

HMAS SYDNEY II Commission of Inquiry

Signal Communications - a supplementary submission.

1. Command and Control (C2) essentially depends upon signal communications. There was no signal communications sub-specialist Officer in SYDNEY II when she was lost¹.
2. As part of the original inquiry into SYDNEY II's loss it should have been essential to assess the cruiser's Command Team competence in SIGINT and COMINT anti-deception measures, observing the ship was engaged in convoy duties in an area where a raider was suspected to be operating and no sub-specialist signal communications Officer was borne. It would have been RACAS and his Operations Staff Officer's responsibility to ensure SYDNEY II's Command Team was adequately trained. Thus the evidence in 1941 from the previously embarked RACAS sub-specialist signals qualified flag-lieutenant, his Warrant Officer Wireless Telegraphist assistant and the ship's recently disembarked Warrant Officer Signal Boatswain would have provided a comprehensive signal communications assessment for the investigation established by the Naval Board.
3. Additional signals intelligence could have been obtained at war's end especially in regard to the possibility the Merchant Ship Secret War Call Sign Book or the disguise's call sign may have been compromised.
4. It is now unlikely that 67 years after the action all this essential evidence will ever be recovered sufficiently to 'balance' the Inquiry in this regard. Furthermore, incomplete and expurgated Admiralty files illustrate that prior to 1942 confusing and ambiguous manoeuvring instructions and procedures existed for Allied warships investigating unknown merchant ships.

¹ Please note any criticism that may be levelled at SYDNEY II's communications standards, including the Command Team's communications expertise, in the absence of a specialist communicator ought NOT be made at the expense of SYDNEY II's Command. It is the RACAS operations staff (including the specialist responsible for fleet communications at the time) who ought to have kept a relevant eye on this training aspect for all operational units and they do not appear to have been involved in any review.

5. On 19 November 1941 SYDNEY II was lost after cautiously approaching an unknown merchant ship and then closing following an exchange of prescribed recognition signals. During the chase the following signal communications ruses either were, or could have been, exercised by HSK KORMORAN who was well prepared for an encounter with an Allied warship:
- a. The disguised raider altered course radically away thus conforming to Allied recognition procedures that, unknown to SYDNEY II, had been compromised.
 - b. Into the sun and at horizon range the raider's flag and, especially, any light signals could not be easily read so that SYDNEY II was obliged to close.
 - c. KORMORAN's responses to SYDNEY II's signals, either by obscured and fumbled flags and/or poorly directed morse signal lamp, were orchestrated in slow-time to cause SYDNEY II to continue to close to about 4 or less nautical miles to interpret her signal responses.
 - d. It is likely SYDNEY II in approaching this apparently hapless merchant vessel not responding to stop signals, would have fired the usual warning shot in accordance with ambiguous Admiralty instructions, but would have had to contend with a possible enemy vessel that might immediately scuttle with the loss of Allied prisoners before the range had closed sufficiently to prevent this eventuality.
 - e. It is significant that a composite report by the Naval Board to the War Cabinet dated 4 December 1941², following interrogation of German survivors, states "At closer range (than 15 miles) the raider, which was flying the Dutch flag, made STRAAT MALAKKA by light". Thus, though subsequently denied by survivors, the Naval Board must have

² Frame, *HMAS Sydney - Loss & Controversy* (2008) at 113.

had substantial evidence that KORMORAN, unobserved by most of her hidden bridge personnel, had used her signal lamp at some stage. It is represented this could have occurred early when the chase began when flags were indistinguishable and before Commanding Officer Detmers subsequently ordered that the International Code pennant should be used at the dip to frustrate and delay acknowledgement of any signal including an expected order to stop.

- f. It is significant that three of the letters in STRAAT MALAKKA's international call sign were also letters repeated in her secret war call sign "IIKP". Thus, if KORMORAN, in order to deter SYDNEY II's approach, had, in the first instance, briefly signalled her disguise's International Call Sign with deliberately poor morse, simulating an inexperienced merchant ship, but SYDNEY II had quickly identified the call sign and immediately challenged with the secret war call-sign "IK" expecting the correct response "IP" there is a possibility this correct response was read as the last and first letters of KORMORAN'S repeated international call sign "PKQI PKQI". If an event such as this occurred SYDNEY II could have relaxed her approach until at close range the raider's silhouette was seen not to conform to the recognition manual and the signalled replies to transit and cargo questions were also seen to be unconvincing, at which time the recognition challenge was either made or re-signalled which precipitated the action.
- g. As SYDNEY II continued to close the raider KORMORAN transmitted a ruse Q alarm signal, which an alert signals Officer would be expected to question, since SYDNEY II as a conventional warship was clearly not an "armed merchant ship raider". Alternatively, as SYDNEY II would have continuously monitored the international MF distress frequency this may have been the first occasion she read the disguise call-sign correctly. Since there is no complete official record of the precise Q signal as transmitted by KORMORAN and similarly received ashore, it is unclear whether the disguise international call-sign or disguise name was signalled, nor whether an indicator letter was added to the signal as

prescribed for other German blockade runners and supply ships. The expectation was that the emergency signal once received onshore would be relayed immediately to the Allied multi-frequency area HF broadcast of which one frequency could normally be monitored by a German receiving station thereby advising the German High Command of the raider's predicament.

- h. Nevertheless, the ruse Q signal would have first appeared genuine to non-signals-expert officers. Evidence indicates SYDNEY II first opened onto KORMORAN's starboard beam to observe her contours in the process of which, alternatively, she could have been in receipt of a signal corresponding to the believed correct reply to the recognition challenge resulting in her closing to 900 metres, by which time the raider's silhouette would have been in doubt and the replies to transit and cargo questions unconvincing, whereupon the challenge was either made or repeated which precipitated the action.
- i. That SYDNEY II closed to 900 metres as if taking station on a believed friendly unit is in keeping with formation manoeuvring instructions in The Conduct of the Fleet (SP 02200) previously exercised extensively in the Mediterranean with cruisers closing to 4 cables in column open order and supports the possibility that KORMORAN's onboard signal intelligence team or the German High Command may have compromised, *inter alia*, STRAAT MALAKKA's secret war call-sign, a feat that would have required complete secrecy, since either onboard SIGINT decryption or an intelligence compromise³ would have provided an essential "in extremis" ruse technique for all German raiders.

³ It is indicated in Dr J. Chapman's translation of ADML Wenneker's Tokyo War Diary at 710 that civilian operated port service vessels were included in the compromised Admiralty warship secret war call sign book. It is not clear whether such ocean-going vessels also featured in the merchant ship secret war call-sign book which may also have been compromised, nor whether call signs of Dutch vessels co-operating with Allied forces could have been compromised if they were also included as an addendum or enclosure in both merchant ship AND the compromised warship code books specifically to avoid mishaps occurring when warships challenged any vessel of unknown nationality in particular at night. It would have been standard practice to prevent accidental sinkings when warships challenged unknown vessels recognized or believed to be merchant or auxiliary shipping in active sea-lanes that such slender addendums or enclosures of essential foreign code material be kept attached inside one or both master code

Response to “An analysis of British and German Archival documents”

6. I respectfully seek to comment upon the 31-page summary, by Counsel Assisting of the Commission of Inquiry, that analyses known British and German Archival documents extant at November 1941. It has to be said that this is a comprehensive and commendable analysis of material available at this time.
7. The principal communications findings are that, at that time, there is no known evidence that the German High Command had compromised the recognition procedure used with the Allied Mercantile Secret Call-Sign and had not compromised the Allied Mercantile Secret Call-Sign Signal Publication 02182.
8. The following observations are made:
 - a. 10.4 (page 3) - CMDR Tighe’s report outlines how merchant ships originating a coded-message often compromised their call-signs. However, this does not indicate how, until 1942, merchant ships identified a coded-message intended for them on a general broadcast i.e., whether their secret call-sign was included in the area broadcast message ‘traffic list’ preamble, indicating a coded-message would follow in the broadcast or whether a general call-sign drew a merchant ship’s attention to a specific coded message. By traffic analysis either procedure may have been a source of compromise.
 - b. 10.6 (page 5) notes that the enemy “had a card index of quite a lot of steam-ships”. Did this index include a card for the STRAAT MALAKKA as well as ships belonging to the Dutch shipping company?

books that may have resulted in compromise where a warship was lost in enemy shallow waters or simply through a breach of physical security.

- c. 10.7 (page 5) records that German Navy success resulted from the capture of code and cipher material in Norway in May 1940, but does not address possible compromise from the loss at Narvik in April 1940 of the Flotilla Leader HMS HARDY in shallow waters nor the 3 RN submarines lost in the Heligoland Bight. Winston Churchill had something personal to say about the latter in ADM 239/335 (CB 04211 GB (II) (C)) staff papers.
- d. 10.12 (page 12) - This indicates all HSK's SIGINT teams could break the British merchant navy code.
- e. 10.13 (page 12) - Since MV AUTOMEDON carried a King's Messenger for a range of important intelligence and cipher material intended for the principal Distributing Authority Singapore, the latter for all Allied warships in the far East, it would be invaluable to locate the precise list of the classified publication amendments that usually accompanied the dispatch of classified books in bulk. For example, a small amendment listing for SP 01282 may have included a page entry that also recorded STRAAT MALAKKA on a correction page.
- f. 10.14 (page 14) - Two merchant navy code editions captured by ATLANTIS from MV AUTOMEDON were cancelled in March 1941. ATLANTIS met up with KORMORAN subsequently and would have exchanged details of all the code and cipher material she had captured from MV AUTOMEDON.
- g. 10.21 (page 17) - Evidence indicates KORMORAN followed the Allied merchant ship evasion technique advised in the compromised AMSI 11. She may also have flashed either of her ruse call signs.
- h. 10.26 (page 21) - Therefore, KORMORAN would have been alerted that a new Allied merchant ship call sign recognition system was in train. KORMORAN's onboard SIGINT team would have been monitoring signs of the new system in Indian Ocean area signal traffic.

- i. 10.27 (page 22) - I would contend it is unrealistic and untenable to state that “challenge and reply procedures were never left on merchant ships”. Naval Control of Shipping Officers would be discreet with their briefings to Captains, but since the challenge and reply procedures were so fundamentally important for ship survival and to avoid action mishaps (observing the increasing number of Captains from non-English speaking nations), it would have been reckless of the Admiralty if NCSO’s did not ensure the recognition procedure was kept securely as a simple code or phrase without reference to a call-sign or other classified publication and available for immediate use. The Captain would have ensured either the First Mate or Mate in charge of navigation was similarly briefed in the event he was indisposed or otherwise unavailable. Likewise, before 1942 the (Chief) Wireless Officer would have had to know the ship’s secret call-sign in order to recognise transmitted coded message traffic for his ship from the area broadcast traffic list preamble. That this recognition procedure was very soon formally promulgated to merchant ships, (and immediately compromised), is proof that the initial informal briefing procedure was not effective for Allied merchant shipping.
- j. 10.34 (page 25) - I would contend it is a misunderstanding of CAPT Rogge’s April 1941 letter where it is believed to refer to SP 02182. Rather, he seems to be stating “What is required for each HSK is the latest intelligence update of British merchant ship war call signs”. This too would have been discussed with KORMORAN.
- k. 10.47 (page 29) - At the time Thijssen had decided to defect he is more likely than not to have built up a reservoir of local area Dutch shipping call-sign details to support his defection. As an accredited wireless Officer he could have gained access to these through a local shore radio station which would have encoded NCSO classified traffic, or from access to Company Headquarters which, for example, would have had to know decoded route details or shipping changes for normal port arrangements. He was evidently clever in hiding his activities in gaining

access to classified material. Wenneker's signal (RM 12II/249) may reveal the full details of the compromised material? Did it include the STRAAT MALAKKA?

1. 10.51 (page 30) - Would it not be more correct to say, "... no inference can be drawn that Detmers knew of the secret call sign of the STRAAT MALAKKA unless it may have been obtained by his onboard SIGINT personnel" or words to that effect?

Amendment to previous evidence

9. I respectfully refer to the oral evidence I gave to the Commission of Inquiry on 20 January 2009. A copy of part of the transcript⁴ of my evidence is attached. Therein, I referred to the "Interrogative Pennant" when I should have written and stated the "International Code Pennant"⁵.

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⁴ TRAN.023.0094, page 1452.

⁵ TRAN.023.0094 at page 1452, lines 11-19.