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**Analysis of writings about loss of HMAS Sydney by J. Eagles
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My attention was drawn to the above referenced paper by the Sea Power Centre of Department of Defence Canberra. This paper by J. Eagles has been displayed on the RAN Communication's Branch Association website for some time and the copy attached was downloaded from this site.

Knowing of my radio communications background from 1940, including service as a telegraphist aboard HMAS Hobart and as a Petty Officer Telegraphist instructor at the RAN signal school and in the UK, I was encouraged to examine and comment on the Eagle's paper.

My comments are set out in the following paragraphs and for ease of reference I have allocated page numbers to the paper from 1 to 21 and the referenced sections of the Eagle's paper have also been highlighted in colour.

Addressing the Eagle's Papers sequentially as now numbered.

Page 1 paragraph 2 after 'To everyone interested in HMAS Sydney' The reference made to exhumation of the unknown sailor buried at Christmas Island, includes the statement, 'autopsy has since revealed that the sailor was shot in the head with a small calibre weapon'.

I understand this statement by Eagles to be completely wrong, but knowing the 'myth makers' have made claims that Kormoran's crew shot Sydney's survivors it raises in my mind that Eagles is perhaps trying to substantiate the allegations made by the 'myth makers' that Sydney's survivors were shot. This unfounded rumour mongering must be very distressing to families of those lost with Sydney

Page 2 paragraph 1 'HMAS Sydney, Direction-Finding and Raiders'. Referring to the last sentence which states, '*improvement had been made over the original 1912 model D/F sets and were normal onboard equipment in RAN ships*'. D/F equipment was not fitted to all RAN ships from commencement of WW2 onwards. The RAN's cruisers, some destroyers and some corvettes, frigates and sloops were so equipped but a good many did not carry D/F equipment at all. For

example, the survey sloop HMAS Moresby and the corvette HMAS Townsville in which I also served after HMAS Hobart as the Leading Telegraphist in charge of the W/T department did not have D/F equipment.

Having trained at FND as an Ordinary Telegraphist, undertaken the Telegraphist and Telegraphist Trained Operator examinations aboard the flagship HMS Ajax when with the Mediterranean Fleet in 1941, as well as Leading Telegraphist, PO Telegraphist and Wireless Instructor W/T 1 courses at FND and instructed at FND and in the UK post WW2, I can state categorically that D/F was not part of these courses or training. D/F was never an examination question during the various examinations or courses undertaken either at sea or ashore at the Signal School.

Although the Navy Office publication A.C.B.107 of March 1940 listing all Service and Commercial W/T stations in Australia records that a Bellini-Tosi D/F system was at Flinders Naval Depot in 1940 for instructional purposes, neither I nor another former Chief Telegraphist who trained with me and instructed at FND ever sighted this D/F equipment.

Page 2, paragraph 2 *Eagles states that in 'Gill's history of the RAN, no mention is made of HMAS Sydney and the hunt for German raiders in January 1941'* The activities of January 1941 and later months of that year in the vicinity of the Seychelles Islands had very little bearing on the loss of Sydney ten months later in November 1941, well away from the Seychelles.

Gill's RAN history does give considerable coverage about the German raiders operating in the Indian and Pacific Oceans during 1940 and 1941 including operating in the vicinity of Australia. It was noted Gill also reports on Sydney's movements, particularly from February 1941 until command was taken over by Burnett on 15 May 1941 and Sydney's movements thereafter under Burnett's command. (Pages 446 to 451 'The Australian Station 1941' Volume 1 - RAN 1939-1942 by G. Hermon Gill refers).

Page 2, paragraph 3 and page 3 paragraph 1 *Under the sub-heading 'Hunting Raiders in the Indian Ocean'* In the third paragraph of this sub-heading on page 2, Eagles quotes 'Sydney searched the area to the southward on 25 and 26 January (1941).' Then at the top of page 3, second line, Eagles quotes from a book by Timothy Gambrell, 'Regarding the hunting of raiders around the vicinity of the Seychelles which is a further example of direction finding and tracking of Axis raiders', etc.

Eagle's reference to this can only be to seek support for his entrenched view about the importance of D/F and his alleged use of D/F by Sydney to locate and close on Kormoran. Also, quoting from the period of January 1941 has nothing to do with the eventual loss of Sydney ten months later.

It is probably also worth noting that the D/F (direction finding) organisation covering the Seychelles area was centred on the FECB, (Far East Combined Bureau) and in its summary dated 22 September 1941 says 'There has been no raider activity in the Indian Ocean during the period of this summary. A raider was operating in the

vicinity of the Galapagos Islands on 17 August (1941) but no D/F indication was given'.

Page 3 paragraph 4 first to fourth line 'The notes above -to- running down those signals'

Eagles says, *'The notes above, (referring to his previous paragraph), indicate that on both H/F and M/F frequencies, the naval authorities ashore and British naval vessels as well as the Sydney, were monitoring wireless signals continually whilst at sea and were capable of running down those signals at top speed'*. This clearly implies monitoring for enemy vessel transmissions and is a misleading claim by the author that our warships were monitoring a range of frequencies listening out for possible enemy transmissions.

RAN ships simply did not do this at any time up until the end of WW2. The Royal Navy did not conduct wireless signals intelligence monitoring afloat either until late in 1944. Such an activity to be meaningful required specially trained personnel with linguistic skills, or access to linguists, additional to the normal complement of telegraphists, as well as suitable radio receivers. These activities were shore based and classified secret by the RAN during WW2 and were known as 'Y' operations. This is now unclassified information and is expanded upon at page 4 of this analysis under 'Sydney and monitoring signals continually'

It was an understanding for ships, including warships, to listen out during the international silence periods of 15 to 18 and 45 to 48 minutes past each hour on 500 Kcs. These three minute periods were usually coloured on the clock face as a reminder and were internationally recognised 'silence periods' during which a merchant ship might transmit an emergency or distress signal, including a 'QQQ' signal.

The naval W/T operators log book in use in 1941 does not contain any reference to keeping a listening watch on the 500Kcs channel including the silence periods but it does say that during silent or quiet periods on the channels being monitored, (meaning naval channels), an entry that receiving gear is correct is to be made every 15 minutes.

My recollection of monitoring the silence periods on 500 Kcs during my time aboard Hobart was via a loudspeaker set up in the main wireless office and connected to a receiver but I never heard or recall any other operator saying they heard an emergency signal on the channel. It is an aspect which didn't seem to rate very highly or be a critical need.

We always had a lot to do watch keeping on essential naval frequencies as well as decoding and these tasks required an operator's total and undivided attention throughout the usual four hour watch. When at action stations the watch periods were longer, tiring and stressful if under attack.

During my time as the Leading Telegraphist on Moresby soon after my time on Hobart and towards the end of WW2 on Townsville, we did not monitor the silence periods at all or maintain watch on 500Kcs.

Sydney's knowledge of a transmission by an enemy vessel, including Kormoran, could perhaps be via her own monitoring of 500 Kcs, an unlikely occurrence, considering how we monitored 500 Kcs in Hobart. Also, by the time Sydney manned her D/F any such transmission would almost certainly have ceased.

In the highly unlikely case of being alerted to an enemy ship's transmission by the Bells broadcast, the enemy transmission in any case would also have ceased, as mentioned in the previous paragraph for 500 Kcs, by the time Sydney could have reacted to set a watch on the stated frequency and take D/F bearings.

Even if any signal had been sent to Sydney concerning enemy transmissions they should of course be recorded in the communications or intelligence log records or signal packs of the time. I understand no such signals were transmitted to Sydney and no log or signal records can be found. This should not be construed by anyone as a cover up but no more than confirmation that such signals were not transmitted from shore.

Without the slightest doubt, Sydney, up to the time of being disabled, would have been maintaining a constant watch on the Bells broadcast and she would have been reading Bells loud and clear on either the Bells low frequency 44 Kcs transmission or the high frequency channels for the particular time of day.

The radiated power of the 44 Kcs low frequency transmitter was 120 kilowatts and the high frequency transmitters approximately 12 kilowatts. These were very high powered transmissions in 1941 and still would be today, and I clearly recall Hobart reading Bells without any difficulty when shaping course Fremantle to the Seychelles and the Mediterranean, having departed Fremantle on 26 June 1941.

Raiders and any other enemy vessel including submarines also observed strict rules about maintaining wireless silence as we did and any transmissions made by say an enemy raider, other than a possible QQQ for deception purposes, would have been short, quick and most likely encoded.

Page 3 paragraph 4, 'Sydney and monitoring signals continually' Australian ships such as the cruisers, destroyers etc with a complement of telegraphists did maintain a continuous W/T watch on naval transmissions such as 'Bells' emanating from the Belconnen naval transmitters keyed from Harman and when in the Pacific after 7 December 1941, Bells and/or the USN station known as the Fox broadcast from Hawaii. Manning both of these broadcasts as we did on Hobart when in the Pacific with the USN imposed considerable strain on Hobart's telegraphist resources.

Monitoring of W/T transmissions on the radio frequencies used by enemy ships and shore stations was carried out by the RAN's 'Y' shore stations and the USN's listening posts in Hawaii etc. The British also operated such a station in Singapore until the surrender on 15 February 1942 as well as in Ceylon etc. During WW2 these activities were highly classified and not publicised. This was W/T intelligence and these monitoring activities were supported by shore based Direction Finding facilities.

'Y' operations for ***monitoring radio telephone transmissions*** by the enemy from their aircraft or German 'E' boats in the English channel areas, as distinct from monitoring

enemy W/T Morse code transmissions, was in fact conducted by the British authorities from 1940 onwards and became operational in the Mediterranean from 1942. This has no relevance to the loss of Sydney in 1941 and the now de-classified 'Y' operations, code named 'Headache' during the war, are covered in detail in the Admiralty Signals Division publication 'Radio Warfare' 1949.

Page 3 paragraph 4 lines 10 and 11 'Judging distance from transmission location'

This is not a valid statement. An operator may assume that a very weak radio signal is some distance away or that a very loud signal is near but it is not a basis upon which to estimate distance. Experience has no bearing whatsoever on being able to quote the distance between a receiving point and the transmitter

Page 3 paragraph 5 'Range of 300 miles for an M/F signal' The emphasis Eagle's is giving to 300 miles, if his claim was valid that this is about the range of an M/F signal on 500 Kcs, has no bearing at all on the loss of Sydney. The range or distance over which an M/F radio signal may be picked up is entirely dependant on several factors and it is inappropriate to suggest that such a signal has a range of about 300 miles. It might be 100, 200, 500 miles or more. The variables are power of transmissions, aerials at transmitting and receiving locations, radio receiver and its sensitivity, operators skill, time of day and weather conditions.

Page 3 paragraph 6 'Submission to Senate Inquiry by Secretary RSL Coffs Harbour'. This claim is in my opinion very questionable and irrelevant. During my time at sea aboard Hobart etc, as already mentioned, watch was not maintained strictly on the mercantile marine channel of 500 Kcs, including the silence periods, as used by merchant ships for emergency transmissions, including auto alarm signals. A continuous W/T watch on 500Kcs generally would only be maintained if directed by signal. I am sure this would have been the same W/T watch keeping situation in our other cruisers etc including HMAS Sydney.

However, this particular claim is quite irrelevant to the matter of Sydney's loss as I understand the movement cards for Sydney show that she was at the Seychelles for refuelling on her return from the Mediterranean to Australia and arrived Fremantle 5 February and Port Jackson 9 February 1941. This alleged incident at the Seychelles must have occurred about 10 months before the loss of Sydney, if of course it did occur.

Thereafter, she was operating on the Australian station, including a Singapore visit, from her return to Australia up to the action with Kormoran in November 1941. The reason for Eagles referring to this alleged D/F event seems to me to be part of his attempt to further highlight the role he claims D/F played in Sydney's location and closing on Kormoran.

Page 4 paragraph 3 'Strength of the OOO signal as received etc' Claiming that because the signal received by Uco and Geraldton was very weak and not very readable establishes that Kormoran was giving a false position is very much a flight of fancy. Too much emphasis is also given to saying that a signal sent from 150 miles away would be perfectly readable.

Whether a wireless signal transmitted on say 500Kcs or any other MF frequency over 50 or 500 miles is received at strength 1 or 5 is entirely dependent on several factors, mentioned earlier, such as radiated power of the transmitting source, time of day or night, weather conditions, sensitivity of the radio receivers picking up the signal, the aerials in use at either end, not to mention the skill of the receiving operators in tuning their receivers and this aspect is also influenced if the transmitted signal is CW or ICW. With an ICW signal the bandwidth of the signal is wider and tuning of the receiver is not quite as critical as with CW signals.

Page 4 paragraph 4 'Sydney would have been bound to investigate' This statement by Eagles, 'With a bearing and an estimate of the signal strength, Sydney would have been bound to investigate, especially if there was a chance of catching a raider in the very act of attacking a merchantman' needs to be scrutinised closely.

Eagles is implying that Sydney received the QQQ signal and was taking a D/F bearing of same. Knowing that it was abnormal for any of our ships to be maintaining a strict watch on 500 Kcs, except during the international silence periods, even any QQQ or other distress signal transmitted during the silence periods on 500 Kcs may not have been received by Sydney and probably was not heard. Furthermore it would have been highly unlikely that Sydney was maintaining a D/F watch to take bearings on 500Kc/s and to seek to link a change of course by Sydney to this alleged happening is quite invalid.

Page 5 paragraph 1 'German Navy's use of Wireless Tricks' Again the author has embarked on a flight of fancy where he says at line 8, 'This divergence from her normal course can only be explained by the fact that Sydney was diverted by a wireless signal from the Kormoran'. This is nothing but supposition as already stated and seems to be another element of the author's claims about the significance of D/F and its use by Sydney.

Page 5 paragraph 3 last two lines 'Detmers knew Straat Malakka's secret call sign'

This again is unfounded supposition on the part of the author and in the absence of absolute proof that Detmers knew the secret call sign of the Straat Malakka, such a claim must be disregarded. Knowing how strictly security was applied to distribution of communications information and instructions I cannot believe Detmers would have known the secret call sign of Straat Malakka or any other ship he may have claimed to be when disguised.

Pages 6 and 7 'Sydney's D/F equipment'

I have been investigating the claim by the author that Sydney's D/F capability was by use of a Bellini-Tosi aerial system and the author further implies that this was connected to '***the Bellini-Tosi C143A M/F D/F set produced by Amalgamated Wireless Australia (AWA)***'. In paragraph 2 on page 7, Eagle confirms his opinion that Sydney had this C143A equipment where he says, 'It is interesting that Sydney has been fitted out with this type of D/F, neither the Perth nor the Hobart were fitted

with this type of communications equipment although they did have direction finding capabilities'.

The question as to AWA being the manufacturers of Bellini-Tosi type C143A MF D/F sets as claimed by Eagles is an area of conflict of opinions

Having contacted AWA head office to seek confirmation or otherwise that AWA manufactured the Bellini-Tosi C143A MF D/F set, I was informed on 20 August 2008 that AWA did not manufacture such equipment and that the quoted C143A reference number is unknown to AWA.

However, in an internet search concerning Bellini-Tosi D/F a letter from the late Mr Rod Torrington reports that he, assisted by Mr. Jim Twycross, installed an AWA made C143A Bellini-Tosi D/F system at the newly established Civil Aviation Aeradio station at Wyndham, WA in 1941. I personally knew both of these former Civil Aviation men. Twycross was Superintendent of Communication for DCA in Western Australia in 1952 and Torrington was an aeradio operator with Civil Aviation, had a background as a marine radio officer and later was an Electronics Engineer with the Civil Aviation Flying Unit at Essendon Airport in 1970.

According to records obtained from HMS Collingwood, England, the Royal Navy Electrical School, which has a very significant collection of historic radio communication data and fit out of British manufactured warships, HMA ships Sydney and Hobart were fitted out with Admiralty type RA1 sets and Perth with an RA2 set. These D/F sets utilised rotating frame aerials.

It is important to also note that British warships fitted with D/F equipment in 1924, and not all were so equipped, Bellini-Tosi systems were used, but by 1928, a revision commenced and HMS Furious was fitted with an experimental set using a rotating frame aerial and in the same year production commenced to supply HMS Queen Elizabeth and Revenge with rotating frame aerial systems and the Bellini-Tosi D/F systems were being dispensed with.

The evidence discovered to date indicates that Sydney may not have been fitted out with D/F equipment of the type claimed by the author but a search of RAN 'Additions and Alterations' lists for Sydney held by the Australian National Archives should be undertaken. The indexing of these records on the internet indicates a list includes changes to Sydney's D/F aerials. As a former member of Hobart's W/T communications team etc I find it difficult to believe Sydney would have been fitted out in an entirely different manner D/F wise to Hobart and Perth so soon after her acquisition from Britain

However, the actual type of D/F HMAS Sydney may have had at the time of the Kormoran action is really quite irrelevant. The key issue is whether or not Sydney used her D/F, whatever the system in use was, to locate and close on Kormoran as claimed by Eagles.

An important aspect about D/F for taking bearings on transmissions, including other ship's transmissions, is the matter of the accuracy of such bearings. The errors which can occur is well illustrated in Gill's history of the RAN and his presentation of the

Manoora's search for the Italian ship Romolo which was eventually sunk on 12 June 1940 well away from the indicated position obtained by D/F fixes from four D/F stations. (Page 120 of volume 1 of Gill's history, 'Royal Australian Navy 1939-1942' refers).

Page 7 paragraph 2 'Sydney and use of D/F to home her Walrus'

The reference at line 9 of this paragraph by the author to D/F and its use in conjunction with the Sydney's aircraft is also worth examination as it is contrary to the way the aircraft operated relative to their parent ships during WW2. Sydney's aircraft at the time of her loss was a Walrus which replaced the original Seagull.

In discussion with Perth's former Telegraphist Air Gunner, Mr Danny Bowden who was flying in the Perth's Walrus when Perth was in the Mediterranean, I was assured that during WW2, when the Walrus was employed, the aircraft observer who was also a trained navigator, was thoroughly briefed concerning the parent ship's intentions, course, speed, position etc before launch and the aircraft maintained a detailed navigation chart and homed on the ship on completion by navigation. D/F bearings to home the aircraft were never transmitted by the ship which was maintaining very strict radio silence.

Eagles implies that the parent ship such as Sydney would frequently transmit D/F bearings back to the Walrus and that this was the only way for the Walrus to locate the parent ship.

Page 7 paragraphs 3 and page 8 paragraph 1 'Directional effect of aerials' This is well established in radio communications but the significance of the directional effect in a warship such as Sydney is of no great significance as implied by the author. Eagles is ignoring the fact that Sydney, although steering a mean course of say 180 degrees would almost certainly be zigzagging and the orientation of the ship's aerials relative to the transmitting source would be frequently changing. This condition would apply to other ships, including Kormoran, if they were proceeding by zigzagging to minimise the risk of being torpedoed.

This statement by Eagles is of no significance and seems to be aimed at pressing his view that Sydney would have been receiving Kormoran's signal which he claims resulted in causing a change of course by Sydney.

Pages 8, 9, and 10 'Reference to charts, courses and use of a false signal by Kormoran' This aspect of the Eagles writings is not in my area of knowledge but to suggest at page 10 that Kormoran was seeking to lure Sydney by a false signal and that the course was changed as a result of a signalled instruction or D/F interception by Sydney, together with the reference to the 300 mile limit of wireless reception, is best said to be completely unjustified speculation on the part of Eagles.

My understanding is that Sydney had apparently visually sighted a vessel, closed to investigate and it proved to be the raider Kormoran. This surely negates all speculation about seeking to lure Sydney, D/F bearings etc.

Pages 11 to 13 'The number of lifeboats carrying Kormoran survivors' This section of the Eagles paper adds nothing to the issue of Sydney's loss and his claim that Kormoran was using the Kormoran's LS3 is entirely speculation on Eagle's part. It is impossible to establish that the Kormoran's LS3 was employed as claimed by Eagles and it seems rather far fetched and highly unlikely in the circumstances.

Pages 14 to 21 'Did Sydney send signals after departure Fremantle, missing log book pages and ship movement cards' This part of the Eagles story is mainly a comparison of views by various people who have written about Sydney's loss and whether or not Sydney sent any signals after departing Fremantle with Zealandia. This is mostly speculative and does not contribute to the matter of Sydney's loss.

As stated earlier in this analysis, observing W/T silence was very strictly applied and in my opinion it was most unlikely that Sydney would have broken silence to make the signals suggested.

The answer to the question 'did Sydney signal after departure time with Zealandia out of Fremantle up to 19 November 1941' can only be established in the affirmative if such a signal or signals, if transmitted, can be found in archival records held.

To date, as I understand the position, copies of any such signals have *not* been found and therefore I consider it is reasonable to accept that Sydney did not transmit at all prior to the action with Kormoran and did not transmit when the action commenced because of damage and loss of aeriels etc.

The missing pages from log books is described by Eagles as being a major breach of rules and regulations and, therefore it must be part of a cover up which this author claims has occurred. Regardless of laid down rules, in an emergency or urgent situation such as was the case with the failure of Sydney to respond to calls for her to report, it would not be unusual for log book records to be surrendered to authorities upon request without regard to any rules or keeping a record of such handover of the documents.

Attached to this report is a photo copy of the instructions for keeping a naval W/T operators log book plus a page from the same log. It came from the main W/T office of Hobart and was being used as a diary from June 1941. This edition was in use from 1932 and was reprinted, not revised, in 1941 and would be identical to the log in use by Sydney and all other W/T equipped naval vessels in 1941 onwards.

There is no mention that failure to observe the rules is a punishable offence and the logs can be destroyed after three months or when a ship pays off.

I agree with the part of Olsen's book quoted by Eagles which says, 'There is nothing to suggest that the information, (meaning log books) was seized as part of an elaborate cover-up'.

Eagles commentary about ship movement cards seems to be of little value in addressing the issue of Sydney's loss and does not merit serious consideration.



In summary, I see little value in the paper by Eagles which only causes confusion and must have added significantly to the anxiety of families of those lost with the ship. I also understand that this Eagles fellow is now saying that the underwater photographs of Sydney have been altered to suppress the facts! People like this really do need to be taken to task and shown up for what they are and that is, 'mischievous myth makers'.

(A. Gordon Johnson)