The significance of Royal Navy cruiser procurement for British naval policy, 1904-1914

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Abstract

In this paper it will be argued that the process of cruiser procurement and deployment within the Royal Navy between 1904 and 1914 has far greater significance for the study of British naval policy than has been warranted previously. Whilst much academic research into this critical period in the development of British maritime power has focused on the contributions of the *Dreadnought* and flotilla defence, in its ubiquitous and varied roles within the fleet and Empire, the cruiser remained the ultimate, active expression of Britain's maritime predominance, as it had been in previous eras. Close study of the evolution of the type reveals not only milestones in the course of naval technology and surface warfare but the cruiser offers the ultimate embodiment of political, economic and strategic imperatives underpinning the nation's widest defence interests – concerns encoded within the procurement process which it is intended to explore here alongside the development of the ships themselves. As well as offering insight into the genesis of a new warship type, the light cruiser, which was to have a marked influence upon Britain's future fleet, the study seeks to provide a better understanding of the procurement process itself, focusing especially upon its importance in reflecting broader defence priorities and planning for both the short and longer term. Conclusions suggest that the cruiser remained central to Britain's distinct defence requirements both in peacetime and war and, in its modernised form, offered the Royal Navy the prospect of continuing maritime predominance.

Contents

Chapter 1 – Introduction: The Cruiser Navy

Between 1904 and 1914 a new type of vessel, the light cruiser, was introduced to the Royal Navy.[1] In terms of the changing composition of the fleet during this critical decade of renewal and its significance for Britain's overall naval policy, historians have given little attention to this development, the advent of the *Dreadnought* and battle cruiser, of considerable advances in torpedo warfare and gunnery, and the implications of the use of sea mines, aircraft and armed merchant cruisers being the major foci of research. From Marder's seminal studies, *An Anatomy of British Sea Power* (1940) and Volume I of *From the Dreadnought to Scapa Flow* (1961), to the extensive work of contemporary scholars such as Matthew Seligmann and Nicholas Lambert, much impressive research has been undertaken in attempting to discern the most significant, and often most implicit, influences upon the Admiralty's thinking during this critical period. Broad assumptions, ruthlessly exploited for immediate purpose, if not fully embraced with conviction in private, formed the bedrock of Admiral Sir John Fisher's so-called revolutionary reforms of the Fleet during his first tenure as First Sea Lord from 1904 to 1910: a service grown inefficient, effete, comfortable, complacent, unprepared and outdated; resistant to change and technological innovation – in short, closed to the realities of modern naval warfare by a long century of unchallenged maritime dominance and *Pax Britannica* – had been brought to 'concert pitch'[2] in short, drastic but necessary measure.

That the particular technological and operational advances offered by the light cruiser should fail to excite the interest of Fisher and some later historians is unsurprising. Andrew Lambert has identified Fisher as a grand strategist employing technology to fix strategic and operational problems, less interested in technological advances *per se* than the deterrent effect they might supply.[3] Battleships and battle cruisers counted in that regard, and in the larger arms race, whereas small cruisers did not, and could, Fisher believed, be built at pace and in considerable numbers should war break out. Yet the arc of light cruiser development is instructive in forming a better appreciation of the course of British naval policy in the period. The early scouts ordered in 1903 were small, short-range vessels designed to lead destroyers against French Channel ports, envisaged as the chief sources of threat in a future naval war. Despite recognition within the Admiralty at this time that Germany represented, at the very least, an additional naval threat, capable of exploiting British vulnerability given war between the Royal Navy,

[1] A classification first adopted formally by the Admiralty in 1913, to encompass the previous scout, second, and third class cruisers of the Royal Navy. The 'commercially-built' scouts, Admiralty scouts, *Town*, *Arethusa* and early '*C*' class ships constructed between 1904 and 1914 are the focus of this study.
[2] See the opening page of Fisher's *Naval Necessities*, 1905-06 published in Lt. Cdr P Kemp (ed.), *The Papers of Admiral Sir John Fisher* Vol. II (London: Navy Records Society, Vol. 106, 1964), p. 5.
[3] I am grateful to Professor Lambert for advanced sight of Chapter 9 of his forthcoming work, *The British Way of War: Julian Corbett and the Battle for a National Strategy* (New Haven, CT: Yale University Press, 2021) in this instance.

France and Russia, a hiatus in new construction of small cruisers followed until 1907/08.[4] That Fisher was persuaded to order successors to the first scouts, first of all of an improved, turbine-engined Admiralty scout design, and then the larger *Towns*, capable of taking on new German third class cruisers both in narrow waters and on the high seas, was a considerable concession, wrought not just by Conservative and Beresfordian opponents of the First Sea Lord concerned with the cruiser traditions of the fleet and Britain's global presence, but by naval officers such as Admirals Sir John Jellicoe, Sir Henry Jackson, Sir Edmond Slade and Captain George Ballard and naval thinkers such as Julian Corbett, worried by the extent of the Navy's overall effectiveness. The deterrent effect and/or battle-readiness of a turbine-engined battle fleet of battleships and destroyer flotillas was undoubtedly compromised by a dearth of modern light cruisers for scouting and the support of light forces against their opponents. The tasks of providing adequate scouting, cruiser screens, cordons, close or intermediate blockades, and countering the threat of commercial raiders, were all predicated on the possession of modern, fast, reliable vessels with good sea-keeping qualities, of a moderate size and available in some numbers, and capable of taking on or monitoring enemy ships they would be likely to encounter in these roles. At the US Naval War College, Admiral Bradley Fiske was to point out in his observations on the opening stages of the First World War the dire consequences for the United States Navy of an unbalanced fleet, woefully bereft of modern cruisers to locate and track an enemy fleet or intercept lone raiders, and the prospect of committing 'national suicide by the most expeditious method' by engaging an enemy without such vessels.[5] Yet it was the effective co-ordination of cruisers, battle cruisers and flotillas within the *German* fleet that most impressed Fiske, and was to provoke the greatest urgency from British Admiralty planners in 1911/12, resulting in the rapid introduction of the small, fleet *Arethusa* class light cruiser and its many successors. Whilst the concerns of the first Chief of the War Staff, Rear Admiral Ernest Troubridge and his successor from January 1913, Henry Jackson, at the Royal Navy's lack of modern small cruisers may not have been expressed in such hyperbolic terms as Fiske, they were strident, and received the backing of influential operational commanders, from Admirals Sir Arthur Wilson, Sir William May and Jellicoe to the First Lord, Winston Churchill. By 1912, in terms of superiority in capital ship numbers at least, Britain had won the so-called 'naval race' with Germany, but this circumstance placed even greater emphasis upon Germany's adoption of novel, integrated cruiser, battle cruiser and destroyer tactics aimed at exploiting local advantage, and on a reassessment of war plans against British trade.[6] As this research seeks to demonstrate, a lack of

[4] Matthew Seligmann cites a memorandum by Captain George Ballard, a future Director of the Operations Division of the Admiralty War Staff, ('On the Framing of Certain Plans for War with Germany Now at the Admiralty', in Ballard to Fisher, 3 May 1909, The National Archives [TNA] ADM 1/8997), which refers to consideration being given by the Naval Intelligence Department to the threat of war with Germany as early as the autumn of 1901. See M S Seligmann, 'Switching Horses: The Admiralty's Recognition of the Threat from Germany, 1900-1905', *International History Review*, Vol. 30, No. 2, June 2008, p.255-6. Ballard was a consistent and strong advocate of light cruiser construction to counter the German threat.

[5] Admiral B A Fiske (USN), *The Navy as a Fighting Machine* (New York: Charles Scribner, 1916), p.106-7.

[6] See Frank Nägler, 'Operational and Strategic Plans in the Kaiser's Navy prior to World War I', M Epkenhans, J Hillmann & F Nägler (eds.), *Jutland: World War I's Greatest Naval Battle* (Lexington, KT: University Press of

modern light cruisers with which to respond to these challenges caused not only considerable concern within the upper echelons of the Admiralty, the fleet, and among those such as Ballard tasked with framing plans to counter the threat, but contributed to consideration of new operational tactics and broader strategies, many critical in ensuring the Navy's ongoing effectiveness.[7]

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Fisher's understandable preoccupation with the immediate threat from Germany, which by late 1904 had replaced France as the Royal Navy's most likely adversary, as well as his willingness to advance new strategic and organisational thinking and employ emerging technologies, have tended to focus the attention of contemporaries and of later scholarship upon urgent preparations for war. Fighting wars is what navies do, have to be prepared to do, and in the case of the Royal Navy in 1914, is what they did, often (but by no means exclusively) employing the plans, objectives and *matériel* initiated during the febrile decade of reform preceding the conflict. Whether the impetus for new strategies, new deployments and new naval procurement prior to 1914 was born purely of competition with Germany, as suggested by Sir Llewellyn Woodward in the 1930s,[8] or was a necessary response to 'the insufficiency of central government finance' to respond in traditional ways to more widespread maritime challenges, as Nicholas Lambert advanced at the century's end,[9] judgements on the efficacy of these reforms, on the preparedness or otherwise of the Royal Navy to respond to threats to its maritime supremacy, and on the wisdom of the procurement process, have been shaped by the events of 1914-18. Fisher's ongoing fascination with overwhelming fighting strength, warship speed and the potential of new technologies (as epitomised by his attraction to outline proposals for a submarine battle cruiser – 'the coming *Dreadnoughts*' – at the war's end)[10] has similarly been reflected in scholarly appreciations of the Navy's procurement programmes. Numerous studies have attempted to draw conclusions as to the significance of the *Dreadnought* battleship, the battle cruiser, flotilla defence and innovations in submarine, aircraft and mine warfare in interpreting the course and success of British

Kentucky, 2015), pp.25-62 and M S Seligmann, ''Britain and Economic Warfare in German Naval Thinking in the Era of the Great War', D Morgan-Owen and L Halewood (eds.), *Economic Warfare and the Sea: Grand Strategies for Maritime Powers, 1650-1945* (Liverpool: Liverpool University Press, 2020), pp.193-208.

[7] In a note attached to a report on cruiser operations by Vice Admiral Sir Doveton Sturdee, dated 1 July 1914, C-in-C Home Fleets, Admiral Sir George Callaghan stressed that 'Light cruisers will probably frequently be required to work with more powerful vessels and it is considered that experience up to date points to their being most useful when with the battle cruisers. This combination enables full advantage to be taken of the speed of both types, provides the battle cruisers with additional "eyes", so increasing their powers of gaining intelligence and reducing risk of unnecessary exposure to damage, and affords the light cruisers the powerful support they may sometimes require to accomplish their object.' (TNA, ADM 1/8388/227, Operations Division No. 14 Report (1914) on Principal Cruiser Work carried out by the Home Fleets during 1913-14, p.18)

[8] E L Woodward, *Great Britain and the German Navy* (Oxford: Clarendon Press, 1935).

[9] N A Lambert, *Sir John Fisher's Naval Revolution* (Columbia, SC: University of South Carolina Press, 1999), p.1.

[10] Holger Herwig, 'The Battlefleet Revolution, 1885-1914' in MacGregor Knox & Williamson Murray (eds.), *The Dynamics of Military Revolution, 1300-2050* (Cambridge: Cambridge University Press, 2001), p.129.

naval policy.[11] Yet *ex post facto* assessments as to whether the Royal Navy was adequately prepared for war, and if so, what type of war, do not always reflect adequately the long-term nature of procurement planning. Vessels were several years in the making and regularly served several decades in commission, facts which the tendency to place overt emphasis upon the design of the latest warships are prone to under-rate. Moreover, it is crucial to appreciate that the pre-1914 Royal Navy was concerned with a good deal more than the conduct of war: the ongoing maintenance of *peace* at sea, with the concomitant advantages to Britain's political, commercial and imperial interest, was a crucial consideration. In this respect, the largely overlooked asset was, and would continue to be, the light cruiser. Indeed, it will be argued that whether Britain's priority in the decade after 1904 was: to seek a Trafalgar-style confrontation; to prepare for the waging of ruthless economic warfare (or more indistinct forms of blockade); to ready her defences against invasion or for the counterstroke of her own combined operations schemes, or to avoid becoming embroiled in conflict altogether, the capabilities of her light cruiser fleet were important to fulfilling these roles, and to the exercise of her seapower in general.[12]

A major focus of this thesis, underrepresented in current historiography, is the struggle to establish continuity in Admiralty cruiser procurement policy, as fought for, and eventually established, by key figures both within and outside the Navy by 1914 – a scheme which reflected key principles of maritime theory, awareness of the implications of technological innovation, and an ambitious intent to maintain British seapower which went beyond a straightforward response to immediate threats to the nation's security, though its urgency and focus was undoubtedly dictated by the proximate German naval threat. Just as it is intended to highlight the place of the light cruiser in a full appreciation of Britain's naval policy, so it is proposed to explain the great importance of the decade prior to war for the evolution of the type. The selection of 1904 as the starting point for this research has obvious association with Fisher's tumultuous arrival as First Sea Lord on Trafalgar Day of that year. However, it also marked the launch of the Navy's first scout cruisers, and it is upon the significance of the procurement of the scouts and their lineal successors, the *Town, Arethusa* and early *C* class cruisers, that the current work is chiefly focussed. These ships represented a significant development in naval design – the birth and coming of age of a light cruiser type reflecting an era of technological advances at sea as significant as any in the century.[13] A new benchmark of operational capability was laid down in the light cruiser

[11] Indeed, some historians have presented a near binary interpretation of naval policy during the period. Nicholas Lambert considers the rival claims of Dreadnought versus flotilla dominance in 'Sir John Fisher and the Concept of Flotilla Defence, 1904-09', *Journal of Military History*, Vol. 59, No.4, October 1995, pp.639-660.

[12] Whilst Seligmann has argued persuasively that the Admiralty's pre-war attitude towards economic warfare reflected both military and economic strategies, 'two *independent* strands of Admiralty thought', the utility of the light cruiser in pursuit of both policies, and in the other roles above mentioned, made them a flexible and valuable asset. (M S Seligmann, 'Failing to Prepare for the Great War? The Absence of Grand Strategy in British War Planning before 1914', *War in History*, Vol. 24, No. 4, 2017, p.417-429).

[13] Rear Admiral James Goldrick has claimed that innovations in wireless communications, turbine propulsion, oil fuel, fire control and other naval technologies made the period c.1912 the most revolutionary era of change for the world's navies, vying even with the advent of the nuclear age. See his "Learning How to Do Over the Horizon

procurement programmes of the decade prior to 1914, which was sustained not only through the First World War but into a second global conflict. The end date for this study, the outbreak of war in 1914, has been chosen not because some teleological determinism was at work in charting the development of the Navy's light cruisers – the war's inevitability, certainly in terms of its eventual nature and duration, was not apparent to those responsible for the instigation and design of these ships, even as *HMS Inconstant*, the last of the pre-war light cruisers to be launched, entered the Clyde less than a month before hostilities broke out. Rather, by the war's commencement, a new procurement cycle – the ordering of six to eight medium-sized cruisers of a largely standard pattern had been established and was continued apace in wartime.

The lineal succession of light cruisers began with commercially designed, lightly armed scouts, influenced by foreign design innovation and torpedo boat tactics, and intended to lead flotillas of torpedo boat destroyers in Channel operations against the French. Although of varying merits, the Armstrong design in particular, in its lines, layout of machinery and seaworthiness,[14] impressed the Admiralty sufficiently to produce more 25-knot scouts in 1907, the *Boadiceas* – the first turbine-engined classes of cruisers for the Navy. In the following year, the first five of what would eventually become nineteen 'new-*Boadiceas*' were ordered. To be known generically as the *Towns*, these vessels were built specifically to counter the threat of new third class German cruisers, either off German home ports or, given their size and endurance, whilst acting as largely unarmoured trade protection cruisers. Eventually reaching a displacement of 6,000 tons and carrying 9-6in guns, with a mixed coal and oil fuel load the *Towns* had a moderate range of 4,140 nm at 16 knots and formed the backbone of Britain's light cruiser force at the commencement of war. They were also the first cruisers to be built both for the Royal Australian Navy and in Australia, in support of the imperial 'fleet unit' concept. Finally, in 1912, with operations against the German High Seas Fleet very much at the forefront of Admiralty war planning, another design inspired by the later scouts – the *Super-Actives* or *Arethusa* class – was ordered with great urgency. Utilising all of the experience gained in light cruiser construction since the turn of the century, the *Arethusas* employed high-speed, destroyer machinery to achieve in excess of 28 knots, and they and their many successors – 28 *C* class, 8 *D* class and 3 *E* class cruisers – formed the nucleus of the cruiser force with the Grand Fleet and throughout home waters in wartime and beyond.

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The work of academics such as Ethan Kapstein in the field of strategic studies has revealed how significant and powerful an interpretative tool a detailed analysis of defence procurement can be in

Warfare at Sea: The Clash of Emergent Communications Technology and the Naval Culture of Command in the First World War", Lecture of Opportunity, U.S. Naval War College, Oct. 6, 2016 at: https://www.youtube.com/watch?v=aVTZ3o7pspg.

[14] The two Armstrong scouts, *Adventure* and *Attentive*, have been described by senior naval architects as the first modern cruisers. See Chapter 4 for a justification of this claim.

determining trends in strategic planning.[15] The Admiralty's warship construction programmes between 1904 and 1914 witnessed the long-term commitment of vast economic, technological and manpower resources to attain certain strategic goals, and provide incontrovertible evidence of the priorities of a navy – the significance of specific design selection, the quantity of units ordered, the speed of construction and intended employment being most informative in this respect. It is the contention of this thesis that this 'bottom up' means of appraisal of Britain's naval policy in the crucial decade before 1914 is well served by the rather neglected study of the Admiralty's hotly contended light cruiser procurement programme.[16]

Prior to a detailed analysis of the Admiralty's light cruiser procurement programme and its significance for our understanding of wider influences upon British naval policy, a review of the academic literature which has both inspired and framed the current research is provided, together with a third chapter which explores the general historical context and themes which influenced that programme between 1904 and 1914. These include the broad considerations of both national and imperial security, the threats posed by rival states, the influence of maritime theory, the sometimes competing aspirations of political, financial, commercial and lobbying interests and the less definable expectations of public opinion.[17] Economic and technological considerations provided both a potential spur to, as well as brake upon procurement, whilst at service level the requirements of strategic planning, the balancing of the fleet's capabilities, and the day-to-day practicalities of constructing, manning, operating and maintaining new warships had a marked impact upon the process. A strong message to emerge from this work is that Britain's was, first and foremost, a cruiser navy – that both the Navy and the nation's chief interests, in war and during the *Pax Britannica* which the former looked to maintain, were best served by a fleet in which the type, sufficiently numerous and capable, held a prominent place.

Thereafter, separate chapters deal with the specific course of light cruiser procurement between 1904 and 1914, commencing with the arrival of the scouts and then the resurgence of the type in trade protection and fleet and home waters cruisers, reflecting new operational challenges confronting the Admiralty. It will be argued that the Admiralty's procurement focus, first upon a large and costly fleet

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[15] E B Kapstein, *The Politics of National Security: A Global Perspective* (New York: McGraw-Hill, 1992).

[16] Even at its nadir during the period 1907-1909, Britain spent some 11% of her total annual government expenditure on warship construction, repair and maintenance (see Footnote 21). The ability of such a scale of national expenditure both to reflect and shape the aspirations of a nation may be gauged if it is recalled that the USA committed just 4% its total annual government expenditure to the Apollo space programme in 1967, at the peak of its development. (O Morton, *The Moon*, London: Profile, 2019, p.103).

[17] In *The Navy and the Nation*, published in 1897, Lt.-Col. Sir George Clarke and the influential naval author and journalist James Thursfield, undoubtedly with an eye to the then current naval procurement debate, wrote of the 1889 Naval Defence Act, 'Not as part of a scheme of national policy, not on the initiative of a great statesman, was it at length determined to strengthen the fleet . . . [The Act] was due to the efforts of writers and speakers, who by appeals to history and to reason aroused the mind of the nation to a sense of peril.' (London: John Murray, p.8). As the first Secretary of the Committee of Imperial Defence between 1904 and 1907, Clarke was a strong advocate of imperial naval co-operation, for which the light cruiser was to provide a key component.

of armoured cruisers to counter a perceived threat from France and Russia at the turn of the century, and then influenced by Fisher's disdain for the small cruiser in countering German naval expansion, led to a hiatus in British light cruiser procurement, and this at a time when technological advances such as the steam turbine, oil fuel and wireless communications were providing this type in particular with a greater potential utility than in any previous era. Undoubtedly, both in the Admiralty's response to French *guerre de course* preparations (which were overestimated) and the German Naval Laws (the light cruiser components of which appear to have been underestimated), an honourable tradition was being adhered to in the rapid procurement of ships designed to surmount such challenges. However, that key personalities at the Admiralty, from commanding officers such as Wilson and Jellicoe to the planning intellects such as Ballard, Slade and Captain Herbert Richmond, expressed strong concern at the relative lack of medium-sized, modern cruisers in the fleet in the decade prior to 1914 is of note. Such men were heavily influenced by the historical and theoretical works of Corbett and his predecessors, which served as a salutary reminder to those overseeing the Navy's fast-changing procurement programmes of the role played by cruisers in attaining the 'bigger purpose' – the maintenance of British seapower. At a practical level, want of light cruisers was, and remained, a limiting factor for the Royal Navy of the period. A case in point is Jellicoe's descriptions in letters sent whilst C-in-C Grand Fleet of his inability to intercept German minelaying operations effectively and his resort to the use of four battleships in the opening weeks of the war to stop and search merchantmen.[18] The particular requirement of Britain and her Empire to employ considerable numbers of cruisers to protect both overseas possessions and trade routes meant that there was a premium for smaller, cost-effective but highly capable vessels in the Royal Navy. They also provided a natural focus for the development of indigenous warship-building capacity in the Dominions, as was proposed in Canada and achieved in Australia with the laying down of *HMAS Brisbane* at Sydney's Cockatoo Yard in January 1913. Such demands, however, placed additional and unique pressures upon the Navy's cruiser fleet in home waters. Whilst it has not been widely recognised in the literature, some in the Admiralty *were* acutely aware of an effective 'cruiser race' with Germany, to match that in other warship types, and the raft of new cruiser designs requested of the Director of Naval Construction from late 1911 onwards, the convening of the Hopwood and other Admiralty Sub-Committees in 1912 to consider new cruiser requirements, and publication of the Troubridge Memorandum in March 1912 make clear this concern.[19]

[18] See Appendix 7 for a selection of letters written by Jellicoe relating to the shortage of light cruisers from TNA, ADM 137/995 f. 39 & f. 69, ADM 137/996, ff. 178-180; British Library [BL], Jellicoe Papers Add. MSS, 48992, ff. 4-5, 17-19 & 32; National Maritime Museum [NMM], Beatty Papers, BTY/3 letter dated 12 Nov 1914 and Hamilton Papers, HTN 117B, letter dated 14 April 1915; Churchill Archive Centre [CAC], Fisher Papers, GBR/0014/FISR/1/16 letter dated 11 November 1914.

[19] Admiralty Board Minutes for the meeting of 8th February 1911 were not unrepresentative in recording grave concerns regarding light cruiser procurement and the necessity to 'replace cruisers which will have become obsolete and to make good the minimum which will be required to meet the completed German programme in 1920.' (TNA, ADM 167/45). The Troubridge Memorandum is referenced in Chapters 6 & 7.

On paper, despite the scrapping of older warships by Fisher upon becoming First Sea Lord, the Navy possessed a great superiority in cruisers, with 107 ships in commission or reserve in 1907. Yet a full third of these vessels were armoured cruisers – large, triple-expansion-engined and costly to man and maintain – with limited utility in fulfilling the traditional cruiser roles. Of the remaining number, second and third class cruisers and scouts,[20] just 13 had been laid down since the turn of the century and only one of these, the machinery trials ship *HMS Amethyst*, was powered by turbines. A second, turbine-engined cruiser, the scout *Boadicea*, was to be the only cruiser laid down in that year. During the same period, 1900 to 1907, the Imperial German Navy laid down 18 light cruisers, four of these equipped with steam turbines. At the year's end *RMS Mauretania* crossed the Atlantic at an average speed of 23.7 knots, and oil-powered turbines, wireless communications and electrically powered auxiliary systems began to be widely adopted in the world's merchant marine, nearly half of which served under a British flag.[21] Undoubtedly, Britain possessed the shipbuilding expertise and capacity to make good deficiencies in her cruiser fleet but this was not to happen immediately, to the concern of those who recognised the fundamental contribution of these ships to the national interest.

A number of the original documents which inform the chapters on the light cruiser procurement programmes are to be found in the Ships' Covers (ADM 138 series) held by the National Maritime Museum at Woolwich. Whilst the covers largely comprise technical materials relating to the design specifications, modifications and trials of the vessels, they also offer an invaluable insight into the fundamental conceptions, requirements and expectations of a design, which could alter and indeed even be abandoned entirely over time. The extent to which a wide range of Admiralty opinion was sought in the evolution of designs is impressive – deriving not only from Sea Lords, Directors of Naval Ordnance, Engineers-in-Chief and the like, but also from war planners and even officers commanding vessels of a similar type. The interventions of First Lords of the Admiralty, especially in the person of Churchill, might be expected, but requests from other political quarters, notably the Treasury, Foreign and Colonial Offices and Committee of Imperial Defence[22] are also contained in the covers, as are a number

[20] Of the 13, the eight initial scouts were so lightly armed and armoured that critics of Admiralty procurement such as the former Director of Naval Construction, Sir William White, refused to consider them 'true cruisers'. Following this tradition, the vessels are detailed in Norman Friedman's *British Destroyers – From Earliest Days to the Second World War* (Barnsley: Seaforth Publishing, 2009) and not in his companion cruiser work, despite their Admiralty designation as light cruisers from 1913 onwards.

[21] A Naval Intelligence Department report of 1907 (TNA, ADM 231/50) provided estimates of the ongoing expansion in the size of the world's merchant marine, much of it turbine-powered. The previous year, mercantile shipbuilding output amongst the chief shipbuilding countries had reached a record 2.92m gross tons, 63% of this total from British yards (S Pollard & P Robertson, *The British Shipbuilding Industry, 1870-1914*, Cambridge, MA: Harvard University Press, 1979, p. 249). Another NID report in the same file recorded the rapid expansion of wireless telegraphy amongst merchant vessels. It is evident that the opportunities but also the challenges presented by the scale of maritime trade were at the forefront of the Admiralty's mind.

[22] Whilst Committee of Imperial Defence Minutes and attached reports in CAB 2/2 (TNA) have received considerable attention, the scope of the current work has largely precluded direct research into the quite diffuse Cabinet papers in CAB 37 and the vast collections of the Treasury, Foreign, Colonial and War Offices. Rather, reference has been made to documents originating from such departments, where relevant, as they appear in Admiralty records, such as ADM 1, Admiralty In-Letters and Papers.

of duplicate memoranda, the originals of which currently reside in collections such as ADM 1 or ADM 116. Alongside these are countless reports on any number of fleet manoeuvres, extracts from NID reviews, technical trials and developments with a possible application to the ship under design: hull form and compartmentalisation; turbine gearing and oil refuelling at sea; experiments in the extension of wireless telegraphy range, ship-to-submarine communications and proposals for the launch of aircraft from the forecastles of cruisers, dating from 1908. Under the direction of a highly professional and experienced team of cruiser-design specialists, themselves overseen by proactive and clear-sighted Directors of Naval Construction in Sir Philip Watts (1902-12) and Sir Eustace Tennyson d'Eyncourt (1912-24), the multitude of design requirements were channelled most effectively and collaboratively into the finished vessel. As one would expect of an organisation with such vast experience of the procurement process, evidence suggests the Admiralty to be efficient and well-versed in controlling the production of new warships, but also markedly receptive to competing opinions and flexible if cautious in adopting innovation if sufficiently proven. The resulting ships, perhaps two to three years in reaching completion from conception, provide tangible, 'money-where-one's-mouth-is' evidence of the convergence of many interests and competing priorities, and of many necessary compromises, in fulfilling the Navy's future requirements. They also display a serious and long-term commitment to a future vision for the nation's defences which may not always be apparent in paper plans and the declarations of admirals and politicians. As such, the conjunction between the broad stimuli of procurement and the final outcomes of those influences provides a rich opportunity for adding to our understanding of Britain's naval policy prior to the First World War.

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Considerable historical interest in the Royal Navy's procurement patterns during the period 1904 to 1914 has inevitably focused upon the much-vaunted advances in capital ship design or the contemporary counterpunch threatened by the emergence of the torpedo, submarine, mine and aircraft as alternative means of waging war at sea. In 1961 the first volume of Arthur Marder's influential study of British naval policy in the Fisher era, dealing with the period 1904-14, was published. Whilst not entirely won over by Fisher's preference for battle cruiser enforcement of the trade routes and high-speed destroyer flotilla protection for the fleet in place of light cruiser forces – his 'naval white elephants' – Marder was righteous in his defence of Fisher's scrapping policy for elderly cruisers (without advocating their replacement) and largely concurred with the First Sea Lord's belief that if employed as intended, the Navy's existing preponderance in armoured cruisers, together with the employment of the *Invincibles*, 'vectored in' by means of the newly developed wireless telegraphy network, would be more than sufficient to ward off any potential threat to the trade routes. Yet arguments about the utility of small cruisers during the Russo-Japanese War of 1904-05, as proposed by Sir William White, Vice Admiral Sir Reginald Custance, Admiral Lord Charles Beresford and others, inevitably provided further grounds for hostility between the existing rival naval factions of the period. Whilst recognising that war

eventually proved critics such as Custance correct, in that 'England [*sic*] never had enough cruisers and small-craft escorts for trade protection', Marder went on to state 'an extenuating factor', that it was 'the ruthless submarine warfare on commerce that led to the critical situation of 1916-17' – a new method and scale of warfare envisaged not even by Fisher himself 'until the very eve of war.'[23] Whilst Marder's views undoubtedly continue to carry weight and some validity, later research has shown the arguments of those advocating and against further light cruiser development to be more nuanced. Fisher may have been scathing of Foreign Office requests to maintain maritime security by the presence of cruisers 'flying the flag' in distant waters but his belief in the employment of overwhelming force where required was similarly motivated by the conviction that the Royal Navy's primary purpose was to ensure peace at sea. Fisher was also, eventually, to recognise the importance of the light cruiser both within the imperial 'fleet unit' concept[24] (the *Town* class cruisers originating during his initial tenure as First Sea Lord) and as a vital component of proposals such as his Baltic plan,[25] although he remained a strong advocate of fast, sea-going destroyers over light cruisers for fleet work. Paradoxically, during a period in which the stock of the light cruiser appeared to be low, the type itself was undergoing a rapid transformation (despite the small numbers in which it was being ordered) into the form of vessel that would inform the Navy's strategic thinking to the outbreak of the Second World War.

As well as reflecting changes in immediate operational requirements, the Royal Navy's cruiser force possessed a broader significance in the view of many Britons. First Lord George Goschen put the case most succinctly when, in addressing proposed cruiser procurement, he informed the House of Commons in March 1896:

> '[Cruiser procurement] is not based upon a comparison of cruisers other nations have, because their conditions are entirely different from ours, but upon the question of what we have to defend, what services have to be performed, in what direction the food supply will have to be protected, and what resources we have.' [26]

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[23] A J Marder, *From the Dreadnought to Scapa Flow, Volume 1: The Road to War 1904-1914* (Oxford: Oxford University Press, 1961), p.54-55. The author cites DNI Captain Charles Ottley's memorandum, 'The Strategic Aspects of Our Building Programme, 1907', dated 7 January 1907 in support of Fisher's low opinion of unarmoured cruisers.

[24] Nicholas Lambert has written at length on this subject and his collection of original documents, *Australia's Naval Inheritance: Imperial Maritime Strategy and the Australia Station, 1880-1909* (Canberra: Maritime Studies Program, 1998) provides useful primary materials. Neville Meaney's *Search for Security in the Pacific, 1901-14: A History of Australian Defence and Foreign Policy, Volume 1* (Sydney: Sydney University Press, 1979), Chapters 6 to 9, also contain enlightening evidence of fluctuating Anglo-Australian relations as regards cruiser deployments. See Andrew Lambert, 'The Royal Navy and the Defence of Empire' in G Kennedy (ed.), *Imperial Defence and the Old World Order, 1856-1956* (London: Routledge, 2007), pp. 111-132 for an appreciation of the cruiser's role in its historical context.

[25] See Andrew Lambert, '"The Possibility of Ultimate Action in the Baltic": The Royal Navy at War, 1914-16' in M Epkenhans, J Hillmann & F Nägler (eds.), *Jutland: World War I's Greatest Naval Battle* (Lexington, KT: University Press of Kentucky, 2015), pp.79-116.

[26] Statement before the House of Commons made on 2nd March 1896, retrieved from Historic Hansard: https://api.parliament.uk/historic-hansard/commons/1896/mar/02/supply-navy-estimates.

In this sense, the question of cruiser procurement remains central to many of the historical debates concerning British defence policy in the early part of the twentieth century. The extent, nature and efficacy of the Royal Navy's preparations for war, the feasibility of collective imperial defence initiatives, the security of the home nation and of Britain's global trade and assets were all impinged upon to some degree by the Royal Navy's capabilities (real and perceived) and ambitions as a cruiser power. Other assets within the fleet, from the battle and battle cruiser squadrons, to the destroyer flotillas and independent squadrons, relied heavily upon fast, modern and effective numbers of light cruisers to optimise their functions. In the broadest appreciation of Goschen's words, Britain's pretensions in cruiser procurement provide a very useful indicator of her aspirations in retaining maritime dominion and her status as the global superpower.[27]

* * *

Given its scale, the procurement and maintenance of the Royal Navy's fleet of warships dominated not only service but political, social, economic and cultural debate throughout the decade 1904 to 1914. Under both the Conservative administration to December 1905 and the Liberal governments thereafter, Treasury commitment to funding the Navy remained remarkably stable, despite the sometimes heated debates of Liberal cabinets over spending priorities in the face of their extensive programme of social reform.[28] From a figure of some £147m *per annum* in 1903-04, total government expenditure fell under both parties to below £140m in 1906-07, thence rising (at a pace from 1910-11) to over £197m in the final year before war.[29] Expenditure on the Navy, however, remained a permanent and dominant feature, shadowing spending trends proportionately – representing 27% of total government spending in 1903-04 and 26% by 1913-14. The drive for economy at the Admiralty undertaken by Fisher as First Sea Lord saw that proportion fall from a high of 29% in 1904-05 to 22% between 1907 and 1909 but this was not to be sustained,[30] and it is accurate to state that the Royal Navy accounted for at least a quarter

[27] The relevance of the Royal Navy to debates on the decline of British superpower status are discussed informatively in Gordon Martel, 'The Meaning of Power: Rethinking the Decline and Fall of Great Britain', *International History Review*, Vol. 13, No. 4, Nov. 1991, pp. 662-694 and Joseph Maiolo, 'Did the Royal Navy Decline between the Two World Wars?', *Journal of the Royal United Services Institute*, Vol. 159, No. 4, Aug/Sep 2014, pp. 18-24.

[28] See Martin Daunton, ''The Greatest and Richest Sacrifice Ever Made on the Altar of Militarism': The Finance of Naval Expansion, c. 1890-1914' in Robert Blyth, Andrew Lambert & Jan Rüger (eds.), *The Dreadnought and the Edwardian Age* (Farnham: Ashgate, 2011), pp. 32-49 for an authoritative treatment of naval expenditure. His assertion that Britain's 'unusually effective and efficient fiscal system in the early twentieth century' could fund 'both welfare and warfare' (p.49) suggests that the nation could afford to win a naval race and promote social reform.

[29] See Appendix 1 for a comparison of total government, naval and Naval Estimate Votes 8 & 9 expenditure, based upon statistics extrapolated from Jon Sumida, *In Defence of Naval Supremacy: Finance, Technology and British Naval Policy, 1889-1914* (Winchester, MS: Unwin Hyman, 1989), Appendix tables 1. 3 and 6.

[30] Matthew Seligmann has stressed the continuities of Liberal naval policy and the impossibility that Fisher's initial reductions in the Naval Estimates could be sustained in the face of a mounting German threat. See 'A Prelude to the Reforms of Admiral Sir John Fisher: the Creation of the Home Fleet, 1902-3', *Historical Research*, Vol. 83, No. 221, Aug. 2010, pp.506-519.

of the government's spending in the decade before the First World War, with never less than half of this sum – rising to 58% of naval (and 15% of national) expenditure – being spent on building, arming, maintaining and repairing the ships of the fleet.[31]

Naval procurement remained, *de jure*, the province of politicians, the First Lord being an influential but sole official representative of the Admiralty in cabinet. Nonetheless, from Lord Selborne to Churchill, the admirals and the Board of Admiralty as a whole held great sway over their First Lords, especially over those matters of procurement in which government did not recognise a political advantage in wielding its *de facto* powers. Therefore, as well as pointing to the broad national priorities – political, economic, technological and imperial – a detailed study of naval procurement between 1904 and 1914 can reveal much about cultural outlook and strategic planning within the Royal Navy itself, especially as the proportion of spending on different warship types was to a large extent within the Admiralty's control. The case of the light cruiser is particularly instructive, as the table below makes clear.[32]

British Government Expenditure on Cruiser Construction during the Period 1888 to 1914

Expenditure Period	1888-89 to 1897-98	1898-99 to 1907-08	1908-09 to 1913-14*
Total Government Expenditure on Warship Construction	£48,373,275	£91,060,091	£73,482,029
Expenditure on Cruiser Construction (as % of Total Expenditure)	£21,692,105 (45%)	£42,185,133 (46%)	£21,847,010 (30%)
Expenditure on First Class Cruiser Construction (as % of Total Expenditure)	£9,027,509 (19%)	£36,929,386 (41%)	£13,138,074 (18%)
Percentage of Cruiser Construction Expenditure Spent on First Class Cruisers	42%	88%	60%
Expenditure on Second/Third Class Cruiser Construction (as % of Total Expenditure)	£12,664,596 (26%)	£5,255,747 (6%)	£8,708,936 (12%)
Percentage of Cruiser Construction Expenditure Spent on Second/Third Class Cruisers	58%	12%	40%

[31] The 15% of annual total government expenditure dedicated to building and maintaining the Navy's warships during the period might usefully bear comparison with present proportions of 13% for education and 19% for health spending, the second and third largest sectors receiving government funding in 2016-17 (Budget 2016 report, published 16 March 2016 by Her Majesty's Government, p. 5).

[32] Light cruisers classified as from 1913, referring to previous scout, second and third class cruisers.

* Six-year period, as opposed to earlier decades, and including Dominion and Malayan contributions from 1010-11 onwards.

(Based upon Navy Estimates recorded in relevant editions of Brassey's Naval Annual and Appendix tables 8 & 9 of J T Sumida, *In Defence of Naval Supremacy: Finance, Technology, and British Naval Policy, 1889-1914*, Winchester, MA: Unwin Hyman, 1989. Figures exclude armaments)

The broad significance of the above statistics, especially insofar as they point to a falling away in light cruiser procurement in the early years of the twentieth century and then a steady recovery in the half-decade before war, will be addressed in the chapters which follow. As Sumida explored at length in his *In Defence of Naval Supremacy*, the Royal Navy's foray into the construction of large armoured cruisers undoubtedly shaped procurement patterns, as did *Dreadnought* expenditure. Recent, enlightening studies[33] have focused upon the wider impact of technological change within the Royal Navy, posing interesting questions about the culture then prevailing within the service and in the society from which it sprang. However, Britain's unique requirement for a considerable number of cruisers of moderate size and a range of capabilities did not subside, in fact becoming more acute as the fleet's need for fast, modern cruisers in home waters became more pressing.

In tandem with this trend, the role of the cruiser took on greater importance as Britain and her Empire, almost *ex post facto*, adopted the guise of upholders of the *Pax Britannica* in the first decade of the twentieth century. As numerous histories of the Roman Empire were published at this date, plainly referencing Britain's role as global policeman, civilising force and trading giant, so politicians, whether of the Liberal (especially Liberal Imperialist), Conservative Unionist or Chamberlainite Imperial Preference persuasion agreed on one, principal assumption – that Britain's future prosperity, security and interest lay in sea power. If not all may have been able to elucidate upon that principle in fine detail (although maritime theory was of considerable public interest at the time) there was a broad appreciation that naval supremacy allowed Britain to conduct her affairs to serve her own and her Empire's interest. For many within the Service, among them the ardent and vocal proponent of the type, Herbert Richmond, the Royal Navy was, in essence, a cruiser navy, and should remain so for the foreseeable future.[34] A battlefleet might hold the ring, defend the Mother Country's shores and capture the public imagination, as it had done in previous iterations, but Britain's destiny in 1914 still appeared to be across oceans not seas.[35] Both, however, were patrolled by cruisers. Integral though the light cruiser

[33] See, for example, Duncan Redford, 'Naval Culture and the Fleet Submarine, 1910-1917' in D Leggett & R Dunn, *Re-inventing the Ship: Science, Technology and the Maritime World, 1800-1918* (Abingdon: Ashgate, 2012), pp.157-172 and Richard Dunley, *Britain and the Mine: Culture, Strategy and International Law* (Palgrave Macmillan, 2018).

[34] Richmond captained *HMS Dreadnought* between 1909 and 1911 but the early volumes of the *Naval Review*, which he co-founded in February 1913, just prior to taking up the post of Assistant Director of the Admiralty War Staff's Operations Division, place particular emphasis upon the key role of the cruiser – for example, Volume 3 for 1913, which draws contemporary lessons from 'Cruiser Work in the Great [Napoleonic] War'.

[35] Britain held 33% of her wealth and perhaps as much as 50% of the nation's savings overseas in 1913, 42% of this total within the Empire and 38% in the United States. Trade – imports plus exports – in goods and services (insurance, banking and other financial activities representing one quarter of the total by value) amounted to 64%

was to the Admiralty's war plans in home waters, they were but one component of the fleet's strategic assets. Similarly, the cruiser was by no means the only vessel to show the flag for Britain on foreign stations. A multitude of sloops, gunboats and smaller vessels represented the nation's interests in ports, estuaries and littoral regions across the globe but it was the cruiser that had come to symbolise the protection and furthering of Britain's strategic and commercial interest across the world's sea lanes.[36]

* * *

Churchill's celebrated Glasgow speech to the Clyde Navigation Trustees on 9 February 1912 is recalled chiefly for its perceived bellicose tone and description of the Imperial German Fleet as 'in the nature of a luxury'.[37] Less was made, both at the time and since, of the First Lord's opening comments on the comparative 'necessity' to Britain and her Empire of the Royal Navy, when he stated, 'The purposes of British naval power are essentially defensive'. It will be argued in this paper that a prime agent of this defensive purpose, and therefore of Britain's naval power, was the light cruiser, whose form and potential came of age during the decade prior to war in 1914. A naval presence to match and sustain Britain's global ambitions was what the cruiser was widely perceived to provide. 'Hulls in the water' as opposed to 'boots on the ground' was an ethos far more acceptable to, and in keeping with, Britain's traditional requirements and perceptions of herself, as well as those of others towards her. However, by early 1912 Churchill was also acutely aware of the vulnerabilities of the Royal Navy, and his urgent advocacy of greater numbers of modern light cruisers in the Naval Estimates of the following month was predicated on the need to make the Home Fleets as effective and superior a fighting force as possible by re-balancing its forces through new light cruiser construction. Andrew Gordon might well have had such a revealing instance of urgent procurement in mind when, in his influential assessment of British naval procurement between the wars, he wrote that 'Unfortunately serious naval writers have not, on the whole, felt prompted to penetrate the supply origins of seapower.'[38]

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of Britain's Gross Domestic Product in 1913. Figures from R Floud, J Humphries & P Johnson, *The Cambridge Economic History of Modern Britain, Volume II: 1870 to the Present* (Cambridge: Cambridge University Press, 2014), p. 61 & 72-73.

[36] As captured by Rudyard Kipling in his poem *Cruisers* (1899): 'For this is our virtue: to track and betray; preparing great battles a sea's width away'.

[37] Report of Churchill's speech from the Churchill Archives Centre, [CAC] Cambridge, Churchill Papers, CHAR 9/43/41-4.

[38] Andrew Gordon, *British Seapower and Procurement between the Wars* (Annapolis, MD: Naval Institute Press, 1988), p. 5.

Chapter 2 – A Review of the Literature Contextualising Light Cruiser Procurement

This study seeks to demonstrate the significance of the light cruiser for the conduct of the Royal Navy's strategic planning in the decade preceding war in 1914. This emphasis reflects the core contentions of this thesis: that the lineage of cruisers arising, albeit falteringly, from the scouts of 1904 were ideally suited to exploiting rapid advances in naval design and technology and both protecting and projecting Britain's global economic and imperial interests as well as contributing to an easing of strategic and operational concerns facing the Admiralty in home waters. That initial reluctance to invest in large numbers of these moderately-sized but highly capable vessels led not only to heated debate over future strategy within and outside the Admiralty, highlighting the talismanic significance of the cruiser to the Navy, but risked imbalances in the fleet's capabilities and thus its deterrent effectiveness, should also inform our understanding of British naval policy in the period. With this in mind, a resort to large-scale light cruiser construction from 1912 onwards should be viewed as an urgent (and barely sufficient) response to specific challenges presented by the German High Seas Fleet in the North Sea, with important consequences for the Royal Navy's conduct of the war. Whilst extensive, scholarship on British naval policy between 1904 and 1914 has rarely focused upon the novel development of the light cruiser during this period, and what study of that process might contribute to our overall understanding of the competing demands, motivations, concerns and aspirations influencing the policy makers. A detailed exploration of the course of light cruiser construction offers scope not only to analyse the determinants which shape defence procurement but to gauge the relative significance of such determinants, and their overall influence upon defence strategy. These outcomes are the tangible corollary of such influences, a calculated response to 'the three major questions that confront every government' in framing a defence policy: 'how to compete internationally in military technology; what proportion of national income to dedicate to defence; and how best to deploy the armed forces.'[1] In the specific case of the Royal Navy in the critical decade prior to 1914, study of the introduction of the light cruiser type offers an instructive if neglected insight into the shifting rationale and application of British naval strategy.

A dearth of academic material on the development of the Royal Navy's light cruiser fleet has presented a particular problem for the existing literature, namely that the fundamental value and necessity of the small cruiser in fulfilling the Navy's purpose in peace and war has gone largely unrecognised. The corollaries of this underestimation have been significant: the very practical influences of historical precedent and continuity of function in shaping the composition of the fleet have, as a result of this omission, been underplayed; the elements of procurement planning which inevitably looked to the long-

[1] G C Peden, *Arms, Economics and British Strategy: From Dreadnoughts to Hydrogen Bombs* (Cambridge: Cambridge University Press, 2007), p. 2.

term, peacetime assumptions of maintaining British seapower have similarly not received their due; the crucial role of the new cruisers in facilitating the work of the fleet, particularly in North Sea operations – be they with the flotillas, battleship or battle cruiser formations, or acting independently – whilst alluded to, are not well appreciated *ut totum* and finally, the vicissitudes of light cruiser development in the decade prior to war reflect not only important advances in warship technology, with particularly broad and lasting ramifications, but also highlight notable turning points in the strategic focus of Admiralty planning and responses to the German threat, and deserve further attention. Whether in determining the nature and achievements of the so-called 'Fisher Revolution', the evolution of naval planning, or informing debates on the character of contemporary naval tactics, study of the type has utility.

The important issues to be raised by this research all found an airing during the febrile decade of debate on British naval policy prior to the outbreak of the First World War. Cruisers were controversial, as they exposed fundamental disagreements within the Navy over its focus and purpose, which have been largely overlooked by later historians. Fisher's dismissal of the small cruiser and scrapping of older vessels of the type inevitably drew strong criticism from his enemies in the Service. Both Custance and Beresford produced well-publicised attacks on the First Sea Lord's alleged contempt for the traditional role of the medium-sized cruiser in supporting the fleet's operations in home waters and representing the nation's interest in 'Blue Waters'.[2] Given that a number of his own designs were being consigned to the breakers' yard, amongst the most vitriolic of critics of the perceived degrading of the active cruiser fleet was the former DNC, Sir William White, who in 1907 railed at 'the abandonment' of traditional cruiser procurement and reminded his readers that 'Cruisers are essential to and must remain integral parts of fleets'.[3] But concerns over the hiatus in small cruiser construction and its impact upon the Navy's operational capabilities derived not only from Fisher's natural adversaries. In March 1912, one week before Churchill's presentation before the House of the Navy Estimates for 1912-13, the Chief of the Royal Navy's War Staff, Ernest Troubridge, issued a confidential memorandum entitled *Future War Requirements in Respect to Cruisers* which heavily criticised the Admiralty's failure to build new cruisers.[4] Within months of its publication, the Rear Admiral's stock was much reduced when the Fleet's summer manoeuvres revealed serious flaws in the intermediate North Sea blockade and cruiser cordon plans for war against Germany that Troubridge had advocated. A shortfall of fast, modern light cruisers was in part to blame for this failure, and the memorandum's key message – that the unique centrality of the light cruiser to the past, present and future maintenance of British seapower, and thus,

[2] See Custance, *Naval Policy: A Plea for the Study of War* (London: Blackwood, 1907) and Beresford, *The Betrayal* (London: King & Son, 1912).
[3] Sir William White ['Civis'], *The State of the Navy in 1907: A Plea for Inquiry* (London: Smith, Elder & Co, 1907), p.128.
[4] TNA, ADM 1/8272 and also *Calliope* class light cruiser Ships' Covers, NMM, ADM 138/303. The paper was drafted by Jackson and Ballard and discussed with Troubridge at the Navy War Council the day before its distribution (TNA, ADM 116/3090, Navy War Council Minutes, 1909-13, 5 March 1912, p.10).

of the British Empire, was in danger of being overlooked – was both salient and far sighted, and representative of a broad and influential body of opinion within the Service. Troubridge himself was certainly not an original thinker, and the strong influence of writers such as Julian Corbett, Ballard as Director of the Operations Division, and Troubridge's replacement as Chief of Staff, Henry Jackson, upon the memorandum is discussed in later chapters. Pivotal to the arguments of these men was the assertion that the rapid technological advances of the age and the similarly escalating nature of the maritime threat made the case for the light cruiser *more* not less pressing. It was a practical requirement recognised by fleet commanders such as Wilson, May and Callaghan, and championed by both Jellicoe and Beatty in wartime, when the presence or lack of sufficient modern vessels of the type played a significant part in the planning and conduct of operations.

* * *

Since the 1930s, if not before, historical consideration of British naval policy in the decade prior to the First World War has inevitably been dominated by that war.[5] The nature and extent of the Admiralty's preparations; the relationship between the Royal Navy, the British Army and the services of other powers; the political, economic and cultural influences upon decision making, and the motivation for those decisions, have all been interpreted through the prism of war. Given that the prime concern of the admirals was the security of Britain and her Empire, and that first French and then German naval ambitions during the decade placed that security under considerable threat, such interpretations are entirely justified. However, even in this respect, whilst the light cruiser receives considerable mention *en passant* in the extensive academic literature relating to British naval preparations for war, little consideration has been given to its particular strategic significance beyond the pages of more technical monographs,[6] and still less to its value as an indicator of the condition of navy and nation. The figure of John Fisher dominates academic research of British naval policy during what has been styled 'the Fisher Era'. For Woodward and Marder, the First Sea Lord was a man of ruthless vision and single-minded preoccupation, determined to overwhelm the proximate and substantial German threat to British naval supremacy by a combination of root-and-branch reforms, the application of vastly enhanced fighting capability and concentration of superior firepower. Thus, the *Dreadnought* rivalry dominated their interpretations.[7] The Mahanian notion of the battlefleet loomed large, both in the definitive action it might fight and the protection it offered to 'light forces' in their stranglehold upon German use of the

[5] For a thorough and modern survey of the British historiography see M S Seligmann, F Nägler & M Epkenhans, *The Naval Route to the Abyss: The Anglo-German Naval Race 1895-1914* (London: Navy Records Society, Vol. 161, 2015), pp. xxii-xxxv.

[6] See David K Brown, *The Grand Fleet: Warship Design and Development 1906-1922* (London: Caxton, 2003) and Norman Friedman, *British Cruisers – Two World Wars and After* (Barnsley: Seaforth, 2010).

[7] Woodward, *Great Britain and the German Navy*; Marder, *From the Dreadnought to Scapa Flow,* Volume 1. Whilst Marder's most influential study contains multiple index entries for '*Dreadnought'*, '*Invincible'*, 'Capital Ships', 'Destroyers', 'Aircraft', 'Mines', 'Torpedoes' and nineteen references to 'Submarines', cruisers were not included in the index headings.

seas. Marder, akin to his hero Fisher, focused upon revolutions in naval procurement – the *Dreadnought*, battle cruiser and submarine – and judged their efficacy in terms of their contribution to the War of 1914-18, as Fisher had valued their deterrent capabilities. For both men, light cruisers were peripheral as they did not fit in with their central understanding of the nature of maritime warfare.

For revisionists such as Jon Sumida and Nicholas Lambert, the imperatives of British naval policy between 1904 and 1914 were both economic – to curb the vast expansion in naval expenditure which had burdened Arthur Balfour's Conservative government, and was resisted in favour of spending on social reform by subsequent Liberal administrations – and to exploit the latest technologies and non-lethal means of waging warfare in so doing. Flotilla defence, swarms of high-speed, torpedo-equipped destroyers and defensive lines of submarines and minefields would deter German naval aggression whilst roving battle cruisers, vectored in to their commerce-raiding quarry by extensive wireless telegraphy coverage, would control the oceans.[8] For such writers, those 'light forces' were taken to be but one element of a highly sophisticated and integrated naval, economic and financial stranglehold planned by the Admiralty in the event of war.[9] Neither traditional nor revisionist interpretations provided significant analysis of the light cruiser fleet which might facilitate the alternative strategies they discerned, nor ventured to explore what procurement programmes for that type might reveal of the Admiralty's long-term preoccupations and future intentions.

Gaps in our historiographical appreciation of British naval policy have led to inevitable distortions and misreading of past attitudes, intentions and actions. A focus upon transformations in the battlefleet and in flotilla defence, and debates about their relative importance within the Admiralty's war planning, often fail to take into account the facilitating requirement for a considerable fleet of modern and effective light cruisers, the same being the case when academic interest turns to the potential of waging economic warfare and the scale of threat to Britain's global trading and imperial interests.[10] Recent studies which address the extent and practicality of the Royal Navy's preparations for war in 1914, and the nature of the conflict that was envisaged, would also benefit from a more detailed appreciation of the Admiralty's procurement programme for the type.[11] Similarly, it can be argued that the impact of new technologies during the period had considerable and particular relevance for the design and operational capabilities of vessels undertaking the traditional cruiser roles, further adding to their value

[8] Nicholas Lambert, *Naval Revolution*.
[9] See Nicholas Lambert, *Planning Armageddon: British Economic Warfare and the First World War* (Cambridge, MA: Harvard University Press, 2012) and Sumida, *In Defence of Naval Supremacy*.
[10] Failure to address the Admiralty's procurement of *means* to facilitate such strategies is evident in wide-ranging works on the development of British war plans such as Paul Kennedy (ed.), *The War Plans of the Great Powers, 1880-1914* (London: Allen & Unwin, 1979) and David French, *British Economic and Strategic Planning, 1905-1915* (London: Allen & Unwin, 1982). Failure to deal adequately with the significance of the Navy's provision of the prime agent of such plans is of more concern in works such as Nicholas Lambert's *Planning Armageddon*.
[11] Shawn Grimes, *Strategy and War Planning in the British Navy, 1887-1918* (Woodbridge: Boydell Press, 2012) usefully addresses the place of scout cruiser procurement in the context of war planning but not the light cruiser in general.

to the fleet. This aspect of research has received some recent attention, not least in the work of James Goldrick, whose studies of British fleet operations during the First World War have reflected his interpretation of the significant impact of new designs and technologies upon the conduct of war at sea.[12] Goldrick's emphasis upon the novel challenges and possibilities offered by new technologies in fulfilling the traditional roles of both individual warships and coordinated fleets informs much of what follows, insofar as it applies, markedly, to the light cruiser.

The importance of a balanced fleet, especially in meeting the multifarious commitments of a global seapower such as Britain, was well understood during the period under consideration. Even Fisher, who in his headlong rush to create an overwhelming naval deterrent via new technology could find little enthusiasm (or funding) for light cruisers, pioneered complex manoeuvres integrating the various warship types during his command of the Mediterranean Fleet (1899-1902), recognising operational utility and pragmatism above all else when writing in 1901, that the design of fighting ships 'must follow the mode of fighting instead of fighting being subsidiary to and dependent on the design of the ship'.[13] Such respect for the considered provision of warship types to meet and integrate the various 'modes of fighting', traditional and novel, was similarly being expressed in contemporary works of maritime theory. Corbett's dictum that 'the classes of ships which constitute a fleet are, or ought to be, the expression in material of the strategical and tactical ideas that prevail at any given time' was well understood within the Admiralty at the time, even if the strict application of this aim was to prove challenging.[14] Despite this understanding, it has only been in recent years that historians have begun to explore in detail the multi-layered interaction of various components of the fleet and offer interpretations as to what their relative prominence at any one time might reveal about 'the strategical and tactical ideas' prevailing. In his studies of the Battle of Jutland, John Brooks has thrown important light upon the role of destroyers and the surface torpedo threat in shaping British naval tactics.[15] Richard Dunley's insightful work on the development of the sea mine – the ethical, legal and cultural challenges it presented to the Admiralty, as well as the potential solution it provided to new strategic challenges –

[12] For a succinct introduction to these ideas see Goldrick, **'**How it worked: understanding the interaction of some environmental and technological realities of naval operations in the opening years of the First World War, 1914-1916', in G Kennedy (ed.), *Britain's War at Sea, 1914-1918:The War they Thought and the War they Fought* (Abingdon: Routledge, 2016), pp. 127 – 148.

[13] Quoted in Marder, *The Anatomy of British Sea Power; a History of British Naval Policy in the Pre-Dreadnought Era, 1880-1905* (New York: Knopf, 1940), p.525. As C-in-C Mediterranean Fleet, Fisher reserved particular praise for the work of Henry Jackson on exercise with his light forces and on wireless communications. Jackson was to become a strong advocate of the light cruiser following these experiences.

[14] Sir Julian Corbett, *Some Principles of Maritime Strategy* (London: Longmans, Green & Co, 1911), p.107. In his 1916 work, *The Navy as a Fighting Machine*, Bradley Fiske reserved strong criticism for the US Navy in its abject failure to respond to new challenges and new technologies with a harmonious and well-balanced fleet of warships of varying types.

[15] J Brooks, 'British Destroyers at Jutland: Torpedo Tactics in Theory and Action', *British Journal of Military History*, Vol. 3, No. 3 (2017), pp. 30-52 develops ideas introduced in his 2016 work, *The Battle of Jutland* (Cambridge: Cambridge University Press) on the operational demand for new destroyers and new flotilla tactics.

has broadened our appreciation of the determinants of naval policy between 1904 and 1914.[16] The detailed work of Matthew Seligmann and David Morgan-Owen on the evolution and deployment of the Navy's battle cruisers has similar value in adding to that appreciation, in its consideration of the prominence of continuity and change in Britain's naval strategy, the significance of new technology, the vision and preparedness or otherwise of those tasked with meeting the threats facing the nation, and the perceived nature and scope of those threats.[17] The current study aims to deploy similar methodologies in addressing the significance of light cruiser procurement for overall British naval policy prior to the First World War.

* * *

Such was the widespread utility and significance of the light cruiser within the conduct of British naval policy that study of its development can inform the literature across a broad range of contentious issues. For instance, debate continues amongst historians as to the influence of the German naval threat upon British naval policy before 1914. Whilst current evidence suggests that the *Kaiserliche Marine* had replaced the navies of France and Russia as the prime maritime concern for British politicians and admirals as early as 1902,[18] an *ex post facto* historical interpretation of the next twelve years, in which all developments in naval policy are explained, and indeed judged, by their contribution to the outbreak of war can only distort our understanding. The element of peacetime purpose within procurement, for an intended twenty-year service life (as exemplified in the later *Town* class light cruiser design documentation)[19] is a useful corrective. Undoubtedly, the seriousness of the German naval challenge was central to the Admiralty's procurement policies. However, that a 'cruiser race' of sorts existed between Britain and Germany, to match that in capital ships and of significant operational import, influenced the urgency of Troubridge's paper but has received little recognition in the literature.[20] Significant turning points in the pace and nature of light cruiser procurement – in 1904, 1907-08 and 1911-12 – mirror the evidence of other historians as to discontinuities in British naval policy.[21] A focus upon other elements of the fleet and the raw statistics of total cruiser numbers has tended to mask the issue but at the outbreak of war the Admiralty had at its disposal just 34 light cruisers constructed since

[16] R Dunley, *Britain and the Mine*.
[17] As exemplified by Matthew Seligmann,'Germany's Ocean Greyhounds and the Royal Navy's First Battle Cruisers: An Historiographical Problem', *Diplomacy & Statecraft*, Vol. 27, No. 1, 2016, pp.162-182 and D Morgan-Owen, 'Continuity and Change: Strategy and Technology in the Royal Navy', *English Historical Review*, published online in October 2020 at:
https://academic.oup.com/ehr/advance-article/doi/10.1093/ehr/ceaa194/5919484.
[18] See Seligmann, 'Switching Horses'.
[19] National Maritime Museum [NMM], Woolwich, ADM 138/240, *Bristol* class Ships' Covers, f.21.
[20] Certainly, the financial implications were not as great in the short-term as those identified by Sumida for the Navy's earlier armoured cruiser programme (J T Sumida, *In Defence of Naval Supremacy*) nor yet as expensive or culturally significant as for the *Dreadnought* race. See Thomas Hoerber, 'Prevail or Perish: Anglo-German Naval Competition at the Beginning of the Twentieth Century', *European Society*, Vol. 20, No. 1, 2011, pp. 65-79 for analysis of that competition's societal significance.
[21] See for instance, Seligmann, 'Failing to Prepare?' and Grimes, *Strategy and War Planning*, pp. 159-189.

the turn of the century to fulfil all duties.[22] The consequences of such a shortage of modern small cruisers – upon the balance of the fleet, for realistic war planning, and the operational conduct of the early stages of the war – whilst referenced frequently in the primary sources, have yet to be analysed fully.

The reputation of Fisher, a topic dominating the existing literature which addresses the period, is likewise informed by the subject of light cruiser procurement. In 1909 the Prime Minister Herbert Asquith was persuaded to form a sub-committee of the Committee of Imperial Defence to investigate the substance of criticisms by Beresford that Fisher's policies were placing the nation's security at risk. Amongst the allegations was a claim that insufficient numbers of light cruisers had been ordered since 1904 to match those being constructed by Germany. Whilst Ruddock Mackay acknowledges that in giving evidence Fisher did not refer to the absence of light cruiser procurement between 1904 and 1907, he defended the First Sea Lord's actions by suggesting that not all of the cruisers due for disposal under Fisher's 'courageous stroke of the pen' had in fact been scrapped and concurred with Fisher's claim that six light cruisers were now being built each year against Germany's two.[23] In fact, in the following year, the Royal Navy laid down just four light cruisers and one scout against the four *Magdeburg* class German light cruisers.

With regards to light cruisers, as much else, Mackay has been generous to Fisher. On the Admiral's celebrated 'Organization for War' memorandum sent to Lord Esher on 28th July 1904, which set out procurement plans for his tenure as First Sea Lord, Mackay wrote that 'The implied proscription of all light cruisers was actually applied to all Fisher's building programmes until the matter was reconsidered in June 1907.'[24] That reconsideration, however, was chiefly brought about by Jackson as Third Sea Lord and Jellicoe, as Director of Naval Ordnance, who pressed the case for the five *Bristol* class cruisers (at a cost of £2m compared to £2.2m for the two *Indefatigable* class battle cruisers proposed) to counter new third class German cruisers, both 'off an enemy's port' and whilst operating from overseas stations.[25] Whilst Nicholas Lambert and Christopher Bell have both addressed Fisher's influence upon the composition of the British fleet and strategy for its employment, the former affording it more consequence than the latter, detailed analysis of light cruiser procurement is not apparent in either study.[26] Fisher's continuing opposition to the type, even beyond his initial tenure as First Sea Lord, influenced urgent reconsideration of new light cruiser procurement in the period 1911-12 and the

[22] Light cruiser dispositions at the beginning of August 1914 were: Grand Fleet – 8 ships; Channel Fleet – 3 ships; Home Flotillas – 11 ships; overseas stations – 12 ships. Of this total, one-third of vessels did not possess steam turbine engines. By contrast, the Navy accepted 62 capital ships into service between 1900 and August 1914, nearly double the number of light cruisers, and considerably more so if the 13 largest armoured cruisers (of near battleship dimensions, at over 13,500 tons displacement) are included.
[23] R F Mackay, *Fisher of Kilverstone* (Oxford: Oxford University Press, 1973), p. 414.
[24] *Ibid*, p. 311.
[25] CAC, Fisher Papers, FISR 5/14/4242, Navy Estimates Committee, November 1907.
[26] Compare, for instance, Nicholas Lambert, 'The Concept of Flotilla Defence, 1904-09', and Christopher Bell, 'The Myth of a Naval Revolution by Proxy: Lord Fisher's Influence on Winston Churchill's Naval Policy, 1911-1914', *Journal of Strategic Studies*, Vol. 38, No. 7, 2015, pp. 1024-1044.

intervention of figures such as Corbett, Richmond, Slade and Ballard in the debate.[27] Recognition of such concern over the limited availability of modern cruisers at this date informs the arguments of Seligmann, both over the practicality of an economic blockade or more limited contraband control strategy being pursued by the Admiralty, and his generally positive assessment of the Royal Navy's pragmatic consideration of its own capabilities in 1914.[28]

Both Fisher's reforms and the war at sea from 1914 to 1918 have cast long shadows upon the literature dealing with the naval policy of the period. The First Sea Lord's dismissal of the small cruiser as an antiquated 'white elephant' and subsequent focus by revisionist historians such as Nicholas Lambert upon the introduction of an allegedly new culture, new strategic vision, new weapons platforms, and new weaponry to sea warfare have proved most influential.[29] Lambert and Sumida have interpreted fiscal retrenchment and the effective economies and tactics to be delivered by technological innovation – swarms of submarines in coastal waters and roving battle cruisers on the high seas – as Fisher's primary motivation. In questioning the extent of Fisher's lasting influence upon force structure, the use of submarines and flotilla defence, and the balance of capital ship deployments between Home, Mediterranean and Pacific theatres, critics of the revisionists such as Bell point to Churchill's more conservative commitment to battleship superiority in the North Sea, to use of submarines and reliance upon the French in the Mediterranean, and to leaving the Pacific 'largely abandoned'.[30] Debates over the essentially orthodox or radical strategic outlook of the Navy by 1914 turn upon interpretations of the 1914-15 Navy Estimates – did 'substitution' proposals to replace capital ship construction with submarine building indicate the ongoing influence of Fisher, a recognition of victory in the *Dreadnought* race against Germany, or even a move towards a more oblique Flanders or Baltic scheme?[31] Receiving little mention in analysis of those and other Estimates dating from 1908 onwards is evidence of the Admiralty's renewed commitment to the procurement of large numbers of modern light cruisers. That this 'middle way' for the Admiralty *facilitated* the employment of the battle fleet and the flotillas alike should not be forgotten. That they also ensured, as Corbett, Richmond, politicians of all persuasions, and the imperially-minded public demanded, that the world's oceans would *not* be 'largely abandoned' by the Royal Navy was also crucial to maintenance of the nation's seapower status. Seapowers, as Andrew Lambert reminds us, 'take a long, maritime, view of their security needs.'[32]

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[27] As discussed in Chapters 6 & 7.
[28] M S Seligmann, 'Failing to Prepare?' and 'A Service Ready for Total War? The State of the Royal Navy in July 1914', *English Historical Review*, February 2018, p.98-122. The view of French in *British Economic and Strategic Planning* that economic warfare was impractical also has relevance here.
[29] N A Lambert, *Naval Revolution*.
[30] C M Bell, 'Sir John Fisher's Naval Revolution Reconsidered: Winston Churchill at the Admiralty, 1911-1914', *War in History*, Vol. 18, No. 3, 2011, p. 355-6.
[31] C M Bell, 'On Standards and Scholarship: A Response to Nicholas Lambert', *War in History*, Vol. 20, No. 3, 2013, p.381-409.
[32] 'Maritime Power: The Future – Britain's Maritime Future', *Council of Military Education Committees of the United Kingdom*, Occasional Paper No. 6, 2015, p. 19.

Whilst that view had undoubtedly been sharpened by the threat of war in the decade prior to 1914, the advent of the light cruiser at that time proved the vision to be resilient: 'overseas trade, resource dependency and naval budgets' were 'synergistic', and in the new designs the Admiralty sought to secure both its purpose and identity for future decades in sustaining this mutuality.

The degree of continuity in British strategic naval policy prior to 1914 has been much debated. Morgan-Owen has highlighted a decline in the Admiralty's long-term strategic vision, particularly under Liberal administrations with their 'keynote peace' determination, as well as the growing influence of the Army's General Staff and invasion concerns, which impinged upon the naval planning process.[33] Whilst direct parallels between this interpretation of the period and the course of light cruiser procurement are inappropriate, evidence suggests that heavy expenditure on a battlefleet and armoured cruisers around the turn of the century, followed by the reforming period of *Dreadnoughts*, battle cruisers and flotilla spending, upset the balance of the fleet and the maritime principles it was intended to uphold. Fisher's sharp focus upon the immediate German naval threat and the rapid creation of powerful and costly deterrents left little place or funding for longer term, peacetime provision. That there was, as this work will show, sufficient long-term vision, informed by historical precedent, both within the Royal Navy and amongst its advocates to act as a corrective in redressing the light cruiser shortage perhaps places the Navy in a more favourable light.[34] That British seapower, readied for war or intent upon maintaining the peace, should look much the same in the composition of its cruiser fleet was axiomatic. Corbett's book, *Some Principles of Maritime Strategy* (1911) reminded the reader, and more especially the Admiralty who sanctioned it, that similar threats had faced Britain before, and this was precisely the moment when the Royal Navy must not surrender its oceanic presence, firstly because that is what enemies wish you to do, and secondly, because the nation's reliance upon seaborne trade posed its own existential threat, as the U-boat campaigns of the two world wars were to prove.[35]

The political implications of 'cruiser warfare' have long engaged those writers with an interest in British maritime affairs.[36] Both the political instinct and moral imperatives of the Liberal administration of the period favoured peace, armament limitation and the application of international laws of the sea, for which the newly developed light cruiser was ideally suited, in one guise symbolising the pacific intent

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[33] D G Morgan-Owen, *The Fear of Invasion: Strategy, Politics, and British War Planning, 1880-1914* (Oxford: Oxford University Press, 2017).

[34] Although John Gooch maintains that civil-military strategic co-ordination, as envisaged through the Committee of Imperial Defence, was largely unsuccessful, leaving the Army to dictate war plans. (J Gooch, 'Adversarial Attitudes: Politicians and Strategic Policy in Edwardian England, 1899-1914' in Paul Smith (ed.), *Government and the Armed Forces, 1856-1990*, London: Hambledon, 1996, pp. 53-74).

[35] For an assessment of the enduring significance of Corbett's work for maritime strategy see A D Lambert, *21st Century Corbett: Maritime Strategy and Naval Policy for the Modern Era* (Annapolis, MD: Naval Institute Press, 2017).

[36] For a detailed analysis and interpretation of the Admiralty's policies with regards to maritime commerce see Matthew Seligmann, *The Royal Navy and the German Threat: Admiralty Plans to Protect British Trade in a War against Germany* (Oxford: Oxford University Press, 2012).

of imperial defence.[37] Proponents of the 'New Liberalism' such as Hobson, who baulked at battleship spending which diverted public spending from social reform, yet saw the protection of imperial trade routes, and especially the efficiencies to be won through the application of new technology in small, capable warships which could also be built and operated within the Dominions, as highly desirable.[38] Opponents in the Conservative Party and those of the Beresford camp and Navy League considered cruiser numbers a prime measure of the nation's maritime capability and security.[39] Amongst the Navy's planners and high-ranking officers was a strong cohort, exemplified by sharp thinkers such as Ballard and Edmond Slade, and influenced by the historical interpretations and statements of maritime principle issued by authors including the Colomb brothers (Sir John and Vice Admiral Philip), John Knox Laughton and Corbett, who maintained that the Navy must not lose sight of its unique and overriding purpose in preparations for war – the maintenance of British seapower across the world's oceans, to which end cruiser strength was to be applied, as provided for by the other elements of the fleet. Thus, future cruiser procurement policy had ramifications far greater than the satisfying of forecast wartime operational requirements. Whilst the totemic status of the light cruiser cannot be compared to that of the *Dreadnought*, its possible range of functions was nonetheless attuned with the political and strategic outlook of a range of audiences and proponents and is deserving of its own exploration.[40]

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Alongside strategic and tactical considerations, the impact of technological innovation on maritime power between 1904 and 1914 has been the subject of extensive research. The sea mine, torpedo, submarine, aircraft, centralised fire control, steam turbine, oil fuel and wireless communications may all have had their origin in the previous century but their influence was certainly to be felt in shaping naval policy in the early years of the succeeding century. Goldrick has gone so far as to write of a transformation in the potential application of seapower around the year 1912,[41] whereas David Edgerton

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[37] Although failure to implement the 1910 London Declaration had much to do with the Navy's operational reliance upon so-called 'cruiser warfare', Liberal attitudes, whilst not monolithic, still tended to favour the maintenance of the free trade *Pax Britannica* strongly associated with the type. See Christopher Martin, 'The Declaration of London: A Matter of Operational Capability', *Historical Research*, Vol. 82, No. 218, November 2009, p.731-755 and Bernard Semmel, *Liberalism and Naval Strategy: Ideology, Interest and Sea Power during the Pax Britannica* (Boston, MS: Allen & Unwin, 1986), which traces the course of such beliefs.

[38] See John Wood, 'J A Hobson and British Imperialism', *American Journal of Economics and Sociology*, Vol. 42, No. 4, Oct. 1983, pp. 483-500. The background to such attitudes can be traced in Simon Gunn & James Vernon (eds.), *The Peculiarities of Liberal Modernity in Imperial Britain* (Berkeley, CA: University of California Press, 2011).

[39] The origin of this viewpoint is dealt with in Andrew Lambert, 'The Tory World View: Sea Power, Strategy and Party Politics, 1815-1914' in Jeremy Black (ed.), *The Tory World: Deep History and the Tory Theme in British Foreign Policy, 1679-2014* (Farnham: Ashgate, 2015), p. 121-148.

[40] See Blyth, Lambert & Rüger, (eds.), *The Dreadnought and the Edwardian Age* and in particular, Rüger's chapter 'The Symbolic Value of the Dreadnought', pp. 9-18.

[41] Although his views are less extreme and controversial than those of Katherine Epstein, who in focusing upon the impact of a single element of technological innovation, writes that 'Torpedoes shattered prevailing strategic paradigms'. See *Torpedo: Inventing the Military-Industrial Complex in the United States and Great Britain* (Cambridge, MA: Harvard University Press, 2014), p.218.

emphasises the ongoing influence of older technologies in fighting the First World War.[42] Unlike the submarine or aircraft, the cruiser concept and the roles it performed were indeed traditional, and Britain's unique seapower dominance in the late nineteenth century relied heavily upon the type. Yet Fisher's vision for flotillas, fleet units and battle cruisers required cruisers. Technological advances, in the guise of the armoured and battle cruiser were, in Bryan Ranft's view, a triumph of form over function – the cruiser's essence being its operational flexibility across the numbers required to provide an oceanic presence – impractical in its larger forms.[43] In narrow seas cruiser roles, very large cruisers tended to be too vulnerable, valuable or impractical to work unescorted, alongside smaller vessels or in littoral operations. Many became absorbed into 'fast wings' of battlefleet, thus exacerbating the shortage of modern cruisers to perform traditional cruiser functions.[44] This shortage was felt all the more acutely as the light cruiser type, as established with the scouts of 1904, were particularly suited to exploiting the newer technologies such as the steam turbine, oil fuel, incorporated belt armour and wireless that were then under development. However, as Sumida has suggested, the adoption of new technologies in the decade prior to war was not a linear process, and both limited budgets and inter-service rivalries delayed advances in the type until 1908 (for trade protection cruisers) and 1912 (for fleet cruisers).[45] Nonetheless, this period of light cruiser resurgence proved vital for the fleet's continuing effectiveness, and displayed the Navy's capacity less to invent or innovate technologically than to exploit, accommodate and adapt to its own purpose.[46]

Evidence suggests that the cruiser also remained central to the culture and identity of the Royal Navy in the first half of the twentieth century. Amongst the great debates shaping naval strategy and procurement during the period – the influence of the *matériel* and historical schools, concepts such as command of the sea, the fleet in being, and the practice of blockade, commerce-raiding, offensive, defensive or amphibious operations – the small cruiser's role was uniquely ubiquitous.[47] Fisher challenged its pre-eminence[48] (although the first battle cruisers were essentially large cruisers) but

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[42] J Goldrick, 'How it worked'. This may usefully be contrasted with Edgerton's *The Shock of the Old: Technology and Global History Since 1900* (London: Profile Books, 2006), particularly pp. 138-159.

[43] B Ranft, 'The Protection of British Seaborne Trade and the Development of Systematic Planning for War, 1860-1906' in B Ranft, (ed.), *Technical Change and British Naval Policy, 1860-1939* (London: Hodder & Stoughton, 1977), pp.1-22.

[44] See Stephen McLaughlin, 'Battlelines and Fast Wings: Battlefleet Tactics in the Royal Navy, 1900–1914', *Journal of Strategic Studies*, Vol. 38, No. 7, 2015, pp. 985-1005.

[45] Sumida has written, 'In actuality, the Royal Navy was neither simply a passive recipient of technological windfall nor a helpless victim of inevitable mechanical vicissitude', and concludes that financial restrictions and the requirement to trial new technology adequately and introduce it operationally affected the pace of its adoption more than 'social or cultural conservatism' (J T Sumida, 'The Quest for Reach: The Development of Long-Range Gunnery in the Royal Navy, 1901-1912' in Stephen Chiabotti (ed.), *Tooling for War: Military Transformation in the Industrial Age* (Chicago, IL: Imprint, 1996), pp. 49-96.

[46] An incorporative, utilitarian and pragmatic process, as identified by Edgerton.

[47] See Beatrice Heuser, *The Evolution of Strategy: Thinking War from Antiquity to the Present* (Cambridge: Cambridge University Press, 2010), pp. 216-247 for an excellent summary of naval strategic thinking prior to 1914.

[48] And continued to do, despite Mackay's claims to the contrary, in 1911-12 when advancing a *Swift*-type large destroyer over the *Arethusas* for North Sea duty.

operational realities, German competition and prevailing maritime principle emphasised its ongoing importance. At an institutional level, the instance of the light cruiser exemplifies the considerable latitude enjoyed by the Admiralty – Treasury constraints not withstanding – to plot its own future strategy and the procurement necessary to fulfil it as a free 'designated governed entity'.[49] Similarly, the work of historians such as Thomas Otte on the influences of institutional traditions, common perceptions, and shared expectations and ambitions helps to explain the resilience of the small cruiser type within the Royal Navy.[50] Not only did the vessel provide a flexible, relatively cheap and capable operational platform for the projection of British seapower but it reinforced the traditions of the service: the frigate lineage; the opportunity for career advancement in an independent command, perhaps on a foreign station – and in peacetime, the greater likelihood of some measure of 'active' service.

At a personal level, the cruiser retained a significant place not only in the strategic vision but also the experiences and affections of many naval officers. David Beatty, whose first three commands had all been cruisers, remained a staunch advocate of the vessel, even beyond retirement. Importantly, such preferences and belief in the centrality of the type had marked operational implications. In a draft document, 'Functions of a Battle-Cruiser Squadron', written on board *HMS Lion* and dated 5 April 1913, Beatty anticipated by three months his draft 1st Battle-Cruiser Squadron Battle Orders, including the key sentence: 'From a study of the great naval wars, it is impressed upon one that cruiser Captains – which of necessity must include battle-cruiser Captains – to be successful must possess in marked degree: initiative, resource, determination, and no fear of accepting responsibility'.[51] Similarly, Joseph Moretz alludes to the important contribution made by those of more junior rank with wartime cruiser experience in improving the operational performance of the type thereafter.[52]

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Despite the dislocating influences of war, the current study does identify significant continuities in British naval policy in the early twentieth century, which envisaged the maintenance of the nation's seapower and the strength and integrity of her Empire through peace at sea rather than a grim struggle

[49] See Patrick Joyce, *The State of Freedom: A Social History of the British State since 1800* (Cambridge: Cambridge University Press, 2013) for an exploration of this interpretation of institutional identity and quasi-autonomy.

[50] Thomas Otte, *The Foreign Office Mind: The Making of British Foreign Policy, 1865-1914* (Cambridge: Cambridge University Press, 2011).

[51] Cited in Bryan Ranft (ed.), *The Beatty Papers*, Vol. I, 1902-1918 (London: Navy Records Society Vol. 128), p. 59. Corbett's explanation of the role of Nelson's frigate captains during the 1911 War Course is reflected in Beatty's words. Andrew Gordon would argue that such initiative was not widespread amongst the Edwardian naval officer class. See his *The Rules of the Game: Jutland and British Naval Command* (London: John Murray, 1996).

[52] The driving forces behind the Navy's revised *Cruiser Manual* of 1920, which incorporated the lessons of wartime operational experience, were Cdr. Stephen King-Hall and Capt. Edward Astley-Rushton, both of whom had served together on the light cruiser *Southampton*. Astley-Rushton, who went on to produce a further, revised manual a decade later, was also captain of the light cruisers *Melbourne* and *Canterbury*. See Joseph Moretz, *Thinking Wisely, Planning Boldly: The Higher Education and Training of Royal Navy Officers, 1919-39* (Solihull: Helion, 2014), p. 154.

for survival. Whilst the seriousness of the German threat facing British trade and the nation itself loomed large in the Admiralty's strategic thinking,[53] even in the spring of 1914 the Admiralty looked ahead to the year 1920 and a predominant battlefleet, together with a force of seventy modern cruisers, half that number facilitating fleet and other operations in home waters and the remainder patrolling the world's trade routes, working alongside their Dominion counterparts. This is not to suggest, as does Keith Wilson, that the German threat was not proximate and substantial.[54] A comparison with the forecast strength of their German counterpart in 1920 was still made – indicating that the challenge was perceived to be long-lived – but that concern was addressed within the Admiralty's overall strategy for the maintenance of British seapower, with regard to which the light cruiser was a valuable barometer of the Navy's pretensions, unrelated to comparative standards and only partially reflecting what might prove temporary diplomatic relations.[55] The contest to maintain this continuity in cruiser numbers reflected the Navy's wider effort to maintain its maritime supremacy. Of significant importance in the current study is the notion that the 'cruiser war', a term coined by Robin Higham to describe the Royal Navy's struggle to maintain cruiser numbers in the face of government cutbacks in the 1920s, was not the first of its kind, and perhaps not even the second, in the service's long history.[56] That the Admiralty chose to reassert the importance of the type developed in the decade before war suggests that in their perception at least, the events of 1914-18 had not substantially changed the essential nature of Britain's strategic outlook, and the cruiser's role in projecting it, in the face of the 'continental commitment' interpretations of historians such as Sir Michael Howard that events surrounding the conflict had altered that outlook irreversibly.[57]

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From contemporary polemicists such as Custance to modern scholars of international relations such as Paul Kennedy, the strength of the British nation has been linked inextricably to the state of its navy. In particular, the Admiralty's competitive struggle to maintain maritime supremacy has been seen to mirror that of the nation as a whole in clinging on to its diplomatic and economic advantage against the challenge of international industrial rivals.[58] Hence, British naval policy between 1904 and 1914

[53] Grimes, in *Strategy and War Planning*, p.43 has written, 'The NID's [Naval Intelligence Department to 1912] North Sea studies and contributions from Cs-in-C afloat throughout 1902-6, did not merely repeat contingencies developed to meet the Dual Alliance but were specifically adapted to the conditions of a naval war with Germany'. The 1907 War Plans (TNA, ADM116/1043B) were predicated on that possibility.

[54] Keith Wilson, *The Policy of the Entente: Essays on the Determinants of British Foreign Policy, 1904-1914* (Cambridge: Cambridge University Press, 1985).

[55] See Peter Lowe, 'The British Empire and the Anglo-Japanese Alliance, 1911-1915', *History*, Vol. 54, No. 181, June 1969, pp. 212-225 for evidence of Admiralty and Dominion distrust of Japanese intentions in the Pacific. Concern over Russia's territorial intentions was also growing once more by 1914.

[56] R Higham, *Armed Forces in Peacetime: Britain, 1918-40, A Case Study* (London: Foulis, 1962), pp. 127-137. Between 1920 and 1923 Navy Estimates were reduced by one-third.

[57] M E Howard, *The Continental Commitment: The Dilemma of British Defence Policy in the Era of the Two World Wars* (London: Temple Smith, 1972).

[58] See Halford Mackinder, *Britain and the British Seas* (London: Heinemann, 1902) and the development of his Heartland Theory in 'The Geographical Pivot of History', *Geographical Journal*, Vol. 23, No.4, April 1904, pp.

continues to be the subject of intense academic research. Understandably, studies have been dominated by the nature and extent of the Royal Navy's preparations for the war which came in 1914. Interpretations of a navy jolted from the complacency and the relative technological and tactical stagnation of a century of *Pax Britannica* into an existential race for survival against the Kaiser's burgeoning fleet were popular during the period, not least when espoused for promotional purposes by the chief instigator of that 'naval revolution', Sir John Fisher. The reorganisation and redeployment of the fleet, the significance of Fisher's *Dreadnought* squadrons, the role of the battle cruiser and the new flotillas of destroyers and submarines, and the variety and feasibility of war planning, both published and (it has been claimed) assumed,[59] have received considerable and sometimes heated scholarly attention, not least because the historical issues raised are greater than the sum of their parts – the inclusion of light cruiser development within that list can further inform our assessment of so-called 'decline and fall' historiography.[60]

In his influential survey of the history of the Royal Navy, *The Rise and Fall of British Naval Mastery*[61], Paul Kennedy called into question the robustness of British seapower, not only in declaring the terminal decline of the *Pax Britannica* from 'its apogee somewhere in the middle of the [nineteenth] century' (making somewhat selective use of Mackinder's theories on the impact of industrialisation and the railways in the development of the continental land-masses) but discerning in the very origins of Britain's reliance on seapower to support her economy, her Empire and feed her people a fundamental weakness. There was, in Kennedy's opinion, an economic, political and strategic inevitability in the validity of *The Standard* newspaper's frantic realisation in May 1912 that 'the Barbarians are thundering at the frontiers. The ominous word has gone forth. We have called home the legions.'[62] The malaise of Britain's imperial decline, economic exhaustion and fracturing of her naval supremacy, with similar overtones of Gibbon abounding, have long been in vogue – from Max Beloff's *Imperial Sunset* to Aaron Friedberg's *The Weary Titan*.[63] Both of these studies saw a direct correlation between the apparent refocussing of the Royal Navy's resources upon home waters in confronting the challenge of the Imperial German Navy and faltering pretensions to remain the global superpower.

421-437 for an influential contemporary expression of such threats and their consequences for British imperial dominance.

[59] In *Planning Armageddon: British Economic Warfare and the First World War* (Cambridge, MA: Harvard University Press, 2012), Nicholas Lambert asserts the existence of a highly integrated and comprehensive plan to defeat Germany by the prompt application of economic warfare involving not just the Royal Navy but the great financial, commercial and communications leverage available to the dominant British monopolies.

[60] See, for instance, the extensive bibliography which accompanies Katherine Epstein's letter to the editor, *Journal of Military History*, Vol. 83, No. 2, Apr. 2019, pp. 651-655.

[61] New York: Scribner, 1976.

[62] Kennedy, *Rise and Fall*, p. 205.

[63] M Beloff, *Imperial Sunset: Britain's Liberal Empire, 1897 - 1921, Vol. 1* (London: Methuen Young, 1969); A L, Friedberg, *The Weary Titan: Britain and the Experience of Relative Decline, 1895-1905* (Princeton NJ: Princeton University Press, 1988).

The advent of a new breed of light cruisers challenges such 'macro-historical' interpretations. They provided more than a flag-waving presence, but evidenced a degree of confidence, vibrancy and logical consistency in Britain's naval policy, even beyond that now being acknowledged in the Admiralty's policies in home waters.[64] Whilst performing much the same roles as their predecessors, the incremental adoption of new technologies offered greater, eminently flexible and adaptable capabilities to the fleet and marked a resurgence of the true cruiser mission in war and peace.[65] The type could also provide the focus for commonality of procurement and the foundation of indigenous warship construction in the Dominions, as Bell has intimated.[66] Historians of Britain's interwar navy, following in the wake of Stephen Roskill, pay much attention to Britain's commitment to a cruiser fleet despite deep reductions elsewhere. Christopher Miller focuses heavily upon the economic imperatives pushing Britain towards the continuing construction of mid-priced, mid-sized cruisers in quantity after 1918, and the benefits for regional industries, private and naval dockyards alike.[67] Evidence of similar procurement priorities exists for the pre-1914 period, especially in the case of scout construction concentrated at Pembroke Dock and the awarding of orders for the first *Town* class light cruisers during the shipbuilding slump of 1908.

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Although largely unrecognised by the current literature, the operational possibilities presented by the development of Britain's light cruiser fleet in the years immediately preceding 1914 were considerable. Not only did these vessels – in which Britain was to gain an unassailable lead both in quantity and quality (just in the nick of time) from the advent of the 1912 Programme onwards – prove vital facilitators in the employment of other elements of the fleet but they offered fast, flexible and potentially numerous independent platforms for the application of British seapower. Rather than the adoption of a form of *Jeune Ecole* strategy, diluting the fleet's resources by the use of expensive and tactically restricted armoured cruisers, light cruisers offered Britain a vision of the so-called 'Streetfighter' concept proposed by some within the current US Department of the Navy – a notion that a proportion of 'the naval power represented by the fleet should be disaggregated amongst a much larger number of individually smaller units . . . networked together so that they can act as a cohesive whole.'[68] Neither

[64] See M Seligmann, 'A Service Ready for Total War?'

[65] To date, most appreciations of the advances made by the Royal Navy in light cruiser design, and their implications for conducting cruiser tasks, have been confined to more technical monographs such as Brown, *The Grand Fleet* and Friedman, *Fighting the Great War at Sea: Strategy, Tactics and Technology* (Barnsley: Seaforth, 2014).

[66] C M Bell, 'Sentiment vs Strategy: British Naval Policy, Imperial Defence, and the Development of Dominion Navies, 1911-1914', *International History Review*, Vol. 37, No. 2, 2014, pp. 262-281.

[67] C W Miller, *Planning and Profits: British Naval Armaments Manufacture and the Military-Industrial Complex, 1918-1941* (Liverpool: Liverpool University Press, 2018).

[68] Geoffrey Till, *Seapower: A Guide for the Twenty-First Century* (new edition, Abingdon: Routledge, 2009) p.122-123.

the state of technology nor operational experience in 1914 allowed for such strategic application of modern British cruisers but a direction was set, from the common ancestor of the scouts of 1904.

The scale, nature and timing of the Royal Navy's light cruiser procurement are by no means the only useful indicators of the long-term direction of British naval policy but they remain considerably neglected topics. War was not an end in itself, and the national war of survival as it developed between 1914 and 1918 was not widely anticipated nor prepared for across Europe – as David French and John Maurer have suggested, Kitchener's prescience was not widespread in either military or political circles.[69] Whether by the lightning leverage of international finance and trade, as alleged by Nicholas Lambert, the more nuanced application of blockade, indirect pressure, threat of amphibious assaults and harrying of the German fleet, or a great clash of battlefleets, no procurement programme or war plan – ever the first casualty – to be devised by the Admiralty set out to deliver the outcome as it occurred. The sheer scale of Britain's eventual land and economic commitment, the rise of the submarine, and the rise and fall of alliances could not be predicted. In keeping faith with the maritime principles that had served the Navy well in past global conflicts, in which the role of the light cruiser was central – to the fleet and flotillas as much as to blockade and trade protection – the Admiralty was hedging its bets as well as looking to the sustaining of British seapower into the peace beyond war.[70] This was why some fought so hard for new cruisers in the decade prior to 1914. In early August 1914 it was the shared view of naval thinkers such as Corbett, Slade and Richmond that Britain was involved in the war for the same reasons as during the Napoleonic conflict, namely to secure and enhance the Empire – through a restored European balance and the clearing of Belgium – and imperial wars required large cruiser forces, both naval and auxiliary.[71] Cruiser numbers and capabilities were not linked purely to standards set by the construction of other powers but to the endogenous requirements of the nation. Limitations on their effectiveness were to be resisted at The Hague in 1907 and London in 1909, just as they were to be in Washington in 1922.

Procurement programmes reflect current defence realities and future defence ambitions. Much of the historiography of British naval policy between 1904 and 1914 is concerned with obtaining a balanced

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[69] D French, *British Economic and Strategic Planning*, p. 124-125, and J H Maurer, *The Outbreak of the First World War: Strategic Planning, Crisis Decision Making, and Deterrence Failure* (Westport, CT: Praeger, 1995), pp. 3-16.

[70] In this sense, the Royal Navy emerged from the period still 'the fox', both aware of and responsive to the many and varied strategic demands upon it, as the prime upholder of the Empire's security and interests. (See Isaiah Berlin's essay *The Hedgehog and the Fox: An Essay on Tolstoy's View of History*, Weidenfeld & Nicolson, 1953, for an explanation of rival world views). Within this interpretation, Fisher's reforms of the fleet can be regarded as a deterrent measure against the contemporary German challenge in order to maintain the Navy's wider interests in the long-term. Some historians, notably Keith Wilson and Nicholas d'Ombrain, have interpreted the Navy's failure to focus, 'hedgehog-like', upon a consistent and co-ordinated Continental strategy as a grave failing, however.

[71] See Stephen Cobb, *Preparing for Blockade, 1885-1914: Naval Contingency for Economic Warfare* (Farnham: Ashgate, 2013) on the development of British naval planning relating to the role of naval and auxiliary cruisers in global trade protection and interdiction in wartime.

assessment of just these elements, and it will be argued that the neglected instance of the light cruiser programme provides a particularly enlightening subject for study. The timing, specifications and number of ships procured, together with their stated rationale, reveal a level of permanence in, and commitment to, the development of a naval policy which paper plans and memoranda alone cannot provide. In the designs approved (and those rejected), the historian is able to discern something of the shifting pattern of strategic priorities, the scale of compromises made and the pretensions of those responsible for the nation's defences. The findings of this survey suggest that after initial opposition, a dedicated light cruiser procurement programme had been developed by the Royal Navy by 1914, indicative of its outlook: more cohesive, flexible, aware and far-sighted strategically than has been widely assumed. War would quickly highlight the flaws in this programme – the impact of the earlier hiatus in cruiser construction; the lack of experience in melding enhanced operational capabilities with tactical planning and execution – but it would be vindicated, by its marked contribution both to the wartime and also peacetime formulation of British naval policy.

Chapter 3 – Common Themes in the Study of Light Cruiser Procurement, 1904-1914

Procurement, the partial fulfilment of a strategic vision, provides the interface between a state's defence ambitions, service needs and the 'limiting factors': financial, industrial or technological constraints; skills and manpower restrictions; international treaty or alliance obligations, maritime geography and the like. Within this triangle of influences the priorities of procurement are shaped, imperatives are upheld and compromises made.[1] Between the financial years 1903-04 and 1913-14 successive British governments allocated an average of 14% of their annual expenditure to the construction, arming, maintenance and repair of the Royal Navy's ships. Even when faced with the important demands of other Votes within the Naval Estimates of that period, from the costs of manning and training the fleet to shore-based infrastructure, administration and supply, never less than half of the Admiralty's financial provision was dedicated to ship construction and maintenance. As Ian Speller has written, despite tremendous developments in warship design, the capability of weapons systems and the potential of communications and surveillance equipment, 'Naval warfare is platform centric.'[2] The balance of differing platform types, their relative effectiveness and readiness tells us much about the traditions, strategic outlook and aspirations of a fleet and the state whose interests and investment it is intended to protect.

Procurement theory attempts to explain and account for the significance of the priorities driving or retarding major defence spending programmes.[3] Between 1904 and 1914 the Admiralty harboured a range of views as to what those priorities should be – from fulfilling immediate, operational need to shaping the long-term ambitions of the Navy; from readying for war to maintaining the peace, and emphasising security in home waters as against sustaining a strong, global presence. The intended rationale for any future cruiser construction lay close to the heart of many of these debates.[4] Exogenous

[1] Chapters 4 & 5 of Geoffrey Till's *Seapower* are enlightening in exploring the processes involved in the selection of platforms for a fleet.
[2] I Speller, *Understanding Naval Warfare* (Abingdon: Routledge, 2014), p. 107.
[3] For an exploration of the principles underpinning procurement theory see Keith Hartley, *The Economics of Defence Policy* (London: Brassey's, 1991) and Ethan Kapstein, *The Politics of National Security*, which stress respectively the influence of the disciplines of economics and strategic studies on interpretations of defence procurement.
[4] The core section of Sir Julian Corbett's chapter 'The Theory of the Means – The Constitution of Fleets' in his *Some Principles of Maritime Strategy*, pp.107-127, was devoted to the perceived necessity for the Admiralty to meet the ongoing, high demand for cruisers to maintain maritime communications *and* facilitate the operations of the fleet: 'On cruisers depends our exercise of control; on the battle-fleet depends the security of control . . . Experience, then, and theory alike dictate that as a general principle cruisers should be regarded as primarily concerned with the active occupation of communications, and that withdrawals for fleet purposes should be reduced to the furthest margin of reasonable risk' (pp.115-117). Determining the fluctuating extent of that risk, particularly with regards to its implications for new cruiser building, was a major preoccupation of the many influential figures at the Admiralty who had read and sanctioned Corbett's work. See Donald Schurman, *The Education of a Navy: The Development of British Naval Strategic Thought, 1867-1914* (London: Cassell, 1965) for an original appreciation of Corbett's influence upon Admiralty policy.

factors – external influences upon a nation's defence planning – obviously included the relative threat to national interest posed by other states; global technological advances which could impinge upon the effectiveness of military hardware, and shaping of defence policy as a result of international alliances, diplomatic, legal and treaty obligations.[5] The decade from 1904 was dominated by such imperatives, all having a discernible impact upon the Admiralty's projections for new vessels: the potential French foe becoming an ally,[6] and looking to a more tangible continental commitment from Britain; the global theatrics of the US Navy's Great White Fleet; three further German Naval Laws and a challenge to the Royal Navy's dominance in home waters; international conferences at The Hague and in London, and advances in maritime technology, from fast, geared steam turbines to oil fuel and effective wireless communications, in which the navy was in the van.

Alongside the 'push' factors linked to international relations, assuring relative gain over adversaries and the requirement to respond to (and harness) technological developments in order to do so, procurement programmes also highlighted endogenous 'pull' factors which reflected the domestic environment of the spending state. Defence spending in a democracy is shaped by the outlook and composition of governments, together with the voters and interest groups – political, financial, commercial, military, intellectual – of whom they must take account. The spending of large sums of public money requires close political and financial scrutiny, and the decision process reveals much about the priorities of a nation in the longer term, given the duration of many equipment programmes. Resource scarcity, the balance of capabilities both between and within services, security of supply of equipment and the ability to increase and upgrade it, and the implications for jobs, national defence assets and the integrity of nation and Empire all shaped the procurement choices made by Balfour's Conservative government in the first two years of the period and Liberal administrations thereafter.[7]

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[5] It is interesting to note that imperial defence policy, considered previously to be very much subordinate to British requirements, took on an exogenous aspect as Dominions such as Australia began to seek greater influence and their own, semi-independent capabilities. In 1909 the First Lord, Reginald McKenna, explained that the British government's change of policy in supporting the establishment of an Australian naval force was prompted not by strategic necessity but as a political response to demands for greater Dominion autonomy. (TNA, ADM 116/1100B, Imperial Conference of 1909 on the Defence of Empire.) See also Lambert, *Australia's Naval Inheritance*; John Mitcham, *Race and Imperial Defence in the British World, 1870-1914* (Cambridge: Cambridge University Press, 2016), Ch.5 and Donald Gordon, *The Dominion Partnership in Imperial Defence, 1870-1914* (Baltimore, MD: Johns Hopkins Press, 1965).

[6] Given the fluid interpretations within the Admiralty of the naval significance of the French Entente, even after the agreement of 1912, there is very little sign of its impact upon cruiser procurement, if not deployments. See John Coogan & Peter Coogan, 'The British Cabinet and the Anglo-French Staff Talks, 1905-1914: Who Knew What and When Did He Know It?', *Journal of British Studies*, Vol. 24, No. 1 (Jan. 1985), pp. 110-131.

[7] Daunton in 'The Greatest and Richest Sacrifice' has stressed the ongoing fiscal capacity of governments of both parties to meet many of the Admiralty's demands. Nonetheless, a policy prospectus produced by Admiral Sir John Fisher in the summer of 1904, prior to taking up his appointment as First Naval Lord (to be retitled First Sea Lord) made clear his intention to make 'drastic changes', not least through a reduction of naval expenditure. (CAC, Fisher Papers, GBR/0014/FISR 8/38/4932, undated print on Admiralty House, Portsmouth stationery). A hiatus in new cruiser construction between 1904 and 1907/8 was one result of these economies (see Chapter 5).

At the service level, competition between the Army and Navy was evident, although government spending on the Senior Service had traditionally been high, and its importance to the national economy was marked.[8] Expenditure on the ships themselves accounted for between 50 and 60% of the Navy Estimates but a constant review of the composition of the fleet, the balance of its capabilities, integration of its units and their age, serviceability and manpower demands was undertaken. Fisher's reforms dominate the period and the procurement-focused literature. The Navy had vast experience and considerable influence with politicians and civil servants in conducting its annual procurement assessments. Some procurement challenges were eternal: the 'trade-offs' of unit numbers against capability; specialised as against multi-role platforms; responsive programmes to combat a current threat as against proactive design planning, anticipating future need and offering the potential for long-term defence advantage; the balance to be struck between the incorporation of new technology and tried and tested systems, which might make less demands upon training and maintenance budgets. As well as what to buy, the question of how to buy was also of relevance, incorporating private versus naval dockyard contracts, speed of delivery and financial controls. Such fundamental choices, together with a host of subsidiary decisions, had to be made in a climate of particularly volatile international relations and domestic circumstances between 1904 and 1914, and with the realisation that procurement commitments made would take two, three or more years to come to fruition, and leave the navy an asset with a possible service life of as many decades.

Procurement was a vital interface between the ends, means and ways of defence policy: the political policy goals to provide national security and international influence; the equipment, operating systems and manpower means to deliver such ends, and the strategic ways to employ them best to deliver those ends. A study of the light cruiser programme is of particular value to the historian as both exogenous and endogenous priorities were prominent in its development. These vessels were built to serve Britain's long-term strategic interests as a global seapower as well as to counter the proximate threat from first France and then Germany. They formed no part of a comparative power standard, rather reflecting the needs of the wider fleet, whose functions they facilitated, and the anticipated nature of British maritime influence across the world's trading routes. From a common ancestor in the scouts, themselves a significant step in cruiser development, came both trade protection and fleet cruisers.

In microcosm, British cruiser development between 1904 and 1914 mirrored the nation's international relations in its exogenous determinants. The design of the first scouts was influenced by innovations in Russian cruiser design but their intended use was in Channel warfare against massed flotillas of French torpedo boat destroyers. The Franco-Russian Naval Convention of December 1901 certainly alarmed

[8] Just over 195,000 workers were directly employed in British shipbuilding by 1911, and by 1913 Admiralty orders were accounting for 17% of annual shipbuilding output by value. Naval orders were of particular assistance during the period 1908-09 when global demand for merchant shipping fell away and unemployment rates reached 13% in the British shipbuilding, engineering and metals sectors. (Pollard & Robertson, *The British Shipbuilding Industry*, p.32, 34 & 242.)

the Conservative government – co-operation during times of diplomatic tension allowed the Russian fleet to hold the Baltic and threaten Egypt with an amphibious assault forced through the Dardanelles, whilst the bulk of the French fleet would offer support in the Mediterranean and her armies would mass along the English Channel, supported by armoured cruisers, submarines and massed torpedo craft – the '*Défence Mobile*'. Whilst the real intent of such schemes must remain speculative, a Cabinet Memorandum by Lord Selborne, First Lord of the Admiralty, dated 16 November 1901, described the Channel deployments of the French Navy as 'extraordinary' and more than 'a mere increase of their defensive powers. I think they must expect so to harry our ships in the narrow waters of the Channel – by day with submarines, and by night with torpedo boats – that our ships when not in harbour will be forced to seek the high seas, and so leave our commerce an easier prey to the French cruisers in narrow waters.'[9] Both the ships' covers for the Royal Navy's commercial scouts[10] and instructions issued by Prince Louis of Battenberg, Director of Naval Intelligence on the concentration of torpedo craft along the Channel coast,[11] stress the urgent littoral role expected of the scouts – to lead fast flotillas of torpedo boat destroyers against their opposite numbers around Cherbourg, Brest and Dunkirk.

Even whilst the early scout cruiser designs were being mooted in the spring of 1901, recent research suggests that the Admiralty's strategic procurement concerns had shifted, and that 'Germany's naval building programme would become, in the future, Britain's principal maritime threat.'[12] Greater range was introduced in the *Boadiceas* of 1907 to allow for close blockade operations off the continental North Sea coastline[13] and despite also being designed with a close blockade as well as trade protection remit, improvements in the *Towns* of 1908 were chiefly sanctioned to counter the larger German third class cruisers then under construction.[14] However, exogenous factors were not the exclusive drivers of cruiser policy: as Director of Naval Intelligence between November 1907 and March 1909, Rear Admiral Edmond Slade was a strong champion of a modern and widely deployed cruiser force in its own right, and Ballard's role in framing various iterations of blockade policy and trade protection plans saw him take an active role in proposed cruiser procurement for the long-term.[15] A Committee on the Design of Cruisers for Foreign and Colonial Stations (1912), chaired by Sir Francis Hopwood and including the influential Slade and Ballard as members, looked to small 'peace cruiser' designs to replace ships on foreign stations over the succeeding eight years. Designs for five cruisers to be built

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[9] Cabinet Memorandum, *The Navy Estimates and the Chancellor of the Exchequer's Memorandum on the Growth of Expenditure,* published in D George Boyce, *The Crisis of British Power: The Imperial and Naval Papers of the Second Earl of Selborne, 1895-1910*, London: Historians' Press, 1990, p. 135.
[10] NMM, Woolwich, ADM 138/189, *Scout* Ships' Covers, 1903-04.
[11] TNA, ADM 116/3093, pp. 509-19, *The Organisation of Torpedo Craft in Home Waters,* 4th July 1904.
[12] M S Seligmann, 'Switching Horses', p.257.
[13] NMM, Woolwich, ADM 138/231, *Boadicea* Ship's Covers, range requirements, f.23.
[14] TNA, ADM 116/1013A Vol. 2, H.M. Ships Design Papers, 1907-11, CN 0642/1908, 'New 2nd Class Cruiser'.
[15] See TNA, CAB 16/5, Slade Memorandum, 'The Economic Effects of German War on Trade', CID Paper E-4, 12 December 1908; Appendix V, 'Report of the Sub-Committee of the Committee of Imperial Defence to Consider the Military Needs of Empire' and Ballard's comments contained in the Ship's Covers for the proposed 'Atlantic' cruiser of 1913 (NMM, Woolwich, ADM 138/319, f.5-6).

under the Canadian Naval Defence Act of 1910 were drawn up, to match the programme underway in Australia, although Sir Wilfred Laurier's replacement by Robert Borden as Prime Minister in 1911 saw the end of the scheme.[16] Plans for a large 'Atlantic cruiser' for commerce protection and interception were similarly shelved in 1913 but were reinstated in the *Hawkins* class of 1915. Thus, whilst it was evident from the focus on the *Arethusa* class of 1912 and their successor *C* and *D* class cruisers that the prime focus for both resources and strategic employment had become the countering of the proximate German threat in the North Sea, study of cruiser procurement shows more nuanced, and by its very nature, more long-term planning at work in the Admiralty, largely beyond any more than general oversight by politicians other than the First Lord in all but financial respects.[17]

Addressing the House of Commons in 1903 the First Civil Lord, Ernest Pretyman, rejected the demand that cruiser numbers should be subject to the same Two-Power Standard as battleships 'because in the matter of cruisers there can be no question of equality'. This was an endogenous concern specific to Britain – not a comparative procurement but 'a proportion to be considered in relation to the magnitude of the interests to be protected.'[18] In this sense, new cruiser designs offered a clear reflection of the national interest as it was perceived and projected.[19] In establishing the Committee of Imperial Defence (CID) in 1904, Balfour and his government aimed at a measure of strategic oversight, in which the cruiser clearly had a role. The Navy is 'the absolute foundation of everything – of all our liberties, of all our greatness' Balfour told the Commons in February 1903, and his hostile reaction to the proposed Declaration of London (1909) which aimed, amongst other goals, to alter belligerent rights at sea and future conduct of cruiser warfare, saw Balfour questioning the alleged altruistic intentions of not just the Liberal government but also 'the military Powers', the USA and Germany.[20] Indeed, it was Balfour who in 1915, during his tenure as First Lord of the Admiralty, ordered the design of the *Hawkins* class, thus renewing the procurement cycle of trade protection cruisers which had been temporarily suspended in 1912 to accommodate the urgent construction of North Sea cruiser types. However, whilst still Prime Minister, battleship and armoured cruiser procurement had dominated the Navy Estimates of Balfour's

[16] See Martin Thornton, *Churchill, Borden and Anglo-Canadian Naval Relations, 1911-14* (Basingstoke: Palgrave Macmillan, 2013) for an analysis of the domestic and Dominion pressures which led to the abandonment of this scheme. The Canadian cruiser designs are in NMM, Woolwich, ADM 138/276, 'Canadian cruiser' Ships' Covers.
[17] From a general 'coming want' of cruisers for 'prospective strategical and tactical necessities' described in early discussions of the new *Towns* on 12 June 1907 (TNA ADM 167/41, Admiralty Board Minutes), by 13 January 1908 a memorandum from Henry Jackson, the Controller, stated of the new designs its 'principal role being to meet the German 3rd Class Cruisers', (TNA, ADM 1013A, Vol. 2, CN 024/1908). For the Report of the Hopwood Committee see ADM 1/8328, Admiralty: Letters-In and Papers, Feb. 1913.
[18] Quoted in Herbert Richmond, *Statesmen and Sea Power* (Oxford: Clarendon Press, 1946), p. 272.
[19] Although by 1912 it is clear that the Liberal Party Cabinet and House of Commons had accepted a 2:1 'standard' between British and German cruiser numbers (see TNA, ADM 116/3486, First Lord's Miscellaneous Cabinet Papers, 1907-16, 'Requirements of Officers, 1920', Churchill's response to Second Sea Lord [Jellicoe], p.10, dated 23 Sept. 1913).
[20] 'You do not promote peace by making it easy, or a relatively cheap and a relatively innocuous operation, to go to war with the British Empire' wrote Balfour in a letter to The Times on 28 June 1911. Both quotations taken from Jason Tomes, *Balfour and Foreign Policy: The International Thought of a Conservative Statesman*, (Cambridge: Cambridge University Press, 1997), pp.43-45.

First Lord's, and his government's, last word on the matter, the Cawdor Memorandum for future naval procurement programmes, which looked to the building of four *Dreadnoughts* or battle cruisers per year and made no provision for light cruisers.

Fluctuating fiscal pressures upon the Royal Navy are particularly well evidenced by the example of light cruiser procurement. The financial burdens of the Boer War and construction of very large armoured cruisers contributed to the aim of Balfour's government to reduce the 16% of its expenditure being allotted to warship building and maintenance (Votes 8 & 9 of the Navy Estimates) by 1904-05. Fisher's aversion to the small cruiser and the determination of Liberal administrations to reduce Navy Estimates yet further left light cruiser construction particularly susceptible to reductions. Between 1904-05 and 1907-08 spending on Votes 8 & 9 fell by 17.5% and not a single example of the type was laid down for the Admiralty between January 1904 and June 1907. In the five years between January 1904 and February 1909, whilst large sums continued to be spent on prestige capital ship programmes and flotilla defence, just two scout cruisers were laid down, at a total cost of £660,000 – considerably less than 1% *per annum* of the new construction allocation.

Sir Henry Campbell-Bannerman's initial 'without prejudice' assessment of this programme for 1906-07 fell foul of what Marder described as the 'little-navy' wing of the Liberal Party, with their interest both in economy and looming disarmament talk at the Hague.[21] This 'New Liberalism' faction within the governing party presented an ongoing challenge to naval procurement after December 1905, in which light cruisers were adjudged the straw breaking the camel's back following vast capital ship expenditure. As late as December 1913, Churchill was forced to issue a detailed rationale for further light cruiser spending to Cabinet after the efforts of the Postmaster-General, Herbert Samuel, to cut the 1914-15 Estimates from 8 to 4 new ships.[22] For the more radical wing of the party, all naval expenditure tended to accelerate the already 'express speed' of 'the cataclysm which . . . will sooner or later submerge civilization',[23] although the cruiser – cheaper, seemingly less martial than the battleship and more a peacekeeper than the 'damned un-English' submarine – was generally less the focus of opposition. For Liberal Imperialists such as Sir Edward Grey, the cruiser could provide a common bond between the Royal and Dominion Navies, as envisioned from the 1909 Imperial Conference onwards,

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[21] Marder (1961), *Dreadnought to Scapa Flow*, Vol. 1, pp.125-26.

[22] Churchill cited the urgent need to replace elderly cruisers on foreign stations as well as the target of a 100% superiority over German types in the memorandum, dated 13 December 1913. (Randolph Churchill, ed., *The Churchill Documents, Vol.5, At The Admiralty, 1911-1914*, reprinted Hillsdale, MI: Hillsdale College Press, 2007, pp.1825-1832).

[23] Speech by Liberal MP J Allen Baker on the Naval Estimates, 16 March 1910, quoted in Kenneth Morgan, *The Age of Lloyd George* (London: Allen & Unwin, 1971), p.159. In the Navy Estimates debate of 16 March 1911, McKenna was pressed by the radical Liberal MP J A Murray Macdonald to give a specific commitment to reduce expenditure on smaller, protected cruisers alongside other savings.
See Historic Hansard: https://hansard.parliament.uk/Commons/1911-03-16/debates/c2308590-2e1c-43e4-ab8c-e879f96e448f/MrMckennaSStatement?highlight=cruisers#contribution-6aed4dfa-1cbb-4352-9fe7-ebc852a7a05e.

although in the cases of Canada and New Zealand, not acted upon with any consistency.[24] Matthew Johnson has also identified 'a peculiarly *Liberal* form of militarism' in the strongly navalist grouping of MPs of the governing party with close ties to the Navy League.[25] Backbench influence grew after the government lost its majority in 1910 and those Liberals who saw in a strong navy the best guarantee of progressive ambitions – the maintenance of peace and free trade – were vocal in their support of sustained expenditure on warship procurement.

The level of public engagement with capital ship procurement for the Royal Navy, especially during the 1909 'naval scare' when fears over an acceleration in German programmes appear to have had some justification,[26] was evidently less marked with respect to smaller vessels. Little immediate political capital could be gleaned by government or its opponents from a 'we want eight (*Arethusa* class light cruisers) and we won't wait!'. The relatively low cost of the type and the speed with which it could be constructed across a number of British yards gave the Admiralty comfort that this was not a pressing issue. Given the expense of the armoured cruiser programme and the still large number of more elderly small cruisers in the Reserve Fleet, the concerns raised by the Navy League, Beresford and the Conservatives about the hiatus in light cruiser building could be rebuffed as partisan attacks. Nonetheless, the broad and cumulative influence of powerful commercial, imperial and public lobbying groups on naval procurement policy should not be underestimated. Banks, insurance companies, Chambers of Commerce, imperial trading organisations and even trade unions concerned to secure the supply of cheap food for their members all held a view on the Imperial Maritime League's claims that failure to modernise the Navy's cruiser fleet put British trade and thus the nation at imminent risk.[27] Their influence amongst MPs was also marked, and criticism of cruiser procurement policy from the floor of the House increased from 1911 onwards, in tune with the admonishments of Corbett and practitioners such as Jellicoe and Ballard as to both the strategic and tactical necessity of modern light cruisers for trade protection and fleet work.[28]

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[24] H C G Matthew, *The Liberal Imperialists: Ideas and Politics of a Post-Gladstonian Elite* (Oxford: Clarendon Press, 1973).

[25] M Johnson, 'The Liberal Party and the Navy League in Britain before the Great War', *Twentieth Century British History*, Vol. 22, No. 2, 2011, pp. 137-163. Liberal MPs and Navy League members included A C T Beck, W H Cowan, A E W Mason, T B Napier, E A Risdale and Carlyon Bellairs. There was cooperation on naval matters between these MPs and some Conservative and Liberal Unionist MPs such as John Middlemore, who raised concerns over comparative British and German light cruiser procurement programmes with Churchill in the Commons in July 1912. The Unionists had only formalised their merger with the Conservatives two months earlier. See Historic Hansard:
https://hansard.parliament.uk/Commons/1912-07-17/debates/daf664fe-a0b3-413d-99f3-554de5e5b7ad/ProtectedCruisers?highlight=cruisers#contribution-34e38cf7-fa22-4a24-a9c4-4e5bd97d4637.

[26] See M S Seligmann, 'Intelligence Information and the 1909 Naval Scare: The Secret Foundations of a Public Panic', *War in History*, Vol. 17, No. 1, 2010, pp.37-59.

[27] See H F Wyatt & L G Horton-Smith, *Britain's Imminent Danger* (London: Imperial Maritime League, 2nd edition, 1912), *passim*.

[28] From the government benches, the South African-born Liberal MP, Percy Molteno, chairman of the Union Castle shipping line, was excoriating in his appraisal of cruiser procurement, suggesting to Churchill in a debate on 17 July 1913 that the Admiralty's view appeared to be that "We are so occupied and engrossed in preparing

Without cohesion or clear leadership from Asquith, any strategic vision became compartmentalised. Both Zara Steiner and Harry Hinsley have shown how the Foreign Office under Grey became almost a private fiefdom,[29] and whilst David Lloyd George's *War Memoir* must be addressed with the usual caution, there is a ring of authenticity in his assertion that 'During the eight years that preceded the war, the Cabinet devoted a ridiculously small percentage of its time to a consideration of foreign affairs . . . the Cabinet as a whole were never called into genuine consultation upon the fundamental aspects of the foreign situation'.[30] Under such circumstances, McKenna and Churchill, despite their Liberal economy credentials, tended to become subsumed within their service department, and whilst historians may argue over whether more conservative or radical strategic naval thinking dominated the minds of both men, that thinking was distinctly *naval* in origin, and gleaned support from many within the party and the opposition.[31]

As Lloyd George went on to discuss in his *War Memoirs*, future naval procurement should have been shaped by the strategic vision of the CID. However, d'Ombrain has claimed that the CID 'lived an *Alice in Wonderland* existence . . . On the whole , the recommendations of the post-1905 C.I.D., dealing with strategic issues, such as they were, went unheeded, for the simple reason that they were based on the (now invalid) strategic premise that that national policy rested on maritime and Imperial defence.'[32] Undoubtedly, Admiralty cruiser procurement between 1904 and 1914 reflected the diplomatic realities facing the nation. The 1904 Entente with France and 1907 accord with Russia reduced the likelihood that the Royal Navy would be engaged in short-range Channel actions against French torpedo flotillas, as the designers of the first scout cruisers had anticipated, or employing its armoured cruisers to chase down *guerre de course* raiders under the flag of either nation.[33] Although naval co-operation between the powers was not formalised until 1912, the reduction in naval forces employed in the Mediterranean, as sanctioned by Churchill, was facilitated by the shift in alliances and the reduced threat of a hostile

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for this great struggle, the great Armageddon which is to come upon us, that we are unable to protect our mercantile marine. We will hand you a few guns, and you must do what you can to defend yourselves." (Online Hansard at: https://hansard.parliament.uk/Commons/1913-07-17/debates/4929f2fd-5673-4bae-9839-a9a63334d89f/ShipbuildingRepairsMaintenanceEtc—Personnel—(Vote8Section1)?highlight=cruiser#contribution-930dc369-8383-4090-a0cb-d0ad184b5bb8)

[29] Z S Steiner, *The Foreign Office and Foreign Policy, 1898-1914* (Cambridge: Cambridge University Press, 1969); F H Hinsley, (ed.), *British Foreign Policy Under Sir Edward Grey* (Cambridge: Cambridge University Press, 1977).

[30] D Lloyd George, *War Memoirs* Vol. 1, (London: Nicholson & Watson, 1933), p.27.

[31] Despite his tarnished image within the navy itself, Churchill's 'reputation as a forceful and eloquent advocate for the navy' (Christopher Bell, *Churchill and the Dardanelles*, Oxford: Oxford University Press, 2017, p. 13) has some validity as regards light cruiser procurement. Against Fisher's advice, it was Churchill who took up the War Staff recommendation for a running programme of 8 light cruisers to be ordered per year from 1912 onwards.

[32] N d'Ombrain, *War Machinery and High Policy: Defence Administration in Peacetime Britain, 1902-1914* (Oxford: Oxford University Press, 1973), p. 139-140.

[33] Mackay's claim that ongoing Admiralty concerns about the French and Russian threat lay behind Fisher's fleet redistributions has now largely been discredited. (See R F Mackay, 'The Admiralty, the German Navy, and the Redistribution of the British Fleet, 1904-05', *Mariner's Mirror*, Vol. 56, No. 3, pp. 341-346).

Russian fleet forcing the Dardanelles.[34] The German threat was clearly uppermost in the Admiralty's mind and the need for North Sea cruisers that could be built cheaply and in numbers, to a standardised pattern, led to a fast version of the late scouts of the *Active* class being developed as the *Arethusa* class (1912) and successor *C* and *D* classes. Where financial constraints pinched, overseas commitments were the victim, and despite protests from the Admiralty Board, plans for the 1911 *Birmingham* class of trade protection cruisers were cut from five to three ships (with a fourth vessel, *Adelaide*, slated for construction in Sydney) at the insistence of the Treasury, and no further cruisers of this type were ordered until 1915.[35] Whilst Churchill the service leader recognised the importance of the cruiser, Churchill the politician saw the necessity of strengthening the fleet in home waters first and foremost. At a Committee of Imperial Defence Meeting in April 1913, he stressed the overwhelming importance of battlefleet operations in the North Sea to the security of Empire – 'If the power of Great Britain were shattered upon the sea the only course open to five millions of white men in the Pacific would be to seek the protection of the United States.'[36] If – as the First Sea Lord, Battenberg, predicted with some hyperbole at the same meeting – Japan could build a fleet of fifty battleships within twenty years, then only the diplomacy of the Anglo-Japanese Alliance could hope to offer protection to Dominions bordering the Pacific. In the interim, and until such time as the proximate threat to the Mother Country could be removed, the cruiser would provide the Navy's only substantial presence in support of the distant parts of Empire, bolstered by whatever numbers the 1908-11 Programmes could spare. Given the widespread distrust of Japanese intentions amongst the Dominions, that measure of reassurance was to prove vital, both in 1913 and in the interwar period when Admiralty plans relied heavily upon cruisers holding the ring in the Far East in the event of war until heavier forces could be deployed from home ports.[37]

The role of the Royal Navy in imperial defence was axiomatic long before 1904, and enshrined in both popular culture and the political perspective.[38] Until 1909 the navy remained hostile to the formation of independent navies in the Dominions, preferring instead to maintain full control of all overseas naval stations. In a letter to the C-in-C Australia Station, Vice-Admiral Sir Lewis Beaumont, dated 21 August

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[34] Bell has alluded to the hostile reaction to Churchill's Mediterranean policy and the utility of battle cruisers and cruisers in allaying public concerns over security in that theatre. Churchill hoped that in regions such as the Mediterranean new technologies such as submarines might replace valuable surface assets more usefully deployed to defend home waters. However, for the time being, cruisers might suffice, and in some sea areas, might remain the only viable means to protect national maritime interests. (C M Bell, 'Sir John Fisher's Naval Revolution Reconsidered').

[35] Detailed in Chapter 6.

[36] TNA, CAB 2/3, Committee of Imperial Defence Minutes, 123rd Meeting, 11 April 1913.

[37] See P Lowe, 'The British Empire and the Anglo-Japanese Alliance' for Dominion concerns regarding naval protection against Japan, and Andrew Boyd, *The Royal Navy in Eastern Waters: Linchpin of Victory, 1935-1942* (Barnsley: Seaforth, 2017) on interwar planning for operations against Japan.

[38] Rhodri Williams describes the Herculean efforts of the Conservative Party to 'cut the Gordian knot' of burgeoning naval expenditure between 1903 and 1905 in the face of great opposition which regarded spending on the Navy and imperial defence as sacrosanct. (*Defending the Empire: The Conservative Party and British Defence Policy, 1899-1915*, New Haven, CT: Yale University Press, 1991, pp. 27-40).

1902, the First Lord, Lord Selborne, wrote, 'My advice to you is to change the Cruiser allotted to New Zealand pretty frequently. Sometimes, let the Commander-in-Chief be there with his flag ship, and for the rest of the time, ring the changes on the 2nd and 3rd class Cruisers in Commission. Never let them get to consider one particular Cruiser as theirs.'[39] Selborne's papers relating to colonial contributions to defence and the 1902 Colonial Conference paint a similar picture – of an Admiralty keen to encourage financial contributions from the colonies towards the costs of their maritime security, as well as undertaking the upgrading and manning of coastal defences, but opposed to autonomous colonial navies.[40]

However, economic pressures, an upsurge in calls for greater political independence within the Empire, and perhaps a greater sense of shared racial cohesion and equality when faced with common threats, pointed to a co-operation of autonomous navies.[41] Technological advances also made cohesion and control of imperial fleets more feasible. As early as 1901 the Queensland government was issued with two Mark II wireless sets for trials to communicate between shore stations and Royal Navy cruisers at sea.[42] Imperial Conferences of the period looked to integrate the economic and defence elements of Empire for mutual benefit, even if numbers of the Dominions proved more wary of closer political ties, and in this, the future role of the cruiser loomed large. At the Spring Conference of 1907 the Canadian premier, Laurier, suggested the establishment of a fast steamship route from Britain to Canada, to rival that of competitors on the transatlantic crossings from Europe to the USA. Goods (including military equipment, should this be required) could then be transported via the Canadian Pacific Railway to Vancouver, and thence on to Australia and New Zealand. This All-British or 'All-Red Route' would naturally be of economic benefit to much of the Empire but cruisers could be concentrated to protect such an established trade route. Laurier's own interest in cruisers was deflected by domestic politics but in Australia, Fisher's Labour Party found the prospects of expanding domestic shipbuilding attractive, and in Captain William Creswell RN they had a dedicated advocate of a home-grown navy. Creswell appears on the circulation list for early designs of the *Town* class cruisers in 1909[43] and having overseen the construction of *HMAS Sydney* and *Melbourne* in British yards, liaised with Sydney's Cockatoo Yard in the home construction of *HMAS Brisbane*, which he considered an ideal project for the nascent warship builder.[44] 'Fleet units', as proposed by Fisher in 1909, relied heavily upon commonality of cruisers, communications and training, especially when the number of battle cruisers available for such

[39] Boyce, *Crisis of British Power*, p. 149.
[40] See Selborne Papers, Bodleian Library, Oxford, MS 133 & MS135.
[41] See J C Mitcham, *Race and Imperial Defence* for a sociological interpretation of this trend.
[42] *Annual Report of the Torpedo School, 1901*, p. 109.
[43] NMM, ADM 138/240, *Bristol* Class Ships' Covers, f.112.
[44] Sheila Dwyer, *Sir William Rooke Creswell and the Foundation of the Australian Navy* (Newcastle: Cambridge Scholars, 2014), pp. 146-174.

duties beyond European waters was limited. As an expression of collective security, the units had considerable merit and prefigured international naval formations.[45]

In New Zealand the Defence Minister, Colonel Sir James Allen, was of the opinion that the nation should end its subsidy of Britain's defence budget and follow Australia's lead in developing its own navy. In July 1912 Allen put forward his proposal for the acquisition of cruisers and destroyers to form a naval unit 'constituted in such a manner that it will fit in with the Australian unit or with a British unit for general imperial purposes in the Pacific or elsewhere.' In fact, Allen envisaged a local unit of an imperial fleet, along the lines of the 'Eastern Fleet of the Empire' that had been discussed at the Imperial Conference on Defence in 1909. Strong opposition from Churchill denied New Zealand the opportunity to acquire its own cruisers and three elderly cruisers, *Psyche*, *Pyramus* and *Philomel*, the last originating with the 1889 Naval Defence Act and destined to be the oldest Royal Navy cruiser to see active service in the First World War, were detached to New Zealand in 1914.[46] Nonetheless, as new light cruisers arrived with the Royal Navy, for every *Coventry* and *Carlisle* authorised by the Admiralty's Naming Committee, there was a *Cairo*, *Capetown* and *Colombo*; a *Delhi*, *Durban* and *Dunedin*. If not always collective security within a fleet unit, collective identity could at least be the aspiration of the type. Continuity in the Admiralty's approach to the connection between the Empire and the cruiser was remarkable. In 1902 Custance , then Director of Naval Intelligence, upheld the findings of C-in-C, Australia Station, Rear Admiral Sir Lewis Beaumont, that eight cruisers – preferably two first class and six second class – should be assigned to the Station.[47] Nearly two decades and a world war thereafter, at the outset of his Empire Mission (1919-20) to frame imperial defence policy for the post-war era, Jellicoe felt seven light cruisers of the latest type should be permanently assigned to Australian waters, although with the addition of one aircraft carrier.[48]

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Technological innovation clearly had an important influence upon naval procurement but was not the overwhelming factor in driving new designs, as has sometimes been assumed. John Lynn has written that 'Technology did not dictate a single best use, but rather it presented alternatives and the choices

[45] See Nicholas Lambert, 'Economy or Empire? The Fleet Unit Concept and the Quest for Collective Security in the Pacific, 1909-1914' in Keith Neilson & Greg Kennedy, *Far Flung Lines: Studies in Imperial Defence in Honour of Donald Mackenzie Schurman* (Abingdon: Routledge, 1997), pp. 55-83.

[46] Admiral W R Creswell, First Naval Member of the Australian Naval Board, who oversaw the construction of *HMAS Sydney* and other vessels of the nascent Royal Australian Navy was delighted to be rid of *Psyche* and *Pyramus* from the Australia Station, describing them as 'the unspeakably useless *P*. class.' (Quotations from Ian McGibbon, *Blue-Water Rationale: The Naval Defence of New Zealand, 1914-42*, Wellington NZ: Historical Publications Branch, Department of Internal Affairs, 1981, p. 14-15).

[47] TNA, ADM 1/7529, Memorandum, 3 March 1902, Commonwealth of Australia – Naval Defence – Co-Operation of the Colony.

[48] 'Memorandum on Post-War Naval Requirements, Port Said', 3 March 1919 in Albert Temple Patterson, (ed.) *The Jellicoe Papers*, Volume II (London: Navy Records Society Volume 111, 1968), p. 295.

soldiers [or sailors] made within that range reflected their cultural values.'[49] Fisher's preference was undoubtedly for the novel. Whether by the armoured or battle cruiser, by 1906 British cruiser design was dominated by size, and smaller cruisers were not being replaced. The spiralling size, cost and complexity of battle cruisers and the increasing need to station them in home waters to confront their German counterparts led to some consideration of new designs of a modernised armoured cruiser type specifically for trade protection.[50] In 1907 Jellicoe proposed a 25-knot, turbine-engined armoured cruiser with an *Invincible* layout of 9.2in guns and the DNC, Sir Philip Watts, oversaw the drawing up of two 'E' designs. A third design, based on the same main armament but in *Indefatigable* layout, was also drawn up in 1907. The proposed size of these designs ranged from 13,000 to 15,750 tons and Jellicoe stated that they could take on fast adversaries on the trade routes, from armed merchant cruisers to armoured cruisers such as *SMS Blücher*. It is possible that Admiral Sir Arthur Wilson also commissioned design work on a large, 9.2in-gunned cruiser during his time as First Sea Lord (1910-11) for interception of fast, armed merchant cruisers in the Atlantic (although no such plans can be found at RMM, Woolwich).[51] In October 1913, the new DNC, d'Eyncourt, produced designs 'E2' and 'E3', armed with eight 9.2in guns and displacing 15,500 and 17,850 tons respectively. Matthew Seligmann has commented on these designs, '. . . they would have been perfect for hunting German AMCs. It appears, therefore, as if come 1913 the Admiralty was going back to first principles and looking for a smaller, cheaper and less well-armed vessel that could perform the function that battle cruisers had originally been able to fulfil, but for which they were no longer being used on account of their heavy armament'.[52] Financial constraints led to the abandonment of all of these proposals, as well as the 'Atlantic' cruiser of 1913 and 13 *Town* class light cruisers were deployed across the trade routes to hunt down enemy cruisers and summon armoured cruisers to the area if greater fighting power was required. The varied roles and numbers required of the cruiser led to the resurgence of the second class (light) cruiser in 1908 and technological advances offered it far greater potential as a force multiplier than predecessors. However, there were never enough of these vessels to fulfil the needs of trade protection and the fleet, leading to the urgent introduction of the smaller and cheaper *Arethusa* class in 1912 for North Sea work, although some *Towns* were also assigned to this primary role.[53]

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[49] J Lynn, *Battle: A History of Combat and Culture* (Boulder, CO: Westview, 2003), p. 121.

[50] Compare the size and cost of *Invincible* (1907) – 17,250 tons standard and £1,625,227 – with those of *Tiger* (1913) at 28,500 tons and £2,593,100, a 65% increase in displacement and 60% rise in cost.

[51] See David Murfin, 'Lost in the Fog of War: Royal Navy Cruiser Designs for Trade Protection, 1905-1920', *Warship 2018*, pp.152-173 and NMM, d'Eyncourt 'Design Particulars', MSS93/011. The reference to Wilson's proposed design is in Admiral Sir Edward Bradford, *The Life of Admiral of The Fleet Sir Arthur Knyvet Wilson* (London: John Murray, 1923), p.228. My thanks to Andrew Choong at NMM Woolwich for his efforts to locate Wilson's armoured cruiser design.

[52] M S Seligmann, *The Royal Navy and the German Threat*, p.86.

[53] In his 1928 monograph, 'The Evolution of the Cruiser in Modern Times', a paper presented to the Admiralty, Commander Stephen King-Hall the former officer, who had served in *Town* class cruisers, criticised the false economies of the Admiralty in selecting the *Arethusa* design over the far more capable if costly improved *Birmingham* design. (TNA, ADM 1/8724/93, p.5) Speed also seems to have been a major determinant, however, as is discussed in Chapter 6.

The cruiser proved an ideal test-bed for many of the technological developments of the age, being sufficiently large and versatile to accommodate such trials. Parsons steam turbines, as to be installed in *Dreadnought*, were trialled, with mixed results, in the cruiser *Amethyst* in 1905. The *Boadicea* class scouts of the 1907 Programme marked the transition to an all-turbine cruiser fleet in the Royal Navy and *Boadicea* herself conducted numerous machinery trials in 1909, observed by representatives of Parsons, Yarrow (the boiler makers) and Pembroke Dockyard, together with the usual array of naval staff from engineering, gunnery, communications and other branches.[54] The first of the *Town* class cruisers, *HMS Bristol*, was selected to receive the Brown Curtis steam turbine, the Admiralty and its naval architects working closely alongside the Clydebank company of John Brown for over a year to adapt the initial design to receive the new machinery.[55] Two ships of the 1913 *Caroline* class, *Calliope* and *Champion*, were designated for extensive trials, incorporating the use of larger Yarrow boilers, geared turbines, a thickened armoured belt and a reduction to two funnels. *Champion* achieved 29 knots in speed trials and many (though by no means all) of the innovations tested were adopted in the subsequent *Cambrian* and later classes. However, the submerged 21in torpedo tubes, in which the First Lord, Winston Churchill, took particular interest,[56] proved unworkable at high speed and deck-mounted tubes were eventually fitted. Twin destroyer turbines fitted in the *Arethusas* of 1912 gave them a speed just short of 30 knots, a near 30% increase on the speed of comparative fleet cruisers completed just eight years previously, necessary to keep pace with the new *L* class destroyers, *Lion* class battle cruisers and *Queen Elizabeth* class battleships then in preparation - synergy within the fleet was a vital consideration which appeared to have been overlooked in the case of the cruiser until that date.[57]

Wireless was of critical importance to light cruiser development. Henry Jackson, who had pioneered the development of wireless for the Navy since experiments in 1897, and had worked alongside Marconi in its early introduction to the fleet, saw the cruiser as the ideal platform to exploit the potential of the new device. He was a strident supporter of the scout cruiser in 1903, as a sufficiently large and fast enough vessel both to accommodate and utilise wireless for scouting and flotilla command. As Third Sea Lord from 1905 to 1908, Jackson's involvement in the installation of Mark II* wireless equipment in the trade protection *Town* class of 1908 was marked. He took particular interest in trials undertaken at *HMS Vernon* to establish the ideal mast height and arrangement of the wireless array for the class to maximise transmission range, as relevant for new trade protection cruisers as it was for the *Invincible* class battle cruisers then under construction. Shore bases for wireless communications were being established in large numbers by 1907, with ever more powerful transmission capacity at A (100 mile

[54] NMM, Woolwich, ADM 138/231, *Boadicea* class Ships' Covers, *passim*.
[55] NMM, Woolwich, ADM 138/240, *Bristol* class Ship's Covers, f.34-6.
[56] NMM, Woolwich, ADM 138/303, *Calliope* class Ships' Covers, f.131.
[57] That the Navy were aware of the need to integrate new technology through extensive fleet exercise is clear from the papers of Admiral Sir William May. As C-In-C, Home Fleet 1909-11, May conducted numerous cruiser trials with the scouts and the first three *Towns*, which were attached to the Fleet. (NMM, May Papers, MAY/10, 'Tactical Reports, 1908-13').

effective transmission range), B (500 miles) and C class stations, with a 1,000 miles range day or night.[58] When combined with Britain's extensive control of the existing submarine telegraphic cable network,[59] wireless offered great strategic advantage to the Admiralty and as First Lord, Churchill was closely involved (too closely, in the opinion of some) in plans to establish an 18-station wireless network which would extend wireless communications across the Empire, for which the British Marconi Wireless Telegraph Company won the government tender in March 1912. Historians remain divided as to the immediate practical application of wireless but its longer-term potential for the cruiser was undoubted.[60] The value of an integrated communications system to imperial defence and the cruiser was demonstrated when five days before the outbreak of war, the Australian Wireless Service, under the control of the Admiralty in Whitehall, detected wireless transmissions from the German cruiser *Scharnhorst*. Six days after the declaration of war, again following Admiralty requests, the cruiser *HMAS Sydney* was patrolling the entrance to Rabaul harbour in the Bismarck Archipelago, in pursuit of von Spee's East Asia Squadron.[61]

With increasing lack of clarity and consistency in the Admiralty's strategic planning in the years before the outbreak of war, procurement forecasts for lighter forces became a vexed process.[62] From 1912 onwards, and with urgency, it was recognised that more modern light cruisers would be required, whatever the future held for the fleet. Lord Charles Beresford had very decided opinions on the number of light cruisers required by the fleet. In 1912 he wrote, 'The proportion of cruisers should be five cruisers for every two battleships or large armoured cruisers. The small cruiser force must be disposed so that they form a protecting screen 120 or 140 miles on all sides from the battle squadron. By no other means is it possible to move a battle squadron at night without risking its destruction by the attack of torpedo craft.'[63] Of course, Beresford's demands were entirely unrealistic. Even had the *entire* cohort of British light cruisers that had entered service since 1904 and were in commission in 1918 been

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[58] See *Annual Report of the Torpedo School, 1908*, Wireless Appendix, pp. 7 – 9.

[59] See Paul Kennedy, 'Imperial Cable Communications and Strategy' in P M Kennedy (ed.), *The War Plans of the Great Powers*, pp. 75-98.

[60] Compare the positive assessment of command, communications and control offered by Nicholas Lambert ('Strategic Command and Control for Maneuver Warfare: Creation of the Royal Navy's "War Room" System, 1905-15', *Journal of Military History*, Vol. 69, No. 2, April 2005, p.361-410) with the more recent, critical assessment of 'over the horizon warfare' by James Goldrick (https://podcasts.apple.com/ca/podcast/firepower-21-jutland-advent-over-horizon-warfare/id1359567372?i=1000445759532).

[61] David Stevens (ed.), *The Royal Australian Navy: The Australian Centenary History of Defence*, Volume III (Oxford: Oxford University Press, 2001), p. 32. The planned attack on von Spee's force was outlined by the Australian C-in-C, Rear-Admiral Patey as Operation Order No. 1, the first test of the fleet unit concept under war conditions.

[62] See John Ferris, 'Pragmatic Hegemony and British Economic Warfare, 1900-1918: Preparations and Practice' in G Kennedy (ed.), *Britain's War at Sea, 1914-1918*, pp. 87-109.

[63] Beresford, *The Betrayal*, p. 165. Even if 'large armoured cruisers' are taken to refer solely to the Royal Navy's battle cruisers, the 37 capital ships present at Jutland would, by Beresford's formula, have required 93 light cruisers in order to perform their duties satisfactorily. In fact, just 26 light cruisers (28% of Beresford's recommended number) accompanied the Grand Fleet on that occasion, and even by the war's end the number with the Fleet had risen only to 33, although the later *C* class cruisers were more capable vessels.

dedicated to the Grand Fleet, only 24 capital ships could have been guaranteed adequate protection from destroyer night attacks by this measure, let alone the depredations of submarines and sea mines.

Despite serving as a key member of Fisher's Committee on Designs (1904-05), Jellicoe remained highly critical of the First Sea Lord's aversion to small cruisers. As Third Sea Lord and Controller of the Navy from 1908 to 1910, Jellicoe was responsible for the promotion of the new *Town* class cruisers but judged Fisher's earlier resistance to the light cruiser highly damaging to the operational effectiveness of the entire fleet. Writing in 1919, Jellicoe bemoaned the pre-war underspending on the type, 'in which we were woefully deficient'. Those cruisers that were built from 1908-09 onwards came at the price of reducing the annual procurement of 20 destroyers, 'as the light cruisers were considered to be even more necessary.'[64] The relationship between Jellicoe and Fisher, although close, was strained over the issue of light cruisers. In March 1916, moved by the concerns of Jellicoe, Maurice Hankey and others about the severe delays in warship construction, Fisher addressed the War Committee and 'expressed great concern at the shortage of light cruisers and destroyers.'[65] A Joint Interdepartmental Committee was later formed to manage the issue but Jellicoe's trust stretched only so far. When, in early 1917, Fisher offered his services to the First Sea Lord as Third Sea Lord and Controller in charge of warship procurement, Jellicoe, after due consideration, declined the offer.[66] Jellicoe's heavily implied criticism of Fisher's procurement failings with regard to light forces in general, and light cruisers in particular, produced a stinging rebuke from Fisher. In early 1919 he wrote to George Lambert, a close supporter as First Civil Lord at the Admiralty, 'But what a sad thing for our naval prestige in this war is all this "fouling of our own nest!" . . . 'Really Jellicoe ought to be shot!'[67] One is left to wonder to what degree the great man's irascible reaction to criticism by his protégé was brought on by a glimmer of recognition as to its justification.

It was unfortunate that the case for the light cruiser found support from those with an axe to grind, about Fisher, the Liberal administration's oversight of the fleet, and much else besides. Sir William White, Reginald Custance and ultimately Charles Beresford himself seized upon the totemic status of the cruiser within both the service and amongst the commercial and imperially-minded interest groups to further their cause.[68] Custance's *Naval Policy: A Plea for the Study of War* of 1907 had much to say about the Navy's reliance upon the smaller cruiser but the tone was measured, and it was true that the Admiralty had not ordered any such vessels in the four years prior to publication. By the time of the

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[64] Admiral Viscount J R Jellicoe, *The Grand Fleet: Its Creation, Development and Work* (London: Cassell, 1919), p. 399-400.
[65] TNA, CAB 42/10, War Committee Minutes, 8 March 1916.
[66] R F Mackay, *Fisher of Kilverstone*, p. 511.
[67] A J Marder (ed.), *Fear God and Dread Nought: The Correspondence of Admiral of the Fleet Lord Fisher of Kilverstone,* [FGDN] Volume III (London: Jonathan Cape, 1959), p. 577.
[68] Custance had been an early proponent of increasing the Navy's fleet of smaller, fast cruisers for Home Service. As DNI in 1902 he had submitted *a Memorandum on the Strategic Position in the North Sea* based upon Naval Intelligence Department Reports (TNA, ADM 231/35), in which he warned that 'a considerable force of Cruisers would be necessary in the North, and these would require a base at some Northern Port.'

promotional tour for Beresford's 1912 work, titled with sufficient embitterment *The Betrayal*, criticism of cruiser policy had become more fervent:

> 'I have of my own personal knowledge, acquired in commanding fleets in various quarters of the globe, affirmed that the Fleet is gravely deficient in small cruisers and destroyers. It is so deficient as to impair the ability of action of the battle squadrons of heavy ships . . . In 1903, the only danger to the Trade Routes to be apprehended was the attack upon commerce by naval warships. It was under these conditions considered necessary to keep a large force of foreign cruisers on foreign stations. To-day, when the danger may be multiplied tenfold by the undefined license accorded to merchantmen, the number of cruisers on foreign stations has been diminished by two-thirds, nor is there any force in the Home ports ready to reinforce them. The cruisers allocated for that duty are reserve ships which, as their complements consist of Royal Naval Reserve men, could not be manned until after the outbreak of war, when it would be too late. These vessels are also unsuitable for this particular service.'[69]

Beresford's chilling conclusion was that 'our sea-borne trade, upon whose punctual arrival in this country the life of its people depends, is left open to sudden and secretly organized attack on the high seas'.[70] For members of the Imperial Maritime League, such hyperbole came as from the mouth of a prophet, and was seized upon avidly in criticisms of the Admiralty's procurement policy, which were several.[71] Churchill's opinion of Beresford was a low one, but he concurred that cruisers of 22 knots or less, the bulk of the cruiser force in 1913, had little future with the fleet.[72] The challenges of manning the larger cruisers were also acknowledged. Fourteen armoured cruisers were assigned to the Third Fleet Reserve between 1911 and 1914, including ships of the *Devonshire* class only completed in 1905 but requiring a full complement of 700 officers and ratings.

For the Navy, the cruiser, or its many aliases, formed a deep association with the past, a fixture of what Duncan Redford has described as its 'corporate culture'.[73] Contrary to the introspective and deferential interpretations of Andrew Gordon, pre-war cruiser command required considerable initiative of its officers.[74] The small cruiser offered many officers seeking flag rank the opportunity for their first command of a substantial fighting vessel, capable of independent action. Beatty's first command, the second class cruiser *Juno*, taught him valuable lessons about co-operation of cruisers and the fleet as he spent the summer of 1902 under the demanding tutelage of Channel Fleet commander, Admiral Sir Arthur Wilson, before taking the ship to the Mediterranean, where he commanded two further cruisers. As his biographer Roskill points out, such early command experiences undoubtedly shaped the later

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[69] Beresford, *The Betrayal*, pp. 165-167.
[70] *Ibid*, p.167.
[71] For example, H F Wyatt & L G Horton-Smith's *Britain's Imminent Danger*.
[72] TNA, ADM 116/3381, First Lord's Miscellaneous Papers, 1911-13, memorandum dated 28th August 1913.
[73] D Redford, 'Naval Culture and the Fleet Submarine', p. 157.
[74] Gordon, *The Rules of the Game*.

close relationship which the Battle Cruiser and then Grand Fleet commander formed with officers such as William Goodenough who led his screening light cruiser squadrons.[75] Alexander Bethell, later to serve as Director of Naval Intelligence between 1909 and 1912, found himself during his second cruiser command (*HMS Naiad*) detached from the Mediterranean Fleet and co-ordinating the amphibious landing and supply of the Somaliland Field Force in 1902-04 in response to unrest in the region.[76] In his autobiography, Admiral Sir Reginald Tupper recalled that despite initial reservations about his posting to command a second class cruiser, *HMS Venus*, 'It turned out that the *Venus* was the best possible command for my future interest, and that the best way to get on in the Service is to go unhesitatingly wherever one is sent and to trust to Providence.'[77] Tupper's experience of joint Channel and Mediterranean Fleet cruiser exercises off the Balearic Islands in the summer of 1904, in his view 'the first occasion on which modern cruisers carried out extensive exercises on a large scale', proved formative, and he would regard it as an invaluable preparation for later commands. Want of 'modern cruisers' of long endurance and good sea-keeping qualities suited to the North Sea led to the Admiralty's decision by the end of 1914 to replace the *Edgar* class cruisers built under the Naval Defence Act with armed merchant cruisers in the Northern Patrol's 10th Cruiser Squadron. Tupper was to command the Squadron between 1916 and 1917, and despite once more holding initial reservations, found his cruiser background stood him in good stead.[78]

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"Nothing depends as much on economic conditions as do the army and navy."
Friedrich Engels, *Anti-Dühring*, 1878

Engels' words are popular with procurement theorists. The wide historical scope of the work of William McNeill reminds the historian that the development of new weapons has always been driven by a complex interaction of economic, military, political, social and technological influences, and that the industrialization of war brought market forces ever more to bear upon military procurement.[79] This interaction is well evidenced in the case of light cruiser procurement, an organic component of British

[75] See Capt. Stephen Roskill, *Admiral of the Fleet Earl Beatty: The Last Naval Hero – An Intimate Biography* (London: Collins, 1980), p.40-41.
[76] It is interesting to note that Bethell's papers (King's College, London, Liddell Hart Centre for Military Archives, Bethell, A E, MV-20-0) offer more content on the Somaliland expedition than any other aspect of his distinguished career. The admiral was particularly proud of his successful oversight of the landing of several hundred camels on a hostile shore, but one example of the many and diverse demands placed upon the captain of a British cruiser on detachment,
[77] Admiral Sir R G O Tupper, *Reminiscences* (London: Jarrold, 1929), p. 149.
[78] Whilst no account of naval cultural identity relating to the light cruiser exists, several works focus upon the battle cruiser, for instance, Henrikki Tikkanen, 'Leader Personality, Managerial Attention, and Disruptive Technologies: the Adoption of the Battlecruiser Concept in the Royal Navy, 1904–1918', *Management & Organizational History*, Vol. 12, No. 1, 2017, pp. 47-75.
[79] W H McNeill, *The Pursuit of Power: Technology, Armed Force, and Society since A.D. 1000* (Chicago: University of Chicago, 1982).

industrial development rather than a separate entity. Ship's covers show the intimate connection between the Cruiser Office of the Director of Naval Construction and design offices of both the naval dockyards and private yards. Stanley Goodall, who rapidly emerged as lead designer in the office after 1908, was a frequent visitor to shipbuilders and the navy's ships were continually in demand with the major engineering, technology and armaments manufacturers to conduct trials of new equipment. The collaboration of the navy and industry was not only expected but encouraged, and brings into question the arguments of Horsfield that the 'Long Victorian Peace' had created conditions to 'stifle initiative, restrict imagination, and create a fear of a trial-and-error approach'.[80] Fisher's connection with the major armaments manufacturer Armstrong of Elswick dated back to 1883, when as captain of the gunnery school, *HMS Excellent*, he encouraged junior officers such as Percy Scott and John Jellicoe to take an active interest in new developments in gunnery. Reginald Bacon, another product of Fisher's 'Fishpond', argued strongly for the adoption of uniform armament in the *Town* class cruisers whilst Director of Naval Ordnance from 1907 to 1909, before taking up the post of managing director of the Coventry Ordnance Works in 1910. Henry Jackson's close collaboration with the Marconi Wireless Company has already been mentioned.[81]

For both the Admiralty and the shipbuilding industry, the retention of a large number of British yards capable of producing numbers of cruisers quickly and to a modern design was imperative. Between 1904 and the outbreak of war all four naval dockyards and nine commercial yards were awarded light cruiser contracts, with tenders being invited from up to a dozen companies for any one class. Scout work given to Pembroke Dockyard undoubtedly saved local jobs and skills whilst during the 1908 economic slump, 'at cost' tenders were placed by a number of shipbuilders to secure Admiralty business for the *Bristol* class.[82] For large concerns such as Vickers and John Brown, light cruiser orders filled slip capacity, gave a reasonably regular and short, staged payment, and maintained the goodwill of the Navy in tendering for more lucrative projects. For companies such as Armstrong and Cammell Laird, developing a specialisation in cruiser construction (in the case of Elswick, over many decades), offered economies of scale savings and boosted export potential.[83] The appointment of two Admiralty

[80] G A H Gordon, *The Rules of the Game: Jutland and British Naval Command* (London: John Murray, 1996). Quotation taken from J Horsfield, *The Art of Leadership in War: The Royal Navy from the Age of Nelson to the End of World War Two* (Westport, CT: Greenwood, 1980), p. 102.

[81] For a detailed account of the close relationship of the Navy with industry see M J Bastable, *Arms and the State: Sir William Armstrong and the Remaking of British Naval Power, 1854-1914* (Aldershot: Ashgate, 2004).

[82] See NMM, Woolwich, ADM 138/240 *Bristol* class Ships' Covers *passim* for the regular complains from shipyards that changing demands from the Admiralty could not be met given the stringent financial limits it had imposed.

[83] Cammell Laird Company Minute Book 9 for 1908-12 (Wirral Archive Service, 5 0042/000) show that after 'greatly reduced turnover' in mercantile shipping orders for the previous year were reported in March 1909, the Board made considerable efforts to secure ongoing cruiser work for its Birkenhead yard. Co-ordination with Fairfield via its large shareholding and the offer of the chairmanship of the board to Admiral Sir Arthur Wilson (which was politely declined) were amongst the initiatives undertaken. Experience with the *Pathfinder* class

Overseers to each cruiser builder, each with experience in the dedicated cruiser design department of the DNC, assisted the management, co-ordination and standardisation of construction across yards, as did (in theory at least) the appointment of Sir Francis Hopwood as Additional Civil Lord in 1912 to oversee contracts, financing and dockyard management. Contract Book H which records all details of Cammell Laird's work on light cruisers from *HMAS Melbourne* to *HMS Capetown* makes clear the close co-operation between numerous Admiralty departments and the shipbuilder, and the complex formula of incremental payments as each stage of construction was completed and signed off after inspection and testing.[84] Profit margins for manufacturers were tight, typically less than 10% and certainly less than for larger ships, but the more elements of the construction process that could be brought in-house, the higher the potential for profit.[85]

Undoubtedly, small cruiser procurement was squeezed out on financial grounds between 1900 and 1908. Vast sums were spent on armoured cruisers, with yet larger demands made upon the Estimates through *Dreadnought* construction. In such locations where strategic necessity could not warrant the permanent stationing of such types, the same schemes of flotilla defence as would be proposed to defend Britain's coast were suggested as economies elsewhere, as by the proposed employment of destroyers and submarines at Malta in 1912. The great cost of armoured cruisers to the Admiralty in the final years of the Conservative administrations also dissuaded First Lords from further financial commitments to smaller versions of the type. *The Report of The Committee on Mercantile Cruisers* (1902) and subsequent discussions on the formation of a merchant cruiser combine make it clear that Balfour's government did not regard the Navy's own cruiser provision as entirely adequate in time of war but found financial arrangements with merchant shipping companies an attractive alternative to the construction of fast, light cruisers in the required numbers.[86] The response of the DNI, Battenberg, was hostile, and the service remained typically cautious of the true fighting value of armed merchant cruisers as a replacement for, rather than assistance to, the Navy's own warships.[87]

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scouts, the company's diverse manufacturing interests, and regular attendance of board members at the Admiralty, all contributed to their winning of six orders for light cruisers prior to the war.

[84] Wirral Archive Service, Laird/Cammell Laird Papers, ZCL 5/164.

[85] Cammell Laird's financial involvement with other shipyards, armour plate, machinery (Parsons turbines being built under licence from March 1905) and ordnance manufacture, as at the Coventry Ordnance Works, all helped to maximise cruiser contract profits. The company's Contract Book H details the overall cost of £396,820 paid by the Admiralty for the light cruiser *HMS Caroline* in 1914: 40% of the total was spent on her hull; 23% on machinery; 14% on boilers; 19% on armament and fitting out; 2½% on sundry costs such as trials, and 1½% on additional dockyard work.

[86] Bodleian, MS Selborne ff. 146-148.

[87] Admiralty caution at the perceived unsuitability of iron-hulled merchant steamers for auxiliary cruiser work predated this – see John Beeler, 'Ploughshares into Swords: The Royal Navy and Merchant Marine Auxiliaries in the Late Nineteenth Century' in G Kennedy (ed.), *The Merchant Marine in International Affairs, 1850-1950* (London: Frank Cass, 2000), pp. 5-30. Despite the sterling work of armed merchant cruisers during the First World War, the Admiralty remained cautious of accepting a reduction in cruiser numbers based upon a firm agreement to use AMCs in wartime. From 1939 until early 1940 the Northern Patrol established to intercept enemy shipping in the northern North Sea was almost exclusively conducted by Royal Navy cruisers. The *C* and *D* class cruisers found the harsh weather conditions demanding, some suffering considerable damage, and were gradually

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As a constituent of the fleet the light cruisers of 1904-14 represented both elements of continuity and change within Admiralty policy.[88] Prior to the construction of the scouts in 1903-04, cruisers of the second and third class in Royal Navy service remained primarily peacetime, imperial constabulary assets. Their traditional duties ranged from the combatting of piracy and slavery to the protection of British and imperial territorial and commercial interests and responding to the regular requests for a naval presence from the Foreign and Colonial Offices. In 1900, 35 such vessels were on foreign stations, comprising 30% of the fleet's ships overseas, alongside a range of types from ironclads to the smallest non-fighting vessels.[89] The size of this maritime police force had remained fairly constant since the reductions achieved by William Gladstone, Hugh Childers, Henry Lennox and George Goschen in the late 1860s and early 1870s, and regular procurement, alongside bursts of cruiser-building activity – as under the Northbrook Programme (1884), the Naval Defence Act (1889) and Spencer Programme (1893) – had maintained a steady provision of smaller cruisers alongside larger versions of the type, and from the 1880s an increase in their effectiveness via the introduction of water-tube boilers, triple expansion engines and other technological advances in steel construction.[90] Expansion in the number of coaling stations and the extent of the telegraph network offered particular advantages to the Royal Navy and all such developments tended to reduce the number of cruising vessels required overseas, although Britain's need was still considerable. To around 1885, 'other nations generally accepted Britain's self-designated role as police of the seas'[91] and the maintenance of peace and free trade was undoubtedly of benefit to the nation.

From the mid-1880s Britain began to encounter growing naval rivalries as the pretensions of other nations to challenge her economic and imperial dominance grew and interest in the concept of seapower was spurred by the writing of Mahan and others.[92] Whilst possible conflict with Japan and the USA was avoided by an alliance with the former in 1902 and British acceptance of Roosevelt's Corollary to the

withdrawn in favour of larger and more seaworthy AMCs. (Alan Raven, *British Cruiser Warfare: The Lessons of the Early War, 1939-41*, Barnsley: Seaforth, 2019, p. 23).

[88] Fisher's belief that naval *policy* and naval *strategy* had once again become one and the same under his tenure as First Sea Lord has engendered much debate amongst historians on the degree to which the navy was subject to revolutionary or evolutionary change after 1904. See Kemp (ed.), *Fisher Papers* Vol. II, p.5 for Fisher's declaration in 'Naval Necessities' that '*The fact is our Navy is now always mobilised!*' [italics in original]. See also Bell, 'Sir John Fisher's Naval Revolution Reconsidered'.

[89] John Beeler, *British Naval Policy in the Gladstone-Disraeli Era 1866-1880* (Stanford, CA: Stanford University Press, 1997), Table 2, p.31. I am indebted to Professor Beeler for sharing his expertise on the Mid- to Late-Victorian Royal Navy, which has particularly informed the conclusion of this chapter.

[90] See Appendix 2 for statistics relating to British cruiser construction between 1889 and 1904 and images of some of the vessels produced.

[91] Beeler, *ibid*, p.25.

[92] Capt. Alfred Thayer Mahan, *The Influence of Sea Power upon History, 1660-1783* (Boston, MA: Little, Brown & Co, 1890).

Monroe Doctrine (1905), both Liberal and Conservative administrations before 1904 still recognised the benefits, for the nation's international prestige and commitment to upholding the rule of law at sea, of maintaining ships such as cruisers on foreign stations. Further, the peacetime stationing of cruising vessels to protect commerce in restricted and busy shipping lanes by interdiction of an enemy rather than by convoy had become an axiomatic strategy at the Admiralty, espoused by Admiral Sir Alexander Milne from the 1870s and supported by most First Naval Lords thereafter, until Fisher, with formulae for combined global cruiser requirements and best locations being regularly updated, aided by the summaries of current threats issued by the Foreign Intelligence Committee (1882-87) and the Naval Intelligence Division thereafter to justify future procurement.[93]

More proximate threats were posed by the navies of France, Russia and Germany after 1885 and the size of British battle fleets in the Mediterranean and home waters began to increase as a result. The number of second and third class cruisers were largely unaffected by this trend but the *Scout* and *Archer* classes (laid down in 1884 and 1885 respectively) were designed as torpedo cruisers to accompany the fleet, as were the ram-bowed *Arrogants* of 1895, variants of the second class, overseas service *Eclipses*, equipped with water tube boilers and capable of 19 knots.[94] In the Mediterranean, where Fisher was C-in-C from 1899 to 1902, the effectiveness of fleet exercises was much enhanced by the efforts of then Captain Henry Jackson to co-ordinate the tactics of light forces under his command, and his success, and experience of both torpedo warfare and the novel use of wireless telegraphy at sea, earned warm praise from Fisher.[95] Jackson's continuing recognition of the importance of small, fast cruisers to work with the fleet, which is referenced hereafter and culminated in his blistering memorandum of January 1913 (see Ch. 7) appears to have had its origins here. In home waters, the utility of smaller cruisers was to be exploited with more reluctance. Seligmann, Morgan-Owen and Beeler have highlighted the growing concentration and upgrading of naval forces in those waters, prefiguring Fisher's 1904 reforms.[96] Smaller cruisers played some part in this: *Arrogant* and *Furious* (second class) and *Pactolus*

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[93] See Beeler, *British Naval Policy*, p.219-224. In 1892 the NID created a formula for optimum cruiser strength, requiring sufficient cruisers to match combined French and Russian numbers together with an additional number ('X') to protect the Empire's wider maritime interests. In the following year the First Naval Lord, Admiral Sir Frederick Richards, gave a value to 'X', leaving the navy with an overall requirement of 106 cruisers, and a shortfall of 42 vessels. (NID memo on *The Effect on Ocean Commerce of an Anglo-Continental War*, Feb. 1892, TNA, ADM 1/7422 and B Ranft, 'The Protection of British Seaborne Trade', p.1-22). Ranft is highly critical of the Admiralty's speculative commerce protection strategy.

[94] See Robert Gardiner *et al* (eds.), *Conway's All the World's Fighting Ships, 1860-1905* (London: Conway Maritime Press, 1979), pp.74-85 for specifications of British second and third class cruisers of the period. Designed as second class cruisers, the *Archers* were re-designated third class cruisers upon completion and chiefly served overseas, efforts to save costs reducing their size, speed and seakeeping qualities, and thus their suitability for fleet work. Regular exercises at high speeds with the Channel and Mediterranean Fleets proved punishing for the *Arrogants*, which were re-boilered between 1902 and 1905.

[95] TNA, ADM 196/38, Officers' Service Records, date of entry 1866-70, f.682. However, Fisher felt that the rules of seniority meant it unlikely that Jackson would make an admiral.

[96] See M S Seligmann,'A Prelude to the Reforms of Admiral Sir John Fisher: the Creation of the Home Fleet, 1902-3', *Historical Research*, Vol. 83, No. 221, Aug. 2010, pp.506-519; D Morgan-Owen, 'Continuity and Change: The Royal Navy in Peace and War, 1890-1918', Winner of the Sir Julian Corbett Prize in Modern Naval History 2016, Institute of Historical Research, School of Advanced Study, University of London and the work of

and *Pelorus* (third class) served the Channel Squadron from January 1901 on home and Mediterranean deployments and Beresford's Channel Fleet, constituted in May 1903, retained 3-4 vessels of the type. The Home Squadron, founded in 1902 by Vice-Admiral Sir Gerard Noel, Admiral Superintendent of Naval Reserves, with the strong support of the Senior Naval Lord, Admiral Lord Walter Kerr, was to become during 1902-03 the nucleus of a powerful Home Fleet. Although the initial core of the Fleet comprised many larger vessels of the Coastguard Squadron and Port Guard Ships, what Seligmann has suggested as 'a desire to improve efficiency and to rectify the deficiencies identified in the forces designated for the defence of the British Isles – possibly in view of a German threat'[97], led to the expansion of its composition and remit. Instructions for the July-August 1903 Fleet Manoeuvres show just how elaborate the process had become. Three fleets, 'X', 'B1' and 'B2', comprising large elements of the Home and Channel Fleets operated from bases on the south coast of England, Ireland, Gibraltar and Madeira, simulating a wide range of operations, from blockade, to cruiser and fleet actions, in co-operation with Admiral Sir Compton Domvile's Mediterranean Fleet. Particular attention was given to cruiser scouting (C-in-C, 'B' Fleet, Vice-Admiral Sir Arthur Wilson, was to pioneer the so-called A-K formation for the fleet screen, which was still in use after 1914) and in all, 29 second and third class cruisers were assigned to the exercise.[98] Most of these ships were operating at or near full speed to maintain station with the fleet, and to work alongside destroyers in providing protection from torpedo attack. McLaughlin has pointed to the evolution of 'fast wings' to locate and attack the flanks of an enemy formation at this time.[99] As the speed, cost and capability of these 'fast wings' increased after 1900, from armoured to battle cruisers, development of smaller cruisers to facilitate and reduce the risk of their operations lagged behind, and many in the Admiralty, though not Fisher, felt the fleet's effectiveness and response to the particular German threat to be weakened as a result.

Despite the advent of the 'guerre de course' theories of the *Jeune Ecole* school in France it was not until the turn of the century that the Admiralty began to give serious consideration to the threat it posed.[100]

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both in 'Evolution or Revolution? British Naval Policy in the Fisher Era', *Journal of Strategic Studies*, 38 (7) 2015 pp. 937 – 943. I am again grateful to Professor Beeler for use of '*From Gladstone to Fisher: The Rhetoric and Substance of Liberal Naval Reform, 1865-1910'*, an unpublished conference paper given at the US Naval Academy McMullen Naval History Symposium, 2017.

[97] Seligmann, 'A Prelude', p.519. Kerr was certainly considering the bolstering of the Home Fleet in August 1904 to counter a combined French and German threat in home waters (A J Marder, *Anatomy of British Sea Power*, p.495-6).

[98] NMM, Papers of Admiral of the Fleet Sir G H U Noel, Box NOE/11B. The cruisers comprised 2 *Medeas*, 13 *Apollos*, 1 *Astraea*, 5 *Eclipse*s, 2 *Arrogants* and 1 *Highflyer* of the second class and 5 *Pelorus*, third class cruisers. Of these, three ships were commissioned for the manoeuvres and a further seven 'completed up'.

[99] Mc Laughlin, 'Battlelines and Fast Wings', p.999, 'Remarks by Umpires' from the '1901 Combined Manoeuvres, Mediterranean and Channel Fleets' (TNA, ADM 1/7506): 'The opinion on the use of armoured Cruisers is practically unanimous, that with their speed and protection they should be used for attacking the van and rear of the enemy from the very commencement of the engagement'.

[100] In 'Handelskrieg gegen England', the opening chapter of Seligmann's *The Royal Navy and the German Threat*, p.7-24, the author suggests that the Admiralty's concern for the vulnerability of British trade increased considerably from the turn of the century as Germany, with her fast transatlantic steamers, capable of conversion to auxiliary cruisers, replaced France and Russia as the chief threat to commerce.

One response was the building of costly armoured cruisers to counter the threat to commerce, which as Sumida has shown, contributed in no small measure to the 85% growth in gross naval expenditure between 1897-8 and 1904-05.[101] The expansion of fleets in home waters was another reaction, and here the Royal Navy's deterrent capacity was bolstered by the ordering of the first scouts in 1903, designed for the support of destroyer flotillas operating off French Channel ports. Andrew Lambert reminds us that during the Fashoda crisis of 1898 the Royal Navy forced a French fleet to retire from Cherbourg to Brest by threatening the bombardment of the former port, and that in 1900 the Germans were similarly concerned about the capacity of the British to attack the Elbe ports.[102] Such 'offensive' deterrents, as exemplified in the ordering of the scouts, might prove cheaper than a defensive posture for the Admiralty in the long run. To the traditional roles of overseas constabulary duties was now added a growing role for smaller cruisers with the fleet, and in leading flotillas, therefore. Already, George Ballard had recognised the centrality of the type within the modern fleet, and as an important component in the imposition of any form of close or more distant blockade and actions against commerce raiders at sea, and he, Custance, Sir Cyprian Bridge and Slade, during their service with the NID, remained firm advocates, together with operational commanders such as Wilson and Jackson.[103] It was no surprise, therefore, that Fisher's disregard for second and third class cruisers both as constabulary forces for peacetime or elements of a modernised, deterrent battle fleet, should cause such concern at the Admiralty over the course of naval policy, as both Britain's overseas interests and the viability of that deterrent ran the risk of being compromised as the potent and crescive navy of Germany sought means to challenge the Royal Navy's command of the seas. As Beeler has asserted, Balfour and Selborne were sufficiently concerned by the spiralling cost of naval expenditure and manpower shortages to accept Fisher's proposals, and to put their reliance in bolstered deterrents in home waters and diplomatic alliances beyond to ward off this threat.[104] Of the second and third class cruisers that survived Fisher's reforms, (and the large numbers that did suggest the Admiralty's continuing reliance upon the type), only two *Challengers* and four *Topaze* class vessels had been procured since the turn of the century, besides the scouts ordered from commercial shipbuilders, which were little more than flotilla leaders. Paradoxically, it would be from these latter ships that the next generation of 'light cruisers', the *Bristol*

[101] See Sumida, *In Defence* (passim) and table on p.12.
[102] Cited in Beeler, 'From Gladstone to Fisher', p.9.
[103] Ballard suggested that the varied applications of a cruiser made its design more complex than that of a battleship and its utility unquestionable. Cdr G A Ballard, Gold Medal Prize Essay for 1899 – 'Considering the Changes made in Naval Construction during the Past Twenty Years, and in View of the Experience gained during the Chino-Japanese and Spanish-American Wars, what are the Best Types of War-Vessels for the British Navy, including Armour, Armament, and General Equipment for Ships of all Types?', Journal of the Royal United Services Institute [*JRUSI*], Vol. 44, No. 266, 1900, p.379. See also Custance, 'A Retrograde Admiralty', *Blackwood's Edinburgh Magazine*, Vol. 177, No. 1075, May 1905, p.606 and Admiral Sir Cyprian Bridge, *The Art of Naval Warfare: Introductory Observations* (London: Smith, Elder & Co., 1907), p.37 for their views on the need for a range of cruiser types.
[104] Beeler, 'From Gladstone to Fisher', p.14.

class, would descend, but it would not be until 1910, with Fisher departing from his post as First Sea Lord and the German challenge very much to the fore, that the first of them was to enter service.

Chapter 4 – The Significance of the Royal Navy's Scout Cruisers for the Fleet: 'Being Prepared'

For many naval historians, the fifteen warships completed for the Royal Navy between April 1905 and October 1913 and designated 'scout cruisers' represent little more than a tactical and technological cul-de-sac of naval design, a failed experiment not to be repeated. In his typically acerbic denunciation of the state of Britain's cruiser fleet published in October 1907, Admiral Sir Edmund Fremantle took every opportunity to dismiss the new scout *Boadicea* then under construction at Pembroke as little more than 'a mother ship for destroyers', appearing unpromisingly as 'new ship unprotected' in the First Lord's introduction to the Navy Estimates for 1907-8. Calling into question the very substance of the *Boadicea* whilst still on the stocks, Fremantle administered the fatal *coup de grâce* to the type in concluding, 'she can scarcely be considered as suitable for ordinary cruiser duties'.[1] A century later the court of naval opinion had largely come to uphold this verdict, and the scout cruiser was chiefly noticeable by its absence from Norman Friedman's masterly monograph, *British Cruisers – Two World Wars and After*, first published in 2010, *Boadicea* and her ilk being relegated to his volume of the preceding year on the British destroyer. Undersized, under-armoured, under-gunned, and too slow even to fulfil their intended 'parental' duties to the new generation of destroyers, the scouts appear largely to have underwhelmed. With the US Navy rapidly abandoning both the concept and the nomenclature, the scout cruiser in its *esploratori* guise struggled on into the 1930s, when even the Regia Marina was forced to concede and 'call a destroyer a destroyer'. The dispute over warship designations is hardly a new phenomenon, especially at the fringes of a type – witness the 'battle cruiser' designation debate of the Fisher era, which proved almost as fiercely contested as the actions in which the type was to be ultimately blooded. The current plethora of hull classification symbols recognised by the US Navy only serves to emphasise, however, that behind the semantics lie important assumptions about a warship's design, role and capabilities, which themselves reveal much about a nation's strategic and technological outlook at the time of procurement. Whether small cruiser or large destroyer, the early scouts certainly lacked many of the capabilities required for 'ordinary cruiser duties', yet that an esteemed authority on warship design and member of the Royal Corps of Naval Constructors, David K Brown, could write: 'The scout *Attentive* was the starting point for British cruisers after 1906'[2] does suggest that the lasting influence

[1] Admiral Sir E R Fremantle, *The Navy League Annual 1907-08*, A H Burgoyne, ed. (London: The Navy League, 1907), p. 80. This was without doubt a just comment, although the nature of 'ordinary cruiser duties' was to change with the advent of the light cruiser designation in 1913.

[2] D K Brown, in Robert Gardiner (ed.), *The Eclipse of the Big Gun: The Warship 1906-45*, (London: Conway Maritime Press, 1992), p. 55. See Appendix 3. The Circ M (length/displaced volume) of the Armstrong designs, clipper bow and high, extended fo'csle made them significantly faster and gave them better seakeeping qualities than the other scouts. The 'generally similar', Admiralty-built *Boadiceas* of 1907 spawned both the *Bristol* class of '*New Boadiceas*' (1908) and the 'Super-*Active*' (i.e. 'improved, late' *Boadicea*) *Arethusas* of 1912. See Brown, *Warrior to Dreadnought: Warship Design and Development*, 1860-1905 (London: Chatham, 1997), p.163-4 and *The Grand Fleet*, p.61-66.

of the type was rather more pronounced than that for which many have given it credit. The scope of the contribution made by the navy's scouts to Britain's preparedness for war in 1914 is certainly worthy of assessment, given that they provided a template for the Admiralty's response to the German light cruiser.

The genesis of a new warship is found in a political requirement, to be fulfilled by a maritime strategy, and secured by the employment of naval tactics which are shaped by the proven technology then available. That the scout's development spanned a period of such mutability in terms of political aims and alliances, adaptations of strategy and, accordingly, of tactics, as well as the coming of age of all manner of new technologies, makes for a revealing case study in the interaction of influences that shape a fleet. That this type was then subjected to rigorous assay in a major war, as few naval innovations of the previous century had been, adds yet a further dimension to the value of such an analysis.

The origins of the scout may be traced to a series of operational decisions taken by the Admiralty at the turn of the century. Given the scale of its commitments, and the close attentions of the Treasury, by 1900 the Admiralty had long since become proficient in maintaining a fleet sufficient unto its present needs, and responding rapidly and forcefully to a newly arising, specific threat as and when perceived, understood and required. This was especially the case with the cruiser, which unlike the battleship, could be produced relatively cheaply and in reasonable numbers for a variety of 'cruising' tasks as and when that threat presented itself. A potent and reassuring symbol of Britain's global maritime influence, by 1897 the Royal Navy had 132 cruisers of all types in service, but none, it would seem, entirely suited to providing support for the burgeoning number of fast destroyers within the fleet.[3] The advent of wireless telegraphy was to increase the potential of scouts of a modest size, capable of mounting the necessary equipment and masts. Other navies had investigated the concept of small, fast cruisers. In 1898 the Russians ordered the *Novik*, a vessel of just 3100 tons, mounting six 4.7in. and eleven smaller guns, as well as five torpedo tubes.[4] Although she still retained a thin protective deck armour, she could attain a remarkable speed of 25 knots, outpacing the latest small British cruisers by five knots and matching most destroyers then in service. However, the Admiralty had no need for dispatch vessels akin to the *Novik* or the proposed (but abandoned) French 4,000 ton 'Croiseur Estafette' (cruiser-courier) design: the Director of Naval Construction of the time, Sir William White, stated in public that

[3] TNA ADM 1/7465C, Admiralty: In-Letters and Papers, Dec. 1900, letter M.0499 dated 1 July1900 expressed concern at the growing demands from Cs-in-C for destroyers for Channel and Mediterranean service. In response to Admiral Fisher's request for 54 destroyers to meet his fleet's needs in the Mediterranean, as he believed had been established by the outcome of manoeuvres with Captain Jackson's destroyers, he was promised 24, as soon as new building allowed. A note by the DNI, Rear-Admiral Custance dated 20 January 1902 (referenced uncited in N Friedman, *British Destroyers – From Earliest Days to the Second World War* (Barnsley: Seaforth Publishing, 2009, p.270) listed 111 destroyers in service, sixty in home waters and thirty in the Mediterranean, with another nine to be allocated as need arose.

[4] See Keith McBride, 'The Royal Navy 'Scout' Class of 1904-05', *Warship International*, No.3, 1994, pp.260-266 on the possible origination of the type. It should be noted that the cruiser-building expertise of the German naval shipbuilders at the Schichau yard was called upon in the design and construction of the *Novik*.

the Russian vessel had sacrificed all other fighting qualities in pursuit of speed and that the Admiralty had no interest in such designs at present.[5]

The scout project appeared to have foundered. Previously, the requirement for scouting vessels had been considerable, with at least a *pair* of vessels required for any one patrol area, one to maintain lookout whilst the other carried news of any sighting to a flagship or friendly port. If such vessels were operating near the limit of their fuel endurance, then more vessels would be required. But the advent of marine wireless in 1899, with the prospect of greatly extending lines of communication at sea, was to change the nature of reconnaissance dramatically in a very short space of time.[6] Although their predictions were to prove premature, some naval theorist felt that wireless communication would greatly reduce the requirement for scouting vessels in narrow seas, and White remained sceptical that a scout cruiser would prove viable, urging that the Admiralty should await the results of imminent trials of turbine-engined destroyers and the impact they would have on the fleet. By 1900, despite initial design sketches, the question remained as to whether rapid advances in technology and tactical requirements would render the Navy's scout stillborn.

However, a number of factors intervened to give the Admiralty cause to reconsider the case of the scout. Discussion outside the Admiralty (though of an admittedly very limited significance for Their Lordships) had been renewed – on March 27 1901 a paper on 'A Design for a Fast Scout'[7] was presented to the Spring Meeting of the Forty-Second Session of the Institution of Naval Architects at Adelphi Terrace in London. Its author, Charles Cooper Penrose-Fitzgerald, was to retire the following day with the rank of Vice-Admiral, after a naval career stretching back to the Crimean War. Fitzgerald's parting gift to the Fleet would be an entirely new type of vessel – 'a scout of high speed and good seagoing qualities'. Whilst claiming that 'I am responsible for the general idea of the design', the speaker was gracious in acknowledging the contribution of Philip Watts, still at that time in the employ of Armstrong's at Elswick, and Admiral Sir John Hopkins, although the scope of their involvement remains uncertain.[8]

Fitzgerald's very limited influence and unpromising rationale for the vessel did not bode well for the proposal. It was stated that the type was not intended to be a "ship of war" or fighting ship, but rather a dispatch vessel or 'scout', its role enhanced by 'continuous high speed, and good sea-going qualities in

[5] White posited that the *Novik*'s continuous sea speed would not surpass 21.5 knots, and George Goschen, the First Lord, rejected a proposal for three fast, third class cruisers for the 1899-1900 Naval Estimates, stating 'they seem likely to be little better than boxes of machinery, rather like torpedo boats than like cruisers' (TNA, ADM 167/31, Admiralty Board Minutes, 19 December 1898).
[6] See A J L Blond, *Technology and Tradition: Wireless Telegraphy and the Royal Navy, 1895-1920* (unpublished PhD thesis, University of Lancaster, 1993).
[7] Vice-Admiral C C P Fitzgerald, *A Design for a Fast Scout* (London: The Institution of Naval Architects, 1901).
[8] Fitzgerald thanked Admiral Sir John Hopkins for sharing his 'great experience and sound practical views' and 'Mr Philip Watts, of Elswick, [who] has most kindly taken all the trouble to work out the design for me, and to carry out my views, so far as that was possible on a given tonnage'(*ibid.*, p.1).

all weathers' (p. 2). By such measures, the scout as envisaged might be deemed a successor to the dispatch vessels *Iris* and *Mercury*, the Navy's first all-steel ships, which some have claimed to be the forerunners of the modern cruiser. These ships had entered service just too late to join the fleet sailing through the Dardanelles at the time of the Russo-Turkish War (1878-79), an episode during which the Admiralty was forced to buy up a number of Liverpool tugs to perform the tasks now envisaged by Fitzgerald for the proposed design. Although a close blockade of enemy ports in time of war was unlikely to be undertaken in the same manner as the previous century, Fitzgerald argued that the navy was also still in want of a vessel to keep ports under surveillance. First class cruisers would be too vulnerable to torpedo attack and too busy ridding the seas of commerce raiders, whilst the fleet's second and third class cruisers were too slow to keep an enemy under observation and survive – the *Pelorus* class barely attaining 20 knots in calm seas. The scout, Fitzgerald concluded, was admirably suited to the roles of lookout and messenger in one hull.

In April 1901, one month after the INA meeting, Admiral Fisher's destroyer captain in the Mediterranean, Henry Jackson, took up the cause of the scout, drafting a paper in support of the concept.[9] Destined himself to be Controller of the Navy and First Sea Lord in later years, Jackson had an outstanding grasp of naval tactics and manoeuvres, and found the current cruisers of the *Barham* and *Pelorus* class, as well as torpedo gunboats, too slow for effective work with his destroyers. His operational experience suggested that a vessel of not less than 24 knots maximum speed, and a continuous speed of 19 knots in moderate weather over 1200 nautical miles was required. Given Jackson's pioneering work with Marconi, it is unsurprising that he also argued that adequate space for excellent flag and wireless signalling facilities must be provided, and that the ship should be handy, sturdy enough for full operations in a head sea, and to tow disabled destroyers, (one of the criticisms aimed at the early, commercially designed scouts that were to appear was their lack of strongpoints for towing – an issue resolved in the later *Boadiceas*). Jackson also felt that large searchlights fore and aft on raised platforms aboard a scout would greatly enhance the performance of destroyer flotillas in both delivering and countering torpedo attacks by night, an aspect of the Navy's battle tactics practised by Jackson but found woefully wanting by the time of Jutland. Due to this weight of expectations for the model scout, Friedman suggests that Jackson became a proponent of a small cruiser rather than a scaled-up destroyer as a future flotilla leader.[10] That a well-respected, serving naval officer had reached such a conclusion further enhanced the stock of the scout cruiser, and Jackson's paper set out detailed

[9] NMM, Jackson Papers, JAC/39, letter to Admiralty relating to the design of a small, fast vessel to escort torpedo boat destroyers. Jackson had been appointed to his first torpedo boat command in 1886.

[10] *Ibid*, p.2. Friedman, *British Destroyers*, p.72 draws attention to an uncited paper by Fisher's successor in the Mediterranean, Admiral Lord Charles Beresford, in which he welcomed the employment of wireless in destroyers but feared that 'its advent would be an excuse to use destroyers as cruisers and scouts, roles for which they are not well suited.' Beresford's later attacks on Fisher's attitude towards small cruisers cited this concern. (See Chapter 5).

parameters for such a design, but hard pragmatism and necessity were required to convince the Third Sea Lord and Controller, Rear Admiral William May, to pursue the scheme with his fellow admirals.

The resurgence of the scout proposal exemplified a wider preoccupation of the Admiralty at this time. Both the third class protected cruisers of the *Topaze* class, provided for under the 1902 and 1903 Programmes, (four being completed by March 1905, with a further four in the 1904 Programme cancelled), as well as the scouts, reflected the Admiralty's interest in a need for speed. With much emphasis, and funding, being channelled into the costly armoured cruiser fleet in the early years of the century, the previous small cruisers of the *Pelorus* class had first been ordered as long ago as the Spencer Programme of 1893. Whilst both this and the preceding Naval Defence Act had done much to update the Navy's cruiser fleet and replace the sailing screw-corvettes, the *Pelorus* class proved woefully inadequate, even as it entered service from 1897 onwards. The trials of a range of water-tube boilers installed anticipated a best speed of 18½ to 20 knots, whereas experience soon confirmed that 15 to 16 knots was the maximum attainable. In order for a cruiser to keep pace with the fleet, as required of the *Topaze* class, or with the new generation of destroyers, as with the scouts, faster designs were necessary.[11] Fitzgerald claimed that improved speeds could be attained in a scout at a cost £50,000 less per hull than that of an existing, and far slower, second class cruiser. The calculations appeared attractive to an Admiralty with such a scale and variety of calls upon its Estimates.

The building of the large, ocean-going *River* class destroyers between 1903 and 1905 saw the torpedo boat destroyer attaining a range of operations well beyond that of the essentially coastal defence craft of the '27-knot' and '30-knot' type. The requirement for a lead ship capable of independent reconnaissance, supporting its flotilla against enemy destroyers and heading the line in torpedo attacks had become apparent, not least as a result of the publication of a parliamentary paper, breaking with a 'policy of secrecy' within the Admiralty, as the naval journalist James Thursfield described it.[12] "Narrative of Combined Manoeuvres by the Mediterranean, Channel and Cruiser Squadrons", a copy of which was laid before the House of Commons on 20 February 1903 (in Hansard, vol 118 cc395-6) declared 'The special object in drawing up the scheme of the 1902 combined manoeuvres was to endeavour to ascertain what risks are involved in keeping such a close watch on a fleet in a defended

[11] Even those with considerable interest in naval affairs struggled to grasp the impact of turbine engines and high speeds for the conduct of blockade. In a House of Lords debate on Admiralty procurement on 9 August 1904, Lord Brassey's condemnation of the cost of the *Scout* programme led him to suggest that *Pelorus* third class cruisers, stripped of some armament to increase speed, would have been the better option for destroyer leaders – this at a date when Germany's Schichau yard was building the 28-knot, *S126* class torpedo-boat destroyer and Germany, unlike France, was looking to such vessels as fleet rather than coastal force assets. Brassey did note the woeful lack of fast, small cruisers for fleet scouting but his recommendation of the use of 'greyhound of the mercantile marine' for such duties again displayed misconceptions as to the challenges of modern naval tactics. (Hansard, House of Lords, Volume 139, Naval Administration Debate, 9 August 1904, at https://hansard.parliament.uk/Lords/1904-08-09/debates/90ee3646-11ce-4094-9e1c-0373dda2b563/NavalAdministration.

[12] J R Thursfield, 'The Manoeuvres in the Mediterranean', *Brassey's Naval Annual 1903* (Portsmouth: Griffin), p.167-8. References from the parliamentary paper are taken from Thursfield's commentary, p.168 and 186-7.

port as to ensure bringing it to action if it issues therefrom'. In reporting the adjudged 'loss' of eight out of fourteen destroyers involved in the close blockade, Thursfield commented that 'the closeness of the watch that can be maintained on a defended port by means of destroyers will be very rapidly impaired by an aggressive and energetic enemy, so that every day that the blockade lasts largely increases the enemy's chances of successful evasion'(p.186). Whilst accepting that bringing the enemy's fleet to sea was in itself an achievement, umpires were unimpressed by the lack of cohesion, co-ordination and preparedness of the close blockading forces and their poor communication with larger units of the fleet.[13] In the autumn of the same year the Admiralty issued contracts to four different commercial shipbuilders, requesting them to produce designs for a new scout.[14] The first scouts, all commercially designed and eight in number, would eventually be built roughly in tandem with the *River* class destroyers, and their utility was clear to those involved in designing the vessels, as well as to those in the Admiralty responsible for their funding.

By May 1902, changes at the Admiralty certainly favoured pursuit of the scout design. The First Lord, Lord Selborne, had been appointed in November 1900 and his initial attitude towards both the building of cruisers of all types and countering the threat posed by France in the 'astonishing development of her 'Défence Mobile' along her entire coastline' augured well for the scheme.[15] Similarly Kerr, First Naval Lord from August 1899, was by 1901 wary of the potency of the French coastal forces, and particularly their submarines, leading him to conclude that a close blockade of French ports in the event of conflict might have to be abandoned in favour of a more distant patrol, requiring greater co-ordination of flotillas, better seakeeping qualities for blockaders and speed to hunt down the fast enemy vessels that would inevitably attempt to run the blockade.[16] May, The Third Sea Lord and Controller from April 1901, took up his post just two months after the new Director of Naval Construction, Philip Watts (who had produced the original design for the scout concept), and the two men proved enthusiasts for the commissioning of experimental designs. In May 1902 May requested Watts to create 'a hull specification and scheme of instalments based on a 3rd class cruiser' to accompany an invitation to tender from commercial shipyards for a 'Fleet Scout'.[17] The specification called for a minimum speed of 25 knots to be sustained for eight hours and 'a strong ahead and astern fire', originally based on a third class cruiser armament or similar.[18] Now Assistant Director of Torpedoes, Jackson commended

[13] The file covering the Mediterranean Fleet exercises of 1900 (TNA ADM 1/7450B) contains 'Tactical Notes for Destroyers', instituting two divisions of eight destroyers, each with a sectional leader. Experience had shown that eight vessels was the largest size of unit for effective command and control purposes.
[14] William May, who as Controller was responsible for initiating the contracts, had worked alongside the then Captain Arthur Wilson on the design and evaluation of torpedoes and torpedo craft in the 1880s. Both men were to take a keen interest in the operations of light forces with the fleet (see Chapter 6).
[15] Lord Selborne, Cabinet Memorandum, 16 Nov. 1901, 'The Navy Estimates and the Chancellor of the Exchequer's Memorandum on the Growth of Expenditure' reprinted in D G Boyce, *The Crisis of British Power*, p.130-1 & p.134-5.
[16] TNA, ADM 1/7515, Admiralty: In-Letters and Papers, July 1901, Kerr Memorandum, *passim*.
[17] NMM, Woolwich, ADM 138/189, *Sentinel*, *Patro*l, *Forward*, *Attentive* Ships' Covers, f.5.
[18] *Ibid*, f.19 and f.87-88.

the design, 'this class of vessel being quite new'.[19] The good signalling facilities (both flag and wireless), speed, strength to stand a head sea, handiness, and searchlight provision outlined in Jackson's April 1901 paper were incorporated into the design specification, even though eventual armament was reduced to ten 12 pdr, eight 3pdr and two 18in torpedo tubes and very light armour protection was provided, confirming that the type's intended opponents would be destroyers. With limited coal bunkerage, these were short-range vessels, the longest legged of them, the Armstrong (*Attentive*) types, reaching 2,370 nautical miles at 10 knots.[20] In December 1905 it was the *Attentives* that provided the basis for 26- and 27-knot scout designs,[21] (eventually abandoned together with the 1904-5 destroyer programmes), and their sleek lines, compartmentalisation and four funnels influenced the *Boadiceas* and 'improved *Boadiceas*' – the *Towns*.

Now that public funds were potentially to be allocated to a new type of warship, political considerations came to the fore once more. In a debate on the supply of the Navy Estimates on 24 February 1902, the noted engineer and naval architect in his own right, the Liberal Unionist MP Sir James Flannery, had raised 'the question of scouts', their funding and function within the fleet.[22] His would be amongst the first of many doubts raised about the rationale of the type and confusion was, to some extent, to be expected. Despite the scouts sharing their name with the eponymous cruiser class of 1887, there was little directly to connect the two warships. *HMS Scout* and subsequent classes of torpedo cruiser were amongst the Navy's first attempts to provide an ocean-going platform for the new wonder-weapon of the late nineteenth century. Smaller, slower, although more heavily armed than their namesake type of the succeeding generation, the torpedo cruiser experiment did not succeed,[23] and these vessels ended their days in the more conventional cruiser role of trade protection. However, the two types did reflect the differing response of successive generations of naval tacticians to the same essential challenge – that of projecting the potential of this short-range weapon beyond coastal waters and countering its use by an enemy. Ultimately, destroyers would become sufficiently robust in their own right to attempt the task, but the concept of constructing a cruiser-type 'guardian' or scout can be viewed in this sense as a component of a clear technological progression, and an interim stage in the development from torpedo cruiser to large destroyer, rather than a failed aberration.

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[19] *Ibid*, f.211.

[20] As well as the longest endurance, the Armstrongs also proved the most seaworthy and fastest of the experimental types, *Attentive* sustaining 25.88 knots for 8 hours on trials. At 137' 6", the ships also mounted the highest wireless telegraphy gaff and a W/T office 8' x 5' x 7' (NMM Woolwich, ADM 138/189A, f.126-8).

[21] NMM Woolwich, ADM 189A, *Scout* Ships' Covers, f.127 dated 20 March 1906 confirms this link to later scout designs.

[22] Retrieved from Historic Hansard at http://hansard.millbanksystems.com/search/scout+cruiser?month=1902-2&speaker=sir-james-flannery.

[23] Although Dittmar & Colledge refer to: 'A torpedo cruiser "of *Arethusa* type" to be named *Polyphemus*, with a main armament of torpedo tubes and having three conning positions, proposed in 1915. She was never ordered.' (*British Warships 1914-1919*, Shepperton: Ian Allan, 1972), p. 47.

Somewhere between a destroyer and a cruiser, the scouts were originally conceived as a heavyweight support for destroyer flotilla attacks on enemy torpedo craft and for close observation of enemy – specifically French – ports. By the last years of the nineteenth century it was becoming evident to naval strategic planners that the imposition of a close, *fleet* blockade on the ports of an enemy, as applied so effectively during the Napoleonic Wars, was no longer viable, given the limited endurance of steam-powered warships and the threat to a battlefleet loitering in coastal waters from the torpedo and mine. The scout was also designed to maintain observation of the enemy in inshore waters and convey information to a friendly fleet at some distance from an enemy's coast when required but the prospect of North Sea operations against Germany brought the scouts' limited range into sharp focus.[24] Torpedo boat manoeuvres also showed that whilst coastal flotillas still required larger vessels to identify targets and lead attacks against them, still greater speed was required.[25] At the same time, the Ballard Committee of 1906-7 helped to rejuvenate the idea of a close blockade in the Admiralty's strategic thinking just at the moment when the scouts were entering service, and its views held considerable sway over the 1907 War Plans as they emerged. The Committee's first plan outlined a Channel and North Sea 'cordon' to contain German shipping, but plans two and three posited a subsequent, much closer commercial blockade, focused on the Elbe, and the destruction of the defences and facilities of the Baltic ports, seizure and use of Borkum and Sylt as destroyer bases and close blockade of the Danish islands of Siaelland and Fyen, should they be held by the enemy. Paul Haggie summarises the plans: 'The only objectives which are considered to be of sufficient importance to justify the risk of attacking German territory are to capture and destroy German naval forces [Fisher's 'Copenhagen'], to seize a base for the British destroyers and torpedo craft, or to increase the efficiency of the commercial blockade'.[26] Whilst the origins of the scouts may well have arisen in the need for close blockade and destroyer screens around French ports, their utility in such new schemes was clear, and a second generation of scouts, commencing with *Boadicea*, was ordered for the Navy in 1907.

Tactically, the advent of the scout appeared to answer the navy's needs. In his admittedly partisan appraisal of the scouts as then constructed, Fitzgerald stated that: 'There seems to be an almost

[24] In a letter from C-in-C Home Fleet, Vice Admiral Sir Arthur Wilson to Lord Selborne, dated 6 March 1904, the problem of finding a secure base 'far enough to the Eastward' to house the Channel Fleet in the event of war with Germany, which would prevent its deployment to the Mediterranean was raised. Until Dover facilities were completed, Spithead seemed the nearest alternative (Boyce, *The Crisis of British Power*, p.174). Beresford, C-in-C Mediterranean Fleet, felt so concerned by the 'enormous' coal consumption of the early scout *HMS Sentinel* and her 'continual source of anxiety to me when cruising' due to lack of endurance that he felt moved to write to the Admiralty Secretary to complain. (NMM Woolwich, ADM 138/189A, *Scout* Ships' Covers, f.232, letter dated 31 Oct. 1905).

[25] TNA, ADM 116/1012, Admiralty: H.M. Ship Designs, 1905-11, Admiralty Board meeting dated 3 April 1906 to discuss an improved scout. It is stated here that Admiral Fisher had outlined the requirement for such a vessel in January of that year. His vision was distinctly for a 'parent ship for destroyers', of 2880 tons, with turbine engines giving up to 27 knots and a range of 2000 nm at 15 knots, and mounting 4-in, high velocity guns and two 18in torpedo tubes.

[26] P Haggie, 'The Royal Navy and War Planning in the Fisher Era', *Journal of Contemporary History*, Vol. 8, No. 3, July 1973, p. 120.

unanimous opinion amongst naval officers that efficient scouting will be of the highest importance in future naval wars'.[27] However, he was gracious enough to recognise a diversity of opinion as to the type of vessel most suitable for the task. Whilst some favoured converted liners, as the Americans had employed during the recent war with Spain, others preferred large and powerful armoured cruisers; yet a third constituency pointed to the employment of Japan's destroyers in scouting from the Elliot Islands to Port Arthur during the recent war with Russia as an indicator for future tactics, although Fitzgerald himself, perhaps unsurprisingly, called into question the relevance of this example for the Royal Navy's operations in its home waters. Whilst lacking the range, armour and armament traditionally associated with the 'cruiser', the scouts nonetheless represented an important component of the Admiralty's overall operational vision for the fleet in the early years of the twentieth century. As envisaged by Fitzgerald, the original scouts were to have had a coal bunkerage of 1200 tons, sufficient to achieve a range of 3,000 miles at 18 knots, and offering them scope to operate for reasonable lengths of time off the ports of continental enemies in times of conflict. This, it would appear, was to be the vessel's primary operational role in the Navy's wider strategic planning. That the scouts as built to Admiralty specifications were to have less than half of the endurance proposed by Fitzgerald remained his chief criticism of the vessels as realised. As often proves the case in warship procurement, attempts to broaden the designed range of the scouts' operational applications inevitably led to compromises in meeting their original, and intended, primary purpose.

Conceived at the very end of Victoria's reign, the first scout cruisers were launched into a very different set of circumstances, and at a pivotal moment for the Royal Navy's cruiser fleet, when Fisher as the new First Sea Lord was undertaking a radical reappraisal of the nature of the fleet as a whole. In October 1904, as *Foresight* and *Patrol*, the fifth and sixth of the initial eight projected scouts were launched, Selborne established The Committee on Designs, with a brief to consider what types of warship would be required by the Navy over the next decade. One of its more immediate consequences, intended or otherwise, was to leave the fleet's cruiser programme in some disarray. By early 1905 a scheme of scrapping of older cruisers, which Fisher himself described as 'Napoleonic in its audacity and Cromwellian in its thoroughness', was well underway. Initially, the First Sea Lord had wanted to retire all vessels incapable of reaching the maximum 23-24 knots of the armoured cruisers then entering service. Even in its diluted form, ninety warships, the 'sheep', were deemed entirely useless and earmarked for sale. The rest were retained as a Material Reserve: 37 'llamas', told off for subsidiary purposes of war such as mine-laying, and 27 'goats', which were to retain their armaments but were not to undergo repair and maintenance. The llamas and goats were laid up at the three home ports without

[27] Vice Admiral C C P Fitzgerald, *The New Scouts* (London: The Institution of Naval Architects, 1906), p. 4. As DNC, Watts tasked his destroyer designer Henry Deadman with preparing statistics on the performance of the scouts, anticipating any criticisms from the Vice Admiral (NMM Woolwich, ADM 138/189A, *Scout* Ships' Covers, f.126-7).

crews.[28] In some respects, the new scout cruisers entering service fulfilled requirements: they represented a largely novel concept and could maintain 25 knots, matching Fisher's maxims on the need for speed. He also argued that the traditional concept of cruising ships was outdated, at least in the sense that commerce protection was itself no longer a viable aim for the type, and scouting for the battlefleet should be undertaken by large destroyers: the scouts, helpfully, were intended initially for neither of these roles. However, Fisher, with some justification, also held an antipathy for small cruisers that could neither fight nor run away. The same large destroyers operating as scouts could adequately fulfil the role of destroyer leader in a strategy of flotilla defence and operations in coastal waters, as he envisaged them. Even where Fisher saw a requirement for a flotilla leader, as with his January 1906 proposal (see fn.25), it was not intended that the design should have anything other than a peacetime role as a third class cruiser. It was to the scouts' lasting misfortune that because of their very lack of 'traditional' cruiser attributes – substantial firepower, a decent degree of armoured protection and a large operational range – they were also the focus of dislike for Fisher's opponents, who saw in the lack of orders for 'proper cruisers' a worrying reduction in the Navy's ability to protect its interests around the globe and to offer adequate protection for the Fleet.

Despite ongoing opposition towards the scout, the rapidly developing strategic planning process was to offer the type a new lease of life. By the time of the ordering of *Boadicea*, the first of the Admiralty scouts in 1907, the fleet was undergoing a major redistribution to focus upon North Sea operations, accelerated by Fisher at the end of 1904. This was extended in 1907, with six battleships and six armoured cruisers being concentrated at the Nore, together with forty-eight destroyers in four flotillas, fully crewed, and accompanied by four of the earlier scouts, at constant readiness to meet any emergency. The *Topaze* class cruiser *Sapphire* was initially appointed Flagship Commodore (D), the benefit of its substantial armament of 12 – 4in. and 8 – 3 pdr. guns being felt to outweigh its limited 21¾ knots speed. Further scouts were deployed to the reorganised destroyer flotillas of twenty-four vessels at both Portsmouth and Devonport. Although unlike the destroyers, some of the scouts continued to receive only nucleus crews, the demand for larger vessels to work in flotilla defence[29] was now recognised,[30] hence the ordering of the first Admiralty scout. Whilst the rationale underpinning the introduction by Fisher of the 1907 Naval War Plans has been subject to varied interpretation,[31] the

[28] Marder, *From the Dreadnought to Scapa Flow*, Volume 1, p. 40.

[29] By 1904 Fisher viewed 'the defence of the 'Narrow Seas' . . . the English Channel and the western basin of the Mediterranean, as a question quite apart and separate from the working of the main fighting fleets' – quoted in Kemp, *Papers of Admiral Fisher*, Vol. 2, p.6 and cited in N A Lambert, 'Fisher and the Concept of Flotilla Defence', p.654. Lambert suggests that Fisher placed quantity over quality in the pursuit of a rapidly enlarged submarine and destroyer force to protect the seas around Britain. The dislike of Beresford and his supporters for the scout may be viewed in terms of their broader mistrust of this two fleet, flotilla defence policy.

[30] See discussions held at the Admiralty Board meeting dated 3 April 1906 detailed in TNA, ADM 116/1012, Admiralty: H.M. Ship Designs, 1905-11.

[31] For example, see Christopher Martin, 'The 1907 Naval War Plans and the second Hague Peace Conference', *Journal of Strategic Studies*, Volume 28, Issue 5, 2005, p. 833-856, in which it is argued (controversially) that Fisher, recognising that developments in naval warfare in narrow seas no longer proved a close blockade strategy

prominence given in it to flotilla work, as well as the ongoing need for a fast dispatch vessel (as originally envisaged by Fitzgerald) to monitor and communicate enemy movements in inshore waters, may well have provided the strategic rationale for the extension of scout construction. It is even possible that specific, potential future operations may have influenced design decisions: as *Fearless*, the last of the Navy's scouts, was being laid down at Pembroke in 1911, Corbett was promoting *Some Principles of Maritime Strategy*, which was approved for publication by the First Lord and First Sea Lord. That the shallow-draught, small and reasonably fast scouts might have a role to play in such a subtle, various, and hopefully efficacious application of sea power as that suggested by Corbett – for instance, in a Baltic project – may well have assisted their case.[32] It was, after all, the direct successors of the scouts, the *Arethusas* of the Light Cruiser Squadrons, that would first be tasked with probing the Great Belt and testing German resolve when war came, albeit that they were able to rely upon a greater range, speed and firepower than their predecessors.

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The first scouts were not designed in the usual way for larger naval vessels, with main plans being drawn up at the Admiralty and individual commercial shipyards taking responsibility solely for planning detail. Rather, the procedure for producing fast destroyers was applied, with each company drawing up its own design to meet an overall Admiralty specification, which was subsequently vetted by the Director of Naval Construction. The final designs emerged over time, with frequent Scout Cruiser conferences held to ensure a measure of standardisation of items such as auxiliary machinery and fittings, a practice which had been ongoing since at least the 1870s. Four shipbuilders – Armstrong, Fairfield, Cammell Laird and Vickers – were each requested by the Admiralty to design and build two vessels. Whilst the sharing of warship construction amongst multiple commercial yards already reaching capacity with other designs was by no means novel, the scale and close co-operation involved in these public-private trials, and the degree of freedom given to each design office are certainly worthy of note. Conscious of its constant need to shepherd financial resources and to pursue modern yet proven technology, the Admiralty set down clear specifications for the four designers: a speed of 25 knots; shallow draught for inshore duties; a 1½-inch armoured deck or similar side armour, and an armament of 10-12pdr, 8-3pdr and two torpedo tubes. In February 1903 Selborne, announced the construction of the new scout designs:[33]

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viable, pursued a policy of interdicting hostile commerce on the high seas, and introduced the 1907 Plans specifically to apply pressure to the Cabinet to veto immunity to all private property at sea, as proposed at the Hague Conference.

[32] Planning work for a close, Baltic blockade, utilising perhaps a nearby captured Danish or even Norwegian base, had informed the Ballard Committee's efforts to develop War Plans in 1906-07. See Andrew Lambert, 'Great Britain and Maritime Law from the Declaration of Paris to the Era of Total War' in Rolf Hobson & Tom Kristiansen (eds.), *Navies in Northern Waters, 1721-2000*, (Abingdon: Frank Cass, 2004), p. 21-31.

[33] *Statement of the First Lord of the Admiralty Explanatory of the Navy Estimates of 1903-04* (London: HMSO, 1903), p. 14-15.

> 'Four vessels of an entirely new class known as "Scouts" have been ordered during the year, by contract. These vessels are named: *Adventure*, *Forward*, *Pathfinder* and *Sentinel* [originally *Eddystone*, *Nore*, *Fastnet* and *Inchkeith*][34] and are building at Elswick, Fairfield, Laird's and Vickers, respectively. It is expected that these vessels will be passed into the Fleet Reserve in 1904-5. These vessels are to maintain a speed of 25 knots for eight hours continuous steaming when in ordinary seagoing conditions. The coal supply is to be sufficient for a radius of action not less than 3,000 knots at 10 knots speed. Design for these vessels were furnished by the respective builders, but considerable time has been taken up in the preparation, examination and modification of the various designs received.'

In the same statement Selborne announced that from thenceforward, contractors rather than naval dockyards would be responsible for all aspects of fitting out, installation of armament and trialling, so that the new scouts would pass straight from the hands of the builders into the Reserve Fleet.

From the very first, questions of value for money spent accompanied the scout project. The cost of each commercially designed scout was to reach £275,000, almost 40% of the sum expended on White's final design as DNC, the *Devonshire* class of armoured cruiser (10,850 tons) then under construction and receiving warm (if ill-founded as it proved) appreciation in naval circles. By 1906 the new ocean-going destroyers of 800 tons and a planned 33 knots would cost £138 000 each, exactly half the cost of a scout and a full 8 knots faster. For some, the obvious way forward was to abandon any thought of a cruiser hull for Channel and North Sea scouting and to build more destroyers: faster, cheaper to construct, man and operate than the scout, yet with sufficient endurance for reconnaissance, and armament to take on its own sort. It was also felt that the new breed of destroyers would be less vulnerable to mine and submarine than the scout. Whatever the reservations about the scout concept, and Fisher's doubts about the utility of cruisers in general, the Navy Estimates for 1907-8 made it plain that the type was to be pursued further. The Explanatory Statement announced: 'A design of a fast, unarmoured cruiser has been prepared, and the ship will be laid down early in the next financial year. In this design special attention has been given to her capabilities for accompanying destroyers and acting as a parent ship in addition to carrying out the peace duties of a light cruiser.'[35] This ship was to become *HMS Boadicea*, the first of seven Admiralty-designed scouts built. Given the enormous demands upon the Navy's building programme at this period, which ranged from battle cruisers to submarines, it is reasonable to assume that the addition of further scouts to the fleet was seen as an expenditure merited by their utility. Whilst the *Boadiceas* were to operate with the Grand Fleet throughout the war in a limited role as signal

[34] It seems that the original naming of the scouts, associated with offshore features of the British Isles, was intended to stress the coastal mission of these ships. As it was, the names were soon abandoned, possibly for fear of causing navigational confusion during communications, and appellations suggestive of vigilance were substituted.

[35] *Statement of the First Lord of the Admiralty Explanatory of the Navy Estimates of 1907-08* (London: HMSO, 1907), p. 27.

repeating vessels, they were never designed for oceanic, third class cruiser roles. But it was in design form rather than function that the design gained significance, providing a blueprint for true light cruiser *Town* and *Arethusa* classes.

An analysis of the design process for the first scouts reveals much about the technological imperatives at work in shaping the British fleet at this period. In May 1902, with Philip Watts installed as Director of Naval Construction and a young and able Lord Selborne as First Lord of the Admiralty, specification letters for the new scout design were sent out to six leading larger warship builders, requesting their design responses by August of the same year. That none of the destroyer builders such as Yarrow, Thornycroft and J S White were approached was in line with the Admiralty's decision to issue a third class cruiser specification with the original letter inviting tenders.[36] Similarly, the stores and equipment requirement given to builders by the Admiralty was as for a protected cruiser.[37] In the event, the proposals of John Brown's and the Thames Iron Works were turned down and it was left to Armstrong (Elswick), Vickers, Sons & Maxim, Fairfield and Laird to negotiate the building programme.

As the Admiralty had hoped,[38] each design differed, particularly with regard to armour. In outward appearance the scouts presented an unusual variety of new and old design features that bore testimony to their transitional status, both in terms of the date of their construction and function. The turtleback forecastle and prominent ventilation cowls of the Vickers pair – *Sentinel* and *Skirmisher* – together with the raised poop of the Fairfield vessels – *Forward* and *Foresight* – harked back, superficially at least, to the previous century. By contrast, the Laird-built *Pathfinder* and *Patrol*, and even more so, Armstrong's *Adventure* and *Attentive*, with their curved bow, and sleek lines, four raked, narrow funnels and a long quarterdeck, the break immediately aft of the bridge, presaged a new era of cruiser designs.[39] Given his previous sixteen years as Director of the War Shipping Department at Armstrong's, and subsequent return as Company Director following his time as Director of Naval Construction at the Admiralty, it is little wonder that it was Philip Watts's Armstrong design that proved most influential in shaping the subsequent seven scouts of the *Boadicea*, *Blonde* and *Active* classes, and, it could be argued, the look of light cruisers thereafter.

Averaging some 2,820 tons in displacement, undoubtedly the first eight scouts were *small* cruisers, but still a third larger than their *Pelorus* Class predecessors, whose cruiser brief, whilst not with the fleet, extended to the patrol of outposts of Empire. High forecastles gave the *Attentives* good sea-keeping even in heavy seas, but a close watch was kept on hulls, as a perception abounded that the vessels were fragile. Despite their being poorer seaboats than their predecessors, the later *Boadicea* and *Blonde*

[36] NMM, Woolwich, ADM 138/189, *Scout* class Ships' Covers, f.3.
[37] *Ibid*, f.34.
[38] The decision to accept four different designs to meet the original tender was an inherent feature of the experimental procurement venture. See NMM Woolwich ADM 138/189, f.5.
[39] See NMM, Woolwich: ADM 138/189A-B, Fleet Scouts, *Adventure*, *Forward*, *Pathfinder* and *Sentinel* classes Ship's Covers, various design blueprints.

classes were still able to maintain station with the Grand Fleet, relaying signals and providing an inner defensive screen for the battle squadrons, even when destroyer flotillas had been forced to return to port due to rough weather. The semi-ram bows of some of the early scouts, which had tended to cascade spray over the forward gun positions at high speeds, as Henry Jackson had predicted they would, were adapted in later variants, concluding with the graceful 'plough' bows of the *Actives*, which gave them a distinctly modern appearance.

The first eight scouts had full length armoured protection, although this varied in thickness throughout each ship and from builder to builder, ranging from two inches to $^{5}/_{8}$ inch. The Fairfield and Laird designs also incorporated a limited, two-inch belt protection for engine room spaces, although this armour had little function other than to offer some measure of assurance should the ships tangle with destroyers whilst scouting off enemy coasts. The seven Admiralty-designed scouts that followed were virtually without armour, carrying just a one-inch partial plating above the machinery spaces as a nod in the direction of preserving the vessels' speed, which was to be their chief means of protection. Like their eventual successors, the *Arethusas*, the scouts were cramped ships, with accommodation space limited. Of the crew, which rose from 268 in the earlier scouts to 325 in the final variants, a 'Black Gang' of 160 officers and men was required to stoke boilers and maintain the ship's engines – 60% of the total complement; a further 60 men were required for manning the armament (rising as the weapons carried increased), leaving few spare hands otherwise to work the ship. This was despite the fact that the original Admiralty proposal for the *Boadiceas* required 'cruiser-like' accommodation, as in peacetime it was envisaged that the vessels would chiefly be employed as third class cruisers.[40] Ultimately, in the three *Active* class scouts, the relocation of crew berths forward and officers' quarters aft did ease overcrowding somewhat.

That the scouts inaugurated a new era in British cruiser design is undeniable. In the late spring of 1908 the armoured cruiser *Defence* was fitting out in Pembroke Dockyard, prior to joining the Fifth Cruiser Squadron of the Home Fleet. At 14,600 tons, carrying up to a 6-inch armoured belt, and triple expansion engines of 23 knots at the limits of their capability, *Defence* in many ways represented the swansong of an earlier age of warships. Of her 850 crew, stokers comprised a third. In the building slip she had vacated, the new, turbine-engined scout *Boadicea* awaited launch, representative of a new age that would usher in the light cruiser – the juxtaposition of the two types was striking to Arthur Nicholls, the Assistant Constructor who had arrived at Pembroke in 1906 straight from three years at the Royal Naval

[40] Such were the limited range and seakeeping qualities of the *Scouts* that their nominal role as peacetime, third class cruisers was impracticable. Writing of his time as a Lieutenant abord the late scout *HMS Active* in 1913, Cdr R L Dearden wrote, 'Active was the lightest of light-cruisers . . . As a practical seaman I cannot imagine a less comfortable or sea-kindly ship. Proportioned like a cigar as regards length and breadth, with four funnels and a mast of grotesque height' (*Watch on Deck*, London: Blackie & Son, 1934, p.162).

College, Greenwich.[41] He was placed in charge of the construction of all seven of the Admiralty scouts to be built at Pembroke between 1907 and 1912.

Whilst naval historians such as McBride have suggested no direct line of evolution from the commercially designed to the Admiralty-built scouts, the evidence appears to suggest otherwise. For one, in July 1906 the DNC with overall responsibility for the new scouts, Philip Watts, compared his outline plan with that of both the *Topaze* class, turbine cruiser *Amethyst* and the Armstrong scout *Adventure*. In fact, the seven Admiralty-built scouts, commencing with *Boadicea* in 1907, illustrate both continuity with the earlier scouts but also rapid developments in strategic, operational and technological outlook in the space of just four years. The 1904-5 Estimates made provision for a new class of 27-knot destroyers which would clearly outrun the existing scouts. Therefore, in December 1905 planning work commenced on alternate proposals for a 2,800 ton-, 27-knot scout with a three-shaft, 21 500 ihp and a slightly larger, 26 knot design of 18 500 ihp. In the event, the planned class of destroyers was cancelled and the scout designs were also abandoned.

At this stage, the future of the scout concept was very much in doubt. On 12 December 1905 Fisher received a paper comparing the relative merits of the current scouts, the third class cruiser *Diamond* and a 1,680 ton, 36 knot 'super destroyer' in leading flotillas. Under the influence of the naval constructor W H Gard, who he had brought back with him from Malta in the capacity of a design adviser, Fisher was captivated by concept of the fast destroyer – '*HMS Uncatchable'*, as he was to dub her. The design, ultimately realised as the single prototype *Swift*, would dominate the narrow seas warfare and replace both destroyers and scouts entirely. Indeed, mention of the scout did not appear amongst Fisher's *Naval Necessities* papers of that period, nor on the agenda of his 1905 Committee on Design. The appearance of the scout within the fleet, as it seemed, was to be a brief one, although events conspired to place the type at the centre of the Admiralty's disagreements, representative of, if not the cause of, strongly differing ideas about the structure and deployment of the Navy's light forces.

The *Swift* design was not to prove the answer to a number of the Navy's operational requirements, as Fisher had hoped, however. The decision of the Admiralty Board in January 1906 to maintain a mix of ocean-going and coastal destroyers provided a lifeline for the type, and indeed it was Fisher himself who called for a leader for the latter, coastal destroyers, which would emerge as TBs 1 – 36, 165 ft long, 250 ton vessels capable of making 26 knots and armed with 2-12pdr. guns and three torpedo tubes. Their leaders were to be the Admiralty-built scouts, from *Boadicea* onwards. Friedman describes the ship as conceived: 'She would act as the eyes of a flotilla, finding targets against which they would concentrate. The need for such a ship had been demonstrated in torpedo boat manoeuvres. She would

[41] Lt. Cdr Lawrie Phillips, *Pembroke Dockyard and the Old Navy: A Bicentennial History* (Stroud: History Press, 2014), p.288-9.

be fast enough (27 knots) to escape cruisers and armed merchant ships, so had to be armed only against enemy destroyers, with high velocity 4in guns'.[42]

In their propulsion, the scouts also provided valuable experience for the Navy, and the evolution of their machinery charts the broader marine engineering developments occurring at this transitional period. As Admiral Sir John Hopkins, a strong advocate of the scout concept, had made clear in a speech at the Royal United Service Institution in early 1901, cruisers had become larger and more heavily armed in the preceding ten years, negating the effect of lighter water-tube boilers and leaving them no faster than at the start of the decade.[43] Hopkins saw in the scout an opportunity to reverse this trend, and whilst White remained unconvinced that the new scouts would achieve speeds in excess of 23 knots, trials of the type were to prove him mistaken. Speed had to be traded against other design attributes, however. In the case of the first scouts, the new Director of Naval Construction in 1902, Philip Watts, asked his destroyer designer, Henry Deadman, to evaluate the design. Deadman's calculations showed that the ships as projected sat on so steep a point on the speed-to-power curve that a reduction of one knot in the specified maximum speed would cut the power required by 4000 ihp. Such a weight saving in machinery would allow a doubling of the armament, but the reduced hull profile would no longer be able to accommodate the crew to man those additional guns. On such fine margins and balances of requirement were the final plans drawn up. As will be discussed in Chapter 7, whilst discussions about the merits of the scout took place in Britain, the German Navy had already made considerable strides in the development of a modern light cruiser type, with utility both for fleet and overseas service, and in the *Gazelle* class, laid down from 1897 and described as 'the first modern light cruisers', they set a precedent for effective design pursued, with technological refinements, until 1918.[44] This development was to have considerable consequences for the course of British naval policy.

Reciprocating engines were fitted to the first eight, commercially designed scouts, despite the not altogether successful trialling of steam turbines in *Amethyst* of the previous *Topaze* class of small cruiser. In part, it was felt that it was enough to experiment with an entirely new concept in cruiser design, let alone complicate matters with the further innovation of steam turbines.[45] Indeed, whilst financial penalties were to be applied to the commercial scout builders should their ships fail to attain the specified speed of 25 knots, there were no bonuses to be had for exceeding this. Watts later claimed that reciprocating engines had been specified, perhaps in response to doubts over the economy of

[42] N Friedman, *British Destroyers*, p. 111.
[43] Admiral Sir J O Hopkins, 'A Few Naval Ideas for the Coming Century', *JRUSI*, Vol. 45, Issue 1, Jan. 1901, pp.7-38.
[44] Quotation from R Gardiner *et al* (eds.), *Fighting Ships, 1860-1905*, p.258. See Holger Herwig, *'Luxury Fleet': The Imperial German Navy 1888–1918* (London: Ashfield Press, 1980), p.28 and Dirk Nottelmann, 'The Development of the Small Cruiser in the Imperial German Navy' (Part 1), *Warship 2020*, pp.102-118 for the development of the German light cruiser force.
[45] McBride, 'The Royal Navy 'Scout' Class', p.262 suggests that the Admiralty's stress on economy and an existing third class cruiser design in its original specification may have engendered conservatism with regards to machinery selection by the six companies tendering.

turbines and as an unwarranted reaction to the loss of the destroyers *Cobra* and *Viper*.[46] In the event, propulsion in the first scouts matched requirements. In the spring of 1906 the Atlantic Fleet departed Gibraltar and all ships conducted their quarterly full-power trials. The Laird scout *Pathfinder* ran the rest of her squadron, including the turbine-equipped *Amethyst*, out of sight within three hours, sustaining very near her 25 knot maximum at nine-tenths of her horsepower, with a dirty bottom, a full load of coal and stores, and deeper than her contract trial draught. Given the relative novelty of fitting steam turbines into larger vessels, and the fact that *Amethyst*'s class of cruisers had not been designed with such propulsion in mind, it is hardly surprising that she never achieved in excess of 22½ knots, only three-quarters of a knot faster than her triple expansion engine-equipped sisters. When looked at in this manner, the 25 knots achieved by the first scouts, a two to three knot advantage over the most recent cruiser types built, was – in this competitive field of striving for incremental gains in speed – a considerable achievement. That *Pathfinder* could sustain 18 knots on her return to Chatham from Gibraltar, apart from in the heavy seas of Biscay, (when speed dropped to 13½ knots), and still have coal for another 1000 miles of steaming at 10 knots, suggests that the operational range of these vessels varied considerably between design.

However, in the longer term, the decision to retain triple expansion engines in the early scouts proved to be flawed when even the battle fleet was on the verge of moving to the turbine. Given the very rapid advances in fast, destroyer machinery, it proved to be a yet worse decision, as very soon after entering service, the scouts were to be relegated to leading the slower destroyer formations. From *HMS Boadicea*, announced under the 1907 Programme, onwards, all future classes of British cruisers would be turbine-powered. In some ways this merely reflected the general move across the fleet from the triple expansion machinery, incapable of sustaining high speed for long periods without shaking itself loose, to the new but increasingly proven turbine. Yet the significance of this advance for cruisers, especially of the 'light' variety, which Fisher insisted must be 'fast enough to run away' but have a range sufficient to operate truly independently overseas, was important. In combination with this change, the move from coal to oil fuel was also undertaken in the Admiralty scouts. The commercially built scouts, especially the Vickers vessels with their scant 410 ton coal capacity, were – for cruisers – very limited in their radius of operations. This did, of course, reflect the nature of the Admiralty's original specification, which envisaged inshore work with destroyers of a similar, limited range. However, *Boadicea* marked a step change to a far larger coal and oil load – 850 and 200 tons respectively, on a displacement only 1000 tons greater than that of her predecessors.[47]

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[46] These destroyers were equipped with Parsons turbines for early trials. *Viper* was wrecked in fog off Alderney in August 1901 and *Cobra* broke her back and foundered a month later whilst sailing from Newcastle to Portsmouth. (See Cdr Peter Rippon, *The Evolution of Engineering in the Royal Navy, Volume 1, 1827-1939*, Tunbridge Wells: Spellmount, 1988, p.67)

[47] R Gardiner & R Gray (eds.), *Conway's All the World's Fighting Ships, 1906-21* (London: Conway Maritime Press, 1985), p. 50 & 53.

The original proposal for *Boadicea* had mandated a speed of 27 knots, enabling her to maintain station with the new coastal destroyers. However, at a meeting of the Board of Admiralty on 3 April 1906, it was agreed that a speed of 25 knots would be acceptable, based upon oil-fuelled turbines, a displacement of 3000 tons, an armament of up to 4-4in. guns, two torpedo tubes and a ½ in. protected deck.[48] Although a speed in excess of 25 knots was achieved over eight hours during the original Vickers trials of the early scouts, it was evident that their triple-expansion engines, when subjected to the vibration produced over a prolonged period, would require substantial and frequent maintenance. *Boadicea* and her sister/half-sisters, on the other hand, did possess both the speed and endurance to accompany the Grand Fleet throughout the war. The problem of speed remained an issue, and even the move from the two shaft, triple expansion machinery of the early scouts to the four shaft, Parsons turbines and twelve Yarrow boilers of the later scouts and subsequent *Town* classes of light cruiser did nothing to raise the original maximum speed of 25 knots. Although the influential *Arethusas* of the 1912 Programme owed much to their scout predecessors, it was the intervention of the Engineer-in-Chief, Sir Henry Oram, that led to the fitting of fast-running destroyer turbines capable of delivering 40,000 shp (compared to 18,000 shp for *Boadicea*) and lifting speed to 28½ knots, although the projected 30 knots proved impossible to attain. However, the arrangement of turbine machinery in such a fashion that one engine room could continue to operate independently from another in the event of damage or flooding was pioneering for a ship as small as *Boadicea*, and was adopted as a matter of course in later cruiser designs.

If the scout could claim to have played a significant role in the development of propulsion systems within the navy, the same could not be said about its contribution to the evolution of weaponry. Fitzgerald's original proposal of 1901 had called for a scout cruiser to carry six 4-in. guns and a dozen machine guns. More substantial and sturdily built than the destroyers that they were intended to operate alongside, he argued that the scouts would provide a larger and steadier gun platform for engaging an enemy's destroyers. Fitzgerald later pointed out that exercises had shown that the new ships 'ought to make short work of half a dozen of the enemy's destroyers',[49] even with guns of a calibre smaller than he had intended. In fact, Fitzgerald became convinced by 1906 that the 12pdrs finally selected for the design may have been preferable in any case, a view not shared by those who were to serve in the scouts and found them badly under-gunned. Henry Jackson, who had proposed nothing less than three 4.7in QF guns and six 12pdrs in his 1901 paper on the scout concept, was alarmed by the lack of hitting power. The Admiralty's eventual specification for the commercial scouts allowed for storage of only 150 rounds of 12 pdr ammunition per gun, as opposed to the usual 300. The requirement for just two 18in torpedo tubes was maintained in later scouts, although the final *Active* class received the 21in type. Weight saving concerns may have underpinned all of these decisions: arming the scout as a third class

[48] TNA, ADM 116/1012: Admiralty: H.M. Ships Designs, 1905-11, CN. 0733/1908, *Blanche*, *Blonde* and *Bellona* design details. The paper also outlined other requirements, including improved accommodation over earlier scouts.
[49] Fitzgerald, *The New Scouts*, p. 6.

cruiser – with 12-4in QF, 8-3pdr, 4 machine guns and 2-18in. torpedo tubes – would have added a total weight equivalent to the entire tonnage of coal that the ship was allotted for trials. However, it also seems apparent that many in the Admiralty did not regard the scouts as a fighting ship in the literal sense.[50] Hence, the Director of Naval Ordnance specified a chasing arrangement for the siting of guns on the first scouts, despite the vulnerability of several gun crews to a single hit. No broadside battles were envisaged, only pursuit of smaller vessels unwilling to remain and fight.

Very soon after they were commissioned, the commercially-built scouts received an additional pair of 12 pdr guns and by 1911-12 the clamour against the type's lack of firepower was rewarded by their complete re-arming with nine 4in guns. Also retrospectively, in 1907-8 the ships were given fire control, squeezed into half of the carpenter's store, and a 4.5 ft. rangefinder. The guns were linked to the control by 'Telaupads' plugged into the deck, although the method of communication was cumbersome. Lessons on fire control, and about the increase of calibre of guns to match the 4.1in. firepower of the new German light cruisers, were learnt in the Admiralty scouts, yet *Boadicea* and *Bellona* initially carried only six 4-in guns alongside four 3pdrs. When extra armament was added, however, it was coal reserves that were cut, further limiting operational radius. In the final five scouts the armament was standardised at 10 – 4in guns, and this was the fit at first suggested for the later *Arethusas*, before the mixed (and therefore problematical) armament of 6in and 4in calibres was adopted, as in much of the wider light cruiser programme. In the end, as later developments proved, standardised calibres of main armament, as fitted in *HMS Blanche* onwards, were to prove the way forward for cruisers, as for other, larger vessels.

In the years between their commissioning and the outbreak of war, the scouts displayed many of the faults of their original design – too small, slow and compromised in their attempt to fulfil multiple roles.[51] Lord Tweedmouth's *Statement on the Naval Estimates of 1906-7*, published at the end of February 1906, announced the first deployment of three scouts to the Destroyer Flotillas of the Channel Fleet. By this time the First Lord could report that all eight vessels had been, 'satisfactorily completed . . . these vessels have fulfilled all the conditions of the design, and have obtained speeds for 6½ hours' continuous steaming, varying from 25.06 knots to 25.88 knots' (p. 13). Ominously, however, it would appear that the Navy's requirement for high speed endurance had already been reduced by nearly 20%, and further experience with the Destroyer Flotillas was to prove that even in a short dash, the early

[50] TNA, ADM 116/1012, H.M. Ships Designs, 1905-11, Admiralty Board meeting discussions of 3 April 1906 and *Boadice*a Ship's Covers (NMM, Woolwich ADM 138/231, f.5-6) cite Fisher's understanding that any new scout would continue to be a 'mother ship' for destroyers and 'act as the eyes of the flotilla, finding targets against which they would concentrate'. (Summary quotation from Friedman, *British Destroyers*, p.111).

[51] In relation to the scouts, Brown writes that even after the improved *Boadiceas* were introduced in 1909, 'it was fairly soon realised that the speed [25 knots] was inadequate and . . . that a 4in shell was too small to be certain of disabling a destroyer with one hit' (Brown, *Grand Fleet*, p.61). With the new, fast *Arethusas* urgently required for fleet scouting once completed, in 1913 the Admiralty ordered the *Lightfoot* class of destroyer leaders to keep up with the planned *M* Class fleet destroyers. (NMM Woolwich, ADM 138/321 Ship's Covers provides requirement details for these flotilla leaders, f.1-5).

scouts struggled to stay on station with their flotilla, revealing a degree of hubris on the part of the First Lord. Such was the pace of change in destroyer design that any larger type would have struggled to maintain parity in terms of speed but this did not negate either the tactical lessons to be learnt from the co-operation of the two, or the experience gained in working the modern, small cruiser itself, which would inform the design of future light cruisers.

As 'fighting ships', the scouts enjoyed mixed fortunes. In the publication *1907 Results of Battle Practice* [52] the gunnery successes of the eight new scouts were listed in a separate table which cannot have made comfortable reading for advocates of the design, their average being 115.82 points – less than half of the average accuracy score for the Home Fleet. In part, this may have been as a result of the poor performance of the 12-pdr, 1800 cwt. guns with which they were provided, although the two Fairfield designs considerably outperformed the rest, despite being provided only with nucleus crews. *Forward*'s captain, Commander Charles Coode, received commendation for the vessel's excellent shooting, suggesting that a small crew, well led and well drilled in gunnery techniques, could excel. By the time of the 1913 battle practice, the newer scouts were certainly a gunnery asset to the Fleet, both *Active* and *Blanche* scoring highly with their 4in. Mk VII guns, and *Amphion*, with 817 points, being bested only by *King George V* across the entire Fleet.[53]

As hoped, the scouts proved large and stable enough to provide a useful lookout and wireless platform. In May 1905 the new, ocean-going *Tribal* class destroyers had been the first such type to be designed with a dedicated wireless room, and *Swift* had been equipped with the latest Mk I* wireless set. Therefore, the ability of the scouts to command destroyers was much enhanced. Annual summer manoeuvres also proved the value of the later scouts in wireless chain work within the fleet. The effective range of wireless communications at sea in the early twentieth century varied remarkably with climatic conditions and quality of wireless transmitters and receivers, to say nothing of wireless operators. Usually it was judged to be somewhere between 50 to 70 miles, but trials in the Mediterranean in 1903 had proved that beyond 30-35 miles, commanders could not normally count upon reliable exchange of information.[54] Conditions in the North Sea would prove even these estimates to be optimistic, as shown to Jellicoe's cost at Jutland, but the continuing employment of scouts attached to each Battle Squadron of the Grand Fleet throughout the war made clear how important was the need for the accurate relaying of signals across the Fleet, be they electronic or visual.[55] The addition of a fore

[52] *Results of Battle Practice in His Majesty's Fleet, 1907* (London: HMSO, 1907), p. 8
[53] *Results of Battle Practice in His Majesty's Fleet, 1913* (London: HMSO, 1913), p. 5
[54] Lt. Alfred Dewar, Gold Medal Prize Essay for1903 – 'In the Existing State of Development of Warships, and of Torpedo and Submarine Vessels, in what Manner can the Strategical Objects, formerly pursued by Blockading an Enemy in his own Ports, be Best Attained?', *JRUSI* Vol.48, No. 314 (May 1904).
[55] See TNA ADM 186/4, *The Cruiser Manual*, 1911, p.7-8 for the importance of the visual and wireless chain and the cruiser's role within it. Jackson was amongst the contributors.

and aft bridge in the *Active* class was a response to the need for increased visual signalling space as well as for conning the ship.

Despite the evident achievements of the scouts in service, they were also the target of harsh criticism, often out of all proportion to their relatively humble status within the fleet. Typical of the hostility towards the new type, the editor of *The Naval Annual* of 1905, Lord Brassey, took the vessels to task even as soon as the first of their number, *HMS Sentinel*, had completed initial sea trials with Vickers at Barrow in January of that year:

> 'Loaded with all war stores and in a sea described as rough, she maintained a speed of 25.249 knots for eight hours, the I.H.P. being about 17,500. The speed attained is eminently satisfactory, but it is difficult to justify the expenditure of £275,000 on this type of vessel. Though they are of about 3,000 tons displacement, they carry no gun larger than a 12-pdr., and therefore could not fight a cruiser of even the smallest size. They carry less than 400 tons of coal. Their duty as scouts could be as well performed in the narrow seas by destroyers, and better in the ocean by merchant cruisers. The chief use of this so-called "scout" class would be to carry out the work of destroyers at a distance from their base at which they could not act. '*The Engineer'* considers that all the requirements for a scout might be embodied by a 1500-ton ship, an improved *Agordet* [*sic* – for the *Agordat* class of Italian torpedo cruisers, 1320 tons, commissioned in 1900] with eight 4-in. instead of twelve 3-in. guns, 24 knots speed, and ¾-in. nickel steel armour to protect the vitals'.[56]

Many of these criticisms were to prove entirely valid once the ships were commissioned. Experimental designs, part destroyer, part cruiser, to many in naval circles scouts were neither fish nor fowl; a compromise that suited no one's requirements entirely. The period was one of often eccentric naval design schemes, that of the Regia Marina's Commander Elia for an entirely oil-fuelled, 30 knot, minelaying cruiser being one such. Fisher, and to a certain extent his theoretician inspiration, Julian Corbett, remained sceptical of the value of small cruising ships in modern maritime conditions, with some reason. Fisher had little time for the scouts, pursuing instead his 'super-destroyer' concept in the form of *HMS Swift*. Meanwhile, those who would not miss any opportunity to undermine the First Sea Lord's position,[57] chose to interpret the arrival of the scout in their own fashion – as further evidence of Fisher's wild experimentation and distaste for 'true' cruising vessels with a global reach. In a vengeful and highly partisan pamphlet of 1907, which took to task all of Fisher's reforms to date, White and John Strachey launched a tirade against the scout, preliminary work upon which had been undertaken during White's tenure as DNC, the vessels being laid down before Fisher took up his post

[56] T A Brassey, *The Naval Annual for 1905* (Portsmouth: J. Griffin & Co., 1905), p. 6.
[57] The bitter feud between Fisher and his critics has been extensively documented, as in R Freeman, *The Great Edwardian Naval Feud* (Barnsley: Pen & Sword, 2009), *passim*.

as First Sea Lord: 'Eight vessels of the *Scout* class, costing in the aggregate two and a quarter millions sterling, were ordered before steps had been taken to establish or disprove the merits of the type, as might have been done by building one or two vessels and subjecting them to exhaustive tests. Now it is found that owing to small coal supplies these ships are incapable of acting as scouts with a fleet. They are employed with torpedo flotillas, or left in reserve – striking examples of unwise expenditure'.[58] The validity of these criticisms remains incontrovertible. Had the Admiralty pursued trials of a single Armstrong design and then a single, turbine-engined and improved variant such as *Boadicea*, then valuable lessons may still have been learnt, and the funds and pathway to a modern light cruiser for the Royal Navy may have been more accessible, though given Fisher's dislike for the type, it is unlikely that the *Bristol* class would have emerged any sooner than 1908.[59]

However, that another seven vessels were ultimately commissioned by the Admiralty, all built at the Navy's Pembroke Dockyard, must suggest that the concept had a substantial rationale, given the many financial demands upon the Admiralty and their political paymasters at the time. Naval historians such as McBride have suggested that the construction of these warships had more to do with the maintenance of a skilled peacetime workforce in West Wales – and possibility the influence of local MPs, such as Chancellor of the Exchequer, David Lloyd George – than naval necessity.[60] Certainly, in his bicentennial history of Pembroke Dockyard, Lawrie Phillips has written that the empty slips after the launch of *HMS Defence* in April 1907, 'marked the end of a busy decade . . . The hiatus must have been unfamiliar and unsettling', and that the steady ordering of *Boadicea* and her successors 'largely kept the Dockyard employed up to the outbreak of the First World War'.[61]

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In a memorandum dated 30 July 1907, written by the Controller of the Navy, Henry Jackson, and countersigned by Fisher as First Sea Lord, an effort was made to outline the rationale of cruiser procurement, both in the recent past and immediate future.[62] By entitling the brief document 'The Cruiser Policy', it is tempting to interpret the paper as a riposte to those such as William White and Reginald Custance who, in the same year, had published critiques suggesting that the Admiralty no longer possessed such a policy.[63] As the document alluded to (intentionally and unintentionally) both the failings and potential of British cruiser procurement at this time, and marked somewhat of a turning point in this respect, it is worth quoting in full here:

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[58] Sir W H White & J St. L Strachey, *The State of the Navy in 1907: A Plea for an Inquiry* (London: Smith, Elder & Co., 1907), Chapter VII.
[59] See Chapter 5 for further exploration of the origins of the *Bristol* class.
[60] McBride, *The Royal Navy 'Scout' Class*, p.281.
[61] Phillips, *Pembroke Dockyard*, p. 288.
[62] NMRN, Papers of Lord Tweedmouth, MSS/254/463.
[63] White, *The State of the Navy* and Custance, *Naval Policy*.

> 'For one or two years past in order to satisfy the fighting requirements the policy has been to build large armoured vessels, and the object having been attained in establishing our required lead and superiority in this type of vessel we are now turning our attention to Cruiser types – one type an improvement on the "Scout" class, the other a type necessary for replacing the "Edgar" class.[64] The "Boadicea" type of about 3,500 tons displacement may be designated as a third-class cruiser largely superior in coal endurance and armament to the "Scout" class and with high speed, and will supply our necessities as parent ships to destroyers, and will be suitable for service on Foreign stations. The other type of cruiser under consideration [the '*New Boadicea*'/*Bristol* class] is required to take the place of the "Edgar" class which are becoming worn out and which no longer satisfy our later requirements in speed, armament and coal endurance.'

Here was some veiled admission of past neglect of smaller cruisers amongst the pressing priorities of capital ship procurement – which were by no means to cease in 1907. As will be discussed in the following chapter, that Fisher had been persuaded to modernise the overseas service element of the cruiser force – though the proposition of a peacetime, constabulary role for the *Boadiceas* was disingenuous – was an important achievement. However, the view (which Fisher continued to advocate in 1912) that 'fighting requirements' in home waters could be satisfied at a relatively small cost by more small scouts, somewhat larger but no faster than their predecessors, was already questionable, and even more so by 1909/10 when these vessels began to enter service. That those 'requirements' would include vessels to take on new German light cruisers, with the speed and other capabilities to facilitate the successful employment of Fisher's battle fleet and battle cruisers, seems to have been overlooked.[65]

As it became more clear that Germany would be the likely adversary in any future war, so concerns grew as to that nation's building programme of light cruisers, at first small and 'protected' only, but later larger and carrying side armour. All carried the excellent 4.1-in gun in some quantity. News from British naval attachés in Berlin made it clear that in manoeuvres these light cruisers were not only to be found in the Aufklärungsgruppe scouting squadrons but leading the Torpedoboots-Flottillen. By 1908 speed and protection of the German vessels had increased to such an extent that with reluctance, the Admiralty was forced to respond with the *Bristol* class light cruisers, *HMS Glasgow* being the first such ship launched in September 1909. Whilst she, and eighteen subsequent cruisers built in gradually

[64] First class protected cruisers of 7,350 tons ordered for overseas service in 1889. They mounted two 9.2in and ten 6in guns and could sustain 18 knots. With a 10,000 nm range, the *Edgars* far exceeded the *Bristols* in endurance, and the pressing need for cruisers of a moderate size saw some of the class remain in active service, albeit much modified, until the war's end.

[65] In issuing design specifications for the *Bristol* class, Jackson envisaged them as a counter to the new third class German cruisers, in whatever waters they might be found – see Appendix 4. That not enough follow-on *Towns* were built for fleet *and* overseas service needs proved problematic, as did the need for vessels faster than 25 knots.

improved designs for the Royal and Royal Australian Navies, owed much to the *Boadiceas*, they marked a new departure in cruiser design.

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The utility of the scouts in their envisaged role as destroyer leaders was necessarily governed by the speed of advances in the destroyer fleet. By 1911, only some five years into their service, the scouts were already beginning to appear obsolete – projected '*K*' and '*L*' class destroyers being designed to reach 29 knots. Yet when Churchill, late in that same year, sought to address the pressing issue of a lack of modern cruisers for flotilla and fleet work, it was the scout influence and the so-called 'cruiser admirals' that won the day, against Fisher's preference for a 37-knot 'super-*Swift*'. The new First Sea Lord, Admiral Sir Arthur Wilson, had vast experience of parent vessels working with torpedo craft, dating back to *HMS Hecla* and the Mediterranean Fleet, where he also pioneered cruiser scouting tactics under Michael Culme-Seymour.[66] That he dismissed 'any repetition of *Swift* in the immediate future' and threw his support behind an upgraded scout carried much weight. At the end of July 1912 the Controller asked about the possibility of putting 22 000 or even 25 000 s.h.p. fast turbine machinery into a scout hull. The suggested 'super-*Active*' (or 'Frenzy, Mania and Delirium type', as the ever melodramatic Churchill was wont to refer to it), given a measure of armoured protection amidships sufficient enough to allow the First Lord to label it as a 'light armoured cruiser' – was to emerge, re-gunned, re-engined and 20% cheaper than the latest *Dartmouth* class light cruisers, as the *Arethusa* class. As 'destroyer of destroyers', as eyes of the Fleet in the North Sea, and as general purpose vessels undertaking everything from minelaying to carrying of aircraft, the *Arethusas* proved both hugely successful and influential for future cruiser designs.

With a realistic speed of 27½ knots, the *Arethusas* were still unlikely to match the promise of a cruiser type capable of operating with the fastest destroyers. In his account of the commercially designed scouts, Keith McBride was forced, with justification, to conclude of the scout experiment:

> 'In practice, the endurance of the Scouts proved inadequate, as did that of the destroyers they led, which was usually eight hours at full speed plus 2000 miles at 15 knots. It must be remembered that the idea of 'Fleet' destroyers came rather late. The original idea was that the destroyers would be employed on short-range skirmishing with enemy torpedo boats and other small craft in areas such as the Channel, some parts of the Mediterranean and Heligoland Bight, as the Japanese and the Russians actually did off Port Arthur and the Harwich Force did throughout 1914-18 in what the Germans called the Hoofden; the southern part of the North Sea. It was only the coming of the sea-going submarine and the final abandonment of the 'Close Blockade' strategy about 1910-12 that led to the need for destroyers to escort big ships wherever

[66] See Bradford, *Life of Wilson*, Chapters IV & VII.

> submarines could go . . . as it was, the Scouts came out as average, unspectacular ships which did an average, unspectacular job'.[67]

In terms of its intended role as 'mother ship for destroyers', changes in technology and strategy were soon to leave the scout outdated, the fate of numerous experimental designs. However, McBride's mention of the Harwich Force, the Bight, and the Mediterranean, where five of the remaining scouts ended their war service, provides a useful reminder that these theatres of operations remained crucial to the navy in wartime, and that the scouts, albeit in an adapted role, still had a contribution to make.

* * *

The commercially designed scouts were indeed hybrids – experimental vessels, but neither entirely novel nor thoroughly proven. Reciprocating machinery propulsion, and entry into service at a time when the turbine-powered *Dreadnought* was indicating the way forward for all navies, would undermine their progressive credentials and new turbine-engined destroyers would soon leave them behind. They were also hybrids in the sense that the strategy and tactics of the Navy were in a state of rapid transition between their inception and commissioning – and they struggled to find a settled role within the fleet. That Admiralty specifications left them badly under-gunned, a compromise based on weight and dimensional limits, was a deficiency recognised in their later rearming. The scouts were also battling fixed conceptions of what a cruiser should be and the roles it should perform, a quasi-existential problem. In an article on co-operation between the Admiralty and private industry in development of warships, Hugh Lyon wrote: 'The *Scout* cruisers . . . though successful as ships, were unsuccessful as a type because they failed to meet Royal Naval requirements. Nations which could deliberately restrict their fleet's role or area of operations had a relatively simple design task, for they could produce highly specialised designs, stressing particular qualities . . . The Royal Navy, with its worldwide commitments and its need to counter all kinds of naval threat, could not normally afford to build highly specialised vessels in large quantities. Most Royal Navy ships had therefore to possess not only those features necessary for their specific purpose, but also qualities of armament, protection, seaworthiness, reliability, speed and habitability that would enable them to cope with some chance of success in any type of situation'.[68] Lyon's argument points to an interesting dichotomy in interpretations critical of the scouts. For Lyon, and even Philip Watts himself, the final design of the commercial scouts had elevated speed above all other considerations, especially radius of operations and armament, placing the reconnaissance role ahead of all other considerations, to the detriment of the type. This was especially so when even in terms of speed, the scouts could no longer match ships with fast-running turbines. Other critics, however, took the vessels to task because of the very ambiguity concerning their

[67] K D McBride, 'The Royal Navy '*Scout*' Class', p.260-281.
[68] H Lyon, 'The Relations between the Admiralty and Private Industry in the Development of Warships' in B Ranft (ed.), *Technical Change and British Naval Policy*, p. 58.

designation and role. This was not the first time that a vessel had fallen foul of labels, nor would it be the last. In a recent paper on the near contemporaneous development of the battle cruiser, Seligmann has shown how arguments over the naming, employment and integration of another hybrid type into the fleet dogged its development, and how it experienced 'a major evolutionary shift, if not in terms of its enemy, then at least in terms of its role'.[69] Conceived at a time when close observation of French Channel ports seemed their most likely task, the first scouts were to experience a similar shift of both enemy and function whilst still under construction.

Ultimately, the commercially designed scouts were to prove '. . . too small, too slow and too lightly armed to be of much use, even as destroyer leaders, which was their main intended role.'[70] Whilst later Admiralty scouts saw considerable improvements in armament and especially in the introduction of turbines, oil fuel, and advanced electrical installations, they remained small and slow. From the First Lord's announcement of a 'new ship, unprotected' in 1907, the Admiralty scouts would be more frequently referred to as light cruisers, and in 1913 even their progenitors were restyled in the same manner. It is true that this was in line with a reclassification of the entire cruiser fleet into 'battle cruiser', 'cruiser' and 'light cruiser' categories, but there was also a sense in which the 'scout' epithet had become if not a discredited, then at least an outdated term.

Yet in some regards the scouts did point the way to the future and help Britain to be better prepared to meet the challenges that lay ahead. The Admiralty always envisaged the type as experimental – flaws in the designs were certainly apparent, but as Brown writes: 'The *Arethusa* class of 1912 were *designed to remedy these defects* [my italics] . . . The speed obtained in trials was about 29 knots and, despite this slight shortfall, the *Arethusas* were outstanding fighting ships and their successors, of the '*C*', '*D*' and '*E*' class with all-6in. guns, even more so.'[71] In their form, and eventual adoption of turbine engines, the scouts undoubtedly influenced British cruiser procurement, though perhaps as much by highlighting the cruiser roles still to be provided for as by influencing the design of the vessels that might do so.

[69] M S Seligmann, 'The Evolution of a Warship Type: The Role and Function of the Battlecruiser in Admiralty Plans on the Eve of the First World War' in N A M Rodger, J R Dancy, B Darnell & E Wilson (eds.), *Strategy and the Sea: Essays in Honour of John B. Hattendorf* (Woodbridge: Boydell Press, 2016), p. 147.
[70] D K Brown, *A Century of Naval Construction: The History of the Royal Corps of Naval Constructors* (London: Conway Maritime Press, 1983), p. 97.
[71] *Ibid*, p. 98-99.

Chapter 5 – Procurement of the *Bristol* Class Cruisers of the 1908 Programme and British Naval Policy: 'A Culpable Deficiency' Answered?

The publication of the *Report of the Committee on Designs* in March 1905 appeared to mark the dawn of a new age for the Royal Navy and to offer hope that a maritime supremacy so long established but now under challenge, could once again be assured by a new family of warships, under the guidance of a clear-sighted and ruthlessly determined First Sea Lord. However, this was also to be a future in which the cruiser, in its existing form at least, appeared destined no longer to have a place, consigned to Admiral Fisher's growing 'junkyard' of outdated and unwanted types. The Committee, led by the recently appointed First Sea Lord, did not mince its words when it came to the 6in–gunned, largely unarmoured cruisers then in service: 'The fast Armoured Cruiser renders all other Cruisers useless. With this speed of 25 knots, and with this armament of 12-inch guns, the Armoured Cruiser can overtake and annihilate everything that floats except the proposed Battleship on account of its more powerful armament and greater protection, and the proposed new type of ocean-going Destroyer, on account of its far higher speed. No number, no combination of unarmoured Cruisers, would be of the slightest avail against one Armoured Cruiser.'[1] The Report went on, with some relish, to describe how a Japanese armoured cruiser had 'annihilated, the 6,500 ton, 6-in cruiser *Varyag* in just 13 minutes in the current Russo-Japanese War. The recent evidence of the 6-in cruiser's demise seemed incontrovertible.

Therefore, in the spring of 1905, an obituary had been written for the Navy's medium-sized cruiser – swept from overseas waters (and the attentions of generations of later naval historians) by a swarm of marauding battle cruisers and made surplus to requirements[2] in the new battle fleet by the planned large, fast destroyers of the *Swift* type, whose specifications Fisher had passed to the Director of Naval Construction almost in the first instant he arrived to take over the Admiralty in October 1904. Fisher's obsessions with deterrence, war preparation and economy proved disastrous for the development of the light cruiser between 1904 and 1908, and it was only grudgingly that by the latter date he was forced to reconsider the case, and the compromising of deterrence and war preparation (let alone the false economy) that might ensue if he did not, through the combined pressure of both naval colleagues and detractors, and changing operational necessity.[3] Like the *Varyag* itself, the 6-in cruiser, flying the White Ensign, was to enjoy a reprieve, indeed to experience a renaissance, in the form of the mixed-armament

[1] British Library [BL], Jellicoe Papers, Volume 1, Add. MSS 48989, p.32-33.

[2] Amongst the 'sheep', 'goats' and 'llamas' identified by Fisher for 'weeding out' and removal from the active list during 1904-05 were 59 cruisers, several that had started their career with full sailing rig. See Fisher's comments in *Naval Necessities, Remarks on Ships of Small Fighting Value* in Kemp (ed.), *The Fisher Papers* Vol. 2, p.9-20.

[3] In a letter to Tweedmouth, the First Lord, dated 17 Jan. 1907, Fisher admitted the pressure of criticisms of his procurement policy upon him but reiterated his resolve: 'Each man naturally fights for his own special department. One wants Cruisers – another wants more destroyers but the Admiralty have got to subordinate everyone's desire to what is imperative for success in war! We should be awfully popular if we put back the Navy Estimates to the 37 millions they were two years ago so we could have everything!' (NMRN, Tweedmouth Papers, MSS 254/427).

Bristol class of the 1908 Programme and 14 subsequent ships of an improved design, which not only provided a vital scouting arm for the Fleet in home waters but served on foreign stations.

In the wake of the Second World War, a conflict in which the light cruiser had certainly shown its worth, many naval historians had a tendency to take Fisher's public utterances against such vessels at face value. For Marder,[4] Fisher's detestation of an 'odd assortment of ships ('bug traps') able neither to fight nor run away' was commendable. In more recent years, much of the focus of naval research has remained upon the rival fleets of *Dreadnoughts*, their strategic interplay with smaller 'flotilla defence craft' and the shifting nature of naval war planning in home waters.[5] The **s**pecific development and design of cruisers has largely been an area left to technical monographs by authors such as Brown, Friedman and Lyon[6] and cruisers parcelled together in amorphous groups, rather as extras to the main players, in 'scouting forces', 'blockading force' or 'parent to destroyers'. Even beyond home waters, where the cruiser had once protected Britain's trade and imperial interests so distinctively, Fisher's vision of the battle cruiser sweeping the seas of commerce raiders has captivated interest, to the exclusion of the light cruisers, which were always expected to work alongside the battle cruiser.[7] Despite a more nuanced assessment of the battle cruiser's role within the fleet in recent years,[8] and a more sophisticated appreciation of the tactical employment of cruisers in war,[9] both the central place of the light cruiser in contributing to Britain's naval planning by 1914, and the significance of the transformations in cruiser design during the pre-war years, have been underplayed, but the years 1907-8 marked an important turning point in this regard.

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In his determination to press the advantages of the battle cruiser for future cruising duties, Fisher was by no means without support. The influential Danish-American authority on warship design, Commander William Hovgaard, defined the ideal cruiser of the time as 'a battleship made extra large so as to secure increased speed without any sacrifices'. However, critics of the proposal seemingly to replace the cruiser with a new breed of 'armoured cruisers' – as outlined in the three vessels of the *Invincible* class ordered in the 1905 Programme – were not slow to voice their opinions. Brassey stated unequivocally that 'Vessels of this enormous size and cost are unsuitable for many of the duties of cruisers'.[10] Indeed, few would disagree with Oscar Parkes' assessment that the use of battle cruisers to

[4] A J Marder, *Dreadnought to Scapa Flow*, Volume 1, p.9.
[5] Important works in this area include Sumida, *In Defence of Naval Supremacy*; N Lambert, *Sir John Fisher's Naval Revolution* and *Planning Armageddon:* Grimes, *Strategy and War Planning* and the useful source collection, Seligmann, Nägler & Epkenhans, *The Naval Route to the Abyss*.
[6] Brown, *The Grand Fleet*; Friedman, *British Cruisers* and David Lyon, 'The First Town Class, 1908-31, Parts 1 – 3', *Warship* Nos. 1 – 3, January to July 1977 (London: Conway Maritime Press).
[7] See Chapter 8 on Fisher's contradictory thoughts on scouting cruisers.
[8] See M S Seligmann, 'The Evolution of a Warship Type'.
[9] J Goldrick, *Before Jutland: The Naval War in Northern European Waters, August 1914–February 1915* (Annapolis: Naval Institute Press, 2015**).**
[10] *Brassey's Naval Annual* 1907, (Portsmouth: Griffin, 1907), p.9.

stop and search neutral shipping in the North Sea until the end of 1914 was indeed 'criminal folly'.[11] A greater danger, at least for Brassey, was the inclusion of the *Invincibles* in the line of battle, where their comparatively light protection would leave them at greater risk and their higher speed would be of less advantage.[12]

Yet no matter how powerful the lobby seemingly in favour of, or opposed to the cruiser in pursuing its traditional roles, there was, even amongst the 'Fishpond', broad agreement that fast, well-equipped and relatively cheap vessels of a moderate size were still required, and for many of the same functions as previously. Fisher's Controller from 1905-8, Henry Jackson, had achieved some success in 1906 in persuading the First Sea Lord to adopt the longer range scout concept for North Sea work but felt the ongoing criticism of Admiralty cruiser policy from members of the 'Syndicate of Discontent' centred around Beresford both deeply and personally. In a Commons debate of 19 February 1907 on the state of Beresford's Channel Fleet, Syndicate 'representative' Carlyon Bellairs MP denounced the provision of just three unarmoured cruisers for the fleet and inquired, 'Will Lord Charles Beresford be given any additional cruisers to handle when and for so long as he likes, although they may not be nominally attached to the Channel Fleet?'[13] Bellairs' suggestion that fleet work had been compromised by the Admiralty's failure to provide sufficient small cruisers stung Jackson, the more so because of the validity of the claim, and Fisher described to Tweedmouth the arrival of the Controller in his office to complain angrily about his treatment with regards to procurement policy.[14] Fisher's Director of Naval Ordnance and Torpedoes at this time was Jellicoe, whose theoretical as well as operational appreciation of the cruiser type offered encouragement to the development of the *Towns*, which continued during his service as Controller between 1908 and 1910.[15]

The First Moroccan Crisis of March 1905 brought into sharp focus the existing concerns of the Admiralty about the threat of Germany. In August of that year Fisher sent the Channel Fleet to cruise the Baltic to deter Russian or German ambitions that might affect Scandinavian neutrality and thus British access to that sea. The deterrent exercise was repeated in July 1906, and in December Fisher

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[11] O Parkes, *British Battleships 1860 - 1950 – Warrior to Vanguard* (London: Seeley Service, 1956), p.492.

[12] Lord Brassey's comments on the unsuitability of battle cruisers for conducting the work of smaller cruisers, the shortage of which would be exacerbated by the commitment of battle cruisers to the line of battle, are in Hansard, House of Lords debate on the shipbuilding programme, 17 Apr 1907, vol 172 cc924-35: https://api.parliament.uk/historic-hansard/lords/1907/apr/17/the-shipbuilding-programme.

[13] Hansard, HC Deb 19 February 1907 vol 169 cc698-9, https://api.parliament.uk/historic-hansard/commons/1907/feb/19/the-channel-fleet#S4V0169P0_19070219_HOC_46.

[14] 'Dear Jackson, always at 'White Heat.' NMRN, Tweedmouth Papers, MSS 254/433, letter from Fisher to Tweedmouth dated 23 Feb. 1907. As Chief of the Admiralty War Staff from 1913 to 1915, Jackson was to be a vociferous proponent of the light cruiser (see Chapter 7).

[15] Andrew Lambert has suggested that Corbett had 'identified the coming men, among them John Jellicoe' to replace Fisher, and to appreciate the central role of the cruiser in Corbett's strategic vision. Corbett's implicit criticisms of existing cruiser policy appeared in 'Recent Attacks on the Admiralty', described as 'Corbett's first major contribution to the naval policy debate in Edwardian Britain'. (Lambert, *21st Century Corbett*, p.21 & 23) Jellicoe's enthusiasm for the operational advantages provided by numbers of 6in-gunned, fast cruisers is dealt with hereafter.

created a secret committee to draft war plans against Germany, with George Ballard as its chair. Ballard's advocacy of the cruiser has already been referenced, but other committee members, such as his NID colleague, Captain Maurice Hankey and the Director of the Naval War College, Captain Edmond Slade,[16] were also well aware of the operational demands confronting the fleet in attempting to project its power into the Baltic, against the Kiel Canal and the German North Sea littoral and overcome German defences. Both men favoured amphibious schemes against vulnerable locations along the German coast, as did Corbett, and consideration had been given the previous year to moving at least 12 of the new *River* class destroyers to an advanced base (such as Borkum) to conduct an inshore, observational blockade.[17] Shawn Grimes has written that 'the Ballard Committee's 1907 war plans were a deliberate reaction to the possibility that the Navy's freedom of action in the North Sea and Baltic, and Britain's influence on the European balance of power, were jeopardized by the uncertain status of the Baltic entrances'.[18] Plans A/A1 to D/D1 proposed by the committee in 1907 ranged from a distant North Sea blockade involving, amongst other types, 42 cruisers and 8 *Scouts* (A/A1), to a close commercial blockade (B/B1), direct attacks on eastern Baltic ports preceded by close blockade of German North Sea estuaries (C/C1) and operations against the Danish islands of Fyen and Zealand, should Germany threaten Denmark's neutrality (D/D1).[19] The Channel and Home Fleet exercise in the summer of 1907 focused on the War Plan scenarios and revealed the serious challenges of maintaining an effective close blockade, an operational strategy which Arthur Wilson and Corbett no longer felt to be tenable.[20] A unifying feature of all plans and manoeuvres was the near impossible burden to be placed on the Navy's small cruisers and the chronic requirement for more vessels of the type with the range, speed and firepower to sustain operations in the North Sea against the best of the German Navy's new third class cruisers.[21]

The NID were already well aware of the deficiency in British light cruisers, and the demands that would confront those that were available. A report on the German fleet's Autumn manoeuvres of September

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[16] Slade was head of the Naval War College at the time, working alongside Corbett. The two men shared a belief in the central role of the cruiser within the fleet. See NMM, Corbett Papers, CBT/2/3 correspondence with Slade on revising *Some Principles*, and CBT/6/5, letters from Slade to Corbett on the invasion question.

[17] TNA, ADM 144/19, Admiralty: Channel Squadron and Fleet: Correspondence, 1867-1907, Destroyers and Torpedo Boats, May 1903-June 1907, letter dated 6 Apr 1906 from Rear Admiral (D) Alfred Winsloe, *HMS Sapphire II* at Portland to C-in-C, Channel Fleet (cited in Grimes, p.83).

[18] Grimes, *Strategy and War Planning*, p.75. The 1907 War Plans and the 1908 revised 'W' series of plans are in TNA, ADM 116/1043B.

[19] John Ferris's definitions of the practical implications of each of these 'blockades' is helpful here. For instance, the 'distant blockade' was 'not a 'blockade', but rather a means to seize contraband, and to exert extra-legal (i.e. coercive but not clearly illegal) pressure on neutrals'. Quoted in 'Pragmatic Hegemony and British Economic Warfare'.

[20] Details of the Channel Fleet Tactical Exercises, Jun-Jul 1907 are in TNA ADM 1/7926, From Admirals D, Channel Fleet. Wilson's 'Remarks on the War Plans' (May 1907) are reprinted in Kemp, *Fisher Papers*, Vol.2, pp.454-6.

[21] The *Kolberg* class of light cruisers then building had a 20% larger displacement and were 1½ knots faster than their predecessors, the *Dresden*s. All were turbine powered, mounted 12-4.1in guns and two 17.7in torpedo tubes and could carry 100 mines. At 4,915 tons deep load, they were over 1,000 tons larger than the *Boadiceas* yet up to 1.7 knots faster. (Gardiner, *Fighting Ships 1906-21*, p.159)

1906, a simulated attack on Cuxhaven and the mouth of the Elbe, noted it to be 'principally a question of exercises in scouting, observation, and in transmitting information interspersed with cruiser actions [and] torpedo boat attacks . . . several hot cruiser actions took place . . . By the night of the 12th nearly all the smaller cruisers and nearly all the torpedo craft . . . had been judged out of action, so there was no longer any question of another night attack on the mouths of the Elbe, Weser and Jade'. As well as the use of mines, booms, searchlights and flares, the NID concluding comments noted that 'torpedo boats were used with the utmost vigour amounting almost to rashness, and that they were brought in and used in the actual thick of the fight'.[22] In January 1907, the DNI, Charles Ottley (who had previously sided with Fisher in his opposition to light cruisers) was forced to conclude that until a replacement for the older armoured cruisers was found, 'We are, therefore, driven back on the alternative of employing armoured cruisers for scouting, reconnaissance work, and cruiser work in general in blue water, reserving the role of inshore cruiser work entirely for that essentially modern evolution of tactical necessities, the ocean-going destroyer and its derivatives, such as British 'Scouts' pending the evolution of a more satisfactory type'.[23] By March 1907, confronted by operational realities, the forthcoming conclusions of the Ballard Committee, pressure of friends from Jackson to Corbett, and enemies centred around Beresford, Fisher succumbed. In a letter to James Thursfield he outlined the need for a modern 'backer-up' cruiser for inshore work, large and potent enough to protect the *Scouts* and flotillas and to liaise with the fleet.[24] By May he and Jackson had drafted 'The Cruiser Policy' (cited in Chapter 4), forecasting a fast, modern replacement for the *Edgars*.

Undoubtedly, Fisher saw the forthcoming *Bristol* class cruisers as primarily inshore assets but his ideas were conflicted on this issue. In responding to Wilson's 'Remarks on the War Plans' in May 1907, Fisher concurred that 'It would be suicidal to expose the armoured units of our Fleet to a surprise Torpedo attack by stationing them before War within striking distance of the enemy . . . At such a time the North Sea and East Coast should swarm with our Destroyers and Submarines backed with their supporting Cruisers'.[25] If the 'armoured units' were not to be risked in supporting flotillas and providing early reconnaissance of German fleet movements, (although Ottley had admitted that necessity was driving the Admiralty to employ armoured cruisers for that purpose), advanced light forces required 'backers-up', and the Home and Channel Fleets themselves would demand ever faster, integral light cruiser screens, the availability of such modern types, with the speed and armament to fulfil all of these

[22] TNA, ADM 231/48 NID Reports 1906-7, Foreign Naval Progress and Estimates, 1906-7, pp.69-74. Similar intelligence concerning aggressive tactics employed by scouting forces of the High Seas Fleet was to inform the Admiralty's urgent decision to procure the *Arethusas* in 1912.
[23] NMM, Richmond Papers, RIC/4/2/a3, C L Ottley, 'The Strategic Aspect of our Building Programme, 1907', 7 Jan. 1907, p.24 (also cited in Grimes, p.106). Serving as an Additional Naval Assistant to Fisher, Richmond was yet another respected officer from the Admiralty vigorously championing the cause of the light cruiser.
[24] NMM, Thursfield Papers, THU/2/6, undated letter (March?) 1907 from Fisher.
[25] Quoted in R F Mackay, *Fisher of Kilverstone* (Oxford: Oxford University Press, 1973), pp.367-8 and taken from TNA, ADM 116/1043B, War Plans 1907-11, Part 1.

roles was limited, to say the least.[26] The problem was further complicated by the findings of the Fremantle Committee, published in December 1907. Formed to consider how the Navy might best counter the threat of a German 'bolt from the blue' invasion scheme, the Committee found that without the presence of the Channel Fleet in the North Sea, a Home Fleet comprised of the fastest battleships and armoured cruisers available, should be permanently stationed on the east coast (as DNI, Slade felt the invasion threat to be low but nonetheless endorsed the formation of a 'North Sea Guard' of 10 battleships and 6 [armoured] cruisers operating from a new Rosyth dockyard). High speed of response and close coordination of the force would be essential in order to locate, intercept and disrupt any invasion fleet, and Slade envisaged that in times of tension between the countries, the Guard would put to sea and cruise off the Humber, remaining in contact with coastal wireless stations.[27] Electronic or agent-originated intelligence might offer some clues as to the departure of any invasion force, but Britain lagged behind Germany both in airship development and submarine reconnaissance in terms of plotting its course,[28] and unless the valuable armoured cruisers were themselves to form the sole scouting line, with patrols well out to sea for efficacy and speed of response,[29] any Guard fleet would require faster (and ultimately more expendable) cruisers to provide a scouting line, accompany the main force and maintain communications. That a fast, well-armed and sufficiently large light cruiser would match operational requirements was indisputable, as the High Seas Fleet had already concluded: the Admiralty did not possess any in 1907 (and too few, one might argue, until the middle war years), and this circumstance was continually to compromise war planning, and particularly the formulation of a suitable resolution to the paradoxical conundrum of dispersing naval forces sufficiently to effect successful reconnaissance and blockade, whilst still concentrating them sufficiently quickly in order to counter any local advantage that an enemy might enjoy and gain the conclusive victory.

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A sound theoretical justification for new light cruisers came from Fisher's maritime strategy advisor and friend, Julian Corbett, who provided a strategic and historical perspective for the Ballard Committee. Corbett viewed the future development of the cruiser within the fleet as a problem for all navies, but most especially for Britain's fleet, given the Royal Navy's unique scale of global interests

[26] The four, third class *Topaze* class cruisers were smaller (and considerably slower) than the *Scouts*, mounting only 4in guns. Whilst larger, and well equipped with eleven 6in guns, the two second class *Challengers* could not exceed 20 knots and were, in any case, assigned to the Australia Station. Aside from the *Scouts*, these represented the sum total of 'light cruiser' procurement by the Admiralty between the 1890s and 1908. Deficiencies in numbers of the type were still apparent in 1913, when concerns over the ongoing use of armoured cruisers for North Sea reconnaissance were ongoing. (See Southampton University Library [UoS], Mountbatten Papers, MB1/T27/254, MS minute dated 27 Nov. 1913 from Admiral Prince Louis Battenberg to Vice Admiral Jackson about the unsuitability of *Bacchante* class armoured cruisers for war purposes in the North Sea).

[27] D G Morgan-Owen, *The Fear of Invasion: Strategy, Politics, and British War Planning, 1880-1914* (Oxford: Oxford University Press, 2017), pp.170-4.

[28] See Andrew Boyd, *British Naval Intelligence Through the Twentieth Century* (Barnsley: Seaforth, 2020), pp.62-97.

[29] A circumstance which could perhaps be equated with Fisher's description of a 'suicidal' risk.

– how best to provide both scout and screen for the fleet and also a protector of commerce and destroyer of commerce raiders? Increased speeds, armour, and fighting strength, and the advent of wireless had all added complications in defining what sort of vessel the cruiser should be, and for Corbett, this remained 'the thorniest question of naval policy'; 'of all naval problems, that of the cruiser is by far the most difficult and uncertain'.[30] In his opinion neither the small cruiser nor large protected cruiser offered a solution, and merchant cruisers lacked the fighting strength for some aspects of the role. Even though Corbett saw one solution in the fast, large armoured cruiser – the future battle cruiser[31] – he recognised that such a valuable asset could only be constructed in small numbers and would often be committed to the fleet, as was eventually to be the case. Therefore, the question arose 'whether some smaller type of fleet cruiser could not be devised which would greatly diminish the number of occasions for detaching armoured cruisers – some development or variant perhaps of the scout type which for cruiser work in war would fill the gap between destroyers and armoured cruisers, and in peace time discharge the police duties of the Navy.'[32]

Cruiser operations were also the object of an international interest. The year 1907, during which this *Bristol* class was conceived, not only witnessed significant alterations in naval war plans but developments at a more elevated, politico-economic and legal level, with significant ramifications for the cruiser. In discussing the impact of the Russo-Japanese War on British foreign policy, Keith Neilson has written that 'Traditionally Britain had favoured keeping belligerent rights as high as possible, counting on utilizing her dominant naval power to the best advantage in any war. The threat to her own commerce during the war had resulted in some new thinking coming to the fore. Between December 1904 and the Second Hague Conference of 1907, British thinking came round to the idea that while belligerent rights must be maintained, the concept of contraband should be eliminated'.[33] Whilst the Directors of Naval Intelligence, first Ottley and then Slade, were liberal in their use of red ink in the margins of conference documents to pass judgement on proposals from the Hague which might, or might not, be to Britain's advantage in war, the evidence appears to suggest that the Admiralty were not opposed to compromise when it came to the contentious matters of defining blockade, continuous voyage and contraband.[34] Nonetheless, apart from agreement on prize courts, little was agreed on these three matters. Foreign Secretary Sir Edward Grey's efforts to shape a maritime code that would better

[30] Quotations taken from Corbett's *Some Principles of Naval Warfare*, p. 19, included as an introduction to *The Admiralty War Plans and Distribution of the Fleet, 1907-08, Vol. I*, TNA, ADM 116/1043B.
[31] Sumida has taken Fisher's enthusiasm for the battle cruiser as a roving guardian of British commercial interest one stage further, and suggests the *Dreadnought* was the price the First Lord had to pay to get his *Invincibles*. See *In Defence of Naval Supremacy*, p.37-61.
[32] Corbett, 'Recent Attacks on the Admiralty', first published in *The Nineteenth Century and After*, February 1907 and included in A D Lambert, *21st Century Corbett*, p. 36.
[33] K Neilson, ''A Dangerous Game of American Poker': The Russo-Japanese War and British Policy', *Journal of Strategic Studies*, Vol. 12 (1), 1989, p.83.
[34] See John Coogan, *The End of Neutrality* (London: Cornell University Press, 1981), Ch. 5 for a clear review of the Conference proceedings.

suit Admiralty and national interests during the London Conference later in the same year, at first, appeared to bear fruit. Slade wrote that 'taking the draft as a whole the majority of the proposed rules follow our existing law' and that Britain's concession to a belligerent's right to seize contraband under the doctrine of continuous voyage was 'of no practical value, as in most cases it would be impossible to obtain the requisite proof'.[35] Concessions on '*rayon d'action'*, limits on the radius of action of blockaders to seize blockade runners, were also seen as largely meaningless and the Board of Trade was delighted with the proposed contraband regulations vital to British commerce.[36] Despite these confident assertions, and pledges of political representatives at the governmental level to reduce the threat and impact of war in future, the Declaration of London, announced (but not ratified by Parliament) as the new cruisers neared completion, made the requirements of the navy for commerce raiding and protection vessels no less necessary than they had been. In some ways, the failure of these conferences made the need the more acute. Whilst Nicholas Lambert's assertion that the throttling of the German economy (by financial as well as military interventions) had become the predominant war plan for Cabinet and admirals alike by 1914 has been challenged, the likely need for modern vessels capable of implementing versions of this policy, or preventing its application by Britain's enemies, was still very much apparent.[37] Preparation to meet any reasonable eventuality that *might* jeopardise the nation's maritime interests was the Admiralty's prime duty, and suitability for foreign service was an important (if subsidiary) element of the *Bristols*' design specification.[38]

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Whilst much attention has been focused on the vociferous opposition that attacked the First Sea Lord and his Liberal political masters for their failure to build more *Dreadnoughts* – the 'we want eight!' lobby of Conservative politicians, journalists, Navy League and the disgruntled coterie of chiefly retired naval officers supporting Beresford[39] – there has been less focus upon criticism of his neglect of the small cruiser and its implications. Britain's many Chambers of Commerce had long been firm supporters of a strong naval presence in foreign waters to protect Britain's vast foreign and imperial financial and trading investments and wider interests. A London Chamber of Commerce pamphlet of 1893 entitled *The State of the Naval Defences* had declared 'The number of British cruisers is totally

[35] TNA, ADM 116/1079, Capt. E W Slade, Minute on Draft Declaration, 16 February, dated 18 February 1909.
[36] NMM, Papers of Admiral E W Slade, (microfilm, M 3), diary entry for 4 January 1909.
[37] N A Lambert, *Planning Armageddon*. For an enlightening review, see D G Morgan-Owen, 'Britain, Europe, and the War at Sea, 1900-1918', *European History Quarterly*, Vol. 47 (2), 2017, p.311-321.
[38] *HMS Newcastle* received orders to replace *HMS Bedford*, wrecked whilst operating on the China Station, immediately after commissioning in September 1910 (RMM Woolwich, *Bristol* Ship's Covers, ADM 138/240, f.314). She remained overseas throughout her active service. Of the other four vessels of the class, *Bristol* and *Glasgow* saw extensive foreign service, and *Gloucester* and *Liverpool* left the Grand Fleet for the Mediterranean in 1916 and 1915 respectively.
[39] See Frank McDonough, *The Conservative Party and Anglo-German Relations, 1905-1914* (London: Palgrave Macmillan, 2007) and Geoffrey Penn, *Infighting Admirals* (Barnsley: Pen & Sword, 2000) for detailed analyses of this opposition.

inadequate for the work which would be required of them in time of war' and displayed yet further, detailed appreciation of naval inadequacies by claiming that 'The bow and stern fire of the majority of our cruisers is inferior in the proportion of one to four to that of the majority of French cruisers'.[40] With a Liberal government in power from 1906, dedicated to international co-operation and a wide array of costly social reforms, in part funded by reductions in military expenditure, the fate of the navy became symbolic of a far wider political debate, which in its popular form, as Offer has shown, embraced large sections of British society.[41] For the active if short-lived Imperial Maritime Defence League, founded in 1908 just as the building of the *Bristol* class was being announced, the increase in numbers of modern cruisers capable of defending the Empire against no longer a French but a determined German enemy could not come soon enough.[42]

Recent scholarship has focused upon the question of just how committed the German Navy was in the years preceding the First World War to waging economic warfare against Britain on the high seas. Traditional interpretations have suggested that Tirpitz, as early as his 1897 Memorandum, had seen the hopelessness of such a course, given the tremendous advantage held by Britain over Germany in available coaling stations worldwide and the sheer predominance of her financial interests. At best, asserts Marcus Faulkner (see fn.45), Germany had a very narrow aim to conduct limited '*Kreuzer*' attacks on weak points along Britain's trade routes to distract the Admiralty's attentions rather than attempting *Handelskrieg*, and U-boat forces (until 1915) and roving cruiser squadrons remained of secondary interest, no more than 30 German naval staff being dedicated to the pursuit of intelligence work on commerce raiding during the First World War. In essence, the argument of such historians remains that Germany did not possess the resources or interest in defeating Britain in economic warfare, being more likely to suffer from Britain's retaliation, when its chief interests were the North Sea 'risk fleet' and defeat of its prime enemies, France and Russia.

In contrast to this view, Seligmann has suggested that the *Admiralstab der Marine* did have a growing faith in the value of focused, if limited, economic warfare, a view which even Tirpitz is shown to have shared by the time of his preparations for the 1907 Hague Peace Conference (in papers contained in Volume 23 of the *Grosser Politik*). Seligmann cites the Grapow and Krosigk *Admiralstab* Memoranda of 1902 and 1911 respectively, as well as the 1906 *Handelskrieg* declaration, which promoted the notion of conducting economic warfare against Britain ever higher up the political agenda, (as did Admiral

[40] *The State of the Naval Defences*, The Council of the London Chamber of Commerce (Incorporated), (London: Hazell, Watson & Viney, 1893).
[41] Avner Offer, 'The Working Classes, British Naval Plans and the Coming of the Great War', *Past & Present*, No. 107, May 1985, p.204-226. Frans Coetzee, *For Party or Country?: Nationalism and the Dilemmas of Popular Conservatism in Edwardian England* (Oxford: Oxford University Press, 1990) and Mark Hamilton, 'The 'New Navalism' and the British Navy League, 1895-1914', *Mariner's Mirror*, Vol. 64 (1), 1978, p.37-44 also provide useful insights into popular enthusiasm for naval matters.
[42] See Neil Fleming, 'The Imperial Maritime League: British Navalism, Conflict, and the Radical Right, c.1907-1920', *War in History*, Vol. 23, No. 3, 2016, pp.296-322.

Friedrich von Baudissin's audience with the Kaiser in 1909, in which he proposed attacks on British trade off South America). Both Max von Grapow and Wilhelm von Krosigk had served on the Australia Station and discerned British vulnerabilities to economic warfare. By the time of Hugo von Pohl's imperial audience in 1913, the Kaiser was fully supportive of cruiser attacks on Britain's Atlantic trade, attracted by the force multiplier argument that one cruiser or a few auxiliaries might divert 20 or 30 pursuing vessels, and reduced the effectiveness of the Royal Navy in the North Sea. In the case of the *Wolf* in 1917, Raeder claimed in his later history of German cruiser warfare that the figure was more akin 50 to 60.[43]

In some ways, the reality of the German economic warfare threat was of less importance in the short term to cruiser requirements than perceptions of it in Britain and her Empire. The 1905 *Royal Commission on Supply of Food and Raw Materials in Time of War* and a further committee on a *National Guarantee for War Risk for Shipping* brought political concerns to public attention. Commercial and financial bodies were concerned that Britain's global interests were at risk if the Navy was focused on home waters. Fisher's most extreme critics spoke of a nation starved of food and cut off from Empire, whilst in 20 articles published in 1906, Spencer Wilkinson of the *Morning Post* reminded the public of the impact on insurance rates and financial confidence if the German economic warfare threat could not be directly, as well as indirectly, countered. Paul Ramsey has usefully reminded us that a Liberal government, and even the Admiralty, were not immune to the ebb and flow of public opinion created by the new mass media. The editor of *Brassey's Naval Annual* for 1907, Lord Brassey, was representative of the opposition voiced by many critics of Fisher's cruiser policy: 'We have in previous volumes of the *Naval Annual* suggested that cruisers of moderate size were needed for the protection of commerce on extra European stations. No such cruisers have been laid down by the British Navy since the *Challenger* and *Encounter*, while many have been removed from the effective list'.[44] Fast, modern cruisers were what were required by the fleet, and were best suited to dealing with the threat to commerce, no matter how small they might see it. In this light, to be seen to be doing *something*, with the introduction of the *Bristol* class, was a small price to pay for politicians and admirals alike.[45]

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[43] See Vice Admiral Erich Raeder, *Cruiser Warfare in Foreign Waters* (2 vols.), published in English by the US Naval War College, Newport, RI in 1934 for a positive assessment of the impact of German commerce raiders during World War One.

[44] T A Brassey, *The Naval Annual, 1907,* p.10.

[45] The ideas drawn in the previous three paragraphs emerge from papers given at the Oxford Naval History Conference of July 2017, namely, Dr Marcus Faulkner: 'Starving Britain in Theory and Practice – The German Naval Staff and the Conceptualisation of Economic Warfare in Two World Wars'; Professor Matthew Seligmann: 'German Naval Plans for Economic Warfare against Britain before 1914' and Paul Ramsey: ''Silly asses headed by Spenser Wilkinson"? Naval Strategy and Admiralty Policy in the Edwardian Public Mind'. Professor Seligmann's paper has since been published in David Morgan-Owen & Louis Halewood, (eds.), *Economic Warfare and the Sea: Grand Strategies for Maritime Powers, 1650-1945* (Liverpool: Liverpool University Press, 2020), pp.193-208 as 'Britain and Economic Warfare in German Naval Thinking in the Era of the Great War'.

Down to the present day, Fisher and those around him have been accused of creating a 'cruiser gap' in the middle of the first decade of the twentieth century due to their disinterest in the type and diversion of financial resources to vessels both larger and smaller. Douglas Morris has gone so far as to suggest that 'Fisher's plans for the Navy had no place for cruisers'[46] and others have concurred, claiming that only the stubborn rearguard action of so-called 'cruiser admirals' like Jackson enabled designs such as the *Bristols* and *Arethusas* of the 1912 Programme to progress beyond the drawing board. Naval artist, writer and polymath, Oscar Parkes, whose working connections to Jane's and Navy League publications, as well as wartime service, do not make him the most objective of observers, nonetheless stated a widely held and still prominent opinion of Fisher and the cruiser in his masterly 1956 review of British battleship development:

> 'Fisher had no use for small 6-in. gunned cruisers . . . the *Swift* and *Tribal* destroyer classes intended to replace light cruisers were included in the five types outlined for consideration by the Committee on Designs. The folly of such a policy was not recognised for another three years, when the construction of the *Bristol* class was authorised and a start made to remedying a culpable deficiency in the type of fighting ship especially needed in an Empire fleet.'[47]

Yet even the harshest critics of British cruiser policy were willing to admit some provisos as to the justification for their concerns. Brassey was not unaware of the technological advances in cruiser design fostered by the *Boadiceas*,[48] as well as the potential of commercial vessels – not only the most prominent *Lusitania* and *Mauritania*, both of which entered service in the autumn of 1907 (as the *Bristol* class were in their early stage of design) and were built under special subvention by the Admiralty – to serve as armed merchant cruisers in time of need.[49] Furthermore, many with a strong interest in naval affairs felt their warnings on cruiser numbers required reconciling with a broader commitment to Mahanian thinking – 'In making the above suggestion [on the need for an increased cruiser fleet], there is no intention to dispute the principle that the protection of commerce depends mainly on the command of the sea'.[50] In line with this view, Julian Corbett's textbook for current naval strategy, *Some Principles of Maritime Strategy* (1911) and the earlier *England in the Seven Years' War: A Study of Combined Strategy* (1907), which Fisher considered 'luminous', had much to say about the continuing relevance of the cruiser in British naval strategy, and their influence, upon the First Sea Lord, on the Naval War

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[46] D Morris, *Cruisers of the Royal and Commonwealth Navies since 1879* (Liskeard: Maritime Books, 1987), p.120, although a not unbiased predilection for the type may be discerned from the choice of subject alone.
[47] O Parkes, *British Battleships*, p.492.
[48] In a memorandum written on 2 July 1908 by the Director of Naval Construction, Philip Watts, to Controller Henry Jackson, all references to the new cruiser's intended design attributes were by means of comparative improvement upon *Boadicea*. See TNA, ADM 116/1013A, H.M Ships, Designs 1905-11, 'Notes on Various Designs' (n.d.).
[49] On the Navy's long-term and extensive planning for the use of armed merchant cruisers in war, see S Cobb, *Preparing for Blockade*.
[50] Brassey, *Naval Annual, 1907*, p.10.

Course, and on War Planning via the Ballard Committee, has been extensively illustrated.[51] Fisher's ally in rebuffing the unfounded allegations of the 'Syndicate of Discontent', Corbett issued a timely reminder that at sea, 'command was exercised by cruisers and flotilla craft, not battle fleets', but that speed was an essential component of their efficacy.[52] Slow cruisers, those unable to maintain 21 knots in order to stay with the fleet or hunt down a commerce raider, were the first targets of Fisher's wholesale clear-out of cruisers in 1904-05. That there were many of them was a concern for which he can hardly be held to account. The debate on how adequately the gap was to be filled remains a matter of more contention.

Fisher remains the villain for those devotees of the cruiser, such as Morris and Friedman, for whom it was the ultimate expression of Britain's global maritime supremacy. However, it is clear that much of the wording of the *Report of the Committee on Designs* was hyperbole, and deliberately meant as such. That Fisher had chosen to stress the overwhelmingly positive attributes of his favoured warship types, at the expense of those unlucky enough to have fallen outside his circle of interest, was typical of his methodology. Undoubtedly it is the case that the small cruiser, in the form typified by bare 20 knot, Victorian vessels then filling the Fleet Lists had precious little utility, either for Fisher or many other men of vision in naval matters. But high-sounding denunciations and mass deletions from the active list, and the entirely understandable focus upon the introduction of a wealth of new warship types to the navy simultaneously, must not distract from the fact that as long as the duties of a cruiser were required, the coffers of the Treasury not bottomless, and technological advances both in Britain and amongst her rivals so rapid, the cruiser would hold its place in the fleet. That it justified this, most satisfactorily, is well attested by the design and service of the *Bristol* class but past neglect and overwhelming demand for light cruisers still plagued Admiralty planning.

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The distinctive design of the five, 5,800 ton *Bristol* class cruisers launched from the autumn of 1909 onwards offers many insights into the close relationship between naval policy and procurement outcomes. However, in this case, accurate interpretations are complicated by what were the wide definitions and roles of 'a cruiser'[53] and also what the eminent historian James Joll christened 'unspoken

[51] See A D Lambert, 'The Naval War Course, Some Principles of Maritime Strategy and the Origins of 'The British Way in Warfare'' in K Neilson & G Kennedy, *The British Way in Warfare: Power and the International System, 1856-1956* (Farnham: Ashgate, 2010), pp.219-256 and his *21st Century Corbett.*.

[52] I am grateful to Professor Lambert for sight of Ch. 9 of his then unpublished work on Corbett and for ideas and information conveyed in his lecture in the Globalising and Localising the Great War Series, 'Sir Julian Corbett, Gallipoli and Jutland in the Official History', Faculty of History, Oxford University, 23 November, 2016.

[53] Since its introduction, the term 'cruiser' had always been applied to function over form – in its widest and most circular definition, 'any vessel told off for cruising duties'. The naval design developments of the early twentieth century did little to clarify matters: '. . . cruising vessels may vary in size and strength from the modern battle cruiser, so heavily armed and armoured as to be not incapable of taking a place, on occasion, in the line of battle, down to the smallest torpedo craft which is endowed with sufficient enduring mobility to enable her to keep the

assumptions'.[54] In a naval context, Nicholas Rodger refers to 'tacit knowledge', by its very nature always implied rather than articulated, and hence hard to establish, or indeed to prove, but with cumulative and considerable influence upon all aspects of the navy by the early twentieth century. In the case of the *Bristol* class cruisers, institutional forces were at work on the decision-makers in terms of the requirement for new warships, and what those warships should be. A 'cruiser' might be many things to many people, despite the exigencies earlier described in this chapter.

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The Admiralty Board meeting of 12 June 1907, chaired by Lord Tweedmouth and comprising the four Sea Lords – Fisher, May, Jackson and Winsloe – as well as the Civil Lord to the Admiralty, George Lambert MP and Parliamentary and Financial Secretary, The Right Honourable Edmund Robertson MP, first discussed and then agreed upon the new shipbuilding Programme for 1908-09. Parliament would be asked to approve new construction costing £7,545,202, a reduction of over £550,000 on the current year's expenditure and £4,109,000 less than the 1904-05 Programme. The £7,500,000 in the forthcoming year was to be spent on the commencement of entirely new vessels, namely one improved *Dreadnought*, one large armoured cruiser, 16 torpedo boat destroyers, 'a number of submarines' to a total of £500,000, and 6 protected cruisers. The Board concluded, 'This programme suffices for next year; whether and to what extent it may be necessary to enlarge it next year, or in future years, must depend upon the additions made to their naval forces by Foreign Powers'.[55]

'A coming want . . . the problem of cruisers' was discussed at some length by the Board at the same meeting, 'from the twin standpoints of our prospective strategical and tactical necessities'.[56] As well as agreement on the need for a further large armoured cruiser, 'There was also a strong consensus of opinion that a type of *unarmoured* [original italics] vessel was also urgently necessary to act as parent-vessels to the large and increasingly numerous flotillas of our Destroyers when operating on an enemy's coast, as well as to meet the vessels of the same type now being built by foreign nations (more especially by Germany).'An 'improved *Boadicea*' class, based upon the second generation scout laid down at Pembroke just eleven days previously was 'ultimately agreed upon', possessing a speed of 25 knots, 12 – 4 in. guns, and a fuel endurance 50% greater than that of *Boadicea*. It was stated that these attributes would 'give the new British unarmoured cruisers two more guns and 1½ knots higher speed than their German prototypes'. In the event, given the addition of a further large armoured cruiser to requirements, five '*improved Boadiceas'* would be ordered as part of the 1908-09 Estimates at an approximate total cost of £2,000,000, or some 27% of total new-build expenditure for the year. At a time when naval

sea and to cruise as near as may be to the enemy's ports' – J R Thursfield, *Naval Warfare*, (Cambridge: Cambridge University Press, 1913), p.119.

[54] J Joll, *1914: The Unspoken Assumptions*, a lecture delivered on 25 April 1968 and published by The London School of Economics.

[55] TNA, ADM 167/41, Admiralty Board Minutes for 12 June 1907, Slip A.

[56] *Ibid*, p.1-3 for this and subsequent quotations given in the paragraph.

budgets were being reduced by a Liberal government dedicated to curbing armaments spending both on moral grounds but also to fund extensive social reforms (the year would see the introduction of the first state pension), Admiralty enthusiasts for the cruiser such as Jackson still faced the demands of the Two Power Standard for the *Dreadnought* fleet, Fisher's enthusiasm for the hybrid battle cruiser concept, *and* War Plans that put much emphasis on large numbers of destroyers and submarines (although the term 'flotilla defence' was not employed). In light of this, the *Bristols* marked a considerable concession by Fisher.

The wording of the Board of Admiralty's rationale for the ordering of the improved *Boadiceas* is instructive as to the 'strategic and tactical necessities' under discussion both in government and the services at this critical period. Whilst each point made, and the 'silent assumptions' implied, deserve detailed analysis, some preliminary interpretations may be deduced. Firstly, despite the opening of the Second Hague Peace Conference just four days hence, the Board were distinctly conscious of their long-term duty to recognise and respond to any nature of challenge to the Navy's supremacy from whatever quarter.[57] With understandings already in place with Japan and France, and similar arrangements being negotiated with Russia that summer, it was not surprising that Germany was singled out for special consideration and comparison as primary naval rival in cruiser development.[58] Indeed, Seligmann has successfully challenged the views of historians such as Sumida, Mackay and Charles Fairbanks that Fisher's new building programmes and redistribution of the Fleet in 1904-05 were not aimed primarily at countering the German threat in home waters but at either cost saving or the provision of a substantial number of battle cruisers to roam the seas, seeing off Russian and French commerce raiders.[59]

Secondly, in the finest traditions of Admiralty procurement, the Board had identified a specific threat in terms of new German cruiser 'prototypes' of a potent sort and was keen to counter to it with some urgency,[60] trumping any advantages of speed and armament that their potential opponents might possess, especially when leading opposing flotillas of destroyers (a task in which the class were never

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[57] See Christopher Martin, 'The 1907 Naval War Plans and the Second Hague Peace Conference: A Case of Propaganda', *Journal of Strategic Studies*, Vol. 28, No. 5, October 2005, p.833-856 and 'The Declaration of London' for an analysis of the Admiralty's efforts to comply with political pressures for the agreement of international maritime codes for conducting warfare at sea whilst preserving British interests.

[58] Although opinion was not entirely uniform on the matter at the time, and recent research has revealed increasing American efforts to curb Britain's maritime and thus economic dominance worldwide, the USA was not seen as a serious naval threat. Bell has written, 'At no time in the first half of the twentieth century did the British navy prepare formal plans for war with the United States. Herbert Asquith's Liberal government had ruled in 1909 that the admiralty [sic] should not calculate its requirements on such an assumption' – C M Bell, 'Thinking the Unthinkable: British and American Strategies for an Anglo-American War, 1918-31', *International History Review*, Vol. 19, No. 4, Nov. 1997, p.791.

[59] M S Seligmann, 'Switching Horses', p.240-241.

[60] A memorandum on the new design from the Controller (Jackson) to the other members of the Admiralty Board dated 13 January 1908 noted 'the general ideas on the new "BOADICEA'S" [sic] were approved, but several subsequent discussions shewed there was a general feeling of building a rather better class of vessel, in view of its principal role being to meet the German 3rd Class Cruisers'. It was at this point that a mixed armament of 4in and 6 in. guns was first discussed (TNA, ADM 116/1013A, H.M. Ships Designs, CN024/1908, notes on designs, Controller's Memorandum, 13 January 1908). See Appendix 4.

employed to any great extent). The term 'improved *Boadicea*' alluded to the design influence of *Boadicea*,[61] but Jackson's May 1907 'Cruiser Policy' document makes it clear that the *Bristols* were always regarded as much larger, second class cruisers, and the Admiralty Board minutes offer hints of other, more strategic requirements for the type. Some were stated, such as the need for greater endurance for the vessels, in order to operate effectively off the German coast, either in the North Sea or Baltic. Such a requirement was in line with the revised War Plans for 1907 then in preparation,[62] but reference to an *Edgar* replacement pointed to a more versatile vessel. Armament, speed, size and endurance of the new cruisers, and the retention of the turbine engines as fitted in the *Boadiceas*, offered an option for the new design's possible employment on distant stations, perhaps in a traditional role as independent, roving protectors of British trading and imperial interests. In this task, however, as Nicholas Lambert would have us believe, the *Bristol* class were but a necessary adjunct, built in small numbers for scouting and communications purposes in support of Fisher's battle cruisers, as a component of the 'fleet unit' concept. In terms of their utility as part of either the battle fleet or littoral flotilla defence formations, or as lone guardian of the shipping lanes, the medium-sized cruiser, as both Lambert and Fisher are claimed to have judged it, had still largely been overtaken by new breeds of warship, chased from its previous prominence in the fleet's active list, as with 'an armadillo let loose on an ant-hill'.[63] Such valedictory sentiments proved somewhat wide of the mark in the case of the light cruiser.

On 13 January 1908 Jackson had already suggested to the Board that the *Bristol* class might be considered 'Protected Cruisers, 2nd Class, as they should be capable of fighting "DIANA" Class'.[64] The *Diana* or *Talbot* second class cruisers, and their improved *Highflyer* and *Challenger* variants, could trace their origins to the 1893 Spencer Programme and, as McBride has made clear 'were intended primarily for trade protection'. Friedman shares this view about the *Bristol* class.[65] The final *Challenger*, *HMS Encounter*, did not enter service on the Australia Station until the very end of 1905 but she and her sister were the only second class cruisers built since the turn of the century. It must also be borne in mind that 'the Admiralty took a long time to work out how it intended to carry out the commerce protection role, a solution not being worked out until after 1900, by which time the invention of wireless

[61] DNC guidance for design and armament layout referred to 'an improved [and enlarged] *Boadicea*'. Those companies invited to tender were provided with plans for the masts and rig of *Boadicea* for guidance with the new design (RMM Woolwich, ADM 138/240, f.37).

[62] See P Haggie, 'The Royal Navy and War Planning'. For a more comprehensive and modern analysis of Admiralty war planning see Grimes, *Strategy and War* Planning, and for the 1907-08 War Plans themselves, TNA, ADM116/1043B.

[63] Fisher, quoted in Marder, *From the Dreadnought to Scapa Flow, Volume 1*, p.55. For Lambert's views on cruiser utility see 'Sir John Fisher and the Concept of Flotilla Defence', and for greater depth of analysis, his *Naval Revolution*.

[64] TNA, ADM 116/1013A, CN024/1908, notes on designs, *ibid.*

[65] Friedman includes all *Town* class cruisers, as well as the abandoned, 7,400 ton 'Atlantic Cruiser' project of 1913 in Chapter 2 of his *British Cruisers*, entitled 'Protecting Trade'.

had revolutionised the situation'.[66] However, it was also undeniable that Fisher's primary concerns during the early part of his initial tenure as First Sea Lord were not with updating the fleet of second class cruisers, and that his eye was taken by other types of vessel, some of which he felt would perform the traditional functions of the cruiser more satisfactorily. This did not mean that either Fisher or loyal members of his 'Fishpond', such as the Director of Naval Ordnance assigned to oversee arming of the *Bristol* class, Rear Admiral Reginald Bacon, were overtly hostile to the cruiser type *per se*. Indeed, now that the full implications of recent technological innovations such as the turbine, oil fuel and wireless could be better appreciated (and the scout programme was most instructive in this sense), their value as 'backers-up' to flotillas or components of fleet units *was* recognised, but as too low a priority for some at the Admiralty.

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Invitations to tender for 'the construction and completion in all respects of the Hull of a Second Class Protected Cruiser for His Majesty's Navy' were sent out from the Admiralty on 5 October 1908, with a closing date for fully costed tenders of noon exactly one month later.[67] In some respects, the new cruisers were framed ideally to fulfil the functions of a screw steam warship that had its origins in the Navy's gunboat prototypes of the mid-1840s: to be pre-positioned on foreign stations in the event of war, or threat of war with Britain's potential major enemies and in defence of Britain's commercial interests by sea, and by implication, by land.[68] However, the introduction of the *guerre de course* strategy by the French in the late nineteenth century, and its potential adoption by the Russians as well, had led the Royal Navy into an extremely costly construction programme of very large armoured cruisers, which had proved a cul-de-sac of naval technology.

Competing views on future naval strategy had led to differing opinions within the Navy on the utility of second class cruisers such as *Bristol* and her sisters. By the time of the launch of the last of the armoured cruisers, *HMS Defence*, in April 1907, at a vast cost of some £1,362,970 (around four times the cost of the new *Bristol* class cruiser), the threat of a *guerre de course* challenge from Britain's new allies, France and Russia, seemed remote, and *Invincible*, the first of Fisher's new breed of 'armoured cruisers' had already been launched eleven days earlier, marking a new direction for the cruiser in its heavy form. Latterly, it had been the German Navy and its associated auxiliary cruisers on the high seas, and the threat of *Handelskrieg* they brought with them, that had prompted the requirement for faster and more capable ocean-going offensive vessels than the ungainly, manpower-heavy and rapidly outdated armoured cruisers. In some ways, the pronouncements of the 1905 Committee on Designs and

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[66] Both quotations taken from K McBride, 'The Cruiser Family Talbot', *Warship 2012*, (London: Conway, 2012), p.136-7.
[67] NMM, Woolwich, ADM 138/240, *Bristol* class Ships' Covers (1908), f.1.
[68] See Andrew Lambert, foreword to Antony Preston & John Major, *Send A Gunboat: The Victorian Navy and Supremacy at Sea, 1854-1904*, revised edition (London: Conway Maritime Books, 2007).

Fisher's commitment to the battle cruiser concept for commerce protection was a logical next step in this progression – a still larger, more heavily armed and much faster form of cruiser, if more lightly armoured. That the second class cruiser was not only to re-emerge in 1907, in the very middle of this seemingly inevitable progression, but was to foster an entirely new breed of cruiser types in the *Towns* and their many successors, was a turning point, born of necessity as much as choice.

The design of the new cruisers generated considerable interest amongst a naval audience used to British innovation and starved of such, in the case of second class cruisers, since the *Challengers* of the 1900 Programme, and in reality, since the *Talbots* of 1893, upon which they were based. Compared to the tremendous developments in battleship, destroyer and submarine then underway, the traditional, medium-sized cruiser had lagged behind badly, with unfortunate consequences both for the balance of the fleet and meeting the challenges of the increasingly capable German Navy. Whilst the scout programme had provided valuable design experience upon which to draw, it had also proved a distraction from true cruiser building, as Fisher's critics such as Custance had claimed.[69] Now the second class cruiser appeared to be experiencing its own renaissance. In January 1910, with all but *Bristol* in the water, the influential British technical journal *The Engineer* declared that 'No little interest attaches to the new vessels, and especially to their machinery, because the style and arrangement of the engine portions has varied so considerably from reasons of an experimental or politically technical nature. Coming at a period when wide experience of the Parsons turbine system, as already adopted on larger cruisers and battleships, has shown the inherent advantages of the turbine system . . . the *City* class cruisers form an ideal class in which to test the merits and demerits of other coming types of turbine'.[70]

Whilst the *Bristol* class design owed little to existing second class cruisers, nor those of the third class – the guardships of Empire had not been built in any number since the *Pelorus* class dating from the Spencer Programme of 1893 – their light cruiser attributes were not without lineage,[71] suggesting that a form of 'tacit knowledge' was at work in the expectation that the Navy would continue to develop vessels of this type as long as the need was recognised and other nations continued to do so. Despite their increased size, the improved *Boadiceas* actually reflected their scout lineage in a number of ways, highlighting the degree of continuity in cruiser *design* evolution throughout the middle years of the first decade of the century. A mixed coal-oil, turbine-engined design owed much to the profile of the *Boadiceas*, as did the arrangement of armament, and the new vessel's handiness at sea.[72] Whether due

[69] Custance, *Naval Policy*, p.264-91, 'The Want of the Cruiser'.
[70] *The Engineer*, 21 January 1910, p.61.
[71] See Nicholas Rodger, 'The First Light Cruisers', *Mariner's Mirror*, Vol 65, No. 3, 1979, p. 209-230 for an interesting if not unchallenged interpretation of the origins of the type, both in Britain and elsewhere.
[72] Steam steering gear trials for *HMS Glasgow* at Skelmorlie in May 1910 showed that the vessels could respond to 35º of port to 35º of starboard rudder in just 17 seconds at full speed (TNA, ADM 138/240, Ships' Covers, *Bristol* Class, f.101).

to the novelty of its design, or the space of time since the Admiralty had ordered a medium-sized cruiser, the *Bristol* class certainly caught the attention of press, public and other navies. The Italian Naval Attaché in London, Captain Arturo Resio, wrote to the Permanent Secretary of the Admiralty, Sir Inigo Thomas, in February1909 to inquire as to the type of steering gear being employed in the *Bristol* class, as his own Navy was in process of constructing a new scout cruiser at the Royal Dockyard in Venice.[73] Similarly, the Americans had employed Curtis turbines in their cruiser the *Salem* and their London Naval Attaché was instructed to discover as much information as possible about the comparative *HMS Bristol*.

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The selection of armament for the *Bristol* class, as the number of options appearing in the Ships' Covers makes clear, was one of its most controversial features, and may go some way towards providing a better understanding as to why the class was built, and how it coincided with then current naval policy. Generally, the mixed 6 in and 4 in arrangement eventually selected has been judged a poor compromise – between those voices in the navy who considered flotilla defence a key role for a true, 'improved *Boadicea*' scout, and those who saw the pressing need to modernise the nation's trade protection assets. David Lyon has written that 'Though on the whole satisfactory, the class had a poor armament for its size', echoing criticisms that had been lodged as early as the publication of *Brassey's Naval Annual* for 1911.[74] Mixed calibre armament was not a proposition beloved of Fisher and it must be assumed that Bacon, as Director of Naval Ordnance at the time, an officer who shared his First Lord's belief in "hitting first and hitting hard", yielded to pressure from Philip Watts as DNC not to compromise the *Boadicea* design and weight issues too greatly, and to those who saw a gun-for-gun, close-in encounter with German light forces as the warship's prime concern. That the new cruisers were specifically designed with German adversaries in mind was reflected in the ongoing choice of a main battery of 10-4 in. guns akin to the *Boadiceas*. In a potential mêlée of engaged flotillas, a large number of small-calibre guns might well be of advantage and would match German practice. Unlike most other navies, Germany was reluctant to adopt the 6 in. gun for its cruisers, giving way to Tirpitz's view on the matter rather than adhering to the wishes of officers serving with the fleet. Instead, new German designs mounted large numbers of 10.5 cm (4.1 in.) guns – 12 in the case of the *Kolbergs* – intended for close destroyer action in the first instance.

Numerous armament layouts appear in the Ships' Covers. Assistant DNC, W H Whiting, issued instructions for consideration of a mixed armament of 6-6 in. fore and aft and 8-12 pdrs in the waist (the 'D Design'), as requested by the Admiralty. Lessons were learnt from the *Boadiceas* concerning

[73] ADM 138/240 Volume 1 (267), p.231, Ships' Covers, *Bristol* Class (1908), RMM, Woolwich.
[74] D Lyon, 'The First Town Class, 1908-31, Part 1', *Warship* No. 1, January 1977, (London: Conway Maritime Press), p.53. *Brassey's Naval Annual, 1911*, p.4.

fields of fire for the new cruisers' batteries, special attention being focused upon forward fire, given that the chasing of fast, commerce raiding adversaries was also a likely role.[75] In the final modification of the first *Town* class of cruiser, the *Birminghams* of the 1911 Programme, the further requirement for forward firepower led to the decision to mount a pair of 'sided' 6 in guns on the forecastle, both the location and calibre of armament suggesting that bow-chasing every bit as much as the mêlée of closely engaged light forces was envisaged for these cruisers. In his commentary on the gun trials for *HMS Glasgow* in May 1910, Captain Reginald Tupper from *HMS Excellent* clearly envisaged this pursuit role – 'The allowance of 300 rounds of 6" ammunition is considered small and would soon be expended if ship is chasing or being chased. Stowage can be found for another 100 rounds and this increase is recommended for consideration', a suggestion to which the DNC had no objections.[76]

Not only were weight considerations and intended fighting role of the new cruisers of significance in choice of armament, but so were the limitations of space for gun crews. More and larger guns meant more gunners, and additional room to accommodate them below decks was at a premium.[77] Six inch guns were considered the largest calibre in which both shell and gun could be successfully handled by gunners with little or no resort to machine-driven means. In fact, annual gunnery trials showed that even this size of gun was less easy to aim in a relatively small, fast and less stable vessel such as a light cruiser than the 4 in, and this factor undoubtedly played a role in the retention of the 4 in gun in the *Bristols*.

Unlike their Scout predecessors, the *Bristols* eventually emerged with all guns protected by shields, to reflect German practice in such warships and the more robust sea-keeping and fighting duties expected of the class. The *Bristols* also marked a move from the Vickers gunsights to the now in-vogue Dreyer model. The DNO, Reginald Bacon, showed great enthusiasm not only for the "hard-hitting 6 in. gun" but for employing some of the new fire control systems then coming into service in larger warships in the *Bristol* class cruisers. In a memorandum of March 1909 concerning *HMS Liverpool*, then building at Vickers, Barrow, Bacon laid out an extensive requirement for integrated fire control involving fire control platform, range finding position, fore control top, conning tower, transmitting station, all connected by Navyphone to gun positions, and backed up by armoured voicepipes. Follow-the-pointer control instruments and a portable visual range and deflection transmitter for each of the 4 in gun batteries were also suggested.[78] The response of the DNC, Philip Watts, was one of horror, and he reminded Bacon that he had been given to assume that the more simplified fire control system and

[75] NMM, Woolwich, ADM 138/240, Ships' Covers, *Bristol* Class, f.342.
[76] *Ibid*, f.141. The 6in gun offered the *Bristols* the potential to stop or sink destroyers or unarmoured commerce raiders with a single shot.
[77] Arguments over crew accommodation fill the pages of design notes associated with the 1912 Programme *Arethusa* class, and typically include detailed calculations by the First Lord, Winston Churchill, himself. See NMM, Woolwich, ADM 138/286, *Arethusa* Class Ships' Covers, *passim*.
[78] NMM Woolwich, ADM 138/240, *Bristol* class Ships' Covers, f.348.

Telaupad communications of the *Boadiceas* was to be adopted, as costings and design of cramped spaces such as the bridge had already been approved.

As early as 18 August 1908 Bacon agreed that two broadside submerged Type B torpedo tubes should be carried by each of the new cruisers, but his continuing preference for the more potent 21 in rather than planned 18 in tubes could not be accommodated, either within the building timeframe or physically,[79] and were not adopted until the subsequent *Dartmouth* class. This was in line with previous British second class cruiser and German practice, although a move away from the deck-mounted tubes of the *Boadiceas*. A crowded broadside gun armament and consequent weight considerations were a factor, but despite these vessels being referred to as 'improved *Boadiceas*', it seems certain that from the first the intention to employ the ships as 'beefed-up' *Boadiceas* to support destroyers in flotilla torpedo attacks and to counter the larger German cruisers being assigned to Aufklärungsgruppe was but one of several roles being considered, hence Bacon's determination to substitute an all-4in gun armament as originally designed for more potent, longer range 6in guns fore and aft. These modern, fast, ocean-going cruisers were simply too scarce a commodity to be committed to the pot luck of close quarters destroyer actions, yet the mixed armament, inspired by both scout and *Talbot* class antecedents, symbolised the confused thinking of 1907-08 over not just the future of the cruiser but of broader naval strategic policy.

In the short term, the combination of gun calibres in the *Bristols* proved just as unsatisfactory for making aiming alterations based upon shell splashes of differing calibres as the views of Scott and others suggested it would be. Some concessions to advances in gunnery techniques were acknowledged in the original design for the cruisers, including plotting tables for the guns and the fitting of a 9 ft rangefinder on a platform abaft the Standard Compass. In November 1913 *HMS Liverpool* conducted a live firing exercise against the old pre-dreadnought, *Empress of India*. At a range of just 4,750 yards the cruiser fired sixteen 6in and sixty-six 4in shells at the large, anchored target. Whilst observers were suitably impressed by the damage caused by those shells that *did* strike their target, 65% did not.[80] It is instructive to note that amongst the first design improvements slated for the subsequent 'Improved *Bristol* Class' – the *Dartmouths* of the 1909 Programme, was a move to a uniform 6in armament, as well as the extending of the forecastle[81] and enclosing of the waist guns in a bulwark, as trials had shown the *Bristols* to be wet ships, which impaired the use of their 4in batteries in heavy weather.[82]

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[79] *Ibid*, f.309 makes it clear that despite being adopted in new destroyers and battleships for the 1909 Programme, only '7 short 21 in. torpedoes might be accommodated in the new cruisers and even then, some would have to be stored 'with their heads off'. The *Bristols* soon gained a reputation as rugged but very cramped ships, the latter factor of account in their very limited post-war service.
[80] Brown, *The Grand Fleet,* p.29.
[81] NMM, Woolwich, ADM 138/240, Ships' Covers, *Bristol* class, f.95.
[82] NMM, Woolwich, ADM 138/253, Ships' Covers, *Dartmouth* class, f.8-12.

Compared to earlier second class cruisers, the 25 knot speed, turbines (powered partially by oil fuel) and new wireless fit of the *Towns* (as the extended class was to be known) had a force-multiplying effect. In an oft-quoted letter written to James L Garvin, then editor of *The Observer*, Fisher wrote in May 1910, 'It's "wireless" that has revolutionised sea war! Airships are the auxiliaries – but "wireless" the main agent for strategic combinations!'[83] The significance of wireless telegraphy, especially for the cruiser, with its roaming and scouting brief, was quickly understood by the navy, and the enthusiasm for such new technology was not solely confined to the First Sea Lord. Controller and Third Sea Lord from February 1905 to October 1908, tasked with initiating and overseeing plans for the *Bristol* class during this period, was Jackson – as Andrew Lambert has described him, 'One of the sharpest minds in Fisher's technology group, and a key figure in the development of wireless radio'.[84] Typical of the Admiralty's rapid but guarded approach to all manner of technological innovations in the nineteenth century, it had encouraged naval officers, in this case Jackson, to work alongside inventors, or rather more entrepreneurs in the case of Marconi, in assessing the utility of the new technology for the Navy in maintaining its lead over rival fleets whilst sharing as few of the financial burdens as possible.[85] Jackson had already championed the building of the scout cruisers over larger destroyers, at least in part because their taller masts and greater size could more easily accommodate the new wireless equipment arriving with the fleet, much due to Jackson's experimental work. The improved *Boadicea* design, which he helped to initiate and then hand on to Jellicoe for completion, was distinctly a 'wireless age' vessel, built to operate in both home and foreign waters in which the Royal Navy, and her competitors, could expect to receive, transmit, relay and intercept wireless traffic over distances of up to 200 miles, and via cable stations, many thousands of miles. The implications for the design, deployment and operation, particularly of these modern cruisers, were immense, and the *Bristol* class marked a significant advance in this respect. In their work on the impact of wireless for the fleet, Nicholas Lambert and James Goldrick, in his study of the early years of 'over the horizon' warfare,[86] have focused rather more on the North Sea arena. However, that Captain Richard Webb, head of the NID's trade section could write in 1913, with a degree of truth, that War Room 'master plot' and other charts updated via wireless and cable signals daily, allowed 'potential commerce raiders, all of whose positions are known roughly, and some accurately, to be dealt with on the outbreak of war' shows how far international communications systems had advanced since 1900.[87] Whilst events were to prove Webb's

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[83] Fisher to James L Garvin, 6 May 1910, Recip., Fisher, file 6/12, Garvin Papers, Harry Ransom Center, University of Texas, quoted in N A Lambert, 'Strategic Command and Control', p.362.

[84] A D Lambert, 'The Naval War Course'. The Jackson Papers held at the National Maritime Museum contain an account of the Rear-Admiral's lecture to the Institute of Electrical Engineers on 25 May 1905 on the matter of effective wireless arrays for long distance signalling (JAC/56).

[85] See A J L Blond, *Technology and Tradition'*.

[86] J Goldrick, *Before Jutland* focuses heavily on revolutionary aspects of command and control, as does his lecture, 'Learning How to Do Over the Horizon Warfare at Sea'

[87] TNA, ADM 137/2864, Trade Division Records, memorandum by Capt. R Webb, *Proposed Scheme of Commerce Protection and Work of Trade Branch of WS*, quoted in Lambert, 'Strategic Command and Control', p.392.

claim somewhat optimistic, the global network of information gathering and dissemination, in which *Town* class cruisers played such a vital part, was essential to the early dilution of the German surface threat to commerce. Indeed, as proved in the case of *HMS Glasgow* and *SMS Dresden* for one, fast, capable cruisers, well commanded and well informed, could both help to track and to dispatch their prey.

From the outset, in October 1908, the installation of a dedicated wireless telegraphy office below decks to house the most up-to-date Service Mark I* equipment, as had been the case with the earlier scouts, was a significant component of the *Bristols*' design process. In an exchange of notes between the newly appointed Controller, Jellicoe, and the DNO's office, commencing 28 October 1908, the latter passed comment on existing plans for the new cruisers: 'It is considered that the height of the masts is insufficient to permit of wireless signalling range being satisfactory having regard to the size of the ship. If the aerial wire could be carried at a height of 160 ft fore & main the signalling range could be increased 20 to 40% - it is submitted that arrangements may be recommended accordingly'. The response of the Assistant DNC, Whiting, to the request was that to raise the height of masts so substantially from the planned 110 feet would pose 'considerable risk', given that the effective spread of the shrouds in the new cruisers was barely as great as that of the *Topaze* class of just half the size. A compromise main mast height of 135 feet, the same as the *Topaze* class, although 30 feet lower than the *Edgar* class, was suggested, and ultimately agreed in December 1908. This was despite the evidence of the Assistant Director of Naval Ordnance, Captain Frederick Tudor, that estimated day ranges on the standard wave for 160 ft masts would be 200 miles and those for 135 ft masts, just 150 miles. Captain Phipps Hornby at *HMS Vernon* was tasked with the design of a rig for the new cruisers to optimise wireless capability. His recommendation that each new cruiser should be assigned a full W/T complement of Petty Officer Telegraphist, Leading Telegraphist and two Telegraphist was adopted.

This was not the only communications development with which the new cruisers were connected. Submarine signalling equipment was discussed in a memorandum sent from the DNC's office on 25 August 1909 and forwarded to *HMS Vernon*. Further, in a letter dated 20 December 1908, as the *Bristol* class took shape in the DNC's offices, largely under the watchful eye of Whiting, a proposal to equip new cruisers with an aircraft was received.[88] That this proposal was suggested barely five years after the first successful heavier-than-air flight shows the remarkable pace of technological advances at the time. In this instance, Bacon was minded to await further developments in this new field and therefore it was the American cruiser *USS Birmingham*, completed in 1907 along similar lines to the *Bristols*, that launched the first aircraft from the deck of a warship three years later. However, flying-off platforms were fitted to the forecastles of subsequent *Towns* in the latter stages of the war and in August

[88] Commander Newton proposed the use of an aircraft launched from the forecastle of a cruiser by use of Wrights' Starting Weight. Both Bacon and Watts concurred that it was best 'to leave the problem to private enterprise and carefully watch'. Letters in TNA, ADM 1/8005, Controller Papers & In-Letters, July-December 1908.

1917 *HMS Yarmouth's* Sopwith Pup accounted for a Zeppelin off Jutland, a notable milestone in the employment of air power at sea.

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Speed, above all else, was Fisher's mantra, and was a guiding principle in the decisions to scrap older vessels and commission new ones. In a rapidly advancing age of turbines, oil fuel and more efficient hull and propeller designs, it was essential that warships could both keep station with their own fleet and outpace opponents, be they naval or mercantile. As a paper entitled *Disposition of Cruisers for Commerce Protection*[89] dated 1908 makes clear, the Admiralty's plans for such protection in the event of war with Germany chiefly relied upon the ten *County* class cruisers, and a large number of fast merchant vessels, as soon as they could be armed. Whilst several of the triple expansion-engined *Counties* struggled to make their contract speed of 23 knots on trials, they were generally regarded as good steamers, but could not hope to maintain the speeds and serviceability of turbine-engined vessels, of which the Germans had increasing numbers in their naval and merchant marine. The 1908 paper is transparent in the need to 'utilise all the fast ocean vessels in British ports to proceed at once in search of German vessels, generally the fastest vessels to proceed to the furthest points. This arrangement is necessary in order to strike with the greatest rapidity. Rapidity is absolutely essential to success. As fast vessels daily arrive in British ports, so they will arm and relieve those already at sea.' The heavy reliance upon the merchant marine had long been planned for, was cost-effective, and exploited Britain's overwhelming predominance in modern, global shipping. Nonetheless, for the navy to be unable to maintain station with auxiliary cruisers in many instances was not a situation that the Admiralty enjoyed and played no small part in Fisher's promotion of the battle cruiser concept. Auxiliaries could not be expected to take on German armoured ships but financial resources would always limit battle cruiser numbers, however, and that a 'flying squadron'[90] would still require fast scouting escorts also helped to ease the way for the introduction of the *Bristol* class.

Aside from the *County* class, the third class *Pelorus* cruisers built for overseas service displaced just 2,135 tons, mounted only 4 in guns, and due to a variety of largely inefficient water-tube boilers installed, could reach just 15-16 knots. Indeed, two of the eleven vessels were laid up in 1904, only five years after entering service, such was the pace of technological advance. The introduction of the marine turbine engine had a marked impact on global shipping, both naval and commercial. Only six years before the design for the *Bristol* class was laid down, Denny's had launched the *King Edward*, the world's first turbine-driven large merchant vessel. Only three years after the new cruisers entered service, the turbine manufacturer Parsons was to claim that 12 of the 28 million horsepower being

[89] I am indebted to Dr Morgan-Owen for access to the Admiralty's Trade Protection Papers, in this instance T16624, from the archives of the National Museum of the Royal Navy, Portsmouth.
[90] A term employed in the 1860s, in the interests of naval economy and reducing the costs of permanent, overseas stations. See Beeler, 'From Gladstone to Fisher', p.4-7.

delivered to power the world's naval and mercantile fleets was already of the direct-action turbine type.[91] With only *one,* 22 knot turbine-engines cruiser above 3,000 tons – *HMS Amethyst* – then in service, any pretence that the Royal Navy might claim to offering even a modicum of protection to British shipping along the 92,000 nautical miles of trade routes they regularly traversed appeared doubtful, even if the reality was rather more complex. Article XII of the Second Hague Conference on prize law and Article 9 of the London Conference provisions on 'continuous voyage' and contraband were of questionable relevance if the means to enforce an effective control of trade routes were not at hand, railed Wilkinson and other of Fisher's more astute critics. At the insistence of the Controller, Jellicoe, the *Chatham* class *Towns* of the 1910 Programme were improved for greater utility as oceanic cruisers: a plough bow, extended forecastle and low metacentric height gave the vessels better seakeeping qualities; a more accurate, uniform battery of 6in guns and a 2in waterline belt of nickel steel matched earlier second class cruiser practice, and DNC confirmed to Jellicoe that the design would 'practically work out as a *Challenger*'.[92] The same design was adopted for the new 'Colonial Cruiser'.[93]

Turbine engines were specified for all of the *Towns*. Further, all auxiliary machinery was to be interchangeable between the sister ships within the class, despite several different constructors being involved.[94] At Fisher's insistence, a minimum speed of 25 knots was required of the new vessels, and a penalty clause was to be applied to the shipbuilders - £9,000 for a one knot and £20,000 for a two knot deficiency. Given the tight financial margins for this construction, such fines would have made the work, even at the lower figure, unsustainable for the yards involved. German cruiser engines were efficient, and all of their vessels of the period achieved considerably faster speeds than the requirement stated in their design legends. Whilst of the *Bristols*' exact contemporaries, the *Kolbergs*, *Augsburg* still relied upon British Parsons turbine machinery, the other three ships of the class could depend upon German or U.S.-German engines, from Melms-Pfenninger, Germania and AEG-Curtiss. Measured at 26.7 knots on builders' trials, *Augsburg* would prove the fastest of the class, yet home-grown turbine technology was clearly catching up with the British lead. In subsequent classes, the German Navy could call upon its own line of so-called 'Navy turbines' to power their light cruisers, and the projected 25 knot speed of the *Bristol* class was seen as a minimum requirement, given that Germany's fleet of commercial vessels capable of operating as armed merchant cruisers was increasingly turbine-engined (and wireless equipped). Naval Intelligence reports of the period gave an annual summary of the speed

[91] David Dougan, *The History of North East Shipbuilding* (London: Allen & Unwin, 1968), p.110, quoting Sir Stanley Goodall, 'Parsons Memorial Lecture', Royal Society of Arts, 26 March 1942.
[92] TNA, ADM 116/1013A Vol. 1, HM Ships Design Papers, 1907-11, CN 0820/1910, 'Protected Cruisers of the 1910-11 Programme, memorandum from DNC to Controller dated 11 Nov. 1909.
[93] The design is referred to as the 'New Colonial Cruiser' (to become *HMAS Brisbane, Melbourne* and *Sydney*) in the Statement of Dimensions, Estimate of Weights etc. included in the above-mentioned file.
[94] NMM, Woolwich, ADM 138/240, p.6, Ships' Covers, *Bristol* Class, f.6 – a lesson learnt from the experience of the four different shipbuilders of the eight original Scouts built for the Navy from 1903 to 1905.

and wireless fit of all foreign mercantile vessels thought capable of being employed as auxiliary cruisers against Britain in time of war – Germany had by far the largest number.[95]

With the fleet, the requirement for fast, well-armed cruisers with good endurance and sufficiently good seakeeping to act as steady gun platforms in the North Sea became ever more apparent. Following Home Fleet exercises to simulate destroyer attacks on the battle line on 26 April 1910, Herbert Richmond, the Flag Captain of the C-in-C, William May, was asked to collate responses from squadron commanders involved as to the efficacy of employing destroyer flotillas with the Fleet.[96] Richmond concluded that speed and good communication between scouting cruisers were essential to the protection of the fleet (and he urged the introduction of a modified, short-range wireless set with a range of c.50 miles to assist in this). May concluded: 'The question of using destroyers in a fleet action has been occupying my attention for some time, I understand that the Germans propose to use two of their flotillas (22 in number) with the High Seas Fleet . . . To meet such an attack, Boadiceas and Scouts would probably be the most effective vessels to employ, especially at the end of the line'. He further asserted that if German destroyers were not beaten off, his battleships might have to resort to turning their 12in guns from the enemy line of battle to this more proximate threat (May felt that the secondary armament of the *Dreadnoughts* was less well protected than that of their opponent, and might not survive the early exchange of large calibre salvoes). Thirty-four previous exercises had convinced May that a 'battle turnaway' to avoid enemy flotillas was very difficult to conduct and he was 'strongly of the opinion that a modern fleet going into action requires at least 6 Boadiceas or Scouts, 24 destroyers, and the ships should have in addition a well-protected anti-destroyer armament, and I strongly recommend arrangements be made accordingly. Until sufficient "BOADICEAs" and Scouts are available, the larger class of destroyers might be utilised, but their radius of action is much against them.' The final comment was a tilt at Fisher and his ongoing support for a *Swift* design: May hoped that the 'improved *Boadicea' Towns* and their 6in guns would be the solution to the fleet's needs, but lack of numbers, and a design that struggled to exceed the speeds in excess of 25 knots now being attained by German destroyers, light cruisers and battle cruisers, brought the issue to the fore most forcible the following year.

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Full power trials of the new cruisers proved both uniform and satisfactory, only *Glasgow* not quite attaining 26 knots and the Curtiss-engined *Bristol*, at a light displacement of 4,795 tons and in a smooth sea, reaching an indicated 28,711 shp and a speed of 27.012 knots, a vindication of all those who had argued for a non-Parsons-engined test bed to be built. In practice, however, 25 knots remained the

[95] An NID report of 1907 identified 17 German commercial vessels known to have been selected as auxiliary cruisers in the event of hostilities. They ranged in size from 5,000 to 45,000 tons and the North German Lloyd liners could steam at 23½ knots. Several were already equipped with wireless apparatus (ADM 231/48, p.56).
[96] The reports, together with the comments of Richmond and May, are in NMM, May Papers, MAY/9/1, 'Tactical Exercise, 26 April 1910'.

maximum speed that could be sustained. The compartmentalising of engine room space along the centreline, as pioneered in the *Boadiceas*, made for some design problems and difficulties of access to coal bunkers, but had much to do with the survivability of the ships, the later *Falmouth* sustaining torpedo attacks from two U-boats before finally succumbing the following day. *Falmouth's* sister *Weymouth* had been 'sunk' by submarine *D.6* during the 1912 manoeuvres, only to be reprieved on appeal by the umpire. She also survived the loss of her stern to a genuine, Austrian torpedo in the Adriatic in 1918. The employment of oil fuel in the cruisers, as pioneered in the *Boadiceas*, marked a clear direction of travel for the Royal Navy, which Goldrick has shown to have been an essential component in the Admiralty's efforts to maintain an advantage at sea, despite the quality and abundance of British coal.[97] Whilst the first *Towns* relied upon a mixed coal-oil fuel, the lessons learnt in these and other vessels proved invaluable in the design of the *Arethusa* and subsequent all-oil-fuelled light cruisers. German constructors did follow the trend in oil fuel use in their destroyers but even the last designed cruisers of the war, the incomplete *Köln* class of 1918, were still reliant upon mixed fuels. German failure to secure ready supplies of oil fuel was also a factor in their ongoing employment of coal, of a much inferior quality to that of the British.

The ongoing chief reliance upon coal in powering the *Bristol* class still provided issues in terms of time and ease of re-coaling, and the sheer manpower required for the effective maintenance of their turbines (although these proved a step-change in terms of endurance and reliability over their triple expansion engine predecessors). The Scheme of Complement for *HMS Liverpool*, dated 18 August 1910, cites an Engineer Branch of 172 men or 36% of the total complement.[98] Whilst this proportion rose to over 50% in the case of the newer battle cruisers, it is instructive to note that the entirely oil-fuelled *Calliope* class of light cruiser (1913), albeit based upon a 1,000 tons lighter displacement, nonetheless made do with a third less ship's complement than the *Bristols*, although mounting a broadly similar armament. Despite such issues, the use of oil and turbines in the *Bristol* class marked a new and consequential departure for the medium-sized cruiser.

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That the new cruisers were built with overseas service in mind is without doubt. Despite the vicissitudes of naval war planning between the inception of the *Bristol* class in mid-1907 and the outbreak of war, the traditional tasks of trade protection were still to remain the province of cruisers. However, such was the tone of Churchill's April 1914 memorandum on the subject that it was clear attention had focused on North Sea waters at the expense of overseas threats.[99] Churchill's urgency was perhaps indicative of

[97] See J Goldrick, 'Coal and the Advent of the First World War at Sea', *War in History*, Volume 21 (3), 2014, pp. 322-337.
[98] NMM, Woolwich, ADM 138/240, *Bristol* class Ships' Covers, f.272.
[99] TNA, ADM 137/818/9, War Standing Order for Vessels Engaged in the Protection of Trade and for Cruiser Forces, memorandum by Winston Churchill dated 14 April 1914.

his personality as much as the nature of the threat, but the central role of new, fast cruisers of the *Town* class in nullifying the German danger in distant waters was nonetheless forcefully restated. The new second class cruisers could expect to meet commerce raiders of all sizes and armaments in their intended role on overseas stations. Early specifications for a well-protected conning tower called for 6 in. sides and 2 in. roof, tested to withstand 6 in A.P. shells at medium range.

The office of the Navy's Engineer-in-Chief, Vice Admiral Sir Henry Oram, took a keen interest in the progress of the new cruiser. On 12 September 1908, commenting on coaling arrangements and boiler room access from bunkers, the E-in-C stated his preference for a design best suited to 'facilitate long distance steaming at high powers'.[100] Such speed and endurance would be necessary for commerce protection on the high seas, although it was recognised that 'even with a full stowage of oil fuel, the endurance of these vessels, at high power steaming with all boilers, is limited by the amount of coal carried abreast the middle boiler rooms.' Yet the *Bristols* were without doubt capable vessels. Stores were carried for 35 days at sea on full rations, and at 10 knots they had an operational radius of 5,900 nautical miles, from Plymouth to Montevideo. Maximum continuous power was rated at 70%, or 22½ knots, with a radius of 2,520 nm yet their range was only half that of *Edgars* at low speed.[101]

Whilst the new cruisers would be a most welcome addition to the capabilities of Fisher's new fleet, quality rather than quantity and naval as well as financial efficiency remained the First Lord's watchwords. At the very same Admiralty Board meeting that agreed the name of '*Bristol* class' for the vessels about to be specified to the DNC for design, provision was made to announce 'what old Second Class Cruisers may be expected to drop out'.[102] On 5 September 1910 the new cruiser *Gloucester*, under command of the much-vaunted Captain 'Tich' Cowan, received orders to sail directly from the Clyde upon delivery by the contractors to relieve the cruiser *Isis* in the First Division of the Home Fleet at Devonport. Having come from command of what was described in his biography as the ill-fated and 'rather passé armoured cruiser' *Cressy*, the impact of the transformation to a new generation of warship was not lost on Cowan – she was 'the apple' and 'best tuned-up ship that I ever commanded'.[103] The step-change in capability for the fleet in replacing vessels that could trace their origins to the Naval Defence Act and Spencer Programme respectively, and had strained to attain 19 let alone 25 knots, was in its own way just as remarkable as that underway amongst the battle squadrons at that time.

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There is no doubt that a driving force in development of the *Towns* was provided by rapid advances in German light cruiser construction. Sir Trevor Dawson, one of the Admiralty's most reliable civilian

[100] NMM, ADM 138/240, *Bristol* class Ships' Covers, f.184-5.
[101] *Ibid*, f.384.
[102] TNA, ADM 167/42, Admiralty Board Minutes for 7 July 1908.
[103] Lionel Dawson, *Sound of the Guns: The Story of Admiral Sir Walter Cowan, Baronet of the Baltic* (Oxford: Pen-in-Hand, 1949), p.124.

informants, made a clandestine surveillance of the Schichau works in Danzig in late February 1909. Seligmann writes that 'What he saw was significant. The yard was known to have recently commenced the building of a small cruiser. To Dawson's surprise, this vessel had already been launched, and on the vacated slip work had already commenced on the keel of a large battleship'.[104] The cruiser, the *Kolberg*, had indeed been launched on 14 November 1908, just months after having been laid down, the lead ship of the *third* class of modern, well-armed and increasingly large light cruisers to enter the water since the end of 1905. Named after German towns – and the Royal Navy's response with the *Bristol* class was indicative – the new warships built on a gradual development of the German light cruiser type since the previous century, in which the roles of commerce protection or destruction, and fleet work, in scouting and the leading of torpedo boat flotillas, were combined in one hull, unlike their British counterparts.[105]

The sea-keeping qualities of each subsequent class of German light cruiser, from the *Königsbergs* laid down in 1905-06 to the *Karlsruhes* of 1911 – 16 vessels in all – improved at each stage. During the same period the Admiralty laid down just 14 cruisers of the *Bristol* and subsequent *Weymouth* and *Chatham* classes, two of these for the newly formed Royal Australian Navy, and although far less attention has been paid to the 'cruiser race' as opposed to its *Dreadnought* equivalent, when the Navy's scout cruisers, designed for closed sea operations, were discounted, Britain did indeed appear to be falling behind its chief rival, especially given the Admiralty's global commitments. Parsons turbines were trialled in *Stettin* in late 1907, as designs for the *Bristol* class were in their formative state, and their contemporaries, the *Kolbergs*, saw the full adoption of turbines, being capable of speeds 1½ knots faster than the previous *Dresden* class of triple expansion-engined cruisers. German cruiser designers had also experimented with the integration of armour on the waterline as part of the hull plating, as adopted with some degree of success in the *Magdeburg* class of the 1908-09 Programme, whilst in the *Bristol* class armour was restricted to a 2-¾ in. steel deck.

The 1898 German Navy Law saw the adoption of fixed establishments of cruiser types in the fleet as well as regularised replacement of older vessels. In addition to 6 large and 16 smaller cruisers with the battle fleet, a further 6 large and 14 small cruisers were designated for Foreign Service. The Reichstag eventually agreed to this naval strength being attained by the end of 1903. Whilst much emphasis was rightly placed upon the consequences in the growth of a modern force of battleships, capable of presenting a considerable challenge in home waters for the Royal Navy, the seeds of a new cruiser rivalry, previously more associated with French and Russian vessels, can be discerned. However, the response of Tirpitz to challenges overseas was rather more in line with the trends of what would become British naval strategy, for in publishing the Second Naval Law in June 1900, Germany's proposed

[104] M S Seligmann, 'Intelligence Information and the 1909 Naval Scare', p.50.
[105] Although the *Towns did* perform a dual role, their speed and growing cost stood against them when the Admiralty sought large numbers of fast light cruisers for North Sea service at the end of 1911.

Foreign Fleet cruiser force was reduced from 6 to 3 large and 14 to 10 small cruisers, with 3 and 4 respectively in Reserve. In contrast, the home waters battle fleet cruiser force was to rise from a proposed total of 22 to 32 vessels, all to be replaced on a twenty-year basis. The actual terms of the Act made German naval thinking quite clear – 'To protect Germany's sea trade and colonies, in the existing circumstances, there is only one means; Germany must have a battle fleet so strong that, even for the adversary with the greatest sea power, a war against it would involve such dangers as to imperil its position in the world'.[106]

Whilst naval historians have continued to debate the precise timing of the development of Germany's so-called 'risk theory' of fleet development and deployment – Jonathan Steinberg as long ago as 1965 arguing that the theory was fully developed by June 1897,[107] prior to the substantive heightening of tensions in Anglo-German relations – it is clear that at the commencement of the period under study here, German plans focused on a large and modern cruiser force with their fleet in home waters and a smaller but nonetheless potent cruiser presence in foreign service. The *Bristol* class were conceived in the wake of the first Moroccan Crisis of 1905 and midway between the *Novelles* of 1906 and 1908, and the Kaiser's letter to First Lord Tweedmouth in February 1908, together with the latter's subsequent disclosure of the 1908 Estimates (including the cruisers) to the Germans in an effort to diffuse Anglo-German tensions, largely had the opposite effect. Tweedmouth was soon replaced by McKenna, an ardent member of the economist wing of the government whilst at the Treasury but a firm convert as First Lord to Grey's Liberal Imperialist, navalist view – 'he remained faithful to the Blue Water School.'[108] In McKenna's hands, as a man who threatened resignation over an increase in the following year's Estimates, the future of the new cruisers were safe – as Fisher wrote with undisguised glee to the King in January 1909, with designs for four 'improved *Bristols*' already with Watts, 'McKenna, who when he came here was an extreme "little Navy" man, is now an ultra "Big Navy" man'.[109] Thus, the new cruisers could count upon support in high places, and given their lower cost, wide utility and direct role in the protection of commerce, were unlikely to engender the heated debates which were to split cabinet and country over the far higher profile *Dreadnought* programme.

Both Tweedmouth and McKenna were not short of evidence from the Director of Naval Intelligence about the progress of German cruiser construction. The Naval Intelligence Department's Report No. 820 for February 1907 identified 62 existing or proposed slips in German shipyards capable of

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[106] Quoted in Rolf Hobson, *Imperialism at Sea – Naval Strategic Thought, The Ideology of Sea Power and The Tirpitz Plan, 1875-1914* (Boston, MA: Brill Academic, 2002) p.243.
[107] J Steinberg, *Yesterday's Deterrent – Tirpitz and the Birth of the German Battle Fleet* (London: Macdonald, 1965), p.201.
[108] Quoted in Z S Steiner and K Neilson, *Britain and the Origins of the First World War*, second edition (Basingstoke: Palgrave Macmillan, 2003), which contains much of value on the political dimensions of British naval policy.
[109] Fisher to Edward VII, 3 January 1909, in Marder (ed.), *FGDN*, Volume II, p. 220.

constructing a cruiser of *Bristol's* size.[110] The Navy were well aware that the new *Magdeburg* class planned for 1908-9 had a deep load displacement of 5,587 tons, on a par with their British counterparts, and a mixed coal and oil reserve of 1,306 tons. This figure was smaller than the 1,600 tons of the *Bristols* but it marked a step-change in the projected operational radius of German cruisers in a very short space of time. Whilst the *Dresden* and *Emden* of the 1905-06 Programme were in wartime to prove their 3,760 nautical mile range at 12 knots at least sufficient to provide their British rivals with much cause for concern, their frequent requirement for re-coaling was reduced dramatically in the *Magdeburgs*, which could steam for over 5,820 nautical miles at the same speed. This was not dissimilar to the range attained by the *Bristol* class cruisers designed for foreign service. [111]

On paper, the increasing threat of German commerce raiders, either naval or auxiliary, to Britain's foreign and imperial trade routes appeared clear, and the *Bristol* class was a direct response to that threat. However, as the research of Goldrick has shown,[112] the advent of turbine propulsion and a subsequent expansion in German ambitions for its navy in distant waters did not engender equal capability with its rivals. A ready supply of 'First-class Cardiff' steaming coal at a vast array of British coaling stations gave the Royal Navy a considerable advantage. From her earliest commission on the China Station in the four years before the outbreak of war, to wartime service that saw her serve on both sides of the Pacific, the East Indies and Mediterranean, *HMS Newcastle* accumulated tens of thousands of miles of largely trouble-free cruising, a testament to a robust design and regular supplies of high quality coal and oil.[113] Similarly, both *Bristol* and *Glasgow* saw extensive service in the southern Atlantic and off the coast of South America, making good use of the large coal stores on the Falklands. By the time that the new cruisers were being discussed in the Admiralty, provision was already being made for oil refuelling at sea: the *SS Petroleum*, carrying a 9,000 ton load, was attached to the Channel Fleet.[114] Efforts to improve both the supply vessels and means of transfer for both coal and oil replenishment at sea, in which the Navy was conducting trials in 1907-08, gave the new cruisers yet further potential in terms of extended endurance.

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[110] TNA, ADM 231/48, Naval Intelligence Reports, 1906-07, *Shipbuilding Capabilities of the Principal Naval Powers*, NID Report No. 820, February 1907.
[111] For technical specifications of German light cruisers, see R Gardiner (ed.), *Fighting Ships, 1906-1921*, p.156-163.
[112] J Goldrick, 'Coal and the Advent of the First World War at Sea'.
[113] For details of the ship's log and maps of *HMS Newcastle's* extensive voyages see http://www.naval-history.net/OWShips-WW1-06-HMS_Newcastle.htm. See also Appendix 5.
[114] For the *SS Petroleum's* role within the fleet see ADM 1/7937, TNA, Admiralty In-Letters & Papers, 1 July 1907. Coal refuelling at sea trials by the Royal Navy are discussed in Warwick Brown, 'When Dreams Confront Reality: Replenishment at Sea in the Era of Coal', *International Journal of Naval History Online*, 2010, http://www.ijnhonline.org/2010/12/01/when-dreams-confront-reality-replenishment-at-sea-in-the-era-of-coal/

The driving forces behind the modernising of the Royal Navy's ocean-going cruiser fleet came not just from within the British Isles but from the outposts of its Empire as well. The expansion of Germany's 'risk fleet' and *Pax Germanica* ambitions had both direct consequences for imperial security and trade, in the form of powerful surface raiders – whether naval or auxiliary – but also indirect effects. For whilst the Britain's superiority might be challenged in home waters by Germany, other nations might launch their bids for regional dominance at the expense of Dominions. Britain's diplomatic response to this challenge, for instance with the 1902 Anglo-Japanese Treaty, was not always met with approval in the Empire. Nicholas Tracy has written that '. . . German destruction of Britain's Navy would have posed a very real danger to Canada's worldwide maritime trade and left Canada vulnerable to American ambition'.[115] The closure of the Royal Naval Dockyard at Esquimalt in March 1905, as part of Fisher's refocusing of resources on home waters, was met with dismay in many quarters, and two years later, as the Admiralty pondered the idea of a new cruiser for imperial service, the Canadian Deputy Minister of Labour and future Prime Minister, William Lyon Mackenzie King, recorded in his diary strong opposition to President Roosevelt's suggestion that the U.S. Navy's 'Great White Fleet' should visit Vancouver, stating he did not think it "desirable that we should encourage a sentiment of dependence on the United States or [help] to strengthen the annexationist feeling in the west . . . if there was to be any fleet in our waters we would prefer to have the British fleet".[116] Such concerns lay behind Canada's drive to form her own navy but the cruisers available to the Canadians – for the east coast the 1897 vintage *Diadem* class protected cruiser *Niobe*, theoretically capable of 20 knots, and the still older, smaller and slower second class cruiser *Rainbow* for the west – demonstrated the shortage of fast, modern cruisers for Britain itself, let alone its Empire. It may be of note than when war broke at in August 1914, *HMS Newcastle* was alongside at Esquimalt, a reassuring presence for the local populace.

The proposal for new cruisers in the summer of 1907 came in the immediate aftermath of the Imperial Conference of April to May of that year. The widening of dominion status and discussions of both Irish Home Rule and Indian self-government were indicative of the new Government's liberal credentials, which under Campbell-Bannerman until his death in April of the following year, and in the influence of cabinet members such as Lloyd George, lay more in the direction of social imperialism, a policy aiming to create a co-operative Empire of (near) equal partners, united in values of democratic and social reform, as well as free trade, in which the costs of defending Empire could hopefully be shared.[117] The rejection of imperial preference in favour of an ongoing commitment to free trade at the conference, together with discussions amongst the military delegations of a greater co-operation and sharing of

[115] N Tracy, *A Two-Edged Sword – The Navy as an Instrument of Canadian Foreign Policy* (Montreal: McGill-Queen's University Press, 2012), p.20.
[116] *Ibid*, p.24.
[117] For a detailed exposition of the imperial policies of the Liberal Government, see Robert Scally, *The Origins of the Lloyd George Coalition: The Politics of Social Imperialism 1900-1918* (Princeton: Princeton University Press, 1975); H C G Matthew, *The Liberal Imperialists* and B Semmel, *Liberalism and Naval Strategy*.

defence burdens amongst the Empire, heavily influenced the climate in which the *Bristol* class was conceived. Previously the Admiralty had been wary of independent navies in the Dominions, and certainly wished to limit their scope,[118] but pressure from the Dominion governments,[119] as well as the changing economic and strategic pressures, altered outlooks. The British naval delegation, led by the First Lord, Tweedmouth, had the strong support of Fisher in stressing to Dominion representatives the urgency of countering German challenges in home waters, and therefore looked to those Dominions to bear more of the financial burden in defence of the wider Empire and its trade. In advance of the August 1909 Imperial Conference on Defence, in a private and confidential letter from the Governor General of Australia, the Earl of Dudley, to the Colonial Secretary, the Earl of Crewe, the matter of cruisers for the proposed Australian Navy was raised: 'I am inclined to think that if Australia is to have a Navy of her own she had much better begin by having a few cruisers of a moderate size, on which she could train men in more or less the same way that they are now trained upon British vessels like the *Challenger*, the *Encounter* and 3rd Class Cruisers – and which would give her an opportunity of creating a small but properly constituted service'.[120] When delegates met in London four months later the *Bristol* class cruiser was offered by the Admiralty to the Dominions, although only the Australian Navy took up the design, in its 'improved' form.

The Director of Commonwealth Naval Stores and driving force behind the creation of an independent Royal Australian Navy, William Creswell, took an intimate interest in the fortunes of the new cruisers. He was a participant in the various conferences on imperial defence between 1907 and 1909 and influential in the promotion of the 'fleet unit' concept. In September 1909, as the first of the new cruisers, *HMS Glasgow*, entered the water, Creswell wrote to the Admiralty Secretary stating that as he was due to return to Australia shortly, he would be obliged to receive full technical specifications, as well as estimates of annual running costs and complement, of the *Bristols* as well as the 'new Indomitable', destroyers (Derwent) and submarines 'comprising the Fleet unit proposed for Australia'.[121]

The 'fleet units' proposed by Fisher arose, according to Nicholas Lambert, from an earlier proposal to replace:

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[118] In a meeting of the Committee of Imperial Defence as recently as 25 May 1906 Lord Tweedmouth had stated that if an Australian Navy were to be formed 'the Admiralty were very decidedly of opinion that such forces should take the form of ocean-going destroyers' (TNA, CAB2/2, CID Meeting, No.88).

[119] Whilst a Committee of Naval Officers of the Commonwealth recommended the coastal defence of Australia be the province of locally based destroyers, the crucial role of the protection of trade to and from Australia was best left to 'the Imperial cruiser squadron' (TNA, ADM 116/1100B, Appendices laid before the Colonial Conference of 1907, p. 365).

[120] Private and confidential letter from the Governor General of Australia to the Colonial Secretary dated 18 April 1909 in TNA, ADM 116/1100B, Imperial Conference on Defence of Empire Notes and Minutes, p.121.

[121] NMM, Woolwich, ADM 138/240, *Bristol* class Ships' Covers, f.385.

> 'the existing arrangement of strategically autonomous station fleets comprised of an assortment of elderly warships backed by one or two armoured cruisers [with] . . . "flying squadrons" based at strategically central locations that would be directed to meet specific threats. He insisted that the abolition of the station fleet system did not signify strategic retrenchment or abandonment of Royal Navy pretensions to global naval predominance. Fisher held that his new system, built upon highly mobile squadrons of new-model armored cruisers, or battle cruisers as they became known, not only would prove to be more affordable than station fleets but would also provide more effective protection for Britain's scattered interests. Fisher subsequently refined his ideas on this subject with the development of the "fleet unit" concept. Of course, the possession of battle cruiser-type warships was not an essential for the adoption of this strategic approach, but they were the ideal, having been purpose designed for this mission'.[122]

Despite his clear captivation by the battle cruiser concept (and his own prescience in arriving at it), Fisher's very use of the term '*fleet* unit' implied a combination of warship types operating in concert. That other vessels, potentially just as 'ideal', and more cost-effective, might be employed in protection of Britain's imperial and commercial interests, was accepted by both Fisher and Lambert in the extract quoted. In that sense, a fast, modern, wireless-equipped and well-armed light cruiser with good endurance – or rather the several that could be purchased for the cost of one battle cruiser – might suffice very well. In the case of the *Bristol* class and their successors, the ongoing scarcity of available battle cruisers for oceanic patrols, and the brief, if rather successful life of fleet units, from that centred on *HMAS Australia* in 1914-15 and *Invincible* and *Inflexible* in 1914, suggested that the light cruiser was to be an important agent of commerce protection in its own right. The ongoing requirement for an 'imperial policeman', as provided by the Navy as long as that Empire had existed, was not only shown in the continuing provision of a field gun for the cruisers but also in the retention of a contingent of 28 Royal Marines amongst the ship's crew to conduct armed interventions: the search or seizure of vessels at sea, and small operations on land, as exemplified by the destruction of the German wireless station at Nauru in the Pacific by 25 Marines and seamen from the *Town* class cruiser *HMAS Melbourne* in September 1914. [123]

In the event, as wartime experience showed, the concept of small but expensive fleet units, built around a battle cruiser, was the hammer to crack a nut. With the particular and pertinent exception of von Spee's East Asia Squadron, which itself was in the process of facing the realities of war and running the blockade back to German waters anyway, the Royal Navy was little troubled by German surface

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[122] N A Lambert, 'Strategic Command and Control', p.377. See also his 'Sir John Fisher, the Fleet Unit Concept and the Creation of the Royal Australian Navy' in David Stevens & John Reeve (eds.), *Southern Trident: Strategy, History and the Rise of Australian Naval Power* (Canberra: Allen & Unwin, 2001).

[123] See P G Pattee, *At War in Distant Waters – Britain's Colonial Defense in the Great War* (Annapolis: Naval Institute Press, 2013) Chapters 6 & 7 on the emergence and execution of a strategy for cruiser use in the destruction of German wireless telegraphy and cable communications assets overseas.

raiders after the first few months of war, and many of the ships intended for overseas duty, including the archetypal fleet unit vessel *HMAS Australia*, soon joined the Grand Fleet. As Brassey had feared, battle cruisers were too expensive, too few in number and too tempting to incorporate within the fleet for widespread oceanic employment. The German decision to concentrate its own battle cruisers in the North Sea settled the case. But an oceanic presence would still be necessary for a nation with a global empire, vast maritime trade and strong naval traditions. In an article penned by the editor of *The Engineer* in April 1908, entitled '*The Cruiser Problem*', the vexed question of quality over quantity was confronted head on:

> 'There is still a school of thought which insists that the vessel with moderate guns and moderate protection is the logical cruiser, even though paper demonstration of her utility may be difficult. There is one argument in connection with this school that is not often advanced, but which, none the less, has considerable potency, and that is, that however invincible any projected cruiser may be, it will never be long before something more recent comes along beside which she is relatively of small account. The school referred to would postulate as its first requirement, "numbers" - "numbers at all costs." It is, of course, patent that numerical superiority can only be secured by the sacrifice of invincibility to start with. Those who hold this view would, of course, argue that, given the necessarv numbers, so long as the cruisers possess guns sufficiently powerful to damage an enemy, combination will give them all other necessary superiority upon occasions when it is required. This line of thought has few exponents now-a-days, but there is probably more forceful logic behind it than appears at a casual glance'.[124]

Both Fisher's reductions in the foreign stations and the increasing improvements in speed, communications and endurance of potential naval and auxiliary opponents in foreign waters left the Navy stretched, and the arrival of the *Towns* yet more eagerly anticipated, especially by the Dominions.

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Planned expenditure of £2 million on the new *Bristol* class cruisers attracted scrutiny. Whilst the new Liberal government of 1906 was pledged to sustain the development of the *Dreadnought* programme as inherited, there was also a commitment to reduce armaments expenditure wherever possible. The number of capital ships in the 1906-07 and 1907-08 Programmes was reduced from four to three and the reluctant 'economist' members of the cabinet, especially Churchill and Lloyd George, were only persuaded to include a battleship as well as battle cruiser in the same 1908-09 Programme as the *Bristols* on the basis that it was vital to maintain Britain's armaments and shipbuilding capacity in the face of the German threat. As late as 6 February 1908 Lloyd George, as President of the Board of Trade, visited the Board of Admiralty and requested a freezing of the overall Naval Estimates due for publication

[124] *The Engineer*, 17 April 1908, p.399.

within a month, in effect reducing the amount requested by £1,300,000. Whilst various means to accommodate this request were discussed, the cruiser programme was held to be sacrosanct. In December 1907 Their Lordships drafted a powerful rebuttal of any attempts to trim the forthcoming Naval Estimates, given the German threat. The proposed *Bristol* class were 'imperatively needed to replace the older cruisers which are now entirely lacking, from age, in the primary requisite of speed. The [improved] "*Boadiceas*" have been designed to meet the requirements of high speed (25 knots) and large fuel endurance on a moderate displacement and comparatively moderate cost (£400,000), and beside fulfilling war requirements in a most important particular, they also are admirably fitted for general peace service.'[125] A copy of this document was read *verbatim* by the First Lord during the subsequent Estimates debate.[126]

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On 1 August 1909, as *HMS Glasgow* neared her launch, Admiral Fisher wrote to Lionel Yexley, editor of *The Fleet*, from the Royal Yacht. In the letter he applauded *The Observer* for 'recommending the '*Indomitable*' type for colonial imitations, and not the small Beresfordian cruisers'.[127] Given the very public nature of the feud that had ensued between the First Sea Lord and Beresford, most would have appreciated the sheer contempt that lay behind the Fisher's choice of adjective in describing such cruisers. Yet as with other aspects of Fisher's 'naval revolution', the reality underlying the rhetoric was of a very different order. Whilst it may have suited Fisher's present, deterrent purpose to enlarge upon the virtues of the battle cruiser, in part by deriding the qualities of the medium-sized cruiser, we should be cautious in drawing too many conclusions from this. Popular newspaper journalism and the rapidly advancing 'art' of advertising were not worlds unknown to Fisher,[128] and he was perfectly capable of exploiting them, to his own benefit but especially to the good of his Service, as he saw it. There is more than a little irony in the fact that the Fisher Era, so closely associated with the transformation of the battleship, the destroyer and the submarine and the introduction of the battle cruiser and aircraft to the fleet, should also have ushered in a new and influential cruiser type. Yet there were many men, both within and outside the Navy, who despite Fisher's reluctance, had the prescience to recognise that ships such as the *Bristol* class, a modern cruiser for a modern fleet, were well placed to exploit the technological advances of the period and sufficiently adaptable as to be of utility in a climate of rapidly changing strategic and tactical requirements. The navy's faith in the new cruiser design was borne out in the line of repeat orders which followed, firmly establishing the 'light cruiser' in the fleet's inventory, from the re-designation of the *Towns* and scouts in 1913. Under Jackson and Jellicoe as Controllers, the

[125] NMM, May Papers, MAY/9/1, 'Building Programme, 1908: Notes for First Lord for Estimates', Dec. 1907.
[126] NMRN, Tweedmouth Papers, MSS 254/924/10, Memorandum by the Sea Lords for the Information of the First Lord
[127] Fisher to Yexley, letter dated 1 August 1909 in Marder (ed.), *FGDN*, Volume II, p.258.
[128] For a detailed exploration of the connection between naval developments and society at large see J Rüger, *The Great Naval Game: Britain and Germany in the Age of Empire* (Cambridge: Cambridge University Press, 2009).

five *Bristols* of the 1908 Programme were followed by four *Dartmouths* in 1909, six *Chathams* in 1910 (three for the RAN) and four *Birminghams* in 1911 (*Adelaide*, the second *Town* to be constructed at Sydney's Cockatoo Yard, was not completed until 1922, but following a major refit in 1938-39, served in her Australian home waters throughout the Second World War). Only in late 1911 did the focus of the Admiralty's light cruiser procurement shift considerably and rapidly.

Opinions remain divided on the rationale behind the construction of the 1908 cruisers. In a provocatively titled paper delivered to a Conference on the Study of British Maritime History in 1981, Bryan Ranft concluded on the failure of the Royal Navy and Merchant Marine to co-operate in plans to counter the predations of commerce raiders in wartime: 'Neither [Navy or mercantile community] really believed that attacks on trade would be decisive. The Navy was convinced that its destruction or blockade of the enemy's naval forces would solve all problems'.[129] Hence, a prime driver of the *Town* design was the need to meet the threat of German light forces in *home* waters. Despite this, in describing these ships as *Edgar* replacements and incorporating them within fleet units, succour was offered to Fisher's many critics, who complained that the general utility of the traditional cruiser type and its oceanic potential had been forsaken. In terms of their public relations value, the *Towns* also came at an important time – reassuring a British citizenry that the Royal Navy had not lost interest in keeping the world's trade routes and the Empire safe, however misjudged it felt the allegations to be. German '*Towns*' would be trumped, the citizens of Bristol, Glasgow, Newcastle, Gloucester and Liverpool reassured, and their fears for cheap food and imperial prestige assuaged.

[129] B Ranft, 'The Royal Navy and the Mercantile Marine, 1860-1914: Partners in Ignorance' in S Palmer S & G Williams (eds.), *Charted and Uncharted Waters: Proceedings of a Conference on the Study of British Maritime History* at Queen Mary College, London, 8-11 September 1981 (London: National Maritime Museum, 1981), p. 214. If the arguments expressed by Nicholas Lambert in his *Planning Armageddon* are correct, then the application of a dramatic and comprehensive economic stranglehold on Germany by both naval and financial means at the commencement of war would have left the Admiralty with few concerns for the long-term consequences for British trade and insurance rates associated with the deprivations of German commerce raiders. Opinion remain divided on this interpretation of the evidence.

Chapter 6 – The Expansion of Light Cruiser Procurement, 1911-14: The Rise of the '*Super-Active'*

By 1911 a measure of normality had returned to cruiser procurement, with three types – the battle cruiser, second class cruiser and scout – under construction. But the earlier hiatus in light cruiser building continued to have serious consequences: 'the situation . . . was far from satisfactory, because only the second class cruisers of the *Town* Classes were a suitable counter to German cruiser construction, and these were not being built in sufficient numbers to fulfil the requirements of the Fleet'.[1] In the view of successive Chiefs of the new Admiralty War Staff in Ernest Troubridge and Henry Jackson, as well as naval planners such as George Ballard and Herbert Richmond, the *volte face* of the new First Lord from October 1911, Winston Churchill in abandoning the second class cruiser for an upgraded, 30 knot scout was only likely to exacerbate the issue.[2] An average of almost five *Towns* a year had been ordered between 1908 and 1911, taking the eventual total to nineteen. The final variants, the *Birminghams*, topped 6,000 tons and mounted nine 6in guns, straining the best efforts of Controllers to meet the many and varied calls for cruisers, the wide range of qualities they must thus possess, and all to budget.[3] Unable to adopt the more holistic approach of the German Navy,[4] the Admiralty struggled to develop a coherent and consistent cruiser policy to co-ordinate with a rapidly modernising and diverse fleet. Despite ongoing concerns as to the German commerce raider threat, it was not until 1915 that Jackson as First Sea Lord could look beyond immediate North Sea requirements once more and order five '*Improved Birminghams*', the *Hawkins* class.[5]

Churchill was not short of advice on future cruiser policy on taking up his post as First Lord, and he was persuaded, to a degree, by 'Big Principles No.1' of his friend and mentor Fisher,

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[1] Alan Raven & John Roberts, *British Cruisers of World War Two* (London: Arms & Armour Press, 1980), p.16.
[2] Those concerns, and the wider debate over cruiser requirements, are dealt with in Chapter 7.
[3] As Controller, Jellicoe had instructed those tendering for contracts for the previous *Chatham* class that total costs 'must not exceed £350,000 per vessel' but an extra 6in gun and other improvements forced up the cost of the *Birminghams* once more. (NMM Woolwich, ADM 138/257, *Melbourne* Ship's Covers, 6 Aug. 1909, f.4).
[4] Germany chose to develop light cruisers with the capacity for scouting, leading flotillas and overseas service in a single design. Similarly, German torpedo-boat destroyers were 'always regarded as part of the battle fleet' (Gardiner, *Fighting Ships, 1906-21*, p.156 & 164). Obviously, the Admiralty's needs were very different from those of the German Navy, and lack of specialisation had its drawbacks, but this did not stop comparisons being drawn, not least by Churchill himself. (See UoS, Mountbatten Papers, MB1/T49/36, minute from Jellicoe to Churchill, n.d. but 1914, on comparison of British and German war fleets by 1920, enclosing list of British light cruisers).
[5] In fact, with their 7-7.5in main armament, up to 3in armoured belt, anti-torpedo bulges and considerable propulsion capacity, offering speeds in excess of 30 knots, the *Hawkins* class doubled the *Birminghams'* tonnage. The incorporation of further design influences from the *Courageous* 'light battle cruisers' and the *Ceres* class light cruisers may account for the somewhat hybrid and aberrant design trend of these vessels.

namely 'ALL armoured ships to be OVER 30-knot speed'.[6] By late 1911 no British light cruiser could maintain station with the new, 29-knot *K* class destroyers. Many German destroyers could reach 30-33 knots but were smaller and less seaworthy, so generally comparable in speed with their new British counterparts, and the concept of a 30-knot, oil-fuelled 'super-scout', mounting twelve 4in guns as a 'destroyer killer' captured Churchill's personal interest and vivid imagination.[7] At the same time, no British light cruiser could keep pace with the fleet's latest battle cruisers, which not only reduced the ability of the large ships to locate the enemy but exposed them to greater danger of interception by superior German forces whilst patrolling the North Sea.[8] Churchill's decision to shift from battle cruiser construction to the 25 knot, *Super-Dreadnoughts* of the *Queen Elizabeth* class in the 1912 Programme placed further demands on the light cruiser. As C-in-C Home Fleet until December 1911, when he succeeded Arthur Wilson as First Sea Lord, Admiral Sir Francis Bridgeman was an advocate of a heavily armoured and armed, fast battleship, capable of concentrating superior fire on the van of an enemy's battle line as Togo had done at Tsushima, as was the Controller, Rear Admiral Charles Briggs. Whilst both men suggested that ordering of the new battleship design should await testing of trials of a 15in gun, Churchill pressed ahead, declaring '[R]isks have to be run in peace as in war, and courage in design now may win a battle later on'.[9] That risk focused on 'the decisive military advantages inherent in the creation of a fast division of vessels of maximum fighting power', capable of being refuelled by oil tankers at sea and thus of long endurance, avoiding the submarine 'menace' lurking near coaling stations.[10] That a fast scouting capacity for the 'fast division' was needed, both to locate the enemy and intercept

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[6] A J Marder (ed.), *FGDN,* Volume II (London: Jonathan Cape, 1956), p.436, letter dated 5 Mar. 1912.

[7] The urgency and involvement of Churchill are apparent throughout the *Arethusa* Ships' Covers (NMM, ADM 138/286). Though arriving at the Admiralty with a reputation for curbing naval expenditure, the Agadir Crisis of April 1911 had been 'a pivotal moment' for Churchill, according to Richard Toye. In July 1912 Lloyd George complained about the First Lord's 'blasted ships . . . Winston is Navy mad' (Toye, *Lloyd George and Churchill: Rivals for Greatness*, Basingstoke: Macmillan, 2007, p.87 & 91).

[8] So great was the concern about the lack of light cruiser scouts for armoured and battle cruisers that the Chief of Staff, Troubridge, suggested the removal of all scouts from destroyer flotillas, their rearming and upgrading with oil-fired boilers, and reassignment to Battle Squadrons and armoured cruiser formations. He posited that the advent of German battle cruisers meant that armoured ships could 'no longer be dispersed on the principle previously laid down that they could run from a more powerful vessel or keep it in sight without fear of capture. They require scouts, as do the Battle Squadrons, and these small and comparatively weak vessels are suitable for the purpose on the general principle of concentrating strength and dispersing weakness' (TNA, ADM 1/8273, part of 13384, Admiralty: In-Letters and Papers, Jul.-Aug. 1912, memorandum dated 31 Jul. 1912, in response to the proposed forming of a committee chaired by Rear Admiral Bayly on the rearming, conversion to oil and future of flotilla scouts).

[9] Quoted in Churchill, *The World Crisis, 1911-1918* Vol. 1 (London: Thornton Butterworth, 1923), p.96.

[10] Churchill's comments on the Navy Estimates of 1914-15, quoted in R S Churchill (ed.), *The Churchill Documents, Vol.5, At The Admiralty, 1911-1914*, p.1822.

possible torpedo attacks, was seen as essential by Bridgeman. Commenting on the *Queen Elizabeth* design, he felt secondary armament was unlikely to ward off longer range torpedo attacks, and instead believed 'the money and weight might be better expended on the hull underwater [as in armoured bulkheads and better internal subdivision] and in adding to the number of our own small craft'.[11] In late 1911 Briggs was asked to consider the best type of vessel suitable for such a role, which would then be destined for inclusion in the fast division.[12] His deliberations would change the direction of light cruiser procurement, and engender the opposition both of Fisher and advocates of the second class cruiser such as Jackson, Jellicoe, Ballard and Richmond, who leant upon historical precedent and the insight of Corbett's *Some Principles of Maritime Strategy* (published that year) alongside operational experience to argue their case.[13]

* * *

Both Morris and Gardiner refer to the procurement of the *Arethusa* class light cruiser of 1912 as the outcome of deliberations of a 'Cruiser Committee', established by Churchill in late 1911 to discuss the comparative merits of a large, 37-knot destroyer design favoured by Fisher, the '*Super-Swift'*, and a 30-knot light cruiser favoured by the Controller and other so-called 'cruiser admirals', a faster variant of a late scout design or '*Super-Active'*.[14] However, evidence would suggest that other than the usual procurement sub-committee chaired by the Controller to discuss future requirements, no such formal committee existed.[15] Lists of Admiralty committees from the period make no mention of cruiser considerations until May 1912 and the formation of a Committee on the Design of Cruisers for Foreign and Colonial Service chaired by Sir Francis Hopwood (detailed in Chapter 7).[16] It is possible that this committee was mistaken for an earlier sub-committee, as no mention of a full-blown Cruiser Committee to investigate the fleet's wider requirements is to be found amongst Churchill's papers of late

[11] NMM, Woolwich, ADM 138/294, *Queen Elizabeth* Ships' Covers, f.49, Bridgeman to Churchill, 25 Nov. 1912, quoted by Nicholas Lambert, 'Admiral Sir Francis Bridgeman-Bridgeman' in Malcolm Murfett (ed.), *The First Sea Lords: From Fisher to Mountbatten* (Westport, CT: Praeger, 1995), p.61.
[12] The 'fast division' concept remained in Churchill's vocabulary and Fisher's operational thinking. On 9 March 1915, Churchill informed Jellicoe that as part of a plan to seize Borkum, a 'fast division' comprising the *Queen Elizabeths, Lion* class battle cruisers, the *Arethusas* and *M* class destroyers would enter the Baltic to contain the High Seas Fleet and cut Germany's trade with Scandinavia. (See BL, Jellicoe Papers, Vol. 2, Add. MSS 489990)
[13] Andrew Lambert has argued convincingly that the Admiralty's approval of the draft of *Some Principles*, and Corbett's friendship and correspondence with key figures there, points to the very practical influence that the book was intended to have on matters such as future procurement. See his 'The Naval War Course'.
[14] Morris, *Cruisers*, p.136 and Gardiner, *Fighting Ships, 1906-21*, p.55.
[15] I am indebted to Dr Norman Friedman and Andrew Choong of NMM Woolwich for their assistance in reaching this conclusion.
[16] See TNA, ADM 1/8222, Admiralty In-Letters and Papers, Nov.-Dec 1911, Lists of Committees.

1911 on Admiralty business, and in January 1913 Henry Jackson, as Chief of Staff, wrote to First Sea Lord Prince Louis of Battenberg precisely 'to point out that a review of [the] cruiser question has been frequently asked for by the War Staff, and as frequently postponed'.[17] What is clear is that a bitter repetition of earlier debates over the place of small cruisers in the Admiralty's overall naval policy did occur, and has been depicted as a 'committee' of rival views in later interpretations. In favour of a light cruiser option, of as large a size and heavy an armament as speed demands would allow, were Briggs, the First Sea Lord Wilson (until his enforced retirement in December), many senior figures under Jackson at the Naval War College as well as officers such as Ballard and Richmond (destined for service in the soon to be formed Operations Division of the War Staff) and Jellicoe, who was about to take command of the Second Battle Squadron of the Home Fleet.[18]

On the other side of the debate, as firmly entrenched in his views as ever, stood Fisher, who could claim the attention of the First Lord even from a very active retirement. In an excoriating and revealing letter to Churchill as the 1912 Estimates were announced he wrote:

> 'I fear I can't agree with you in the substitution of 8 'Super-Actives' for 'Swifts'. *It's money chucked away!* The 'Super-Swift' has a mission that a 'Super-Active' cannot fulfil. You might as well ask a cabbage to be a violet! The 'Super-Actives', with only their 30 knots and small size, which will instantly cause their speed to lessen in any sea whatever, will be all gobbled up by an armoured cruiser, like the armadillo gobbles up the ants – puts out its tongue and licks them up one after another – and the bigger the ant, the more passive the digestive smile! You are making an awful mistake. Your first impulse of the 'Super-Swift' was Heaven-born! B.M.G. [Briggs must go] *Aviation* is the 'Super-Active'! Of all the damnable follies ever perpetrated, nothing compares with the small cruiser! ARMOUR IS VISION!!! The 'Super-Active' can't push home a reconnaissance. They must flee for their lives – but they can't escape with 30 knots. The 'Super-Swift' with 40 knots [*sic*] *can*, but her mission is to back up the submarine, not do what aviation can do better'.[19]

[17] UoS, Mountbatten Papers, MB1/T23/181, minute dated 23 Jan. 1913.
[18] Briggs was cited as the instigator of the *Arethusas* by Fisher in a letter to Churchill, as quoted above. Wilson had invented the A-K fleet cruiser scouting line and remained a firm advocate of its use. Jackson, Ballard and Richmond remained harsh critics of the lack of cruiser building by the Admiralty (see MB1/T23/181, previously cited) and Jellicoe was singled out by Churchill for producing a report favouring the *Arethusa* design 'which greatly influenced me' (letter to Fisher, 9 March 1912, R S Churchill (ed.), *The Churchill Documents, Vol.5*, p.1526-7).
[19] Letter dated 5 March 1912, quoted in Marder (ed.), *FGDN*, Vol. II, p.436-7.

Fisher's ongoing contempt for the light cruiser could not have been more clear: his predictions on the effective speed of the *Arethusas* were to prove correct but his faith in the efficacy of aviation and the submarine was premature, and his focus upon the reconnaissance role of the new ships whilst ignoring their designed capability to counter German destroyers was questionable.[20]

Fisher's views had their adherents, including the Assistant Director of Torpedoes, Captain Edward Charlton.[21] The advent of the heater torpedo (introduced to the fleet in 1907), with its increased range, and the potency of larger torpedoes, such as the 1910, 21in type, had given the Admiralty pause for thought about the implications of a massed German torpedo boat attack on their line of battle. Whilst Nicholas Lambert may be overstating his case somewhat in writing that 'Before 1910, nearly every senior British admiral believed that except for a couple of small cruisers for signalling, the battleships alone would participate in fleet actions. Cruisers and destroyers, they felt, had no role to play in fleet actions',[22] the issue certainly became a matter of urgent debate in 1910. In a letter to May, the C-in-C, Home Fleet, his subordinate, Rear Admiral Doveton Sturdee, warned that if urgent schemes were not undertaken to repulse 'the possibility of a Destroyer Attack on [the] Battle Fleet by day . . . the ships of the Fleet may be exposed to serious danger'.[23] Both Bridgeman and Jellicoe felt that upgrading the secondary armament of battleships to deal with this danger would be costly and problematic, as sighting for main armament could be affected and the range of a 6in gun would be required to provide a margin of safety from torpedoes: destroyer screens seemed the better option.[24] However, such an option posed the subsidiary problem of whether the battle fleet flotillas, which would, of necessity, be comprised of the fastest and most modern destroyer types, should be led, coordinated and protected by a scout cruiser, as was the practice elsewhere in the fleet. Nicholas Lambert has suggested that the key reason underpinning the Admiralty's decision to build a

[20] Heavily weather dependent and with restricted signalling capacity, the reconnaissance value of British submarines and aircraft at Jutland four years later was still limited. Light cruisers (of both fleets) were responsible for the initial contact between forces. See William Schleihauf (ed.), *Jutland: The Naval Staff Appreciation* (Barnsley: Seaforth, 2016) on aviation (p.54-55), submarines (p.189) and light cruiser contacts (p.47-53).

[21] Dating back to Fisher's 1904 warship design manifesto, *Naval Necessities*, a lobby of naval officers such as Charlton continued to press the idea of a fleet of super-destroyers after Fisher left the Admiralty in 1910. Friedman (*British Destroyers*, p.104-106) mentions Charlton's advocacy of a 'cruiserette', like *Swift*, large enough to attain at least 34 knots, remain a lookout in bad weather and carry Mk I* wireless equipment. In January 1911 Briggs remained sceptical of Charlton's claim that two super-*Swifts* could be built for the price of one light cruiser. Similarly, the enthusiasm of *Swift*'s first CO, Captain John Dumaresq, for such designs to work alongside battle cruisers was not shared by the Controller. (NMM, Woolwich, ADM 138/217A, *Swift* Ship's Cover, DNC letter to Controller, and comments, January 1911).

[22] Lambert, *Naval Revolution*, p.216.

[23] NMM, May Papers, MAY/9/1, letter dated 27 April 1910, 'Remarks on Tactical Exercises'.

[24] TNA, ADM 1/8367/27, G01512/12, 'Anti-Torpedo Boat Armament of Capital Ships'

high-speed version of the scout was its capacity to mount a 6in gun, which 'could not only shoot further, but practical trials had shown that a single 6 inch shell would effectively wreck a modern destroyer'.[25] That early designs for the *Arethusas* proposed the mounting of ten (or even twelve) 4in guns appears to call this interpretation into question.

The markedly more hostile environment for naval operations in the North Sea by 1912 would require a great deal of the vessels that would serve effectively there. In May 1910, the Home Fleet's Captain (D), Edwyn Alexander-Sinclair, had reflected upon the need for new scout designs and the multiple roles which they might perform: 'As regards warding off destroyer attacks, Scouts would undoubtedly greatly assist . . .but in my opinion Scouts attached to a battle fleet could [also] be of great use to scout just previous to an action after the enemy has been located by the Cruisers and the latter have retired out of the way'.[26] Lack of experience in integrating light cruisers within the fleet, as well as the stuttering development of the type since 1904 (and thus its insufficiency of numbers) did not aid clarity of thought. Was the light cruiser still a 'mother ship to destroyers', a 'destroyer of enemy destroyers', a constituent of mid-North Sea patrol lines, an adversary for the light cruisers now leading German light forces and scouting groups, or the 'eyes of the fleet' as a whole, more likely to be working in association with battle cruisers now that armoured cruisers were ever more likely to be 'retired out of the way' to a safe distance from primary scouting duties? For the new First Lord, whose first public speech in November 1911 expressed the hope that 'the high-water mark' of naval expenditure had been reached,[27] the prospect of a £285,000 vessel that might fulfil *all* of these requirements was sufficiently tempting to warrant incurring the wrath of his friend and informal naval adviser, Fisher. Churchill was particularly fond of the classification 'light armoured cruiser' for the *Arethusas*, as both speed and resilience were suggested, although the generic nomenclature of 'light cruiser' was adopted in 1913.[28]

[25] Lambert, *Naval Revolution*, p.217.
[26] NMM, May Papers, MAY/9/1, letter to Vice Admiral Sir Berkeley Milne, commanding 2nd Division, Home Fleet, 1 May 1910. It would be Alexander-Sinclair's 1st Light Cruiser Squadron, comprising three *Arethusas* and one improved *C* class light cruiser, that would intercept the German High Seas Fleet at Jutland.
[27] Christopher Bell, *Churchill & Sea Power* (Oxford: Oxford University Press, 2013), p.16.
[28] NMM, Woolwich, ADM 138/286, *Arethusa* class Ships' Covers, f.93, 'Class Designation of Small Cruiser of the 1912/13 Programme' dated 9 March 1912 is a note from the Controller to other Sea Lords to the effect that he had been informed by the First Lord that the third class cruiser of the 1912/13 Programme would now be designated 'light armoured cruiser'. The term 'battle cruiser' appears in the Admiralty Board Minutes from 12 December 1911 (TNA ADM 167/45). The dropping of the term 'scout' assisted the Admiralty in countering complaints about modern 'cruiser' numbers.

In a response to Fisher's criticisms of the *Arethusa* concept, Churchill was well briefed by both Briggs and Jellicoe.[29] He wrote, 'These vessels are intended primarily for service with the battle-fleet as destroyer-destroyers as well as scouts and patrols. In the last character they have many points of superiority over the Super-Swifts: they have better observation platforms, stronger batteries, larger radius of action,[30] and are much less likely to lose their speed in a seaway . . . They are also cruisers and count as such: there is no flotilla they cannot break up, and no flotilla-cruiser they cannot go round'. As a nod of deference to his correspondent, Churchill added, disingenuously, that 'It is perfectly possible, if desired, to add something to their speed' but that his mind was made up on the design.[31]

* * *

The *Arethusa* class (see Appendix 6) of eight, 4,400 ton (deep load) vessels arising from this procurement debate were to set the standard for a rapid expansion in smaller, fast, home service cruisers, and some 28 *C* class and 8 *D* class ships, as well as two, more expanded *E* class cruisers – all built to an evolving but similar design – had been procured by the war's end. Eight *Arethusas* were followed by eight *Calliope* class light cruisers of the 1913 Programme and four *Cambrian* and two *Centaur* class cruisers in 1914. Undoubtedly, growing concerns over the threat posed by the German Navy in the North Sea served to prompt action, as with other types in the fleet. Between 1910 and 1911 the Germans laid down six new light cruisers in the 4,500 to 6,000 ton range,[32] all turbine-driven to a speed of 28 knots, and well-armed. More were to follow, as the High Seas Fleet adopted not only light cruiser scouting groups but also large torpedo boat flotillas led by such fast, modern cruisers.

The pace of technological advance also influenced the procurement of the *Arethusas*. Although the last of the *Scouts*, *HMS Fearless*, was not laid down until November 1911, her largely coal-powered turbines delivered only 16,000 SHP and a maximum speed of 25 knots, up to 6 knots less than the new *K* and *L* class fleet destroyers she was expected to lead. By adopting oil fuel

[29] Letter dated 9 March 1911 quoted in R S Churchill, *The Churchill Documents*, Vol. 5, pp.1526-7.
[30] NMM, ADM 138/286, *Arethusa* class Ships' Covers, f.32-33 show a comparison of the ranges of the *Super-Swift* and *Super-Active* drawn up at the request of the DNC: the former had a range of 2,400 nm at 16 knots and the latter 4,400 nm at 15 knots.
[31] This instance appears further to refute the claim of Nicholas Lambert in *Naval Revolution* that Churchill was a 'proxy' for Fisher as First Lord, intent upon completing his technological revolution chiefly via radical employment of flotilla defence and battle cruisers. In fact, 1912 saw the demise of both the '*Super-Swift'* design and a halt to battle cruiser construction. (See Christopher Bell, 'Sir John Fisher's Naval Revolution Reconsidered' and 'The Myth of a Naval Revolution by Proxy' for the origins of this debate).
[32] These were four *Magdeburg* and two *Karlsruhe* class cruisers, armed with ten 10.5 cm guns.

only, and two, fast-running turbine engines of the destroyer type,[33] the *Arethusas* were able to generate 40,000 SHP, two-and-a-half times that of the scouts, and attain a speed in excess of 28 knots. Without coal bunkers to provide vertical protection, a novel 2in high-tensile steel armoured belt ran longitudinally along the ship, offering strength to the double-bottomed hull and a more streamlined hull form, enabling Churchill, to advertise the class to a sceptical Commons as the aforementioned 'light armoured cruisers'.[34] Larger boilers and geared turbines were tested in *Calliope* and *Champion* of the subsequent class, further improving performance. The move to oil fuel created its own technical challenges: practical fuel capacity was reduced to 810 tons and on 19 March 1913, concerned at the scarcity of light oil fuel for the *Arethusas* and *Queen Elizabeth* class battleships, Churchill pressed Rear Admiral Gordon Moore, the Controller, to accelerate trials on heating apparatus for the ships to reduce fuel viscosity prior to ignition.[35] Additional cruising turbines were fitted in six of the original class, increasing their range from 4,000 to 5,000 nm at 16 knots. Incorporating such an array of relatively new technologies into a single class of vessels was to cause inevitable issues during construction and service, but it also bore testimony to the urgency and flexibility with which the Admiralty, DNC and shipyards approached the task.

Interminable debates over the arming of the *Arethusas* and the subsequent *C* class cruisers take up many pages of the Ships' Covers.[36] Options for the *Arethusas* ranged from 10-4in breach loaders, to 12-4in quick firing guns for use in destroyer mêlées, to the eventual choice of single 6in guns fore and aft and 6-4in on the beam.[37] The arming of the subsequent *Calliope* class served to highlight the range of roles for which the ships were being considered. In November 1912 Churchill asked the DNO, Captain Frederick Tudor, to explore the armament options for the new class. In December Tudor responded by stating that the varied roles expected of the new light cruiser – attacking and dispersing destroyers, engaging multiple targets simultaneously on both beams, sinking or disabling destroyers with a single 6in shot or

[33] As pioneered in the Italian scout *Quarto* of 1911, which attained 28 knots.
[34] See the First Lord's introduction of the Naval Estimates, 1912-13, 18 March 1912 in Hansard, col. 1559, at https://hansard.parliament.uk/Commons/1912-03-18/debates/9fdb989b-a2f6-414f-bc5c-1f204b13b4a8/NavyEstimates1912–13?highlight=light%20armoured%20cruisers#contribution-016602fd-9262-4249-9d17-9e2ce4d6eb5d.
[35] NMM, Woolwich, ADM 138/286a, *Arethusa* class Ships' Covers, p.179.
[36] NMM, Woolwich, ADM 138/286, 303 & 307, *Arethusa*, *Calliope* and *Cambrian* class Ships' Covers respectively.
[37] In May 1913 Rear Admiral Gordon Moore succeeded Charles Briggs as Controller. Moore disliked the 4in gun, despite its rate of fire and ease of loading and laying, writing of the *Arethusa*s, 'armed as at present they are merely large destroyers and could not face a cruiser with one 6in gun. It is true that they could probably save themselves by running away but this is not desirable' (*Arethusa* Ships' Covers, Moore to DNC, Modification to Armament, f.107).

confronting enemy light cruisers at close or medium range demanded much of its armament.[38] Jellicoe was strongly against a mixed armament and the ranging problems it would cause, feeling an all-4in or all-6in battery preferable, but on balance the 4in option, 'because a small cruiser with 6in guns is tempted to fight instead of carrying out the duty of getting information and conveying it to the proper source'. David Beatty (Naval Secretary to the First Lord) proposed an all-6in armament which would enable the *Calliopes* to 'engage light heartily [*sic*] an enemy vessel of greater pretensions than the mere Destroyer and [be] a far more valuable fighting unit in consequence'. Churchill was of the opinion that 'Unless 6in guns are mounted the whole of this class will be looked upon as incapable of offering any resistance to her enemy's cruiser, even of the smallest type'. Such confusions spoke volumes as to the state of naval planning and the light cruiser's place within it. The outcome of the discussions, which saw 8-4in guns mounted forward and on the beam for use in advancing into destroyer actions and two 6in guns aft for fending off pursuing light cruisers was a compromise that satisfied no one. Only with the *Centaurs*, the last two light cruisers ordered before the outbreak of war, was a satisfactory complement of 5-6in guns on the centreline achieved, although the number of 21in torpedo tubes increased from two to eight tubes in wartime construction as the offensive capacity of the ships against larger targets was realised.[39] In part due to this trend, and a review of battle tactics, a scheme favoured by Churchill for a projected torpedo light cruiser, the *Polyphemus*, was abandoned in 1914.[40]

Following gunnery trials on board *HMS Falmouth*, her commander, Captain Percy Grant, submitted a detailed set of suggestion for design of future light cruisers, the original letter, together with responses from Admiral Sir Henry May and the Controller, being passed on to the DNC for consideration in producing sketches for the *Arethusas*' successors, the *Calliopes*.[41] The list, based upon the fulfilment of a multitude of roles for which the type might be suited, was extensive, but included: high speed; large fuel capacity; greatest possible volume of

[38] NMM Woolwich, *Calliope* Ships' Covers, ADM 138/303, f.15a-t, Submissions on Armament of Improved Armoured Light Cruisers, 16 Nov. 1912 to 7 Jan. 1913.

[39] By March 1913 more consideration had been given to the offensive potential of the new light cruisers and Battenberg, First Sea Lord, ordered a doubling in the number of the *Arethusas*' torpedo tubes, stating 'The loss of ¼ knot of speed can be accepted. I can quite conceive occasion when these very fast vessels could deliver torpedo attacks at night on a battle squadron or division, which could not be avoided or resisted.' (NMM Woolwich, ADM 138/286a, *Arethusa* Ships' Covers, f.169).

[40] See UoS, Mountbatten Papers, MB1/T37/361 and 362, memoranda by Vice Admiral Sturdee, 'What is the raison d'être of the polyphemus [*sic*] at the present time?' and 'What is the strategic and tactical value of a polyphemus?', both dated 24 July 1914. See Bell, 'Sir John Fisher's Naval Revolution Reconsidered', pp.352-3 for the context of this project.

[41] NMM Woolwich, ADM 138/303, *Calliope* class Ships' Covers, Controller's summary and response to *Falmouth* trials, G15578/13 f.3-4. See Appendix 8.

gunfire; largest possible gun; at least one long-range gun forward; maximum possible number of torpedo tubes, with the greatest possible output; stowage for aeroplanes, and light draught. As pointed out by Rear Admiral Briggs, the Controller, attaining all such attributes in a single vessel would be impossible to achieve, and for the time being it was felt that between them the *Towns* and *Arethusas* offered a satisfactory attempt to meet these requirements between them. Briggs concluded: 'It is therefore considered that the policy which has been adopted in the past, viz: building light cruisers of various sizes, powers, and displacement, is the one most likely to afford ships which, in the aggregate, will best carry out all the requirements that are expected from Light Cruisers'.[42] Many in the Admiralty would have agreed with the Controller's sentiments, whilst commenting that construction of the '*Super-Actives'* had *replaced* new light cruiser construction in the form of the *Towns*, not augmented it.

* * *

The publicly stated rationale behind the procurement of the *Arethusas* as opposed to new destroyers given in Churchill's March 1912 introduction of the 1912-13 Estimates is worth quoting at length, as it highlighted many of the core issues governing the place of the light cruiser in British naval policy at that date:

> 'The only novel feature in the minor programme is the small cruiser. If we had repeated the programme of recent years we should have built four "Chathams," [Later Towns] of about 5,400 tons, and one "Blonde [Improved Scout]." We have been considering, however, the cruiser problem as a whole. We observe that the "Chathams" grow larger each year, and that they tend, under the rivalry of type, to approach ever more closely to the armoured cruiser class of ten and fifteen years ago. This would be a very expensive development if it were to continue, and we are by no means satisfied that it is a development based upon a sound appreciation of naval tactics. Numbers also are very important in this sphere, and we propose therefore to hark back to smaller vessels and to build eight of these new light armoured cruisers instead of the four "Chathams" and the "Blonde" which have hitherto figured in our programme. I do not think the House would wish me to go too much into detail about the dimensions and qualities of these vessels—they are to be described as light armoured cruisers, and they will, in fact, be the smallest, cheapest, and fastest vessels protected by vertical armour ever projected for the British Navy. They are designed for attendance on the battle fleet. They are

[42] *Ibid*, f.4.

> designed to be its eyes and ears by night and day and to watch over it in movement and at rest. They will be strong enough and fast enough to overhaul and cut down any torpedo-boat destroyer afloat, and generally they will be available for the purpose of observation and reconnaissance.'[43]

The 'cruiser problem' related as much to the status and perceptions of the entire navy, and thus of the 'nation's shield', as it did to the raw ingredients of financial commitment and technical capacity. A fortune had been spent in creating an armoured cruiser force of 35 vessels from 1897 onward, and whilst the vessel still had utility on overseas stations, its effective employment in home waters required considerable caution. The advent of the battle cruiser had, seemingly, further lowered the stock of the 'pure cruiser' in the eyes of some, although arguments remained over whether the new ships were, in essential form and function, any other than this.[44] In 1912 Conservative opponents of the government, finding their voice in the Navy League and champion in Beresford, continued to bemoan the deficiencies of cruiser procurement at the Admiralty. However, within the Admiralty, there was also a significant body of opinion which considered the 'cruiser problem' had been but partially, rather than wholly, addressed by the First Lord.

Twelve days prior to Churchill's statement to the House on the 1912-13 Estimates, the Chief of the newly created War Staff, Rear Admiral Sir Ernest Troubridge, had submitted to him a confidential memorandum drafted as a result of an Admiralty War Staff meeting held the previous day. As will be discussed in Chapter 7, the Director of the Operations Division, George Ballard, and Henry Jackson, then commanding the Royal Navy War College, Greenwich, were responsible for the content of the memorandum.[45] The three-page document was entitled 'Future War Requirements in Respect to Cruisers' and set forth a strong argument for the centrality of a modern and substantial cruiser fleet within the nation's defence planning, both in home and overseas waters.[46] Troubridge opened by asserting that 'providing a sufficient

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[43] Hansard, 12 March 1912, as fn.34.

[44] For something of the historiographical debate on the inception of the battle cruiser see N A Lambert, 'Righting the Scholarship: the Battle-Cruiser in History and Historiography', *Historical Journal*, Volume 58, No.1, 2015, pp. 275-307.

[45] Whilst not as intellectually acute as these men, Troubridge was certainly aware of historical precedent and maritime theory. His letter of response to receiving a draft copy of Corbett's *Some Principles of Maritime Strategy* (1911) can be found in NMM, CBT/13/3 and Corbett's *Campaign of Trafalgar* (1910) certainly informed Troubridge's comments on the want of frigates in earlier conflicts. In July 1914 Richmond was to reaffirm his belief in aggressive cruiser tactics: 'direct attacks on trade . . . must be made by cruisers and other surface travelling [not submarine] vessels' (NMM, Richmond Papers, RIC/1/9, draft paper dated 1 July 1914).

[46] Memorandum dated 6 March 1912 in TNA, ADM 1/8272, Admiralty: In-Letters and Papers, March-June 1912. The document receives prominent mention in Cut 91 ('*Ships & Vessels General Policy and Building Programmes*') of the ADM 12 lists as dealing with general cruiser procurement and appears again in the First

number of cruisers to carry out the only general policy of war under which it is open to us to exercise pressure on any great foreign military Power is a matter demanding urgent attention.' Historical precedent, it was asserted, showed it to be 'a false policy to allow the proportion of cruisers, to ships of the line, to fall too low' and the modern expansion of seaborne trade and communications had made this an even more pressing concern. The import of the Chief of Staff's memorandum was to suggest nothing less than that without a substantial, modern and effective fleet of light cruisers, Britain's entire naval strategy was fundamentally flawed, and generally accepted 'principles' established in the previous century, which rested upon a 'recognised policy to aim at a cruiser force possessing a superiority of 100 per cent. over that of any possible enemy', were being eroded:

> 'Unless we possess enough cruisers to attack the enemy's mercantile marine and sea-borne commerce, after the necessary numbers have been detailed to watch his main fleet, we shall fail to make the most effective use of any supremacy we may possess in battleships. A battleship supremacy might confine the enemy's main fleet to its ports, but in so doing would neither in itself protect our own trade from fast individual vessels slipping out, nor injure the enemy's unless further steps were possible. If the hostile battle fleet refuses to come out, operations reach a state of comparative deadlock in which the enemy suffers less than we do ourselves, unless cruisers are available to proceed with the work of cutting off and seizing one of his main sources of wealth and national prosperity. If such cruisers are available, our battle fleet becomes the cover which renders their operations free from hostile interference. If they are not available, the use to which our battle fleet can be put becomes restricted as an instrument for compelling an enemy to accept our terms and agree to peace. A battle fleet is, in effect, a weapon for blockade or action; a cruiser fleet a weapon for protection of the battle fleet or of the lines of communication and trade routes in near or distant seas.'

The implications of this argument, greatly influenced by Corbett, were clear: the navy risked undermining British sea power if it did not provide sufficient capable, modern cruisers to translate the command of the sea won by the battle fleet into tangible results. A clash of cultures at the very heart of Admiralty policy was apparent, between the economic strictures and operational complexities of outwitting a formidable North Sea opponent, and a broader, if

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Lord's Miscellaneous Papers, 1911-14 (ADM 116/3381). It is also to be found attached to Admiralty instructions to the Director of Naval Construction for drawing up of designs for the successors to the *Arethusa*s, the *Calliope* class of the 1913 Programme, acting as an outline rationale for ongoing light cruiser procurement. (NMM, Woolwich, Ships' Covers, ADM 138/303).

perhaps more idealistic, vision of a global naval strategy, and the future of the cruiser was its focus.

The causes of the light cruiser procurement emergency, and thus of the threat to the nation's entire maritime strategy were, in the opinion of the War Staff, fourfold. Firstly, whilst traditional Admiralty practice, pragmatism and 'our rule of maintaining a numerical superiority in cruisers of all types' had pushed the navy to construction of very large and expensive armoured cruisers to counter similar French and Russian programmes around the turn of the century, this had been at the expense of light cruiser development – ignoring 'the axiom that cruiser operations call for large numbers and therefore for moderate size in the individual ships'. As well as the additional demands placed upon the existing cruiser force by the removal of older vessels under Fisher's reforms, 'the building of the smaller classes of cruisers entirely ceased for a period extending over nearly ten years'.[47]

Secondly, the willingness of the German Navy to invest in sustained light cruiser construction since 1898 had seriously challenged the fundamentals of British naval policy, just as significantly as the far more highly publicised and emotive *Dreadnought* race. NID figures suggested an ongoing commitment by the *Kaiserliche Marine* to procure a minimum of two new light cruisers annually, with a maximum twenty-year service life anticipated. Whilst the popular focus of reaction to Tirpitz's Third Novelle of 1912 may have been on the Imperial Navy's planned 'luxury fleet' of 49 battleships and 28 battle cruisers by 1920, there appeared many indications that political and service resolve in Whitehall, backed by substantial economic and engineering resources, would surmount the capital ship rivalry. However, in Troubridge's opinion, Germany's aim to create a home force of 30 fast, modern cruisers and eight large and ten light cruisers for 'overseas service' was worrying in the extreme, especially when the latter could be supplemented by a large number of auxiliary cruisers.[48] Similarly, only if the Royal Navy's Battle and Battle Cruiser Fleets could be adequately screened by light

[47] This claim was exaggerated, as it made no allowance for *Scout* construction, nor the *Topaze* class of the 1902 and 1903 Programmes. However, the latter comprised only four ships and the *Scouts* were not to be reclassified as light cruisers until the year following Troubridge's memorandum. Whilst it was accepted that a damaging hiatus in light cruiser procurement had recently, in part, been addressed (with the *Towns*), it was pointed out that the *Pelorus* class of the 1893 Spencer Programme (eleven vessels) had been the last substantive light cruiser commitment.

[48] Troubridge added that 'Some answer to this may perhaps be found in arming our own [mail steamers], but even if this is done the measure will be *protective* only unless carried to the extent which other Powers intend by commissioning these ships under the White Ensign as regular cruisers legally authorised to attack as well as defend. In any case they would be indifferent substitutes for proper ships of war.' Such views echo Battenberg's doubts in 1904 about the efficacy of armed merchant cruisers and service culture suspicions of civilian involvement in naval operations (See Cobb, *Preparing for Blockade*, pp.225-240).

cruisers – providing early warning of enemy formations and protection from the large number of cruiser-led German destroyer flotillas now entering service – would they be able to perform their deterrent or offensive function. By comparison, even Germany's new cruisers of moderate size were capable of oceanic endurance and threatening Britain's trade routes. The *Graudenz* class of that year had a maximum range of 5,500 nm – a figure estimated remarkably accurately by the NID, although the Admiralty continued to overestimate the Germans' ease of access to refit and coaling facilities, the quality of that coal, and their willingness to adopt oil fuel.[49] The Germans appeared to place greater faith in pursuing *guerre de course* tactics via these traditional cruiser means than through the use of novel technologies such as airships or submarines.[50] The influence of arguably unprecedented changes in marine technology in the past decade was, in the War Staff's opinion, particularly disadvantageous to the Royal Navy, in that it undermined its ability 'to maintain a cruiser preponderance at the level shown alike by history and theory to be necessary.' Statistics submitted by the DNI, Rear Admiral Alexander Bethell, to Churchill in late 1911 and influential in his urgent decision to review cruiser construction, were repeated in Troubridge's assessment. Assuming, on the German model, that the serviceable life of a cruiser was twenty years, 42 British cruisers would be lost to the fleet in the period 1912-20 compared to 14 German equivalents.

Year	British Cruisers attaining 20 Years of Service	German Cruisers attaining 20 Years of Service
1912	4	1
1913	7	1
1914	1	0
1915	6	1
1916	6	0
1917	7	3
1918	9	2
1919	1	2

[49] Whilst informed public opinion at the time of the report differed as to the true extent of German ambitions in disrupting global trade – Archibald Hurd's *German Sea-Power* (1913) being conciliatory and optimistic when set against the predictably dire predictions of Wyatt & Horton-Smith's Imperial Maritime League publication, *Britain's Imminent Danger* (1912) – the authors agreed on the growing capacity of Germany to do so, and the potential serious consequences for Britain and her Empire.

[50] Holger Herwig, (*'Luxury Fleet'* p.88) notes Tirpitz's reluctance in 1912 to adopt "dangerous" commerce-raiding tactics, in either expanding the use made by Admiral von Capelle of airships in the annual fleet exercises or expanding the role of the U-boat Flotilla and School founded in that year.

1920	1	4
Total	42	14

Whilst it was plain that the German cruiser fleet was far smaller than that of the Royal Navy to begin with, it was pointed out that Britain's commitments were truly global and thus the potential demands of her cruisers were multifarious. There was also concern at the withdrawal of vessels from 'proper cruiser work' to act as minelayers, in the case of seven of the *Apollo* second class cruisers, or to be reassigned as depot ships, such as *Venus* and *Arrogant*. Meanwhile, orders had been issued for no further maintenance to be carried out on cruisers such as the *Apollo* class *Brilliant* and *Scylla*, and *Pelorus* class *Proserpine*, despite their serving less than twenty years with the fleet (less than fourteen in the latter case). Such cost-saving measures were projected to continue in the 1912-13 Estimates and the forecast twenty-year lifespan appeared optimistic, in Troubridge's view, for much of the cruiser fleet. Cruisers in particular required a variety of attributes, including speed, manoeuvrability, seaworthiness and endurance, as well as providing an effective platform for observation and communications. Questions of light protective armour and substantive armament, including torpedo tubes and at least partial means of fire control, also added to the complexity of the type during a period of fast-paced innovation in all of these areas. Staying ahead of the competition in pioneering new light cruiser designs was as critical for the Royal Navy as in developing any other type, if not more so. For instance, the War Staff were only too aware that at the time of preparation of the *Future War Requirements in Respect to Cruisers* memorandum in March 1912, the cruiser fleet comprised just 14 turbine-engined vessels, five of these being scouts.[51]At the same moment the Imperial German Navy alone had in service ten turbine-engined light cruisers, with a further four due to commission before the end of 1912.[52] That the most recent German destroyer designs, such as the *V1* class of 1911, had attained 32 knots was also a grave worry when commanders were tasked with protecting the British fleet from massed flotilla torpedo attacks.

War Staff concerns over light cruiser procurement were compounded by the prospect of ongoing operations of lengthy duration in home waters in the event of war with Germany.

[51] The *Gem* class trials cruiser *Amethyst*, four *Boadiceas* and one improved *scout*, *Active*, and eight *Towns*.
[52] *Lübeck*, *Dresden*, four vessels each of the *Königsberg* and *Kolberg* classes and four *Magdeburg* class cruisers, of an equivalent size and capability to the *Chathams* then building and commissioned by the end of 1912. Advantageous though turbine power was, it should not be forgotten that *Dresden*'s sister, *SMS Emden*, caused considerable concerns for the Admiralty in 1914 although powered by triple-expansion engines. Superior Allied communications and intelligence, logistical support and quality of command and seamanship proved most significant in her destruction.

North Sea operations presented their own problems for the British battle fleet, not least rough seas and poor visibility, as well as difficulties of communication and navigation. The presence of German mines, airships, submarines, concern at sallies by fast battle cruiser groups and the shortage of secure anchorages for the British fleet along the East coast all added to the complications of maintaining any form of blockade – 'close', 'distant' or 'intermediate'.[53] In April 1910, at the urging of Jellicoe, then Controller, trials were conducted on the seaworthiness of the Navy's scouts following a number of reports of structural weaknesses in the ships. Commodore (Training) Edward Charlton monitored the performance of the scouts in a Force 5-6, fresh to strong breeze and 'short, steep sea' off the Firth of Forth.[54] The formation was reduced to 16 knots, as accompanying destroyers were shipping much water – the new *Tribal* class destroyer *Mohawk*, designed to attain twice this speed, suffering damage to her bridge and chart house in the process. The scouts themselves performed poorly, with the forecastle of *Pathfinder* and *Boadicea* frequently awash, forward guns unusable and other guns and torpedoes incapable of being laid accurately. Only the Armstrong-built *Adventure*, with her flared bow and long forecastle, remained relatively dry,[55] prompting grave concerns that the fleet might be effectively denuded of scouting and flotilla forces in any other than moderate seas, and thus rendered vulnerable. Jellicoe's staunch opposition to the building of large, fast destroyers, and strong advocacy of sturdy, capable, well-armed and long-range cruisers for fleet work and other North Sea operations are understandable in this context. In his report as C-in-C Red Fleet following the 1913 Naval Manoeuvres,[56] Jellicoe reserved his harshest criticism for the decision to remove cruisers from the flotillas and the overall lack of fast cruisers with the fleet. Amongst the roles allotted by Jellicoe to his light cruisers were: the interdiction of enemy destroyers making raids on friendly ports; the 'interruption of Atlantic trade', and vital scouting duties to facilitate 'the immense value of battle cruisers of the highest speed' and 'battle squadrons of superior speed to that of the enemy's fastest battleships.' The negative impact on the flotillas of the withdrawal of cruisers was felt immediately during the manoeuvres, affecting navigation, concentration of forces and creating circumstances in which 'communication between the flotilla and the Commander-in-Chief is very quickly lost.'

[53] See D G Morgan-Owen, 'An 'Intermediate Blockade'? British North Sea Strategy, 1912-1914', *War in History*, Vol. 22, No. 4, 2015, p.478-502 for a detailed account of the varying means adopted by the Navy to counter these challenges.
[54] NMM, Woolwich, Ships' Covers for *Scouts*, ADM 138/189b, f.169.
[55] It will be recalled that D K Brown described the sleek and modern Armstrong *Scout* design as 'the starting point for British cruisers after 1906.' (*The Eclipse of the Big Gun*, op. cit., p.55).
[56] TNA, ADM 116/3381, First Lord's Miscellaneous Papers, 1911-14, C-in-C Red Fleet, 1913 Naval Manoeuvres, Remarks.

Jellicoe had been forced to assign the battle squadron repeating cruisers to the flotillas, thus losing the ability to 'signal with any facility or rapidity' within the fleet, and he stressed 'The absolute necessity for the reintroduction of the flotilla cruiser.'

A prime concern for the War Staff in assessing cruiser numbers was that all recent War Plans assumed a substantial cruiser fleet when 'already it is difficult to find enough ships for the effective performance of the cruiser duties either in the revised War Plans or in those of recent years, which the new Plans are intended to supersede.' The cruiser cordons to intercept a potential enemy's trade (features of all such plans), as well as the patrols of cruisers on overseas stations to protect friendly shipping and hunt down commerce raiders were 'getting more and more attenuated' as 'close' had given way to 'distant blockade' and the number of movements of potentially hostile vessels had multiplied. In Troubridge's view, given current light cruiser numbers, it would soon become impossible for the navy to maintain an effective blockade of enemy ports, protect shipping on the high seas and conduct fleet work simultaneously, as envisaged by the plans – one or more roles must of necessity be curtailed: 'If we abandon our powers to exercise pressure by relaxing our cruiser policy, Germany will soon realise that the danger is becoming less menacing.'[57] Whether one advocated 'the global blue-water strategic ideas'[58] espoused by Sir Arthur Wilson until his effective removal as First Sea Lord in December 1911, or a greater concentration of effort by the fleet in home waters – and the likelihood was that *both* would be demanded of the Admiralty in the event of hostilities – too few light cruisers at the Admiralty's disposal would endanger the efficacy of any plan, in the opinion of the Naval Intelligence Division appraisal provided for the War Staff.

In light of all of the above concerns, the advice of the Admiralty Board, endorsed emphatically by the new War Staff (which now took over from the NID the role of evaluating new warship

[57] The urgency of fitting out orders and trials for the *Arethusa* and *Calliope* classes in 1914 is reflected in peremptory notes from the Admiralty to its shipyard representatives, harried by the First Lord himself (See NMM, Woolwich, ADM 138/286 *Arethusa* Ships' Covers, f'73, note from Churchill to Controller, dated 9 April 1912, 'One of the Super Actives should be begun at the earliest possible moment, in order that we may have the benefit of trying her before we complete the others'). At the commencement of war the navy's most recent *Birmingham* class trade protection cruisers were all in fact allocated to the Grand Fleet. Despite having no role to play in the line of battle and dubious scouting qualities, three squadrons of armoured cruisers were also with the Grand Fleet, and one of these still remained at the war's end. As Beatty was to point out repeatedly, the fast battle cruisers and (later) *Queen Elizabeth* class battleships under his command demanded protection and scouting from only the fastest cruisers (see 'Functions of a Battle-Cruiser Squadron', dated 5 April 1913, NMM, Beatty Papers, BTY/2/4/3).

[58] Andrew Lambert asserts that the view expressed by Wilson before the Committee of Imperial Defence on 23 August 1911 was 'based on long experience, and offered the only programme whereby Britain could hope to exert any influence on European politics at a time when the other powers all possessed million-man armies.' (A D Lambert, Wilson, Sir Arthur Knyvet, Third Baronet (1842-1921), *Oxford Dictionary of National Biography*, H C G Maththew & B Harrison (eds.), Oxford: Oxford University Press, 2004).

designs against criteria outlined by the Board of Admiralty) was that the Estimates of 1912-13 should make provision for the ordering of eight new light cruisers, with a similar provision being made in further Estimates for the foreseeable future.[59] At the very least, it was seen as imperative that the navy should lay down two light cruisers for every German one henceforth.

* * *

As was usual in Admiralty procurement programmes, the evolution of the *Arethusa* design was much influenced by tactical experience, especially in the Home Fleet. The shortage of fast light cruisers was, as stated, felt most acutely in the North Sea, and evidenced by a large number of tactical exercises conducted by Admiral Sir Henry May during his command of the Home Fleet from 1909 to 1911. A predecessor as C-in-C, Home Fleet (1903-04, then retitled Channel Fleet, 1904-07), Arthur Wilson, had worked tirelessly to integrate the tactics of light forces and battle squadrons within the Fleet, making it 'virtually a School for Battle'. Wilson was 'a tactician who studied tactics by practical use of the Fleet he commanded', and the developed the eponymous 'A-K' cruiser screen.[60] However, whilst Wilson as First Sea Lord considered scout-led destroyer flotillas sufficient to ward off massed German flotilla attacks on the fleet (with pre-emptive attacks on enemy destroyer and submarine bases preferable), May's work suggested light cruisers working in the van and on the flanks of the fleet were the most efficient gun platforms to counter such threats.[61] At this tactical level, commitment from the majority of senior officers at sea to the proven scouting, signalling and defensive value of light cruisers, compared to the less tried and reliable aircraft and submarine, remained fast, even with the onset of war and further advances in the latter types. May's flag captain, Herbert Richmond, found such fleet exercises most instructive and they certainly influenced his thinking when appointed Assistant Director of the Operations Division – in August 1913 he submitted a paper, *North Sea Strategy*,[62] offering a fully-developed plan for the strategic aims of the British fleet

[59] Admiralty Board Minutes introducing the 1913-14 Estimates suggest the question of 8 light cruisers for this Programme was already settled. (TNA, ADM 167/47, dated 6th February 1913). However, the original scheme was for *four* Arethusas for 1912-13, the doubling no doubt in response to discontent within the War Staff and elsewhere. (See Raven & Roberts, *British Cruisers*, p.20)

[60] Rear-Admiral W S Chalmers, *The Life and Letters of David, Earl Beatty, Admiral of the Fleet* (London: Hodder & Stoughton, 1951), p.86. Beatty also recalled the demands of commanding the cruiser *Juno* as part of Wilson's cruiser screen.

[61] See TNA, ADM 1/8041 & 8120, Letters-In from Admirals, X Home Fleet, 1909-10, multiple reports on fleet exercises.

[62] NMM, Richmond Papers, RIC/14/3. Documents under the same reference, dated September 1913, make it clear that Richmond envisaged aggressive and purposeful North Sea operations against Germany taking place alongside urgent and concerted offensives against German trade and overseas interests. See 'Considerations Affecting the Capture of Tsing-Tau'. Richmond remained a lifelong advocate of a strong cruiser fleet. At the outset of war he bemoaned the lack of cruiser intervention against German minelaying operations in the North Sea, suggesting the

in the North Sea in the event of war, in which light cruisers played a pivotal part. In October 1911 Wilson had pushed through a two-part revision of The Cruiser Manual, focusing entirely on fleet and narrow seas operations.[63] Part 1 ran to 58 pages plus appendices, and dealt with cruiser 'spreading', 'searching', 'screening', 'patrol', 'keeping touch with an enemy's fleet' and 'cruising order'. Particular emphasis was placed upon wireless communications (Henry Jackson being a named contributor), it being stated, 'Inter-ship communication is of extreme importance in cruiser work. If swift and reliable communication is secured, the utility and scope of cruisers are greatly increased. Wireless telegraphy enables all cruisers to keep in communication with the Commander-in-Chief and with one another' (p.7). Part 2 of the Manual focused upon cruisers in littoral operations, 'observing an enemy's coastline' and 'the effects on cruiser work of mines, submarine boats and aerial craft.' Wilson remained hopeful that an ongoing procurement programme of faster *Town* class cruisers, outlined by the Admiralty Board in September 1911, would, in time, meet the fleet's overall requirements but neither he nor the programme would feature in Admiralty plans by the year end.[64]

* * *

A new and highly evident sense of urgency was apparent throughout the procurement process for the *Arethusas*, as the Admiralty came to terms with fluctuating war plans and the growing threat of German scouting formations.[65] The initial sketch work, allocated to Constructor Stanley Goodall and his dedicated cruiser design department, was completed in just two days and by 29th February 1912, the Assistant Director of Naval Construction, Whiting, was writing to instruct the department that 'This design should now be pushed on as quickly as possible and [be] well manned.'[66] One month after Churchill proposed the new class of light cruisers in introducing his 1912-13 Estimates, the Board approved the final design sketches, satisfactory modelling being completed in record time at Froude's experimental test tanks at Haslar, thanks to overtime working. A month after this, in early May, tenders for the dual high-speed turbines capable of delivering 40,000 shp for four-hour maximum running were circulating.

Secure wireless communications were held to be of vital importance in the new light cruisers, and the DNC was pressed to relocate the Wireless Telegraphy Office in the *Arethusas* to the

Admiralty's "limited response" policy was making the North Sea a "German Ocean". (Quoted in Barry Hunt, *Sailor-Scholar: Admiral Sir Herbert Richmond, 1871-1946*, Waterloo, Ont.: Wilfred Laurier University Press, 1982, p.41-42).

[63] TNA, ADM 186/4, Admiralty Publications: Administration, General Code (1/1).

[64] TNA, ADM 167/45, Admiralty Board Minutes, 19 Sept. 1911.

[65] See Chapter 7.

[66] NMM, Woolwich, ADM 138/286, *Arethusa* class Ships' Covers, f .34.

Lower Deck to ensure sufficient space for this vital aspect of the ships' operations and a measure of protection, as offered by the armoured belt. In the absence of reliable aerial reconnaissance, the scouting and reporting role of the fast light cruiser was paramount for the fleet, especially for the Battle Cruiser Squadron from its formation in 1913 – the same year in which short range wireless telegraphy equipment was introduced to all light cruisers, including scouts. Beatty, like Jellicoe, recognised the impracticality and risks of venturing to sea with insufficient fast light cruiser forces with the means to communicate with his flagship. In the middle of the war, with the question of sufficient light cruiser numbers still causing grave concern within the fleet, Beatty wrote to Prime Minister Herbert Asquith to urge him to address delays in their construction, and encapsulated the essential attributes of the type:[67]

> 'Amongst other duties, they are to the Grand Fleet what Zeppelins are to the High Seas Fleet, and it is imperative that nothing should be allowed to prevent our fleet being provided with a full supply of them. The light cruiser is our antidote to the Zeppelin and by using a sufficiency of them we can curtail the discovery of the position, composition and disposition of our Fleet. We thereby limit the successful use of enemy minelayers and prevent the enemy submarines acquiring information which would be invaluable to enable them to reach a most favourable position for attacking our Grand Fleet.'

In addition, in Beatty's view, light cruisers would locate and report enemy formations, cause submarines to submerge, thus reducing their range of action and disrupting pre-arranged plans, and would 'drive in' the enemy's light cruisers, reducing their opposite numbers' effectiveness as scouts. Finally, when battle was joined, given the enemy's potential parity or better in torpedo boat destroyers, the light cruiser was 'the principal protection of our fleet against enemy T.B.D. attack' – all of this to be achieved whilst maintaining contact with and reporting on the enemy's movements, often in poor weather and visibility, via 'flag or wireless chain' if necessary.

In December 1912, at Churchill's instigation, the newly appointed First Sea Lord, Prince Louis of Battenberg, requested the thoughts of the Chief of Staff and other Sea Lords on simplification of nomenclature for the cruiser fleet.[68] As well as the 'battle cruisers', seven

[67] Copy received by Jellicoe of a letter sent by Vice-Admiral David Beatty to Prime Minister Herbert Asquith from *HMS Lion*, 3rd February 1916 (BL, Jellicoe Papers, Add. MSS 49008, ff. 80-83).
[68] TNA, ADM 1/8327, First Lord Misc. Papers, 1911-14, 'New Nomenclature for Official Description of Cruisers' dated 23 Dec 1912.

other classifications were then in use, ranging from 'armoured cruisers' to 'scouts'. The variety of suggestions offered for renaming of cruiser types – ranging from 'frigate', 'corvette', 'sloop', '1st and 2nd class', 'heavy and light', 'armoured and unarmoured', 'large and small' – bore testimony to their diversity and the wide roles assigned to them. On 2 January 1913 Troubridge issued his own recommendations, which were adopted forthwith. 'The cruiser must fit into the War Organization and not the War Organization into the cruiser', wrote the COS. Armour or lack of armour was immaterial, as was peacetime organization (it was planned during 1913 to form what were effectively 'Light Cruiser Squadrons' alongside 'Cruiser' Squadrons in any case), as ships of clearly differing capabilities might serve in the same formation.[69] Function, and function alone, should be the delineating factor, with the speed, manoeuvrability and versatility of the 'light cruiser' distinguishing it from the more ponderous and heavily-armed 'cruiser' in defining the roles best suited to each. In effect, light cruisers did not exceed 6,000 tons and 6in main armament, and all new designs of the type were expected to achieve a minimum of 25 knots. Alongside numerous intended roles and at least four iterations of design, the type now had a formal, unified classification, and its own formations, but questions over its precise utilisation in time of war, and the number of vessels that might be available in such an instance, were to remain very much at the forefront of the Admiralty's future policy discussions.

[69] Such was the case in the 1st Cruiser Squadron (Mediterranean) and 4th Cruiser Squadron (North America and West Indies) at the outbreak of war. In the December 1912 memorandum, Battenberg had written, 'Light cruiser squadrons consisting of the Town Class are on the point of being formed. The term seems a suitable one and might be extended to the "Light Armoured Cruisers" [*Arethusas*] when ready, there being no object in retaining the word "Armoured".

Chapter 7 – The Cruiser Imperative: The 110 Demands

Despite the advent of the *Arethusas*, mistrust over long-term Admiralty plans for the cruiser fleet remained high in some quarters, as the Troubridge Memorandum had shown. The decision by McKenna as First Lord to cut the procurement plan for new *Town* class cruisers from five to three vessels in February 1911 due to financial exigencies was the first sign that light cruiser development, so long in the offing, might be curtailed in its adolescence. The Board desired it to be recorded that 'this reduction can only be regarded as a postponement necessitating an addition to the programme of cruisers in future years, in order to replace cruisers which will have become obsolete and to make good the minimum which will be required to meet the completed German Programme in 1920'.[1] The full cancellation of the improved *Birmingham* class, the final design for which had only been agreed as late as September 1911, felt like a retrograde step to some at the Admiralty.[2] It was the view of Troubridge and the Admiralty War Staff, as well as that of cruiser officers such as Stephen King-Hall, that 'the cruiser problem as a whole' had not been addressed with the substitute *Arethusas*. In 1928 King-Hall was to write, 'they [the *Arethusas*] were not the type of cruiser visualised by the C.O.S. and suitable as opponents of German contemporaries ("Karlsruhe" Class). They should have been improved "Southamptons" – which as the War proved, were excellent, all-round light cruisers, suitable for work with the fleet or for trade – though on the slow side'.[3] This contention, that a focus on speed, economy and particular North Sea requirements had compromised both effective cruiser numbers and the essential broad utility of the second class cruiser lay at the heart of discontent in the Admiralty beyond the outbreak of war.

In part, Churchill, his two pre-war First Sea Lords, Bridgeman and Battenberg, and two Controllers, Briggs and Moore, were beset by the age-old procurement issue of confronting the conflicting prioritisation of quantity, quality, specialisation, utility and economy in equipment choices. However, the relative novelty of the light cruiser designation, its controversial and interrupted development, and the varied as well as pre-existing expectations that those in the Service had of the type also complicated decision making. Churchill's support for the *Arethusas* and subsequent light cruiser programmes certainly relied heavily on traditional and sound criteria – value for money and predominance in numbers of like ships over Germany. In

[1] TNA, ADM 167/45, Admiralty Board Minutes, 8 February 1911.
[2] *Ibid*, 19 Sept. 1911.
[3] TNA, ADM 1/8724/93, 'Monograph: The Evolution of the Cruiser in Modern Times', a paper presented by Cdr S King-Hall to the Admiralty, 1928, f.22.

December 1913 he wrote that 'the expense of 8 light cruisers and 12 destroyers is almost exactly equal to that of 4 Town Class cruisers and 20 destroyers, which would be the conventional programme on the lines adopted by my predecessor. Not less than 8 light cruisers . . . are required, apart from the reduction of the destroyer programme, to maintain the 100 per cent standard in cruiser strength which has long been followed by the Admiralty, and which I inherited from my predecessor'.[4] Numerical superiority over German equivalents was the fundamental and clearly articulated principle of light cruiser building between 1912 and 1914, accepted by the Admiralty Board, War Staff and many others both inside and outside the Navy.[5] In 1913 Churchill forecast that by the summer of 1916 Germany would have 9 large cruisers and 44 light cruisers under twenty years old whilst, leaving aside the 1914-15 Programme, the Admiralty would muster 34 large cruisers, 23 old type and light cruisers and 38 new type light cruisers, totalling 95 vessels. This figure excluded the Australian cruisers but included *Hermes* (1896 Programme), remaining *Diadems* (1895/6) and 5 *Pegasus* third class cruisers (laid down from 1895).[6] Nearly one in five of the Admiralty cruisers could not attain 22 knots, compared to one in four for the German fleet. Nonetheless, Churchill concluded, even when adding the three Australian cruisers and older vessels 'not being converted into hulks', the Admiralty could only achieve its 2:1 numerical superiority in 1916 by including eight light cruisers in the 1914-15 Programme, as it had done in the previous two years.[7]

Bur creative accounting by the First Lord as to the number of effective cruisers in the fleet was compounded by ongoing disagreements as to what constituted a 'light cruiser' beyond the January 1913 classifications. That Churchill admitted that 'a proportion of the British cruisers which have been built in the current year, and which it is proposed to build next year, are in substitution of what might be called the normal destroyer programme'[8] confirmed the

[4] Quoted in R S Churchill, *The Churchill Documents*, Vol. 5, p.1826. The cost of the four *Town* class was stated as £1,440,000 and the eight new light cruisers, £2,400,000, a significant per unit saving The NID 'formula' for optimum cruiser strength to counter rival cruiser construction dated from 1892.

[5] See the terse exchange between Churchill and the Second Sea Lord, Jellicoe on the complexities of calculating such comparative figures for light cruisers with accuracy, especially in future projections, in TNA, ADM 116/3486, First Lord's Miscellaneous Papers, 1907-16, Minute by Second Sea Lord in response to First Lord's Memorandum, 'Requirements of Officers, 1920', ff.5-6.

[6] *Ibid*, p.1831.

[7] In fact, funds could only be found for four *Cambrian* class light cruisers in the 1914 Programme – totalling £1,375,000 according to a paper on 'The New Construction Programme Approved by the Cabinet in 1914-15', 14 December 1914 (TNA, ADM 116/3486, First Lord's Miscellaneous Cabinet Papers, 1907-16). A Cabinet paper from December 1914 suggests £1.5m had been cut from the usual £16m building programme, i.e. almost equivalent to the cost of the additional four light cruisers anticipated, suggesting that Churchill's arguments concerning cruiser numbers had not been altogether persuasive in Cabinet (TNA CAB 37/122). In other words, fewer, and cheaper light cruisers were being ordered in 1914. A return to ordering of 8 light cruisers was originally slated for the 1915-16 Programme.

[8] R S Churchill, *The Churchill Documents*, Vol. 5, p.1831

suspicions of those like King-Hall who feared that the removal of older cruisers from the fleet and substitution of enhanced scouts for the far larger, oceanic *Towns* was to claim cruiser numbers on the cheap.[9]

By late 1911 the strain upon the Royal Navy's force of modern light cruisers was becoming all too obvious, as Troubridge's March 1912 paper had made clear. Of the vessels completed since 1904, the Pink Lists for October 1911 showed a total of eleven scouts and four *Towns* available to the Admiralty for North Sea duties.[10] Due to the fast pace of technological advances, especially in turbine engineering and communications, the early scouts were already struggling to work with the fleet and fast destroyer flotillas, and did not possess the range (having been designed for operations against the French coast), for sustained operations on the North Sea or Baltic coast of Germany, as were being considered.[11] Earlier in the year Corbett had theorised that 'on cruisers depends our exercise of control' but there were many in the Admiralty who considered that exercise in jeopardy given the lack of modern cruisers to meet the Navy's many requirements.[12] It was indisputably the view of successive Admiralty Chiefs of Staff in 1912-13 that cruisers (specifically their want) were shaping war planning rather than war planning

[9] Besides construction costs, the Admiralty was acutely aware of variations in annual operating costs amongst the cruiser fleet. Churchill's efforts to steer the 1913-14 Estimates past the Cabinet and through Parliament involved the publishing of 'A Summary of Draft Navy Estimates for 1913-14 Together with an Explanation of the Principal Causes of Increase', signed off by the First Lord on 1 January 1913 (TNA, ADM 1/8275. Admiralty: In-Letters and Papers, Nov-Dec 1912). Under a table detailing 'Approximate Annual Cost of Maintaining Various Ships in Different Conditions', comparisons were offered of the total cost (pay, victualling, repairs, stores, fuel, ordnance etc.) of a variety of ships in full commission. The average annual cost of a *Boadicea*-type scout was £43,729; that of a *Bristol* class cruiser, £55,640; an *Edgar*, £70,451 and a *Cressy* class armoured cruiser, £98,568.

[10] Records of Royal Navy vessel locations and movements for Oct. 1911, NMRN, Portsmouth. Three early scouts were with the Home Fleet flotillas and five with 3rd Fleet flotillas at Portsmouth, the Nore and Devonport; three Admiralty scouts were also with Home Fleet flotillas and four *Towns* with the Battle Squadrons of the Home Fleet. A further two *Towns* and one Admiralty scout were serving overseas, and two *Towns* and the late scout *HMS Active* were completing with shipbuilders.

[11] Want of fast, small light cruisers to undertake such operations and to operate from any offshore base that might be seized was just one of the grounds for the vociferous service opposition to what Richmond described as 'quite mad' proposals. Matthew Seligmann has shown that the Admiralty had by no means abandoned the concept of amphibious operations prior to 1914, however. (See 'The special service squadron of the Royal Marines: The Royal Navy and organic amphibious warfare capability before 1914', *Journal of Strategic Studies*, published online, 29 Sept. 2020). German defences against British littoral operations were enhanced by their advances in light forces, an anonymous German naval officer writing in January 1912, 'Quick preparation is everything in this age of wireless telegraphy, fast cruisers and torpedo boats.' (Quoted in Paul Hayes, 'Britain, Germany and the Admiralty's Plans for Attacking German Territory, 1906-1915' in L Freedman, P Hayes & R O'Neill (eds.), *War, Strategy and International Politics: Essays in Honour of Sir Michael Howard* (Oxford: Clarendon Press, 1992), p.116.

[12] Corbett's list of correspondents within the navy was considerable. As well as Slade, who assisted with the drafting of *Some Principles* (see NMM, Corbett Papers, CBT/2/3), Beatty, Bridgeman, Custance, Jackson, May, Troubridge and a host of other naval officers are all represented in Corbett's collected correspondence (CBT/13/3). Amongst the War Staff, Ballard and Richmond were colleagues via the Navy Records Society, Richmond writing an obituary for Corbett, and the latter's influence over the operational aspects of Jellicoe's plans has been well attested (see Donald Schurman, *Julian S.Corbett, 1854-1922: Historian of British Maritime Policy from Drake to Jellicoe*, London: Royal Historical Society, 1981, pp.166-7).

informing the procurement of cruisers, a situation that was to persist until the middle years of the war. Historical precedent played a leading role in their arguments. In May 1913 the Admiralty War Staff issued a tactical commentary in their series 'Papers on Naval Subjects' written by Rear Admiral Sturdee, commanding 2nd Cruiser Squadron.[13] Sturdee combined 106 pages of commentary on cruiser work in the age of sail, especially in the role of reconnaissance and blockade, with 11 pages on its relevance to the current work of his own cruisers. Sufficiency of cruiser numbers, and the importance of maintaining watch on the enemy, despite adverse weather conditions or enemy efforts to disrupt the blockade, were amongst the historical lessons to be drawn, and the War Staff were pleased to give the document wide circulation.[14]

Founded in January 1912, the Admiralty War Staff took on the key role of war planning,[15] and in the person of Chiefs of Staff Troubridge and Jackson, as well as officers in the Operations Division such as Ballard and Richmond, provided vocal critics of Admiralty cruiser policy. That such an organisation was long overdue, and that concerns voiced over cruisers had legitimacy, was exemplified by Captain Mark Kerr's December 1911 memorandum to Churchill 'Concerning British Naval Strategy in the Event of War with Germany'.[16] Kerr's suggested North Sea scheme arose from a summons to the Admiralty by Battenberg, soon to be appointed Second Sea Lord. During the meeting in late November 1911, Battenberg informed Kerr 'that there was no plan for war against Germany, except one that was plain suicide' [Wilson's close observational blockade] and Kerr was asked for his thoughts. Besides the removal of the battle fleet to Bantry Bay, Kerr's subsequent war plan called for 66 light cruisers to work between the Thames and Aberdeen, whilst an unspecified number would serve with battle-cruisers in the Minch and alongside destroyers at Dover, and seaplane and submarine observations of the Baltic entrances and the mouth of the Elbe would also require support. Unsurprisingly, Kerr recognised that 'other cruisers will have to be employed until sufficient light cruisers are built', and his plan was not pursued.

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[13] TNA, ADM 1/8326/X2229/13, From Admirals: X Home Fleet, Z Australia, 1913.

[14] It is unfortunate that as COS in the following year, Sturdee was reported to have referred to the age-old traditions of the 'Broad Fourteens' patrol off the Dutch coast when challenged on the wisdom of employing armoured cruisers on that patrol. The subsequent sinking by U-boat of three of these ships led some critics to conclude that Sturdee was out of touch with the realities of modern naval warfare (Goldrick, *Before Jutland*, pp.143-151).

[15] Nicholas Black has highlighted the practical and war-focused approach of the Admiralty War Staff, contrary to some earlier interpretations. See *The British War Staff in the First World War* (Woodbridge: Boydell, 2009).

[16] UoS, Mountbatten Papers, MB1/T22/165. Kerr commanded *HMS King George V* at the time. Kerr's meeting and a copy of his war plan are recorded in his biography, *The Navy in My Time* (London: Rich & Cowan, 1933), pp.152-3.

Admiralty War Staff planning proved more robust and realistic but no less critical of the compromises wrought by shortage of modern light cruisers. On 23 January 1913, five days before officially taking up his post as Chief of Staff, Jackson wrote to Battenberg to protest against Admiralty plans to retire from service three *Argonaut* (*Diadem*) first class protected cruisers tasked with the protection of Atlantic trade and eight *Edgars*, of a similar type, six assigned to the Northern Patrol and two at Gibraltar for trade protection duties.[17] Jackson included with his minute a copy of Troubridge's March 1912 paper on cruiser shortages (which Jackson and Ballard had drafted)[18] and a memorandum from Ballard, the DOD, on the impact of the planned reductions on cruiser organisation. Jackson urged Battenberg to reverse his decision 'as the number [of cruisers] now available is, in my opinion, inadequate for the duties which must fall on vessels of the cruiser class in war, viz. to act as look outs for our fleet at home, carry out patrol duties necessary by our War Plans, and defend the enormous interests of the Empire abroad, and protect our commerce afloat. Any serious reduction in their present numbers must cause grave anxiety on the part of those who are conversant with the subject'. Further to this, Jackson supplied 'a list of cruiser requirements in war, and it will be observed that they total to 110, a number also arrived at by D.O.D. in an independent consideration of the numbers required'.[19] Ballard's attached note on cruiser reorganisation stated 'As regards the North Sea duties, these would by the revised distribution be thus carried out by very much faster though less powerfully armed vessels', though *Drakes* and *Cressys* (large armoured cruisers) would still be required to make good the deletions.[20] A lack of provision of suitable modern replacement cruisers and proposals to further reduce the number of older cruisers caused Ballard to write to Jackson once again in January 1914 concerning the cruiser imperative, which whilst but one element of the War Staff's planning, touched upon so many of its practical preoccupations between 1912 and 1914.[21]

Firstly, cruisers were required to impose a form of limited economic warfare on Germany by imposing contraband control lines along the northern and southern exits from the North Sea,

[17] UoS, Mountbatten Papers, MB1/T23/181, COS minute to First Sea Lord, dated 23 January 1913' with attached report on cruiser reorganisation from DOD.
[18] TNA, ADM 116/3090, Navy War Council Minutes, 1909-13, 5 March 1912, p.10.
[19] Jackson and Ballard's figures identified a need for 69 cruisers on the Home Station (as against the 59 then available) and 41 (as against the 34) on Foreign Stations, a shortfall of 17 ships before the proposed cuts.
[20] UoS, Mountbatten Papers, MB1/T27/254 contains an exchange of minutes between Battenberg and Jackson, dated 27 & 28 Nov. 1913, on the unsuitability of the *Bacchantes* (*Cressys*) for war purposes in the North Sea. Put simply, the Admiralty did not possess sufficient modern light cruisers to obviate this necessity, even into wartime.
[21] UoS, Mountbatten Papers, MB1/T29/277, letter dated 26 January 1914.

reflecting Ballard's 1907 War Plan A/A1.[22] Ballard trusted that 'a prolonged distant blockade would cause 'serious economic consequences to Germany', forcing the High Seas Fleet to break the blockade and instigating a fleet action closer to British bases than their own'.[23] In this he concurred with Jackson, who wrote in March 1913, 'The War Plans are directed against Germany's mercantile marine, with the hope that sufficient pressure can be brought, through dislocating her trade, for the Grand Fleet to seek action with ours, and so end the struggle'.[24] As Jackson was only too well aware, such a scheme was predicated on cruisers being able to apply 'sufficient pressure' to lure out the High Seas Fleet, and on the ability of the Grand Fleet to detect, concentrate against and overcome their adversary whilst responding to any raids, invasion attempts or feints that the enemy might launch.[25] Given the Admiralty's reluctance to employ auxiliary cruisers in this role, faster cruisers were preferable, because they could patrol a greater sea area in a given time and were more likely to escape if encountering German warships more powerful than themselves. Inevitably, however, older cruisers had to be assigned to this more mundane task given the many calls on the *Towns* and *Arethusas*, and in the early months of the war, even battleships and battle cruisers were pressed into service to cover gaps in the blockade.[26]

Second, the mid-North Sea problem demanded solutions of the War Staff. Fears as to the possible complexity and cunning of German naval plans in the event of war fuelled the demands for ever more effective means to monitor their shipping movements.[27] Patrol lines demanded ships with good endurance and seakeeping qualities. Armoured cruisers might fit

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[22] See TNA, ADM 116/3412, Admiralty to C-in-C Home Fleets, 'War Plans and War Orders, 25 Nov & 16 December 1912 and 18 February 1913. Grimes suggests that the 'distant blockade' was also intended to 'secure England's coasts from invasions and raids and cover the BEF's transport to France' (*Strategy and War Planning*, p.178).

[23] Grimes, *ibid*.

[24] Quoted in Seligmann, 'Failing to Prepare?', p.433. Original in TNA, ADM 116/3412, 'Remarks on War Plans and on the First Lord's Notes on the Subject', 11 March 1913.

[25] The claims of revisionist historians such as Nicholas Lambert (see *Planning Armageddon*, *passim*) that Britain was readied in 1914 to apply 'sufficient pressure' to defeat Germany rapidly, and chiefly, via financial and economic levers such as British dominance of global communications, banking, insurance and shipping might, if correct, have gone some way towards exonerating the Admiralty for its failure to build more light cruisers, and ceasing to build battle cruisers, before 1914. However, this interpretation has been challenged by Christopher Bell, Matthew Seligmann and others (see Seligmann, 'Failing to Prepare?', p.416, fn. 5)

[26] Beatty's Flag Captain on *HMS Lion*, Ernle Chatfield, described 'the many weeks we spent stopping and examining merchant ships, but we were handicapped by half-hearted blockade methods' (*The Navy and Defence*, London: Heinemann, 1942, p.123). In short measure between 1912 and 1913 Chatfield commanded the old armoured cruiser *Aboukir* and the new light cruiser *Southampton* before his posting to the battle cruisers. His comments on the relative demerits of *Aboukir* compared to the other vessels is revealing (p.98-120).

[27] See TNA, ADM 116/3486, First Lord's Miscellaneous Papers, 1907-16, Churchill's notes to the Invasion Committee, Apr. 1913; Invasion Committee Preliminary Draft Report, July 1913 and a shocking, fictionalised account of a German invasion, *The Timetable of a Nightmare*. For the context of these documents see Morgan-Owen, *Fear of Invasion*, pp.203-226.

the task and would be able to take on German forces lighter than themselves. However, their size and speed made them vulnerable to surface or submarine torpedo attack, and if caught by German battle cruisers, they would be at a grave disadvantage.[28] Light cruisers of 25 knots or above provided smaller (and cheaper) targets, their 6in guns being able to fend off light scouting groups whilst still providing the vital reconnaissance and notice required by the fleet in order to concentrate and disrupt any incursion by the High Seas Fleet. David Morgan-Owen has detailed the problems faced by Ballard in confronting the shortage of such vessels to locate and shadow the enemy's movements and guide heavier units to their opponents.[29] As Umpire-in-Chief of the 1912 manoeuvres, William May was highly critical of the failure of the too extended scouting cordon to prevent Admiral Callaghan's Red Fleet from landing an invading force on the East coast, a circumstance which led Lord Beresford to question the First Lord on 'the state of chaos in the fleet', 'whether a patrol was thrown across the North Sea, half of which patrol was under the command of the Admiralty, and the other half under the command of the Commander-in-Chief of the defending force' and 'whether it is the intention of the Board of Admiralty to manœuvre the Fleet in Home waters by wireless in the event of hostilities?'[30]

Patrolling closer to East Coast bases was of benefit, but the wide expanses of the North Sea could be demanding to navigate, enemies hard to locate visually and command and control methods, though developing through the use of wireless, remained unsophisticated.[31] May's report on the 1912 manoeuvres highlighted some of the issues involved:

> 'The system of stringing out cruisers and destroyers has been shewn to have drawbacks [and] fails to give sufficient warning of the approach of an enemy . . . If armoured cruisers are to be open to advanced lines of patrol from the first night of hostilities, there is small chance of their remaining effective throughout a protracted war. A better form of look-out would be to have advanced lines of ships of small fighting value but high speed, or, failing them, destroyers spread out about 40 to 60m in front of the

[28] Grimes has described the Admiralty's resort to 'the North Sea strategic problem' as 'equally flawed and, ultimately, more untenable' than Wilson's close observation plan (Grimes, *Strategy and War Planning*, p.169). Morgan-Owen is more positive about the value of what he believes was not an 'intermediate blockade' so much as a series of mid-North Sea patrols to provide a measure of warning of German intentions ('An 'Intermediate Blockade'?').

[29] In 'An 'Intermediate Blockade'?', p.489 Morgan-Owen cites Ballard's 'Remarks on War Orders for an Observation Force in the North Sea in Connection with the Lessons of the 1912 Manoeuvres' dated 16 September 1912 (TNA, ADM 116/866B) and 'the problem of some difficulty' that insufficient numbers of cruisers for patrol duties presented.

[30] See NMM, May Papers, MAY/10, Papers Relating to the 1912 Manoeuvres and Hansard, Naval Manoeuvres, HC Deb 06 August 1912, vol 41 cc2946-7W at: https://api.parliament.uk/historic-hansard/written-answers/1912/aug/06/naval-manoeuvres.

[31] See Goldrick, *Before Jutland*, Ch.5 'Operational Challenges', pp.41-60.

> armoured cruiser. The latter should be stationed in small squadrons but well to the rear of the advanced patrol line. They would receive warning of the enemy's approach from the advanced line, in time to concentrate as far as necessary.'[32]

Another feature of May's conclusions was the risk posed to larger units of the fleet in undertaking North Sea patrols. The 1912 manoeuvres simulated the scouting role of German airships, and 36 submarines were involved, although only five were allocated to the 'enemy' Red Fleet (by 1914, Germany would have 48 U-boats in service or under construction). With a maximum speed of between 21 and 23 knots, the Admiralty's preponderance of large, armoured cruisers and of pre-1900 cruisers were not well suited to patrolling tasks and vulnerable to submarines or of falling prey to Germany's new battle cruisers.[33]

The implication of May's comments was clearly that a heavy duty rested upon the fast cruisers of the advanced line; that the greater their speed, the more extensive would be the area of patrol covered in a set time (a force-multiplier effect), the faster their sightings could be passed on, and the more likely it was that they (and other units of the fleet) might avoid being overrun by superior enemy formations. Contrary to Fisher, May saw destroyers as less than ideal for such a role and clearly had improved scout cruisers in mind, such as the *Arethusas* then building. Whilst alternative methods for maintaining an observational patrol to determine German naval movements were considered in order to counter the effect of a lack of suitable cruisers, (these included the use of submarines, aircraft and the mining of the German coast in order to reduce the required area of patrol), Morgan-Owen cites 'the dramatic expansion of the navy's light cruiser procurement programme during 1912' – eight *Arethusas*, followed by eight *Calliopes* in 1913 – as evidence of the Admiralty's faith in North Sea cruiser patrols if provided with the appropriate vessels.[34]

Not only the Royal Navy's lines of patrol but other elements of the fleet in home waters were affected by a third operational consideration with implications for its force of light cruisers, namely the evolving tactics of the High Seas Fleet, particularly with regard to more aggressive operations by its scouting formations. By 1912 it appeared clear to the Admiralty that in responding to limited British economic blockade pressure and launching its own potential raids,

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[32] TNA, ADM 1/8273, Naval Manoeuvres, 1912, Remarks by Umpire-in-Chief, 5 Aug. 1912. Just 6 protected cruisers were available to the Blue Fleet to halt the enemy's east coast landing scheme and its attempts to disrupt Atlantic trade.

[33] Germany's first battle cruiser, *SMS Von der Tann*, entered service in 1910. In September 1911 SMS Moltke replaced the armoured cruiser *Roon* in the 1st Scouting Group. She was capable of 25½ knots, was well armoured and mounted ten 11in guns.

[34] Morgan-Owen, 'An 'Intermediate Blockade'?', p.490.

invasion schemes and efforts to disrupt trade, Germany would initiate any confrontation of fleets, potentially enjoying localised superiority before units of the Royal Navy could concentrate to deal the decisive blow.[35] In their employment of modern light cruisers within the fleet, Germany had considerable experience. A paper by the then Captain Tirpitz, 'General Lessons Learned from the Manoeuvres of the Autumn Training Fleet' was drafted in June 1894 and outlined the suggested specifications and role of a new generation of small cruisers for the German fleet: high speed; an endurance of 5,000nm at 10 knots to facilitate operations on foreign stations; an armament to allow them 'to engage successfully hostile scouts of comparable size' and 'to hunt successfully for the newest type of torpedo craft'; ability to work with the fleet's own torpedo craft; good seakeeping qualities; an armoured deck and masts of sufficient height 'for signalling [then visually] at long distances'.[36] Germany's lead in light cruiser design, focus on a single type for home and foreign service and integration within the fleet was not without issues. The design compromises necessary to accommodate fleet, flotilla and overseas service, and reluctance to introduce a main armament larger than 4.1in or oil fuel, would ultimately give Admiralty equivalents entering service from 1914 an advantage, but made that introduction all the more urgent given the capabilities that German light cruisers *did* possess.

Changing tactics amongst German scouting forces also caused mounting concern as to the Admiralty's ability to respond effectively. A typescript copy of a report by the French Grand General Staff on the German Navy's manoeuvres of March 1913 noted the value of Heligoland, 'the Gibraltar of the German Empire', as a base for light squadrons and advanced observation, permitting fast steamships and cruisers to seize a favourable opportunity to escape from the North Sea and to interdict British operations in the Bight and beyond.[37] Torpedo boat training was noted as 'truly remarkable in its intensity' and light cruisers would 'assume the task of combatting hostile flotillas by forming a screen about the battleships . . . On them rather than the secondary guns of the battleships will the task fall of defending the squadron'. In an offensive capacity, German cruisers were 'not solely scouts but veritable DESTROYERS, adapted to the requirements of modern warfare . . . [and in] leading the flotillas against the

[35] See details of the Umpire-in-Chief's Reports on the Manoeuvres of 1912 and 1913 for reference to simulation of such scenarios. May's 1912 report is in TNA, ADM 1/8273, Admiralty: In-Letters and Papers, July-August 1912 and the 1913 report can be found in UoS, Mountbatten Papers, MB1/T26/231.
[36] Quoted in Nottelmann, 'The Development of the Small Cruiser', pp.105-6.
[37] UoS, Mountbatten Papers, MB1/T23/198, April 1913.

enemy (as the *Bulletin Mensuel* of the Grand General Staff had observed in November 1912)[38] . . . German cruisers take a most active part in military operations proper'. The War Staff commentary on the report concluded by expressing concerns at the impact of new German light cruiser construction, not least in the form of the *Breslau* [*Magdeburg*] class, which were of a size and speed to match the *Towns*, although mounting 12-4.1in guns. Unsurprisingly, this document was swiftly followed by a memorandum from Jackson to Battenberg, pointing out the neglect in war plans for protecting the BEF's lines of communication and the general risk posed by German scouting formations.[39] Frank Nägler has detailed the ever more sophisticated operational plans of the High Seas Fleet, in which speed and the element of surprise, together with the careful co-ordination of battle and light cruisers, destroyer flotillas and the battleships of the fleet could be employed to disadvantage, isolate and overcome elements of the British lines of patrol.[40] The biographer of Admiral Franz von Hipper, Captain Hugo von Waldeyer-Hartz, who served alongside the Admiral in the First Scouting Group, captured the offensive spirit of the German cruiser force at this time: '[Hipper] was promoted Rear Admiral in 1912 [and] became commander of the High Seas Fleet destroyer flotillas. Hipper transferred his flag to the light cruiser *Köln*.[41] Now he was in his element, controlling the weapon "speed", as embodied in modern light cruisers and destroyers'.[42] At this date, no British scout or second class cruiser could match the speed of Hipper's light cruisers, nor the High Seas Fleet's battle cruisers, which placed considerable responsibilities on the British battle cruisers. A reliable wireless chain to speed accurate communications between the C-in-C and the forces under his command was crucial under such circumstances, especially in the variable weather conditions prevailing in the North Sea, and light cruisers were of great value when procedures and technology were in their infancy and the fleet was now a complex organisation which would eventually comprise over 150 warships. It was in this context that the commander of the Red Fleet during the 1913 manoeuvres, John Jellicoe, stated that as well as demonstrating 'the immense value of battle cruisers of the highest speed' to an enemy, his combined formations of 23 knot battleships, battle cruisers, cruisers and destroyers would do 'immense damage to our cruiser patrols almost with impunity' and pose a serious threat to the British battle fleet.[43]

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[38] UoS, Mountbatten Papers, MB1/T21/156, typescript copy of a supplement to the *Bulletin Mensuel* of the Grand General Staff, 'Torpedo Craft in Germany and their Utilisation in Battle', 1 Nov. 1912.
[39] UoS, Battenberg Papers, MB1/T23/199, memorandum dated 5 April 1913.
[40] Nägler, 'Operational and Strategic Plans', pp.25-62.
[41] Köln was capable of sustaining nearly 27 knots.
[42] Capt. Hugo von Waldeyer-Hartz, *Admiral von Hipper* (London: Rich & Cowan, 1933), p.85.
[43] TNA, ADM 116/3381, First Lord's Miscellaneous Papers, 1911-14, Naval Manoeuvres 1913, Report by Vice Admiral J R Jellicoe, Commander-in-Chief, Red Fleet, pp.4-5.

Under those circumstances Jellicoe considered the reintroduction of the scout flotilla leader in order to co-ordinate destroyer screens for, and communications with the fleet an 'absolute necessity' (so pressing was the wider need for scouting vessels that the manoeuvres had experimented with withdrawing them from the battle fleet). Such flotillas, if properly led, could serve to drive off enemy cruisers and break up massed torpedo attacks on the fleet.[44] Sufficient battle cruisers might not be available to keep the enemy under observation but if a vessel 'has considerably greater speed even with less offensive qualities then it will be difficult to shake her off'. Jellicoe's later, ongoing concerns about the acute shortage of light cruisers available for service with the Grand Fleet should be viewed in the light these remarks.[45]

As Fisher had envisaged, the natural counter to Germany's fast light cruisers, and the battle cruisers she had built in imitation of Admiralty practice, was the Royal Navy's own battle cruisers, yet their presence within the fleet was to highlight a fourth requirement for the Navy to build its own fast light cruisers, in contravention of Fisher's beliefs. As Bryan Ranft wrote of Rear Admiral commanding 1st Battle Cruiser Squadron from March 1913, 'Beatty, of course, realised that battle cruisers could not act alone. They needed the co-operation of light cruisers in reconnaissance and the protection of destroyers when executing offensive missions, as well as the protection of battleships in fleet actions.'[46] At the First Lord's insistence, the *M* class destroyers of the 1913 Programme were designed to attain 35 knots, 6 knots faster than their predecessors. The *Arethusas* were similarly not to begin service with the fleet until the outbreak of war, but Churchill was already keen to assign them to their intended purpose. In a memorandum dated 3 April 1913 he stated:

> 'battle cruisers by reason of their great strength are capable of isolated action. From this point of view they are particularly suited to reinforce a light cruiser observation line. The tactical combinations of battle cruisers and light cruisers require special study and practice. The 30-knot light cruiser has nothing to fear from any vessel afloat except the enemy's battle cruiser. She can beat off destroyers: she can escape the enemy's small cruisers . . . The natural support of the light cruiser is our own battle cruiser. When the

[44] Unlike the High Seas Fleet, fleet exercises to practise the operations of the battle fleet alongside scouts and their flotillas had only commenced in 1910 (NMM, May Papers, MAY/10, May to Admiralty, 'Report of the work carried out during the combined cruise with the Atlantic Fleet, April to May 1910).
[45] See Appendix 7, attributions previously cited.
[46] Ranft (ed.), *Beatty Papers*, Vol. 1, p.53.

> "Arethusas" are ready it would be desirable to exercise them in groups with battle cruisers, there being 1 battle cruiser to every 4 light cruisers.'[47]

Churchill believed that with this formation deployed in a patrol line and spaced 15 miles apart, with the battle cruiser at the centre, a front of 90 miles might be watched in clear weather, whilst the light cruisers would still come under the protection of the larger vessel, becoming 'in a certain sense, multiplications in miniature of the battle cruiser'. The response of Jackson as COS was rather less sanguine. He assumed that Churchill was referring to a scouting line ahead of a battle fleet rather than a patrol line, and referred to the planned *Arethusas* more 'in light as a sharp "feeler or antenna"', vulnerable to a well-gunned 25 knot cruiser if caught unawares in often prevailing poor North Sea conditions. Nonetheless, Jackson felt that further work on the distribution of battle cruisers – 'in squadron; two divisions in different areas; and scattered with light cruisers' – would be beneficial. That considerable creative thought was given to the North Sea problem via consideration of revised formations of battle cruisers and light cruisers is evident from Matthew Seligmann's paper on the Royal Navy's proposed Spithead (later Portland) conference, arranged to take place in late July 1914 but abandoned due to the onset of war.[48] In comments prepared for the conference, Beatty stated that 'Manoeuvres have shown that the lines of our present Cruiser Strategy in the North Sea involves heavy risks and very small compensating advantages'.[49] In a letter written to Battenberg the previous year by the C-in-C Home Fleet, Admiral Sir George Callaghan, similar concerns were raised about the vulnerability of armoured cruisers in Patrolling Squadrons, especially if the number of battle cruisers was to be reduced by sending some ships to the Mediterranean: 'A couple of [enemy] Battle Cruisers can completely break up our patrol (or observation) line composed of even our best Armoured Cruisers such as "Shannons" – even if the Cruisers are in supporting distance of each other . . . a determined attack by two Battle Cruisers would sweep our patrols from their areas of observation in the North Sea'.[50] If remaining battle cruisers were detached to pursue enemy ships attempting to escape the North Sea, as War Plans posited, then one or more Battle Squadrons might be required to bolster the cruiser line, with all the associated risks that would be involved. Jackson's comment on the letter agreed that 'all extended lines of communication are vulnerable to faster, more powerful

[47] TNA, ADM 1/8329, Admiralty: In-Letters and Papers, Mar-May 1913, 'Remarks on the Use of Light Cruisers'. Jackson's response to Churchill, dated 7 April 1913, is in the same file.
[48] Seligmann, 'A Service Ready for Total War?'
[49] *Ibid*, p.118. The original comments are taken from TNA, ADM 137/1939, fo.49.
[50] UoS, Mountbatten Papers, MB1/T23/184, manuscript letter dated 8 March 1913. Jackson's response, addressed to Battenberg and dated 26 March 1913, is in the same folder.

enemy ships' and he thought it unwise either to dilute the Battle Cruiser Squadron or to break up the fleet. Nonetheless, lack of suitable, fast cruisers and the scarce resource of the battle cruiser with which to equip patrol lines suggested to Jackson that a proposal to maintain the entire Home Fleet at sea might be 'worthy of serious consideration in a future War Staff meeting – such was the scale of the problem that the Admiralty faced.

Beatty's often quoted paper of April 1913, 'Functions of a Battle-Cruiser Squadron' perhaps best summarises the cruiser issues facing the Admiralty in the North Sea.[51] Of the five functions he identified, two involved the provision of support for armoured cruisers engaged in operations which left them vulnerable; two tasks involved being at readiness to respond to reports from light cruisers either shadowing an enemy fleet or conducting sweeps of the enemy coast, whilst the final function was to be in the van of the battlefleet, which as wartime practice was to prove, also meant working in close co-operation with the fleet's A-K line of scouting light cruisers. All five of these functions involved co-operation with cruisers but it would be reasonable to assume that Beatty considered the armoured cruisers a liability (albethey necessary, given the demand on cruisers) to be protected and the light cruisers an offensive asset. Perhaps with this in mind, Beatty was an advocate of a number of mixed squadrons comprising two battle cruisers and accompanying fast light cruisers rather than of concentrating all battle cruisers in a single formation, as was the practice in 1914.[52] Such a deployment would allow more areas of the patrol line to be proximate to the ready support of fast and substantial units and the battle cruisers themselves would have integral scouts to locate the enemy or conduct sweeps towards the enemy coastline with the backing of the battle cruisers. Seligmann notes that 'the creation of mixed squadrons was, in fact, Admiralty policy', scheduled for introduction in 1915.[53] Interestingly, he notes that the proposed conference was to discuss whether battle cruisers should be employed as the spearhead of the battle fleet when at sea or in support of scouting light cruisers: if the former, then scouting light cruisers might suffer

[51] NMM, Beatty Papers, BTY/2/3/4, holograph draft dated 5 April 1913.
[52] Seligmann, 'A Service Ready for Total War?', p.118-9
[53] *Ibid*, p.119 and TNA, ADM 1/8383/179, Board of Admiralty: Board Approval to Battle and Cruiser Squadron Programme, 8 July 1914. The scheme envisaged four Cruiser Squadrons, each comprising two battle cruisers and four *Arethusa* or *Calliope* class light cruisers. None of the 16 light cruisers assigned at that date had yet entered service. Whilst the last of the battle cruisers, *HMS Tiger*, was to be commissioned by October 1914, the last of the allotted light cruisers, *HMS Champion*, was not commissioned until December 1915, and did not join the Grand Fleet until February of the following year.

heavy losses when unsupported but would still be required for the vital task of locating the enemy.[54]

Obviously, a 30-knot, 6in armed light cruiser such as the *Arethusa might* be able to fend off enemy destroyers and light cruisers it might encounter, as well as outrunning a battle cruiser in order to transmit its vital intelligence. However, all such schemes for mixed squadrons, fast patrol lines and sweeps towards the enemy's coast involving fast light cruisers were prospective in nature. At the outbreak of war, of the seventeen 25-knot *Towns* then in service, four were in the North Sea: of the 29-knot *Arethusas*, none had yet been commissioned.[55] Even after the outbreak of war, the first four *Arethusas* were assigned to serve with Commodore Tyrwhitt's Harwich Force and, much to Jellicoe's indignation, it was not until March 1915 that the other four ships of the class were available to the Grand Fleet.[56] That the new ships were much in demand for their speed is illustrated by the case of *HMS Arethusa* herself. Although Jellicoe had expected ships of the class to join the Grand Fleet immediately upon entering service, the Admiralty had assigned the lead ship to Captain Bertram Thesiger directly from commissioning in late August 1914 to take part in the search for the German light cruiser *Karlsruhe* in the Caribbean, hardly a task for which her design was suited. However, command of the vessel went to Tyrwhitt, as a result of a meeting with Churchill and Battenberg on 24 August to discuss the First Lord's Ostend plan. Captains of the *Arethusa*'s sisters, *Undaunted* and *Aurora*, already preparing to accept the ships into service with the Grand Fleet, were reassigned and new commanders appointed, also within the Harwich Force, following the loss of the late scout *Amphion*.[57]

Jackson's concluding requirement for a total cruiser force of no less than 110 vessels was to 'defend the interests of the Empire abroad, and protect our commerce afloat'.[58] As Christopher Bell has demonstrated, imperial sentiment had limited traction in the Admiralty immediately

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[54] 'A Service Ready for Total War?', p.119. Topics suggested by Callaghan for discussion at the Spithead Conference included replacement of slower cruisers and more regular docking of cruisers. Both items were excised from the proposed agenda by Churchill. (See p.108 of the same paper).

[55] The four *Towns* were serving with the Grand Fleet's 1st Light Cruiser Squadron. Three were in the Mediterranean, one in the Red Sea, one in the East Indies, two in China, two off the coast of the Americas, two on Atlantic patrol and the two RAN vessels were in the Pacific. The commitment of three-quarters of the Admiralty's fastest and most modern cruisers to overseas stations at the outbreak of war is revealing of the continuing concern for the protection of trade routes and oversea interests. *Arethusa* was the first of her class to be commissioned, one week after the outbreak of war.

[56] A Pearsall, 'Arethusa Class Cruisers Part 2', *Warship* Vol. 32, Oct. 1984, p.258-9.

[57] *Ibid*. Tyrwhitt wrote to his brother the same evening, 'From the oldest and slowest [*Amethyst*] to the newest and fastest light cruiser. She's a regular flyer and a ripper but I have no time to get her into fighting trim' (A Temple Patterson, *Tyrwhitt of the Harwich Force*, London: Macdonald, 1973, p.54).

[58] UoS, Mountbatten Papers, MB1/T23/181, Jackson's 23 January 1913 minute as previously cited.

before the war, and the hard-nosed realities of containing and overcoming the High Seas Fleet in the North Sea undoubtedly dominated strategic thinking and light cruiser procurement.[59] However, in the case of cruisers, strategic realities such as they were perceived at this period also demanded a strong overseas presence. By the time of Churchill's arrival at the Admiralty in October 1911, of the light cruisers built since 1900, there were four second class and one third class cruisers serving overseas, plus one scout in the Mediterranean, a matter of constant concern to the War Staff.[60] For Ballard and his Assistant DOD from 1913, Herbert Richmond, both well-versed in the teaching predominant at the Royal Navy War College, the need to enhance the *overseas* response to the presence of a powerful German fleet in home waters was axiomatic. Twenty years later, Richmond, a strong advocate of aggressive cruiser operations, was to write, 'When a superiority on the part of one fleet has been established so markedly that the inferior fleet ceases to dispute command, recourse is had by the inferior navy to an effort made directly at against the shipping of its enemy by cruising forces. Large numbers of vessels of the smaller . . . types are launched in every possible combination against trade, while a respectable main body continues to exercise a threat which obliges a larger force of the superior navy to be kept in concentration for the purpose of keeping it under control. A great expansion of cruiser and flotilla forces becomes necessary to meet this form of attack'.[61] Whilst Richmond's description of 'the inferior fleet' did not reflect the circumstances of light cruiser provision in the North Sea in 1914, from 1912 onwards it was becoming apparent that Britain was winning the race to build capital ships and that Germany was thus ever more likely to adopt the policies described by the author.

The Admiralty remained sensitive to a range of lobbying groups, all concerned with the protection of Britain's vast overseas interests, from those 'Liberal Imperialists' such as Asquith and Grey in the Cabinet to the civil servants of the Foreign and Colonial Offices, the City of London, and the Committee of Imperial Defence among others, with its strictures on security of food and oil supplies.[62] Such influences were clearly apparent in both the Admiralty's strategic thinking and operational training. In the 1912 manoeuvres, two of the three stated objectives for the enemy Red Fleet commander were to disrupt Atlantic trade, first by operating

[59] Bell, 'Sentiment vs Strategy'. All of the pre-war programme *C* class light cruisers saw North Sea service.
[60] Two *Challengers* in Australia, a *Town* in China, and a *Town* and *HMS Amethyst* on the SE coast of America. (NMRN, Pink Lists, October 1911).
[61] Admiral Sir Herbert Richmond, *Sea Power in the Modern World* (London: G Bell & Sons, 1934), pp.42-3.
[62] See Matthew, *The Liberal Imperialists*; N C Fleming, 'The Imperial Maritime League'; d'Ombrain, 'War Machinery' and J Rüger, *The Great Naval Game* for explorations of the wider political, social and economic influences affecting Admiralty policy during the period.

in strength and second 'by cruisers acting independently'.[63] In 1913, one of the two tasks assigned to Jellicoe as C-in-C Red Fleet was again the interruption of Atlantic trade.[64] Discussions on commerce protection and theoretical exercises also consumed the energies of the Admiralty War Staff and the Royal Navy War College.[65] That a central tenet of Germany's 'risk fleet' strategy was aimed at expanding the nation's foreign and imperial interests, and diluting British naval strength overseas by the presence of the High Seas Fleet in home waters, was well understood at the Admiralty, and was all the more reason why, in Jackson's opinion, 37% of the navy's cruiser fleet should remain on foreign stations.[66]

Both Seligman and Angus Ross have pointed to recognition within the Admiralty as to the extent of the surface threat to British commerce before August 1914.[67] The submarine was not widely recognised as a danger in this context, and was famously dismissed as such by Richmond less than a month before the outbreak of war.[68] Of far greater worry was the lack of fast cruisers available to deal with German light cruisers such as the *Karlsruhe,* which at 27 knots could outrun the *Monmouths,* fastest of the trade protection armoured cruisers. The issue was compounded, as Seligmann has demonstrated, by the 46 German auxiliary cruisers that were known to be fitted out for service as armed auxiliaries by 1914.[69] The presence of German battle cruisers in the High Seas Fleet and Churchill's 1912 commitment to sending some vessels of the type to the Mediterranean precluded widespread battle cruiser deployments for commerce protection duties. The 'fleet unit' concept operated in the Pacific, (with an Australian battle cruiser and *Town* class light cruisers) but was more fleeting elsewhere. Whilst Admiralty war plans allowed for battle cruisers to be detached against commerce raiders, aside from the operations of battle cruisers in the Mediterranean to locate the *Goeben* and *Breslau* in August 1914 and the commitment of *Invincible, Inflexible* and *Princess Royal* to the search for von Spee's East Asia Squadron after Coronel in November, the 'fast' element of operations

[63] NMM, May Papers, MAY/10, 1912 Naval Manoeuvres, Narrative of Events, p.1.
[64] TNA, ADM 116/3381, First Lord's Miscellaneous Papers, 1911-14, Naval Manoeuvres 1913, Report by Vice Admiral J R Jellicoe, Commander-in-Chief, Red Fleet, p.1-8.
[65] See for instance, UoS, Mountbatten Papers, MB1/T29/278, typescript memorandum by the Admiralty War Staff dated 14 February 1914 on 'Strategical exercise on attack and defence of commerce worked at RN War College'.
[66] For Germany's 'risk fleet' see Herwig, *Luxury Fleet*, pp.35-38. Jackson's 23 January 1913 paper on cruiser requirements stated the need for 69 cruisers on the Home Station and 41 on Foreign Stations.
[67] Seligmann, 'A Service Ready for Total War?', pp. 113-4; Angus Ross, 'Losing the Initiative in Mercantile Warfare: Great Britain's Surprising Failure to Anticipate Maritime Challenges to Her Global Trading Network in the First World War'**,** *International Journal of Naval History*, Volume 1, Number 1, April 2002.
[68] NMM, Richmond Papers, RIC/1/9, draft paper, 11 July 1914.
[69] See Seligmann, *The Royal Navy and the German Threat* (passim) and 'A Service Ready for Total War?', p.114 for the auxiliary cruiser figure, which is quoted from TNA, ADM 137/2831, Richard Webb, 'Memorandum on Possible Losses to British Commerce in an Anglo-German War', 28 May 1914. Transatlantic liners slated for conversion such as *Kaiser Wilhelm II* could attain 23½knots.

against commerce raiders would, under normal circumstances, have to be provided from elsewhere.[70]

One response to the German threat to commerce was the arming of merchantmen in imitation of German practice. As Rear Admiral Henry Campbell wrote in January 1913, in a war 'Germany will show her hand as regards the arming of her Merchantmen' but with such a dominant merchant marine, as well as a global infrastructure of port facilities, communications and coaling facilities, 'the power of retaliation therefore lies with Great Britain'.[71] Stephen Cobb has detailed the growing acceptance within the Admiralty of the need for armed merchant cruisers with both the speed and endurance to counter a German oceanic threat to commerce.[72] However, as he points out, 'Admiralty plans never envisaged that AMCs would – or could – enter naval service in less than three to six weeks following the outbreak of war. It was British policy *not* to equip merchantmen with guns and ammunition that they might arm themselves on the high seas when war broke out'.[73] Britain would not initiate attacks on trade: legal and commercial considerations would have to be weighed, and any designated auxiliaries at sea would need to return to Britain for conversion. Admiralty war planning recognised that the opening days of any future war could prove critical in terms of identifying, locating and neutralising the German commerce raider threat.[74] In a paper dated 18 December 1913 Ballard addressed the question of trade protection cruiser numbers given that understanding.[75] He concluded that the use of armed merchant cruisers for the Northern Patrol and to police the South American and Cape trade routes could not be contemplated unless 'they were immediately available but that is impossible', hence AMCs could not 'be regarded as proper substitutes for any of the cruisers' on these routes. Ballard added that war games had suggested

[70] Callaghan's concerns at the impact of such plans for the Home Fleet are expressed in UoS, Mountbatten Papers, MB1/T23/184, letter to Battenberg dated 8 March 1913. Jellicoe strongly objected to 'the danger of weakening our battle-cruisers below German strength' in the North Sea (telegram to Admiralty, 10 November 1914, in Temple Patterson (ed.), *The Jellicoe Papers*, Vol. I, p.70-80). *Town* class cruisers were still an important component in scouting for the battle cruisers in both the Mediterranean and South Atlantic.

[71] UoS, Mountbatten Papers, MB1/T23/180, memorandum dated 22 January 1913, 'Notes on the Arming of Merchant Ships'.

[72] Cobb, *Preparing for Blockade*, pp.225-239.

[73] *Ibid*, p.245.

[74] Corbett's description of 'trade defence movements' both prior to the outbreak of war and immediately after its commencement bears testimony to the Admiralty's concerns. To counter the presence of German, high-speed liners berthed in New York and designated for auxiliary cruiser duties, as well as the naval cruisers *Dresden* and *Karlsruhe* off the Atlantic seaboard of the Americas, five cruiser squadrons were deployed, the *Town* class *Bristol* attached locating the *Karlsruhe*, and *Glasgow* encountering *Dresden* at Coronel and being instrumental in her destruction thereafter (J S Corbett, *Naval Operations: A History of the Great War based on Official Documents, Vol* 1, London: Longmans, Green & Co., 1920, pp.40-53)

[75] NMRN, Trade Protection Papers, T16626, 'Cruisers for Trade Routes'. Ballard proposed: 4 cruisers for the North American trade route; 6 for South American trade; 2 for the Channel to Gibraltar trade; 10 for Mediterranean trade; 6 for the Cape route trade; 4 in the East Indies; 6 on the China Station and 1 protecting West Indies trade.

that German commerce raiders would adopt tactics comprising 'a series of dashes immediately followed by a rapid retreat' when attacking trade routes. Speed, both of strategic *and* operational response, would clearly be critical in countering any German commerce raider threat in the event of war, and must provide much of the rationale for the deployment of the Admiralty's fastest cruisers after the battle cruisers, the *Towns*, in such numbers (three-quarters of all these ships) to trade protection duties in 1914 when the requirement for similar vessels in the North Sea was so pressing. Admiralty policy was to station at least one of the *Towns* adjacent to each major trade route and to employ them for relaying of wireless communications, contraband control, location and interdiction of enemy cruisers and accompanying support vessels and colliers, vectoring in of armoured cruiser squadrons to intercept such vessels, scouting for armoured cruiser sweeps, and blockade of enemy vessels in neutral ports. By the outbreak of war, there were three *Town* class light cruisers in the Mediterranean, one in the Red Sea, one in the East Indies, two in China, two off the coast of the Americas, two on Atlantic patrol and two Australian *Towns* in the Pacific.[76]

Although Corbett had suggested that protecting maritime communications on the high seas was a vital part of a cruiser's work, the application of contraband control was not a priority for the Admiralty beyond the North Sea. Both John Ferris and Seligmann have pointed out the issues of practicality and legality facing the Navy in applying such a policy, as well as the threat of damage to British interests that might occur if an aggrieved neutral power such as the USA chose to retaliate in kind.[77] In August 1913 Churchill wrote that 'British attacks on German trade are a comparatively unimportant feature in our operations and British cruisers should not engage in them to the prejudice of other duties'.[78] Given the existing demands upon the Navy's cruisers this was perhaps just as well, although the ability to counter the operations of German commerce raiders continued to give concern.

Due to their speed, the *Towns* were much prized assets on foreign stations. However, whilst turbine engines possessed far greater serviceability than triple expansion machinery, especially at higher power settings, boilers were still largely coal fuelled and at between 4,500 and 5,000 nm, the range of the ships was not as impressive as that of the *Edgars* they were intended to replace. The commission of the early *Town* class light cruiser *Bristol* between May 1914 and

[76] NMRN, Admiralty Pink Lists of HM Ships' Movements, July 1914.
[77] See Ferris, 'Pragmatic Hegemony', p.87-98 and Seligmann, 'Failing to Prepare?', pp.423-5. Both authors refer to Admiralty reluctance to consider further tightening of international laws governing blockade whilst wishing to encourage exactly that for contraband control.
[78] Memorandum dated 21 August 1913 cited in Bell, *Churchill and Sea Power,* p.44.

December 1915 still provides full testimony as to value of these vessels to the Admiralty, especially given advances in marine wireless communications.[79] Over 19 months the ship covered 59,858 nautical miles, equivalent to three circumnavigations of the globe, taking in the Caribbean, the Atlantic and Pacific coasts of South America, the Falklands, the Western Mediterranean and the Adriatic [80]. She re-coaled and oiled on 45 occasions, at twenty different locations, both in port and at sea, taking on board an average of 614 tons of fuel on each of these occasions – 27, 649 tons or nearly six times her own normal displacement in total. Of her 579-day commission, 329 days, or 57% of that time, was spent at sea – and if *Bristol*'s single long refit at Gibraltar in the summer of 1915 is discounted, that proportion rises to two-thirds. It is perhaps no wonder that none of the *Towns* reached their anticipated twenty years of active service.

Given Fisher's (if not entirely Jackson's) original vision for the *Towns* as 'backers-up' of the close blockade in home waters, as stated in the 1907 'Cruiser Policy',[81] the part reluctance of Dominions such as Canada and New Zealand and part unwillingness of the Admiralty to expand the fleet unit concept left provision of trade protection still largely the responsibility of armoured cruisers.[82] The deployment of 13 *Towns* to overseas stations was an assistance, but as the new DNC, Sir Eustace d'Eyncourt, was to point out to the Admiralty Board in 1912, the speed of these armoured cruisers did not exceed 23 knots, and the German Naval Law recently passed called for the building of ten, fast new cruisers specifically for foreign service by 1920.[83] D'Eyncourt's suggestion that a replacement for the large armoured cruisers should be investigated was endorsed by the DOD, George Ballard, who reminded the Board of the First Lord's commitment to building two new cruisers for every one constructed by Germany. Twenty such vessels would offer five each for the China, East Indies and Cape Stations and a further five for the Atlantic, West Indies or wherever required. In support of the proposal,

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[79] See Pattee, *At War in Distant Waters*, p.27-32 for an explanation of the functioning of British cable and wireless communications and their relevance for the Royal Navy at the outbreak of the First World War.

[80] William Buchan, *The Log of HMS Bristol, 1914-1915* (London: Westminster Press, 1916).

[81] NMRN, Papers of Lord Tweedmouth, MSS/254/463 previously referenced. Jackson's description of the newly proposed *Towns* as replacements for the first class, commerce protection *Edgars* clearly alluded to his hope that such numbers might eventually be built to suffice in countering German third class cruisers wherever they might be found.

[82] Christopher Bell comments on the reluctance of Churchill and the Admiralty to commit new and valuable cruisers for permanent, overseas service: having substituted two pre-dreadnoughts for the battle cruisers promised for a Pacific squadron in a 1909 agreement with the Dominions, 'During the course of 1913, he [Churchill] went further still and attempted to substitute older vessels for the modern *Bristol*-class cruisers that had been earmarked for New Zealand waters'(Bell, 'Sir John Fisher's Naval Revolution Reconsidered', p.355).

[83] Original comments to the Board from the DNC and Ballard are included in NMM, Woolwich, ADM 138/319, Ships' Covers, 'Atlantic Cruiser, 1913', f.1-14. Friedman, *British Cruisers*, p.35 details the origins of the scheme and illustrates the abandoned design options.

Ballard also pointed to the German plan in the event of war to convert ten of their largest and fastest merchant ships to armed merchant cruisers, with the likelihood they were intended for distant service given their large coal capacity. In the context of the ongoing warnings from Chiefs of the War Staff between 1912 and 1914 as to the requirement to maintain as large and modern a fleet of cruisers as possible, both at home and overseas, these recommendations were hardly surprising, but Ballard's direct involvement with, and advocacy of, particular DNC schemes is of interest.

By July 1913 a design outline (B3) had been produced for the so-called 'Atlantic Cruiser', a 7,440 ton ship mounting eight single 7.5in guns in enclosed turrets, four submerged 21in torpedo tubes, up to 4in side armour and capable of 26 knots, generated by oil-fired boilers and turbines. Friedman quotes a report on the new design dated 2 July 1913, probably written by the Controller, Rear Admiral Gordon Moore, in which he stated 'this design was got out as a result of rumours that the new German protected cruisers would be armed with guns at least 6.9in [*sic*, surely 5.9in] calibre (probably larger). The First Lord was anxious to have a design ready in case these rumours were true'.[84] The *Pillau* class laid down in 1913 did indeed adopt a 5.9in main armament, as was standard practice for light cruisers constructed thereafter, and this undoubtedly influence the choice of 7.5in guns for the 'Atlantics'. Moore was impressed by the design and its improvement upon the *County* class armoured cruisers, but on 4 August Churchill wrote to Battenberg to 'question whether it does not go beyond anything required by German cruiser construction. I do not like the expression "for Atlantic service".[85] Despite a smaller, mixed 7.5/6in design (B4) being produced in the same month, the scheme was dropped – at an estimated cost of £700,000 per vessel, the 'Atlantic' design was two-and-a-half times more expensive than the *Arethusas.* As detailed in Chapter 3, plans to produce cheaper versions of the battle cruisers then under development, and with a dedicated commerce protection remit in mind, dated back at least to Jellicoe's 1907 proposals.[86] That none of the 1912-14 design studies was pursued was clearly due to financial constraints and strategic priorities: the combination of armoured cruisers and *Towns* on overseas stations would suffice; the urgent need for fast fleet cruisers in the North Sea could not, and it was the *Arethusas* and *C* class light cruisers that Churchill declared would meet the Admiralty's 2:1 cruiser construction pledge. Only in June 1915, with Jackson replacing Fisher as First Sea Lord and North Sea light cruiser

[84] Friedman, *ibid* and 'Atlantic Cruiser' Ships' Covers, f.31.
[85] Freidman, *ibid* and Ships' Covers, f.89.
[86] See Murfin, 'Lost in the Fog of War'.

numbers more encouraging, did design work on a rejuvenated 'Atlantic Cruiser' design, the *Hawkins* class, recommence.

By 1914 provision had been made, albeit belatedly, to update the Admiralty's cruiser force for service with the fleet and commerce protection duties. However, the constabulary duties of the smaller second and third class cruiser, so reviled by Fisher, were not to be enhanced.[87] The former First Sea Lord associated such peacetime cruisers of small fighting value as relics of a former procurement policy originating in what Andrew Gordon has described as 'The long calm lee of Trafalgar'.[88] The words of Lord Charles Beresford could not have summarised the grounds for Fisher's contempt for the author had he composed them himself: 'It is contrary to common sense that British naval power should be organized only for purposes of battle. The British Fleet heretofore carried the British Flag and the British ideas of justice and good government to every corner of the globe, and the service rendered to the peace of the world by the British Navy is not to be reckoned on first class battleships, armoured cruisers and torpedo craft alone. Similar vessels, but less powerful, are still needed in all parts of the world for the training of officers and men, and for the vindication of the laws of civilisation'.[89] In the summer of 1912, when the scale of naval expenditure had already prompted Churchill to propose a joint 'holiday' from further large-scale spending to Germany, a Committee on 'HM Ships – Duties in Peace – Types Required' was established under the chairmanship of Sir Francis Hopwood to consider the most cost-effective methods for replacing chiefly smaller cruisers on foreign and colonial stations which, by 1920, would be unsuitable for further service or too costly to maintain. Seventeen such vessels were identified by Hopwood and the other committee members, Rear Admiral Sir Edmond Slade, Captain George Ballard and the Admiralty Assistant Secretary for Finance, Vincent Baddeley.[90]

Evidence was received from the War Staff, the Military Branch of the Admiralty and both the Foreign and Colonial Offices, the latter reissuing a July 1907 memorandum on the value of small cruisers for 'ceremonial and other visits and in police patrol work'. However, both Offices were against 'a purely peace ship', and preferred 'war ships, looking the part, flying the White Ensign, carrying several effective guns and capable of disembarking landing parties

[87] In his 1905-6 volume *Naval Necessities*, Fisher reserved especial vitriol in the section "Why we must continue to weed out!", 'Remarks on ships of small fighting value' for such vessels, particularly 'the retention of 20 useless "Apollo's"' [*sic*]. See Kemp (ed.), *Fisher Papers*, Volume II, p.9-11.
[88] Gordon, *The Rules of the Game*, pp.155-192.
[89] *The Betrayal*, (1912), p.40.
[90] The Hopwood Report and appendices (1 Feb. 1913) and Ballard's minority report (31 Jan. 1913), quoted here, can be found in TNA, ADM 1/8328, Admiralty: In Letters and Papers, Feb. 1913.

of Seamen and Marines'. In an appendix, Slade considered that 'the danger from moderate speed Auxiliary Cruisers widely distributed all over the world is very pressing' and offered calculations as to the financial cost of potential British mercantile losses upon the immediate outbreak of war if naval protection was not close at hand.[91] In the event, the majority of the committee favoured a 'low cost and maintenance Apollo design', of some 2,000 tons, 17-18 knots speed, 8,000 nm range and armed with 2-6in, 4-4in and 2-12 pdr landing guns, a design for which was drawn up by Stanley Goodall as 'FC2' in October 1912.[92] The cost of the design was estimated at £130,000 per vessel. Ballard provided the dissenting voice, and in a minority report stated his opposition to 'a cruiser of low cost and small permanent personnel'. He declared that 'It is the considered opinion of the War Staff that her fighting value would be negligible in the aspects and conditions of wars of the future'. Slow speed would be of little value against a navy which aside from armoured ships was at that time building no ship of less than 26 knots speed, nor against fast auxiliary cruisers. Ballard dealt the proposal a mortal blow by querying whether it was anticipated that the new ships would be included in the calculation of the navy's 100% superiority in cruiser construction over Germany. If this was the case, he argued, their merits hardly warranted comparison with German vessels; if not, then additional funds would have to be found to build them. In a letter to Ballard dated 5 February 1913, Churchill thanked Ballard for his work on the committee and the scheme was duly cancelled.[93] Building of North Sea light cruisers and war preparedness were now the understandable priority, alongside financial constraints, and so-called 'peace cruisers' had no place in procurement. However, as John Beeler has pointed out, Britain's abandonment of the constabulary cruiser may have had unintended, long-term consequences for British international prestige and her commercial interests, contributing to a decline in the 'soft power' that the nation was able to wield.[94]

* * *.

As evidence mounted during 1912 that Britain was winning the *Dreadnought* race, the appeal of modernising her cruiser force was more attractive. Not only did such a programme meet the Navy's traditional, long-standing commitments, ever rehearsed by the Admiralty War Staff,

[91] Slade provided NID reports from mid-October 1912 which suggested that there were 742 German merchant steamers at that date engaged in trade worldwide, 131 fitted with wireless telegraphy and 37 fitted as armed auxiliaries (*Ibid*, Appendix D).
[92] NMM, Woolwich, ADM 138/319, Ships' Cover 'General Cruiser'. See also Rear Admiral R Morris, 'The Colonial Cruiser of 1912', *Warships*, No.142, Nov. 2001, pp.30-34.
[93] UoS, Mountbatten Papers, MB1/T23/185, minute on 'Committee on Colonial Cruiser'.
[94] Beeler, 'From Gladstone to Fisher', p.19.

but also the Liberal Party's desire to sustain the '*pax*' in the '*Pax Britannica'* with less controversial expenditure. That over ten *Arethusas*, or nine *Chathams* could be ordered annually – giving work to all Royal Dockyards and up to half a dozen private yards at the same time – for the cost of one super dreadnought[95] was also appealing to the Cabinet, although financial constraints would continue to impinge upon cruiser procurement. Another appeal was the growing versatility of the ships. Whilst the *C* class cruisers were distinctly North Sea service ships, their gradually increasing size and range, heavier armament and a speed still commensurate with the *Arethusas* gave them a wider utility which suited an Admiralty with many calls upon its fleet.[96]

A minute issued by Churchill as First Lord in August 1913 under the anodyne title, *Requirements of Officers, 1920*, attempted to regularise the light cruiser procurement programme.[97] Re-establishing the statistical analysis of future cruiser requirements and a cruiser 'standard' that strongly resembled the aims of First Naval Lord Sir Frederick Richards during the 1890s,[98] the document set out the Fleet's cruiser requirements for the year 1920 and beyond. Firstly, light cruisers of 22 knots or less were to be discounted, 'it being impossible for them to escape the majority of battleships of which the fleets will then be composed.' The proposed light cruiser fleet for 1920 was as follows:

[95] Comparative figures extracted from the relevant volumes of *Brassey's Naval Annual* give an average unit cost of £285,000 for the *Arethusas*, £334,053 for the *Chathams* and £3,014,103 for the first super dreadnought, *HMS Queen Elizabeth*, although figures were lower for subsequent ships of the class.

[96] The last pre-war class, the *Centaurs*, mounted 5-6in guns, a 3in armoured belt and could sustain 29 knots. In 1913 Pembroke Dockyard was assigned contracts for two 'oil cargo steamers', *RFAs Trefoil* and *Turmoil*, and the potential of replenishment at sea to increase the endurance of new cruisers on patrol lines, and thus the effective availability of ships at sea, was not lost on the Admiralty. Each oiler carried 2,000 tons of oil, sufficient to entirely refuel two *Calliope* class light cruisers and near double their 3,680 miles range at 18 knots. Sadly, the propulsion of the oilers themselves proved unsatisfactory once launched (Phillips, *Pembroke Dockyard*, pp.303-4).

[97] TNA, ADM 116/3486, First Lord's Miscellaneous Papers, 1907-16,' Requirements of Officers, 1920','War Requirements', p.2-3.

[98] Richards did not live to see the reaffirmation of his cruiser procurement planning, dying in 1912. However, in his later years he became a vociferous critic of the 'interruptions and distractions' of Fisher's reforms, finding himself aligned (although not formally) with the Beresford camp when he wrote to the Admiral on 6 April 1909, 'The want of useful cruisers for fleet service is due mainly to the scrap-heap policy so eulogised by Mr. Balfour, when that statesman was Prime Minister, as the "courageous stroke of a pen."' (Quoted in *The Naval Review*, November 1933, XXI (4). p. 793).

Light Cruiser Classes in Service, 1920	*No. of Vessels*
4 future programmes not yet declared, say, 6 each	24
1914-15 Programme	8
Programmes of 1912-13 and 1913-14	16
Chathams	6
Bristols	5
Weymouths	4
Boadiceas	7
Scouts	8
Total	78*

**This figure did not include the four Gem class and two Challenger class cruisers, nor the 3 Australian Chathams.*

All of the above ships were capable of, or designed to achieve, 25 knots, with a planned progression to oil fuelled, geared-turbine machinery (as in *Calliope* and *Champion* of the 1913 Programme) and a uniform 6in main armament. By 1913, all light cruisers carried telegraphic wireless equipment.

Proposed deployment of light cruisers for 1920 was:

Station	*No. of Vessels*
In attendance on the battle squadrons of the 1st and 2nd Fleets, 6 squadrons of 6 (including repeating ships)	36
Flotilla cruisers	10
Mediterranean	4
China	3
East Indies	3
New Zealand	2
Cape of Good Hope	4
West Atlantic	2
South-East Coast of America	1
Total	65

All of the above ships to be maintained in full or active commission, with the remaining 13 being assigned to the 3rd Fleet in reserve commission.

The focus of light cruiser numbers in home waters was noticeable, and hardly surprising given the date of the document. Comparisons with Germany were also a key determinant, it being pointed out that by 1920 Britain should have these 78 light cruisers, set against Germany's 25. Whilst Churchill may have hoped to satisfy those officers on the Admiralty Board, the Naval War Staff and serving with the fleet who regarded British naval policy still hamstrung by the want of light cruisers by demonstrating his ongoing commitment to the type, he was to be disappointed. Led by Jellicoe, the Second Sea Lord, and almost certainly supplied with his statistics by Jackson and the War Staff (elements of the content closely reflect the Chief of Staff's letter of concern on cruiser numbers of January 1913), Churchill's claims for the forthcoming superiority in light cruiser numbers were challenged.[99] In a minute dated 12 September 1913, Jellicoe reminded the First Lord that if Germany was to have 40 light cruisers in service by 1920 according to their Navy Law, including 31 in full commission, 21 on the home station and 10 overseas, then the Royal Navy must have double that number i.e. 80 light cruisers, with 62 in full commission, 42 in home waters and 20 overseas. 'This is in my opinion is a bare minimum', wrote Jellicoe, as given differing dates of commissioning, disagreements over the reserve status of some ships and light cruiser 'substitutions' for destroyers, the real requirement was probably above 84. This figure would leave Churchill's 1920 forecasts the equivalent of a year's worth of light cruiser procurement behind at then current rates of ordering. Clearly irked, on 23 September Churchill fell back on political prerogative and retorted that the method Jellicoe had employed to determine cruiser requirements 'ignores altogether our great preponderance in armoured cruisers, and seeks to establish a separate 100% preponderance in light cruisers . . . No distinction is drawn between cruisers and light cruisers. A 100% superiority is the only standard which has received any sanction from the Cabinet or House of Commons'. In a final minute dated 29 September, Jellicoe sought to clarify his statistical analysis, but did not amend his conclusions. It appeared that the light cruiser was now regarded in the highest echelons of the navy as worthy of its own standard.

Four days after the outbreak of war Ballard's Operations Division issued their Report No. 14 on 'Principal Cruiser Work carried out by the Home Fleets during 1913-14, written by Sturdee

[99] The entire, rather ill-tempered exchange of minutes between Churchill and Jellicoe concerning the 'Requirements of Officers, 1920' paper was published in April 1914 and appears in ADM 116/3486, First Lord's Miscellaneous Papers, 1907-16.

(by then COS) and dated July 1914.[100] An accompanying note from the Operations Division attached to the report in the archive file states that its issuing should be 'Immediate' and 'to all HM ships and vessels' but 'first to cruisers'. The report offered reports on cruiser work in the 1913 manoeuvres and various fleet exercises in February and April of that year, each accompanied by a list of lessons to be drawn. Much was made of the vital importance of cruisers as 'senders of information', which had to be accurate, and cruiser captains were encouraged to 'cultivate their imagination to appreciate what the receiver, the C-in-C or the senior officer of reports, requires to know'. The 'advantage to be gained by surrounding the enemy's fleet with shadowing cruisers' was deemed incalculable, although cruisers should not come too close to an enemy's fleet, small cruisers being best suited to conducting sweeps to locate danger. Sturdee believed that the danger from submarines, destroyer attacks or the arrival of fast, large armoured units meant that 'a cruiser patrol line is inherently weak'. Recent exercises had shown that as 'visibility in home waters is generally variable and mostly less than 12 miles, cruisers which do not possess speed equivalent to more powerful hostile cruisers cannot be spread 8 miles apart except at considerable risk' and that 'long cruiser lines composed of the present type of (armoured) cruiser are not desirable in home waters owing to their maximum speed and power being less than that of battle cruisers and fast battleships. Light cruisers, so long as weather conditions allow them to obtain a speed equivalent to a battle cruiser, may, however, be spread if the conditions at the time require them to watch a broad front'. The report concluded by suggesting the 'useful combination' of light cruiser and cruiser or light cruiser and battle cruiser forces. Whilst the report must have made uncomfortable reading for the commanders of the fleet's armoured cruisers now at war, it appeared that fast light cruisers, once they became operational, would be much in demand.

At the highest levels, the role of the light cruiser was being debated, empirical evidence being analysed, and it appeared likely that the significance of the type in the formulation of future naval policy was to be considerable, such was the indispensable component of the fleet it had become – yet the index of Volume 1 of the *Jellicoe Papers* prefixes *all* of its entries for 'light cruisers' with 'shortage of'. There are twelve such. That deficiency was brought about partly as a result of earlier Admiralty reluctance to develop the type, partly due to financial constraints but also due to the broad expectation of the many duties that the light cruiser might undertake and the impact it might have in advancing the nation's naval strategy: there were too many calls upon its services with the fleet. The pace of light cruiser procurement from 1912 onwards

[100] TNA, ADM 1/8388/227. The quotations cited here are taken from p.5-18 of Sturdee's report.

provided some relief but even in February 1916, Jellicoe was expressing deep concern in a letter to Arthur Balfour about the ongoing operational consequences of 'our very serious shortage in light cruisers . . . before the war.'[101]

[101] BL, Jellicoe Papers, Add. MSS.48992, ff.17-19, letter dated 3 February 1916. Appendix 7 contains extracts from this and several other of Jellicoe's communications concerning the lack of light cruisers in service.

Chapter 8 – Conclusion: Ever 'The Want of Frigates'

In a study focusing upon the contribution of a particular element to the general evolution of a theme as substantial and all-embracing as that of British naval policy between 1904 and 1904, overstatement of a case is an inherent hazard. Despite the constantly expressed anxieties of the 'Syndicate of Discontent', certain members of the Admiralty Board, writers on naval affairs, and ultimately the Admiralty's own War Staff about the urgent requirement to modernise the navy's cruiser fleet, those who formulated the nation's naval policy, from the Cabinet downwards, faced a myriad of challenges and competing priorities, most relating to the growing German naval threat. Even when confining themselves to the thorny issue of future procurement, the First Lord and his naval advisers faced many challenges: battleship construction remained a vast, costly but essential commitment until the 'substitution' of wartime; whilst also expensive, the great potential of the battle cruiser was recognised, no less by the potential enemy, and whilst Jellicoe may have pleaded special consideration for a light cruiser standard, from his command of the Second Division of the Home Fleet in 1911 at the latest, he was convinced that the battle fleet also required large numbers of destroyers, for both defensive and offensive operations.[1] Technological advances in the machinery of destroyers, the employment of aviation, sea mines and the submarine called into question assumptions about the role of the cruiser in reconnaissance, blockade and other traditional duties. As for those wielding political and financial control over new construction, although the predominance of Britain's cruiser force had been somewhat eroded since the high point of 1904,[2] a fleet approximately double the size of that of its nearest rival appeared acceptable.

For many naval historians, including Arthur Marder, the small cruiser has had little or no relevance in the development of British naval policy prior to the First World War.[3] Possessing neither the potency of the capital ship nor the ultimate strategic significance of the submarine, such a view is understandable and has proved to be remarkably resilient.[4] By 1914 new light cruisers comprised only one-third of the navy's cruiser fleet, which itself was but one component of a vast organisation that encompassed not just the vessels of the fleet but its manpower, training facilities, and its global infrastructure of shore stations, dockyards, depots, communications and administration. Throughout much of this organisation,

[1] See Temple Patterson (ed.), Jellicoe Papers Vol. 1, 'War Orders and Dispositions prepared when in 2nd Division, Home Fleet, 1911 (n.d.), p.25. In the wake of the 1913 manoeuvres Jellicoe stressed 'the value of a torpedo boat destroyer flotilla in company with a battle fleet seeking to evade actions, or indeed at all times' (TNA, ADM 116/3381, 1911-14, Naval Manoeuvres 1913, Report of C-in-C Red Fleet, n.d., p.5).
[2] See Appendix 2.3.
[3] In Volume 1 of *From the Dreadnought to Scapa Flow* (436 pages) covering the period 1904 to 1914 no specific reference is made to the light cruiser.
[4] See David Stevenson, 'Land Armaments in Europe, 1866-1914' in T Mahnken, J Maiolo and D Stevenson (eds.), *Arms Races in International Politics: From the Nineteenth to the Twenty-First Century* (Oxford: Oxford University Press, 2016), pp.41-60. Stevenson argues that a land arms race dominated European military rivalries after 1911 but assumes that its naval equivalent was solely a matter of capital ship competition.

despite the reforms of the Fisher era, naval policy was directed as much by pre-existing systems, expectations and the evolution of equipment, methods of thinking and of operation, as by urgent innovation.[5] New warship types were developed from, and worked alongside the old, just as the strategies themselves developed. In contrast to this evolutionary viewpoint, Marder's predecessor, Sir Llewellyn Woodward, adopted almost a teleological approach in describing the Admiralty policy during the decade,[6] and such *ex post facto* interpretations still have their adherents, with varying agendas to propose: there were war aims, leading to war plans, produced by war planners, which prompted the building of the warships, which went to war in 1914. The narrative of light cruiser development between 1904 and 1914 does not fit easily with either interpretation of naval strategy but in that, it is probably a more accurate reflection of the fluctuations, uncertainties, backtracking and sharp changes of direction that characterised the Admiralty's response to the challenges of the decade. With little deterrent value *per se*, and many other competing demands for *matériel* and expenditure, the prioritising of light cruiser procurement at certain key moments, and its abandonment at others, together with the preference for particular design attributes – speed, armour, a 4in or 6in main armament, greater endurance or cheapness – does tell us much about the evolution of the Admiralty's broader strategy. That light cruisers were engaged in so many aspects of the fleet's work, and were central to a wider debate about the function of navies – and the particular application of British seapower – merits attention if we are to gain a more comprehensive understanding of naval policy in that decade.

Preceding chapters have sought to demonstrate that the development of the light cruiser type between 1904 and 1914 reflected not only important evolutions in the technological advancement of warships (in their own way every bit as consequential as those in the design of capital ships and destroyers) but that those evolutions both mirrored and shaped the course of British naval policy in a not insignificant way. At a simplistic level, one can discern some of the key preoccupations of naval planners in the genealogy of the ships: Jackson's championing of the scout concept in 1901 to lead torpedo boats against French Channel ports; the abandonment of further scout (and all small cruiser) construction with the appointment of Fisher as First Sea Lord in 1904 and introduction of his so-called 'naval revolution'; Fisher's own recognition in 1906 of the requirement for scouts with greater endurance to co-ordinate close blockade flotillas off the German coast (the *Boadiceas*) and his apparent concession to Jackson and Jellicoe's urgings that a counter to new German third class cruisers then building be ordered, with utility for backing up the close observers and foreign stations (the 'improved *Boadiceas*' or first *Towns*). With Fisher's departure from the Admiralty in 1910, the building programme of ever-improved classes of *Towns* continued, in particular to equip the Royal Australian Navy and to meet the need to provide some vessels of above 22 knots speed for commerce protection. However, in the same year, in response

[5] See Edgerton, *The Shock of the Old* and Otte, *The Foreign Office Mind*, as referenced in Chapter 2, for further discussion of the impact of older technologies on armed forces and the culture of large organisations.
[6] Woodward, *Great Britain and the German Navy*.

to the more potent threat to the battle fleet from combined German scouting formations, destroyer flotillas and their scouts began operations with the fleet. In late 1911, with Churchill's arrival as First Lord and Wilson's departure from the Admiralty, there was an abrupt change in cruiser procurement policy, reflecting an intense concentration upon the threat in home waters and the mid-North Sea problem in particular. The cancellation of the 1912 *Towns* and their replacement by the *Arethusa* design is most revealing in pointing to the urgent requirement for considerable numbers of very fast but adequately armed vessels to fulfil a host of now pressing duties. That Churchill was to commit (though not always keep) to such a large programme of light cruiser construction, with between six and eight vessels a year being ordered from 1912, and to ignore the verbal assaults of Fisher regarding these 'damnable follies', bears testimony to their importance for the conduct of future North Sea operations.

Thanks to the laggardly response of the Admiralty to modernising their small cruiser force in previous years, their fleet, unlike the High Seas Fleet, was operationally unbalanced for the roles it was now being expected to perform. Want of light cruisers was apparent in many areas: admirable ships though they were, the four *Towns* with the Grand Fleet could keep pace neither with modern destroyers nor the battle cruisers. Troubridge's support for the removal of scouts from fleet flotillas in 1912, in order that they might conduct much-needed independent reconnaissance duties, was a product of desperation. The scouts were no faster than the *Towns*, had limited range, and were far less able to defend themselves. The impact on co-ordination of fleet destroyer flotillas deprived of scouts during the 1913 manoeuvres was, as Jellicoe pointed out, disastrous.[7] With the scrapping of plans for a close operational blockade in 1912, those cruisers conducting the mid-North Sea patrols, as well as those involved in the more distant, economic blockade lines, in theory, became more vulnerable to surprise attacks by more powerful German scouting units. Mere numbers of cruisers did not solve this issue, as the areas of sea to be patrolled were too extensive and rapid concentration under all circumstances impossible. Particularly vulnerable due to their size and restricted speed were the armoured cruisers: assumed to be a prime target for submarines and unable to escape those that their considerable armament could not fend off, be it massed destroyer torpedo attacks or larger and faster elements of the German fleet, the unsuitability of these ships for making first contact with an enemy in the North Sea was well understood by 1913.[8] That both Jackson and Sturdee (COS, July to November 1914) should insist upon the retention

[7] TNA, ADM 116/3381, 1911-14, Naval Manoeuvres 1913, Report of C-in-C Red Fleet, n.d., p.4-5. In a letter to the Secretary of the Admiralty dated 4 December 1914, Jellicoe warned of the consequences for the battle fleet of too few accompanying destroyers and light cruisers: 'The menace of so large a number of torpedo boat destroyers attacking cannot however possibly be disregarded without the certainty of heavy losses in the battle line, and – failing an adequate defensive force to counter the attack – I feel that I shall be forced into attempting to carry out this manoeuvre [turning the battle fleet away from the enemy]. We shall not have a superiority in light cruisers so that I can depend on this class of vessel to take the place of the torpedo boat destroyers' (TNA, ADM 137/995, ff.68-9).

[8] See Umpire-in-Chief's Reports on the 1912 & 1913 naval manoeuvres, (NMM, May Papers, MAY/10); UoS, Mountbatten Papers, MB1/T27/254, exchange of minutes between Admiral Prince Louis Battenberg and Vice-Admiral Jackson about the unsuitability of the *Bacchante* class for war purposes in the North Sea, dated 27 & 28

of such vessels on patrol duties again suggests that the shortage of modern light cruisers threatened to compromise the implementation of war plans. Ultimately, the débâcle that befell the 7th Cruiser Squadron when three *Bacchante* class armoured cruisers were sunk by a German U-boat off the Dutch coast in September 1914 was a result of the incompatibility of war plans as drafted and the fleet as then constituted. Churchill may have written that 'The narrow seas, being the nearest point to the enemy, should be kept by a small number of good, modern ships'[9] but as Sturdee was to persuade Battenberg, 'the desire to ensure early notice of any raid on the Channel to attack the British transports' was sufficient that the *Bacchantes* would have to remain on station, with or without destroyer escort, until more *Arethusas* became available.[10] The number of 'good, modern ships' was simply *too* small.

As the work of Matthew Seligmann and David Morgan-Owen has demonstrated, between 1912 and 1914 the Admiralty and its War Staff gave much attention to the North Sea problem and the efficacy of the mid-North Sea patrol. Creative use of battle cruiser formations, consideration of a 'fast division', more flexible lines of patrol, employment of minefields, aircraft, submarines, intelligence gathering, offensive sweeps and even more substantial operations in the Baltic might all serve to ease the problem in some form or other and re-establish the strategic initiative for the Admiralty, but at some point (preferably at the earliest opportunity) contact had to be made with the enemy, his intentions be discerned and the rest of the fleet be made aware so that the navy's quantitative superiority over its adversary could be brought into play.[11] Seligmann has usefully reminded us that in an era before great advances in 'remote forms of intelligence gathering, the only means of knowing if an enemy navy was in harbour or at sea was to go and look'.[12] Until such time as submarine or aircraft reconnaissance was to prove more effective, in North Sea conditions it was expected to be the fast light cruiser that would do the 'looking'. Lack of such vessels seriously inhibited the range of options open to both naval planners and operational commanders when considering North Sea strategy. On 31 August 1914 Jellicoe wrote to the Secretary of the Admiralty from *HMS Iron Duke*, 'Be pleased to bring to the notice of the Lords Commissioners of the Admiralty that the shortage of Light Cruisers attached to the Grand Fleet greatly limits the activity of the cruiser sweeps at present, and will become very serious when the bad weather and long nights set in'.[13] At that date Jellicoe relied upon six light cruisers to support destroyers, act with the battle cruisers, patrol alongside the armoured cruisers, scout for and protect the

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Nov. 1913; TNA, ADM 1/8388/227, Operations Division Report No. 14, 'Principal Cruiser Work carried out by the Home Fleets during 1913-14', as quoted in Chapter 7.

[9] Letter from Churchill to Battenberg dated 18 September 1914, quoted in *The World Crisis*, Vol. I, p.324. On the day before the outbreak of war, Churchill had outlined naval plans for the defence of the English Channel and BEF transports in a minute to Asquith and Grey (TNA, ADM 137/988) dated 3 August 1914.

[10] Quotation from Marder, *From the Dreadnought*, Vol. II, p.57. See Goldrick, *Before Jutland*, p.93 & pp.143-151 for the urgency with which the new *Arethusas* were anticipated.

[11] Seligmann, 'A Service Ready for Total War?'; Morgan-Owen, 'An 'Intermediate' Blockade'. See Andrew Lambert, '"The Possibility of Ultimate Action in the Baltic"' for analysis of Baltic plans.

[12] Seligmann, 'Failing to Prepare?', p.419.

[13] TNA, ADM 137/996, f.178. The letter in full is reproduced in Appendix 7.

front and flanks of the battle fleet in action. By May 1916, with a force of light cruisers over four times that size, more offensive options were open to the Commander-in-Chief, and in a plan devised to lure the High Seas Fleet out to sea, 'a light cruiser force would make a bold incursion through the Skagerrak as far as The Sound and the Great Belt, with supporting battleships and battlecruisers in the Skagerrak and off the Norwegian coast'.[14] Whilst the light cruiser offered no panacea for the Admiralty in confronting the strategic demands of North Sea operations, its entry to the fleet (from 1910 in the case of the *Towns*, and from just after the commencement of with the *Arethusas*) did at least offer the prospect of enhancing the effective deployment of other fast vessels therein, of disrupting the attacks of German light forces on armoured ships, and crucially, of increasing the notice that the C-in-C might have of the movements of the enemy.

Evidence of the influence of light cruiser development upon naval policy concerning operations on foreign stations is less easy to adduce. Whilst politicians, commercial interests and Admiralty were all in agreement that 'Britain's sea-borne trade was essential to her political and economic survival' and that 'its vulnerability in a maritime war was self-evident and had to be countered whatever the cost', Ranft concluded that the Admiralty's approach to cruisers was rather extemporised. Given the large number of cruisers of all types existing on paper (107 in 1907), 'The Admiralty were confident that . . . they would be able to update the cruiser force in numbers and quality to deal with any increase in the threat' as and when it arose.[15] The reduction in the 1911 Programme for the *Birminghams* and cancellation of further *Town* class vessels thereafter suggested that the Admiralty had put its faith in the majority of the *Towns* already ordered, in armoured cruisers, the possible employment of auxiliary cruisers and the advantages of a global communications and intelligence network to assist in vectoring in forces sufficient to deal with commerce raiders.[16] Fisher's original concept for the battle cruiser certainly prioritised *its* advantages for trade protection, although both flying squadron and fleet unit concepts envisaged co-operation with smaller and necessarily fast scouting elements.[17] The exchange of views on forecast cruiser numbers between Churchill and Jellicoe in August and September 1913[18] suggests that whilst the Cabinet went as far as confirming that a 100% superiority in cruiser numbers should be applicable separately to German home service and overseas cruisers, it did not apply to comparison of light cruiser numbers. Nonetheless, that 75% of the *Town* class were committed to

[14] John Brooks, *The Battle of Jutland* (Cambridge: Cambridge University Press, 2016), p.136. Jellicoe's plan for 2 June 1916 was of course forestalled by news of the High Seas Fleet's movements on 31 May.
[15] B Ranft, 'Parliamentary Debate, Economic Vulnerability, and British Naval Expansion, 1860-1905' in L Freedman, P Hayes & R O'Neill (eds.), *War, Strategy and International Politics: Essays in Honour of Sir Michael Howard* (Oxford: Clarendon Press, 1992), p.91.
[16] See N Lambert, 'Strategic Command and Control' and M Seligmann, *The Royal Navy and the German Threat,* pp.109-131.
[17] Seligmann, *ibid*, pp.65-88 emphasises this rationale for the battle cruiser. In heavy sea conditions, such as can pertain in the mid-Atlantic, *Town* class cruisers would struggle to maintain speed or to operate as steady gun platforms.
[18] TNA, ADM 116/3486, First Lord's Miscellaneous Papers, 1907-16, exchange of minutes on First Lord's paper, 'Requirement of Officers, 1920'.

foreign stations in 1914 when light cruiser needs were so pressing in home waters and the exercise of oceanic contraband control had been largely eschewed suggest that the Admiralty's concerns over the presence of fast German cruisers and auxiliaries on the trade routes were considerable. The allocation of *Towns* to cover each of the main trade routes was calculated in great detail by Ballard so that in the event of war, intelligence reports on the whereabouts of German cruisers and auxiliaries provided by the NID could be acted upon with the least possible delay.[19] Ballard's promotion of the 'Atlantic cruiser' design in 1913 also shows that the War Staff were alert to possible enhancements in German commerce raiding capabilities, at least in terms of surface vessels. Nonetheless, that no light cruisers suitable for overseas service were ordered between 1911 and 1915 suggests the clear focus of Admiralty policy with regards to the type.

Of the personalities influential in the development of naval policy in the period, and the place of the light cruiser within it, the figure of John Fisher looms large. Fisher's 1904 'revolution', which placed such emphasis on enhancing the capabilities of the larger and smaller units of the fleet, left the cruiser of moderate size the 'squeezed middle'.[20] Failure to modernise the second and third class cruiser fleet between 1904 and 1908, (and it was 1910 before the first ships of a new generation began to join the fleet), not only deprived the fleet of its constabulary fleet of 'small fighting value', which would not be replaced before 1914, but also of vessels that would need to be replaced, and urgently, by 1911. That the cruiser, both literally and metaphorically, could no longer keep pace with those elements of the fleet that *had* been enhanced – the fastest battleships, the battle cruiser, destroyers – and not least, with the enemy's own light cruisers, presented a number of issues both for naval policy makers and operational commanders. The claim of the Committee on Designs that 'the fast armoured cruiser renders all other cruisers useless'[21] was hyperbole, intended for maximum deterrent effect but conflating the obvious superiority of the battle cruiser over slower, smaller types in single combat with the roles that a smaller cruiser might otherwise perform, either independently or in facilitating the more effective deployment of other elements of the fleet, including battle cruisers.[22] In any event, the escalating size, cost and North Sea focus of the battle cruiser, and the halting of the building programme in 1912, compromised its ability to undertake the cruiser role in the fleet. Of more relevance was the conclusion of Fisher's pliable 'Committee of Five' that 'no ship is really useful below the strength of a 1st Class Armoured Cruiser

[19] See UoS, Mountbatten Papers, MB1/T31/294, minute from Battenberg to Churchill on cruiser distribution for 1914, 11 March 1914.
[20] It could be argued that Fisher's programme also had a lasting impact on the approach of later historians interested in the naval policy of the period, given their strong focus upon the development of the battlefleet in the case of Marder, and the battle cruiser and flotilla defence in the work of Jon Sumida and Nicholas Lambert.
[21] BL, Jellicoe Papers, Vol. 1, Add. MSS 48989, First Progress Report of the Committee on Designs, Feb. 1905, p.32.
[22] Hence Beatty's support for mixed squadrons. The wartime experience of the *Towns Bristol*, *Sydney* and *Glasgow* (albeit with assistance) against German, commerce raiding equivalents suggests that British light cruisers were able to hold their own without need to resort to the deployment of battle cruisers.

which cannot keep a seagoing speed of 25 knots in average weather'.[23] Speed was to become an essential attribute of the light cruiser and to render it a most valuable asset in the cat-and-mouse game of locating and shadowing the enemy or luring him out. However, it would appear that Fisher was well aware of the assets of a light cruiser. In his commentary on the War Plans of 1907,[24] he reminded his reader that despite the advent of the battle cruiser, 'The theory of naval war . . . still demands ordinary cruisers in considerable numbers for the primary function of controlling the maritime lines of passage and communication. The sea is wide and no concentration of force in a few units can ever be a substitute for the wide-flung net of numbers'. Similarly, Fisher recognised the requirement for 'squadrons of ordinary cruisers of as small a size as is compatible with high speed and reasonable endurance, such as the *Boadicea*, and that such squadrons should operate from a sea base' (as a leader for close observational blockade flotillas, with *Town* class 'backers-up').[25] Such views help to explain his support for the 1907 *Boadicea* and *Bristol* programmes, but Fisher's faith in the *Swift* design, which proved still less of an operational success than the scouts,[26] and his preference for a '*Super-Swift'*/submarine patrol line backed by aircraft in 1912, whilst of interest to the Admiralty, was far too experimental to meet its immediate requirement for fast reconnaissance vessels with a capacity to counter enemy destroyer and light cruiser operations in the North Sea. There is some irony in the fact that in the latter half of Fisher's first term of office as First Sea Lord, and during his second term, light cruiser procurement was marked.

That a consensus of discontent existed within the navy over the inadequacy of light cruiser procurement and the deleterious effect that this would have upon naval policy is clear. This was not a partisan, conservative or formalised grouping in any sense, however. Wilson acknowledged that a faster battle fleet necessitated a faster scouting line; May highlighted the difficulties of operating destroyer flotillas with the fleet and of driving off massed enemy torpedo attacks, led by light cruisers; Jellicoe too was concerned about the number of destroyers and light cruisers available to the battlefleet, and felt hamstrung by the want of fast light cruisers, both to conduct reconnaissance and more offensive operations. As Third Sea Lord between 1908 and 1910, Jellicoe had done much to advance the cause of the type and as Second Sea Lord, promoted the War Staff's crusade for a 'standard' of superiority in British over German light cruiser numbers. Perhaps the most outspoken champion of the light cruiser was Beatty, who recognised its contribution in bringing the enemy to battle: of the battle cruiser he wrote, 'The power of the ship is to be gauged by her offensive rather than her defensive, and the best

[23] Kemp (ed.), *The Fisher Papers*, Vol. 1, 'Some Criticisms of the Original Print of Sir John Fisher by the Committee of Five', 1904, p.12. By 1913 Churchill was looking to retire any cruiser that could not attain 22 knots by 1920 (see 'Requirements of Officers, 1920') and even first class armoured cruisers were not immune to threat in the North Sea at the date Churchill put forward his plans..
[24] *Ibid*., Vol. 2, 'War Plans, 1907', p.323-336. Quotations taken from p.327 & p.335.
[25] This was just as well, as Fisher himself had initiated the *Boadicea* programme in 1906, although he must have been horrified that in so doing, he had unwittingly provided a design model for the later '*Super-Active*' *Arethusas*.
[26] See Friedman, *British Destroyers*, p.101-4 on Fisher's '*HMS Uncatchable'* design.

defensive is an overpowering offensive'.[27] Beatty's light cruiser captains could do no wrong in closing with the enemy, for if Beatty was to follow suit, he required to know the whereabouts of that enemy, and the composition of its forces. Whilst he recognised that light cruisers must be supported 'to avoid destruction by enemy armoured cruisers', there were 'only two . . . simple requirements' for his subordinate commanders in anticipating his orders: 'so long as the enemy heavy ships remain afloat, we must "locate and report", "attack and destroy".[28]

From 1912 onward much of the burden of formulating naval strategy fell to the Admiralty War Staff, and it was from amongst its senior members that the campaign for procurement of more cruisers found its most vocal support. Jackson and Ballard wrote the paper on the Admiralty's failed cruiser policy which Troubridge presented in March 1912. Jackson's association with the light cruiser lineage dated to 1901 and his scout proposal, but as the preceding pages attest, he was the Controller to secure Fisher's signature on 'The Cruiser Policy' of 1907, and to confront Churchill over cruiser numbers as Chief of Staff. Ballard's meticulous and continual calculation of comparative cruiser numbers, deployments and the challenges presented by German cruisers and auxiliaries are evident across many of the archives. His intimate appreciation of war planning as Head of the War Division (1904-6), chair of the 1907 War Plan Committee and DOD from 1912 gave him the breadth of vision to appreciate the mutability of the strategic threat prior to 1914 and to respond appropriately. The need to maintain a large superiority in modern, effective cruisers was but one of the concerns facing the DOD but his appreciation of the operational versatility of the cruiser, the agency that it provided for other units of the fleet, and the complexity of procuring cruisers to meet required function in their form, and not *vice versa*, was of long standing.[29] The war plans drawn up by Ballard in November-December 1912 to replace Troubridge's contested 'cordon' scheme were iterations of his War Plan A/A1 of 1907,[30] but he was well aware that all war plans required a line of observation of some sort, and that the more ships of a suitable nature the Admiralty possessed to constitute that line, the greater the efficacy of the plan. In Ballard's Assistant DOD from 1913, Herbert Richmond, the War Staff was to find an intellect with a lifelong belief in Britain's unique requirement for a strong cruiser navy. Following the Second World War, reflecting upon three-and-a-half centuries of British naval policy, Richmond was to write:

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[27] NMM, Beatty Papers, BTY/2/4/3, 'Functions of a Battle-Cruiser Squadron', 5 April 1913. In a letter from Beatty to Asquith dated 3 February 1916, he wrote, pointedly: 'Considering the various functions and duties, all essential, that have to be performed by our light cruisers, it is obvious that delay in completion and delivery is a matter to cause grave concern to those who have to be dependent on them' (BTY/5/2/2).

[28] Ranft (ed,), *The Beatty Papers*, Vol. 1, p.370, 'Lessons learnt from action of 31 May 1916', dated 31 August 1916.

[29] Cdr G A Ballard, Gold Medal Prize Essay for 1899 – 'Considering the Changes made in Naval Construction during the Past Twenty Years, and in View of the Experience gained during the Chino-Japanese and Spanish-American Wars, what are the Best Types of War-Vessels for the British Navy, including Armour, Armament, and General Equipment for Ships of all types?', *JRUSI*, Vol. 44, No. 266, 1900, pp.359-94.

[30] Grimes, *Strategy and War Planning*, p.178-9.

> 'What statesmen had to learn then and in our own times was that the number of 'cruisers' is not dependent on the number of enemy vessels, large and small, but upon the number of convoys to be defended, the positions to be kept under observation, and the strength of the individual escorts. As the attacks are ubiquitous, so defence must be similarly ubiquitous. The expansion in the cruiser and flotilla forces called for in the Napoleonic and the two German wars, and the losses suffered until that expansion had been effected, are costly reminders of the need of maintaining the necessary forces, whether they be 'cruisers', 'frigates', or any other type of either surface or aircraft, at all times. The economies of peace have proved costly in war.' [31]

That 'the economies of peace' limited light cruiser construction before the outbreak of war is undoubted. Procurement priorities required constant reassessment, and money could not always be found for small cruisers. The stark possibility of imminent war with Germany, at least from 1911 onwards, was the driving force behind the preparations of Churchill and the War Staff, and the expansion of light cruiser programmes. However, war remained hypothetical until August 1914, and those responsible for shaping naval policy had also to consider the twenty-year utility of warships to meet the nation's demands in war and peace, confronting a range of possible strategic scenarios. In their dilemmas, the 'ad hoc general staff'[32] who attended Corbett's Naval War College lectures, incorporated his Green Pamphlet with the 1907 War Plans (heavily influencing Fisher's thoughts on cruisers) and sanctioned his 1911 publication of *Some Principles of Maritime Warfare*, sought a framework, a perspective for informing their decisions. This is not to suggest that the overwhelming power of education, or blind adherence to creed or maritime theory, prompted the building of light cruisers, but that the accumulated empiricism and intensely and intentionally practical recommendations of Corbett, which recognised the centrality of the cruiser in fulfilling the particular maritime requirements of the nation, strategic and tactical, made sense to many hard-nosed planners and operational commanders alike.[33] The provision of a modern, well-equipped and numerous cruiser fleet was not the ambition of the technology-averse, of those more interested in past imperial glories than grim, operational realities and continental commitments in home waters, nor of those set to unleash a brutally effective brand of economic warfare upon their enemies, but a measured response to the particular strategic issues then facing Britain, as well as those likely to confront her for the foreseeable future.

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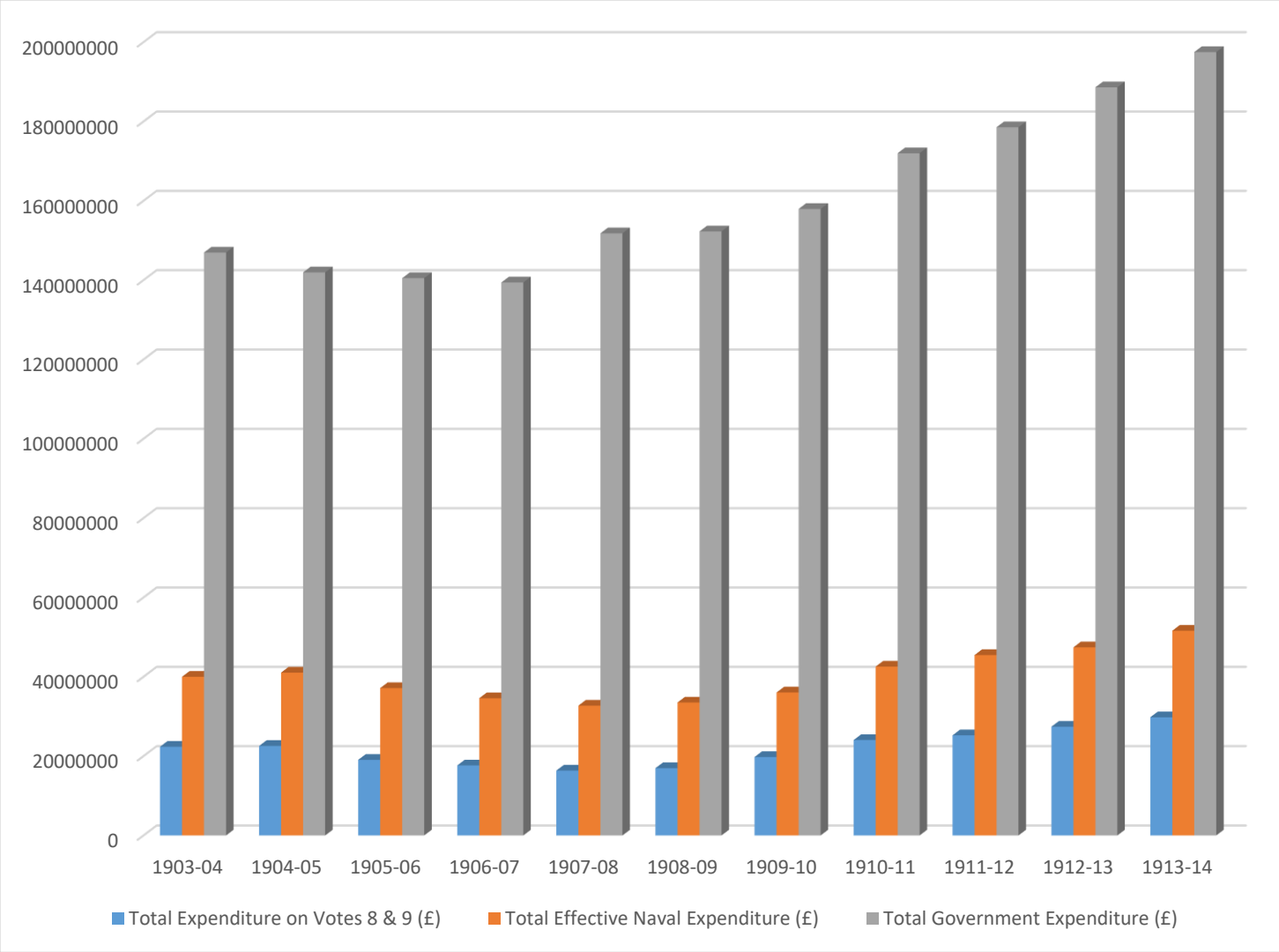
[31] Richmond, *Statesmen and Sea Power*, p.343.

[32] Hunt, *Sailor-Scholar*, p.18. Slade, Ballard, Richmond and Jackson all had close ties with the College. See Andrew Lambert's forthcoming work, *The British Way of War: Julian Corbett and the Battle for a National Strategy* for a detailed analysis of the impact of Corbett's ideas on British naval strategy.

[33] As the Troubridge Memorandum expressed it in 1912, 'A study of all possible alternative lines of strategy of war policy only serves to bring to light the impossibility of framing any satisfactory plan of operations for war against a maritime Power without an adequate cruiser superiority.'

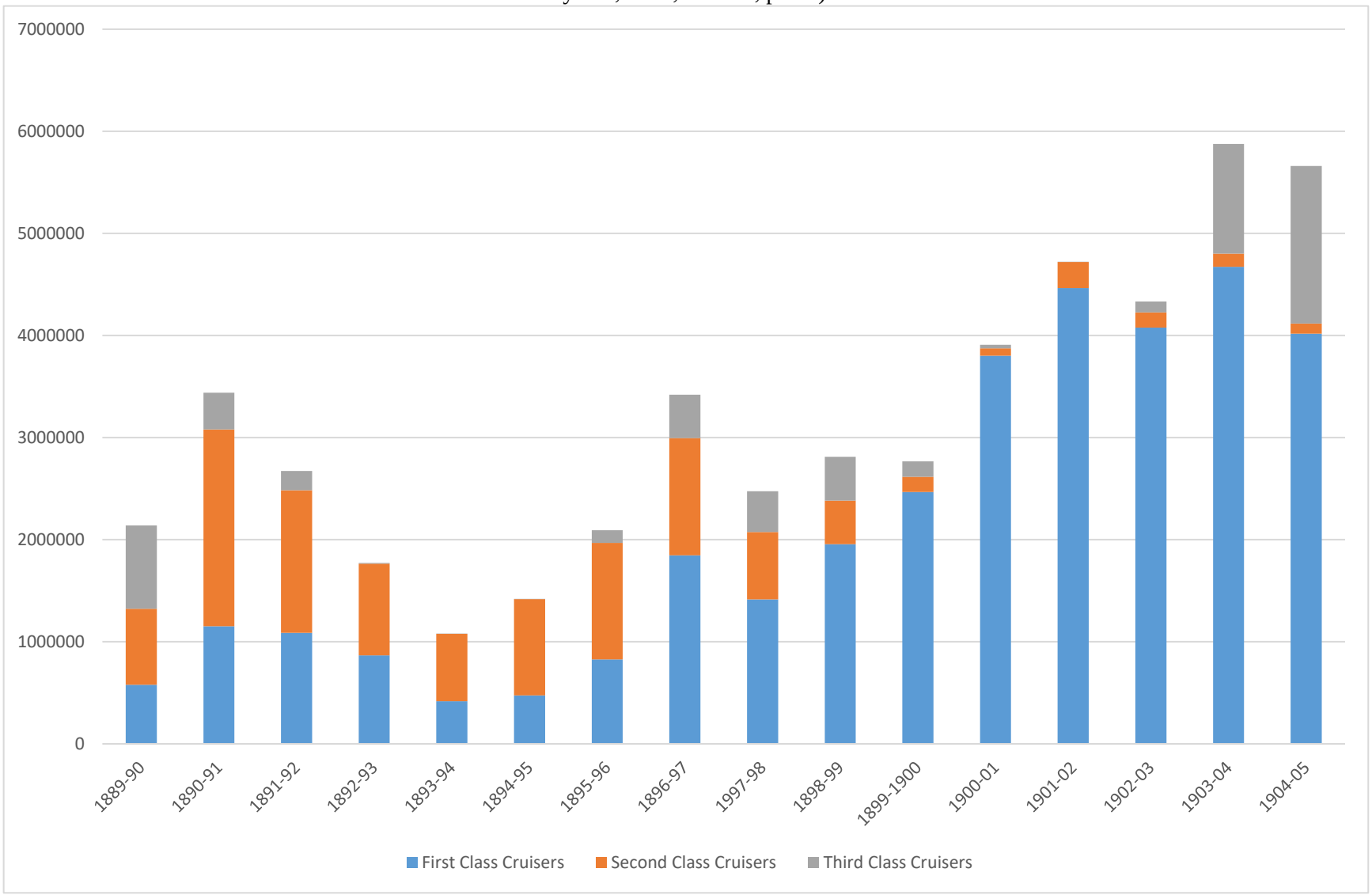
Appendix 1 - Admiralty Expenditure on Estimate Votes 8 & 9 (Shipbuilding, Repairs, Maintenance & Armaments) as a Proportion of Total Naval and Government Expenditures, 1903-04 to 1913-14



(Based on figures extrapolated from J T Sumida, *In Defence of Naval Supremacy*, 1989, Appendix Tables 1, 3 & 6)

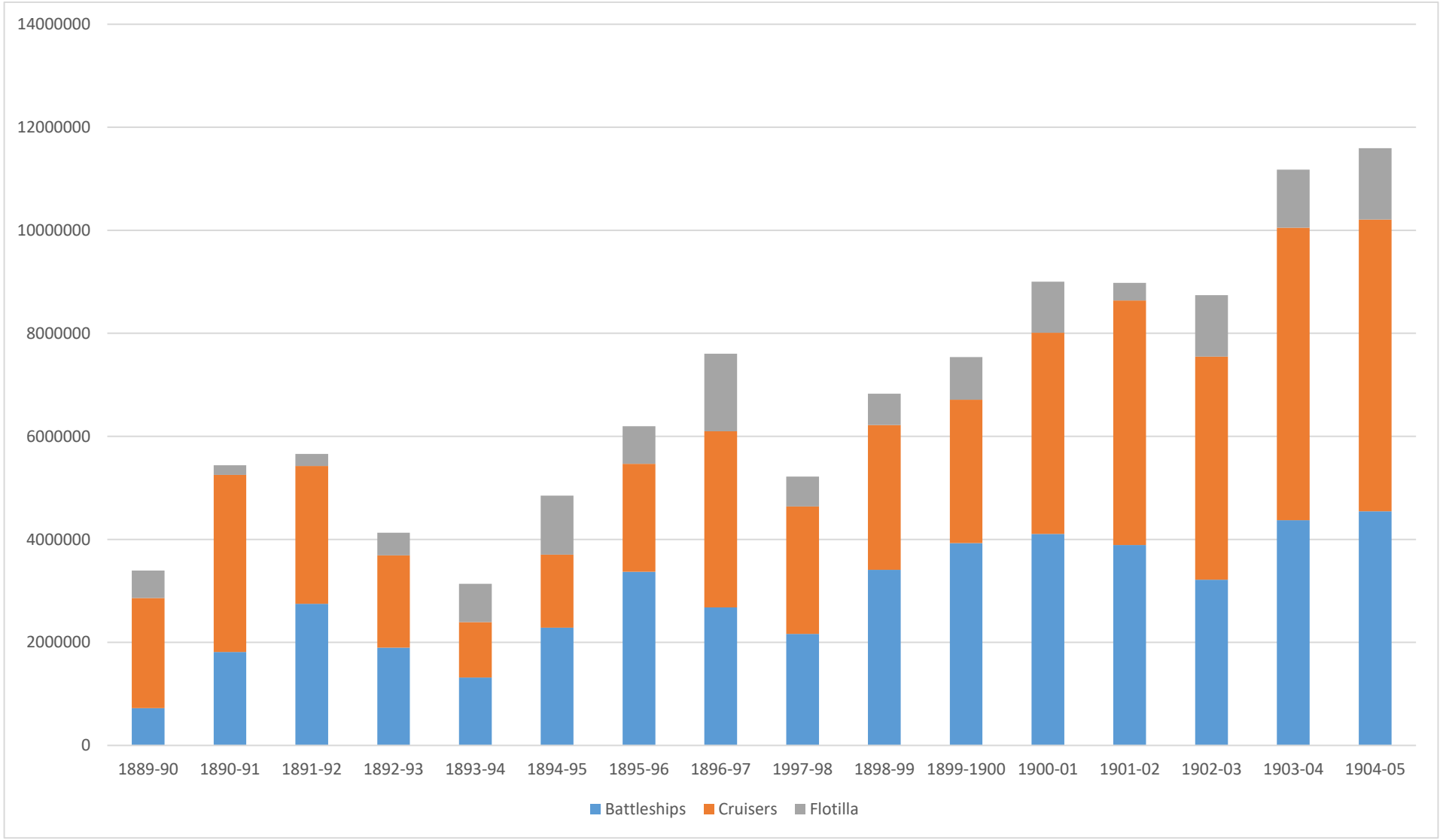
Appendix 2.1 - Expenditure on Royal Navy Cruiser Construction by Type, 1889-1904 (excluding cost of armament) in Pounds Sterling

(Derived from statistics taken from Sumida, J T, *In Defence of Naval Supremacy: Finance, Technology, and British Naval Policy, 1889-1914*, Winchester, MA: Unwin Hyman, 1989, Table 9, p.351)



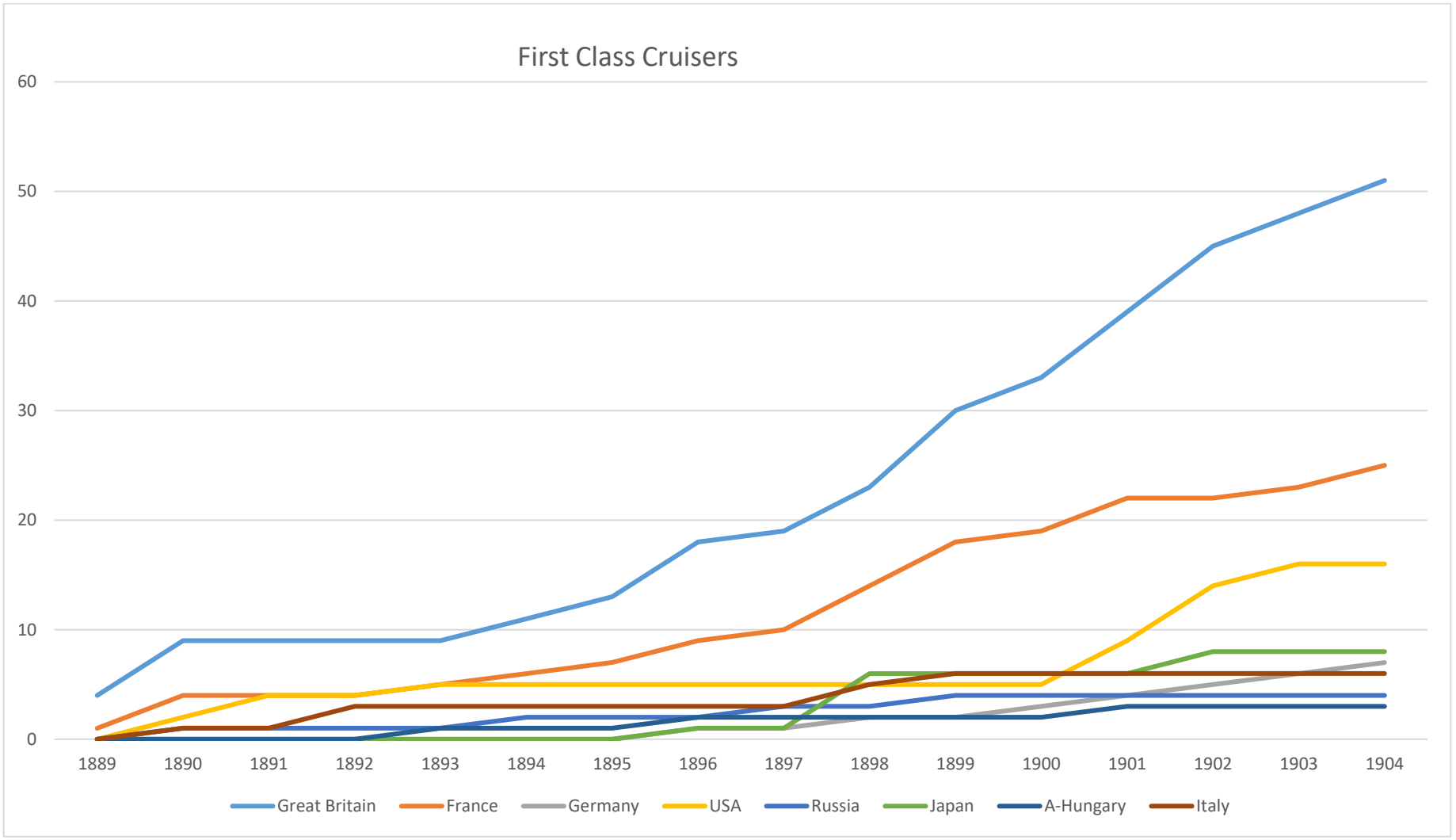
Appendix 2.2 - Comparative Expenditure on Royal Navy Warships by Type, 1889-1904 (excluding cost of armament) in Pounds Sterling

(Derived from statistics taken from Sumida, J T, *In Defence of Naval Supremacy: Finance, Technology, and British Naval Policy, 1889-1914*, Winchester, MA: Unwin Hyman, 1989, Table 8, p.350)

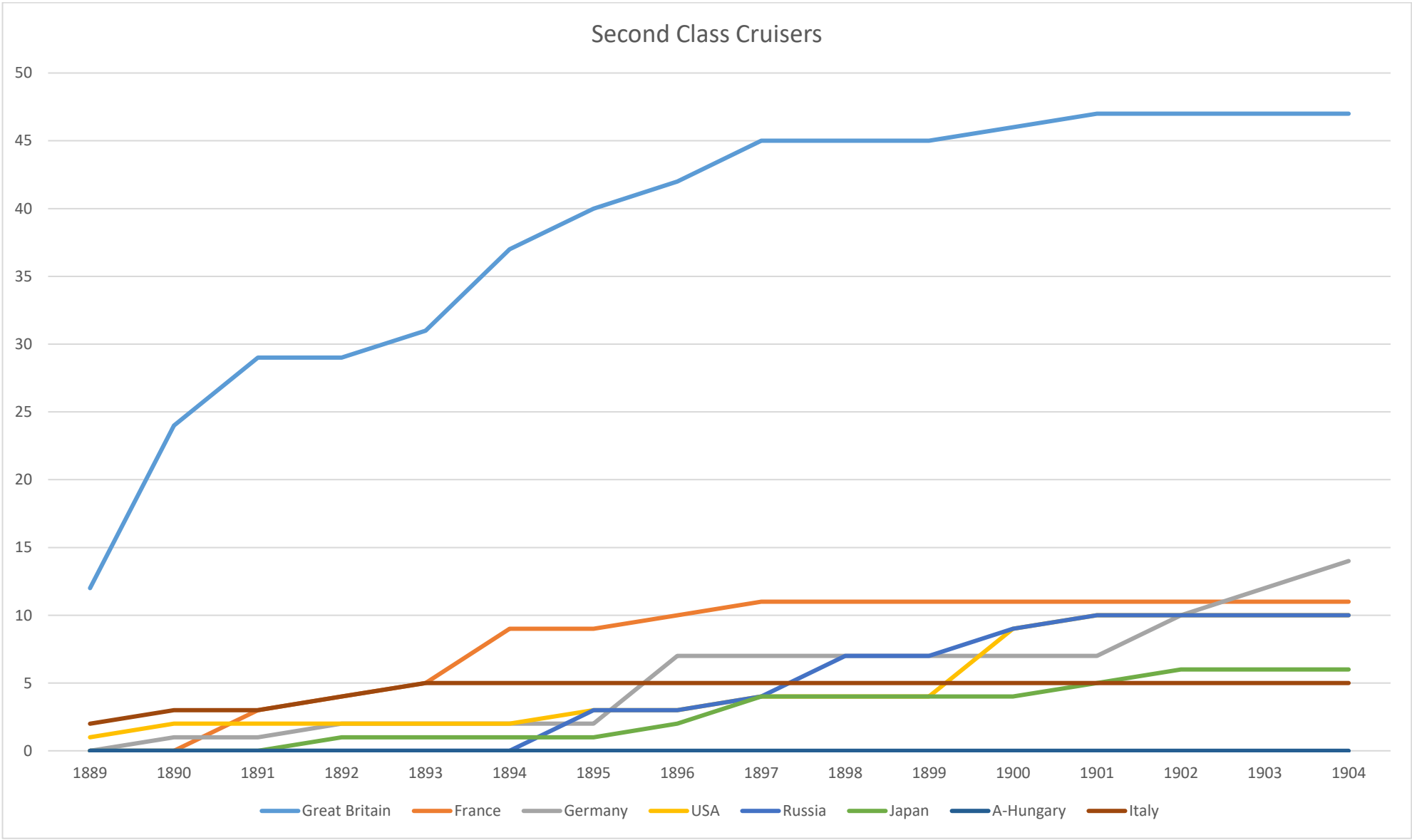


Appendix 2.3a - Cumulative Construction of First Class Cruisers, 1889-1904 by Country

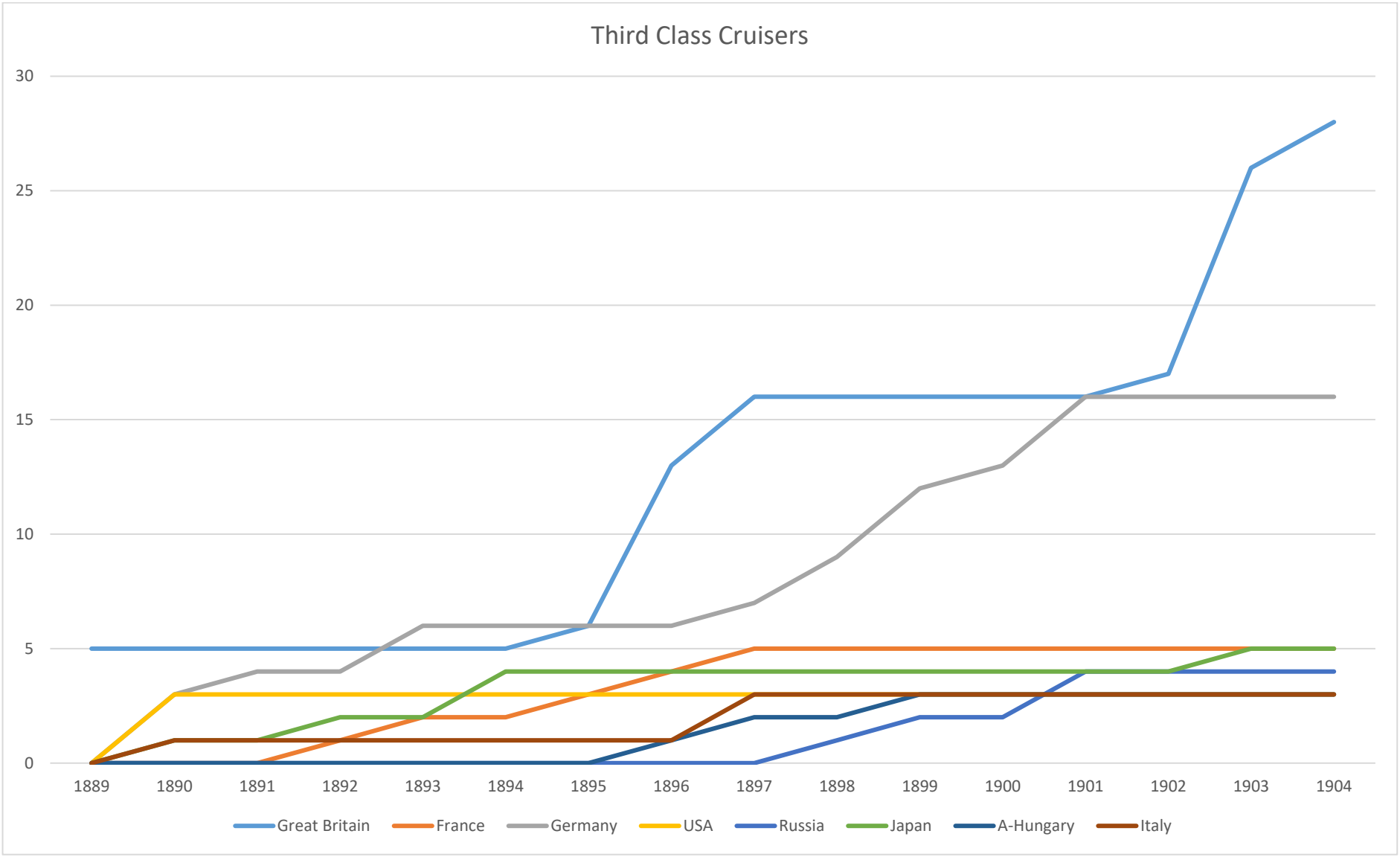
(Derived from details in Gardiner, R *et al* (eds.), *Conway's All the World's Fighting Ships, 1860-1905*, London: Conway Maritime Press, 1979. Royal Navy vessels have been grouped with their foreign counterparts on the basis of size, speed, armament and armoured protection, as most other navies did not employ a formal three-tier classification of cruisers. Dates refer to all ships laid down, under construction or completed from 1889 onwards)



Appendix 2.3b - Cumulative Construction of Second Class Cruisers, 1889-1904 by Country



Appendix 2.3c - Cumulative Construction of Third Class Cruisers, 1889-1904 by Country



Appendix 2.4 - Royal Navy Cruiser Classes Laid Down 1889-1904

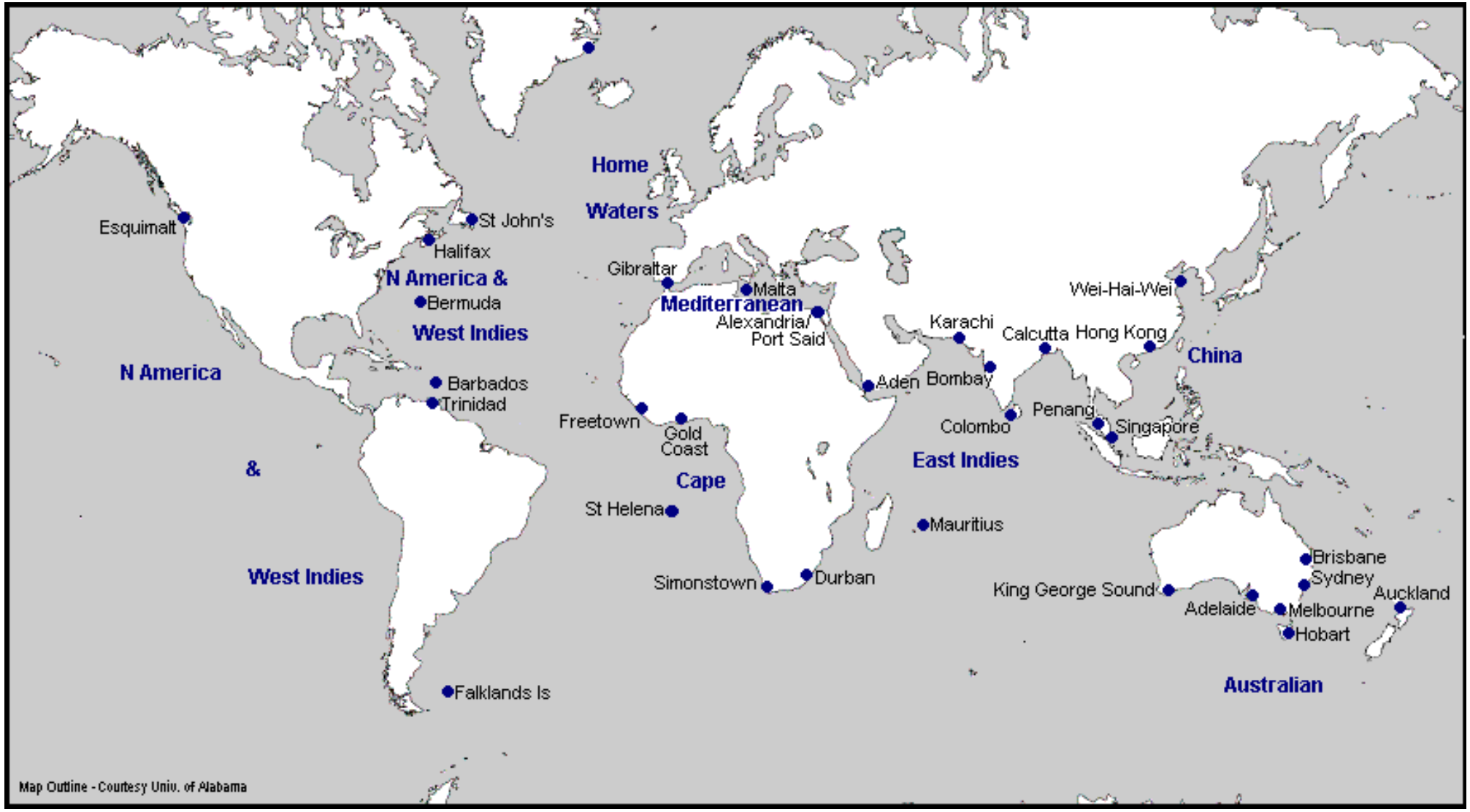
(Based on details from Morris, D, *Cruisers of the Royal and Commonwealth Navies*, Liskeard: Maritime Books, 1987)

Programme Year	Class	Rate	Units	Full Load (Tonnes Average)	Speed (Knots Maximum)	Original Main Armament
1889	Pallas	3rd	4	2,575	19	8-4.7in
1889	Edgar	1st	7	7,450	20	2-9.2in & 10-6in
1889	Crescent	1st	2	7,700	20	1-9.2in & 12-6in
1889	Apollo	2nd	21	3,500	20	2-6in & 6-4.4in
1889	Astraea	2nd	8	4,360	8	2-6in & 8-4.7in
1893	Powerful	1st	2	14,200	22	2-9.2in & 12-6in
1893	Eclipse	2nd	9	5,600	19½	5-6in & 6-4.7in
1893 (onwards)	Pelorus	3rd	11	2,135	20	8-4in
1895-6	Diadem	1st	8	11,000	20¾	16-6in
1895	Arrogant	2nd	4	5,750	19	4-6in & 6-4.7in
1896	Highflyer	2nd	3	5,600	20	11-6in
1897	Cressy	1st	6	12,000	21	2-9.2in & 12-6in
1898	Drake	1st	4	14,150	23	2-9.2in & 16-6in
1898 (onwards)	Monmouth	1st	10	9,800	23	14-6in
1900	Challenger	2nd	2	5,915	21	11-6in

1901	Devonshire	1st	6	10,850	22	4-7.5in & 6-6in
1902	Duke of Edinburgh	1st	2	13,550	23½	6-9.2in & 10-6in
1902 (onwards)	Topaze	3rd	4	3,000	21¾-22½*	12-4in
1903	Warrior	1st	4	13,550	23	6-9.2in & 4-7.5in
1903	Adventure	3rd	2	2,640	25	10-12pdr
1903	Forward	3rd	2	2,860	25	10-12pdr
1903	Pathfinder	3rd	2	2,900	25	10-12pdr
1903	Sentinel	3rd	2	2,880	25	10-12pdr

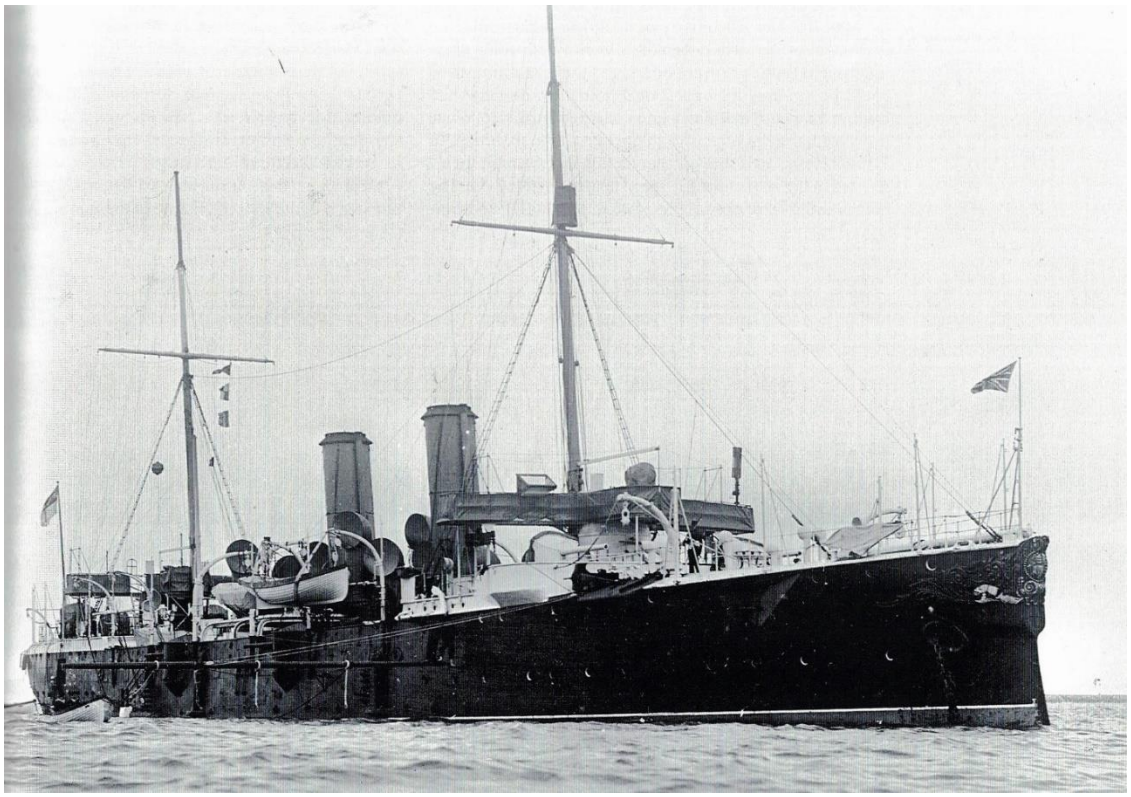
* *Amethyst* of this class was equipped with turbine engines

Appendix 2.5 - Map of Royal Navy Overseas Cruiser Stations c.1900



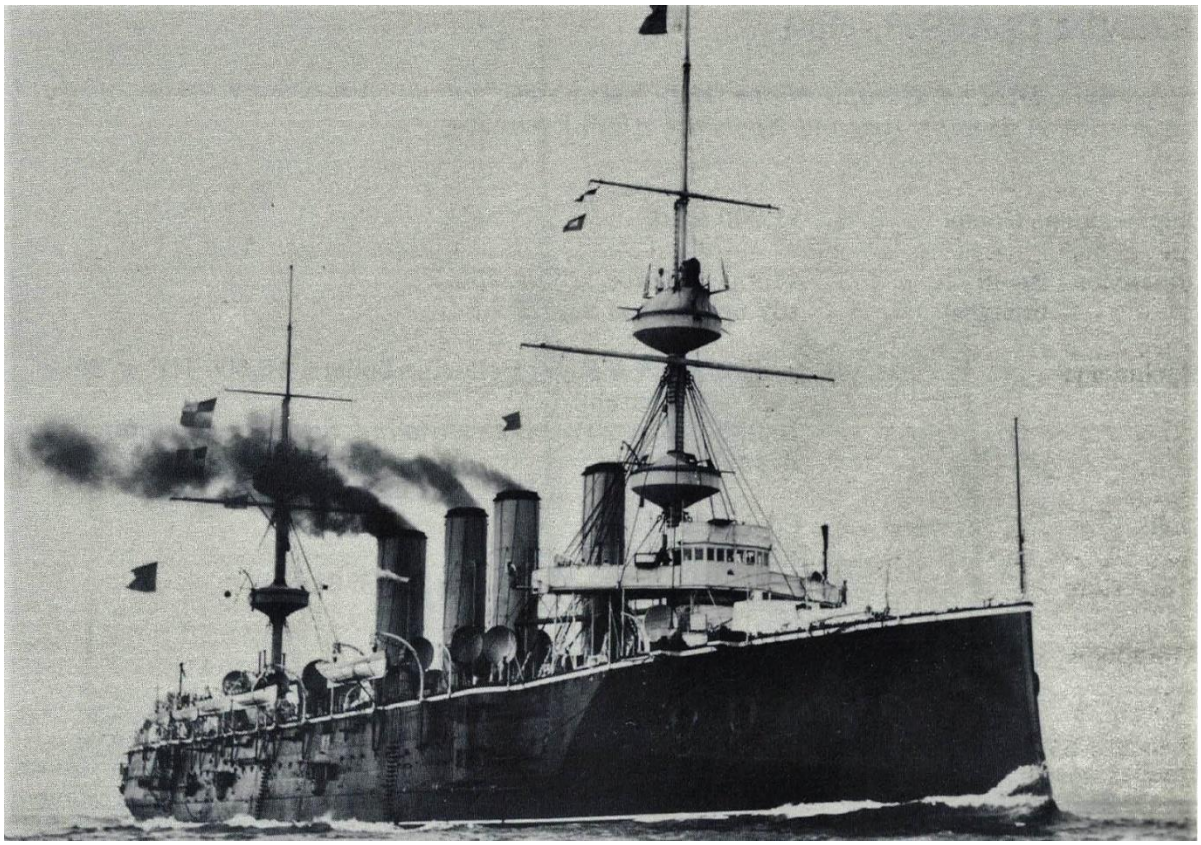
Source: naval-history.net

Appendix 2.6 - Photographs of a Selection of Royal Navy Cruiser Types, 1889-1904

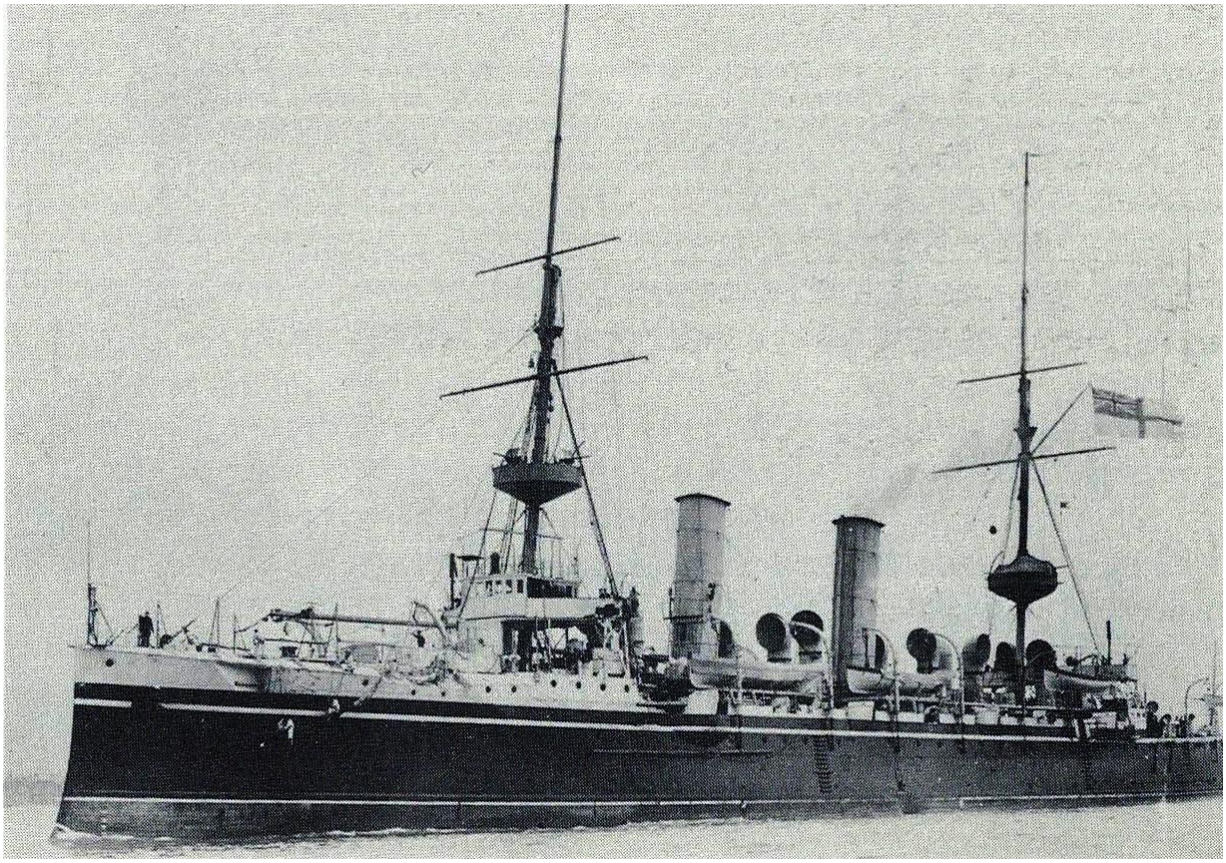


HMS Pearl (Pallas Third Class Cruiser) in 1896
(NMM N01308)

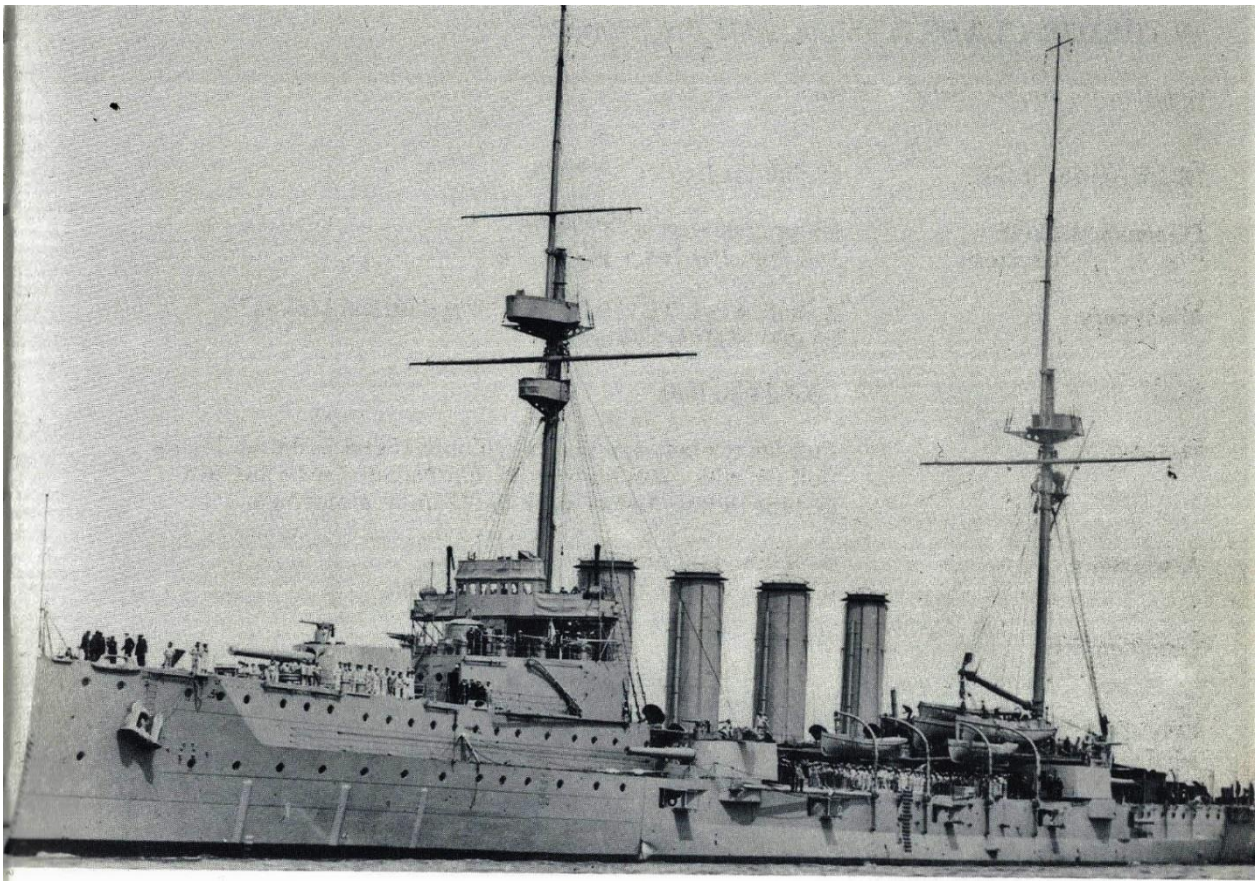
HMS St George (Edgar First Class Cruiser), Flagship Cape Squadron c.1895
(Berken of Cowes)



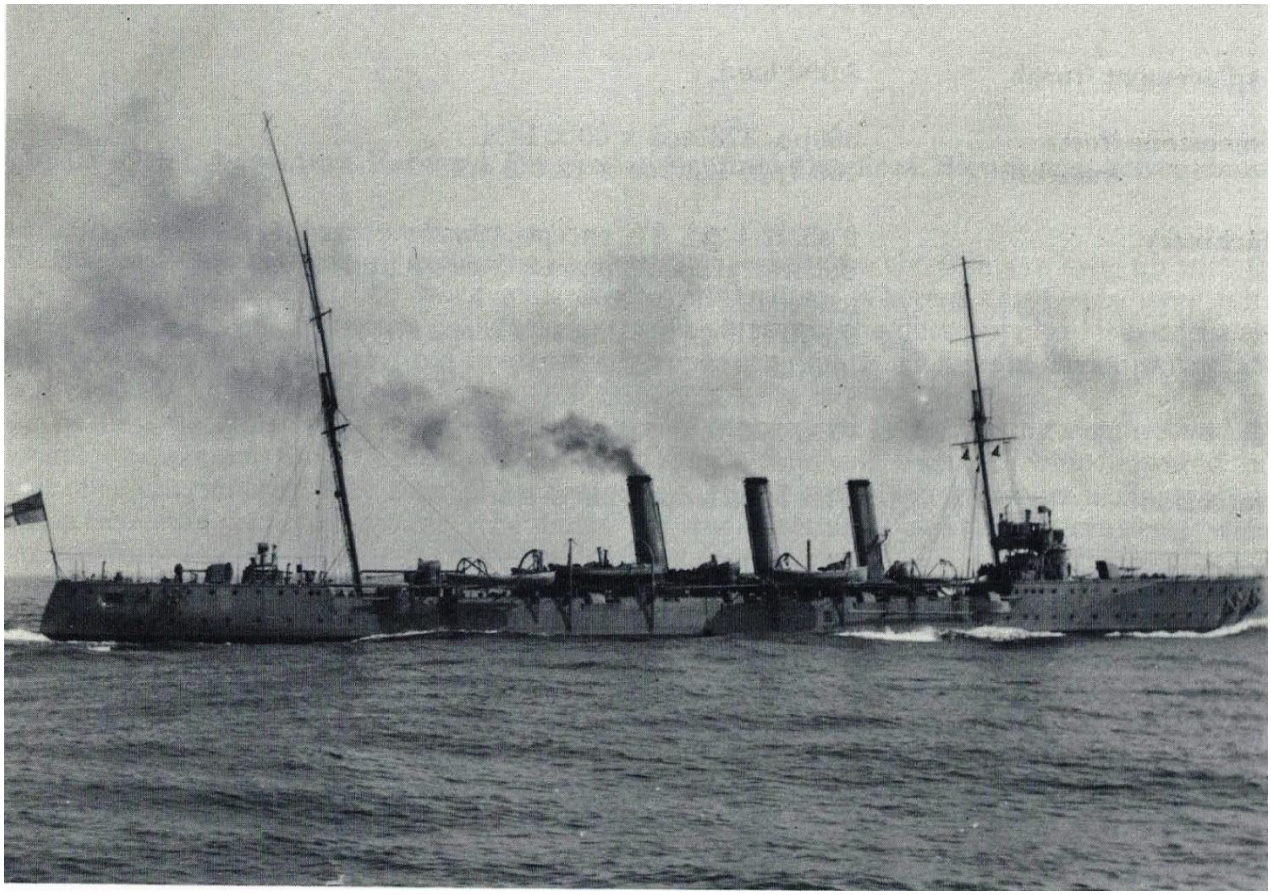
HMS Powerful (First Class Cruiser) in 1897
(Imperial War Museum)



HMS Minerva (Eclipse Second Class Cruiser) in 1897
(Imperial War Museum)

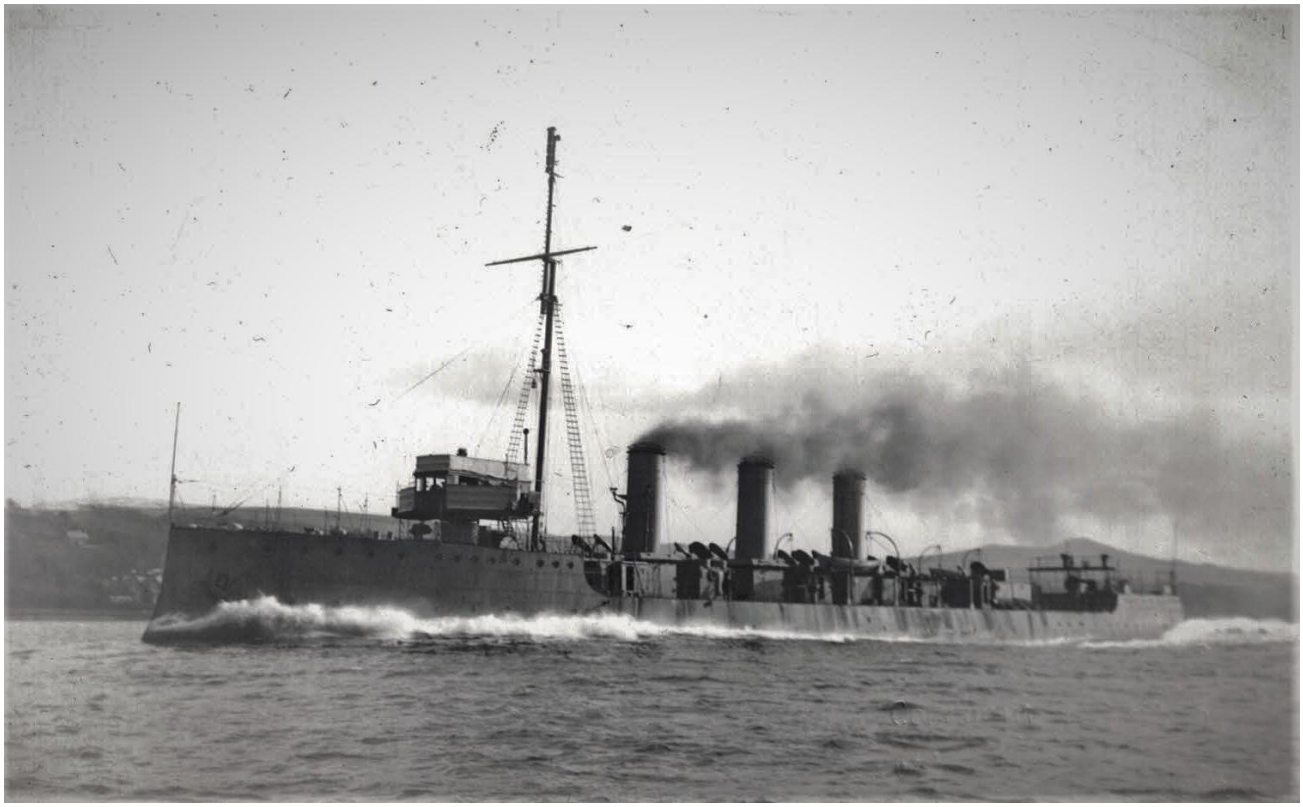


HMS Duke of Edinburgh (First Class Armoured Cruiser) c.1906
(Husbands)

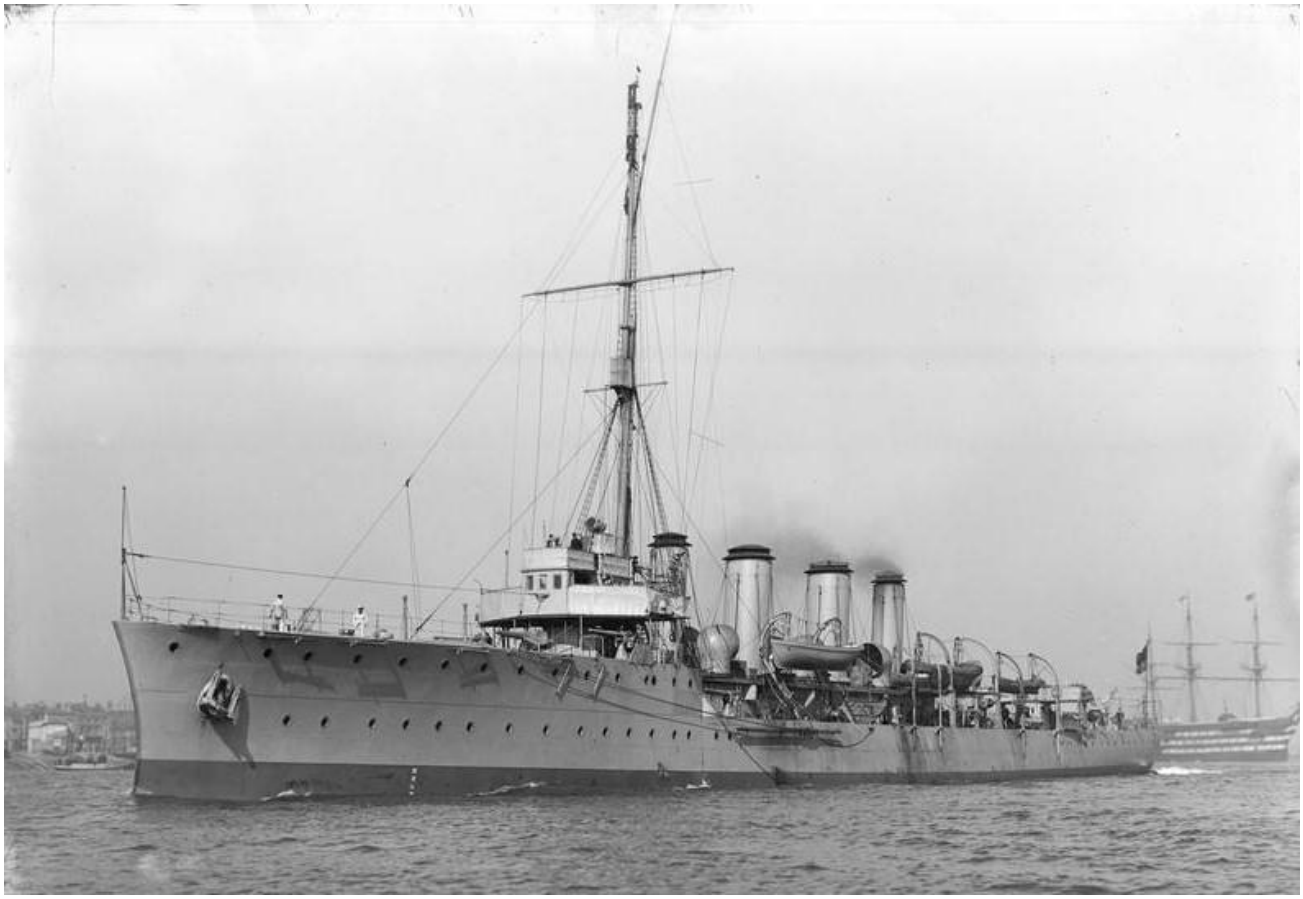


HMS Amethyst (Turbine-Engined Topaze Third Class Cruiser) c.1905
(NMM)

Appendix 3 - Royal Navy Scouts



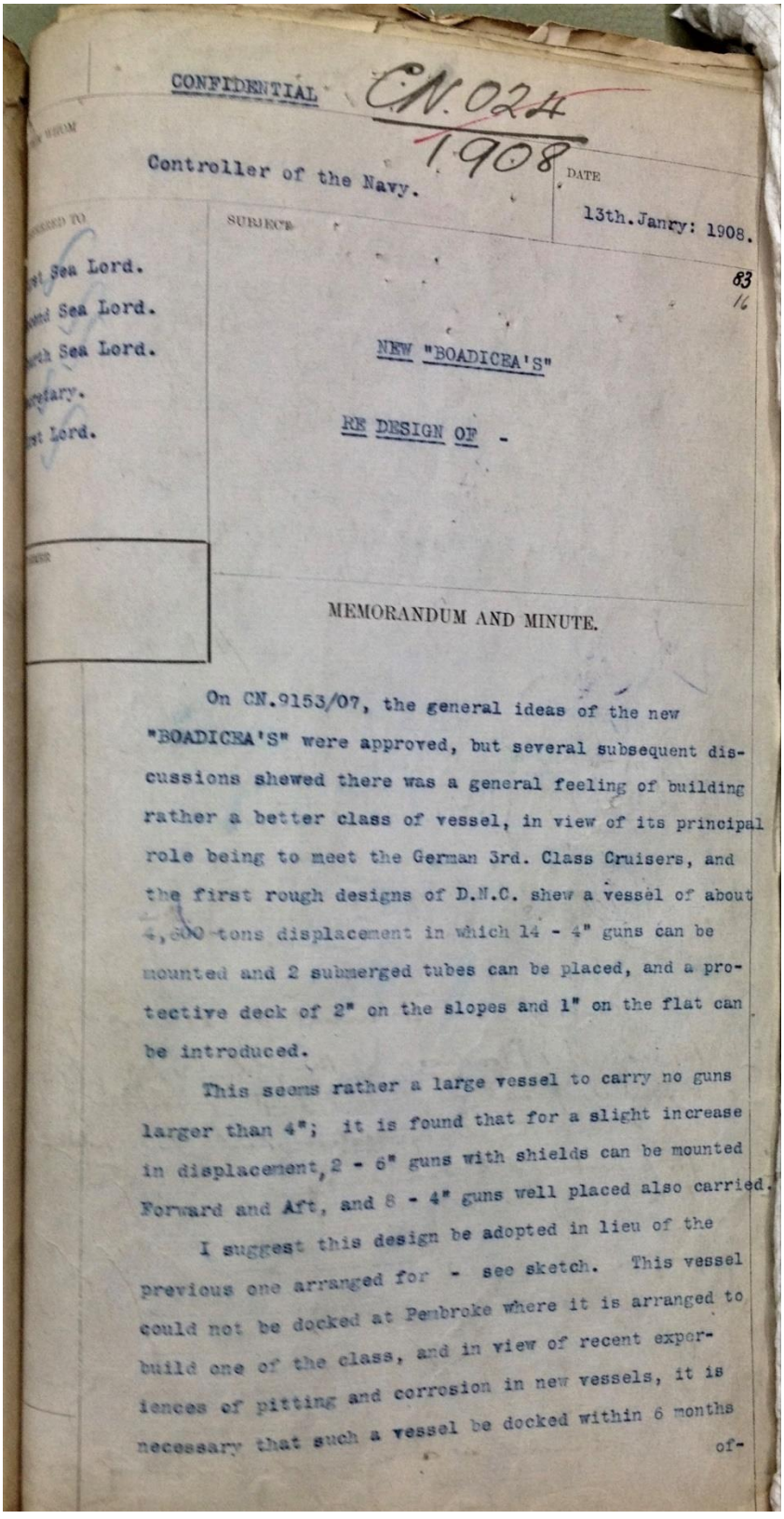
Fairfield-built *HMS Forward* on sea trials in the Clyde, 1905 (author's collection)



Armstrong-built *HMS Attentive* in 1906 – 'The starting point for British cruisers after 1906' (author's collection)

Appendix 4 – *'New Boadiceas'*

Memorandum dated 13 January 1908 from the Third Sea Lord and Controller, Rear-Admiral Sir Henry Jackson, to other Admiralty Board members concerning design of the new *Bristol* class light cruiser. Note 'its principal role being to meet the German 3rd Class Cruisers'. (TNA, ADM 116/1013A Vol. 2, HM Ships Design Papers, 1907-11, CN 024/1908)



CONFIDENTIAL CN.024 1908

FROM Controller of the Navy. DATE 13th. Janry: 1908.

ADDRESSED TO 1st Sea Lord. 2nd Sea Lord. 4th Sea Lord. Secretary. 1st Lord.

SUBJECT 83 16

NEW "BOADICEA'S"

RE DESIGN OF -

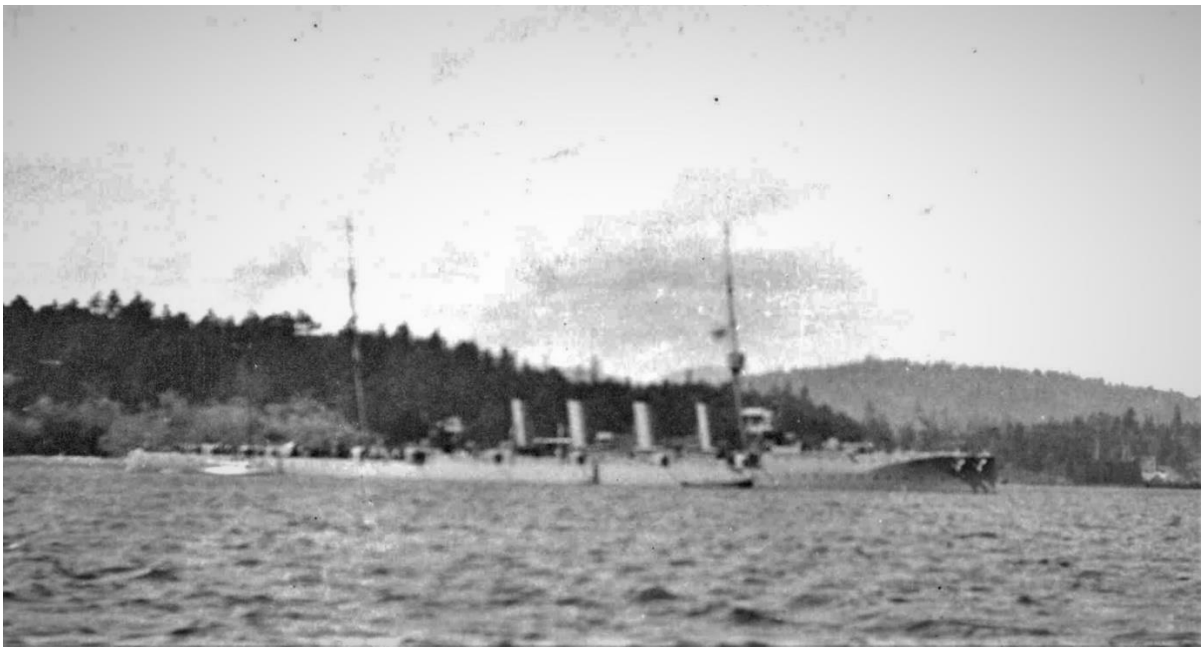
MEMORANDUM AND MINUTE.

On CN.9153/07, the general ideas of the new "BOADICEA'S" were approved, but several subsequent discussions shewed there was a general feeling of building rather a better class of vessel, in view of its principal role being to meet the German 3rd. Class Cruisers, and the first rough designs of D.N.C. shew a vessel of about 4,600 tons displacement in which 14 - 4" guns can be mounted and 2 submerged tubes can be placed, and a protective deck of 2" on the slopes and 1" on the flat can be introduced.

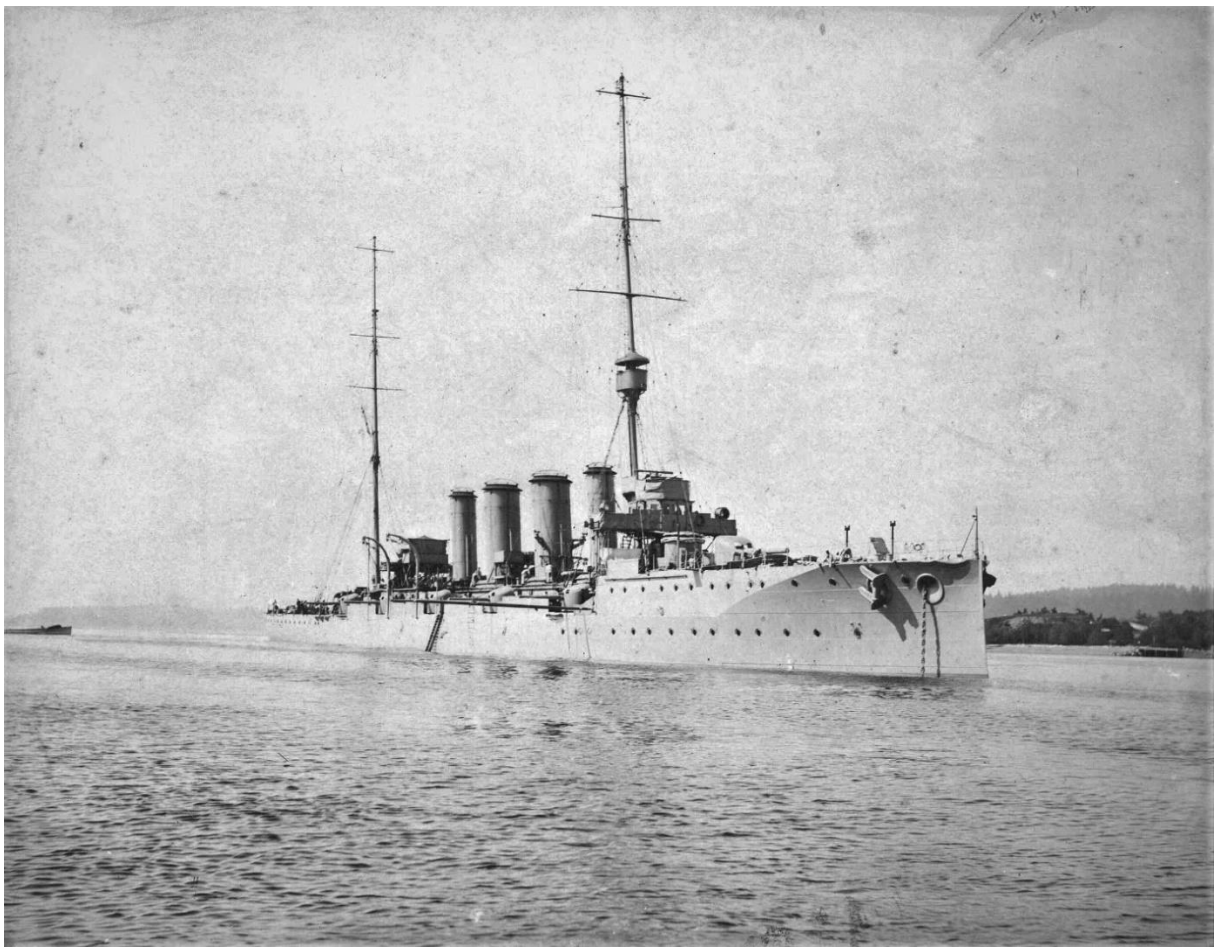
This seems rather a large vessel to carry no guns larger than 4"; it is found that for a slight increase in displacement, 2 - 6" guns with shields can be mounted Forward and Aft, and 8 - 4" guns well placed also carried.

I suggest this design be adopted in lieu of the previous one arranged for - see sketch. This vessel could not be docked at Pembroke where it is arranged to build one of the class, and in view of recent experiences of pitting and corrosion in new vessels, it is necessary that such a vessel be docked within 6 months of-

Appendix 5 – *Town* Class Light Cruisers

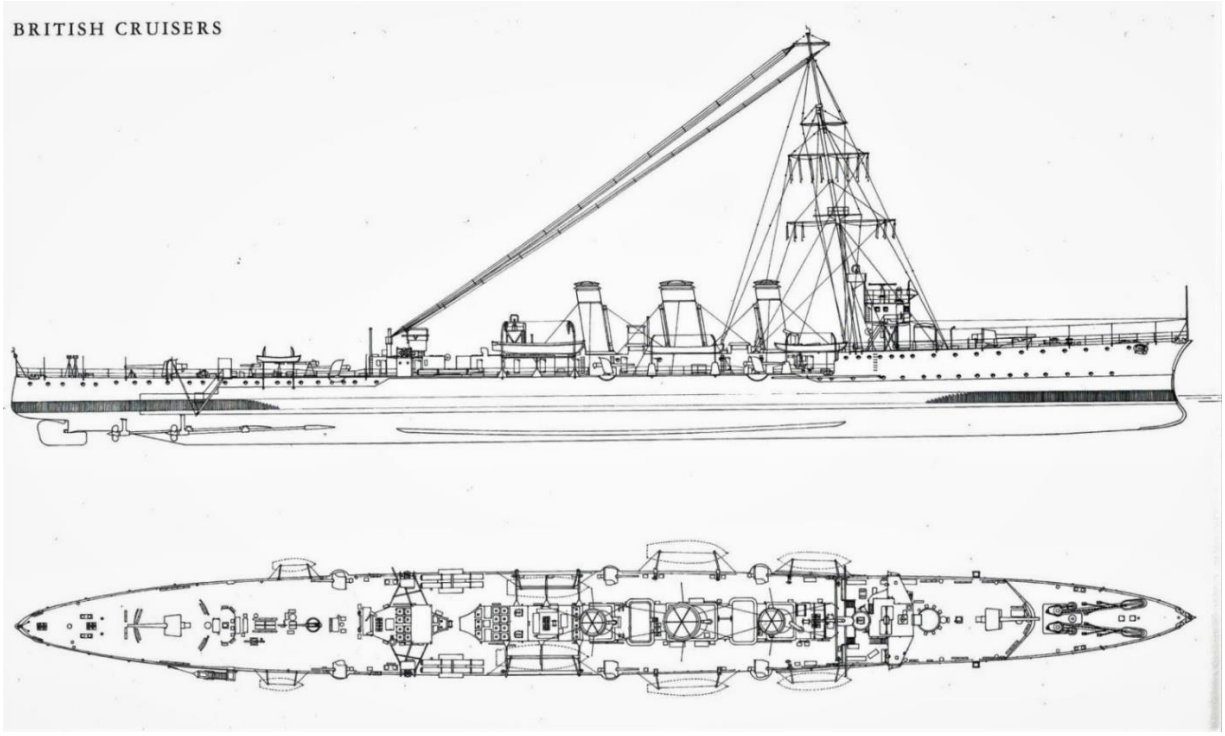


The *Bristol* class light cruiser *HMS Newcastle* served on the China Station from completion in 1910. She is pictured upon arrival at Esquimalt, British Columbia in late August 1914 on her first wartime deployment.
(CFB Esquimalt Naval & Military Museum Archive photograph VR991.33.19)



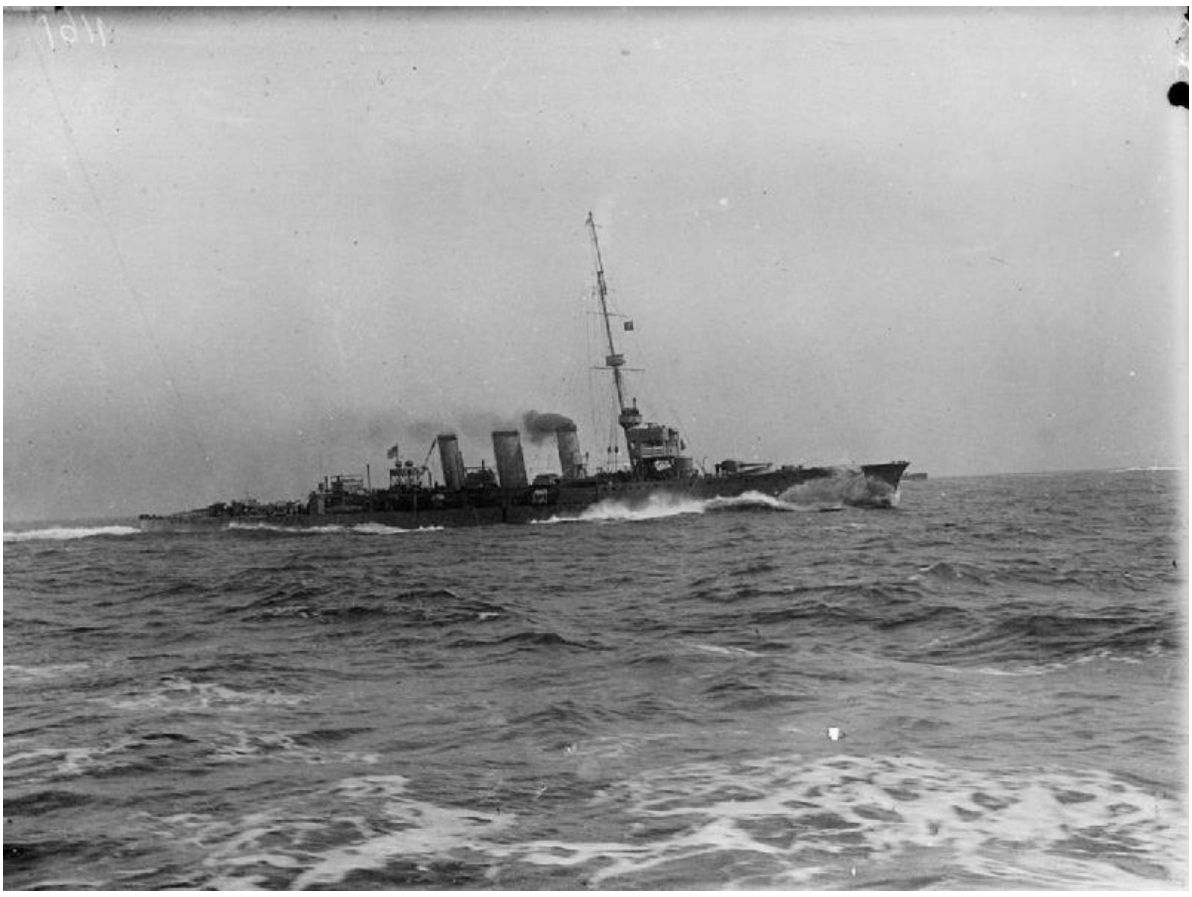
HMS Newcastle at Esquimalt during 1915
(CFB Esquimalt Naval & Military Museum Archive photograph VR 992.84.100)

Appendix 6 – The *Arethusa* Class



Plan of HMS Arethusa as completed, 1914

(Friedman, N, *British Cruisers: Two World Wars and After*)



HMS Arethusa, 1914 (author's collection)

Appendix 7 – Jellicoe and Want of Light Cruisers

Extracts from Temple Patterson, A, (ed.) *The Jellicoe Papers*, Volume 1 (London: Navy Records Society Volume 108, 1966)

Jellicoe to the Secretary of the Admiralty (TNA, ADM 137/996, ff. 178-180)

Secret Urgent

Iron Duke at Scapa Flow, 31st August 1914

'Be pleased to bring to the notice of the Lords Commissioners of the Admiralty that the shortage of Light Cruisers attached to the Grand Fleet greatly limits the activity of the cruiser sweeps at present, and will become very serious when the bad weather and long nights set in.

I submit to their Lordships that steps should be taken at once to augment their number. The light cruisers are required to:

(a) Support destroyer raids,
(b) Act with the battle cruisers in offensive sweeps,
(c) Patrol areas in conjunction with the Second and Third Cruiser Squadrons to cover the approaches to Scapa,
(d) Cover the front of the Battle Fleet at sea and protect its van and flanks in action.

2. Six cruisers are quite inadequate for these duties. The need for a greater number was not felt very acutely at the commencement of the war because the enemy was inactive and the visibility was generally so high that one cruiser has been able to perform the duties of three under normal North Sea conditions.

3. The necessity for more active work on the part of our cruisers has, however, been well demonstrated of late by the ease with which German minelayers are succeeding in reaching our coasts, even well to the Northward, without being observed either on the outward or return journey, and until the number of light cruisers is increased I see no method of stopping these operations by cruisers, although it would seem possible that the actual work of laying the mines might be interfered with if our patrol flotillas were further out at night from the coast.

4. There are four light cruisers of our latest type in the Mediterranean whose duties could apparently be performed by armed merchantmen since the Austrian cruisers can be dealt with by the French. I beg to suggest for Their Lordships' favourable consideration that the *Chatham* and *Dublin* be at once detached from the Mediterranean and sent to the Grand Fleet, to be followed by *Weymouth* and *Gloucester* when relieved by armed merchantmen. [Marginal pencil note – "At present not possible"]

. . . 6. The shortage of late has been so serious that battleships have of necessity been employed boarding merchantmen. On a recent occasion four battleships were absent from the Fleet at one time on this duty, which cannot be neglected since there is no certainty that a merchantman met with, flying neutral colours, may not be a minelayer.'

Throughout his time commanding the Grand Fleet Jellicoe consistently sought an audience for his views on the damaging effects of limited light cruiser numbers:

Suggested Subjects for Discussion, Conference of Senior Officers on board *Iron Duke*, September 17th 1914 (TNA, ADM 137/995 f. 39)

II PAUCITY OF CRUISERS

'In winter especially the light cruisers cannot be expected to keep the sea nearly so continuously as the larger ships. Another squadron is essential by middle October . . . otherwise the cruiser sweeps can only take place very occasionally.'

To Fisher, November 11th, 1914 (Lennoxlove MSS)

'. . . it is to my mind specially important not to weaken the Grand Fleet just now. We are weak compared to the Germans in light cruisers in home waters, and this emphasizes the necessity for a powerful battle cruiser squadron.'

To Beatty, November 12th, 1914 (Beatty MSS)

'We must hope for the best but we are getting woefully weak in cruisers.'

To the Secretary of the Admiralty, November 12th 1914 (British Library, Jellicoe Papers, Add. MSS, f. 32) [Comments on a comparative table of German and British fleets]

'7. . . .The worst feature is the lack of [our] cruisers. There is a probable inferiority of one Battle-cruiser [*sic*], an equality in cruisers and a certain inferiority of 5 light cruisers . . .'

8. The weakness in cruisers will be a great disadvantage in the work of first locating the enemy and second of ascertaining his strength and dispositions, whilst the inferiority in numbers of torpedo craft may make it impossible to prevent an effective attack on the part of the German vessels of this class, more especially as we shall not possess sufficient light cruisers to deal with them.'

To the Secretary of the Admiralty, 4th December 1914 (TNA ADM 137/995, f.69)

[Relating to the superiority in numbers of German over British torpedo boat destroyers] 'The menace of so large a number of [German] torpedo boat destroyers attacking cannot however possibly be disregarded without the certainty of heavy losses in the battle line . . . We shall not have a superiority in numbers of light cruisers so that I cannot depend on this class of vessel to take the place of the torpedo boat destroyers.'

To Admiral Sir Frederick Hamilton, 14th April 1915 (NMM, Hamilton Papers)

'I am considerably put about [out?] over my late treatment by the Admiralty. The "inner circle" does not appear to realise our difficulties at all . . . Our deficiency in fast light cruisers is also ignored entirely. I have been so disgusted of late that I wrote my plain ideas to the First Sea Lord [Fisher] three days ago. What the result will be I don't know, and moreover I don't care as I am in that condition which Jack would call b-----y minded!'

To Balfour, 19th January 1916 (British Library, Add. MSS, Jellicoe Papers, 48992, ff. 4-5)

'I think it right to let you know that I am much disturbed at the increasing delays that are taking place:

(a) In the completion of repairs to ships
(b) In the completion of new ships building

I refer principally to the private yards. The time for refits is gradually lengthening out with the result that the fleet is weakened, and this fact taken in conjunction with the growing troubles connected . . . with boilers is actually making the number of cruisers with the Grand Fleet *smaller* than 2 or 3 months ago in spite of the fact that new ships are slowly (but *very* slowly) dribbling in. At the same time we know well that the Germans are increasing the number of their light cruisers.'

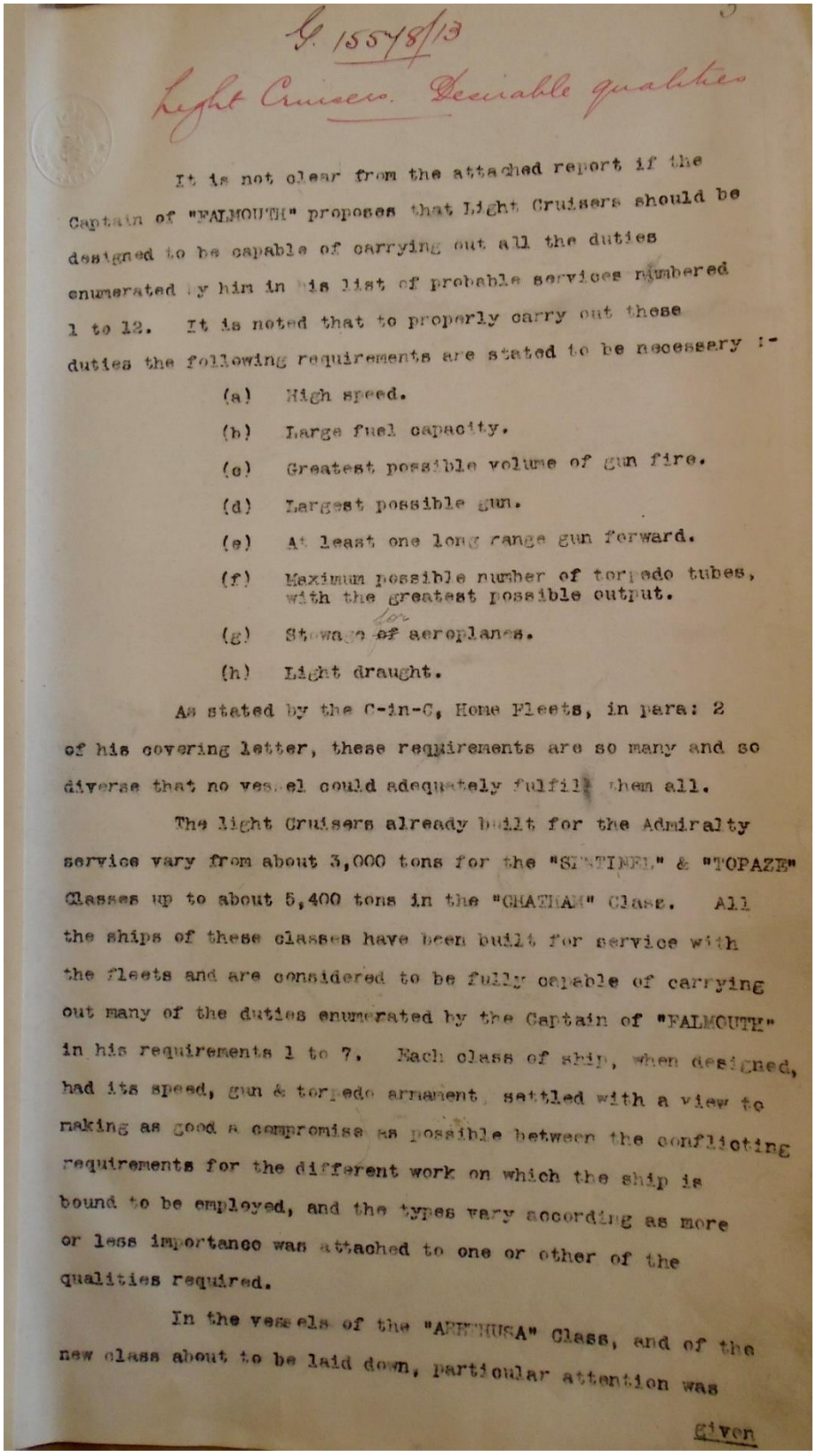
Grave concern at delays in new light cruiser construction were expressed once again in a letter from Jellicoe to Fisher on 29th January 1916 (Lennoxlove MSS), in which he stated 'The delays are terrible.' The supply of new destroyers, rather than the promised 17 since August 1915, was in fact 2, and 'The case is almost worse in light cruisers.'

To Balfour, 3rd February 1916 (British Library, Add. MSS, Jellicoe Papers, 48992, ff. 17-19)

'My remarks as to the increase in the number of German light cruisers and destroyers were based on the information given in the Quarterly Return . . . The increase . . . is by no means negligible, especially when our very serious shortage in light cruisers and destroyers (of the sea-going type) before the war is considered, together with the fact that a large number of our light cruisers and destroyers are employed out of Home Waters, whereas this is not the case with Germany.'

Appendix 8 – Light Cruiser Desirable Qualities

'Light cruiser desirable qualities' – a response (c. July 1913) from the Third Sea Lord, Rear-Admiral Gordon Moore, to a report on suggested future light cruiser designs by the commander of *HMS Falmouth*, Captain Edmund Grant following sea trials in April 1913. Both Grant and Moore's documents appear in the Ships' Covers for the new *Calliope* class of that year. (NMM, Woolwich, ADM 138/303 G15578/13, f.3-4)



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Light Cruisers. Desirable qualities

It is not clear from the attached report if the Captain of "FALMOUTH" proposes that Light Cruisers should be designed to be capable of carrying out all the duties enumerated by him in his list of probable services numbered 1 to 12. It is noted that to properly carry out these duties the following requirements are stated to be necessary :-

(a) High speed.

(b) Large fuel capacity.

(c) Greatest possible volume of gun fire.

(d) Largest possible gun.

(e) At least one long range gun forward.

(f) Maximum possible number of torpedo tubes, with the greatest possible output.

(g) Stowage for aeroplanes.

(h) Light draught.

As stated by the C-in-C, Home Fleets, in para: 2 of his covering letter, these requirements are so many and so diverse that no vessel could adequately fulfil them all.

The Light Cruisers already built for the Admiralty service vary from about 3,000 tons for the "SENTINEL" & "TOPAZE" Classes up to about 5,400 tons in the "CHATHAM" Class. All the ships of these classes have been built for service with the fleets and are considered to be fully capable of carrying out many of the duties enumerated by the Captain of "FALMOUTH" in his requirements 1 to 7. Each class of ship, when designed, had its speed, gun & torpedo armament settled with a view to making as good a compromise as possible between the conflicting requirements for the different work on which the ship is bound to be employed, and the types vary according as more or less importance was attached to one or other of the qualities required.

In the vessels of the "ARETHUSA" Class, and of the new class about to be laid down, particular attention was

given

(cont.)

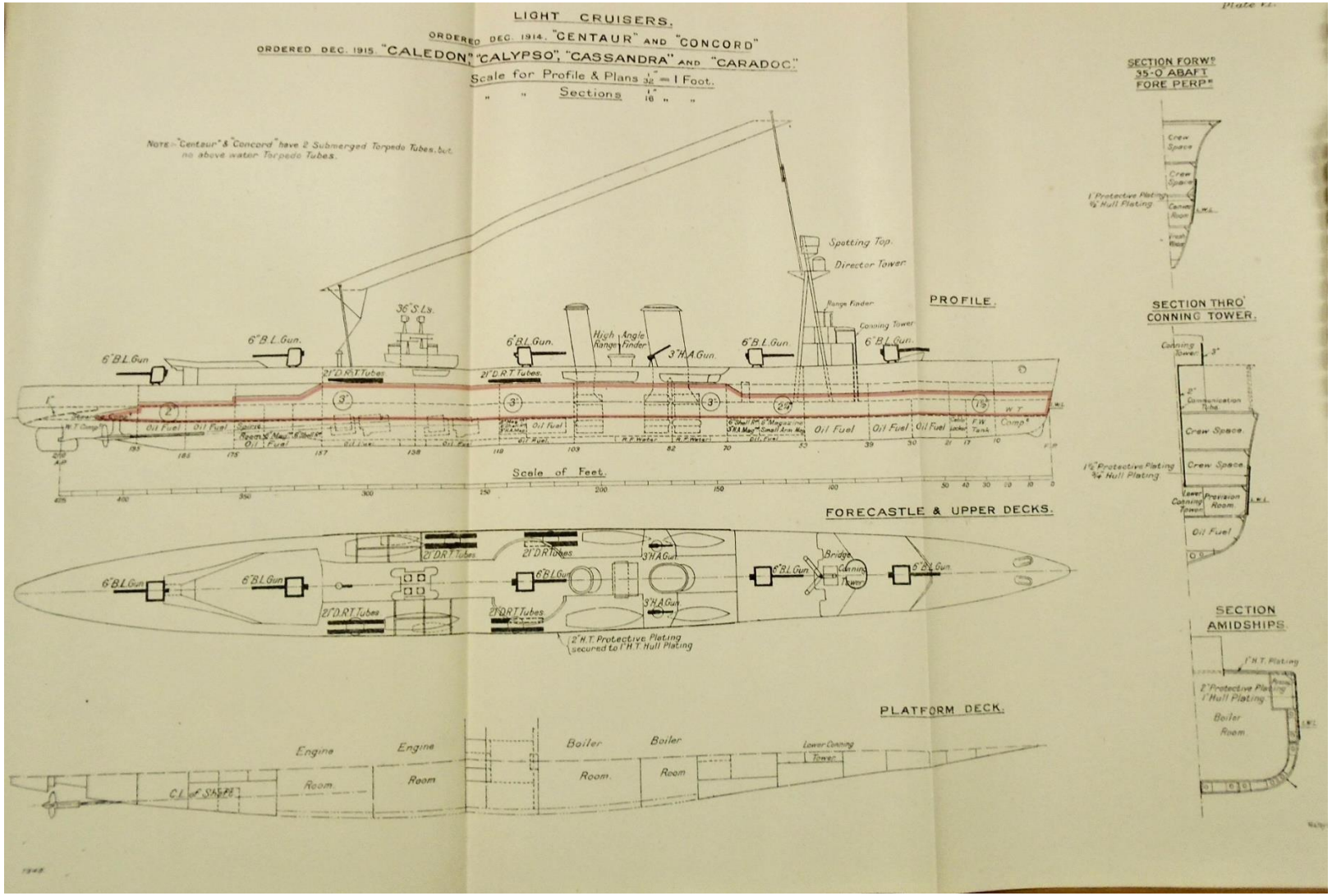
given to their power to deal with hostile Destroyers and also to engage hostile Cruisers; high speed, a good gun armament, and as good a torpedo armament as there was space for were specially provided, and the ships appear to meet the views of the C-in-C, Home Fleet, as expressed in para: 3 of his letter. The armament necessary for such service was very fully discussed on S.0201/13, on which paper the mixed 6" & 5" armament was decided upon for this type of ship. The remarks of the Captain of "FALMOUTH" and the C-in-C, Home Fleets, with regard to the 5" gun are noted. It would probably be found possible to mount such guns in the numbers suggested by the Captain of "FALMOUTH" in para: 10 of his letter.

As stated above, it would not be practicable to combine all the qualities that are necessary for duties 1 to 7 in one ship; the combination of high speed, large gun armament, large torpedo armament, and large fuel supply, would necessarily produce a large ship, and such a ship, from its size and draught, would be less capable of carrying out some of the duties than smaller ships built specially for one requirement. It is therefore considered that the policy which has been adopted in the past, viz: building light cruisers of various sizes, powers, and displacement, is the one most likely to afford ships which, in the aggregate, will best carry out all the requirements that are expected from the Light Cruisers attached to the fleet.

As regards requirements 8 to 12, the Cruisers which have been built in the past to carry out these duties have comprised ships such as the "POWERFUL", "BLAKE", "CRESCENT", and "HAWKE" Classes, in which high speed and power to keep the sea have been considered of first importance; to combine all the qualities that are desirable in a ship to perform these services would necessitate a class considerably larger than any of the Light Cruisers at present built.

Appendix 9 – C Class Light Cruisers

The emergence of the modern British light cruiser with uniform main armament – the *Centaur* class of the 1914 Programme and *Caledon* class of the initial Emergency War Programme. Plan from the papers of the Director of Naval Construction, Sir Eustace Tennyson d'Eyncourt (NMM, Greenwich, DEY/101)



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ADM 138/240	*Bristol* class (1908) Ships' Covers
ADM 138/252	*Blanche* & *Blonde* class (1909) Ships' Covers
ADM 138/253	*Dartmouth* class (1909) Ships' Covers
ADM 138/257	*HMAS Melbourne* (1910) Ship's Cover
ADM 138/272	*Birmingham* class (1911) Ships' Cover
ADM 138/276	*HMAS Brisbane* (1910 – constructed in Australia) & Canadian cruiser (cancelled)
ADM 138/286	*Arethusa* class (1912) Ships' Covers

ADM 138/303 *Calliope* class (1913) Ships' Covers
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