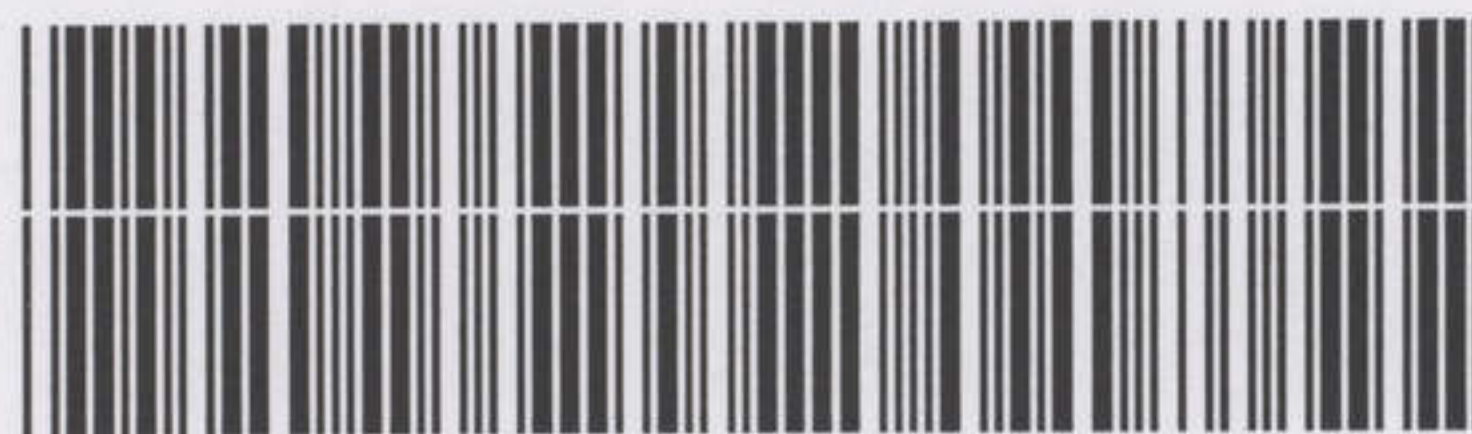


**AWM78**  
**Reports of Proceedings,  
HMA Ships and Establishments**

**HMAS STUART (I)**

**Item number: 326/7**

**Title: September 1963 - May 1967. Duplicate**



AWM78-326/7



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326/7

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DEPARTMENT OF THE NAVY

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STUART

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DEPARTMENT OF THE NAVY

MINUTE PAPER

18-206-1010

Report of May 1967 Proceedings

HMAS

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} Separate Report Circulating

- NOTES: (A) This report should be dealt with and passed on promptly.
- (B) On this file comments should be brief; if any matter requires comprehensive treatment, reference to another Branch, or approval of a Board Member, a new file should be raised, cross-referenced to this one.



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ROYAL AUSTRALIAN NAVY

17/52/215

REF. No. 1/10/04

H.M.A.S. STUART,

at sea.

1st June, 1967.

The Flag Officer Commanding,  
H.M. AUSTRALIAN FLEET.

(Copy to: The Captain (F), FIRST FRIGATE SQUADRON.)

Sir,

I have the honour to report the proceedings of H.M.A. Ship under my command during the month of May, 1967. Times are Zone (-10) until 251830, then Zone (-9) until 271830, then Zone (-8).

2. H.M.A.S. STUART cast off from Garden Island at 0900, Monday 1st May, and proceeded to sea in company with H.M.A.S. QUEENBOROUGH for A.S.W. exercises with H.M.S/M TRUMP. These exercises continued until 2000, Tuesday 2nd May, with STUART detaching for an A.A. Tracking Exercise and a Naval Gunfire Support Exercise. The ship was anchored in Jervis Bay at 2030.

3. On Wednesday, 3rd May, landing parties and divers were exercised during the forenoon and in the afternoon the first games of a comprehensive inter-part competition were played.

4. STUART departed Jervis Bay at 0800 the next day and made passage to rendezvous with the tug BRONZEWING and the Williams Target. N.B.C.D. exercises were carried out en route. As Radar 903 was unserviceable it was decided to carry out the surface shoot in Clock Rate. This was completed satisfactorily with the right gun only as the left still continued to double ram. Then course was set for Sydney and the ship was secured alongside Cruiser Wharf at 1600. A small reception was held onboard that evening for the Officers of U.S.S. EPPERSON.

5. The arrival in Sydney marked the beginning of the first self-maintenance period since the Mid Cycle Docking and there was much to be done. A new E.H.T. Cabinet for the L.W.O.2 radar was fitted, the V.D.S. body was returned after an extensive overhaul, the M.R.S. 3 received considerable attention and there was a great deal of work carried out on the Main and Auxiliary machinery.

6. After casting off from Garden Island at 0830 Tuesday 16th May, the ship ammunitioned at No.2 buoy and then sailed in high hopes that all equipment would function correctly. However within two hours of lowering the V.D.S. body the cable connector / plug allowed the ingress of water and a new cable is required before the Sonar can be used again. This particular plug has been the major cause of V.D.S. unserviceability in STUART and details of the failures were reported in my letter No.7/2/024 dated 22nd May, 1967.

7. The M.F/D.F. equipment was calibrated satisfactorily but the A.A. tracking exercise which followed indicated that further adjustments were necessary to the Radar 903. From 1900 until 0200 a Casex was carried out with H.M.A.S. PERTH and H.M.S/M TABARD.



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II.

8. During the forenoon of Wednesday 17th May, an A.A. Tracking Exercise was carried out and followed by a Medium Range firing. Unfortunately, cloud prevented a satisfactory radar alignment and the firing had to be carried out in visual. The result of an estimated 38% T.T.B.s and 17% early bursts was heartening, but this was offset by the continuing double ramming of the left gun.

9. A surface shoot was programmed for the afternoon, but just as the tow was streamed to its maximum the Williams Target overturned. By the time STUART's divers had righted it there was insufficient light to carry on. There was no apparent reason for the target capsizing as the weather was good and the seas calm, but it was frustrating to the Gunnery team. A six hour Casex with H.M.A.S. PERTH and H.M.S/M TABARD followed, and when it had finished, course was set to rendezvous with H.M.A.S. SYDNEY off Brisbane.

10. Balloon tracking during the next two days and further adjustments to the left gun indicated that the M.R.S.3 was fully operational but it will not be possible to confirm this until an A.A.M.R.F. is carried out in the Singapore exercise area on 2nd June. Daily ramming and the firing of 18 rounds from the left gun indicate that the double ramming is cured and will not recur.

11. At 1815, Friday 19th May, STUART took station ahead of H.M.A.S. SYDNEY carrying members of the 2nd Battalion of the Royal Australian Regiment. The four day passage to Manus Island was made at 19 knots and was uneventful. Helicopters of 725 Squadron onboard SYDNEY supplemented the screen during daylight hours and Officers undergoing a "d" course were transferred to STUART to control them. Replenishment of fuel and transfers of stores and personnel were carried out concurrently on two occasions. Bathythermograph readings were taken each hour and lines of sounding were charted where it was considered they would be of use to the Hydrographer.

12. Both ships anchored in Seeadler Harbour during the forenoon of Tuesday 23rd May, and SYDNEY embarked fuel. The ships departed at 1800 and set course for Vietnam via Basilan and Balibac Straits.

13. N.B.C.D. Exercises with particular emphasis on Damage Control were carried out frequently. STUART again fuelled and transferred stores and personnel concurrently from SYDNEY on two occasions. NAVCOMEX's and plotting exercises were a regular occurrence and STUART provided star shell targets on which SYDNEY carried out a Rapid Open Fire exercise.

14. SYDNEY provided a newspaper "SYDNEWS" each day and so impressed my Ship's Company that a rival paper is now being produced in STUART and it compares very favourably. An Army versus Navy Boxing Tournament was held in SYDNEY on 26th May and STUART provided six novices of whom two won their bouts.

15. The ship came to condition 3 when 18 hours out of Vung Tau and closed up at action stations for entering harbour from 0600 Tuesday 30th May. STUART came to single anchor at 0700. Awkward State 2 was assumed immediately and was maintained until departure at 1430. The operation of embarking and disembarking troops and stores in SYDNEY was completed in record time and was much quicker than had been thought possible.

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III.

16. Course was set for the Singapore area when clear of the channel and the ship reverted to condition 4 at 0730 Wednesday 31st May. The time spent at condition 3 and Awkward State 2 was of great benefit to the Ship's Company and a high standard has been achieved in Damage Control exercises with the spur of the possibility of damage being real.

17. The long period at sea in good weather has enabled the upper deck and all internal compartments to be brought up to a good standard. Apart from a few minor defects the main and auxiliary machinery has functioned well. All weapons and electrical equipment with the exception of those mentioned earlier have had a high rate of serviceability. There has been a malfunction and a series of defects on the Ikara Magazine spray arrangements which gives cause for concern and this has been reported in my letter No.7/3/071 dated 29th May, 1967.

18. The health of the Ship's Company has been good throughout the month, morale is high and conduct satisfactory. The Ship's Company has been spoken to on security.

I have the honour to be,

Sir,

Your obedient servant.



(R.G. Loosli)  
Commander R.A.N.  
CAPTAIN

SECRET



STEAMING APPENDIX.

Distance steamed during month:	6,672.8 miles
Hours underway during month:	400 hours
Total distance steamed:	97,059.8 miles
Total hours underway:	7,063 hours.

ECONOMICAL SPEED EXCEEDED.

<u>DATE.</u>	<u>No. OF HOURS.</u>	<u>AVGE. SPEED.</u>	<u>FUEL PER HOUR.</u>	<u>DIST.</u>	<u>AUTHORITY.</u>
1st.	3	17.6	2.20	52.9	W. P. P.
2nd.	5	15.1	1.65	75.5	"
4th.	6	18.0	2.20	108.1	"
16th.	8	17.8	2.22	142.8	"
17th.	5	18.8	2.40	93.8	"
18th.	2	15.2	1.67	30.4	Rumbling Two
19th.	8	18.4	2.34	147.2	" "
20th.	24	19.7	2.83	473.3	" "
21st.	24	19.6	2.89	470.0	" "
22nd.	24	19.9	2.83	477.1	" "
23rd.	14	17.4	2.16	244.1	" "
24th.	24	21.7	3.01	484.0	" "
25th.	23	20.0	2.95	459.1	" "
26th.	24	19.6	2.90	471.3	" "
27th.	23	18.2	2.30	419.0	" "
28th.	24	16.7	2.06	400.4	" "
29th.	24	18.1	2.76	435.4	" "
30th.	8	17.2	2.02	137.9	" "
31st.	2	16.0	1.76	32.0	" "

EXERCISE APPENDIX.

SEAMANSHIP.

<u>DATE.</u>	<u>EXERCISE.</u>
18th.	Exercised emergency and leaving ship stations.
20th.	RAS Liquids abeam - Jackstay transfer - stores and personnel.
23rd.	" " " " " " " " " "
26th.	" " " " " " " " " "
29th.	" " " " " " " " " " Action stations.
30th.	Exercised Action Stations.
31st.	O.O.W. Manoeuvres. - Exercised seaboat and swimmer of the watch.

ENGINEERING AND N.B.C.D.

2nd.	Exercised Machinery space fires.
4th.	Citadel Vacuum test - minor NBCDX - Exercised machinery breakdowns.
19th.	Exercised machinery breakdowns. - Manoeuvring trials. - exercised steering breakdown -.
23rd.	Exercised machinery space fires.
24th.	Exercised machinery breakdowns. - steering breakdowns. Major NBCDX.
27th.	NBCD Section exercises.

GUNNERY.

1st.	AATX(G)
2nd.	NGSCX - NGSFX.
3rd.	Landing party exercises in patrol and capture and riot drill.
4th.	AATX(G) - SUTP in clock rate.
17th.	AATX(G) - AATRP.
25th.	Starshell drill. - R.O.F.X.
26th.	Small arms firing.
27th.	" " "
30th.	AATX(G).
30th.	HRQ Runs - All seacat aimers on live aircraft.



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EXERCISE APPENDIX CONTINUED.

T. A. S.

<u>DATE.</u>	<u>EXERCISE.</u>
1st.	CASEX A4/5
2nd.	CASEX A17 and A4/5.
3rd.	Exercised divers.
9th.	" "
16th.	CASEX A4/5.
17th.	" " - Exercised divers.
24th.	S.C.R. Cruising watch I.D. Tapes - 45 minutes each watch.
25th.	" " " " " " " "
26th.	" " " " " " " "
27th.	" " " " " " " "
30th.	Operation Awkward.

COMMUNICATIONS.

1st.	2 x NAVCOMEX 202 - NAVCOMEX 201 - EWX57 - EWX45.
2nd.	NAVCOMEX 202 - NAVCOMEX 207 - NGSCX - EWX 45.
3rd.	NAVCOMEX 202 - MKX.
4th.	" 206 "
5th.	" 202
8th.	" 202 - NAVCOMEX 405 - MKX
9th.	" 202 - " 405 - TTX - MKX.
10th.	2 x NAVCOMEX 202 - NAVCOMEX 201 - MKX.
11th.	NAVCOMEX 202 - NAVCOMEX 501 - MKX.
12th.	" " " "
15th.	2 x NAVCOMEX 202 - NAVCOMEX 201 - RRX.
16th.	NAVCOMEX 202 - RRX - MSX - MKX - TTX.
17th.	" " - NAVCOMEX 207 - RRX - MSX - TTX.
18th.	" " - " 501 - " " "
19th.	" " " 201 " "
20th.	" "
22nd.	3 x NAVCOMEX 202 - NAVCOMEX 201 - TTX - RRX.
23rd.	NAVCOMEX 202 - 2 x EWX57 - RRX - TTX.
24th.	2 x NAVCOMEX 202 - NAVCOMEX 206 - 2 x NAVCOMEX 417 - 2 x EWX57 - RRX.
25th.	NAVCOMEX 202 - NAVCOMEX 206 - 2 x NAVCOMEX 417 - RRX.
26th.	2 x NAVCOMEX 202 - NAVCOMEX 405 - NAVCOMEX 302
27th.	NAVCOMEX 302 - NAVCOMEX 405 - TTX - ZRRX - MSX.
28th.	TTX - RRX.
29th.	TTX - MSX - RRX.
31st.	TTX - MSX - RRX - NAVCOMEX 202.

NAVIGATION AND A.I.O.

17th.	IPF/SIF and Radar proof trials.
20-31st.	Live helicopter control - screening.
20th.	V.P.X. - Multi LOP.
21st.	" " "
22nd.	" " "
24th.	Multi LOP.
25th.	" "
26th.	" "
27th.	Relative Velocity Exercise.
28th.	" " "

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SPORTING APPENDIX.

<u>DATE.</u>	<u>SPORT.</u>	<u>VERSUS</u>	<u>RESULT.</u>
		<u>Ship's Interpart Trophy.</u>	
3rd.	Rugby )	1st. Seamen V Engineers.	Seamen won 51 - 0
	" )	round. W/Elect. V Supply/Comm	W/Elect. won 6 - 3
	" )	2nd. Seamen V W/Elect.	Seamen won 21 - 0
	" )	round. Supply/Comm. V Engineers.	Supply/Comm. won 6 - 3
3rd.	Golf	Supply/Comm.	1 - 168 points.
		Seamen	2 - 126 "
		Engineers.	3 - 112 "
		W/Elect.	4 - 65 "
3rd.	XCountry.	W/Elect.	1 - 20 points.
		Supply/Comm.	2 - 19 "
		Seamen	3 - 16 "
		Engineers.	4 - 10 "
5th.	Rugby	VENDETTA (2nd XV)	VENDETTA won 21- 6
		VENDETTA (1st XV)	VENDETTA won 9 - 6
5th.	Golf.	USS EPPERSON	STUART won 3 matches to 1
10th.	Ten Pin Bowling	Seamen	1 - 2,030 points.
	Ship's interpart trophy.	Supply/Comm.	2 - 1,780 "
		W/Elect.	3 - 1,520 "
		Engineering.	4 - 1,410 "
10th.	Rugby	KUTTABUL/RUSHCUTTER	FLEET won 18 - 8 (4 reps. from STUART)
12th.	"	HENZS BLACKPOOL	FLEET won 17 - 3 (2 reps. from STUART)
24th.	Cricket	TARANGAU	STUART won 60 - 51 1st. Inn.
	Basket ball	"	TARANGAU won 35 -17
	Volley ball	"	" " 2 -0
	Water polo	"	" " 16 -0
	Soccer	"	" " 6 -0
26th.	Boxing	ARMY (2nd Battilion)	ARMY won 9 -5 (6 reps from STUART)

Total representation 253.



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1. 10. 04

HMAS STUART,  
at Sea.

4th June, 1966

The Flag Officer Commanding,  
HM AUSTRALIAN FLEET.

(Copy to: The Captain(F),  
First Frigate Squadron.)

REPORT OF PROCEEDINGS - MAY, 1966.

Sir,

I have the honour to report the proceedings of HMA Ship under my command for the month of May, 1966. All times are Zone minus ten.

2. For the 1st of the month STUART lay at South End Cruiser Wharf, Garden Island, and at 0835 on Monday 2nd May was shifted by tugs to No. 4 Buoy to embark practice Ikara missiles, returning to berth on TOBRUK at the Cruiser Wharf at 1505. Ikara firings which had been planned to take place on 4th and 5th May, had by this time been postponed due to faults in the Firing Sequence Equipment.

3. At 0815 Wednesday 4th May the ship proceeded to the D.G. range; ranging was completed at 1047 and the ship secured to No. 4 Buoy at 1113. During the afternoon the compass was adjusted, and STUART slipped and proceeded to sea at 1715. MFDF calibrations were carried out when clear of the Heads, and the ship proceeded towards the Jervis Bay area.

4. During Thursday 5th May a surface throw off shoot was conducted against TEAL, and after an AA shoot and six hours of EW trials in conjunction with a P2E the ship came to anchor in Jervis Bay at 2300

5. On the following morning the landing party was put ashore to exercise at Jervis Bay Airfield (it is believed that the Petty Officer Clearance Diver managed to booby trap them all during the course of the day) and at 0800 STUART weighed, spent the following three and a half hours noise ranging and came back to anchor at 1145. At 1330 the ship got under way once more, anchoring on completion of mortar sea check firings at 1655.

6. At 2200 Friday 6th May the ship weighed and proceeded to Sydney, and after fuelling at Chowder Bay secured port side to TOBRUK at North End Cruiser Wharf at 0845 the following morning.

7. At 1030 on that day Sir Alfred Simms, K.C.B., O.B.E., Director General Ships, Ministry of Defence (Royal Navy), accompanied by Captain J.E. Pope, R.N., Director of Naval Equipment, and Captain J.F. Bell A.D.C., R.A.N., General Manager

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Garden Island Dockyard, came on board and was shown the Ikara system.

8. At 0830 on Monday 9th May with your Chief Staff Officer, Captain P.H. Doyle, R.A.N., embarked, STUART cast off and proceeded to sea. The forenoon was occupied with runs over the measured mile, and after a surface throwoff shoot at IBIS and an AA shoot, both successful, the ship entered Watson's Bay and Captain Doyle was disembarked at 1740. On returning to sea a night encounter exercise was carried out with TEAL and IBIS.

9. During the forenoon of 10th May a pilotless target aircraft was launched, and two Seacat missiles fired. Subsequent analysis showed these to have been extremely successful, with miss distances of 12.2 and 5.6 feet; the PTA was recovered undamaged. A naval gunfire support exercise was then carried out, and the ship anchored in Jervis Bay to disembark the PTA unit at 1650. At 2155 STUART weighed and proceeded to Sydney, securing port side to TOBRUK on North End Cruiser Wharf at 0700 Wednesday 11th May.

10. At 1830 on the same day, with some eighteen observers and members of various trials teams embarked, STUART proceeded to sea for Ikara firings. TEAL and IBIS had departed earlier, TEAL towing the Ikara target, and after meeting them at sea and ascertaining that they were aware of the rendezvous for the following morning the ship proceeded to seaward for the necessary distance to enable the command transmitter to be operated. On rejoining TEAL and IBIS at first light on the 12th it was apparent that the sea state was slightly beyond the limits allowed for Ikara trials. However, it appeared to be moderating, and I was spared any agony of decision by the fact that the tow parted; STUART's Zodiac (TEAL's being unserviceable) was therefore launched and the target prepared for a firing.

11. Shortly before midday, while carrying out pre-firing sequences, suspicious rackets were obtained on northerly bearings. To my extreme irritation the characteristics of these were such that I was obliged to classify them as emanating from a possible intruder, and reported accordingly. I also commenced searching in a northerly direction, and at 1418 a racket from what was judged to be the same source was received, once more on a northerly bearing; as the ship was now some twenty miles to the north of the target, and as the firing was planned to be in a southerly direction and at comparatively short range, the ship turned at 1425, returned at 22 knots, entered the firing pattern on arrival and Missile No. 331 was fired at 1559 at a range of 5,000 yards on sonar information. The vehicle behaved normally, but only very small pieces were sighted in the water; the torpedo was sighted, but it disappeared before it could be recovered.

12. By the time the search for the torpedo and vehicle was complete the sun had set, and in a rising sea and swell I have not yet sufficient faith in outboard motors to be happy about Zodiac work in darkness in the open sea. I accordingly directed TEAL not to recover the target, but for TEAL and IBIS to remain in its vicinity overnight, under conditions of radar silence.

13. There had been no indications of a possible intruder since 1418, and, indeed, no further contact was gained. During the night of 12th/13th May STUART proceeded to the north, and then towards Jervis Bay to obtain an accurate position before rejoining the target. The ship maintained sonar silence, and silence on S and X band radars, and the area was kept under surveillance by maritime aircraft throughout the night.

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14. By the morning of Friday 13th May the weather had deteriorated to such an extent that trial firings were out of the question, and it would have been imprudent to attempt to recover the tow; indeed, I was very glad to have had previous experience of the seaworthiness of the target. During the forenoon, however, the weather moderated to some extent, and at 1300 the zodiac was launched to transfer a party to prepare the target for towing. The engine would not start; it was brought inboard and eventually a defect was discovered which would take a considerable time to rectify, so the zodiac was despatched to the target under oars.

15. Considerable effort was required to clear the two sea anchors before TEAL could pick up the tow, and the zodiac was recovered at 1700, the crew, consisting of two officers and two sailors, having had their exercise for the day.

16. During the night, under the same conditions of silence as previously, TEAL and IBIS regained the original rendezvous (the target had been drifting in a north easterly direction at approximately three knots since 0720 on the 12th, and STUART once more held to the north, rejoining at first light.

17. The weather on Saturday 14th May was ideal for trials purposes - the wind was not above force 2 after 0800, with excellent visibility and a very low swell. The target was prepared, and the zodiac, engine now running, recovered by 0720, and on opening the range it was discovered that the target could be held on sonar 177 beyond 19,000 yards.

18. At 0904, at a range of 19,000 yards, the first missile of a pair was fired and approximately three minutes later, at 18,500 yards, the second. The first operated normally; the torpedo was recovered, but only small parts of the vehicle found. The second failed to achieve separation, and no parts were sighted after splash.

19. The one torpedo was recovered by 1000; by 1025 it was apparent that in the prevailing conditions anything left in the area would have been sighted by one of the three ships and two aircraft present, so STUART opened out for a firing by the ship's team.

20. This took place at 1113 at a range of 18,000 yards on sonar information, and the missile functioned normally. Both torpedo and vehicle were recovered by 1240.

21. TEAL took the target in tow, and was detached with IBIS; STUART then returned to Sydney, securing on TOBRUK at North End Cruiser Wharf at 1715.

22. Both TEAL and IBIS did everything they were called upon to do, and spent some very uncomfortable periods during the operation. The provision of aircraft by HMAS ALBATROSS for continuous cover in daylight hours, and beyond, at the ranges involved, was particularly impressive.

23. STUART sailed at 0950 on Monday 16th May; the day was fully occupied with an AA shoot, a surface shoot, EW sea acceptance trials in conjunction with a P2E, and Ikara radio hazard trials, which completed at 2300. Department of Supply personnel concerned with this last trial were landed at Jervis Bay at 0800 the following morning, and after a naval gunfire support firing the ship proceeded to Sydney; NBCD exercises and closing down drills were carried out en route.

24. STUART secured port side to Outer West Wall Captain Cook Dock at 1650 on Tuesday 17th May, docked down the following

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day, and remained in that condition until Tuesday 24th May. At 0845 Wednesday 25th May the ship was shifted to North End Cruiser Wharf; shifted at 0815 the following morning to No. 4 Buoy for ammunition, and returned to North End Cruiser Wharf at 1540.

25. During this period self maintenance was progressed, and the ship stored, and the granting of a brief period of leave to all members of the ship's company completed. The purpose of docking was to have cracks in the Agouti glands in the propellers inspected and repaired, and defects in Hull Outfit 15 made good.

26. On Friday 27th May Commander D. Verboom, Royal Netherlands Navy, and Lieutenant Commander R.J. Claasen, Royal Netherlands Navy, came on board and were shown the Ikara system.

27. At 1100 Monday 30th May, farewelled by a considerable concourse of people, STUART sailed from Sydney and after carrying out a six hour Casex with TACITURN, proceeded towards Suva.

28. The Ship's Company were reminded of the need for security on several occasions during the month, in particular before and after the Ikara firings.

29. The programme during the first half and the leave period during the second left no opportunity for organised sport during the month, although eight members of the ship's company represented Destroyers and Frigates at rugby against KUTTABUL.

30. The condition of the ship is good and the Ship's Company is glad to be on its way, and particularly glad to be clear of a protracted workup and trials programme. In this respect, however, I must pay tribute to all members of the various Trials Teams. Without exception, they have put a great deal of effort into the ship, and it is much appreciated.

I have the honour to be,

Sir,

Your obedient Servant,



(P. GOLDRICK.)  
COMMANDER R.A.N.  
C A P T A I N.

Enclosures: A. Steaming Appendix.  
B. Exercise Appendix.  
C. Sporting Appendix.

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APPENDIX A TO HMAS STUART LETTER 1. 10. 04 DATED 4th JUNE, 1966.

STEAMING APPENDIX.

- (a) 2484.2 miles.
- (b) 234.32/60 hours.
- (c) 41,469.1 miles.
- (d) 3328 19/60 hours.
- (e) (i) No. of hours economical speed exceeded  
10 52/60.
  - (ii) Average speed not calculated.
  - (iii) Distance run per ton of fuel not calculated.
  - (iv) Reason and authority for excess - to achieve  
trials programme.

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APPENDIX B TO HMAS STUART LETTER 1.10.04 DATED 4th JUNE, 1966.

EXERCISE APPENDIX.

<u>DATE.</u>	<u>EXERCISE.</u>
2nd. 4th.	Anti Infiltration Exercise. VPX DG Ranging. Compass swing. MFDF Calibration.
5th	AATX. AAMRF. SUTOF. NGSCX.
6th.	Sea check Firing. Noise Ranging. Exercised Landing Party. Exercised Divers.
9th.	AATX. AAMRF. SUTOF. NEX including minor NBCDX. Harbour Plottex.
10th.	MAX. NGSCX. NGSF. Seacat firing. ARRX. Exercised Divers.
11th - 14th.	Ikara trials.
16th.	SUTF. AATX. AAMRF. ARRX. VPX. Radar Reporting Exercise. EW trial with LRMP aircraft. Ikara Radio Hazard Trial.
17th.	Major NBCDX including Wearing respirators for extended period. Shelter Stations Pre Wetting. Steering gear breakdown.  NGSCX. NGSF. VPX. Radar reporting Exercise. ARRX.
18th.	Officers lectured by D.N.I's representatives. Ships company lectured by D.N.I's representatives.
30th.	Casex A4/5 with TACITURN. VPX. Radar reporting Exercise. ARRX.
31st.	VPX. Radar Reporting Exercise.

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APPENDIX C TO HMAS STUART LETTER 1. 10. 04 DATED 4th JUNE, 1966.

FLEET SPORTS COMPETITION.

Nil return.

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1/10/004.

HMAS STUART,  
at Williamstown.

- 3 AUG 1965

THE FLAG OFFICER COMMANDING,  
HER MAJESTY'S AUSTRALIAN FLEET.

(Copy to: The Captain(F), First Frigate Squadron).

REPORT OF PROCEEDINGS - JULY, 1965

Sir,

I have the honour to report the Proceedings of HMA Ship under my command for the month of July, 1965. All times are Zone minus ten.

2. On the first day of the month STUART was secured port side to Messageries Wharf, Brisbane. During the forenoon, accompanied by the Naval Officer-in-charge, Queensland, Commander D.J. Robertson, R.A.N., I called upon His Excellency the Administrator, the Honourable Sir Alan Mansfield, K.C.M.G., the Premier, the Honourable G.F.R. Nicklin, M.M., the Right Honourable C. Jones, the Lord Mayor of Brisbane, and Brigadier C.H. Frazer, M.B.E., Chief of Staff to the General Officer Commanding.
3. STUART cast off and proceeded to Cato Island at 1030 on Saturday, 3rd. The three day stay in Brisbane was thoroughly enjoyed by the Ship's Company, for whom it was the first city apart from Williamstown or Sydney which the ship had visited during two years commission.
4. After an uneventful passage STUART came to anchor off the northern side of Cato Island at 0850 on Sunday, 4th, having exchanged identities with HMAS KIMBLA, Lieutenant-Commander P.M. Cumming, R.A.N.
5. A working party was landed to assist in setting up trials equipment. Accompanied by Acting Commander L.A. Stonebridge, R.A.N., Naval Research and Development Officer, and Mr. Murray Evans, the Officer in Scientific Charge of the Trials, I went ashore, heavily doused in DDT, to see how the equipment fitted in among the thousands of resident birds. After my return to the ship, happily free of insects, STUART weighed and proceeded at 1300 and sonar checks were carried out against a transponder suspended beneath the Ikara Sea Target, which was moored in 330 fathoms off the southern side of the island. Water conditions were good, and ranges to 13000 yards were obtained when pinging along the line of the reef. The ship returned to the anchorage at 1700.
6. At 1030 on Monday, 5th July, STUART sailed for the seventh firing of the series, and the first with the missile carrying a recoverable Mk. 44 torpedo with an exercise head. The Dakota joined at 1125, pre-firing sequences went smoothly, and at 1335 Missile M311 was fired at a range of 22000 yards. Unfortunately the torpedo failed to detach from the vehicle, and despite a search around the splash point no parts were recovered. The ship anchored at 1545.

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7. STUART remained at anchor throughout Tuesday 6th while records were assessed, and at 0800 Wednesday 7th the ship weighed and proceeded to carry out the first firing using Sonar 177 information. After comparisons of Radar 903 and Sonar 177 ranges the normal pre-firing sequences were carried out, and at 1317 Missile M310 was fired at a range of 3000 yards. The torpedo splashed 165 yards short and 175 yards right, but ran for only 5 seconds. Both the torpedo and the vehicle were recovered, and the ship returned to the northern side of Cato Island to anchor at 1545.

8. The following day was occupied with assessment, and at 0805 on Friday 9th STUART sailed for the ninth firing of the series, which took place at 1245, at a range of 22,000 yards on Radar 903 information. The torpedo was delivered satisfactorily, near the target, and ran normally; the vehicle, however, lost stability after release, and after a thorough search of the splash position two wings only were recovered.

9. STUART anchored at 1445, and at 1610 KIMBLA passed a wire from her stern winch to a slip on STUART's quarterdeck, opened out, anchored, and winched herself back to an acceptable distance. A hose was then passed across and 32 tons of furnace fuel oil were supplied to her. KIMBLA was slipped at 1925.

10. After landing a party of twenty sailors to assist in clearing the island, STUART weighed at 0655 on Saturday 10th July and proceeded for the final firing. After sonar ranging trials Missile M314 was fired on Sonar 177 information at a range of 13,190 yards, and the torpedo splashed 400 yards short and 175 yards right. It appeared to run normally, and was recovered. STUART then returned to the northern side of the island, and after embarking the parties from the island, at 1805 sailed for Sydney.

11. STUART secured port side to HMAS DUCHESS on North East Cruiser Wharf Garden Island at 1630 Monday 12th July, and a very rapid exodus of civilian trials personnel occurred, particularly of those who had been in both the Fairfax and Cato Island parties.

12. At 0900 on Tuesday 13th July I called on you, Sir.

13. At 1437 STUART was held off by tugs while DUCHESS was shifted, and was then berthed on Moresby at North East Cruiser Wharf.

14. STUART cast off at 0830 Friday 16th July and proceeded to No. 4 Buoy, where 20 rounds of 4.5" ammunition were embarked. The buoy was slipped at 0950, and the ship sailed to rendezvous with H.M. Submarine Trump, Lieutenant Commander J.B.L. Watson R.N., for Variable Depth Sonar Acceptance Trials. These commenced at 1115 and were proceeding very satisfactorily when at 1305 the towed body became flooded, and the trials had to be abandoned. This matter has been reported separately. The opportunity was taken to carry out a Casex A4 during the afternoon and after detaching Trump at 1620 STUART proceeded to Jervis Bay, anchoring in Montagu Roads at 2250.

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15. Trial N23/2 was commenced at 1300 Saturday 17th July. The aim of this trial was to prove the external data link, which was fitted in a Wessex helicopter, and it continued, with the Wessex, for the remainder of Saturday and on Sunday 18th, with the ship at anchor.
16. STUART weighed at 0625 on Monday 19th and, having been joined at sea by the Wessex and KIMBLA, who acted as a sonar target, continued with the trial. The results were unsatisfactory, due to incorrect setting up of some of the Wessex equipment, so the day's work was abandoned early and the ship anchored in Jervis Bay at 1435.
17. Having weighed and proceeded at 0630 on Tuesday 20th, the trial recommenced at sea. On this occasion very satisfactory results were obtained, and the trial was completed at 0930. The quarterly full power trial was then carried out, but proved unsatisfactory, due to erratic feed regulation to both boilers caused by unsteady operation of the main feed pump, and was broken off at 1150. This matter has been reported separately.
18. At 1230 the firing of 20 rounds of 4.5 inch on various after bearings was commenced, the object being to determine if there was any effect on the performance of the Ikara Tracking Mount in its new position on the bridge roof. The trial went very smoothly; no noticeable effect was recorded on any of the Ikara equipment, and the firings were completed at 1435. The ship returned to Sydney, and secured to No. 2 Buoy at 1630. This marked the end, insofar as can be foreseen, of STUART's role as Ikara Trials Ship.
19. After de-ammunitioning the ship was shifted by tugs, securing on MORESBY at North East Cruiser Wharf at 1110 on Tuesday 20th July.
20. The third Family Day since commissioning took place on Friday 23rd. STUART sailed, in perfect weather, at 1030, with 116 relatives of the Ship's Company on board; after a short burst of speed at sea lunch was taken at anchor in Watsons Bay, and after a brief cruise in the harbour the ship secured on MORESBY at 1435. It appeared to be a most successful occasion.
21. Pre-refit trials were progressed during the week commencing 26th July, and various items of equipment, such as the mortar, lookout sights, and rocket launchers which had not previously been fitted, were loaded on board.
22. At 1000 on Friday 30th July I attended a Captains' Meeting, convened by you, Sir.
23. During the forenoon of Saturday 31st some sixty members of the Institute of Defence Science, who were attending a symposium in HMAS WATSON, were shown over the ship. Those of them who had been actively concerned with the concept and design of the Ikara system showed commendable forbearance to their guides.
24. STUART sailed for Williamstown for refit at 1300 on Saturday 31st. On clearing the Heads the Annual Full Power Trial was attempted, and proved unsuccessful, due to the same causes as had frustrated the Quarterly Trial, despite the fact that the main feed pump governor had been examined and worn components replaced. This is being reported separately.

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25. Little sport has been played during the month, except that the ship provided six representatives in the Destroyers and Frigates Rugby Team for two matches.

26. Morale has been high, with a long leave period in the offing; the health of the Ship's Company has been very good, and the condition of the ship is good, although it is apparent that a refit is required in some areas.

I have the honour to be,

Sir,

Your obedient servant,

(Sgd.) P. GOLDRICK,

(P. Goldrick)  
COMMANDER, R.A.N.  
C A P T A I N

Enclosure: Photograph of HMAS KIMBLA fuelling.

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APPENDIX 'A' TO HMAS STUART'S REPORT OF PROCEEDINGS FOR  
JULY, 1965

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- (a) 1868.4 miles
- (b) 147 32/60 hours.
- (c) 28416.5 miles
- (d) 2422 37/60 hours.
- (e)
  - (i) No. of hours economical speed exceeded - 34 hours.
  - (ii) Average speed - various
  - (iii) Distance run per ton of fuel - Not calculable
  - (iv) Reason and authority for excess -
    - (a) Ikara Trials.
    - (b) Full Power Trial.
    - (c) Families Day - F.O.C.A.F's 210138Z/ July.

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HMAS STUART,  
at Brisbane.

F-9 JUL 1965

THE FLAG OFFICER COMMANDING,  
HER MAJESTY'S AUSTRALIAN FLEET.

REPORT OF PROCEEDINGS - JUNE, 1965.

Sir,

I have the honour to report the Proceedings of H.M.A. Ship under my command for the month of June, 1965. All times are Zone minus ten.

2. On the first day of the month STUART was on passage from Jervis Bay to Williamstown. During the day vibration measurements at various speeds were taken by representatives of the Aeronautical Research Laboratories, and at 1200 on Wednesday 2nd June, the ship secured starboard side to Outer East Nelson Pier, Williamstown.
3. On securing, representatives of the Aeronautical Research Laboratories, Electrical and Musical Industries Ltd., and the Weapons Project Division came on board, and after M 304, a specially equipped Ikara test missile, was embarked, Harbour System Compatability Checks were commenced.
4. This trial continued throughout Thursday 3rd June, under the direction of Commander A.J. McCLELLAND, R.A.N., Officer in Charge, Electrical and Engineering Trials Unit.
5. At 0830 on Friday 4th., STUART cast off and proceeded into Port Phillip Bay for Sea System Compatability Trials. Several high speed turns were carried out to test the system under realistic conditions and on successful completion of the trial the ship returned to Nelson Pier, securing at 1400. Test missile M 304 was landed and returned to the Naval Armament Establishment, Maribyrnong, to be adapted for Electrical Explosive Hazard Trial N8/4.
6. I called on the Captain, HMAS DERWENT, Commander J.D. STEVENS, R.A.N., at 1140 on Monday 7th June, and afterwards lunched with him in HMAS QUEENBOROUGH.
7. An 'At Home' was held on board at 1830 on Monday 7th, for senior representatives, together with their wives, of the Department of Supply and the Aeronautical Research Laboratories who have been closely associated with the Ikara project. The list of guests is attached as Appendix B.
8. Test missile M 304 was re-embarked early on Tuesday 8th June, and at 0850 Electrical Explosive Hazard Trial N8/4 commenced; this was successfully completed at 1850, and the missile landed.



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9. At 1050 on Thursday 10th. the embarkation of seven missiles for the forthcoming N22 firings was commenced. At 1100 Captain G.L. FOWLE, D.S.C., R.A.N., Director of Weapons Engineering came on Board, and later, having been joined by Commander J.D. STEVENS, R.A.N., the Captain, HMAS DERWENT, lunched with me. At 1400 Commander B.L. CLEARY, R.A.N., came on board and discussed security arrangements for Trial N22, and at 1750, Mr. E. TREHARNE, Superintendent Weapons Project Division, Weapons Research Establishment, accompanied by Mr. J. ADAMS, Principal Officer, Systems Electronics, called.

10. During Friday 11th June, three more Ikara missiles, making a total of ten, and two test missiles were embarked; the main aim of Trial N22 being to obtain further information for evaluation against the agreed characteristics from the firing of ten pre production missiles, six fitted with dummy stores and four with exercise Mk 44 torpedoes, at various target ranges and bearings.

11. STUART sailed from Williamstown at 0730 on Saturday 12th June, and after an uneventful fast passage secured on ANZAC at Fitting Out Wharf, Garden Island Dockyard, at 1315 Sunday 13th June. After fuelling and embarking trials personnel to make a total of twenty seven, the ship sailed for the trials area at 1500.

12. Various briefings for the trials personnel were conducted during Monday 14th, and at 1400 a rehearsal of the Dummy Firing Sequence and Misfire Drill was carried out.

13. At 1140 on Tuesday 15th June identities were exchanged with HMAS KIMBLA, Lieutenant Commander P. CUMMING, R.A.N., and at 1200 STUART anchored to the west of Fairfax Island. In the anchorage were M.R.L. 253, Commander O.M. MAY, R.A.N.R., and the hired launch MATILDA, Lieutenant W.S.G. BATEMAN R.A.N. At 1240 Lieutenant Commander CUMMING came on board, and lunched with me. I learnt that bad weather had hampered the setting up of the target area, and that the first firing would therefore be delayed for twenty four hours; also that the astern gearing of the launch MATILDA had failed, and that she had suffered hull and superstructure damage. Ship's staff made an examination of the launch during the afternoon. Apart from the fact that she was damaged (reported in my 04302 of 16 June) it was apparent that MATILDA was too lightly constructed to be adequate in her envisaged role of area search and S.A.R. in the open waters around Fairfax Island at this time of year, and I determined to return her to the mainland at the first convenient opportunity. This decision I was very glad of later in the trials period when severe weather was encountered, although the lack of an S.A.R. craft was inconvenient in that flying had to be restricted to days when STUART was either under way or at immediate notice, in order to conserve oil fuel. Very few fishing craft had to be warned off the area, a fact probably to be attributed mainly to the bad weather which persisted for most of the latter half of the period.

14. At 0930 on Wednesday 16th June, accompanied by members of the trials team, I went ashore to Fairfax Island. The target area party and the diving team had, considering the conditions, made themselves surprisingly comfortable, although rain and strong winds had a very depressing effect. During the afternoon the trials Dakota, now based at Bundaberg, joined for fin and guidance checks.

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15. M.R.L. 253 sailed for Gladstone at 1150 on 16th June.

16. The launch MATILDA sailed for Bundaberg at 0700 Friday 18th June - as the weather was fair and as STUART was under way and both the Dakota and Iroquois airborne for most of the period of her passage, I considered it safe to dispatch her without escort. STUART weighed and proceeded at 0740, and while the aircraft carried out area searched the prefiring sequences were commenced; these continued with only minor delays and at 1059 Missile M 320 was fired at a range of ten thousand yards at the R.A.N.E.L. target, which was moored in the passage between Fairfax and Lady Musgrave Island. The firing was successful; the store splashed twenty yards short and fifty yards left, and both store and vehicle were recovered. STUART returned to the western side of Fairfax Island and anchored at 1135.

17. Saturday 19th June was spent at anchor, while trials personnel assessed telemetry visicorder and camera records made during the first firing, and cameras ashore were resited. Thirty of the ships company were landed, and a great deal of fishing took place.

18. STUART sailed at 0730 Sunday 20th June, for the second firing, and after the usual area searches and prefiring sequences at 1145 Missile M 317 was fired at a range of twenty thousand yards, ships speed 28 knots. Both store and vehicle were recovered, the store error being 213 yards left and 100 yards short. After the store had been brought inboard from the divers Zodiac Sonar Target Proving Trials were carried out on the R.A.N.E.L. target. Both the Bubble and the Triplane targets proved unsatisfactory, but the Transponder was held to 8,000 yards while streamed in only 23 fathoms. STUART anchored at 1650.

19. The weather was calm on Monday 21st, and at 0825 KIMBLA passed a line from her stern winch to STUART's after bollards, opened out to drop an anchor, and then winched herself in until the sterns were about 80 feet apart. Hoses were then passed across from STUART, and KIMBLA supplied 40 tons of furnace fuel oil. No difficulties were encountered, and KIMBLA was slipped at 1650.

20. STUART sailed at 0745 on Tuesday 22nd June for the third firing. The prefiring sequences went very smoothly, and M 318 was fired at a range of 2000 yards; the store splashed 10 yards over and 100 yards right, but the vehicle was not recovered.

21. After recovering the store I allowed the ship to drift in what I piously, but in the event mistakenly, hoped was a good fishing area, while measuring equipment ashore was adapted for a Compass Comparison Trial. The aim of this trial was compare the performance of the Admiralty Gyro Compass Pattern 5005 and the Admiralty Gyro Magnetic Compass Mk. 6, and involved the ship steaming a pre-arranged pattern. After three hours of these trials STUART anchored at 1835.

22. Further Compass Comparison Trials were carried out on Wednesday 23rd, STUART sailing at 0715 and anchoring at 1535. Shortly after the ship anchored Dr. W.A.S. BUTEMENT, C.B.E., Chief Scientist, Department of Supply, and Mr. H.A. WILLS, Controller, Research and Development, Department of Supply, came on board by Zodiac - they had been landed on Fairfax Island by helicopter during the forenoon.

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23. The firing scheduled for Thursday 24th was cancelled because of a fault in the Command Guidance Transmitter, and the ship remained at anchor. During the afternoon Mr. BUTEMENT and Mr. WILLS were taken on a most successful fishing expedition in the whaler by the ships experts. At 1450 Commander J.L. CARIKER Jnr. U.S.N. and Lieutenant Commander R.F. McBAIN, U.S.N., staff of COMOPTEVFOR, came on board by helicopter, accompanied by Lieutenant Commander J. ANDREWARTHA R.A.N. Their visit lasted until 29th June, and its object was to familiarise them with the Ikara System from the point of view of the Ikara Operval.

24. At 0715 on Friday 25th STUART sailed, in bad weather, and at 1106 M 319 was fired at a range of 23,000 yards - the reply pulse from the missile failed and the missile was "cut-down" after 155 seconds flight, the first such incident in 27 firings from the ship. In fact the missile received no guidance after launch and landed in the sea to the east of Lady Musgrave Island; a search revealed no trace of debris. STUART anchored at 1400, and Mr. BUTEMENT and Mr. WILLS were returned to Bundaberg by helicopter.

25. As the last two firings of the serice were to be against the spit target, it had been planned that KIMBLA before detaching to Bundaberg for stores and fuel would tow the R.A.N.E.L. target to the western side of Fairfax Island after the firing of 25th, so that it could be got into the lagoon and made fully serviceable for the tow to Venue Delta. However, strong winds prevented this on the 25th, and persisted until STUART departed the area on the 29th, so that the target could not be properly inspected until KIMBLA's return on that date.

26. STUART sailed at 0815 for the fifth firing; after many frustrating delays due to heavy rain and low visibility the firing sequence proceeded until the "+ 10 seconds" call, when it was aborted because of failure in the Firing Sequence Equipment. The ship anchored at 1555.

27. On Monday 28th STUART sailed at 0930, having delayed because strong seas had carried away some of the camera timing cables between the two islands of the Fairfax Group, and at 1317 M 315 was fired at a range of 10,000 yards, and impacted about 150 yards from the spit target. STUART anchored at 1400 and Commander CARIKER and Lieutenant Commander McBAIN departed for Bundaberg by helicopter. During the first watch a signal was received from KIMBLA, who was returning from Bundaberg, stating that her radar was unserviceable; she was accordingly "vectored in", and anchored in company at 0145 on the 29th.

28. STUART weighed and proceeded at 0730 Tuesday 29th June for the final firing, which was to be witnessed by A/Captain K.W. SHANDS R.A.N., Director of Tactics and Weapon Policy, who arrived by helicopter at 0740. After a series of small delays, mainly due to visibility at the firing range of 19,000 yards, M 316 was fired at 1132, and the store landed 110 yards short and 225 yards left of the spit target. The ship anchored at 1235 - Captain SHANDS, having lunched with me, departed by helicopter at 1330; the diving party, two trials personnel and eight of the ships company who had spent the day ashore assisting in unrigging the target area were embarked, and STUART sailed for Brisbane at 1531.

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29. After an uneventful passage STUART secured port side to Messageries Wharf, Brisbane at 1035 Wednesday 30th June. There was considerable press interest in STUART's arrival, and I was constrained to speak to representatives of the Press, as well as Radia and Television. No mention was made of Ikara, but questions on the "bombing" of Fairfax Island had to be parried. The Naval Officer-in-Charge, Queensland, called immediately after arrival, and his Intelligence Officer assisted in handling the large numbers of press representatives.

30. Apart from a Rugby match against an Army team during the afternoon after arrival in Brisbane, sport throughout the month has been limited to Physical and Circuit Training on board. The S.R.E. Quiz and Tombola have been popular pastimes as the usual excellent fishing was very limited by the high winds which were present for most of the time the ship was at Venue Bravo.

31. The health of the ships company has been excellent. Morale is high, and the condition of the ship is good.

I have the honour to be,

Sir,

Your obedient servant,

(Sgd.) P. GOLDRICK.

(P. GOLDRICK.)  
COMMANDER R.A.N.  
C A P T A I N.

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APPENDIX 'A' TO HMAS STUART'S REPORT OF PROCEEDINGS FOR  
JUNE, 1965.

- (a) 2,580.9 miles
- (b) 203 32/60 hours
- (c) 26,548.1 miles
- (d) 2,275 5/60 hours
- (e)
  - (i) No. of hours economical speed exceeded - 94
  - (ii) Average Speed - Various
  - (iii) Distance run per ton of fuel - not calculable
  - (iv) Reasons and authority for excess
    - (a) Ikara Trials.

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APPENDIX 'B' TO HMAS STUART'S REPORT OF PROCEEDINGS FOR  
JUNE, 1965

Dr. W.A.S. Butement - Chief Scientist Department of Supply, and Mrs. Butement.  
Mr. A Cooley - Controller General, Munitions and Supply, and Mrs. Cooley.  
Mr. H.A. Wills. - Controller Research and Development and Mrs. Wills.  
Mr. F.W. David. - Assistant Controller Research and Development and Mrs. David.  
Mr. A. Sharpe. - Assistant Controller Guided Weapons and Aeronautics and Mrs. Sharpe.  
Mr. K.F. Pope. - Research and Development, and Mrs. Pope.  
Mr. W. Howard. - Ikara Project Officer - A.R.L., and Mrs. Howard.  
Mr. D.E. Hatton. - Principal Officer, Systems Dynamics Group A.R.L., and Mrs. Hatton.  
Mr. A. Ross. - Systems Dynamics Group, A.R.L., and Mrs. Ross.  
Mr. J.R. Marsh. - Systems Dynamics Group, A.R.L., and Mrs. Marsh.  
Mr. G.C. Quigg. - Principal Experimental Officer, Ikara Trials, and Mrs. Quigg.  
Mr. S.S. Schaetzel. - Principal Officer, Missile Design Group, A.R.L, and Mrs. Schaetzel.  
Mr. G. Church. - Manager, Government Aircraft Factory, and Mrs. Church.  
Mr. A. West. - Chief Engineer, Government Aircraft Factory, and Mrs. West.  
Mr. I. Ring. - Chief Designer Commonwealth Aircraft Corporation, and Mrs. Ring.  
Mr. J.L. Knight. - Manager, Commonwealth Aircraft Corporation, and Mrs. Knight.  
Mr. D.H. Eltringham. - Director of Telecommunications and Electronics, and Mrs. Eltringham.  
A/Commander H.P. Jarrett. - Naval Staff Officer to Department of Supply, and Mrs. Jarrett.  
A/Commander L. Stonebridge. - Naval Research and Development Officer .  
Lt. Commander A. Dalgleish. - Staff of Naval Research and Development, and Mrs. Dalgleish.

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HMAS STUART  
at Williamstown.

-5 JUN 1965

THE FLAG OFFICER COMMANDING,  
HER MAJESTY'S AUSTRALIAN FLEET.

Sir,

I have the honour to report the Proceedings of H.M.A. Ship under my command for the month of May, 1965. All times are zone minus ten.

2. On 1st May STUART came into your command, Sir, and became a unit of the First Frigate Squadron.
3. The ship was secured on ANZAC at Oil Wharf, Garden Island, at the beginning of the month, and at 0820 on Monday 3rd was held off by tugs while ANZAC cast off and proceeded, and was then secured alongside Oil Wharf. At 0845 I called on your Chief Staff Officer, Captain P.H. Doyle, R.A.N., and at 1030 a meeting was held on board to discuss accommodation and logistic requirements for the forthcoming N22 Ikara Trial. The Captain, H.M.A.S. KIMBLA, Lieutenant Commander F.R. Woods, R.A.N., and representatives from the R.A.N. Experimental Laboratory, the Aeronautical Research Laboratories, and from your staff attended.
4. At 1520 on Wednesday, 5th May, H.M.A.S. GASCOYNE secured outboard of STUART.
5. Your Chief Staff Officer, Captain P.H. Doyle, R.A.N., came on board at 0930 Friday 7th, and walked round the ship.
6. T.C.V. COLAC was secured on GASCOYNE at 0830 on Monday 10th, and fuel tank cleaning was progressed throughout the week. GASCOYNE and COLAC were shifted by tugs at 0820 on Friday 14th May.
7. At 1130 on Tuesday 25th May, Mr. W.E. Brennan, a Sydney gentleman who interests himself in such things, came on board to present the Brennan Trophy to the winners of the competition for 1965. This trophy, which Mr. Brennan had made to his own specifications and presented to the ship on 3rd April, 1964, consists of a figure of an athlete holding aloft a torch; the wooden plinth on which the figure stands is flanked by four circular columns of chromed steel, which support a flat surface on which is placed a smaller plinth supporting an anchor. Facing outwards around this plinth are four model Type 12 frigates. It is a large trophy, and is competed for annually on an inter-divisional basis; the competition this year involved tugs of war, volley ball, ten pin bowling, squash, tennis, and seven-a-side rugby, and was very keenly contested.
8. After the presentation I entertained Mr. Brennan at luncheon.
9. The newly posted captain of H.M.A.S. KIMBLA, Lieutenant Commander P.M. Cumming, R.A.N., called on me at 1125 on Wednesday 26th May.

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10. Until the 17th of the month representatives of Electrical Mechanical Industries Limited were completing the installation of the new guidance computer, and carrying out other modifications to the Ikara guidance equipment; on the 17th nine persons from the Weapons Radio Establishment came on board and commenced setting the system as a whole to work.

11. This work proceeded very well and STUART was able to sail for Trial N7/5 at 0845 on Friday 28th May, three days earlier than had been planned. En route to Jervis Bay thirty boxes of obsolete cypher machinery were dumped and the ship anchored in Montagu Roads at 1630. During the day the Navigating Officer, Lieutenant Commander (SD) K. Graham, R.A.N., attended a meeting at the Aeronautical Research Laboratories, Melbourne, to finalise minor details connected with the programme and the conduct of the N22 Firing Trials.

12. The aim of Trial N7/5 was to check the performance of the Modified Guidance Equipment, and of the Tracking Mount in its new site on the bridge roof. The trial started at 1030 on Saturday 29th, with the Trials Dakota carrying out tuning runs, and thereafter continued throughout Saturday, Sunday and Monday forenoon with the Trials Venom and Wessex. Good weather, combined with excellent aircraft and equipment serviceability enabled the trial to be completed at 1130 on Monday 31st.

13. STUART sailed for Williamstown at 1300 on Monday 31st. On passage vibration measurements were taken in various positions connected with the Ikara system.

14. As well as activities connected with the Brennan Trophy a considerable amount of sport was played during the month. The ship had four representatives in the trials for the Inter-Service Rugby Team, two for the Combined Services Team, and one in the R.A.N. Squash Team.

15. The condition of the ship remains good. The Ship's Company generally are pleased that the ship has come to the end of a lengthy period in harbour, and their health is good.

I have the honour to be ,

Sir,

Your obedient servant,

(Sgd.) P. GOLDRICK.

(P. Goldrick)  
Commander, R.A.N.  
C A P T A I N

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APPENDIX 'A' TO HMAS STUART'S REPORT OF PROCEEDINGS FOR  
MAY, 1965.

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- (a) 271.1 miles
- (b) 18 48/60 hours
- (c) 23967.2 miles
- (d) 2071 33/60 hours.
- (e) (i) No. of hours economical speed exceeded - 9 12/60 hours  
(ii) Average speed - various  
(iii) Distance run per ton of fuel - not calculable  
(iv) Reasons and authority for excess
  - (a) Vibration measurement trial for Ikara records.

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1.10.004

H.M.A.S. STUART  
at Sydney

6 MAY 1965

The Flag Officer in Charge,  
EAST AUSTRALIA AREA.

Sir,

I have the honour to report the Proceedings of H.M.A. Ship under my command for the month of April, 1965. All times are zone minus ten.

2. On the first day of the month STUART was secured alongside Williamstown Dockyard completing a four week period of Ikara equipment installation and wiring. On that day two modified M2 type Ikara missiles for the forthcoming N25 trials were taken on board, and I and the Navigating Officer (Lieutenant Commander (SD) K. Graham, R.A.N.) attended a meeting at Navy Office, Canberra, to discuss logistics and detailed requirements for the N22 firings to be held in June and July.

3. At 0835 on Friday 2nd., identities were exchanged with H.M.A.S. VAMPIRE, Captain D.J. Hamer, D.S.C., R.A.N., and at 0905 STUART sailed for exercises in Port Phillip Bay, securing at Nelsons Pier, Williamstown, at 1640.

4. On Saturday 3rd. Ship's Company guests were embarked, and at 1025 STUART cast off and proceeded for her second Family Day since commissioning, and the first in Melbourne. Because of STUART's role as Ikara Trials Ship the usual firing demonstration could not be given, but the weather was perfect for cruising in Port Phillip Bay, and suitable entertainments were organised for the children. The ship secured at Williamstown at 1450, after a most successful day; what comment I heard was extremely favourable, and the quality of the lunch provided apparently made a very good impression.

5. At 0930 on Sunday 4th April, STUART sailed from Williamstown and anchored in Jervis Bay at 1325, Monday 5th.. At 1400 Surgeon Lieutenant R.J. Ritson, R.A.N., and two representatives of the R.A.N. Experimental Laboratory joined for the duration of the trials, and at 1400, Lieutenant (SD) A.D. Vodic, R.A.N., Commanding Officer of the S.A.R. arrived on board for a pre-trial briefing.

6. At 1535 STUART weighed, and two dummy runs over the Sound Range were carried out. While these were in progress the adjacent areas were thoroughly searched by the S.A.R. and a Dakota, and at 1750 Missile 236 was fired on a launcher bearing of Red 100, splash point occurring as predicted at a range of approximately 3,200 yards. Small pieces of the missile fins were recovered by the S.A.R., and STUART anchored at 1820.

7. STUART weighed at 0545 on Tuesday 6th. April for the second missile firing, but heavy intermittent rain prevented the leads being seen, and the firing was postponed until the late afternoon. The ship anchored at 0845, weighed at 1530, and the missile was fired at 1652 on a launcher bearing of Green 170, the splash occurring at 3,000 yards. Again small pieces of the fins were recovered by the S.A.R. and STUART anchored at 1725.

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8. The object of the Trial (N25) was to measure the underwater noise generated by the firing of Ikara missiles on different relative bearings. Final results have not been received, but good records were obtained, and it is apparent that an Ikara firing can be heard at a considerable range underwater.

9. At 2230 on Tuesday 6th. April, STUART weighed and proceeded to Sydney. At 2305 identities were exchanged with H.M.A.S. VAMPIRE, Captain D.J. Hamer, D.S.C., R.A.N., and at 0500 the following morning a gathering of some 24 vessels was detected by radar off Sydney Heads. The majority of these proved to be a Russian whaling fleet which was in the process of entering harbour as STUART approached. I had determined to allow them to precede STUART into harbour when it was overheard on the Pilot's Radio net that there would be a delay of several hours before all Russian vessels entered, and STUART therefore proceeded into harbour. On the ship rounding Bradley's Head T.B.9 came alongside and two rounds of 4.5" ammunition were embarked. STUART secured alongside the Oil Wharf at 0845.

10. Representatives of Electrical and Mechanical Industries Ltd., who had left STUART for the duration of N25 Trial, rejoined on the ship's arrival in Sydney, and together with Dockyard Staff commenced resiting the tracking aerial and setting up and testing other Ikara equipment.

11. On Sunday 9th. April, Lieutenant Commander M.C. Thomas de Meaune, R.A.N.R.(S), joined for 28 days training.

12. Commander K.M. Saull, R.N.Z.N., Captain designate of H.M.N.Z.S. TARANAKI, came on board at 1400 and was conducted round the Ikara installation. He displayed considerable interest.

13. On Thursday 15th., Captain G.J.B. Crabb, D.S.C., R.A.N., accompanied by Commander R.O. Brasch, R.A.N., called and was conducted round the Ikara installation. At 1445 STUART was shifted by tugs and berthed on QUIBERON at S.E. Cruiser Wharf.

14. The ship was shifted by tugs back to the Oil Wharf at 0845 on Monday 20th.

15. The Captain designate, H.M.A.S. DERWENT, Commander J.D. Stevens, R.A.N., came on board at 1100 on Thursday 22nd., and was briefed on the Ikara system.

16. I and the Navigating Officer attended a meeting at the Aeronautical Research Laboratories, Melbourne, on Friday 23rd; as far as possible the trials programme until July 26th was settled.

17. At 0820 on Tuesday 27th., STUART cast off and proceeded to sea to carry out R.A.N.E.L. Target proving trials, the aim being to assess, in field conditions, the operation of three separate types of simulated submarine targets, and to compare where possible, the acoustic return of each type of target with that of a submarine. After rendezvous had been made with H.M.A.S. KIMBLA, Lieutenant Commander P.R. Woods, R.A.N., and H.M.S. TACITURN, Lieutenant Commander P.D. Hurford, R.N., KIMBLA laid a free floating spherical buoy with mast and radar reflector and a triplane target suspended below, and then took station clear of the buoy and streamed a transponder target; TACITURN remained at periscope depth about two miles from KIMBLA and sonar ranging commenced. Water conditions were fair and ranges out to 8,000 yards were obtained on the submarine and on the transponder target, but ranges on the triplane target were disappointing, being only 2,000 - 3,000 yards.

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18. Sonar ranging was continued throughout the night, but ranges obtained on the triplane target remained very low, and at 0830, Wednesday 28th., it was recovered, and KIMBLA substituted a bubble target for the transponder. Ranges to 18,000 yards were obtained on the submarine and the bubble target throughout the day.

19. The transponder and bubble target were interchanged at intervals during the night, and the trial completed at 0600 on Thursday 29th.. Preliminary results show that the triplane target is not successful at long ranges, the transponder target needs some modification, and that in good conditions the bubble target gives an echo comparable to that of a submarine.

20. On detaching KIMBLA and TACITURN, STUART proceeded to the Jervis Bay area, and at 0820 fired two practice rounds of 4.5" so that the R.A.N.E.L. representatives could measure the amount of noise passed through the ship's hull into the water, and compare it with the noise from an Ikara missile firing.

21. On completion of the firing STUART proceeded north and at 1400 met KIMBLA off Sydney Heads. KIMBLA had the partially constructed new Ikara Target in tow, and Type 903 ranging trials were carried out. In the extremely good weather conditions prevailing the target appeared to tow well, and it was discovered that with the 50ft. mast extended Type 903 would lock on at 27,000 yards. STUART secured on ANZAC at the Oil Wharf, Garden Island, at 1715, Thursday 29th April.

22. During the month Dockyard Staff completed the re-siting of the Ikara tracking aerial on the bridge roof, and representatives of the Electrical and Mechanical Industries Ltd. completed the running of temporary cabling from the aerial to the Guidance Equipment Compartment, and have made good progress with the rewiring and setting to work of other equipments.

23. A considerable amount of sport has been played during the month. The Rugby team has had two wins and two draws in four games, and an interpart competition comprising several sports is almost complete. Eighteen ratings passed the swimming test.

24. The condition of the ship is good. The Ship's Company is healthy and morale is high. The period of increased activity which will start at the end of May is generally looked forward to, particularly by the younger ratings.

I have the honour to be,

Sir,

Your obedient servant,

(Sgd.) P. GOLDRICK,

(P. GOLDRICK)  
COMMANDER, R.A.N.  
CAPTAIN.



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APPENDIX 'A' TO H.M.A.S. STUART'S REPORT OF PROCEEDINGS FOR  
APRIL, 1965.

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- (a) 1344.5 miles
- (b) 115 5/60 hours
- (c) 23696.1 miles
- (d) 2052 45/60 hours
- (e) (i) No. of hours economical speed exceeded - 27 45/60
  - (ii) Average speed - various
  - (iii) Distance run per ton of fuel - not calculable
  - (iv) Reasons and authority for excess
    - (a) partial quarterly full power trial  
my 240715Z/Mar. and F.O.I.C.E.A. 250556Z/Mar.
    - (b) Ikara trial N25.
    - (c) R.A.N.E.L. Target Proving Trials.

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REF. No. 1.10.004

H.M.A.S. STUART  
at Sea.

5 April, 1965.

The Flag Officer in Charge,  
EAST AUSTRALIA AREA.

Sir,

I have the honour to report the Proceedings of H.M.A. Ship under my command for the month of March, 1965. All times are zone minus ten.

2. At 0805 on Monday, 1st March, STUART sailed from Oil Wharf, Garden Island, for Williamstown Dockyard. En route the quarterly full power trial was carried out, but due to troubles with the feed pump regulators was not entirely satisfactory and the trial has had to be partially repeated after self maintenance. This has been reported separately.

3. STUART secured in Williamstown Dockyard at 1815 on Tuesday 2nd. At 2030 the Captain, H.M.A.S. ANZAC, Commander I.H. Nicholson, R.A.N., called.

4. At 1130 on Wednesday 3rd. I called on the Captain, H.M.A.S. ANZAC.

5. Identities were exchanged with H.M.A.S. SYDNEY, Captain G.J.B. Crabb, D.S.C., R.A.N., at 0845 on Friday, 5th March, and on that day Mr. A. Sharpe, Assistant Controller, Guided Weapons and Aeronautics, Department of Supply, accompanied by four other representatives of the Department of Supply, inspected the IKARA installation onboard.

6. On Monday 8th., Lieutenant (SD) E.C. Reading, R.A.N., and Lieutenant T.B.L. Liming, R.N. of the Gunnery Trials Team, arrived onboard and commenced Pre-Refit Trials of the still uncompleted Gunnery Weapons System.

7. Representatives of Electrical Mechanical Industries Ltd. arrived onboard on Tuesday 9th., and commenced unwiring the Computer Rack in the Guidance Equipment Compartment prior to its removal and the installation of the new Computer Rack. *Musical Instruments*

8. At 1000 on Friday 12th., Lieutenant Colonel L.W.F. Lukis, R.M., (Naval Ordnance Inspection Officer), and Mr. Schultz, (Tele-Communications Ltd.) came onboard and inspected the IKARA installation.

9. On the same day thirty eight Ordinary Seaman (Various) joined the ship from H.M.A.S. CERBERUS.

10. On Sunday 14th. March, the Royal Australian Naval Reserve Diving Team from H.M.A.S. LONSDALE, while undergoing their Annual Inspection by the Officer in Charge, Diving School, H.M.A.S. RUSHCUTTER, were employed in cleaning the Ship's propellers.

11. Mr. A. Treharne, Deputy Director of the Weapons Project Division of the Weapons Research Establishment, and Mr. W. Craik, also of the Weapons Research Establishment, visited the

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Ship on Tuesday 16th., to discuss and attempt to finalize the siting of the IKARA Tracking Mount, as the results of trials conducted during February show that a Tracking Mount situated on the bridge roof has distinct advantages over one situated on the mast. This matter has now been resolved, and the Tracking Aerial will be fitted on the Bridge Roof for the firings in Trial N22.

12. At 1545 on Sunday, 21st March, identities were exchanged with H.M.A.S. GASCOYNE, Lieutenant Commander M. Calder, R.A.N., and at 0735 on Monday 22nd, with H.M.A.S. DUCHESS, Commander I.M. Burnside, R.A.N..

13. At 1220 on Thursday 25th., I and six of my officers met the Chief Scientist of the Department of Supply, Dr. W.A.S. Butement, and other senior representatives of the Department, at 339 Swanston Street, Melbourne, and after a short discussion on future developments we were entertained at lunch, Dr. Butement was not present for this.

14. During the month some progress was made by Dockyard Staff in forwarding work preparatory to the installation of Electronic Warfare Equipment during the coming refit, and the Electronic Warfare Console is now installed in the Operations Room, although the wiring is not yet complete. Dockyard Staff also removed the temporary Tracking Mount which had been installed on the bridge roof for Trial N7/4, and assisted in work in the Test Room and the Guidance Equipment Compartment.

15. M.W.L.256 was manned on three occasions and used for Higher Rate and Ordinary Seaman (Various) seamanship training. A day away from the Ship proved particularly popular with the Ordinary Seamen, and some valuable training was carried out.

16. Sport throughout the month has been well attended, especially for inter-part competitions. A team from STUART played golf against a team from the Aeronautical Research Laboratory, and the annual Wardroom versus Chief Petty Officers Cricket Match was held at the Williamstown Oval on Tuesday 30th.. Chief Writer Steele represented the Navy in the Inter Service Clay Target Shooting Competition.

17. The health of the Ship's Company has been good, and their conduct satisfactory throughout the month. The condition of the Ship is good, as is to be expected after such a period alongside.

I have the honour to be,

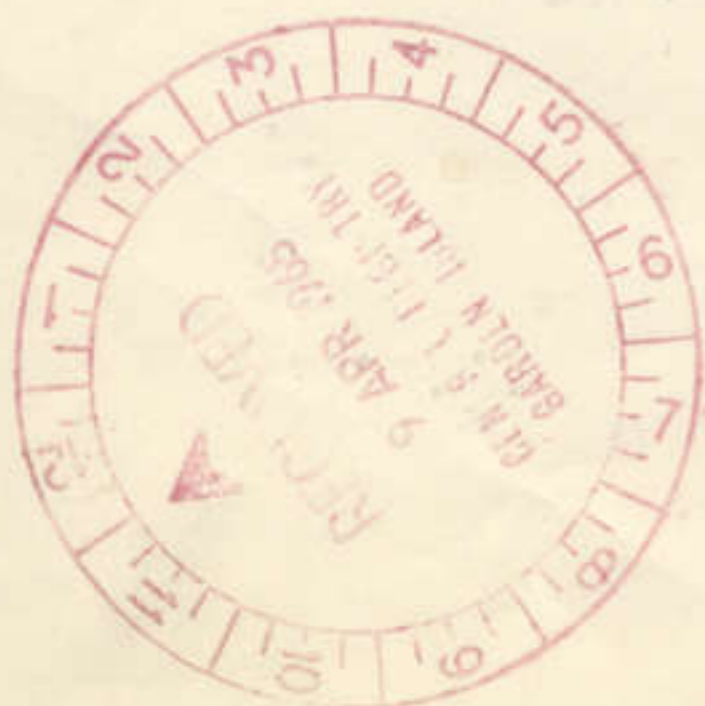
Sir,

Your obedient servant,

**SECRET**



(P. GOLDRICK)  
COMMANDER, R.A.N.  
CAPTAIN.





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APPENDIX 'A' TO H.M.A.S. STUART REPORT OF PROCEEDINGS DATED 5TH  
APRIL, 1965.

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- (a) 616.7 miles
- (b) 34 56/60 hours.
- (c) 22,351.6 miles
- (d) 1937 40/60 hours.
- (e)
  - (i) No. of hours economical speed exceeded - 10
  - (ii) Average speed - Various
  - (iii) Distance run per ton of fuel - not calculable
  - (iv) Reason and authority for excess -
    - (a) quarterly full power trial.

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H.M.A.S. STUART,  
at Melbourne.

1st January, 1965.

The Flag Officer-in-Charge,  
EAST AUSTRALIA AREA.

Sir,

I have the honour to report the proceedings of H.M.A. Ship under the command of Commander M.L. Molony for the period 1st December until 14th December and under my command for the remainder of the month of December. All times are zone minus ten.

2. On Tuesday 1st December, STUART was at anchor off Fairfax Island whilst Trials personnel assessed the results of the previous day's missile firing. Mr. Latrobe, British Aircraft Corporation representative and Officer-in-Charge, Target Area, was admitted to Sick Bay with coral poisoning of the foot.

3. At 0730 on Wednesday 2nd STUART sailed and carried out Alignment Checks against the fin transponder on the Spit Tower. At 0830 the Dakota joined from Bundaberg and further alignment runs were carried out to investigate a fault in the aerial servo system, which during the first firing, had produced an undesirable weave of the missile, whilst in flight. A short circuit in the Computer caused the termination of the trials and STUART anchored at 1330.

4. On Thursday 3rd at 0630 Captain G.R. Griffiths, D.S.C., R.A.N., and Mr. D. White, Principal Scientific Officer, W.R.E., arrived onboard by helicopter. Captain G.L. Fowle, D.S.C., R.A.N., arrived at 1530 by the same means. At 1600 STUART sailed for alignment checks, but faults developed in the servo roll stabiliser and the ship returned to anchor at 1835.

5. At 0610 on Friday 4th, identities were exchanged with H.M.A.S. ANZAC, Commander I.H. Nicholson, R.A.N., and at 0650 ANZAC secured alongside. Weather conditions initially were ideal and the transfer of two Ikara missiles and 100 tons of Furnace Fuel Oil was quickly carried out. ANZAC slipped at 1055 by which time a slight beam swell was causing a considerable amount of ship movement. STUART sailed at 1200 and carried out more alignment checks against the Spit Tower and later with the Dakota aircraft. Results showed that the aerial servo defects had been remedied. STUART anchored at 1655 and at 1835 Vice-Admiral Sir Hastings Harrington, K.B.E., C.B., D.S.O., First Naval Member and Chief of Naval Staff arrived onboard by helicopter. At 2100 Chief of Naval Staff was briefed in the Operations Room on the firing trials.

6. On Saturday 5th at 0720 a Wessex helicopter joined from Bundaberg to carry out a surface search of the nearby islands and at 0730 STUART sailed. Pre-firing sequences commenced and at 0830 the Dakota aircraft joined for a long range search. Minor delays were encountered, but the sequences continued until, at 1205, the second missile of the series was fired at the Spit Target from a range of 19,000 yards. Both the vehicle and the store were subsequently recovered and STUART anchored at 1250. At 1405 Chief of Naval Staff, accompanied by Captain Fowle and Commander Stonebridge left by Zodiac to inspect the installations on the Target Area, and

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later visited H.M.A.S. KIMBLA. At 1810 Chief of Naval Staff addressed the Ship's Company and later attended a reception on the forecastle where he met members of the Trials Team.

7. At 0725 on Sunday 6th, Chief of Naval Staff and Captain Fowle departed for Bundaberg by helicopter. Thirty members of the Ship's Company were landed for a banyan on Fairfax Island and twenty others went away in fishing parties.

8. At 0750 on Monday 7th STUART sailed to carry out the third firing of the series at a range of 1,000 yards, which is the minimum firing range of the Ikara System. Helicopters and Dakota aircraft joined for surface searches, but delays in firing were caused by maladjustments in the reset cams of the tracker cabinet. Missile M.306 was fired at 1427 on a relative bearing of Green 90. The Store did not separate from the vehicle and both impacted 11,200 yards from target in approximately 36 fathoms of water. A search of the area was carried out but only two damaged wings were recovered and STUART anchored at 1615. During the firing, WREBUS, and electronic means of flare ignition on the target was again tried, but failed and the flares (which are necessary for camera spotting) were ignited by the divers from a zodiac.

9. On Tuesday 8th, STUART sailed at 0745 to repeat the previous days firing plan. All pre-firing sequences went smoothly and missile M.309 was fired at 1205 at a target range of 1,150 yards. The store splashed approximately 70 yards left of target and was recovered, but the vehicle sank near the north end of Fairfax Island in 20 fathoms of water. At 1215 STUART anchored between Fairfax and Lady Musgrove Islands to allow trials personnel to re-set up equipment necessary for a Compass Comparison Trial, the aim of the trial being to investigate the performance of a prototype Compass Comparator and Damping Unit to be fitted for Ikara Services. STUART sailed at 1330 for the Compass Comparison Trial, anchoring on completion at 1900.

10. Wednesday 9th was an assessment day, STUART remaining at anchor. The Dakota aircraft joined at 1000 and tracking runs were carried out.

11. STUART sailed at 0645 on Thursday 10th after landing a working party of thirteen to assist in clearing the island. Helicopter and Dakota aircraft joined. All pre-firings sequences went smoothly but the firing was delayed two hours, because of the failure of target flares to burn for their correct duration of time. Missile M.308 was fired at 1130 at a range of 5,000 yards, the store splashing approximately 120 yards from target. Both store and vehicle were recovered. At 1230 STUART commenced a Gun Shock and Vibration Trial to investigate the effect of gun fire on the Ikara equipment installed in the ship. Twenty Rounds were fired on different bearings and angles of elevation with the Ikara equipment fully operational and a test missile on the launcher. Results indicated that all equipment was unaffected. STUART anchored at 1535. At 1600 a Wessex helicopter arrived and began transferring heavy loads from the Island to a pontoon secured ahead of KIMBLA as a loading platform. After embarking the Island working party STUART sailed for Sydney at 1705.

12. On Friday 11th STUART carried out an annual full power trial in conjunction with a Vibration Measurements Trial, the object being to obtain an analysis of vibration at various speed in selected compartments and on adjacent Ikara equipment.

13. At 1000 on Saturday 12th STUART berthed on VENDETTA at South East Cruiser Wharf, Garden Island.

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14. On Monday 14th at 1130 Commander M.L. Molony addressed the Ship's Company and said goodbye.
15. On Tuesday 15th I assumed command of STUART.
16. At 1600 On Wednesday 16th STUART sailed for Williamstown.
17. At 0810 on Friday 18th identities were exchanged with H.M.A.S. YARRA, Commander B.H. Loxton, R.A.N., in Port Phillip Bay, and later with H.M.A.S. ANZAC, Commander I.H. Nicholson, R.A.N., refitting in Williamstown dockyard. STUART secured at Dockyard Pier, Williamstown, at 0930, reverting to 24 hours notice for steam, for Christmas leave and long self maintenance.
18. The remainder of the month passed uneventfully, with the majority of the Ship's Company enjoying their Christmas Leave.
19. During the trials period the health, welfare and conduct of the Ship's Company was good despite the uncertainty of the ship's programme from day to day, and the lack of facilities for entertainment and recreation.
20. Alongside in Williamstown Dockyard, conditions onboard remained good, little dockyard work being carried out. It was, however, necessary to supplement shore power by a Diesel Generator when air conditioning was in use, however it is understood that this situation will be remedied shortly.
21. The condition of the ship remains excellent though the external appearance has fallen back slightly, as emphasis is being placed on below decks maintenance during the leave period.

I have the honour to be,

Sir,

Your obedient servant.

(Sgd) I. K. WILSON

(IAN K. WILSON.)  
LT. CDR. R.A.N.  
C A P T A I N.



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APPENDIX 'A' TO H.M.A.S. STUART REPORT OF PROCEEDINGS DATED 1st  
JANUARY, 1965.

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- A) 1,763.6 miles.
- B) 131 44/60 hours.
- C) 20,841.3 miles.
- D) 1,811 48/60 hours.
- E)
  - (1) No. of hours economical speed exceeded - 33.
  - (2) Average Speed - various.
  - (3) Distance run per ton of fuel - not calculable.
  - (4) Reason and Authority for excess
    - (a) Ikara Trials N.22
    - (b) Annual full power trial.

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1/10/004

H.M.A.S. STUART,  
at Sea.

1st December, 1964.

The Flag Officer-in-Charge,  
EAST AUSTRALIA AREA.

Sir,

I have the honour to Report the Proceedings of H.M.A. Ship under my command for the Month of November. All times are zone minus ten.

2. On Sunday 1st November, STUART was secured at Fitting Out Wharf, Garden Island, beginning the second week of the installation of the Ikara test equipment in the Test Room, and testing existing installations.
3. On Wednesday 4th, The Ikara Monitoring Committee arrived onboard and inspected the newly installed equipment.
4. On Friday 6th, Captain (I) J. Denny, (Chief Inspector of Naval Ordnance) accompanied by Chief Inspectors of Naval Ordnance from United Kingdom, New Zealand and The United States arrived onboard, inspected Ikara equipment and later lunched with me.
5. At 0830 on Saturday 7th, STUART sailed and anchored in Montagu Roads, Jervis Bay, at 1315. As more results were needed to check out the guidance equipment, trials with helicopter and Venom aircraft continued until 1745 with STUART sailing for Melbourne at 2100.
6. At 0830 on Monday 9th, identities were exchanged with H.M.A.S. DUCHESS, Commander I.M. Burnside, R.A.N., and at 0900 STUART secured at Nelson's Pier, Williamstown. Missile M.304 was loaded and trials personnel commenced Harbour System Compatability checks.
7. On Thursday 12th at 0845, STUART sailed and carried out a Sea System Compatability Trial in Port Phillip Bay, securing at Nelson's Pier at 1400.
8. At 1045 on Friday 13th, The Minister for Supply, The Hon. Allen Fairhall, M.P., The Minister for Navy, The Hon. F.C. Chaney, A.F.C., M.P., and party (see Appendix A) arrived onboard and were shown around the Ikara installations.
9. On Tuesday 17th, I and my Ship's Officers attended a Preliminary Pre-Refit Conference in Williamstown Dockyard Board Room. It appeared likely that the ship's programme in 1965 would require to be changed completely because of Sea Trials requirements, but confirmation of these changes is still awaited.
10. Wednesday 18th was scheduled for the Electrical Explosives Hazard Trial N8/3, but this was postponed because of the presence of a Polish merchant ship loading wool, which prevented any electro-magnetic transmissions being made.

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11. At 1000 on Thursday 19th, the test missile was embarked and Trial N8/3 commenced, the aim of the trial being to ascertain whether any of the ship's electrical equipment constituted an electrical hazard to the Ikara missile. The trial was successfully completed at 2205.
12. At 1400 on Friday 20th, Captain E.J. Peel, D.S.C., R.A.N., Australian Naval Attache, Washington, arrived onboard and inspected the Ikara installation.
13. On Saturday 21st at 1430, Major General F. Thorlin, U.S.A., Commanding General of the White Sands Missile Range, New Mexico, accompanied by Captain Romberg, U.S.N., arrived onboard and inspected the Ikara installation.
14. At 1315 on Monday 23rd, STUART embarked three Ikara missiles for the N.22 firings and one dummy missile for test. At 1440 Dr. W.A.S. Butement, Chief Scientist, Department of Supply, arrived onboard and inspected the Ikara installation.
15. At 0800 on Tuesday 24th, STUART sailed for the N.22 Trials, the aim of the trial being to obtain further information for evaluation against the agreed characteristics from a series of pre production missile firings intended to deliver up to a maximum of five dummy torpedoes, accurately at various target ranges and bearings.
16. After an uneventful fast passage to Sydney, STUART secured at Chowder Bay at 1430 on Wednesday 25th. On completion of fuelling, storing and embarkation of Trials personnel, STUART sailed for the Trials Area at 1620.
17. At 1330 on Thursday 26th, a briefing of trials personnel was held followed by a N.22 Firing Dress Rehearsal to familiarize personnel with the Trials Instructions and ship communications.
18. At 0805 on Friday 27th, identities were exchanged with H.M.A.S. KIMBLA, Lieutenant Commander F.R. Woods, R.A.N., and STUART anchored at 0810. During the day fin checks were carried out with KIMBLA and Target Area; a Wessex helicopter arrived from Bundaberg with T.A.S. Trials Officer, Lieutenant P. Blackman, R.A.N., mail and stores.
19. On Saturday 27th at 0850, the Trials Dakota joined and guidance and fin checks were carried out - at 1035, Lieutenant Commander N. Ralph, R.A.N., arrived onboard from the Trials Helicopter to discuss the participation of two Bundaberg based Wessex Aircraft in a close range search of the islands on firing days, a task usually done by S.A.R. craft, which unfortunately had broken down at Bundaberg. Trials personnel continued with equipment checks and missile M.307 was partially armed. KIMBLA sailed and laid the R.A.N.E.L. Sea Target Mk. II and the marker pontoon.
20. At 0710 on Sunday 29th, a Wessex helicopter joined for close air search of islands and STUART sailed at 0745. The sequences commenced at 0825 with alignment checks against KIMBLA, and the Dakota aircraft joined at 0830 for a long range air search. Minor delays were caused by faults developing in the computer and operational display which were quickly remedied, and the sequence continued with the Dummy Sequence thence Instrumentation checks, using the Dakota aircraft. As WREBUS, an electronic means of igniting flares on the target had been damaged when a section of the mast on target collapsed during the rigging, flares had to be ignited by safety fuse by divers from a zodiac, and as "Holds" were called in two firing sequences after ignition of flares, further delays were experienced caused by the renewal of flares. A fault occurred in the tracking mount servo switch in the Guidance Equipment Compartment, and at 1600 trials for the day were abandoned with STUART anchoring

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at 1640.

21. On Monday 30th, STUART sailed at 0745 and at 0805 KIMBLA, which had been checking the Sea Target reported that the forward section had deflated, causing it to list heavily. However it was decided to go ahead with the trial. Wessex and Dakota aircraft joined and commenced their searches, and at 0812 the sequences commenced, with Alignment checks against KIMBLA. Minor delays were encountered but the sequences continued and Missile M.307 was fired at 1220, on a bearing of Green 120, Range 5,000 yards with a ship's speed of 24 knots. The store landed about 260 yards from the target and was recovered, whilst the vehicle parachute failed to deploy and only the ventral fin was recovered. STUART anchored at 1320. Commander P.H. Wilson, R.A.N., Deputy Director Weapons Branch, (designate), arrived at 1530 by helicopter.

22. The condition of the ship remains very satisfactory, and the health of the Ship's Company has been excellent.

23. The conduct of a small proportion of the Ordinary Seamen (Various) and a few perpetual trouble makers amongst the Ship's Company has left a lot to be desired, but the conduct of the remainder has been satisfactory.

24. Sport throughout the month has been limited, but keen rivalry exists between departments in all sports. Whilst on trials the fishing competition and S.R.E. quiz are the most popular pastimes.

I have the honour to be

Sir,

Your obedient servant.

(Sgd) M. L. MOLONY

(M.L. MOLONY.)  
COMMANDER R.A.N.  
CAPTAIN.



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APPENDIX A

Ministerial

Hon. Allen Fairhall, M.P.,  
Minister for Supply

Hon. F.C. Chaney, A.F.C., M.P.,  
Minister for Navy

Defence Committee

Air Marshal Sir Frederick Scherger, K.B.E., C.B., D.S.O., A.F.C.,  
Chairman, Chiefs of Staff Committee,  
Department of Defence, Canberra

Vice-Admiral Sir Hastings Harrington, K.B.E., C.B., D.S.O.,  
Chief of the Naval Staff,  
Department of the Navy, Canberra

C.L.S. Hewitt, O.B.E.,  
Deputy Secretary (Supply and General),  
Department of the Treasury, Canberra

Sir Leslie Martin, C.B.E., F.R.S.,  
Chairman, Australian Universities Commission,  
474 St. Kilda Road, Melbourne

J.J. Corrigan,  
Secretary, Defence Committee,  
Department of Defence, Canberra

Naval Board

Rear-Admiral F.L. George, C.B.E.,  
Third Naval Member and Chief of Naval Technical Services,  
Department of the Navy

S. Landau, O.B.E.,  
Secretary, Department of the Navy

Department of Navy

Rear-Admiral T.K. Morrison, C.B.E., D.S.O.,  
Deputy Chief of the Naval Staff,  
Department of the Navy, Canberra

Rear-Admiral A.W.R. McNicoll, C.B.E., G.M.,  
Flag Officer-in-Charge, Eastern Area,  
Naval Base Headquarters, Sydney

Commodore R.L. Shimmin, A.D.C.,  
Naval Officer-in-Charge,  
Victoria

Captain G.L. Fowle, D.S.C.,  
Director of Weapons

Department of Defence

G.E. Blakers, O.B.E.,  
Deputy Secretary  
(Representing Mr. Hicks)

A.G. Salisbury,  
First Assistant Secretary (Finance)

Department of Supply

J.L. Knott, C.B.E.,  
Secretary

A.S. Cooley,  
Controller General, Munitions Supply

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Department of Supply (continued)

H.A. Wills,  
Acting Chief Scientist

I.B. Fleming, O.B.E.,  
Controller, Aircraft and Guided Weapons Supply

A. Sharpe,  
Assistant Controller, Guided Weapons and Aeronautics

D.H. Eltringham,  
Director of Telecommunications and Electronics

M.J. Evans,  
Officer-in-Scientific Charge (IKARA)

E.J.W. Herbert,  
Controller, Ordnance and Small Arms Supply

J.L. Knight,  
Controller, Explosives and Ammunition Supply

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APPENDIX 'B' TO H.M.A.S. STUART REPORT OF PROCEEDINGS DATED 1st  
DECEMBER, 1964.

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- (A) 2,110.7 miles
- (B) 132 43/60 hours
- (C) 19,104.9 miles
- (D) 1,679.04 hours
- (E) 74 hours

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✓  
1/10/004.H.M.A.S. STUART,  
at Cockatoo Island.

1st June, 1964.

The Flag Officer-in-Charge,  
EAST AUSTRALIA AREA.

Sir,

I have the honour to Report the Proceedings of H.M.A. Ship under my command for the month of May. All times are zone minus ten.

2. On Friday 1st May, STUART was secured at Cruiser Wharf Cockatoo Island undergoing leave and self maintenance, whilst Cockatoo Island Dockyard progressed fitting of ships operational equipment, outstanding A.S.448 items, <sup>MND</sup> priority defects, and Garden Island Dockyard, the fitting of Autosec equipment in the Wireless Office. I and my Navigating Officer attended a meeting of the Ikara Trials Planning Group in Melbourne to discuss results of the recent Ikara Trials and preliminary programme for the N21 firings scheduled for October.
3. On Saturday 2nd, thirty one Ordinary Seamen (various) joined from H.M.A.S. CERBERUS, these being the first of the new scheme of ORD's to join STUART.
4. On Monday 4th, representatives of E.M.I. Salisbury arrived onboard and commenced removing the telemetry equipment from Operations Room, as it is required for trials at Woomera. The first part of the midwinter leave period began with one hundred and forty of the ships company being sent on three weeks leave.
5. On Tuesday 6th, the Ikara Launcher and the two unboosted missiles which had been onboard for three months undergoing magazine habitability tests were removed.
6. On Friday 8th, a meeting was held in the Principal Overseers office Cockatoo Island, attended by ships Officers, representatives of Overseers Staff, Cockatoo Dockyard, TAS Trials Officers and Navy Office representatives to discuss the installation programme of V.D.S. in STUART.
7. On Wednesday 13th, a further V.D.S. meeting was held in Principal Overseers Office, where after hearing reports from the Navy Office representative, it was decided that Cockatoo Dockyard would progress the installation as far as possible, but no trials or sea tuning could be carried out before the end of the refit (August 20th).
8. On Saturday 23rd, the ship was fumigated by civilian contractors, the Duty Watch being accommodated in Dockyard accommodation adjacent to the ship.

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(2)

9. On Friday 29th, in the presence of the ships company, I had much pleasure in congratulating AB RP R.J. MAGUIRE on winning the New South Wales Light Welterweight Boxing Championship, and on his selection to contest the Olympic Trials in Melbourne early in June.

10. Fitting of the Variable Depth Sonar has progressed, but the fitting of Autosec in the Wireless Office is apparently progressing slowly, probably due to the extensive amount of preparation and re-construction which had to be carried out.

11. The condition of the ship is satisfactory and the living spaces have been kept at a good standard. However because of the leave period the cleanliness of the upperdeck has fallen below standard.

12. The ships company have enjoyed their sport throughout the month, daily games of Volley Ball being played on Cockatoo Island with strong representation in the mid week Australian Rules, Rugby and Soccer competitions.

13. The conduct and health of the ships company remains satisfactory.

I have the honour to be,

Sir,

Your obedient servant.

(Sgd) M. L. MOLONY

(M.L. MOLONY.)  
COMMANDER R.A.N.  
C A P T A I N.

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NS 1-1628

1/10/004.

H.M.A.S. STUART,  
Cockatoo Island.

4th May, 1964.

The Flag Officer-in-Charge,  
EAST AUSTRALIA AREA.

Sir,

I have the honour to Report the Proceedings of H.M.A. Ship under my command for the month of April. All times are zone minus ten.

2. On Wednesday 1st April, STUART was secured alongside North East Cruiser Wharf, Garden Island completing installation of new equipment for the forthcoming N.10 and N.11 Trials.
3. At 0940 on Thursday 2nd, I called on the Flag Officer Commanding H.M.A. Fleet, Rear Admiral O.H. Becher, C.B.E., D.S.O., D.S.C. and Bar.
4. On Friday 3rd, the Flag Officer Commanding H.M.A. Fleet, Rear Admiral O.H. Becher, C.B.E., D.S.O., D.S.C. and Bar returned my call and walked around the ship.
5. At 1135, Mr. Brennan, a Sydney solicitor, presented STUART with a handsome trophy called the Brennan Trophy which will be competed for annually for interpart sporting competition.
6. At 1315 on Monday 6th, STUART sailed and at 1430 rendezvoused with H.M.A.S. SUPPLY, Captain G.V. Gladstone, D.S.C. and Bar, R.A.N. and commenced a Replenishment at Sea Trial. The aim of the Trial was to see what effect various tensions applied by SUPPLY on the heavy jackstay had on STUART's ship handling. Tension was increased from one ton to five tons and though the trial was held in near perfect weather there was a considerable effect on the steering when the tension was three tons or more. A report of this trial has been rendered seperately.
7. At 0800 on Tuesday 7th, STUART anchored in Twofold Bay to allow representatives from the Weapons Research Establishment Salisbury to complete installation and set to work the new equipment fitted in the Guidance Equipment Compartment.
8. On Thursday 9th at 1300, H.M.A.S. KIMBLA, Lieutenant Commander F.R. Woods, R.A.N. anchored at Twofold Bay. Fin checks were carried out successfully between STUART and KIMBLA.
9. At 0700 on Friday 10th, STUART sailed to commence Ikara Trials N.10 and N.11. The aims of the Trials were to find the extent of consistent aberrations and any general misalignment between sonar bearing and range and those for the same target obtained from the Ikara Tracking Receiver. At 0830, STUART rendezvoused with H.M.A.S. KIMBLA and commenced the trial. KIMBLA streamed the RANEL bubble target, but sonar ranges out to only 4000 yards were obtained owing to heavy quenching caused by the rough seas. As ranges were too short for trials purposes, the trial was abandoned at 1015 and STUART anchored in Twofold Bay at 1200.

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10. STUART sailed at 0700 on Saturday 11th and after rendezvousing with KIMBLA at 0830 commenced N.10 Trial. Water conditions were good, but rough seas and heavy swell caused too much noise and quenching with intermittent ranges out to 6700 yards being obtained. As the ranges were not consistent enough for trial purposes, STUART returned to Twofold Bay anchoring at 1250.
11. At 0700 on Sunday 12th, STUART sailed and commenced the Trial at 0840. Water conditions were again isothermal, but KIMBLA had trouble with the compressor supplying air to the bubble target and though ranges were obtained out to 7000 yards they were not consistent enough to take recordings for the trial. With the bubble target working efficiently, the trial commenced at 1500, but at 1630 the gearbox on the visicorder seized and was not repaired until 2015, by which time conditions had deteriorated and though ranges of only 4000 yards were being obtained, STUART continued operating Sonar 177 through out the night in case conditions improved, but no records were obtained.
12. At 0630 on Monday 13th, KIMBLA on recovering the bubble target discovered that only approximately 25% of the target was working efficiently, KIMBLA then streamed the RANEL Triplane target, but again ranges obtained were not sufficient for the Trial. The bubble target was again streamed by KIMBLA but at 1040 major faults developed in the Command Transmitter and Tracking Aerial and STUART returned to Twofold Bay anchoring at 2240.
13. STUART remained at anchor on Tuesday 14th completing repairs to trials equipment.
14. At 0700 on Wednesday 15th, STUART sailed but again equipment failures delayed the start of the trial until 1225. Conditions were good and ranges in excess of 8000 yards were obtained. At 2215 conditions began to deteriorate and ranges were reduced to 3000 yards.
15. Water conditions had improved by 0145 on Thursday 16th, and the trial was recommenced but had to be stopped at 0330 because of the necessity of electronic emission silence as a Russian merchant ship was passing through the trials area and was again started at 0730. Ranges to 14,000 yards were obtained and the trial continued throughout the day and night.
16. At 0130 on Friday 17th, a fault was found in the Ranging Unit of the Guidance equipment which necessitated a new part and, after installation, carrying out a range survey check which could not be carried out in the Twofold Bay area. At 0300 N.10 and N.11 trial was completed and STUART returned to Twofold Bay anchoring at 0800. 95% of the N.10 and N.11 requirements were achieved with 25 valid hours of records being obtained.
17. Saturday 18th was spent at anchor preparing the ship for inspection.
18. At 1430 on Sunday 19th, STUART sailed for Sydney. At 2000 Surgeon Lieutenant Mende reported a case of acute appendicitis who should be operated on as soon as possible. Speed was increased to 24 knots and STUART arrived at Jervis Bay at 2315, the patient, EM WE B.J. Newell, was landed by work boat from Creswell and taken to Royal Naval Air Station Nowra, where he was successfully operated on.
19. On Monday 20th at 0920 STUART secured <sup>at</sup> South East Cruiser Wharf, Garden Island.

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3.

20. At 0930 on Tuesday 21st you, Sir, and your Staff Officers arrived onboard and carried out an inspection of STUART. Bad weather prevented Divisions being held, but you addressed the Ships Company in the Cafeteria. At 1330 the Base T.A.S. Officer and Diving Officer carried out their inspection.
21. At 0830 on Wednesday 22nd, STUART was shifted to No.4 buoy to carry out Ikara heeling trials. The aim of the trials were to confirm that Ikara handling equipment would function with the ship heeling fifteen degrees and to test safety devices fitted to render the equipment safe in case of power failure or burst pipes. STUART was heeled ten degrees to Port and all Ikara handling equipment was operated and worked satisfactorily.
22. On Thursday 23rd at 0940, Vice Admiral John T. Hayward, U.S. Navy, the Commander Anti Submarine Force U.S. Pacific Fleet (COMASWFORPAC) accompanied by U.S. Navy Staff Officers and you, Sir, walked around STUART. At 1045 the second part of the heeling trial began with STUART heeled twelve degrees to Starboard. All equipment worked satisfactorily, although one minor stoppage occurred. The safety devices were then tried, and found to work, but there will have to be further investigation by Commonwealth Aircraft Corporation and small alterations made before they fully meet the safety requirements. East Australia Area Staff Officers carried out departmental inspections throughout the day.
23. On Friday 24th, East Australia Area Staff Officers completed their inspections and STUART's small outfit of ammunition was landed by lighter. At 1330 STUART was shifted from No. 4 buoy to Cruiser Wharf Cockatoo Island.
24. On Monday 27th STUART began a leave and self maintenance period with Cockatoo Island progressing fitting of ships operational equipment, completing AS.448 items and priority defects and Garden Island Dockyard staff commencing fitting of Autosec equipment in Wireless Office.
25. At 1030 on Tuesday 28th, I and my Navigating Officer attended an Ikara de briefing in the Court Martial Room, Naval Base Headquarters.
26. On Wednesday 29th, I and my Officers attended a Refit conference held in the Board Room Cockatoo Island, and discussed with Garden Island and Cockatoo Island representatives work to be done in STUART during the leave and self maintenance period.
27. Sport throughout the month was very limited. One of the boxing team has won all his matches in the N.S.W. Trials and has a very good chance of making the Olympic Boxing Squad.
28. The condition of the ship as shown by the Admirals Inspection report, was most satisfactory. Despite the rather boring trials, morale is high and the Ships Company in good spirits.

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29. The conduct and health of the Ships Company has been most satisfactory.

I have the honour to be,

Sir,

Your obedient servant.

*M. L. Molony*

(M. L. MOLONY)  
COMMANDER, R. A. N.  
CAPTAIN.

Enclosure.

Appendix A.



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APPENDIX A TO H.M.A.S. STUART REPORT OF PROCEEDINGS

DATED 4th MAY, 1964.

- (a) 1166.9 miles.
- (b) 161.20/60 hours.
- (c) 14,794.1 miles.
- (d) 1300 47/60 hours.
- (e) (1) No. of hours economical speed exceeded - 3.  
(2) Average speed - various.  
(3) Distance run per ton of fuel - Not calculable.  
(4) Reason and Authority for excess:-
  - (i) Passage Twofold Bay to Jervis Bay  
vide my 191002Z April.

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1/10/004.

H.M.A.S. STUART,  
at Garden Island.

2nd April, 1964.

The Flag Officer-in-Charge,  
EAST AUSTRALIA AREA.

Sir,

I have the honour to Report the Proceedings of H.M.A. Ship under my command for the month of March.

2. On Sunday 1st March, STUART was secured alongside Nelson Pier, Williamstown having loaded eight Ikara missiles for the N.12 firings. The aim of this trial, the second firing trial at sea of the Ikara Weapon System was to obtain further information for evaluation against the agreed characteristics from a series of firings intended to deliver up to a maximum of six dummy and two exercise torpedoes, accurately at various ranges and bearings. At 0730 fourteen Trials personnel were embarked, and STUART sailed at 0830.
3. After an uneventful fast passage to Sydney, STUART berthed at Fitting Out Wharf Garden Island on Monday 2nd at 1300. On completion of fuelling and embarking ten Trials personnel STUART sailed at 1445 for the Trials area.
4. On Tuesday 3rd, Trials teams began their equipment checks and the first missile was brought on to the launcher by use of the recently completed Magazine and Handling Equipment and pre arming checks were begun.
5. At 0900 on Wednesday 4th a briefing of Trials personnel and Ships Staff was held and on completion a full N.12 Firing Dress Rehearsal was carried out to familiarise personnel with the Trials instructions and ship borne communications. At 1330, STUART arrived at Fairfax Island and identities were exchanged with H.M.A.S. KIMBLA, Lieutenant Commander F.R. WOODS, R.A.N. and H.M.A.S. AIR CHIEF, Lieutenant K.E. STEPHEN, R.A.N. At 1335 a meeting was held in STUART which was attended by the Commanding Officers KIMBLA and AIR CHIEF and Department of Supply Security Officer Lieutenant W. JAMIESON, R.A.N.R. The Trials Dakota joined at 1440 from Bundaberg and guidance and fin checks were carried out. After detaching the Dakota, Radio and Radar Silence was enforced, whilst pre-arming was carried out on missile M.231. Chain cable and flare equipment was delivered to KIMBLA, who then proceeded to lay the R.A.N.E.L. buoy, which was to be the Ikara sea target.
6. On Tuesday 5th the intention was for STUART to sail at 0745, but as KIMBLA had difficulty in getting the WREBUS transmitter workable or igniting the flares by direct cable, STUART delayed sailing until 1225. The Trials Dakota joined at 0800 but was returned to Bundaberg, and re-joined at 1300. Pre-instrumentation checks began, but at 1320 KIMBLA reported no success in igniting the flares. As it was considered essential to show a positive reference point for camera records that the flares be ignited, the Trial was aborted and STUART anchored at 1445. After a meeting in STUART, it was decided rather than hold up the trial any longer, because of the failure of the WREBUS transmitter that an attempt to ignite the flares by safety fuze No.18 and safety match should be tried.

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7. At 0530 on Friday 6th, Sub Lieutenant M. FREW, (SD) (TAS), and the ships Petty Officer U.C. accompanied by two representatives from Weapons Research Establishment joined KIMBLA and successfully demonstrated the ignition of a flare by safety fuse. It was then agreed that this method would be used in future firings with a diver from the SAR lighting the safety fuse.

8. At 1145 STUART sailed and at 1248 the Pre-firing sequences commenced with an alignment check against KIMBLA. The Dakota joined and on completion of the Guidance and Telemetry Check at 1320 was detached for an air search of the area. The sequences continued with minor delays and at 1658 Missile No.231 was fired on a bearing of Green 45°. The launcher boost and guidance was satisfactory but the store did not release from the vehicle and splashed at approximately 22,000 yards. STUART carried out a search until dark but nothing was recovered and STUART anchored off Fairfax Island at 1900.

9. Saturday 7th was scheduled for an assessment day and examination of records, but because of a malfunction, on the previous day it became a day of investigation by Trials personnel. It was later found that the release failure was due to the operation of a safety circuit incorporated in the guidance system immediately prior to the ship sailing from Sydney. Later discussions were held on board with O.I.C. Target Area, Mr. H. McCallum, who stated that conditions though primitive on the island were much better than on the previous N.9 Trial since permanent installation of Nissen huts, extra refrigeration and a Naval cook.

10. On Sunday 8th, STUART sailed at 0745 for the second firing. The Trials Dakota joined at 0800 and the prefiring sequences commenced at 0822. Only minor delays were experienced and Missile 228 was fired at 1317 on a bearing of Green 45° at a range of 2,000 yards with ships speed of 20 knots. The firing was partially successful with both store and vehicle being recovered, but the miss distance of 540 yards was thought to be excessive. STUART anchored at 1405.

11. STUART remained at anchor on Monday 9th to allow the trials team to check ships guidance equipment for possible cause of large miss distance in previous firing.

12. At 1130 on Tuesday 10th, STUART sailed to carry out a trial range calibration check. The aim of this trial was to determine, if any range errors existed in the Ikara Guidance System. STUART anchored 3,000 yards from Fairfax Island and simultaneous ranges were taken between Radar 903, Ikara system and two hydrographers with theodolites stationed on the island. The results again proved there was a consistent error of approximately 75 yards between the Ikara system and Radar 903. This error was allowed for in all future firings. STUART returned to the anchorage at 1430.

13. On Wednesday 11th, STUART was delayed in sailing until 1230, whilst KIMBLA replaced the R.A.N.E.L. Sea target, which had been damaged during the night, with another R.A.N.E.L. buoy target. Pre-firing sequences commenced at 1300 and continued until 1600 when the sequences failed during the Dummy Run sequence. Investigations later showed that there was a fault with the Fin on the missile and STUART returned to anchorage at 1810.

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(3)

14. Thursday 12th was a scheduled firing day but due to failure of power supplies in the Guidance Equipment Room, which caused damage to blower motors in the compartment the firing was postponed and STUART remained at anchor.
15. At 0750 on Friday 13th, STUART sailed and Pre-firing Sequences commenced. At 1143 the third missile in this series and the thirteenth from STUART was fired. The store sank in twenty three fathoms of water whilst the vehicle was recovered by KIMBLA. The miss distance was estimated to be about 400 yards and STUART returned to anchor at 1340.
16. Saturday 14th STUART remained at anchor with Trials Team busy assessing results and endeavouring to find the cause of the excessive miss distance's from previous two firings.
17. On Sunday 15th, STUART sailed at 0745 though the weather had deteriorated with a wind of Force 7 causing rough seas. The pre-firing sequences were carried out until the Dummy Sequence, when Radar 903 could not acquire and hold the target, so the trial was aborted with STUART anchoring at 1200. A meeting was held in STUART attended by N.R.D.O., O.I.S.C., Commanding Officer KIMBLA and ships officers to discuss the possibility of constructing a new target, by erecting a guyed wooden mast on a rubber pontoon. It was agreed that KIMBLA should endeavour to construct and lay a pontoon target. H.M.A.S. KIMBLA sailed at 1800 for Bundaberg to fuel and store ship.
18. At 0755 on Monday 16th, STUART sailed to carry out the fourth firing against a target situated on the end of the island. This was classed as a foul weather firing with winds of Force 7 and height of swell 9 - 10 feet. As KIMBLA and AIR CHIEF were in Bundaberg it was planned to land the store on the island and the vehicle 3,000 yards beyond, to be recovered by divers in a Zodiac. All pre-firing sequences were carried out smoothly and missile M.232 was fired at 1158 at a range of three thousand yards. The store landed 213 yards from the target in shallow water and the vehicle was located by divers in a Zodiac and subsequently lifted inboard. STUART anchored at 1345.
19. On Tuesday 17th, STUART remained at anchor with Trials Team assessing previous firing results and Air Research Laboratories Camera personnel resiting cameras.
20. STUART sailed at 0830 on Wednesday 18th for the fifth firing against the existing pontoon sea target, which had been fitted with flares. The Dakota joined and all pre-firing sequences went smoothly until a "hold" was called at -45 seconds in the firing sequence, because of a fault in the Interim Sequencer Unit. Remedial action was taken and missile M.229 was fired at 1450 at a range of 5,000 yards. The store splashed approximately 40 yards from the target, but neither store or vehicle were recovered. STUART anchored at 1600.
21. At 1035 on Thursday 19th, STUART sailed to carry out a long range (nineteen thousand yard) firing against the newly constructed pontoon target. Faults occurred in the auto zero unit on the missile and the trial was aborted at 1430 with STUART anchoring at 1600. The Trials Team discovered dampness in various sections of the missile and spent most of the night drying out these units.

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22. STUART sailed at 0620 on Friday 20th after landing thirty of the ships company to assist in clearing the island. The Trials Dakota joined at 0630 and pre-firing sequences commenced. Delays were caused by faults in one of the servo motors in the Guidance Equipment Compartment and after rectification missile M.227 was fired at 1246 at a range of 15,000 yards. During flight it was reported that guidance had lost signals and the missile was heading towards manned positions, so the manual emergency release was ordered. After the emergency release, store and vehicle behaved normally and both were recovered, with STUART anchoring at 1355. The R.A.N. helicopter from Bundaberg had arrived on the island at 0830 and on completion of the firing began transferring the heavy loads from all parts of the island to either the pontoons or a disembarkation point close to the entrance to the lagoon. At 1800 the island clearing party returned on-board and STUART sailed at 1810 for Brisbane to refuel.

23. At 0550 on Saturday 21st STUART stopped off Caloundra Head and embarked a Brisbane pilot. STUART secured at No.1 Newstead Wharf, Brisbane at 1020. After embarking fuel, fresh provisions and landing ten Trials personnel, STUART sailed at 1400, for Cato Island to carry out the two remaining firings. The change of venue for these firings was necessary to allow two MK44 Mod 7 torpedoes with exercise heads to be fired in depths of excess of 100 fathoms to confirm satisfactory operation of Torpedo MK44 after water impact.

24. It was notable that the long passage up the river could have been saved if it had been possible for the Naval Officer-in-Charge, QUEENSLAND, to provide a lighter off PILE LIGHT.

25. At 1130 on Sunday 22nd, STUART anchored off Cato Island. KIMBLA had arrived at 0600 and after laying a new pontoon sea target, landed personnel on the island to set up the camera and spotters positions.

26. Monday 23rd was intended to be a firing day, but the pontoon target dragged its moorings during the night and by using the Dakota to visually identify a radar contact, the target was located twelve miles away. At 1300 STUART sailed and carried out compass comparison trials, the object of the trials being to compare the performance of the two types of compass fitted in STUART viz. the Admiralty Gyro Compass Pattern 5005 and the Admiralty Gyro Magnetic Compass MK VI (AG MC 6). STUART anchored at 1600.

27. On Tuesday 24th STUART sailed at 0745, and commenced pre-firing sequences at 0820. The Dakota joined at 1030 and missile M.234 was fired at 1135 at a range of 10,000 yards. The torpedo entry was approximately 60 yards from target and the Torpedo was recovered, but the vehicle sank in 100 fathoms of water. Preparations then began for the eighth and final firing. Missile M.233 was fired at 1509 at a range of 5,000 yards, with Torpedo entry close to target, and later recovered whilst the vehicle spun in shortly after release and was not recovered. After embarking all trials personnel, (except one in KIMBLA) and the diving team, STUART sailed for Sydney at 1800.

28. On Wednesday 25th STUART carried out a quarterly full power trial enroute Sydney.

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(5)

29. At 1130 on Thursday 26th STUART secured at North East Cruiser Wharf, Garden Island.
30. STUART spent the remainder of the month alongside Garden Island.
31. As STUART was at sea for most of the month of March, organised sports were very limited. The early morning circuit training for footballers was very popular and on present indications STUART should be able to provide some good Dempster Cup players.
32. After the trials, I had the pleasure of congratulating all who took part on their initiative and hard work in overcoming the many problems associated with the trials. I was particularly impressed by the seamanship and resource shown by H.M.A.S. KIMBLA and the Clearance Diving Team and felt that their work was a subject of commendation. A separate signal was sent to this effect.
33. The condition of the ship outboard has deteriorated due to bad weather and limited opportunities to rectify but it is anticipated this will be set right early in April. Internally the ship is in fair condition but with about thirty percent deficiency in complement, improvements take time.
34. Morale is satisfactory and attempts were made to keep it high with quizzes, fishing competitions, etc., but the fact remains that trials from the ships company point of view are dull. However, morale was improved by the arrival of the ship in Sydney in time for Easter leave.
35. The health of the ships company has been excellent and their conduct most satisfactory.

I have the honour to be,

Sir,

Your obedient servant.

(Sgd) M. L. MOLONY.  
(M.L. MOLONY.)  
COMMANDER R.A.N.  
C A P T A I N.

Enclosure.

Appendix A.

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APPENDIX A TO H.M.A.S. STUART REPORT OF PROCEEDINGS DATED 2nd  
APRIL, 1964.

- (a) 2946.8 miles.
- (b) 229 41/60 hours.
- (c) 13,627.2 miles.
- (d) 1139 27/60 hours.
- (e) (1) No. of hours economical speed exceeded - 106.
  - (2) Average speed - various.
  - (3) Distance run per ton of fuel - Not calculable.
  - (4) Reason and authority for excess:-
    - (i) Passage to and from Venues for Ikara Firings.
    - (ii) Ikara Trials.
    - (iii) Quarterly full power trial.

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21. During October forty two ratings took their seasonal leave, which will now allow all interstate natives to be on leave over Christmas, New Year Period.

22. The morale of the ships company remains high, and their health is good.

I have the honour to be,

Sir,

Your obedient servant.

(Sgd) M. L. MOLONY

(M.L. MOLONY.)  
COMMANDER R.A.N.  
CAPTAIN.

Enclosure.

Appendix A.



SECRET



SECRET

NS 1-16-28

1/10/004.

H.M.A.S. STUART,  
at sea.

4th March, 1964. ✓

The Flag Officer-in-Charge,  
EAST AUSTRALIA AREA.

Sir,

I have the honour to report the proceedings of H.M.A. Ship under my command for the month of February, All times are zone minus ten.

2. STUART remained alongside Bolt Shop Wharf, Cockatoo Island until Monday 10th for the completion of the leave and self maintenance period and Dockyard fitting of the Ikara Magazine and Handling Equipment.
3. On Monday 3rd, the Director of Weapons, Acting Captain G. Fowle, D.S.C., R.A.N. accompanied by Mr. White, Secretary to the D.R.D.P.C., and Mr. Coplenorn arrived onboard to inspect the Ikara Magazine installation. During the day, a basin trial was successfully carried out proving ship staff and dockyard work.
4. On Tuesday 4th, U.K. Ikara Team "B" consisting of Commander A. Pomroy, R.N. Rtd., Lieutenant Commanders Hallett R.N. and Williams, R.N. accompanied by Captain T.W. Stocker, R.N., R.N.L.O., arrived onboard and inspected the Ikara Magazine and Handling Equipment, and the preparations being made for the first Ikara R.A.S. Harbour trial.
5. At 1100 on Wednesday 5th, the R.A.S. Harbour trial began and was attended by U.K. Ikara Team "B", the Captain of H.M.A.S. SUPPLY, Captain G.V. Gladstone, D.S.C.\* R.A.N. and representatives from D.T.S.R., D.A.S., D.N.C., and N.R.D.O. The trial was only partially successful and as a result there were many minor alterations and adjustments to be done before the next trial. In my opinion, the scheme appeared to be impracticable and suggestions were made in an effort to promote a more practical scheme.
6. On Thursday 6th, Engineer Commander (OE) W.M. Maughan, M.B.E., R.A.N. assistant to D.W., arrived onboard and inspected the Ikara installation. Representatives of W.R.E. Salisbury also carried out a trial to check the accuracy of the Ikara computer Range and Type 903 Range. Lieutenant Commander P.D. Hurford, R.N., Captain designate of H.M. Submarine TACTITIAN called on me at 1145.
7. On Sunday 9th, the dockyard finished work on the Ikara Magazine and Handling Equipment. The Pump Room which had been set to work and was operating satisfactorily was electrically and hydraulically complete, but still required cleaning and painting. The Magazine was electrically and hydraulically complete and the system filled with oil, but was not operating in any mode. The general finish of the mechanical installation was poor with ragged edges and pieces of shims jutting out. The assembly room was electrically and hydraulically complete, but had no wing and fin stowages fitted. The lagging with

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Navy board insulation was incomplete, as was the ventilation and the painting was not finished. The over all finish of the Assembly Room was poor. The Missile Quarters Officers position was 90% complete, with some communications unfinished.

8. At 0940 on Monday 10th., STUART sailed from Cockatoo for her "shakedown". At 0945, STUART secured to No. 4 Buoy and commenced a compass swing, in conjunction with a bearing comparison trial between the MRS 111 and Ikara system. On completion of the swing, 500 cases of redundant hedgehog projectiles were embarked for dumping. At 1410, STUART sailed and after dumping the hedgehog projectiles rendezvoused at 2000 with H.M.S. TABARD and commenced a six hour CASEX.

9. At 2220 a signal was received from F.O.I.C.E.A. ordering STUART to proceed with all despatch to render assistance to H.M.A.S. VOYAGER. The Submarine was surfaced and STUART proceeded at 25 and later 28 knots. On arrival in the vicinity of the collision between H.M.A.S. MELBOURNE and H.M.A.S. VOYAGER at 2345, STUART was instructed by H.M.A.S. MELBOURNE to slowly circle and search for survivors. STUART searched independently but no survivors were sighted. At about 0250 I was ordered by MELBOURNE to take charge of the searching ships and aircraft and to continue the search. At 0300, STUART combined with H.M.A.S. HAWK, CURLEW and Air Sprite and carried out a sector search around the datum position. At 0520, STUART formed up with the three minesweepers to carry out a co-ordinated search through the area. Throughout this period, two helicopters from Nowra had been co-operating with the searching ships and at 0600 four Gannets and four more helicopters arrived to extend the search. At 1200, an R.A.A.F. Neptune arrived to co-operate with STUART and together with naval aircraft and surface units the search continued until 1800. No survivors were sighted, though life rafts, <sup>hedgehog cases</sup> whaler, dingy and small pieces of debris were recovered. On instructions from the Flag Officer-in-Charge, East Australia Area, the search was abandoned at 1800, when STUART returned to Jervis Bay, anchoring at 2245. Narrative and track charts were forwarded separately with my letter 5/1/12 of 13th February, 1964.

10 At 0730 on Wednesday 12th, STUART sailed to rendezvous with H.M.S. TABARD and began a five hour CASEX at 1230. On completion STUART proceeded to Sydney, securing to No.4 Buoy at 1830.

11. On Thursday 13th, STUART sailed at 0815 and after rendezvousing with H.M.S. TABARD at 1000 began an eight hour CASEX. Water conditions throughout the day were good and ranges in excess of 11,000 yards were obtained with Sonar Type 177. After a four hour break to allow the submarine to recharge her batteries, STUART again rendezvoused with TABARD at 2200 and began a ten hour CASEX. On completion at 0800 on Friday 14th, STUART sailed for Jervis Bay anchoring at 1500.

12. Saturday 15th and Sunday 16th were spent at anchor in Jervis Bay progressing internal drills and cleaning ship.

13. The period 10th to the 16th was scheduled for setting to work the Ikara Magazine Handling Equipment and with the help of five representatives from the Commonwealth Aircraft Corporation good progress was made, with the system operating in all modes of control, this being greatly helped by the excellent electrical wiring done by CODOCK. Initial indications show that some early modifications will be required to make the system function reliably under the conditions expected at sea.

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14. At 0400 on Monday 17th, STUART sailed for Sydney and at 1015 secured to catamarans placed alongside H.M.A.S. SUPPLY at Refitting<sup>out</sup> Wharf, Garden Island. At 1030, a simulated Sea Ikara R.A.S. Trial began which was watched by representatives of D.W., D.N.C., D.T.S.R., N.R.D.O, Garden Island Dockyard and Cockatoo Island Dockyard. In this trial with STUART about sixty feet off SUPPLY, the heavy jackstay was rigged and the trolley and metal box were passed over and the missile transferred to the assembly room. It was apparent that at sea it would be a difficult time consuming operation which would constitute a danger to life and limb and the general opinion was that the operation was impracticable. On completion of the trial STUART cast off and secured at Bolt Shop Wharf, Cockatoo Island at 1440.
15. On Tuesday 18th at 0930 accompanied by my First Lieutenant and Mr. C. Lloyd, Senior Technical Officer, Department of the Navy, I attended a meeting in H.M.A.S. SUPPLY to discuss the harbour trial of Ikara R.A.S. arrangements. The meeting concluded that the present arrangements were impracticable and the position of the high point and the need for the heavy "golden casket" or metal box should be investigated.
16. At 1330, accompanied by ships officers I attended a meeting at CODOCK to discuss work to be carried out during the refit period April 27th to August 20th, with the aim of progressing the installation of equipment in STUART.
17. The period from the 18th to 23rd February had been scheduled for the removal of the old Telemetry equipment and its replacement. Two representatives from E.M.I. began work on removing the existing Telemetry receiver and began the installation of a new type receiver, whilst CODOCK staff continued work on the R.A.S. arrangements and the Ikara Handling Equipment.
18. On Friday 21st, I and seven of my officers and fifty five of the ships company attended the VOYAGER memorial services. At 1130, I was interviewed in the Crown Solicitors Office in connection with the loss of H.M.A.S. VOYAGER and subsequent search for survivors. My Navigating Officer also attended later.
19. At 1515, I called on the Captain, H.M.A.S. MELBOURNE, Captain R.J. Robertson, D.S.C., R.A.N.
20. At 0800 on Monday 24th, STUART sailed for Williamstown and after an uneventful if somewhat rough passage berthed at outer East Nelson Pier Williamstown at 1500 on Tuesday 25th.
21. Wednesday 26th was scheduled for the Electrical Explosives Hazards Trial, N8/2, but this had to be postponed because of the presence of an Indonesian Ship loading flour, which prevented any electromagnetic transmissions being made. At 1700, the trial missile for the N8/2 trial was embarked and the recently completed handling equipment was used to place the missile in the Magazine.
22. At 0815 on Thursday 27th the N8/2 Trial commenced, the aim of the trial being to ascertain whether any of the ships electrical equipment constituted an electrical hazard to the missile. The trial involved the switching on and off of all the electrical equipment and continued throughout the day and was successfully completed at 1800.

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23. At 1125, Mr. Coombes, Chief Superintendent of Aeronautical Research Laboratories accompanied by senior members of the Ikara Project Team arrived on board. At 1130, in the presence of these gentlemen and of the ships company I had much pleasure in accepting from Mr. Coombes, at a short ceremony, a beautiful model of the first STUART.
24. At 0815, on Friday 28th, STUART embarked four Ikara missiles for the N.12 firings and one dummy missile for test.
25. At 0905, the Third Sea Lord Vice Admiral Sir Michael Le Fanu K.C.B., D.S.C., accompanied by Captain T.W. Stocker, R.N., R.N.L.O., Captain J.D. Treacher, R.N., Naval Assistant and Lieutenant Commander Hallett, R.N., Ikara Project Officer, R.N., arrived onboard and inspected the Ikara installations. Vice Admiral Le Fanu seemed to be impressed with what he saw particularly the handling gear and left the ship at 1000.
26. At 1400 on Saturday 29th, STUART embarked the remaining four Ikara missiles.
27. Sporting activities throughout February have been mainly limited to inter part games, with the exception of the water polo teams participation in the Lorraine Crapp Trophy.
28. The condition of the ship is reasonably satisfactory but as always after a long period alongside, much remains to be done to bring the ship up to the standard required.
29. The health and conduct of the ships company is satisfactory and morale is good.

I have the honour to be,  
Sir,  
Your obedient servant.

*M.L. Molony.*

(M.L. MOLONY.)  
COMMANDER R.A.N.  
CAPTAIN.

Enclosure.

Appendix A.



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APPENDIX A TO H.M.A.S. STUART REPORT OF PROCEEDINGS DATED  
DATED 4th MARCH, 1964.

- (a) 1493.8 miles.
- (b) 112 <sup>58</sup>/<sub>60</sub> hours.
- (c) 10,680.4 miles.
- (d) 909 <sup>46</sup>/<sub>60</sub> hours.
- (e) (1) Number of hours economical speed exceeded 36.  
(2) Average speed - various.  
(3) Distance run per ton of fuel - not calculable.  
(4) Reason and authority for excess.
  - (1) Search for H.M.A.S. VOYAGER survivors.
  - (2) Passage to Melbourne for loading of Ikara Missiles.

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1/10/004.

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H.M.A.S. STUART,  
at Cockatoo Island.

5th February, 1964.

The Flag Officer-in-Charge,  
EAST AUSTRALIA AREA.

Sir,

I have the honour to report the Proceedings of H.M.A. Ship under my command for the month of January.

2. STUART remained alongside Bolt Shop Wharf Cockatoo Island throughout the month of January undergoing leave and self maintenance whilst Dockyard carried on with the fitting of the Ikara Magazine and Handling Equipment.

3. At 0930 on Tuesday 7th, a meeting was held in STUART between ships officers, overseers and dockyard officials to discuss progress of work.

4. On Wednesday 8th and Friday 10th, I and my Command Team attended the Fleet Tactical Period at WATSON the results of which were disappointing considering the effort expended.

5. On Wednesday 15th Commander J.G. YULE, R.A.N, Executive Officer of H.M.A.S. SUPPLY arrived onboard to see and discuss the Ikara Replenishment at Sea arrangements with ships officers.

6. On Saturday 18th, I attended the launching of the "Empress of Australia" at Cockatoo Dockyard. Afterwards, I had the pleasure of entertaining Mrs. H.M.L. Waller wife of the late Captain N.M.L. WALLER, R.A.N.

7. On Wednesday 22nd, Mr. E.T. Bell, S.N.A. arrived onboard and together with ships officers, overseers and dockyard officials discussed the preparations necessary for the noise and blast trials to be held in conjunction with the next Ikara firings.

8. At 1400 on Tuesday 28th, a meeting was held in STUART between ships officers, overseers and dockyard officials to discuss 448 items. It was agreed to transfer the outstanding items (about eight) to List II or for defect action.

9. On Wednesday 29th and Thursday 30th, thirty ratings each day attended the Long Bay Rifle Range for their Annual Rifle Course.

10. On Friday 31st, I and my Navigating Officer attended a meeting of the Ikara Trials Planning Group in Melbourne to discuss final arrangements for the N/12 Ikara firings scheduled to take place in March.

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11. The original completion date for the Handling equipment has not been met by Cockatoo Dockyard. It now appears, that the Magazine will be completed by the 2nd February and the Assembly Room about the 7th. These late completion dates will mean that some of the Handling Equipment will have to be "set to work" at sea, a not altogether desirable situation, because of ship movement. The Pump Room is complete and the system will start to be filled with oil on the 4th February. The final finishing touches such as maintenance catwalks and painting will not be done until the April refit, but this will not hamper the operation or assessment of the system.
12. The Electronic Warfare Office conversion for additional accommodation for scientists is now almost complete and as it will have eating and recreational space for twelve, it should greatly relieve the over crowded Wardroom during future trials.
13. The Electrical Department has progressed planned maintenance, but with leave periods and drafting of ratings without reliefs, it is finding it difficult to keep up to date. The training commitment is also heavier, now that three of the six EM(C) 2's have been replaced by other ratings direct off course, making a need to run two courses instead of one.
14. Inter-part cricket, volley ball and water polo has been played throughout the leave period, whilst the boxing team of three, has had mixed success in the N.S.W. and Olympic Trials, with two of the team though beaten in their bouts have been tentatively chosen for the N.S.W. Team.
15. The condition of the ship is satisfactory except for the quarterdeck which has suffered from the dockyard installation of handling equipment.
16. The health and conduct of the ships company is good and morale is high.

I have the honour to be,

Sir,

Your obedient servant.

(Sgd) M. L. MOLONY

(M.L. MOLONY.)  
COMMANDER R.A.N.  
C A P T A I N.

Enclosure.

Appendix A.

**SECRET**





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APPENDIX A TO H.M.A.S. STUART REPORT OF PROCEEDINGS DATED  
5th FEBRUARY, 1964.

- (a) Nil
- (b) Nil
- (c) 9186.6 miles
- (d) 796 48/60 hours
- (e) Nil

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1.10.004

H.M.A.S. STUART,  
at Cockatoo Island.

3rd January, 1964.

The Flag Officer in Charge,  
EAST AUSTRALIA AREA.

Sir,

I have the honour to report the Proceedings of H.M.A. SHIP under my command for the month of December, 1963.

2. STUART remained alongside Bolt Shop Wharf, Cockatoo Island throughout the month of December.

3. On December 2nd and 3rd all recently joined ratings were sent to PENGUIN for fire-fighting courses.

4. On Wednesday 4th, I and my Navigating Officer attended a meeting of the IKARA Trials Planning Group in Melbourne to discuss the arrangements for IKARA Trial N.12 (firings in March, 1964).

5. On Thursday 5th December two A.B.C.D. Instructors from PENGUIN carried out the six monthly test of Anti-Gas Respirators onboard.

6. On December 9th and 10th, I and my TAS Officers attended the Annual TAS Conference at H.M.A.S. WATSON. The papers read were interesting, the discussion invigorating and in my view the conference achieved its proper level for discussion i.e. Commanders and below. All UC rates were sent to WATSON for training in the ASUAT.

7. On Friday 13th December, 106 ratings were sent on long leave including all interstate natives.

8. The fitting of the missile handling equipment has been proceeding at what appeared to be a slow pace, but this was due to the very fine tolerances, which had to be achieved in the fitting of the magazine rails. These are now bolted in place and work is progressing at a faster rate in the magazine. The pump room has been progressed and now requires only the pumps and motors to complete it. The missile quarters position has the consoles installed but not wired into the system. Dockyard personnel are working two twelve hour shifts in an endeavour to complete the magazine and handling equipment by 17th January, 1964.

9. Good progress has been made with outstanding 448 items and should be completed by February.

10. During this month at Cockatoo Island the Electrical Department has been able to progress the many outstanding modifications to equipment and to further training of REM2's.

11. Engine Room ship's staff completed the internal and external cleaning of the boilers and repair of brickwork. Steam was raised to prove work done. On December 26th, Lieutenant Commander W.J. ROURKE (Eng.M) R.A.N., was relieved by Lieutenant B.R. BAMBRICK (Eng.M) R.A.N., as Engineer Officer.

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12. Good progress was made by the Executive Department in maintenance and painting of the masts and upper decks.

13. Volley Ball is still the most popular sport but interest is now being shown in the water polo since their two success's in the Lorraine Crapp Competition.

14. The boxing team are training daily at the Balmain Police Boy's Club and visited the City of Maitland with them recently to give an exhibition.

15. The health and conduct of the ship's company is good and morale remains high.

(Sgd) M. L. MOLONY

(M.L. MOLONY.)  
COMMANDER R.A.N.  
C A P T A I N.

Enclosure.

Appendix A.

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APPENDIX A TO H.M.A.S. STUART REPORT OF PROCEEDINGS DATED

3rd JANUARY, 1964.

- (a) Nil
- (b) Nil
- (c) 9186.6 miles
- (d) 796 48/60 hours
- (e) Nil

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APPENDIX A TO H.M.A.S. STUART REPORT OF PROCEEDINGS DATED

1st JANUARY, 1964

26 MAR 1964

- (a) 111
- (b) 111
- (c) 918.6 miles
- (d) 126 48/60 hours
- (e) 111

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1/10/004.

H.M.A.S. STUART,  
at Cockatoo Island.

2nd December, 1963.

The Flag Officer-in-Charge,  
EAST AUSTRALIA AREA.

Sir,

I have the honour to report the Proceedings of H.M.A. Ship under my command for the month of November. All times are zone minus ten.

2. On Friday 1st November, STUART was alongside Cockatoo Island completing self maintenance, whilst Dockyard were progressing the installation of the Ikara Magazine and Handling Equipment.

3. At 1330, STUART was shifted by tugs from Cockatoo Island to No.2 buoy, Sydney.

4. On Saturday 2nd and Sunday 3rd, R.N.E. representatives of R.A.N.E.L. investigated beam patterns of sonar type 177.

5. At 0900 on Monday 4th, STUART sailed to rendezvous with H.M.S. TABARD. At 1100, a five hour CASEX was commenced with TABARD, the aim being to check the performance of the modified sonar type 177 at sea. Water conditions were not good, the maximum range obtained being 6,500 yards. Sonar 177 performed satisfactorily, but it would have been more gratifying if the water conditions had been better, to allow the A.U.W.E. experts to set up and tune the set correctly. At 1730, STUART secured to No.2 Buoy.

6. At 0830 on Tuesday 5th, STUART sailed to carry out Partial Repair Trials. All trials were satisfactorily carried out and STUART returned to harbour at 1530 securing to No.2 Buoy.

7. At 0830 on Wednesday 6th, STUART sailed to commence Ikara Trial N/10. The aims of the trial were to check that the modifications and additions to Sonar 177 were effective and to find the extent of consistent aberrations and any general misalignment between sonar bearing and range, and those for the same target obtained from the Ikara Tracking Receiver.

8. At 1000 STUART rendezvoused with H.M.A.S. KIMBLA and commenced the Trial.

9. KIMBLA carried two R.A.N.E.L. targets, a triplane and a bubble target. The bubble target was tried first, but very poor results were obtained. This was replaced by the triplane target, but the wind and sea caused KIMBLA to drift away from the target and unsatisfactory results were obtained. The trial was abandoned at 1430 without achieving any worthwhile results. STUART secured to No.2 buoy at 1620.

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10. On Thursday 7th STUART remained in harbour to assess the records of the previous days trial.
11. At 0830 on Friday 8th STUART sailed for N/10 Trials. At 0905 identities were exchanged with H.M.A.S. PARRAMATTA, Captain B.S. MURRAY, A.D.C., R.A.N.
12. After rendezvousing with KIMBLA at 1030, the trial commenced, but water conditions were poor, giving intermittent contacts at ranges of only 1000 yards, which were too short for trial purposes.
13. STUART returned to Sydney and secured alongside ANZAC at Garden Island at 1330.
14. At 0805 on Monday 11th, STUART sailed and after rendezvousing with KIMBLA at 1005, N/10 Trial began with firm contacts being held on the bubble target at a range of 6,000 yards. Conditions gradually deteriorated until only intermittent contact was held at 3,000 yards. At 1330 KIMBLA reported that the bubble target was suspect and the trial was abandoned.
15. At 1345, Auxiliary Trial N/10A commenced, the aim of the trial being to test ~~of~~ methods for stabilizing the Tracking Mounting against Pitch and Roll, and for testing the effectiveness of a new form of servo drive for the Ikara launcher. The results for these trials were obtained by STUART carrying out high speed 180° turns using 10° and 35° of rudder and the measurements being recorded on a visicorder. STUART secured at No.2 Buoy at 1545.
16. On Wednesday 13th, STUART sailed at 0400 and at 0520 N/10 Trial commenced with consistent ranges of 7,000 yards being obtained on the bubble target. By 1000, water conditions had changed and ranges of the target were now down to 3,000 yards. The Trial was terminated at 1040, because of inconsistent contacts and the short range. STUART secured to No.4 buoy at 1330.
17. On Friday 15th at 0400 STUART sailed for N/10 Trials, and after rendezvousing with KIMBLA at 0545 the Trial commenced with maximum ranges of only 4,000 yards. These ranges were consistent, except for a 30 minute period, when all the "bottom echo's" disappeared and strong echos were obtained out to 6,500 yards. Water conditions again gradually deteriorated reducing ranges to 2,500 yards and the trial finished at 1140.
18. At 1100 identities were exchanged with H.M.A.S. SYDNEY, Captain W.J. DOVERS, D.S.C., R.A.N.
19. Auxiliary Trial N/10A was progressed, with STUART carrying out high speed 180° turns and STUART then secured North End Cruiser Wharf at 1400.
20. At 1500, Captain Dalton U.S.N. Chief of Staff to COMASWFORPAC accompanied by Commander B. Loxton, DRAN and Commander G. Griffiths, D.T.S.R. arrived onboard for a brief tour of the Ikara Installations.

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10. On Thursday 7th STUART remained in harbour to assess the records of the previous days trial.

11. At 0830 on Friday 8th STUART called for N/10 trials. At 0900 identities were exchanged with H.M.A.S. PARANATTA, Captain B.S. HURRY, A.D.C., R.A.N.

12. After rendezvousing with KIMBA at 1030, the trial commenced, but water conditions were poor, giving intermittent contacts at ranges of only 1000 yards, which were too short for trial purposes.

13. STUART returned to Sydney and secured alongside HMS at Garden Island at 1330.

14. At 0805 on Monday 11th STUART called and after rendezvousing with KIMBA at 1005, N/10 trial began with first contacts being held on the bubble target at a range of 6,000 yards. Conditions gradually deteriorated until only intermittent contact was held at 3,000 yards. At 1330 KIMBA reported that the bubble target was suspect and the trial was abandoned.

15. At 1345, Auxiliary Trial N/10A commenced, the aim of the trial being to test methods for stabilising the tracking mounting against pitch and roll, and for testing the effectiveness of a new form of servo drive for the laser launcher. The results for these trials were obtained by STUART carrying out high speed 180° turns using 10° and 35° of rudder and the measurements being recorded on a videorecorder. STUART secured at No. 2 buoy at 1545.

16. On Wednesday 13th STUART called at 0400 and at 0520 N/10 trial commenced with consistent ranges of 7,000 yards being obtained on the bubble target. By 1600 water conditions had changed and range of the target was now down to 3,000 yards. The trial was terminated at 1640, because of inconsistent contacts and the short range. STUART secured to No. 4 buoy at 1730.

17. On Friday 15th at 0400 STUART called for N/10 trials and after rendezvousing with KIMBA at 0545 the trial commenced with maximum ranges of only 4,000 yards. These ranges were consistent, except for a 30 minute period, when all the "bottom echo's" disappeared and strong echoes were obtained out to 6,500 yards. Water conditions again gradually deteriorated reducing ranges to 2,500 yards and the trial finished at 1140.

18. At 1100 identities were exchanged with H.M.A.S. SYBRY, Captain W.J. BOWERS, D.S.C., R.A.N.

19. Auxiliary Trial N/10A was progressed, with STUART carrying out high speed 180° turns and STUART then secured North East Channel buoy at 1400.

20. At 1500, Captain Duffin U.S.N. Chief of Staff to Commander R. Duffin, U.S.N. arrived aboard for a trial tour of the laser installations.

M.D.G. BRANCH  
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21. At 0930 on Saturday 16th, STUART embarked one hundred and eighty one ships company guests and sailed at 1000 for her first Family Day. Because of her role as an "Ikara Trials" Ship, STUART was unable to carry out the usual demonstrations of surface and underwater firings, but carried out a cruise to Broken Bay, anchoring for lunch and sailing again at 1330. STUART secured North End Cruiser Wharf at 1505 and I was pleased at the comments which indicated general enjoyment of family day.
22. On Monday 18th at 0830, STUART sailed to continue N/10 Trial. Enroute to the Trials Area, (twenty five miles from the coast) a medium sized merchant ship was detected by 177 and held out to a range of 20,000 yards. This confirmed that Sonar Type 177 was capable of producing optimum performance.
23. N/10 Trial commenced at 1020 with good results being obtained on the target out to 10,000 yards. By 1200, conditions had deteriorated until at 1400 the trial had to be terminated because only weak and intermittent contacts were being obtained at 3,000 yards. STUART secured No.2 buoy at 1645.
24. At 0820 on Wednesday 20th STUART sailed and during the forenoon dumped five hundred and six redundant hedgehog projectiles.
25. N/10 trial commenced at 1105, but water conditions were so bad that no worthwhile results were obtained, detection ranges being only 1,000 yards, whilst the Trial requirement was for 6,000 - 10,000 yard detections. Auxiliary Trial N/10A was progressed until 1510.
26. At 1535, STUART entered Watsons Bay and took in tow a High Speed Target and then proceeded to sea to carry out trials. Seas were calm and the target was towed successfully at speeds up to 22 knots. STUART secured No.2 buoy at 1830.
27. On Friday 22nd, STUART sailed at 0815 for the final day of N/10 Trial, dumping 500 Hedgehog Projectiles during the forenoon.
28. At 1050 N/10 Trial commenced, but once again detection ranges on the target were only 4 to 5,000 yards and very intermittent, and consequently unsuitable for the Trials requirement. Auxiliary Trial N/10A was commenced at 1300, completing at 1350, on completion STUART returned to harbour and secured at Bolt Shop Wharf Cockatoo Island at 1520.
29. Owing to the poor water conditions experienced off the N.S.W. coast, the N/10 Trials requirements were not completed, but much useful information was obtained by Trials personnel.
30. On Monday 25th, Dockyard personnel re-commenced work on the installation of the Ikara Magazine and Handling Equipment. At 1000, I and my Navigating Officer, attended a pre Trial Planning Group meeting at KUTTABUL, to discuss logistics concerned with the March 1964 N/12 Ikara firings.
31. At 0930 on Tuesday 26th a meeting was held in STUART between ships officers, overseers and Dockyard officials to plan work to be done during STUARTS availability. It was agreed, that if possible all outstanding 448 items list 1, and Magazine and Handling Equipment would be completed.

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32. On Wednesday 27th, I attended the court-martial of Commander P.J. HUTSON, R.A.N., H.M.A.S. SYDNEY as a member of the court.

33. STUART spent the remainder of November at Cockatoo Island.

34. It is pleasing to note that the ships company have become very sport conscious. In addition to cricket and volley ball a boxing troupe has now been formed and STUART also has a team entered in the Command Water Polo competition.

35. The condition of the ship is satisfactory and if hands are provided in accordance with the new Scheme of Peace Complement, a good standard should be maintained.

36. The health and conduct of the ships company is good and morale remains high.

I have the honour to be,

Sir,

Your obedient servant.

(Sgd) M. L. MOLONY

(M.L. MOLONY.)  
COMMANDER R.A.N.  
C A P T A I N.

Enclosure.

Appendix A.

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APPENDIX A TO H.M.A.S. STUART REPORT OF PROCEEDINGS DATED  
2nd DECEMBER, 1963.

- (a) 841.4 miles
- (b) 84 7/60 hours
- (c) 9186.6 miles
- (d) 796 48/60 hours
- (e) (1) No. of hours economical speed exceeded 18
  - (2) Average speed - various
  - (3) Distance run per ton of fuel - not calculable
  - (4) Reason and authority for excess:-
    - (i) Partial Repair Trials - my 110636Z Oct
    - (ii) Ikara Trials N/10
    - (iii) High Speed Target Trials - F.O.I.C.E.A's  
190541Z Nov.

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1/10/004.

H.M.A.S. STUART,  
at Sea.

5th November, 1963.

The Flag Officer-in-Charge,  
EAST AUSTRALIA AREA.

Sir,

I have the honour to report the Proceedings of H.M.A. ship under my command for the month of October. All times are zone minus ten.

2. On Tuesday 1st October, STUART was on passage from Fairfax Island to Sydney after successfully completing the N/9 Ikara Firing Trial.

3. At 1000, STUART secured at Bolt Shop Wharf Cockatoo Island.

4. STUART remained at Cockatoo Island throughout the month, whilst self maintenance, docking and installation of the Ikara Magazine and Handling Equipment were progressed.

5. On Thursday 3rd, Mr. K.R. Haigh, S.S.O., A.U.W.E., and Mr. W. Hawke, E.O., A.U.W.E. arrived onboard to assist S.W.E. and ships staff with the R.N. and R.A.N. modifications to Sonar Type 177. These modifications were necessary:-

- (a) To increase the capabilities of 177
- (b) To detect and track fast submarines
- (c) To convert it from a search sonar to an attack sonar
- (d) To make it compatible with the Ikara Fire Control System.

These have now been completed and sea acceptance trials will be carried out in November. Minor modifications were also carried out to Sonar Type 170, to allow it to feed information into the Ikara computer.

6. On Tuesday 8th, STUART was docked at Cockatoo for seven days, it being five months since the final docking before commissioning. The underwater hull was generally in good condition although there was considerable growth (ectocarpus) on the boot topping, (international Vinyl black, Ref 93315) which seemed to have poor anti fouling properties. All normal docking planned maintenance was carried out.

7. On Friday 11th, the United Kingdom Ikara Assessment Team Group D, visited STUART to inspect the layout of the Ikara Equipment. The Group consisted of Mr. Turner, P.S.O., A.U.W.E., the Ikara Project Officer within A.U.W.E., Mr. Hocking S.S.O., and Mr. Murray S.S.O., A.U.W.E.. They were accompanied by Lieutenant Commander Hallett, R.N., Ikara Project Officer (Australia).

8. On Monday 14th, Ordinary Seaman P.A. Rossiter R58925 was admitted to Balmoral Naval Hospital with an Open Kochs infection. Rossiter had been drafted to STUART from ANZAC on 24th June, where there had been a previous case of Kochs infection. The mess deck in which Rossiter had been living was vacated and fumigated. All ships company have had chest X-rays and a Mantoux Skin Test. Trials personnel who may have come in contact with Rossiter have been advised to have similar treatment.

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9. On Tuesday 15th and Wednesday 16th all U.W. rates were sent to WATSON for mortar drill.
10. On Monday 21st, Lieutenant Commander D.J. MARTIN, R.A.N. ANRUK, (Weapons designate) visited STUART for Ikara familiarization.
11. The installation of the Magazine and Handling Equipment began on Monday 21st. The magazine overhead rails were clamped in place, but will have to be re-aligned on return to dockyard after the November Trials, as the clamps are not sufficiently positive, to ensure that the equipment will not move under sea conditions. The missile pump room has been cleared of temporary fittings and the motor starters and hydraulic reservoir fitted. The windows to the assembly room have been fitted. The fittings of the handling equipment is proceeding satisfactorily and no serious difficulties have yet been encountered.
12. On Tuesday 22nd, all U.C. rates were sent to WATSON for training in the A.S.U.A.T.
13. On Thursday 24th and Friday 25th, my command team attended the Tactical games at the A.S.T.T. at WATSON, which are held at the completion of the Tactical Course.
14. On Tuesday 29th, Vice Admiral Sir Desmond DREYER, K.B.E., D.S.C., Flag Officer Commanding in Chief Far East Station, visited STUART for a brief inspection of the Ikara equipment. Vice Admiral Dreyer was accompanied by Captain T.W. STOCKER, R.N., R.N.L.O. and Captain J.F. BELL, R.A.N., G.M.G.I.D.
15. On Thursday 31st, a basin trial was carried out to prove ships staff and dockyard work. During the month, Engine Room Staff made good all outstanding machinery defects and completed planned maintenance due. Dockyard staff renewed the defective casing on the main feed pump; and both Forced Draught Blowers were modified, to overcome design weaknesses at the root of the oil thrower ring, K Diesel generator being overhauled by sub contractors.
16. Fair progress was made by Dockyard Staff in completing outstanding 448 items. All A.B.C.D. markings were fitted, and it should be possible to have all outstanding items completed during the next availability at Cockatoo Island.
17. Upperdeck maintenance was concentrated on areas where there was corrosion, in the main limited to those areas, where pre-treatment and painting by the builders was carried out during adverse weather conditions prior to commissioning. The painting of the ships side was completed.
18. The Electrical Department made good progress with outstanding modifications and planned maintenance. The number of small defects still remains high, but there has been no major breakdown of electrical equipment during October.
19. The month alongside Cockatoo allowed good progress to be made in Higher Rates classes and classes for the Command Tests.
20. Sporting facilities are very limited at Cockatoo Island and Volley Ball is the only sport. An inter-part Volley Ball competition was played daily in the lunch hour with practice games in the Dog Watches and was very popular with the ships company. Three inter-part cricket matches and two social games have been played at Rushcutter Park and results indicate that STUART will have some representatives assisting KUTTABUL in the Zingari Competition.

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APPENDIX A TO H.M.A.S. STUART REPORT OF PROCEEDINGS DATED  
5th NOVEMBER, 1963.

- (a) 118.3 miles.
- (b) 10 3/60 hours.
- (c) 8345.2 miles.
- (d) 712 41/60 hours.
- (e) Nil.

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1/10/004.

H.M.A.S. STUART,  
at Cockatoo Island.

3rd October, 1963.

The Flag Officer-in-Charge,  
EAST AUSTRALIA AREA.

Sir,

I have the honour to Report the Proceedings of H.M.A. Ship under my command for the month of September. All times are zone minus ten.

2. On Sunday 1st September, STUART was at anchor off North East Island of the Percy Group awaiting the completion of modifications and tests to the third remaining Ikara Type F.1 missile by the Ikara Trials Personnel, before proceeding South to Fairfax Island for the final firing of Trial N9/1.
3. A case of acute appendicitis was reported at 0300 and STUART sailed at 0600 to rendezvous with H.M.A.S. AIR SPRITE twenty miles South off North Reef at 1245.
4. The patient, L.S.B.A. N. WATTY, and Surgeon Lieutenant G.A. MENDE were transferred to AIR SPRITE, which proceeded to Bundaberg, WATTY being operated on at 2200 in Bundaberg General Hospital with Surgeon Lieutenant MENDE assisting in the successful operation.
5. STUART anchored off Fairfax Island at 1730.
6. At 0700 Monday 2nd, STUART sailed to take up her station for the pre-firing checks.
7. AIR SPRITE came alongside STUART at 0720 and after transferring Surgeon Lieutenant MENDE, proceeded to carry out a search around Fairfax and Lady Elliot Islands.
8. The Tender rejoined from Bundaberg and sailed in company with KIMBLA at 0800.
9. At 0800 the Trials Dakota joined, and STUART commenced the Guidance and Telemetry checks, the Dakota was then detached to carry out an air search of the area.
10. In STUART, alignment checks, followed by the Dummy Sequence, then preparations for firing were completed. The missile was armed and the count down for firing was commenced, with the missile being fired at 1120.
11. This firing was a complete success in that the missile obeyed the commands of the guidance transmitter and landed in the target area 17,100 yards from STUART. The diagnosis and correction of faults which occurred in previous firings reflected great credit on the Ikara Trials Team.
12. After the firing, STUART carried out another alignment check, followed by a wind finding run with a balloon released from the target area.

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13. Some Trials personnel were then transferred to AIR SPRITE, who also collected personnel from KIMBLA and the target area before proceeding to Bundaberg.
14. As this completed Trial N9/1, STUART sailed for Sydney at 1300.
15. After an uneventful passage, STUART secured at South East Cruiser Wharf at 1005 Wednesday 4th.
16. At 1500, H.M.A.S. ANZAC, Commander D.A.H. CLARKE, M.V.O., D.S.C., R.A.N. secured alongside.
17. On Thursday 5th, I called on His Excellency the Governor of New South Wales, Lieutenant General Sir Eric Winslow WOODWARD, K.C.M.G., C.B., C.B.E., D.S.O. at 1000, and the Captain H.M.N.Z.S. ROYALIST Captain B.E. TURNER O.B.E., D.S.C., R.N.Z.N. at 1200.
18. On Friday 6th, I called on Captain B.S. MURRAY, A.D.C., R.A.N., Captain (F) First Frigate Squadron, H.M.A.S. PARRAMATTA.
19. On Tuesday 10th, I called on the Flag Officer Commanding H.M. Australian Fleet, Rear Admiral A.W.R. McNICOLL, C.B.E., G.M., at 1430.
20. On Wednesday 11th, the Flag Officer Commanding H.M.A. Fleet, Rear Admiral A.W.R. McNICOLL, C.B.E., G.M., the Captain H.M.A.S. MELBOURNE, Captain R.I. PEEK, O.B.E., D.S.C., R.A.N. and the Captain (F) First Frigate Squadron, Captain B.S. MURRAY, A.D.C., R.A.N., returned my calls and walked round the ship. Captain MURRAY and the Superintendent R.A.N. Experimental Laboratory Commander J.L. W. MERSON lunched with me.
21. H.M.A.S. ANZAC cast off at 0830 and sailed for exercises.
22. The period 4th to the 12th was utilised by the Engine Room staff to progress outstanding work and externally clean the port boiler. Main machinery spaces bilges were also cleaned with the assistance of the T.C.V. A large proportion of the quarter's planned maintenance was carried out including examination of 50 percent turbo driven auxiliaries and the starboard main turbine. A main turbine bearing was replaced. Various leaking steam joints and other minor defects were made good. The Dockyard had insufficient time to carry out main feed pump repairs, but removed and tested a heat exchanger which was replaced by ships staff. A basin trial was carried out on Thursday 12th September to prove work.
23. At 0825 Friday 13th, STUART sailed from Garden Island for Williamstown to embark missiles for Trial N9/2.
24. After an uneventful passage, STUART secured to Nelson Pier Williamstown on Sunday 15th at 1030. At 1430 STUART commenced loading 4 Type F.2 missiles.
25. At 0900 on Monday 16th, the Controller-General Munitions, the Controller Ordnance Supply and the Managers of Ordnance Factories Bendigo and Maribyrong visited STUART to inspect the IKARA Launcher.
26. STUART sailed from Williamstown at 1045 for N9/2 Trial Area.

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27. At 1700 on Tuesday 17th, STUART berthed at Chowder Bay Sydney. After fuelling, and embarking twenty civilian Trials personnel, STUART sailed at 1810 for Fairfax Island.
28. At 0810, Thursday 19th, STUART anchored off Fairfax Island. Identities were exchanged with H.M.A.S. KIMBLA, who had arrived the previous day to land personnel on Fairfax Island and "set up" the Target area for the firings. During the day, a pre-firing briefing was carried out onboard with Trials personnel, ships staff and KIMBLA, followed by the pre-arming of the missile.
29. On Friday 20th, STUART sailed at 0700 to take up position for the pre-firing sequences.
30. The Trials Dakota joined from Bundaberg at 0800 and began guidance equipment checks and on completion was detached for an air search of the area.
31. 903 Radar Tracking alignment checks were then carried out, followed by the Dummy sequence.
32. During one of the checks, a suspected fault in the roll gyro in the missile, caused a delay of two and a half hours, which necessitated sending the Dakota back to Bundaberg to refuel.
33. The Dakota rejoined at 1350 and preparations re-commenced for the firing.
34. The F-2 type missile was fired at 1535. During the flight, spurious, signals from the pitch gyro caused severe pitch and roll manoeuvres. The store failed to eject, and together with the carrier, impacted in shallow water about three hundred and thirty yards from target. During the flight, the nose cone came off and the parachute ejected. ~~But~~ it was decided that no further firings would take place until the malfunctions had been satisfactorily explained.
35. STUART anchored off Lady Musgrave Island at 1700.
36. Saturday 21st was scheduled for an assessment day, but because of the malfunction of the missile, it became a day of investigation by the Trials Personnel. Commander G.A.R. BENNETT, the Naval Research and Development Officer, and Mr. M. Evans, Officer in Scientific Charge, were landed on Fairfax Island to inspect the position of impact and the recovered portions of missile and store. About eighty percent of the missile ~~was~~ recovered selected sections being brought back to STUART for closer study.
37. Investigation of camera and telemetry records and of the recovered gyro from the missile showed that the fault was in the gyro assembly, and the trials team commenced modifying the three remaining gyro's.
38. On Monday 23rd, I and my Navigating Officer and Lieutenant Commander L.A. STONEBRIDGE, the Naval Research and Development Officer (designate) went ashore to Fairfax Island and inspected the Target installations and accommodation. Conditions ashore were comparatively primitive for the trials party but it is apparent that if the installation and tents were put to the test of the cyclone season, considerable modifications would have to be made and stronger and more permanent installations built.

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39. The diving team, who were accommodated in KIMBLA had a big catch of fish (Trevallee) in the islands lagoon and sent over to STUART some of the two hundred and fifty odd six pounders which were greatly appreciated by the ships company, who had been catching plenty of two pounders but very few larger fish.
40. Tuesday 24th, STUART remained at anchor, with Trials Team finishing off the gyro modifications.
41. At 0730 on Wednesday 25th, STUART sailed and at 0800 commenced pre-firing sequences.
42. The Trials Dakota joined at 0800, but again at 1000 had to be returned to Bundaberg to refuel, as there was a delay of ninety minutes in the dummy sequence. When the Dakota rejoined at 1130 the sequence recommenced.
43. At 1355, a Type F-2 missile was fired on Bearing of Green 30° at a range of 20,000 yards and the store impacted 115 yards from the target. The firing appeared to be completely successful with the vehicle and the store both being recovered. Members of the Trials Team were sent to KIMBLA to examine the recovered vehicle.
44. STUART anchored off Fairfax Island at 1515.
45. At 0715 on Friday 27th, STUART sailed for the third firing of the series.
46. The Trials Dakota joined and all pre-firing checks and sequences went smoothly with STUART firing a F-2 Type missile at 1020.
47. The missile was fired on a relative bearing of Red 45 degrees at a range of 10,000 yards. The firing was successful with the vehicle parachute being deployed, but the floatation bag did not operate and vehicle was not located by divers who were interrupted in their search by sharks. Store release was 117 yards from the target.
48. STUART then carried out a 30,000 yard alignment check with the Target area, followed by a Radar Type 903 and Guidance Equipment bearing check on an Island target, to determine any errors in these equipments. STUART then anchored at 1310.
49. At 0515 on Sunday 29th, STUART landed thirty volunteers from the ships company to assist KIMBLA in clearing the target area after the final firing.
50. STUART sailed at 0545 and commenced alignment checks with the Island Target.
51. At 0700, the Trials Dakota joined and pre-firing sequences continued without any delays.
52. With KIMBLA and AIR SPRITE in their holding positions the fourth F-2 type missile of the N9/2 series was fired at 0901.

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53. The missile was fired at a range of 5,000 yards on a relative bearing of Red 50 degrees. During the flight the store ejection system was not triggered but the band release of the store worked, and the store separated. The store was not located, but the carrier was recovered by KIMBLA in good condition and was returned to STUART for examination. STUART anchored at 1000.

54. At 1210 an Ansett A.N.A. helicopter arrived from Bundaberg at assist in clearing stores and equipment from Target area. At 1600 the Island clearing Party returned on board and STUART sailed at 1645 for return to Sydney.

55. It is probably difficult to appreciate, especially for those not directly concerned, the tribulations and difficulties in prototype guided weapons firings. In my opinion, the IKARA Trials Team did a magnificent job! Not only did they have to diagnose faults but they had to remedy them on the spot with makeshift facilities and information which was not always adequate. That they did all this and proved their analysis by producing results is in my view not only a subject for hearty congratulations but is an excellent augury for future IKARA trials.

56. The condition of the ship is generally good and the addition of hands additional to complement has greatly eased the task of bringing the weather decks up to standard.

57. The eight day period alongside Garden Island assisted in bringing planned and machinery maintenance up to date.

58. The health and conduct of the ships company has been good. Morale though high would undoubtedly be improved, if at some stage there was a prospect of visiting some port other than Williamstown or Sydney (Cockatoo Island).

I have the honour to be,

Sir,

Your obedient servant.

(S) M. L. MOLONY

(M.L. MOLONY.)  
COMMANDER R.A.N.  
CAPTAIN.

Enclosure.

Appendix A.



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APPENDIX A TO H.M.A.S. STUART REPORT OF PROCEEDINGS DATED

3rd OCTOBER, 1963.

- (a) 3557.7 miles.
- (b) 240 46/60 hours.
- (c) 8226.9 miles.
- (d) 702 38/60 hours.
- (e) (1) No. of hours economical speed exceeded 89.
  - (2) Average speed - various.
  - (3) Distance run per ton of fuel - not calculable.
  - (4) Reason and authority for excess:-
    - (i) Passage from Percy Islands to Venue B - vide my 311729Z Aug.
    - (ii) IKARA Trials at venue B - N9/2.
    - (iii) Transit Venue B - Navy Office Letter 740/252/156 C02592 of 26th June, 1963.
    - (iv) IKARA Trials at Venue B - N9/2.
    - (v) Annual Full Power Trial.

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1/10/04.

H.M.A.S. STUART,  
at Sea.

3rd September, 1963.

The Flag Officer-in-Charge,  
EAST AUSTRALIA AREA.

Sir,

I have the honour to report the proceedings of H.M.A. Ship under my command for the month of August, 1963. All times are zone minus ten.

2. On Thursday 1st, STUART was carrying out the second part of Trial N7/1 in Jervis Bay, the aim of which was to check the accuracy of the Computer predictor against a fixed target. In this case, the target was a buoy with a corner reflector laid on the middle ground in the entrance to Jervis Bay. In addition, the performance of the Navigation Shaping Unit for missile dummy circuits was checked, by flying a Venom aircraft fitted with a missile guidance transponder on predetermined courses over STUART.

3. At 0700 on Thursday 1st H.M.A.S. KIMBLA entered Jervis Bay to recover the Moresby Target previously laid for STUART's computer predictor trials. This had proved to be unsatisfactory and a R.A.N.E.L. buoy target with corner reflector was laid in lieu.

4. At 0805 STUART sailed and carried out a ranging 903 run on the target which was successfully tracked out to 20,000 yards. This was followed by continuous runs throughout the day at speeds of 10 knots and 20 knots anchoring at 1730 in Jervis Bay.

5. At 0530 on Friday 2nd STUART sailed to rendezvous with the Trials Venom sixty miles off the coast. At 0705 identities were exchanged with H.M.A.S. MELBOURNE, Captain R.I. PEEK O.B.E., D.S.C., R.A.N., bound for Jervis Bay.

6. Once again the trial with the Venom aircraft was aborted this time because of radio defects in the aircraft, and the day was spent carrying out 180° turns at high speed to evaluate the stabilisation of the tracking aerial. This was successfully completed at 1600 and STUART proceeded to R.V. with H.M.S. TABARD at 1800.

7. From 1800 Friday 2nd until 0600 Saturday 3rd, STUART carried a simple CASEX A4 with the submarine. It was the first real experience all U.C. rates had with a submarine and proved to be good value.

8. At 0800 on Saturday 3rd, STUART again attempted to carry out the outstanding part of Trial N7/1 with the Venom trials aircraft, and after flying three twenty minute sorties the trial was completed satisfactorily. H.M.A.S. MELBOURNE was carrying out runs over the sound range in Jervis Bay and anchored at 1600. STUART returned to Jervis Bay anchoring at 1430.

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9. At 1830 I called on the Captain H.M.A.S. MELBOURNE Captain R.I. PEEK O.B.E., D.S.C., R.A.N.
10. On Sunday 4th, the Fleet R.C. and C of E Chaplains, The Reverend G.S. LAKE and W.T. WHEELDON conducted church services on board.
11. Weather conditions on Monday 5th caused the cancellation of flying from Nowra, which meant the postponement of the official aerial Photographs and the final N7/1 trial requirement, namely the interference trial. STUART finally sailed at 1800 for Williamstown.
12. At 1045 on Tuesday 6th STUART rendezvoused with the Dakota aircraft off CAPE EVERARD and completed the interference trial and Trial N7/1.
13. After an uneventful passage, STUART berthed at outer East Nelson Pier Williamstown, at 1300 on Wednesday 7th.
14. On Thursday 8th one dummy missile was embarked for launcher compatibility trials.
15. In order to encourage ships company interest in the IKARA project and to allow them to be properly briefed, I had previously arranged with the Department of Supply, for a short lecture by the Naval Research and Development Officer, IKARA, Commander G.A. BENNETT R.A.N., the Officer in Scientific Charge Mr. MURRAY EVANS and the Department of Supply Security Officer, followed by a screening of the film "THIS IS IKARA". This lecture took place in the WILLIAMSTOWN Dockyard canteen at 1400 on Thursday 8th and was well received by the ships company. From comments heard since, I believe it achieved its object.
16. At 1000 on Friday 9th August, the second of four U.K. groups visiting Australia to obtain information for a detailed design study which has to be completed to enable U.K.D.R.P.C. approval for fitting IKARA in Post Leander Class Frigates, visited STUART. The group consisted of Lieutenant Commander Williams, Project Officer for IKARA Launcher and Handling Equipment in R.N. Post Leander Class Frigates, Mr. Chapman, Chief Design Engineer, Armament Office, Vickers Armstrong, and Mr. Bevan, Senior Design Engineer, Armaments Office, Vickers Armstrong. The group briefly inspected the IKARA System Equipment and examined the Launcher in detail.
17. At 0700 on Sunday 11th, STUART commenced N.8. Electrical Explosives Hazard Trial, the aim of the trial, being to ascertain whether any of the ship's electrical equipment constituted an explosives hazard to the missile. The trial involving the switching on and off all electrical equipment continued throughout the day, and was successfully completed at 1930.
18. On Monday 12th, commencing at 0930, I and seven of my Officers and eight Chief Petty Officers and Petty Officers of the technical branches, were taken on a tour of three of the Melbourne establishments involved in the design and development of the IKARA System. Firstly we visited Aeronautical Research Laboratories which is the co-ordinating R & D Authority for the project. A.R.L. is also responsible for the design of the missile aerodynamics and control system, and the activities of the Systems Dynamics and Missile Design Groups were explained to us.

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19. We then visited the Commonwealth Aircraft Corporation where we saw the final assembly of the magazine and handling equipment and were impressed by what we saw. However, the concensus of opinion amongst the visitors was that maintenance, particularly of the many microswitches might prove to be a problem.

20. At the Government Aircraft Factory we were conducted around the Experimental workshop where final assembly and testing of F1 rounds to be fired in Trial N9/1 was taking place. These visits were of great value and were reciprocated by various representatives from Department of Supply to the STUART.

21. At 1005 on Monday 12th H.M.A.S. VOYAGER, Captain D.H. STEVENS, R.A.N., secured alongside Williamstown Dockyard and that evening I dined Captain STEVENS.

22. STUART's Australian Rules Football team got their second run of the season against LONSDALE No.2 team and recorded an easy victory.

23. STUART sailed at 1145 Tuesday 13th to rendezvous with H.M.S. TRUMP off CAPE EVERARD at 0800 on Wednesday 14th.

24. On joining TRUMP, STUART commenced a simple CASEX A4 to give the sonar operators practice in the use of Sonar Type 177. Water conditions proved good and maximum range on the submarine was 17,800 yards. On completion at 1800, TRUMP acted independently until the next morning.

25. At 0600 on Thursday 15th, STUART again rendezvoused with the submarine and commenced exercising. A case of acute appendicitis was reported at 0945 and, after surfacing the submarine, STUART proceeded at eighteen knots to Eden, to land the patient at 1215. The patient, L.M(E) V.J. MARTIN, was operated on during the afternoon at Bega District Hospital and his condition was reported to be satisfactory.

26. On completion STUART proceeded to sea, recommencing the CASEX at 1345. When the exercise finished at 1800, STUART and TRUMP proceeded to Twofold Bay, STUART anchoring at 1915.

27. On Friday 16th at 0645 STUART sailed from Twofold Bay and again commenced exercising with TRUMP - good ranges on both sonar sets being obtained during the day.

28. At 1515 an accident occurred in the tiller flat, where an Engine Room rating was jammed between the rudder crosshead and a vertical support and suffered a suspected fractured pelvis. The submarine was immediately surfaced, and STUART again proceeded to Twofold Bay where the patient was landed after anchoring at 1720. He was taken to Bega Hospital where X-rays showed that he had suffered bruising but no fracture. SUITABLE precautions have been taken to ensure that no repetition of this accident is possible.

29. A defect in the Main Feed Pump, which was temporarily repaired on board, but needed to be X-Rayed caused a change in programme, as I decided that at least forty eight hours were required at Williamstown Dockyard for the feed pump casing to be replaced if necessary.

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30. STUART and TRUMP sailed again at 0630 on Saturday 17th for the final day of CASEX. Water conditions and sonar ranges were average, but it was noted that when the ship crossed the 100 fathom line where the shelf falls away quickly, and the submarine was still on the shelf, bottom reflections when "pinging" inshore made it extremely difficult to maintain contact due to the large amount of noise and non submarine echoes present.

31. At 1900 STUART and TRUMP completed exercising and STUART sailed for Williamstown whilst TRUMP returned to Sydney.

32. The four days intensive basic 177 training provided very good experience for all concerned and it is considered that the operators now understand the problems associated with initial detection, classification, and tracking of a submarine and have confidence in the set. It would have been ideal to follow up this period with more advanced exercises.

33. At 1630 on Sunday 18th, STUART secured to Nelson Pier Williamstown to find that several signals including the LOGREQ had not been received by NOIC Victoria. It is understood that NOIC Victoria is raising this issue seperately.

34. Monday 19th and A.M. Tuesday 20th were spent fuelling and storing. The radiograph of the flange of the feed pump showed a requirement for extensive repair, but as time did not permit, temporary repairs were carried out.

35. At 1330 on Tuesday 20th STUART commenced loading three Type F1 missiles and one unboosted missile. Some twenty seven trials personnel from Navy and Department of Supply joined before sailing.

36. At 1400 on Tuesday 20th the third U.K. Assessment group visited STUART and were shown the IKARA System Equipment. This group, which is concerned with policy and drawing up a bilateral agreement between Australia and the U.K., consisted of Captain Caswell R.N., D.G.W.(N), M.O.A., Mr. P. Ward, Chief Engineer IKARA System Admiralty, Mr. J.G. Brown, D.G.W.(P), M.O.A., and Lieutenant Commander Hallett R.N., R.N. IKARA Project Officer (Designate) Australia.

37. On Wednesday 21st at 0800 STUART sailed from Williamstown for N.9. trial in the Fairfax Island area. The aim of this trial, the first firing at sea of the complete IKARA weapon system is to obtain information from a series of these firings intended to deliver up to three dummy torpedoes accurately at various target ranges and bearings.

38. After an uneventful fast passage to Sydney, STUART berthed at Chowder Bay for fuel on Thursday 22nd at 1700. After fuelling STUART sailed at 1815.

39. Good weather permitted a twenty knot passage and STUART arrived off Fairfax Island in the Bunker Group at 0730 Saturday 24th. Identities were exchanged with H.M.A.S. KIMBLA, Lieutenant Commander P.R. WOODS, R.A.N. H.M.A.S. AIR SPRITE, Lieutenant R. BURNS, R.A.N. came alongside to take off safe hand mail and provisions for KIMBLA. The third member of the support group a 56 foot ex R.A.A.F. Stores vessel, which should have arrived two days previously was held up at South Molle Island with engine trouble.

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40. At 0800 the Trials Dakota which was now based at Bundaberg, joined STUART and commenced the second half of the N/7 trial started earlier in the month at Jervis Bay.
41. A fault was found in the guidance equipment and the Dakota was sent back to Bundaberg to refuel and returned to STUART at 1030. With the arrival of the Dakota the trial continued and was successfully completed at 1430, STUART anchoring off Lady Musgrave Island at 1730.
42. During the afternoon a meeting was held in STUART which was attended by the Commanding Officers of KIMBLA, AIR SPRITE and Department of Supply Security Officer, Lieutenant Jamieson R.A.N.R. - KIMBLA reported that there had been two small pleasure craft in the area which had now moved on; but no more news had been received of the Tender.
43. Sunday 25th was spent at anchor, with the ships company enjoying the good weather and excellent fishing.
44. Dr. Rundle and Mr. MacCallum (O.I.C. Target Area) from Department of Supply came onboard and reported that all preparations on the Island were completed. They were then given instructions in communications and in balloon filling.
45. A full N.9. Firing Dress Rehearsal was carried out in the dog watches attended by KIMBLA, AIR SPRITE, Trials Personnel and Ships Officers - This was followed by a debriefing and a briefing of the Firing Plan for the following day.
46. At 1730 pre arming of the missile was commenced, which involves having complete Radio and Radar Silence, strict smoking restrictions aft and the clearing of the after mess deck of ratings.
47. No news had yet been heard of the Tender, and the Dakota was ordered to search along the intended track, but with no success.
48. At 0700 Monday 26th, STUART and AIR SPRITE sailed, STUART to her station for the pre-firing checks and AIR SPRITE to carry a search around the nearby Islands. KIMBLA sailed at 0800 to take up her holding station for the firing.
49. At 0800 the Trials Dakota joined and STUART commenced the Guidance and Telemetry checks. On completion of the checks the Dakota was detached to carry out a search to the North and East of the Target Area. In STUART, Radar 903 Tracking Alignment checks were being carried out followed by preparations for the Dummy Sequence, which entails going right through the firing Sequence with KIMBLA and Dakota in their assigned holding stations. On completion of the Dummy Sequence, the Dakota was again detached to carry out a search to the South and East. Preparations for the Firing Sequence were then commenced and the missile armed. With the preparations for firing completed, STUART went into the Firing Sequence, and a type F1 missile was fired at 1242 to overfly a target situated on the South West Sand Spit of Fairfax Island.
50. The missile was successfully boosted from the launcher, but after flying for thirty five seconds the missile was observed to lose stability and entered the sea approximately three and half thousand yards along the firing course.

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51. The TYPE F1 missile is fully controlled and commanded guided, with active fin guidance, prototype control system, torpedo deployment system and contains the MURAWA motor giving a maximum range of 25,000 yards.

52. STUART, KIMBLA and AIR SPRITE searched the area around the splash point which has a depth of thirty eight fathoms, but no sign of any debris was seen, and STUART anchored off Fairfax Island at 1730.

53. Later investigations of the camera and telemetry records indicated that there had been a failure of power from a thermal battery, causing the stabilizing gyro to topple, which caused the missile to spin into the sea.

54. At 0800 on Tuesday 27th the Dakota joined, and guidance and telemetry checks were carried out whilst STUART remained at anchor. The Dakota returning to Bundaberg at 0950. Pre-firing briefing for Wednesday was carried out at 1630.

55. At 0700 Wednesday 29th STUART sailed and at 0800 was in position to commence the Guidance and Telemetry Checks. The Dakota joined, but a fault developed in Radar Type 903 which necessitated postponing the firing by four and a half hours. The Dakota returned to Bundaberg and rejoined at 1230 when the Guidance and Telemetry checks were carried out successfully and STUART then commenced the necessary preparations for firing.

56. The tender finally joined at 0715 and was instructed to remain with KIMBLA in the holding position for firings.

57. At 1600 a missile was fired, but again unsuccessfully, as the missile after obeying the first target shift, operated the parachute ejection chute and crashed into the sea approximately four and half thousand yards along the firing course.

58. STUART, KIMBLA and AIR SPRITE searched the splash point area and recovered small portions of the wing and floatation bag - STUART anchoring off Fairfax Island at 1800. AIR SPRITE was sent to Bundaberg for mail and fuel.

59. Investigation again indicated a failure in the thermal battery supply.

60. Thursday 29th was to have been an assessment day with all units at anchor, but, as the trials personnel had discovered the cause of the two previous failures and now required three days in good working conditions to remedy this, and as the predicted weather, indicated strong winds and rising seas, I decided to evacuate the Island. All personnel were brought off by KIMBLA's dinghy with difficulty, and all equipment was left behind.

61. The fault discovered in the missile was in the pitch and roll amplifier and was caused by bad design and workmanship. Trials personnel began to carry out modifications and tests on the remaining missile.

62. At 1230 the Dakota joined and the low level telemetry runs were carried out the Dakota returning to Bundaberg at 1315.

63. An A.N.A. helicopter arrived at Bundaberg to assist in clearing the target area on Friday 30th but was not required.

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64. KIMBLA, AIR SPRITE and the Tender sailed p.m. for Bundaberg, STUART sailing at 1800 for the Percy Islands.

65. At 0800 Friday 30th, STUART anchored in a small bay off N.E. Percy Island in the Percy Island Group.

66. Saturday 31st was spent at anchor. Whilst Department of Supply Personnel investigated the fault in the missile, forty five of the ships company and fifteen of the Trials Team were landed with the ships diving team for a barbecue lunch on the deserted N.E. Percy Island.

67. The condition of the ship between decks is good although the non completion of A.B.C.D. markings, Tallies etc., makes realistic A.B.C.D. drills difficult. However, I am still concerned at the state of the weather decks which despite all efforts are still sub standard. With the present reduced complement, I am convinced that the condition of the ship will not be satisfactory and am awaiting clarification of how the problem of sleeping and feeding forty scientists is to be tackled before raising this issue separately.

68. As might be expected at this stage of the commission, some difficulty has been experienced in coping with the large number of recurring electrical and engineering defects in operational equipment. However as the maintainers gain experience, I anticipate these defects will be overcome more easily.

69. The health of the ships company has been good.

70. The conduct of the ships company has been satisfactory and the morale remains high.

I have the honour to be,

Sir,

Your obedient servant.

(Sgd) M. L. MOLONY  
(M.L. MOLONY.)  
COMMANDER R.A.N.  
CAPTAIN.

Enclosure.

Appendix A.

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