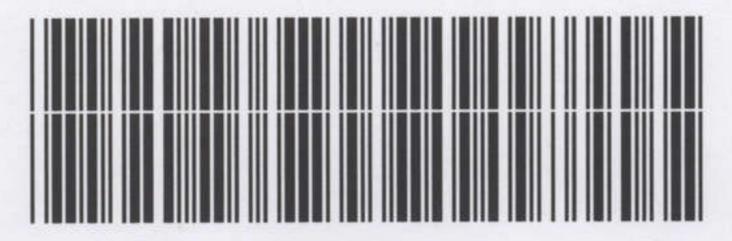
## **AWM78**

## Reports of Proceedings, HMA Ships and Establishments

HMAS DIAMANTINA (I)

Item number: 99/5

Title: September 1966



AWM78-99/5

Leciansification Authority-Defence Records This record has been reviewed and has been declassified by the Department of Defence (1-avy) with effect from: / // /99.0
Authority Dig (N) Admin 18-13. Reviewer: LCDR R. L. Smith (RANEM) UNIFILE 22

COMMONWEALTH OF AUSTRALIA



NAVY--- CAMBERRA REF. Nob 695 56/9/16.

DEPARTMENT OF THE NAVY

NAVAL STAFF OFFICE, P.O. Box 58, FREMANTLE, W.A.

AH 11/20

Hydrographic Office, C/- Post Office, GARDEN ISLAND.

2nd November, 1966.

The Naval Officer-in-Charge, WEST AUSTRALIA AREA.

H.M.S. DAMPIER - REPORT OF PROCEEDINGS.

A copy of H.M.S. Dampier's Report of Proceedings for September, 1966 is enclosed.

The complimentary references to H.M.A.S. 2. DIAMANTINA have been noted with pleasure.

(D. W. Haslam) Captain, R.N. HYDROGRAPHER. R.A.N.

II

The Captain, H.M.A.S. DIAMANTINA.

(Copy to: The Secretary, Department of the Navy, Navy Office, Canberra).

Forwarded with pleasure.

(Sgd.) W. B. M. MARKS

COMMODORE (W.B.M. MARKS) NAVAL OFFICER-IN-CHARGE WEST AUSTRALIA AREA.

AUSTRALIAN WAR MEMORIAL

\* copy of the mal paper colio's que 15/9/06

H.M.S. DAMPIER at Sea

9th October 1966

No.8/ 566

The Hydrographer of the Navy, Ministry of Defence, Whitchall.

Sir,

I have the honour to report the proceedings of Her Majesty's Ship DAMPIER under my command for the month of September 1966.

- 2. The month opened with M.M.S. DATTIR and H.M.A.S. DIABATINA anchored in 22 fathoms about 130 miles north westward of the Natura Group and about 150 miles south of the Cambodian Coast. Not long after anchoring I exchanged identities with U.S.S. ESTES who enquired, rather surprisingly, where I was from and where bound. Not wanting to prolong the exchange I replied "Anchored for the night", and the conversation came to an abrupt end. The following day's work continued according to plan, and as some time was left over at the end of the day the two ships spent a useful two hours exercising Officer of the Watch manoeuvres.
- J. The earlier day's work had shown that it was preferable to make the overside observations (Velocimeter, corer, camera etc.) at a point a third of the way along the accoustic run and this practice was started on 2nd September. 'Mosobs' as H.M.S. DAMPIER's overside observations had been christened could thus be started 2 hours earlier an invaluable gain for the deeper stations, of which that on Saturday, 3rd September was the first. This day was also the opening day of a \*oncentrated period of rain squalls, and as the velocimeter team started to pay out a mile of electric strain cable hand over hand the first the first should be a been down on the backs of the forlorn farty on the forecastle. A little difficulty was experienced on this first deep day which led to a number of improvements on the rig. The results from the instrument however left no doubt about its value, for a continuous velocity profile from 0 to 2,000 netres was obtained, the values at 5 netre intervals recording themselves with a clatter on a converted adding machine at the mere press of a button.
- 4. The station's observations were finished before 1600 and I set course for a pre-arranged rendezvous with R.F.A. BROWN RANGER to refuel. H.M.A.C. DIMMMTHM had preceeded me and I joined her in the rendezvous position or so both ships individually thought - at 0600 on Sunday 4th. In the end, the rendezvous was made an hour late, as R.F.A. BROWN RUNGER had been set north by the coastal current whereas H.M.S. DAMPIER and H.M.A.S. DINWATINA, coming from the east, had been set south by the counter current; neither group having been able to observe stars for over 24 hours. I finally connected up astern of R.F.A. BROWN RANGER at 1000 and disconnected with a feeling of well-being through having full tanks at 1145. Group One had appeared with a swish shortly after the replenishment and a transfer of documents had been arranged for 1315. The squadron steamed in formation over the dinner-hour prior to an exchange of documents between H.M.S. VERULAM and H.M.S. DAMPIER planned for 1315. I put off the transfer as a squall passed but it was obvious when H.M.S. VERULAM lowered her Gemini craft that it would stand up to much worse weather than the force 5 of the squall. The evolution was very snartly executed by H.M.S. VERULAM and it is clear that a bemini craft is a much more valuable boat than the classical sea boat, whose days must be numbered. As soon as the transfer was complete, Group One rapidly vanished westward whilst H.M.S. DAMPIER and H.M.A.S. DIMMNTIMA continued towards Monday's area.

5. The standard/ .....

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- 6. During the night of Thursday 8th/Friday 9th I gave Scarborough Reef a very wide berth as neither ship had been able to obtain a fix for 36 hours. At the closest point to the reef the bottom shocked abruptly to 800 fathoms although some 2,000 fathoms was charted. After the peak had passed I was surprised to find that H.M.A.S. DIAMANTING had obtained a shoaler sounding although she was on the outside track, and that the shoal was separate from the reef.
- On the following day, Friday 9th, whilst H.M.A.S. DIMESTINA was reporting the condition of her quarter lock rice-field, the sun was seen fee an instant and a position line obtained. It the end of the day's work both ships stoamed towards the coast of Luzon, obtained a satisfactory land lix before midnight, and turned to steam slowly towards the following day's replenishment position. By daybreak R.F. .. TILLFOOL had joined up and R.F. .. BROWN RINGER was steaming towards. To save time I had decided to carry out a three ship R.A.S., from R.F.A. TIDEFOOL. The wenther was not very auspicious but ships seemed fairly comfortable with the wind on the stur-DIMMITTIMA the port side and H.M.S. DANTIER astern. I had thought that R.F.A. BROWN RANGER would be the steadier ship to have on the weather side, but in the conditions she had quite an exciting time. H.M. .. S. DELICATION commodes with her usual aploab, N.F.A. BROWN ROLLER commedet with what was an excellent feat of sermanship and I approached from ratery. trying to iron out the snaking of the hose. Tais, unfortunately if fillen to do for the base passed briefly under the stem and when I had findly connected and pumping started a look appeared in the hase. Duefally I disconnected again until a new hose section could be inserted afterconnected just as H.M. I.S. DIA: MATINA was branking Augy. In or my me's Urelief R.F.A. BROWN RINGER completed her pump-over shortly aftern ords this H.M.S. DIJTIR, taking it gently through her aging pipes, disconnected t 1020.
  - Bay, and the four 'll' ships made a fine sight racing towards Subjective divisions in column, division guides abeam. A ninety degree turn should have put the four ships in column, but I underestimated R.F.A. TIDEPOCL'S turning circle so that a quick shuffle was necessary before ships product Grande Isle, the entry point for Subject Bay at 1315. Here, R.F.A. TILECO and R.F.A. BROWN RANGER had to sadly break away to their rather remote anchorages.
  - 9. Entering Subic Bay was something like arriving in a modern child's fort layout: there was everything: fighters swooped overhead, a helicogtar hung over us for a time (making wheel orders quite inaudible) and ships of all descriptions were lying to the closely laid mornings. One felt that any minute someone would offer to exchange a ship that there were two of for a survey ship (a class which was not represented in the home side).

Turning the corner/ .....

lost time.

Turning the corner to our allotted berth at 1350, H.M.S. DAIPIER mosed alongside W.M.S. VERULLI, lying alone, just shead of five ships alongside each other. H.M.A.S. DEMINITINA came alongside outboard shortly afterwards. A most impressive 14 piece band was assembled on H.M.S. VERULNI's boatdeak playing military music with such force that again wheel orders were insudible. It appeared that the musicians' instruments had only just arrived in their "residual baggage" and they were anxious to make up for

- 10. As soon as the ships were alongside, Captains and Officers of our lest ships came on board to welcome us, and offer as much hospitality as could be packed into our short stay. It had been hoped that prior arrangements would have been made, as requested, for officers of the base and their vivos to come on board in the evening to a combined party, but to our dismay nothing had been done. As all preparations had been made, the Captains and Officers of our host ships rallied round and invited a large number of guests, and an enjoyable but somewhat impromptu reception was held, graced by a vigorous section of the Band.
- 11. On the following day it was possible to start discussing operational natters with the base staff (who work an 18 hour day, seven days a week apparently), punctuated by attendance of Commanding Officers and Officers of all four ships at Morning Service.
- During the first two days in Subic, the low pressure system which we had feared was forming north west of Luzon became recognised by the meteorological authorities and rated as a tropical storm. As its position was over the areas we had intended to work in, a quick change of plan was nade before sailing to give it time to get out of the way. Final arrangements having been made and final farewells and thanks said, the process of winkling H.H.A.S. DIMMNTINA, H.H.S. DIMPIER and H.H.S. VERULII out from inside H.H.S. DELIGHT AND H.M.A.S. PARRIMATTA began. The two ships that were staying held off their sterns with tugs whilst we all slipped out one by one. The basic plan was that H.M.A.S. DIGAMTINA, H.M.S. ANDREW and H.M.S. DIMPIER should take up waiting positions until H.M.S. VERULAM was ready to go ahead, when we could all proceed in column, modified for foul weather if necessary to permit us to leave in separate divisions. H.M.S. ANDREY arrived in good time, H.M.A.S. DIAMANTINA took up her position and H.M.S. DAMPIER had just taken the station ahead when the heavens opened up. H.M.S. VERULIM, who had just slipped and who would have had difficulty turning into the wind in any case let go an anchor to swing on, and as the visibility had reduced to 12 cables, I decided to go ahead with H.M. ... S. DLAMANTHW., leaving H.M.S. ANDREW, patient, and somewhat forlorn, to wait for H.M.S. VERULAM. Nothing was seen of the harbour on the way out except a quick glimpse of H.M.S. VICTORIOUS and the only other object in sight was H.M.A.S. DIAMANTINA, a shadowy shape and as always in excellent station astern. The weather cleared as Grande Isle was passed, and in the gathering gloon, H.H.S. VERULIM, H.M.S. ANDREW and R.F.A. BROWN RANGER could be seen about a mile astern.

14. The sudden/.....

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14. The sudden very heavy squall put the seal on our visit to Subic Bay. The Americans had done all that they possibly could for us, and in H.M.S. DAMPIER's case, no praise was high enough for the hospitality of our host ship U.S.S. RENSHAL. All the U.S. clubs were open to the ship's company and everywhere one found the U.S. Navy personnel cheerful, friendly and hospitable. Nevertheless, two days in Subic would probably be enough for a change for the ship's company. The constant succession of squalls during our visit had not improved matters, and this last made us glad to be out with some sea room.

- 15. A slow passage was made overnight to an edjacent area for two days work over a known accoustic range. MR. F.E. HALE of San Diego had been embarked for the leg to Hong Kong and he, of course, showed great interest in our results over this range. The two days went well, little disturbed by the weather, which continued much as before. On the first day two accoustic runs were made for a comparison of methods and the whole of the second day was devoted to coring and camera stations. Trials of a newly obtained U.S. Camera were, unfortunately, unsuccessful, and it was clear that some modification was required before it would work.
- 16. At 0230 on 16th September, as H.M.S. DAMPIER and H.M.A.S. DIAMANTINA were heading north to the next area, and just beginning to feel the swell from the tropical storm, now promoted to Typhoon ELSIE, I received via Singapore, a general distress signal concerning Ore Carrier AUGUST MOON (10,000 tons), aground on Fratas Reef. After some thought I ordered H.M.S. VERULAM, H.M. .S. DIAMINTINA and H.M.S. DAMPIER to proceed at best speed to Pratas Reef. All three ships were about 250 niles away but I hoped that H.M.S. VERULAM at least and possibly H.M.I.S. DIMENTING would get there before sunset. H.M.S. DAMPIER with her lower speed would have got there about 2000 in good conditions. Meanwhile, I heard that H.M.S. LOCH FADA had been diverted to Pratas Reef, and after assessment of the relative importance of H.M.S. VERUL'M's work ordered her to return to her trials. As luck would have it, H.M.S. DAMPIER was in the act of changing over boilers, and both boilers were connected by 0412, when I increased to 15 knots - the speed I thought I could best keep up for a long period. H.M.A.S. DIAMINTINA, with 14 knots on one boiler was not far astern, and by 0800 she was coming up close to port with a knot advantage, making as she came past "How do you get these things out of second gear?" By nor the swell from Typhoon ELSIE had become quite steep, and both ships were clambering up to the crests and plunging down into the troughs, proving once again their excellent hull design. So we continued for an hour, in bright sunshine, with a feeli of excitement in the air, and it must be admitted a feeling of escape from the daily oceanography. It soon became clear however that U.S.S. ORISKANEY was going to get to the scens long before we were, and it was her helicopters which would be vital in the rescue. By 1000 H.M.A.S. DIMENTINA passed news of her first sorties and I turned both ships back to our area for the day and reduced speed. Shortly afterwards, came the good news that all the crew had been rescued. The station was started at 1315, still in a 15 foot swell, and by 1950 a slightly reduced series of observations was complete.
- 17. The formation and passage of Typhoon EISIE had cleared the air and nade a complete change in the weather. The next three days continued, back in the even tenor of our observations in bright, sunny and calm weather. Apart from the occasional over-heating of some of the equipment and a general difficulty in keeping the wires up and down in the confused surface currents caused by Typhoon ELSIE the days produced good results and a satisfying feeling of steady production.

18. On Sunday 18th/ .....

On Sunday 18th, however our pulses quickened a little when I was asked by Commodore, Hong Kong if any of our group of ships could be spared to pick up 37 survivors of AUGUST MOON who had been kept temporarily on Pratas Island by the local authorities. I immediately volunteered the services of H.M.S. DAMPIER and if necessary, H.M.A.S. DIAMANTINA, and hoped that we could be of some service. The planning of the period before Hong Kong had left me with a feeling of dissatisfaction because which ever way it was planned I could not avoid wasting time. I had been instructed that both ships had to refuel from R.F.A. BROWN RANGER before entering Hong Kong and with the passages involved and the desirability of entering on a favourable tide it appeared that the replenishment was likely to waste a whole day's work. A call at Pratas Island seemed to be the piece which completed the jig-saw puzzle, however, for it would not mean the loss of any more observational time, but would put something useful into the blank period. It was therefore with relief that I received orders from Commodore, Hong Kong to proceed to Pratas Island by early a. .. on 20th September - a time and date which fitted in perfectly. I arrived off the Island at 0630 and anchored 3 miles to the south

west, obtaining a reasonable lee from the force 4 to 5 north easter. Shortly "ter 0700 two survey notor boats and the notor cutter, each towing a eanghy proceeded towards the island in column, making a fine sight in the norning sun. Lieutenant J.F. SHORTHOUSE was in charge of the leading boat and the operation. The passage through the nigger heads was found without much difficulty and all three boats nosed into the beach soon after 0800. The survivors had reached the beach before then and quickly enparked. Lieutenant SHORTHOUSE had a brief conversation with the Garrison Commander and as other members of the garrison started to let off fire crackers the boats returned to the ship. As soon as the boats were hoisted, I weighed and proceeded to the vicinity of the wreck to fix its position, apologising to Captain Cameron the Haster of AUGUST MOON for having to take him back to the scene of the disaster. The wreck was 12 miles away, near the north east tip of the reef and as I was short of time to meet my replenishment rendezvous I had to confine the ship's activities to fixing the wreck and putting in some small dotail on the island and reluctantly abandon any hope of fixing the positions of the other wrecks marked P.A. on the chart.

21. R.F.A. BROWN RANGER and H.M.A.S. DIAMINTINA were sighted at 1450 and I was connected astern of R.F.A. BROWN RANGER at 1600. H.M.A.S. DIAMINTINA and completed her replenishment and I was sorry that I had settled on replenishing astern - an inefficient method at the best of times. I disconnected at 1750 and as R.F.A. BROWN RANGER set course towards Hong Kong, the two ships stopped for the last event of the day a calibration of the accoustic charges and equipment. Thanks to excellent manoeuvring by H.M.A.S. DIAMANTINA the calibration was complete by 1940, the last masthead angle being taken between her masthead obstruction light and an almost indistinguishable waterline.

22. A slow night passage to the last area and a successful day in 700 fathons completed phase 1 of the observations and at 1615 I turned towards Hong Kong, being joined by H.M.A.S. DIAMANTINA from the other end of the line during the First Watch. A stop was made off Wang Lang Light for a wash-and-brush-up, and having been ordered to enter at twenty minute spacing, I proceeded at C900, leaving H.M.A.S. DIAMANTINA still at it.

23. As soon as the ship was through Lei-u-Mun Pass, I hauled over to starboard and lowered a survey notor boat which I expected to need during the stay in Hong Kong and leaving her to follow proceeded through, for Hong Kong, exceptionally light harbour traffic, berthing on South Wall, Victoria Basin at 1105. H.M.A.S. DIAMANTINA entered the basin twenty minutes later and berthed outboard of H.M.S. DAMPIER.

24. The crew of/ ......

The crew of AUGUST MOON had proved to be very friendly during their two days stay, accepting rather cranped conditions on the upper deck cheerfully and the Master regaling the wardroon with many salty stories. The crew had kindly cleaned all the upper deck bright-work on the morning of our arrival. As the ship came alongside many of their relatives were on the jetty and made a moving sight as they were reunited. The press, also, were present in force and gave the survivors a fairly hard time. Luckily, they were not very interested in H.M.S. DAMPIER.

- 25. I called on the Connodore-in-Charge, Hong Kong, Connodore F.D. HOLFORD, D.S.C., at 1430 that afternoon and he returned my call at 1000 on the following day. At 1150 the Connanding Officers of H.M.A.S. DIAMANTINA, H.M.S. ANDREW, H.M.S. ANCHORITE and myself signed the books of His Excellency the Governor, and the Military Commander.
- 26. On Friday 23rd September, also, the Fleet started to arrive, H.M.S. VICTORIOUS, wearing the Flag of Vice Admiral MILLS, Flag Officer Second-in-Command, Far East Fleet, entering at 1245 and securing to No.1 buoy, closely followed by H.M.A.S. STUART, (Commander P. GOLDRICK, R.A.N.), H.M.S. LENDER, (Captain R.L. EVELEIGH, D.S.C., R.N.) and H.M.A.S. PARRAMATTA, (Commander J.A. MATTHEW, M.B.E., Royal Australian Navy).
- 27. The initial days in Hong Kong seemed ideal. The weather was perfect, and the ship's company enjoyed the easy access to the town, well deserved after our recent disregard of Saturdays and Sundays. The complications of life in harbour, however, tended to slow down the enormous amount of paperwork arising from the preceding oceanographical observations, and there were moments of desperation when one regretted that with three ships outboard it would be difficult to slip and go away to sea for a few days.
- 28. As soon as the ship had arrived in Hong Kong the Base Engineer Officer had come on board to offer assistance with any defects we might have. His offer was eagerly taken up and within 24 hours the oceanographic winch had been removed complete, for the overhaul it badly needed. Of less obvious, but more vital concern were some noisy connecting rod bearings on the main engines. Approval was obtained to go to extended notice on one engine at a time, and with shore assistance these bearings were quickly opened up and found to be well in need of re-netalling, the work being taken in hand immediately. At the same time con ract assistance was obtained for cleaning and painting the engine-room bilges. The work was progressing steadily when, on Wednesday 28th September the Engine Room Artificer supervising their work heard running water and on inspection found a localised spot of corrosion on the outer botton had broken through leaving a hole. A soft wood wedge was immediately driven into the hole and to his alarm made the hole bigger. The flow was reduced to a trickle with packing and the defect reported to Connodore, Hong Kong, who within four hours arranged for the ship to dock on Saturday 1st October. Such is the rate of working in the connercial docks in Hong Kong that it was expected that the ship would be out again in 48 hours.
- 29. On Monday 26th September the ship was visited by Mr. Lu and Captain Koo of the Great Southern Steamship Company, owners of AUGUST MOON. Despite protests that we had done nothing dangerous or difficult in taking off the crew from Pratas Island, they had insisted on presenting the ship with a cup to mark the occasion. The ship's company were assembled while Mr. Lu presented the cup, and in thanking him I pointed out that the most important thing of all was that all had been saved, and expressed the sympathy of the ship's company with the company in the loss of their ship.

30. On Thursday 29th/....

' On Thursday 29th September, the ship was honoured by a visit from . Mr. J.P.W. MALLELIEU, M.P., Minister of Defence for the Royal Navy. He arrived on board, accompanied by Flag Officer, Seccond-in-Command, Far East Fleet, Vice Admiral C.P. MILLS, C.B., C.B.E., D.S.C., the Naval Secretary, Rear Admiral J.G.B. COOKE, C.B., D.S.C., The Deputy Under Secretary of State (Naval), Mr. S. REDMAN, C.B., J.P. and the Private Secretary to the Minister Mr. J. PETERS. The Minister visited the Chartroon, where he inspected results of previous surveys and asked many questions about the resultant value both to the fleet and to overseas devolopment, the conversation including a brief review of hydrographic potential in this theatre - a poignant subject in view of H.M.S. DAMPIER's imminent docking. After this hors d'oeuvres the Minister inspected the recent oceanographical results and again asked many questions about the results. Mr. J. HARGHEAVES the ship's Benior Scientist, had laid on a replay of an acoustic run (all of which are recorded on tape) and a detailed conversation ensued about the acoustic properties of the oceans. Unfortunately I had to hurry the Minister over the closing stages of this conversation as we were already far behind schedule. After a brief inspection of the Hydroplastic Corer, the Velocineter, and Temperature Salinity Bridge, followed by a look into a Survey Motor Boat, the Minister visited the Chief Petty Officers Mess, where he took tea, and two of the Junior Ratings messdecks before leaving the ship at 1505, twenty minutes late.

- 31. The same evening Commanding Officers of ships attended a dinner in the Flagship given in honour of the Minister by Vice Admiral Mills. Conversation during and after dinner ranged over a wide number of subjects until midnight and the Minister won the admiration of all by his tenacity in some very virile discussion after what must have been a very gruelling day. All left this excellent dinner with the conviction that their remarks and views had been noted by the Minister.
- 32. The month ended with a brief exercise for the ship's Internal Security Platoon on 30th September and preparations for leaving Victoria Basin and entering the Cosmopolitan Dock, Kowloon on the following day.
- 33. In retrospect the month had been a most rewarding one. The oceanographic work had been very successful and the results at first sight appeared to be valuabl. The credit for the success of Phase 1 of the project goes to the surreying officers and matings who have worked very long hours throughout the weeks, as well as keeping watches and carrying on ship's duties, the ship's artificers who vitually formed an Oceanographic Support Group and in particular to the First Lieutenant, Lieutenant Commander M.T.T. JAMES and the then Senior Scientist, Instructor Lieutenant G.N. DAVIS, B.S.C., whose work and cheerful approach won the respect of all.
- 34. The oceanographic work will be dealt with in greater detail in separate reports. It cannot go unmentioned, however, what a first class part H.M.A.S. DIAMANTONA has played in the combined oceanography in Phase 1, as well as carrying out detailed observations of her own programme. It would be impossible to imagine a better ship to work with. She has played a faultless part in the combined work although often wrestling with defective equipment, and her irrepressible humour has helped along rainy and sunny days alike. Although her own observations are just as important as the combined ones she has always been ready to absorb any change of plan or special requirement.
- 35. During the month Lieutenant Commander R.J. CAMPBELL joined on 25th September and took over as First Lieutenant on 29th September, Lieutenant Commander P.M. MARCELL, joined on 27th September and took over as Supply Officer on 30th September. Lieutenant G.N. DAVIS, Mr. D.R. WOODLAND and Mr. J. ARCHER, all of A.U.W.E. all returned to the United Kingdom on 25th September, having been relieved by Mr. J. HARGREAVES, Mr. T.G. PENN and Mr. J. WOLFENDEN respectively.

Lieutenant SHALLOW/ ......

- 8 -

Lieutenant SHALLOW left the ship on 30th September and Lieutenant Commander JAMES remained after the end of the month after being relieved having offered to help with surveying records until the ship sailed: his honeward flight not being until 8th October.

- 36. The advance party of the new commission joined on the ship's arrival and the outgoing advance party were discharged on 24th September.
- 37. The conduct of the ship's company has been in general very good. Subic Bay was unfortunately conducive to a number of minor leave-breaking offences, and one offence of insubordination ashore in Hong Kong was punished by warrant.
- 38. The health of the ship's company has been very good. All benefitted from the cooler, drier atmosphere of Hong Kong.
- 39. A list of correspondence to and from the Hydrographer is appended in original only.

I have the honour to be

Sir

Your obedient Servant

(P.G.N. CARDNO) Connander, Royal Navy

Enclosure: Appendix.

Copies to: The Commander, Far East Fleet.

The Flag Officer, Second-in-Command, Far East Fleet.

The Chief of Naval Information, Whitehall.
The Officer-in-Charge, Hydrographic School.

H.M.S. DAMPIER at Sea

9th October 1966

No.8/ 566

The Hydrographer of the Navy, Ministry of Defence, Whitchall.

Sir,

I have the honour to report the proceedings of Her Majesty's Ship DAMPIER under my command for the month of September 1966.

- 2. The month opened with M.M.S. DAMPIER and H.M.A.S. DIMMANTINA anchored in 22 fathoms about 130 miles north westward of the Natura Group and about 150 miles south of the Cambodian Coast. Not long after anchoring I exchanged identities with U.S.S. ESTES who enquired, rather surprisingly, where I was from and where bound. Not wanting to prolong the exchange I replied "Anchored for the night", and the conversation came to an abrupt end. The following day's work continued according to plan, and as some time was left over at the end of the day the two ships spont a useful two hours exercising Officer of the Watch manoeuvres.
- J. The earlier day's work had shown that it was preferable to make the overside observations (Velocimeter, corer, camera etc.) at a point a third of the way along the accoustic run and this practice was started on 2nd September. 'Mosobs' as H.M.S. DAMPIER's overside observations had been christened could thus be started 2 hours earlier an invaluable gain for the deeper stations, of which that on Saturday, 3rd September was the first. This day was also the opening day of a \*oncentrated period of rain squalls, and as the velocimeter team started to pay out a mile of electric strain cable hand over hand the first all opening its slape and beat down on the backs of the forlorn party on the forecastle. A little difficulty was experienced on this first deep day which led to a number of improvements on the rig. The results from the instrument however left no doubt about its value, for a continuous velocity profile from 0 to 2,000 metres was obtained, the values at 5 metre intervals recording themselves with a clatter on a converted adding machine at the mere press of a button.
- The station's observations were finished before 1600 and I set course for a pre-arranged rendezvous with R.F.A. BROWN RANGER to refuel. H.H.A.S. DIMMANTINA had preceeded me and I joined her in the rendezvous position or so both ships individually thought - at 0600 on Sunday 4th. In the end, the rendezvous was made an hour late, as R.F.A. BROWN RANGER had been set north by the coastal current whereas H.M.S. DAMPIER and H.M.A.S. DIAMMINA, coming from the east, had been set south by the counter current; neither group having been able to observe stars for over 24 hours. I finally connected up astern of R.F.A. BROWN RANGER at 1000 and disconnected with a feeling of well-being through having full tanks at 1145. Group One had appeared with a swish shortly after the replenishment and a transfer of documents had been arranged for 1315. The squadron steamed in formation over the dinner-hour prior to an exchange of documents between H.M.S. VIRULAM and H.M.S. DAMPIER planned for 1315. I put off the transfer as a squall passed but it was obvious when H.M.S. VERULAM lowered her Genini craft that it would stand up to much worse weather than the force 5 of the squall. The evolution was very smartly executed by H.M.S. VERULAM and it is clear that a bomini craft is a much more valuable boat than the classical sea boat, whose days must be numbered. As soon as the transfer was complete, Group One rapidly vanished westward whilst H.M.S. DAMPIER and H.M.A.S. DIMMNTINA continued towards Monday's area.

5. The standard/ .....

1 3/1/1 Me

good one replied that it must have been the first. 6. During the night of Thursday 8th/Friday 9th I gave Scarborough Reef a very wide berth as neither ship had been able to obtain a fix for 36 hours. At the closest point to the reef the bottom shouled abruptly to 800 fathoms although some 2,000 fathoms was charted. After the peak had passed I was surprised to find that H.M.A.S. DIAMANTIMA had obtained a shoaler sounding although she was on the outside track, and that the shoal was separate from the reef.

had looked like any other on the radar burst on the ship with winds of

60 knots. H.M. ... S. DIAMANTINA on being told that she had just missed a

- On the following day, Friday 9th, whilst H.M. ... S. DLMMATINA was eporting the condition of her quarterdeck rice-field, the sun was seen for an instant and a position line obtained. At the end of the day's work both ships steamed towards the coast of Luzon, obtained a satisfactory land fix before midnight, and turned to steam slowly towards the following day's replenishment position. By daybreak R.F.A. TIDEPOOL had joined up and R.F. BROWN RANGER was steaming towards. To save time I had decided to carry out a three ship R.A.S., from R.F.A. TIDEFOOL. The weather was not very auspicious but ships seemed fairly comfortable with the wind on the starboard bow. R.F. ... DROLD MINGER was allocated the starboard side, H.M.L.S. DIMMNITINA the port side and H.M.S. DAMPIER astern. I had thought that R.F.A. BROWN RANGER would be the stendier ship to have on the weather side, but in the conditions she had quite an exciting time. H.M.A.S. DIJUNTINA connected with her usual aplomb, R.F.A. BROWN RINGER connected with what was on excellent feat of sermanship and I approached from astern, trying to iron out the snaking of the hose. This, unfortunately I failed to do for the hose passed briefly under the stem and when I had finally connected and pumping started a leak appeared in the hose. Ruefully I disconnected again until a new hose section could be inserted and re-\_\_connected just as H.M.A.S. DIAMMINA was breaking away. To everyone's relief R.F.A. BROWN RINGER completed her pump-over shortly afterwards and H.M.S. DAMPIER, taking it gently through her aging pipes, disconnected at 1020.
  - 8. R.F.A. TIDEPOOL graciously joined up with the group for entering Series Boy, and the four 'A' ships made a fine sight racing towards Subic with divisions in column, division guides abeam. A ninety degree turn should have put the four ships in column, but I underestimated R.F.A. FIDIPOOL's turning circle so that a quick shuffle was necessary before ships passed Grande Isle, the entry point for Subic Bay at 1315. Here, R.F.A. TIDIPOOL and R.F.A. BROWN RUNGER had to sadly break away to their rather remote anchorages.
  - Entering Subic Bay was something like arriving in a modern child's fort layout: there was everything: fighters swooped overhead, a helicopter hung over us for a time (making wheel orders quite inaudible) and ships of all descriptions were lying to the closely laid moorings. One felt that any minute someone would offer to exchange a ship that there were two of for a survey ship (a class which was not represented in the hone side).

Turning the corner/ .....

Turning the corner to our allotted berth at 1350, H.M.S. DAMPIER nosed alongside ".H.S. VERULAH, lying alone, just ahead of five ships alongside each other. H.M.A.S. DEMINISTRAL came alongside outboard shortly afterwards. A most impressive 14 piece band was assembled on H.M.S. VERULAH's boatdeak playing military music with such force that again wheel orders were inaudible. It appeared that the musicians' instruments had only just arrived in their "residual baggage" and they were anxious to make up for lost time.

- 10. As soon as the ships were alongside, Captains and Officers of our host ships came on board to welcome us, and offer as much hospitality as could be packed into our short stay. It had been hoped that prior arrangements would have been made, as requested, for officers of the base and their wives to come on board in the evening to a combined party, but to our dismay nothing had been done. As all preparations had been made, the Captains and Officers of our host ships rallied round and invited a large number of guests, and an enjoyable but somewhat impromptu reception was held, graced by a vigorous section of the Band.
- 11. On the following day it was possible to start discussing operational matters with the base staff (who work an 18 hour day, seven days a week apparently), punctuated by attendance of Commanding Officers and Officers of all four ships at Horning Service.
- 13. During the first two days in Subic, the low pressure system which we had feared was forming north west of Luzon became recognised by the netcorological authorities and rated as a tropical storm. As its position was over the areas we had intended to work in, a quick change of plan was ande before sailing to give it time to get out of the way. Final arrangements having been made and final farewells and thanks said, the process of winkling H.H.A.S. DIMMANTINA, H.H.S. DAMPIER and H.H.S. VERULAL out from inside H.H.S. DLLIGHT AND H.M.A.S. PARRAMATTA began. The two ships that were staying held off their sterns with tugs whilst we all slipped out one by one. The basic plan was that H.M.A.S. DIMMANTINA, H.M.S. ANDREW and H.M.S. D.MPIER should take up waiting positions until H.M.S. VERULAM was ready to go ahead, when we could all proceed in column, modified for foul weather if necessary to permit us to leave in separate divisions. H.M.S. ANDREW arrived in good time, H.M.A.S. DIAMANTINA took up her position and H.M.S. DAMPIER had just taken the station ahead when the heavens opened up. H.M.S. VERULIM, who had just slipped and who would have had difficulty turning into the wind in any case let go an anchor to swing on, and as the visibility had reduced to 12 cables, I decided to go ahead with H.M.I.S. DIAMANTHW., leaving H.M.S. ANDREW, patient, and somewhat forlorn, to wait for H.M.S. VERULAM. Nothing was seen of the harbour on the way out except a quick glimpse of H.M.S. VICTORIOUS and the only other object in sight was H.M.A.S. DIAMANTINA, a shadowy shape and as always in excellent station astern. The weather cleared as Grande Isle was passed, and in the gathering gloom, H.M.S. VERULIM, H.M.S. INDREW and R.F.A. BROWN RANGER could be seen about a nile astern.

14. The sudden/.....

14. The sudden very heavy squall put the seal on our visit to Subic Bay. The Americans had done all that they possibly could for us, and in H.M.S. DAMPIER's case, no praise was high enough for the hospitality of our host ship U.S.S. REMSHAW. All the U.S. clubs were open to the ship's company and everywhere one found the U.S. Navy personnel cheerful, friendly and hospitable. Nevertheless, two days in Subic would probably be enough for a change for the ship's company. The constant succession of squalls during our visit had not improved matters, and this last made us glad to be out with some sea room.

- days work over a known accoustic range. MR. F.E. HALE of San Diego had been embarked for the leg to Hong Kong and he, of course, showed great interest in our results over this range. The two days went well, little disturbed by the weather, which continued much as before. On the first day two accoustic runs were made for a comparison of methods and the whole of the second day was devoted to coring and camera stations. Trials of a newly obtained U.S. Camera were, unfortunately, unsuccessful, and it was clear that some modification was required before it would work.
- 16. At 0230 on 16th September, as H.M.S. DAMPHER and H.M.A.S. DIMMATINA wore heading north to the next area, and just beginning to feel the swell from the tropical storm, now promoted to Typhoon ELSIE, I received via Singapore, a general distress signal concerning Ore Carrier AUGUST MOON (10,000 tons), aground on Fratas Reef. After some thought I ordered H.M.S. VERULAM, H.M. .S. DIAMINTINA and H.M.S. DAMPIER to proceed at best speed to Pratas Reef. All three ships were about 250 miles away but I hoped that H.M.S. VERULAM at least and possibly H.M.A.S. DIMLINTING would get there before sunset. H.M.S. DAMPIER with her lower speed would have got there about 2000 in good conditions. Meanwhile, I heard that H.M.S. LOCH FADA had been diverted to Pratas Reef, and after assessment of the relative importance of H.M.S. VERUL'M's work ordered her to return to her trials. As luck would have it, H.M.S. DAMPIER was in the act of changing over boilers, and both boilers were connected by 0412, when I increased to 15 kmots - the speed I thought I could best keep up for a long period. H.M.A.S. DIAMANTINA, with 14 knots on one boiler was not far astern, and by 0800 she was coming up close to port with a knot advantage, making as she came past "How do you get these things out of second gear?" By nor the swell from Typhoon ELSIE had become quite steep, and both ships were clambering up to the crests and plunging down into the troughs, proving once again their excellent hull design. So we continued for an hour, in bright sunshine, with a feeli of excitement in the air, and it must be admitted a feeling of escape from the daily oceanography. It soon became clear however that U.S.S. ORISKANEY was going to get to the scens long before we were, and it was her helicopters which would be vital in the rescue. By 1000 H.M.A.S. DIAMINTINA passed news of her first sorties and I turned both ships back to our area for the day and reduced speed. Shortly afterwards, came the good news that all the crew had been rescued. The station was started at 1315, still in a 15 foot swell, and by 1950 a slightly reduced series of observations was complete.
- 17. The fornation and passage of Typhoon EISIE had cleared the air and nade a complete change in the weather. The next three days continued, back in the even tenor of our observations in bright, sunny and calm weather. Apart from the occasional over-heating of some of the equipment and a general difficulty in keeping the wires up and down in the confused surface currents caused by Typhoon ELSIE the days produced good results and a satisfying feeling of steady production.

18. On Sunday 18th/ .....

On Sunday 18th, however our pulses quickened a little when I was asked by Commodore, Hong Kong if any of our group of ships could be spared to pick up 37 survivors of AUGUST MOON who had been kept temporarily on Pratas Island by the local authorities. I immediately volunteered the services of H.M.S. DAMPIER and if necessary, H.M.A.S. DIAMANTINA, and hoped that we could be of some service. 19. The planning of the period before Hong Kong had left ne with a feeling of dissatisfaction because which ever way it was planned I could not avoid wasting time. I had been instructed that both ships had to refuel from R.F.A. BROWN RANGER before entering Hong Kong and with the passages involved and the desirability of entering on a favourable tide it appeared that the replenishment was likely to waste a whole day's work. A call at Pratas Island seemed to be the piece which completed the jig-saw puzzle, however, for it would not mean the loss of any more observational time, but would put something useful into the blank period. It was therefore with relief that I received orders from Commodore, Hong Kong to proceed to Pratas Island by early a. a. on 20th September - a time and date which fitted in perfectly. I arrived off the Island at 0630 and anchored 3 miles to the south west, obtaining a reasonable lee from the force 4 to 5 north easter. Shortly Tter 0700 two survey notor boats and the notor cutter, each towing a winghy proceeded towards the island in column, making a fine sight in the norming sun. Lieutenant J.F. SHORTHOUSE was in charge of the leading boat and the operation. The passage through the nigger heads was found without much difficulty and all three boats nosed into the beach soon after 0800. The survivors had reached the beach before them and quickly entarked. Lieutenant SHORTHOUSE had a brief conversation with the Garrison Commander and as other members of the garrison started to let off fire crackers the boats returned to the ship. As soon as the boats were hoisted, I weighed and proceeded to the vicinity of the wreck to fix its position, apologising to Captain Cameron the Master of AUGUST MOON for having to take him back to the scene of the disaster. The wreck was 12 miles away, near the north east tip of the reef and as I was short of time to neet my replenishment rendezvous I had to confine the ship's activities to fixing the wreck and putting in some small detail on the island and reluctantly abandon any hope of fixing the positions of the other wrecks marked P.A. on the chart. 21. R.F.A. BROWN RANGER and H.M.A.S. DIAMINTINA were sighted at 1450 and I was connected astern of R.F.A. BROWN RANGER at 1600. H.M.A.S. DIAMINTINA ad completed her replenishment and I was sorry that I had settled on replenishing astern - an inefficient method at the best of times. I disconnected at 1750 and as R.F.A. BROWN RANGER set course towards Hong Kong, the two ships stopped for the last event of the day a calibration of the accoustic charges and equipment. Thanks to excellent manoeuvring by H.M.A.S. DIAMANTINA the calibration was complete by 1940, the last nasthead angle being taken between her nasthead obstruction light and an almost indistinguishable waterline. 22. A slow night passage to the last area and a successful day in 700 fathons completed phase 1 of the observations and at 1615 I turned towards Hong Kong, being joined by H.M.A.S. DIAMANTINA from the other end of the line during the First Watch. A stop was nade off Wang Lang Light for a wash-and-brush-up, and having been ordered to enter at twenty minute spacing, I proceeded at C900, leaving H.M.A.S. DIAM/NTINA still at it. 23. As soon as the ship was through Lei-u-Mun Pass, I hauled over to starboard and lowered a survey notor boat which I expected to need during the stay in Hong Kong and leaving her to follow proceeded through, for Hong Kong, exceptionally light harbour traffic, berthing on South Wall, Victoria Basin at 1105. H.M.A.S. DIAMANTINA entered the basin twenty nimutes later and berthed outboard of H.M.S. DAMPIER. 24. The crew of/ ..... AUSTRALIAN WAR MEMORIAL RCDIG1074030 25. I called on the Connodore-in-Charge, Hong Kong, Connodore F.D. HOLFORD, D.S.C., at 1430 that afternoon and he returned my call at 1000 on the following day. At 1150 the Connanding Officers of H.M.A.S. DIAMANTINA, H.M.S. ANDREW, H.M.S. ANDREW, H.M.S. ANDREW, and the Military Connander.

26. On Friday 23rd September, also, the Fleet started to arrive, H.M.S. VICTORIOUS, wearing the Flag of Vice Admiral MILLS, Flag Officer Second-in-Command, Far East Fleet, entering at 1245 and securing to No.1 buoy, closely followed by H.M.A.S. STUAPT, (Commander P. GOLDRICK, R.A.N.), H.M.S. LENDER, (Captain R.L. EVELEIGH, D.S.C., R.N.) and H.M.A.S. PARRAMATTA, (Commander J.A. MATTHEW, M.B.E., Royal Australian Navy).

27. The initial days in Hong Kong seemed ideal. The weather was perfect, and the ship's company enjoyed the easy access to the town, well deserved after our recent disregard of Saturdays and Sundays. The complications of life in harbour, however, tended to slow down the enormous amount of paperwork arising from the preceding oceanographical observations, and there were moments of desperation when one regretted that with three ships outboard it would be difficult to slip and go away to sea for a few days.

28. As soon as the ship had arrived in Hong Kong the Base Engineer Officer had come on board to offer assistance with any defects we might have. His offer was eagerly taken up and within 24 hours the oceanographic winch had been removed complete, for the overhaul it badly needed. Of less obvious, but nore vital concern were some noisy connecting rod bearings on the main engines. Approval was obtained to go to extended notice on one engine at a time, and with shore assistance these bearings were quickly opened up and found to be well in need of re-netalling, the work being taken in hand immediately. At the same time con ract assistance was obtained for cleaning and painting the engine-room bilges. The work was progressing steadily when, on Wednesday 28th September the Engine Room Artificer supervising their work heard running water and on inspection found a localised spot of corrosion on the outer botton had broken through leaving a hole. A soft wood wedge was immediately driven into the hole and to his alarn nade the hole bigger. The flow was reduced to a trickle with packing and the defect reported to Connodore, Hong Kong, who within four hours arranged for the ship to dock on Saturday 1st October. Such is the rate of working in the connercial docks in Hong Kong that it was expected that the ship would be out again in 48 hours.

29. On Monday 26th September the ship was visited by Mr. Lu and Captain Koo of the Great Southern Steanship Company, owners of AUGUST MOON. Despite protests that we had done nothing dangerous or difficult in taking off the crew from Pratas Island, they had insisted on presenting the ship with a cup to mark the occasion. The ship's company were assembled while Mr. Lu presented the cup, and in thanking him I pointed out that the most important thing of all was that all had been saved, and expressed the sympathy of the ship's company with the company in the loss of their ship.

30. On Thursday 29th/....

- 7 -

On Thursday 29th September, the ship was honoured by a visit from J.P.W. MALLELIEU, M.P., Minister of Defence for the Royal Navy. He arrived on board, accompanied by Flag Officer, Second-in-Command, Far East Fleet. Vice Admiral C.P. MILIS, C.B., C.B.E., D.S.C., the Naval Secretary, Rear Admiral J.G.B. COOKE, C.B., D.S.C., The Deputy Under Secretary of State (Naval), Mr. S. REDMAN, C.B., J.P. and the Private Secretary to the Minister Mr. J. PETERS. The Minister visited the Chartroon, where he inspected results of previous surveys and asked many questions about the resultant value both to the fleet and to overseas devolopment, the conversation including a brief review of hydrographic potential in this theatre - a poignant subject in view of H.M.S. DAMPIER's imminent docking. After this hors d'oeuvres the Minister inspected the recent oceanographical results and again asked many questions about the results. Mr. J. HARGINEAVES the ship's Zenior Scientist, had laid on a replay of an acoustic run (all of which are recorded on tape) and a detailed conversation ensued about the acoustic properties of the oceans. Unfortunately I had to hurry the Minister over the closing stages of this conversation as we were already far behind schedule. After a brief inspection of the Hydroplastic Corer, the Velocineter, and Temperature Salinity Bridge, followed by a look into a Survey Motor Boat, the Minister visited the Chief Petty Officers Mess, where he took tea, and two of the Junior Ratings messdecks before leaving the ship at 1505, twenty minutes late.

- 31. The same evening Commanding Officers of ships attended a dinner in the Flagship given in honour of the Minister by Vice Admiral Milla. Conversation during and after dinner ranged over a wide number of subjects until midnight and the Minister won the admiration of all by his tenacity in some very virile discussion after what must have been a very gruelling day. All left this excellent dinner with the conviction that their remarks and views had been noted by the Minister.
- 32. The month ended with a brief exercise for the ship's Internal Security Platoon on 30th September and preparations for leaving Victoria Basin and entering the Cosmopolitan Dock, Kowloon on the following day.
- 33. In retrospect the month had been a most rewarding one. The oceanographic work had been very successful and the results at first sight appeared to be valuable. The credit for the success of Phase 1 of the project goes to the surreying officers and matings who have worked very long hours throughout the weeks, as well as keeping watches and carrying on ship's duties, the ship's artificers who vitually formed an Ocean-ographic Support Group and in particular to the First Lieutenant, Lieutenant Commander M. J.W. JAMES and the then Senior Scientist, Instructor Lieutenant G.N. DAVIS, D.S.C., whose work and cheerful approach won the respect of all.
- 34. The oceanographic work will be dealt with in greater detail in separate reports. It cannot go unmentioned, however, what a first class part H.M.A.S. DIAMANTINA has played in the combined oceanography in Phase 1, as well as carrying out detailed observations of her own programme. It would be impossible to imagine a better ship to work with. She has played a faultless part in the combined work although often wrestling with defective equipment, and her irrepressible humour has helped along rainy and sunny days alike. Although her own observations are just as important as the combined ones she has always been ready to absorb any change of plan or special requirement.
- 35. During the month Lieutenant Commander R.J. CAMPBELL joined on 25th September and took over as First Lieutenant on 29th September, Lieutenant Commander P.M. MARCELL, joined on 27th September and took over as Supply Officer on 30th September. Lieutenant G.N. DAVIS, Mr. D.R. WOODLAND and Mr. J. ARCHER, all of A.U.W.E. all returned to the United Kingdom on 25th September, having been relieved by Mr. J. HARGREAVES, Mr. T.G. PENN and Mr. J. WOLFENDEN respectively.

Lieutenant SHALLOW left the ship on 30th September and Lieutenant Commander JAMES remained after the end of the month after being relieved having offered to help with surveying records until the ship sailed: his homeward flight not being until 8th October.

- 36. The advance party of the new connission joined on the ship's arrival and the outgoing advance party were discharged on 24th September.
- 37. The conduct of the ship's company has been in general very good. Subic Bay was unfortunately conducive to a number of minor leave-breaking offences, and one offence of insubordination ashore in Hong Kong was punished by warrant.
- 38. The health of the ship's company has been very good. All benefitted from the cooler, drier atmosphere of Hong Kong.
- 39. A list of correspondence to and from the Hydrographer is appended in original only.

I have the honour to be

Sir

Your obedient Servant

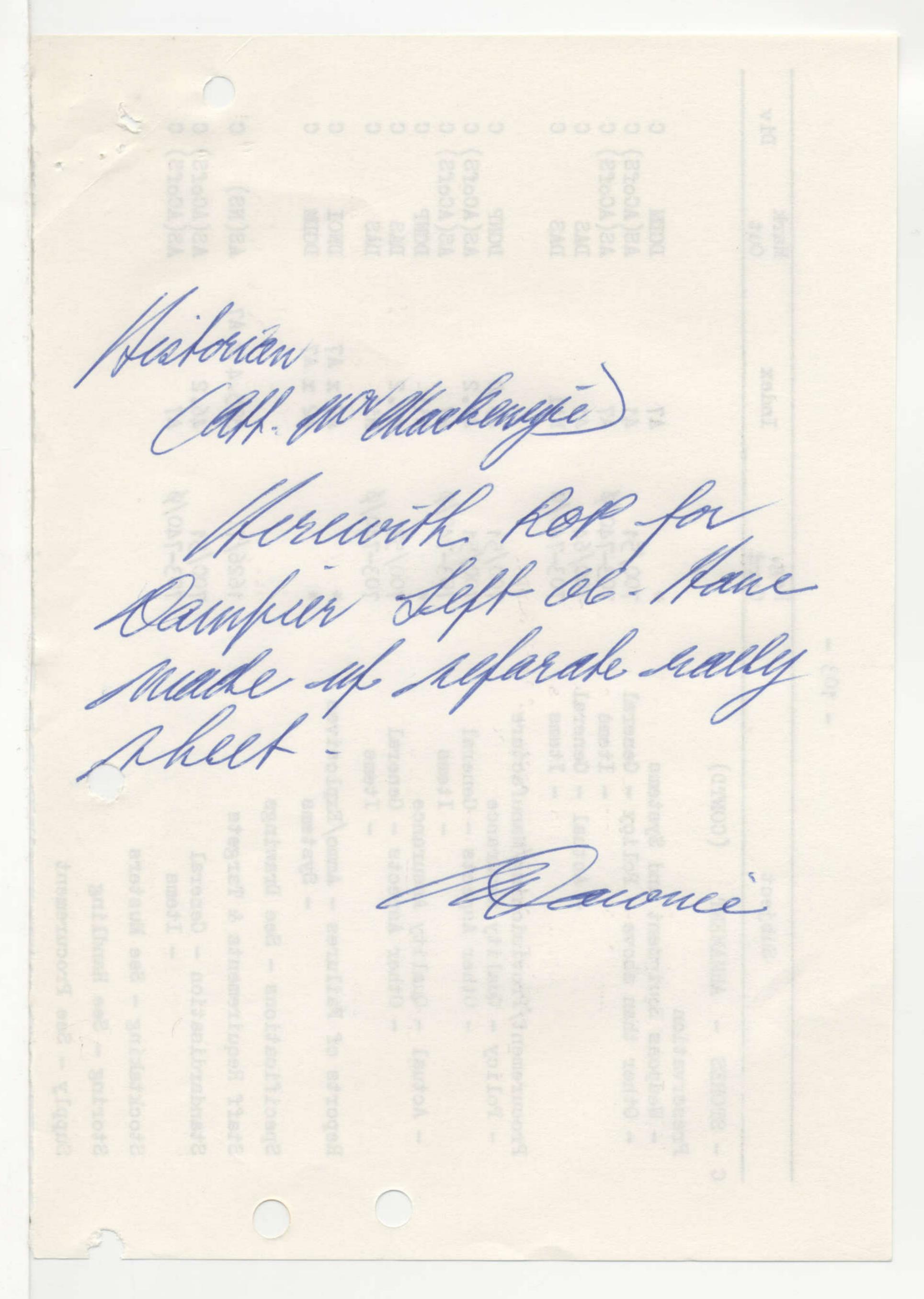
(P.G.N. CARDNO) Connander, Royal Navy

Enclosure: Appendix.

Copies to: The Commander, Far East Fleet.

The Flag Officer, Second-in-Command, Far East Fleet.

The Chief of Naval Information, Whitehall.
The Officer-in-Charge, Hydrographic School.



Reg. Card	Index	Mark	Div
*	A7	DGDM	C
	41		
			C
703-740/\$	Nil	DAS	C
1 11 4			
700/51	49.2	DGNP	C
700/51	49.2		
703-740/0	A7		450
700/57			C
703-740/Ø	Nil	DAS	C
*	A2 x A7	DNOI	C
*	A2 x A7	DGDM	C
1626/7	395.4 x A7	AS(NS)	C
700/51	46.2	AS(ACofS)	C
703-740/8	A7	AS(ACofS)	C
			. 1
	* 700/51 703-740/Ø 700/64 703-740/Ø  700/51 700/51 700/57 703-740/Ø  * * * 1626/7 700/51	* A7 700/51 41 703-740/Ø A7 700/64 41 703-740/Ø Nil  700/51 49.2 700/51 49.2 703-740/Ø A7 * Nil 700/57 49.2 703-740/Ø Nil  * A2 x A7 * A2 x A7 700/51 46.2	* A7 DGDM  700/51 41 AS(ACofS)  703-740/Ø A7 AS(ACofS)  700/64 41 DAS  703-740/Ø Nil DAS  700/51 49.2 DGNP  700/51 49.2 AS(ACofS)  703-740/Ø A7 AS(ACofS)  * Nil DGNP  700/57 49.2 DAS  703-740/Ø Nil DGNP  700/57 49.2 DAS  * A2 x A7 DNOI  * A2 x A7 DGDM  1626/7 395.4 x A7 AS(NS)  700/51 46.2 AS(ACofS)