unclass/NPM



Cory 2 ET

FUR FILET 38 SERIAL NO 0006

MINISTRY OF DEFENCE

Main Building, Whitehall, London SWIA 2HB
Telephone (Direct Dialling) 01-218 7165

(Switchboard) 01-218 9000

From: ARM JAFFRAY CB., Deputy Under-Secretary of State (Navy)

Ref: 14/2/35(21)

14 January 1983

Commander-in-Chief Fleet Northwood Middlesex HA6 3HP

Sir

10,

BOARD OF INQUIRY - REPORT INTO THE LOSS OF HMS ARDENT

Reference: 520/241L dated 21 September 1982

- 1. I am commanded by the Admiralty Board of the Defence Council to inform you that they have taken note of your report and the Board of Inquiry proceedings forwarded under the reference.
- 2. The Admiralty Board made the following observations:
 - a. As in the loss of HMS COVENTRY the Inquiry highlights the vulnerability of ships against air attack when employed in-shore and armed with AAW not optimised for that situation. This incident has demonstrated the need for multiple channels of fire, capable of local control when under such attack.
 - b. Greater emphasis on training in the use of GSA 4 Emergency Modes willbe beneficial, but technical limitations suggest that it will be impossible to achieve reasonable results unless the LAS is replaced by a more suitable equipment. Consideration will be given to an Electro Optical sight incorporating a wide field of view for acquisition, a narrower field of view for tracking and a simple deflection device.
 - c. The observations on secondary armament are noted. It is not clear at present why 20 mm guns were not fitted before the ship left Ascension. There is no record of demand on DNADs for GPMGs before HMS ARDENT sailed; generally HM Ships did not begin to demand them until May when the LLAD policy was clarified. It is assumed that thereafter they were allocated to ships in accordance with an assessment of priorities.

- d. The need for improved education and more readily assimilated information on stability has been identified by other Boards of Inquiry and the DSAC Working Party. Improvements will be sought through the NBCD Committee structure; the Training Panel of that Committee will look at the training of XXXXXX in their task of informing the command of ship conditions (and the priority this has over weapon repair) as well as the ethics of rescue.
- 538 344
- e. Provision of an Alternative Damage Control HQ is a lesson also derived from experience in HMS SHEFFIELD and HMS COVENTRY; this, and the possibility of improved control from the bridge, is under investigation for new designs and existing ships.
- f. Factors leading to rapid spread of smoke and vulnerability of internal communications to damage have also been identified in other incidents; action is being taken to rectify these shortcomings in the Type 23 design, and as much improvement as possible will be made for ships under construction and in the Running Fleet.
- - h. The training aspects of the medical organisation will be examined by MDG(N) when all the CORPORATE medical reports have been analysed.
- 3. Your report and the proceedings have been taken into account in the "Lessons Learnt" studies in the Navy Department. The detailed lessons in both your report and the proceedings are also being follows up by the Staffs responsible. The Admiralty Board may wish to make further observations when all the lessons from Operate CORPORATE and from the Reports and Boards of Inquiry into other ship losses have been fully examined.

I am, Sir Your obedient Servant

amfortons.

Copy to: The Flag Officer First Flotilla

Internal: 1SL
2SL
CofN
CFS
VCNS
CERN
AUS(NS)
AUS(NP)
DGNMT
DGNPS
MDG(N)
DGFSP&S
DGST(N)
DG Ships
DGW(N)
DNW

HIS The : Plymouth ard of Inquiry chool

HIS DRAKE Devon

The Commander in Chief Fleet Northwood Middlesex HA6 3HP

6 August 1982

Sir

REPORT OF THE BOARD OF INQUIRY INTO THE LOSS OF HES ARDENT

- We have the honour to forward our report and findings on the loss of Her Majesty's Ship ARDENT as directed in your letter No 00520/3-X dated 11 June 1982.
- The Board convened at Devonport between 28 June and 6 August 1982. One hundred and twenty seven members of the Ship's Company were interviewed together with three persons from other authorities. Seventy six survivors were given medical interviews.
- 3. It became clear to the Board that, with some five weeks between the events and the Board first sitting, memories had faded, some stories had changed and a degree of mythology had developed. Much of this had resulted from the Ship's Company's time together homeward bound in SS CANBERRA and RES QUEEN ELIZABETH II where much was mixed and exaggerated. Nevertheless we are satisfied that we have established the great majority of the relevant facts, and that those we lack would not seriously affect our findings.
- AXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

PREPARATORY EVENTS

- HAS ARDENT sailed for the Falkland Islands and Operation CORPORATE from Devonport on 19 April 1982. Despite having only four days warning of deployment she was well stored and in good material and operational state. Her recent programme had been ideal preparation for an operational task and had included COST, a JMC and Exercise ALLOY EXPRESS with the Amphibious Group. She had had a few recent personnel changes and many of the Ship's Company had been onboard for two years.
- It is clear that the ship was highly respected by both Squadron and Flotilla staff and was well organised and well led. She had an enviable record in Fleet Gunnery and Missile Competitions, and her Flight had a recent FOF3 commendation for efficiency. The Ship's Company were confident of their ability and had their tails up.

unclass/NPM

STATE IN CONFIDENCE CONFIDENTIAL COVERING SECRET

COMPTENDED AL COVERING SECRET STARR-IN COMPTERMOR

- The passage South to Ascension Island was in company with HES ARGONAUT and RFAs REGENT and PLUMLEAF. Six days were spent in the vicinity of Ascension and ARDENT then headed South with CANBERRA and ELK to join the FEARLESS group on 10 liay.
- Throughout the passage period training and briefing were conducted accurate assessment of the prime threat and XXXX ship's future employment, and took particular pains to train xxx weapon crews in the Emergency modes of control, knowing this was likely to be required on the day. However, no fixed wing assets were made available at any time for realistic AAW drills.

The ship had attempted to acquire several General Purpose Machine Guns (CPMGs) before sailing from Devonport. In the event they acquired only one, fitting this on the GDP along with four LMGs in various parts of the ship.

OPERATIONS IN FALKLAND SOUND

- 10. On the 19/20 May the Amphibious Group approached the Falkland Islands from the East, preparatory to a landing in the San Carlos area of East Falkland on 21 May. HMS ARDENT's initial role was to carry out Naval Gunfire Support from Grantham Sound to the South of the landing area and she was to be the first ship of the group to enter Falkland Sound. At 2010Z on 20 May ARDENT detached from the Amphibious Group and made a high speed transit to Falkland Sound passing through the North entrance into the Sound at midnight. She then proceeded straight to her Fire Support Station in the South of Grantham Sound. Although prepared for all eventualities her arrival was uneventful.
- 11. Surprisingly there was no 'call for fire' before dawn at about 1100Z, but from then on ARDENT was involved in regular Naval Cunfire Support on Goose Green Airfield and other targets. This was extremely successful and at least three Pucara aircraft were damaged on the ground. These engagements continued until about 1600 and by 1700 it was confirmed there was no further NGS requirement in that area.
- 12. After dawn had brought in a fine, clear day with excellent visibility, the first air attacks on the Group by Argentine aircraft commenced. Most of them were concentrated on the ships near San Carlos, but ARDENT was approached on three occasions by pairs of Pucara aircraft and by the occasional Mirage on its way up the Sound towards the AOA. All turned away when engaged by ARDENT. At about 1600Z a lone Skyhawk emerged from over the land close to the South of the ship and dropped two bombs in the water, one on either side of ARDENT. These failed to explode. On this occasion only the port 20 mm opened up, the warning being so short, but in general at other times the **ΔΑΑΛΑΛΑΛΑΛΑΛΑΛΑΛΑΛΑΛΑΛΑΛΑΛΑΛΑΛΑΛΑ**

Naval Gunfire Support and AA defence were quickly and simply made using the flexibility of the GSA 4 system.

CONFIDENTIAL COVERENCE SECRET

unclass/NPM

MAJOR AIR ATTACKS ON HAS ARDENT

- 13. Having had confirmation of the completion of her Gunfire Support task at about 1700Z, ARDENT was told to 'split air attacks from the South' with HMS YARMOUTH. The origin of this order is obscure but ARDENT proceeded to a patrol line West of North West Island with YARMOUTH to the West of her.
- 14. Shortly after arrival in the new area at 1740Z a group of three A4 Skyhawks was sighted by ARDENT crossing Falkland Sound from the West. They circled the ship anti-clockwise at about two miles and then turned in to attack from the North East. This attack was pressed home vigorously from the port quarter, out of 4.5 gun arcs, and although 20 mm and LMCs blazed away, the Seacat, again in Emergency mode, failed to fire for no immediately obvious reasons.
- 15. The aircraft attacked with cannon and bombs, two of the bombs exploding in the Hangar area, one penetrating down through the After Switchboard and into the After Auxiliary Machinery Room without exploding, the others missing.
- 16. This attack caused major damage to the Hangar area, tossed the Seacat mounting onto the Flight Deck and severely damaged the Lynx helicopter. The After Switchboard was severely damaged with resultant loss of power including normal supplies to the 4.5 Mk 8 gun. There was flooding in the Dining Hall, Ship Control Centre and flat, and Galley areas due to fractured pipes, and a fire started in the starboard side of the Hangar. There were also several casualties.
- 13. Shortly after this as the ship headed North at about 1800Z a further attack of five A4 Skyhawks developed. They approached from either quarter and dropped a considerable number of normal and retard bombs of differing size. The ship was virtually defenceless and could not fend off this attack. Two to four bombs exploded in the ship aft of the Hangar and further unexploded bombs almost certainly penetrated into the ship from the Hangar area aft on the port side. Several bombs exploded in the water nearby and the ship whipped heavily. Again most of the bombs fell aft, but there was some damage to the plating on the starboard side of the Forward Auxiliary Machinery Room resulting in a minor leak.
- 19. The bombs aft had devastated the Dining Hall and Pain Shop area where there were many casualties and the steering failed, although the Tyne engines were still driving the ship and were under control.

POST DAMAGE ACTION

20. Although a full damage assessment had not been completed the ship's team had virtually got the fire and flooding of the first attack under control when the second attack arrived.

CONFIDENTIAL COVERING SECRET CHAFF-IN CONFIDENCE

unclass/NPM

whole after part of the Ship's Company then started to move to the Boat Deck.

S38 540

22. Communication between Bridge and Ship Control Centre was virtually non-existent at this time, and with the ship heading fast ashore(XXXXXX) XXXXXXX finally got orders through by zeroing the pitch lever setting. The last man out through the Ship Control Centre heard the order as he left. He re-entered and tripped the engines. The ship stopped less than a mile offshore and *XXXXXXXXXXX then ordered an anchor to be let go.

23.

538

24. Shortly after further limited discussion and with the ship now listing noticeably to starboard, xxxxxxxxxx made the decision to abandon ship, and

called HMS YARMOUTH alongside to take off XXXX Ship's Company.

THE SINKING OF HMS ARDENT

- 25. At about 1855Z XXXXXXXXXXXXXXXXXXXXXXX was the last to leave HDS ARDENT. and HMS YARMOUTH, after a short delay when she fouled herself on ARDENT's anchor cable, then sailed at speed to San Carlos Water. There the survivors were transferred to the SS CANBERRA. HMS BROADSWORD had also picked up one survivor and she accompanied the other ships to the AOA.
- 26. On the way a check was carried out of the Ship's Company, and once on CANBERRA it was confirmed that 22 were dead or missing.
- 27. Shortly after dark CANBERRA sailed from the AOA and the ARDENT Ship's Company were on their way home. ARDENT was still afloat and was seen by BROADSWORD steadily burning throughout the night with several major explosions onboard. After 0600Z on 22 May, when BROADSWORD left the scene, no other person can be found to have seen ARDENT afloat. It is believed that the ship sank at about 0630Z.
- 28. Divers have subsequently visited the wreck which is about 4 cables South West of North West Islands.

ANALYSIS

29. HES ARDENT was well prepared for the Falklands Operation. She was a well organised and efficient ship who had the right programme beforehand, had assessed the threat well and prepared as best she could to meet it. Her material state was high and personnel confident of their equipment and training.

- 30. In Falkland Sound, faced with short term warning of attack and Emergency mode of control of weapons, she repulsed various rather half-hearted air attacks, and at the same time carried out some excellent Naval Gunfire Support. However at the end of the day, in a somewhat exposed part of Falkland Sound, she succumbed to two determined multi-aircraft attacks which she had little chance of deflecting, and was seriously damaged. This damage would have been greater still had not many bombs failed to explode. The reason why Seacat failed to fire during the first of these attacks had not been fully substantiated.

540 544 xxxxxxxx₅₂

S40

<38



- In abandoning ship there were no major problems and it was relatively

- 43. The Board has reached the following principal conclusions:
 - a. HES ARDENT was well prepared, well stored and in good material state on arrival in the Falklands.
 - b. Her Ship's Company had achieved high standards in training and were confident in themselves and the ship.

 - e. The limitations on radar within Falkland Sound and the subsequent use of Emergency modes of Weapon control were expected by both XXXXXXXXXXXXXX the ship.
 - f. HMS ARDENT's weapon systems for defence against determined air attack close inshore were inadequate.
 - g. HAS ARDENT was hit by bombs as a result of two air attacks pressed home with determination.
 - h. Failure of the Seacat system to fire during the first major air attack on HLS ARDENT made her virtually defenceless.

 - 1. The decision by xxxxxxxxxxxxxxxxxxx to abandon ship, was justified on the evidence presented to him.

unclass/NPM

538 540 544

RECOMMENDATIONS

- 44. The Board make the following principal recommendations.
 - a. The GSA 4 emergency mode be significantly improved to allow a realistic chance of successful AA engagement.
 - b. The Type 21 frigate be fitted with additional short range weapon systems.
 - c. Further studies be undertaken to provide a basis for improving methods of preparing men for the stresses of action.
 - d. That an alternative Damage Control HQ(HQ2) be established and manned at Action Stations.

CONFIDENTIAL CONFIDENCE

We have the honour to be, Sir, Your obedient Servants

xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

unclass/NPM

STAFF IN CONFIDENCE

TICE OF

ANNEX A TO
REPORT OF HMS ARDENT BOT
DATED 6 AUGUST 1982

MMANDER-IN-CHIEF, FLEET

)RTHWOOD

MIDDLESEX HA6 3HP

Northwood 26161 Ext. 7157

TELEX 23139

00520/3.X

See Distribution

[(June 82

LOSS OF HMS ARDENT - BOARD OF INQUIRY

538 540 544

- 2. Specifically you should ascertain and identify by questioning those involved and other available witnesses the matters listed in Annex A. Although the matters in Annex A are significant, they are not intended to be exhaustive and all other areas of inquiry deemed pertinent should be scrutinized.
- 3. The Commanding Officer HMS ARDENT's preliminary report is at Annex B.
- 4. Should any information come to light which the President considers should be communicated urgently to me or to any member of my staff, such information is to be sent by any appropriate manner in anticipation of completion of the inquiry.
- 5. A list of those on board HMS ARDENT on 21 May 1982 is at Annex C.
- 6. The inquiry is to be conducted in accordance with the directions contained in QRRN Chapter 23, Appendix 38, and FLAGO 1619.
- 7. The report of the board is to be accompanied by minutes of evidence, or statements taken, and is to contain an expression of opinion on the degrees of adequacy of personnel, material and procedures.
- 8. The report is to be signed by each member of the board and is to be forwarded in original and unstapled form. The President is to deliver his report personally and brief me on the principal findings.
- 9. Shorthand writers will be detailed from the offices of the Commander-in-Chief Fleet, Flag Officer Plymouth and Flag Officer Portsmouth.

J D E FIELDHOUSE Admiral

unclass/NPM

AEST HOTES

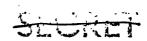
A - 1 of 8

5

unclass/NPM

FEETFHOTED GOV

COVERING



ANNEX A TO REPORT OF HMS ARDENT BOI DATED 6 AUGUST 1982

Annexes:

A. Specimen Matters for Investigation.

B. The Commanding Officer HMS ARDENT's Report dated 3 June 82.

C. List of Personnel on board HMS ARDENT on 21 May 82.

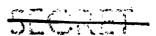
Distribution:

JΒ

unclass/NPM

HOTED





Copy El

ANNEX A TO CINCFLEET'S 00520/3.X DATED // JUNE 82

ANNEX A TO REPORT OF HMS ARDENT BOI DATED 6 AUGUST 1982

SPECIMEN MATTERS FOR INVESTIGATION

Operational

- 1. The Task Group Commander's assessment of the threat before the attack.
- 2. The Task Group Commander's intentions and policies in force at the time of the attack.
- 3. The Task Group communications plan before the attack.
- 4. The disposition of the Task Group.
- 5. The degree of readiness of the Task Group, and the ship, before, during, and after the attack.
- 6. The ship's OPDEF state immediately before the attack.
- 7. The manning states of operations teams, weapons, propulsion and generation systems, and the locations of personnel.
- 8. The damage control state and condition immediately before, and at the time of, the attack.
- 9. The nature and sequence of events before, during and after the attack.
- 10. The use of the ship's weapon systems and sensors.
- 11. The use of countermeasures, including chaff, against the attack.

Design/Maintenance

- 12. The adequacy of the Type 21's weapon and sensor fit and its ability to react to the threat.
- 13. The adequacy of the damage control and fire fighting organisation, procedures, equipment and training.
- 14. Any problems arising from the design and layout of Type 21 destroyers and their machinery and equipment, with particular regard to any hazardous materials.
- 15. The degree of readiness of, and confidence in, all weapons, sensors and communication equipments, including the degree to which standard operator checks and performance servicing logs were used.
- 16. Any shortcomings in machinery operating procedures.
- 17. The influence, if any, of the material state of the ship on events.

Environmental

- 18. The environmental conditions and observed effect on picture compilation.
- 19. Any evidence of stress affecting the ship's company before the attack.
- 20. Any evidence of efficiency being reduced because of seasickness, shortage of sleep, or length of time closed up at action and defence stations, or any other cause.

Training

- 21. The adequacy or otherwise of individual training and preparation of personnel.
- 22. The adequacy or otherwise of whole-ship training and preparation of personnel.

Administrative/Medical

- 23. Whether those trained in First Aid were adequate in numbers and in expertise.
- 24. Whether First Aid parties were closed up.
- 25. Whether emergency operating station was rigged.
- 26. Whether access to the Sick Bay and First Aid stations was affected by damage.
- 27. Whether any casualties were treated.
- 28. Whether any clinical diagnoses of causes of death were established.
- 29. Whether man-made fibres rather than cotton were worn by personnel, and whether these fibres contributed to burns.
- 30. Any evidence of toxic fumes arising from electrical cable insulation, plastics, cushions, etc.
- 31. Any evidence to assist towards the registration of deaths, and towards giving further information to next-of-kin, such as where each fatal casualty was last seen, his apparent physical condition at that time, and known or conjectured cause and circumstances of death.

Rescue and Salvage

- 32. Brief narrative of immediate rescue assistance by other ships to HMS ARDENT and her personnel.
- 33. Brief narrative of any attempt to take in tow; and eventual sinking.
- 34. Summary of any equipment, materials, etc salvaged from the ship before she sank.