

# **The empire is listening: naval signals intelligence in the Far East to 1942 | Australian War Memorial**

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{28} Coupled with the development of facilities, recruiting and training of operators for the HF/DF stations also commenced in both Australia and New Zealand, though it was not until late 1939 that the prospect of creating an independent cryptanalysis organisation was investigated. Paymaster Commander Nave, who had returned to Australia for medical reasons, assisted in the establishment of a small cryptographic organisation known as the Special Intelligence Bureau (SIB) within Navy Office. In April 1940 the Prime Minister, R. G. Menzies, wrote to the Secretary of State for Dominion Affairs seeking guidance,<sup>28</sup> although not everybody saw the need to seek British views and approval on the subject of an independent cryptanalysis organisation.<sup>29</sup> The British response, which was dispatched in October 1940, was not supportive "for the present"<sup>30</sup> of the idea of a large-scale Australian-based organisation. It did however, propose a number of actions, such as training of selected personnel in London and continuation of existing co-operative programmes. The main concern appears to have been to prevent a duplication of effort, though this could also be interpreted as an attempt to prevent Australia from conducting an independent analysis of the same information being obtained by Britain.

{29} In January 1941 Captain F. J. Wylie, RN, the COIS at Singapore, visited Australia for discussions on intelligence and sigint matters. In the course of these discussions he advised that, with respect to Japanese naval traffic, the FECB receivers at Kranji could not read the traffic of the Combined Fleet by day. Some assistance in this was being provided by

Stonecutter's and Esquimalt. Kranji also could not read the day traffic originating in the Mandated Territory. Coverage of these areas by Australia was requested. Of lesser importance, but still requested, was assistance in covering Japanese consular and commercial (HF and MF) traffic, and South China traffic.

{30} The FECB was also interested in Russian naval and general traffic as the reception of these transmissions at Kranji was also poor.<sup>31</sup> This traffic had been previously monitored by Stonecutter's and Auckland<sup>32</sup> but both stations had been switched to copying the Japanese five-figure code. The Russian material was required mainly for traffic analysis purposes.

{31} In light of these requests, an arrangement was reached with the Australian naval authorities whereby the Royal Navy would intercept Japanese communications covering "Japanese and Asiatic waters; and of the Combined Fleet, 1st Fleet, 2nd Fleet and their associated units in any waters".<sup>33</sup> Australia would provide intelligence, to the best of her abilities, on "Japanese Naval activities in the Mandated Territory, and of the 4th Fleet".<sup>34</sup>

{32} By the outbreak of the war in the Pacific, the RAN had in place a HF/DF and intercept organisation supported by a small cryptographic bureau. This nucleus organisation would prove to be invaluable in the coming years.

## **New Zealand**

{33} As part of the British Empire chain, New Zealand also had an important role to play in the collection of raw material for the FECB during the pre-war years. In particular, the New Zealanders had been monitoring Russian naval traffic for the FECB. By 1941 they were also working on copying the Japanese five-figure operational code for the FECB. From small beginnings, the New Zealand naval sigint capacity would develop so that it possessed a chain of HF/DF stations located at Awaru, Musick

Point (Auckland), Waipapakauri and Suva (Fiji).<sup>35</sup> These stations had direct communications with each other so as to obtain simultaneous bearings.

{34} Radio intercept stations were ultimately to be established at Awarua, Wairouro, Suva and Nairnville (Wellington). Any transmissions intercepted by these stations were forwarded to Navy Office in Wellington for on-forwarding. Another station had also been established at Blenheim, commencing August 1942. This station, designated as Naval W/T Station Rapaura, carried out Radio Finger Printing functions.<sup>36</sup>

## **Co-operation with the United States, Russia and Netherlands East Indies**

{35} In 1937 the United States Navy and RN agreed to exchange technical information on the Imperial Japanese Navy. Information based on signals intelligence was not covered as part of this exchange. With the outbreak of war and the development of closer co-operation in a number of sensitive areas, the question of broad scale intelligence co-operation, including cryptography, emerged.

{36} Available records indicate that the first steps towards co-operation were initiated by Brigadier-General George Strong of the US Army on 31 August 1940.<sup>37</sup> Following this offer, relatively slow progress was made. The next tentative step appears to have been a meeting in London on 23 October 1940, between Admiral Robert L. Ghormley, USN, Admiral J. H. Godfrey (the RN's DNI) and Brigadier Sir Stewart Menzies (who administered GC&CS). Those present agreed to hold discussion in Washington in an attempt to broker an agreement. This agreement was eventually completed in December 1940.<sup>38</sup>

{37} During the course of the US-British Staff Conversations (ABC-1) the issue of intelligence co-operation was raised and it was agreed that there would be a "full and prompt exchange of pertinent information",<sup>39</sup> and

that "intelligence liaison will be established not only through the Military Missions but also between all echelons in the field".<sup>40</sup> Though signals intelligence, and in particular cryptographic co-operation, was not specifically mentioned in the context of intelligence co-operation, it appears to have been included as part of the spirit of the agreement. This is borne out by the inclusion of HF/DF as part of the communications annex to the report. This annex stated that both the USN and RN would exchange information essential for the intercommunication between them. Included in this information was "data as to locations and organisation of strategic D/F stations".<sup>41</sup> Furthermore plans were to have been drawn up for the joint operation of USN and RN strategic DF stations.<sup>42</sup> The degree to which real co-operation emerged from these discussions is not known, especially as the Communications Annex was caveated as being "tentatively accepted subject to technical examination by the British Chiefs of Staff".<sup>43</sup>

{38} On 6 June 1941 the British Joint Intelligence Committee revealed the extent of Anglo-American intelligence co-operation in the Pacific, when American liaison officers were attached to the FECB. By this stage the FECB had been instructed that there should be a full exchange of intelligence with the Americans, including signals intelligence. As a consequence of this co-operation, a copy of the Japanese Merchant Ships Naval Liaison was received by the Australian Special Intelligence Bureau, more than likely forwarded from the FECB, in June 1941. This was possibly the type of material referred to by Commander Newman when he wrote that "Consular, Diplomatic, four-figure Naval and Merchant Ship broadcast codes and ciphers have now been made available [to the FECB] from friendly sources".<sup>44</sup>

{39} The German invasion of Russia provided Britain with a new, though unlikely, ally in the region: the Soviet Union. Having already fought two battles with the Japanese, the Russians were very interested in Japanese plans and capabilities even though their main attention was focused on

the German onslaught. After the German attack, Britain began to supply intelligence, including signals intelligence, to the Russians. In return they expected to receive intelligence and other information. Negotiations with the Russians on formal exchanges were difficult, to say the least, and no formal arrangements were entered into along the lines of exchanges with the United States. The British, especially Admiral Godfrey, were pressing the Russians to allow them to establish a liaison office in Vladivostok.<sup>45</sup> Had permission been granted, there is every likelihood that they would have attempted to establish an intercept facility along the lines of the one in Polyarno. The Russians however, refused. One of their concerns was the possible Japanese reaction.

{40} This did not mean though that the Russians did not exchange intelligence with Britain on Japan. In July, the Russians informed the British that the Kwantung Army was being placed on a war footing. This was followed by a series of meetings on Japanese order-of-battle topics. The information supplied to the British Army was especially of value due to the paucity of real intelligence they held on the Japanese Army. In the area of codes, the Russians informed the British that the Germans had supplied the Japanese with keys to a British code that they had broken. On 30 December 1941, the Russians provided the British with complete details of the Japanese naval communications network, as at October 1941, and informed them that all warship callsigns had been changed.<sup>46</sup> While the exchange of intelligence between Russia and Britain did not reach the same levels as that with the United States, the Russians did provide information which was of value to the British and added to their own efforts in the region.

{41} The third main area of international signals intelligence co-operation in the region was with the Netherlands East Indies. Some details as to the extent of this co-operation are provided by documents relating to Captain Wylie' s visit to Australia in early 1941. While en route from Singapore on 28 December 1940, Wylie' s aircraft made a stopover at Tanjong Priok

where he was met by Commander Burrows, the RN Liaison Officer. Burrows boarded the aircraft and received a verbal message from Wylie concerning "Y" co-operation.<sup>47</sup> Unfortunately, the exact nature of this message is not revealed. In the course of his discussions with senior RAN officers, Wylie stated that there was an interchange of intelligence between the FECB and the Dutch but that no real intelligence was being provided. The surviving records indicate that during the course of these discussions there was no specific mention of Anglo-Dutch signals intelligence co-operation.

{42} In February 1941, Commander Newman attended a tri-national Combined Services Communications Conference in Singapore. While the report of the conference<sup>48</sup> makes no mention of signals intelligence co-operation, a separate report submitted by Newman does. Newman stated that arrangements were in place with the Dutch to exchange diplomatic and consular intercepts for Mandated Island naval traffic. In addition to this exchange of information, the Dutch were also requested to co-operate with Australia in the interception of naval traffic from the Mandated Territory. The proposal was for the ACNB and Dutch authorities to co-ordinate their interception of Japanese naval traffic in the Mandated Territory so as to eliminate any duplication of effort.<sup>49</sup>

{43} Clearly, by mid-1941, the FECB were not only co-operating with the United States and Dutch signals intelligence organisations in the region by exchanging material but were also, in the case of the Dutch, either conducting or planning to conduct, operations with a degree of co-ordination previously not suspected.

## **Dissolution of the FECB**

{44} Though originally established in Hong Kong, the final wartime home of any Far East based cryptographic organisation was always going to be Singapore. Singapore was not only a naval base but also intended to be

the command centre for British military operations in the region. In August 1939, with the deteriorating military and political situation in the Far East, the FECB was relocated to Singapore. The intercept station on Stonecutter's Island still remained operational, providing raw data to Singapore. The safety of Singapore was, however, to prove illusory, and after the fall of Hong Kong the decision was made to relocate again. Barely three weeks after the outbreak of war in the Far East, the first steps were being taken for the evacuation of Singapore.

{45} On 5 January 1942 the Naval Section of FECB, their equipment and records, were evacuated to Ceylon on board the transport *Devonshire*. In the course of the evacuation, records and equipment – including a purple machine supposedly held by FECB – were destroyed.<sup>50</sup> The loss of Singapore and the intercept and DF stations necessitated re-arrangement of the RN's sigint organisation. The main base for the reconstituted signals intelligence organisation was to be HMS *Anderson* on the outskirts of Colombo, where about half the former FECB naval staff were located. Intelligence reports from *Anderson* were originated under the signal address of Captain on Staff, Colombo. The remainder of the staff were sent to Kilindini, Mombasa, to form HMS *Alidina*, and originated signals as Captain on Staff, Kilindini. This new naval signals intelligence organisation served the Commander-in-Chief Far East Fleet and no longer had the veneer of being a joint service organisation. Military and Air intelligence needs would be met by a second organisation established in India. To all intents and purposes, the FECB ceased to exist from the time the Naval Section was evacuated from Singapore.

## **Conclusion**

{46} The establishment of the Imperial signals intelligence network in the Far East highlighted the benefits and pitfalls of Imperial association. The Royal Navy benefited from the resources being applied to this organisation by the Dominion navies. These navies provided facilities,

trained personnel and raw information for use by the RN. The facilities and personnel provided by the Dominions absorbed scarce funds which they may have preferred to utilise to satisfy other requirements. The geographical dispersion of the Dominion facilities provided the RN with a degree of coverage and security that it may not have otherwise had.

{47} The downside of this Imperial co-operation for the Dominions was that often their own requirements became secondary considerations in the overall British scheme. The Admiralty, and British authorities generally, were not enthused at the prospect of Dominions developing independent analysis capabilities and thus drawing divergent conclusions from the collected intelligence. Their preference was to retain such capabilities solely under their direct control. Notwithstanding these shortcomings, the Imperial connection was to prove beneficial to all parties during the course of the war.

{48} As well as these issues, other aspects relating to the development of the Royal Navy's signals intelligence capability in the Far East and its achievements need highlighting. These are: how successful was this organisation; and why has it been treated the way it has by historians?

{49} The answer to the first question is that the FECB was relatively successful in what they did. Sufficient records are available to indicate that a number of the Japanese codes and ciphers had been penetrated, and that the FECB was able to provide warning of the impending attack, though neither the timing nor the targets could be accurately identified by intelligence alone. Even had the FECB been able to accurately predict the timings and scale of attack, it is unlikely that this information would have prevented the subsequent chain of disasters that befell the Anglo-Dutch-American forces in the region. The defence problem in the region was not just one of adequate intelligence; but related very much to the inaccurate interpretations made by distant officials and inadequate planning to meet plausible scenarios. Furthermore, by December 1941,



British and American attention and resources were very much focused on the Atlantic and European situation.

{50} The European focus has also resulted in the history of the FECB being neglected when compared to ULTRA. The destruction of many records and the slow release of surviving records in this area have limited the opportunities for detailed and accurate research in this area.

Furthermore, many of the earlier authors of works on signals intelligence history have a direct connection with Bletchley Park and the European theatre, and so feel more secure in dealing with subjects closer to home. As more material is becoming available, more works are being produced which deal with what could be described as ULTRA's neglected cousin.

{51} All of this should not however, detract from the achievements of the FECB and the signals intelligence organisation in the Asia-Pacific region. While the information obtained did not impede the Japanese advances in 1941 and early 1942, it did provide much of the basis upon which the subsequent war was planned and fought. The fifteen or so years of listening to the Japanese provided the British, and Americans, not only with an infrastructure on which to base the future expansion of capabilities and operations but also with a knowledge of Japanese procedures and organisations which was to prove invaluable in the war ahead.

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# Notes

1. The modern term "signals intelligence" is used here for simplicity, and to indicate all aspects of information obtained from communications.
2. F. H. Hinsley, *British Intelligence in the Second World War: its influence on strategy and operations* (London: HMSO, 1979), p.x.
3. William F. Clarke, "Government Code and Cypher School: its foundation and development with special reference to its Naval side", *Cryptologia*, vol.11, no.4, October 1987, p.221.
4. As surviving archival material is released, and new books based on this are published. In the latter category, see Keiichiro Komatsu, *Origins of the Pacific War and the importance of 'Magic'* (New York: St. Martin's Press, 1999) and Richard J. Aldrich, *Intelligence and the war against Japan: Britain, America and the politics of secret service* (New York: Cambridge University Press, 2000).
5. NAA, MP1587, item 311J, "Report of Penang Naval Conference—March 1921", dated 11 April 1921.
6. Clarke, p.222.
7. J. Bryden, *Best Kept Secret: Canadian Secret Intelligence in the Second World War* (Ottawa: Lester Publishing, 1993), p.8.
8. NAA, MP1049, item 1914/0351, minute dated 14 December 1926.
9. Arthur W. Jose, *The Royal Australian Navy 1914-1918*, 2nd edn, (Sydney: Angus & Robertson, 1935), pp.46, 381.
10. Commonwealth Naval Order 131 of 1912 – Return of Men with Knowledge of Foreign Languages.

11. NAA, MP1049, item 1997/5/196 – minute by Director Signal Section dated 17 June 1921.
12. NAA, MP1049, item 1997/5/196 – letter from Australian Naval Representative London dated 12 April 1924.
13. Lionel Wigmore, *The Japanese Thrust* (Canberra: Australian War Memorial, 1957), p.9n, says that Nave was sent in 1925, and McLaughlin and Ball in 1927. But just as Nave was actually sent several years earlier than the year claimed, so was Ball. He had apparently served as an infantry lieutenant in the A.I.F., but no further details are known concerning his activities.
14. The implication in James Rusbridger and Eric Nave, *Betrayal at Pearl Harbor: how Churchill lured Roosevelt into World War II* (New York: Summit Books, 1991), pp.30-1, that the ACNB was unaware of Nave's likely employment is unbelievable, given that the Naval Board was already using him in a basic cryptographic capacity.
15. NAA, MP1049, item 1997/5/196 – Admiralty letter M.03049/25 dated 19 November 1925.
16. NAA, MP1049, item 1997/5/196 – Admiralty letter M.0145/28 dated 21 February 1928.
17. *Notes on the History of Operational Intelligence Centre in Canada*, p.2.
18. NAA, MP1185/8, item 2021/5/529 – "Y, W/T and D/F", undated notes c.1940-41. Though unsigned this document is on Admiralty embossed paper.
19. Captain H. R. Sandwith, RN, quoted in Bryden, p.128.
20. NAA, MP1185/8, item 2021/5/529 – "Notes on Captain Wylie's Visit",

minute by DNI dated 10 January 1941.

21. A. J. Marder, *Old Friends, New Enemies: the Royal Navy and the Japanese Navy – strategic illusions 1936-1941* (London: OUP, 1981), p.357.
22. Hinsley, p.52.
23. Hinsley, p.53.
24. NAA, MP1185/8, item 1937/2/415 – "Establishment of a Cryptographic Organisation in Australia", DSC minute dated 19 March 1941.
25. NAA, MP1185/8, item 1937/2/415 – DSC minute dated 19 March 1941.
26. NAA, MP1185/8, item 2037/3/29 – Admiralty letter M.01003/40 dated 1 February 1940.
27. NAA, MP1185, item 1997/5/305 – letter to Secretary of Admiralty dated 26 May 1936.
28. NAA, A816, item 43/302/18 – letter from R. G. Menzies dated 11 April 1940.
29. NAA, MP1185, item 1937/2/415 – copy of letter from R. G. Menzies dated 11 April 1940. This carries the annotation "We are not proud of this". The author appears to be Commander R. B. M. Long, the Director of Naval Intelligence, RAN, although Long's biographer does not make this connection. See Barbara Winter, *The intrigue master: Commander Long and Naval Intelligence in Australia, 1913-1945* (Brisbane: Boolarong Press, 1995), p.49.
30. NAA, A816, item 43/302/18 – letter from Lord Cranbourne dated 15

October 1940.

31. NAA, MP1185, item 2021/5/529 – "Y, W/T and D/F", undated.
32. Whether this indicated an intercept station in Auckland or Auckland as the originator of reports is not known.
33. NAA, MP1185/8, item 2002/2/260 – "W/T Procedure Y - Personnel", minute by DSC dated 26 March 1941.
34. NAA, MP1185/8, item 2002/2/260 – "W/T Procedure Y – Personnel".
35. *Royal New Zealand Navy and Naval Facilities in New Zealand*, paper dated 30 April 1944, p.25, copy held by Naval Historical Section.
36. Grant Howard, *Happy in the service* (Auckland: privately published, 1985), p.50.
37. Bradley F. Smith, *The MAGIC - ULTRA deals* (London: Airlife Publishing Ltd, 1993), p.43.
38. Smith, p.52.
39. AWM124, item 4/149, "United States-British Staff Conversations Report (ABC-1)", 27 March 1941, paragraph 19.
40. AWM124, item 4/149, paragraph 19.
41. AWM124, item 4/149, Annex 4 "Communications".
42. AWM124, item 4/149, Annex 4.
43. AWM124, item 4/149, Annex 4.
44. NAA, MP1185, item 1937/2/415 – minute by DSC dated 19 March 1941.

45. Bradley Smith, *Sharing secrets with Stalin: how the Allies traded Intelligence 1941-1945* (Kansas: Kansas University Press, 1996), p.39.
46. Smith, p.78.
47. NAA, MP1185/8, item 2021/5/529 – "Visit Report" by Captain F. J. Wylie, dated 17 January 1941, Appendix 1- Itinerary, p.I.
48. NAA, MP1185/8, item 2037/2/783 – "Report on Anglo-Dutch-Australian Combined Services Communications Conference".
49. NAA, MP1185, item 1937/2/415 – minute by DSC dated 19 March 1941.
50. Jack Bleakley, *The eavesdroppers* (Canberra: AGPS, 1992), p.26. For an alternative view, see R. Erskine, "When a Purple Machine went missing: how Japan nearly discovered America's greatest secret", *Intelligence and National Security*, vol.12, no.3, July 1997.