

SECRET

C.S.

1942.

No.

S/1/42.

10

Rear Admiral, South America Division.

SUBJECT.

1941.

28th December.

FALKLAND ISLANDS DEFENCES -

Maintenance of, etc.,

Previous Paper.

MINUTES.

1-2. Letter from R.A., S.A.D. 28/12/41.
 3-10 " " " " 5/1/42.

Y/E
 Returned as directed.
 C. Lovell
 12/1/42.

Any remarks by G.C. Troops?
 C. Lovell
 12/1/42

D.C. Troops.
 Referred to you.
 C. Lovell
 13/1/42.

Hon Col Sec.
 The promise of technical assistance at the end of a phrase that specimens in marks welcome. I think a full list of

Subsequent Paper.

and equipment as the defenses are
unlikely to be equipped with other
than naval guns. Moreover there
is no accurate survey of the coast
defense area and until this is done
autocyclic and Defusion Ramp Funds
cannot be introduced.

There are very few of the required personnel
tests - such as ship tests etc that have not
been carried out by the Force in spite of
the complete absence of the usual tools.
The report indicates a clear appreciation
of the prevailing technical difficulties.

YH.
Submitted.

C. S. J. D.
for D.
13/1/42.

C. D. L. Col
GC Troops
13.1.42.

✓

(2)

Office of Rear Admiral Commanding
South America Division.

28th December 1941.

No. 0311B/1.

Your Excellency,

I have the honour to forward a copy of my letter No. 0311B of 28th December 1941 addressed to the Secretary of the Admiralty, the Commander in Chief South Atlantic and the Naval Officer in Charge, Falkland Islands, concerning the Falkland Islands defences.

I have the honour to be,

Your excellency's

obedient servant.

✓



REAR ADMIRAL.

His Excellency the Governor,
of the Falkland Islands,
Government House,
Port Stanley.

①

SECRET

Office of Rear Admiral Commanding
South America Division.

28th December 1941.

No. 3211B.

The Commander in Chief, South Atlantic.

(Copies to:- The Secretary of the Admiralty (No. 124/3311B)
The Naval Officer in Charge, Falkland Islands.)

FALKLAND ISLANDS DEFENCES.

With reference to my letter no. 3211B of 21st December 1941, the following further details of the situation at the Falkland Islands are submitted.

REQUIREMENTS

1. The maintenance of existing defences is not satisfactory and can only be carried out thoroughly during the rare visits of U.S. ships by ship's staff.

There is nobody in the Defence Force qualified in the maintenance of guns and mountings, of search lights, or of electrical equipment, nor are there any facilities for repair work. It is considered essential that one ordnance artificer and one C.P. (or equivalent R.A. or Army rank) should be drafted to Falkland Islands for maintenance of coast defence guns, and the guns of the local defence force (minesweepers). A small lathe and drilling machine are also considered necessary. Until this is done I shall not feel confident that the existing gun defences are kept efficient nor do I consider that the two modern 6" guns referred to in Admiralty message 2004 of 7th October 1941, could be maintained.

2. Much the same state exists with electrical maintenance except that there is one electrical artificer employed at the wireless station who is available to assist from time to time. This is not sufficient, however, for the amount of maintenance needed. It has been found impossible, for instance, to maintain the present hydrophone in an efficient condition. It is therefore considered that one electrical artificer should be sent to Falkland Islands for erection and maintenance work in all sections of the defences.

3. The lack of a technical officer to co-ordinate such small facilities as exist, to their full efficiency, is very apparent. Pending the arrival of the Engineer officer appointed to the Falkland Islands base, I have recommended to the Naval Officer in Charge that the Chief Engineer of HMA 541 (ASSTO) should be employed to carry out those duties.

EXISTING DEFENCES

4. Coast Defence. It must be appreciated that the existing defences are primitive from a coast defence point of view. There are no position finders, depression rangefinders, auto-sights, allowances for dip for height of mountings above sea level, nor could any improved system be operated by existing personnel. Extra men with previous experience will, in any case, be required when the new 6" guns arrive.

ADDITIONAL DEFENCES

5. Erection of new 6" guns. Although it was stated at the meeting of the Defence Committee that local resources could erect new 6" guns and mountings, I am not entirely satisfied that this can be carried out without other assistance.

The

The size and weight of 45° mountings compared to P.I.T. mountings does not seem to be fully appreciated, and no suitable lifting appliances are available. The only means of transport is by horses and wooden sleds. The risk of damage is considerable when this sort of work is carried out without proper equipment and skilled personnel.

8. Accommodation, Supply of Labour, Materials. The supply of labour and lack of accommodation was referred to in para. 14 of my letter no. 2512 of 25th December 1941, but it is desired to re-emphasise this vital point. The necessity to import all materials, and a sense of even the remotest vestige of timber must also be borne in mind when considering the problem of making defences.

GENERAL REMARKS

9. A further difficulty arises in the peculiar situation of the Officer Commanding Troops, who is appointed by the War Office, works for the Colonial Government, and for coast defence (as usual) and with ammunition supplied from naval sources.

This has led to great difficulties in the obtaining of spare parts, lubricants, etc. which it appears have only been obtained during visits of U.S. ships. I am recommending to His Excellency that he makes urgent demands for his requirements in this respect.

Both the Officer Commanding Troops and the Naval Officer in Charge are very largely dependent on U.S. ships visiting Port Stanley to enable them to keep the defences in an efficient state. This was ^{considered} satisfactory in peace time, but in war time, particularly as visits are so rare, the system is most unsatisfactory.

It is therefore hoped that the extra personnel asked for may be provided immediately when I would propose that all technical personnel should be grouped into a pool to work under the Base Engineer Officer for all maintenance work in connection with the defences.

10. The full reports of the technical officers of H.M.S. DISCOVERY, together with details of maintenance work done by ship's staff, and work still requiring to be done, have been forwarded to His Excellency the Governor of the Falkland Islands for information and for the assistance of those concerned.

11. A copy of this letter is being forwarded to His Excellency the Governor of the Falkland Islands.

(Sd.) F. H. Pegram

HEAD OFFICE.

10

SECRET

Office of Rear Admiral Commanding
South America Division.

5th January 1942.

✓
No.0311B.

Your Excellency,

I am much concerned at the lack of facilities and technical staff at the Falkland Islands, with the consequent adverse effect on the efficiency of the defences.

2. During my recent visit in H.M.S.BIRMINGHAM, I was able to appreciate the amount of good work under very adverse circumstances which has been done by all concerned at the Falkland Islands. The detailed reports to me of my technical officers, copies of which are enclosed, convince me however that none of those concerned with the defences has a fair opportunity of carrying out the work satisfactorily. It is hoped that these reports will prove of assistance to them. There is an obvious lack of technical advice, and so far as the gun defences are concerned, the impression gained was that the O.C.Troops and his Staff were not fully aware of the unsatisfactory state of maintenance of some of the defences.

This is not intended as any reflection on these officers for the nature of the defects was only apparent to a skilled ordnance workman. Clearly the standard of drill, external cleanliness of guns and other matters had reached a high degree.

It is also most unfortunate that so little progress has been made in erecting the D.E.L's.

3. Detailed statements of the work carried out by H.M.S.BIRMINGHAM are attached.

4. It is considered that in the past, the Falkland Islands have been dependent to much too great an extent on the visits of H.M.Ships for carrying out maintenance work on the defences. As visits are now very infrequent, and such assistance cannot be depended on, more satisfactory arrangements must be made.

5. It is requested that you will signal detailed requirements of spare parts, lubricants etc. for coast defence guns, and any other stores required by O.C.Troops.

6. Copies of this letter with enclosures are being forwarded to the O.C.Troops and Naval Officer-in-Charge, Falkland Islands.

I have the honour to be,

Your Excellency's obedient servant,


REAR ADMIRAL.

His Excellency,
The Governor of
The Falkland Islands,
Government House, Stanley, Falkland Islands.

ENCLOSURES :-

- | | | |
|-------|--------------|--------------------------------------|
| No.1. | Appendix "A" | Report by Squadron Gunnery Officer. |
| No.2. | Appendix "B" | Report by Squadron Torpedo Officer. |
| No.3. | Appendix "C" | Report by Squadron Engineer Officer. |

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APPENDIX "A".
(Report of Squadron Gunnery Officer).

FALKLAND ISLANDS DEFENCES-ORDNANCE.

NEW 6" SUPERCHARGED AMMUNITION.

400 charges (28lb.2oz.12drams) 400 6" c.r.h. projectiles range and deflection dials suitable for the ammunition, sent from U.K. for fixed defences, had not been received by the coast defence guns. Investigations showed that these quantities had been shipped from Naval Armament Depot, Upnor, without any particular indication of service for which intended, in s.s.Mandalay and Baltavia.

It is considered that this is definitely for the local defences and necessary action is being taken (O.C.A.S. Falkland Islands' No.1520z of 23rd November 1941 to D.A.S. (R) R.A.S.A.D).

POSITIONS OF MOUNTINGS.

600 feet
2. 4" Mounting at Mount Low (Signal Hill). This gun has been mounted by local resources in a most creditable manner; the gun, mounting and all equipment having to be hauled on skids by horses to a height of 100ft. The gun is in one of the best sites possible, covering Berkeley Sound, Port William and the approaches thereto. Range 10,200 yds.

3. 6" Mk.VII Mounting. Canopus. (Range 11,400yds).
(New Range 15,000yds). This gun is not well sited, being blanked by Tussac Island and the higher ground towards Cape Pembroke. O.C.Troops informed me that he intended to move it some 50yds to the northward to the highest point in the immediate vicinity, which will considerably improve its arc of fire. The Command post and rangefinder are also too low, and it is proposed that they should also be moved to a more satisfactory position. If possible a tower should be built to accommodate them.

4. 6" Mk.VII Mounting Sappers Hill. (Range 11,400yds).
(New Range 15,000yds). Although this gun is in quite a good position, its range at present limits its cover to Port Harriet and the inner end of Port William harbour only. Even with new ammunition, it will only cover Port William as far as Mengeary Light and slightly beyond Cape Pembroke, and will not cover the "bombardment area". It is proposed to shift this mounting to Canopus. (See para.8).

5. Charles Point. 12 Pdr.Battery. (Range 9,600yds.) One gun from Signal Hill and one from Arrow Point have been shifted to a position at Charles Point, which can cover the entrance to Port William and the examination anchorage. This is the examination battery.

The Command post and 9' Rangefinder are also well sited here.

6. Ordnance Point.3 Pdr.Battery. (Range 3,400yds). Two guns cover the inner part of Port William, to the west of Charles Point.

7. Fire Control Instruments. Vickers clocks and Dumaresq are in good condition. 12' FQ2 Rangefinders at Canopus and Sappers Hill satisfactory, except for pentagonal prisms of rangefinder at Sappers Hill, which require resilvering

9' FQ2 at Charles Point satisfactory. The 1 metre box range-finder at Ordnance Point appears to have one objective lens moved, and there is a co-incidence error. No rangefinder at Mount Low, (see para.8).

ADDITIONAL MOUNTINGS AND RE-SITING OF GUNS.

8. The 4" mounting at Mount Low has replaced one 12pdr. mounting, the latter being shifted to Charles Point. This is a great improvement. The 4" gun has a very good arc of fire.

If 2 additional 45° 6" mountings were added to Falkland Islands defences, it is strongly recommended that they should be mounted in place of the 4" mounting. This site is the most central from the defence point of view and 6" guns would cover Berkeley Sound and Port William, the approaches thereto and the bombardment area. One 4" gun in this position is a marked improvement on previous layout, but it has insufficient range to be really effective.

9. The re-siting of the 4" gun depends on the ability to block the channel into Port William between Tussac Island and Cape Pembroke. If this can be done, the gun should be sited at Charles Point or Arrow Point, to back up the 12pdr. battery. If the Channel cannot be blocked, it might have to be sited at Ordnance Point to cover this entrance.

10. With new 6" guns at Mount Low, the 6" Mk.VII at Sapper Hill would be moved to Canopus to form a 2-gun battery. It is suggested that it might be advantageous to carry out this change now, without waiting for the new guns. Port Harriet would still be covered and increased protection would be given to eastward of Cape Pembroke. To seaward south of Sapper Hill a loss of range of about 6,000 yds. would result.

11. The rangefinder from Sapper Hill would be moved to Mount Low, where there is at present no rangefinder. This rangefinder is optically in poor condition, the pentagonals requiring resilvering.

ADMINISTRATION.

12. The transport of provisions and stores is a matter of considerable difficulty, mainly due to the absence of roads and lack of transport facilities. Compared to the similar problems which existed in Orkney when increased defences of Scapa Flow were being considered, (a matter of which I have personal experience) the situation in Falkland Islands is much more difficult, although the numbers of men and guns involved is of course a mere fraction of those at Scapa. For example, stores for Mount Low and Charles Point have to be landed at Sparrow Cove by boat from Stanley, and carried by hand from there to the batteries. At times boat transport is impossible.

The shift of the Sapper Hill gun to Canopus would also simplify administrative problems.

13. It is recommended that Bren gun carriers should be supplied to the Falkland Islands Defence Force for the rapid transport of men to any threatened point of attack in emergency, and that the carriers should be used also for transport to the batteries and camps.

MAINTENANCE.

14. There is nobody in the Defence Force qualified in the maintenance of guns and mountings, nor facilities for repair work. Although guns were clean externally and superficially, there seems to be little appreciation of the vital importance of periodical examinations for efficient working.

For example:- No hauling back tackles are provided for

4" gun, so that lubrication of chase and cradle and the carrying out of slip tests is not possible. It is thought that the recoils of 6" guns have not been stripped and examined for about 2½ years, nor is it possible to do this with local resources.

There is a shortage of tools, lubricants and spare parts. At present visiting ships are depended on for providing facilities for maintenance and to a certain extent, of stores also. This is obviously very unsatisfactory.

15. I do not consider that the new 6" mountings should be sent to the Falkland Islands until provision is made for adequate maintenance. One Ordnance Artificer and one Q.O. with a small lathe, drill and necessary tools are considered essential. They could also assist in the maintenance of guns onboard mine-sweepers etc., which at present have nobody to carry out the necessary work.

16. Difficulty also arises in that O.C.Troops is appointed by the War Office, works for the Colonial Government, and has naval guns, with ammunition supplied from naval sources.

From whom should he order spares etc., and ask for assistance? Until there is some definite ruling on this point, he is dependent on the generosity of visiting ships, and the situation is far from satisfactory.

Clearly there could be greater co-operation between various Services and departments in the Falkland Islands, but where facilities are so marked by their absence, difficulties are bound to arise, and some more definite and satisfactory organisation seems essential.

A senior officer with technical experience is suggested as suitable for appointment to co-ordinate all work, civil and military and decide priorities.

17. It is suggested that O.C.Troops be asked to forward a detailed report of stores, spares and equipment required.

18. A detailed statement of work carried out by the ordnance staff of H.M.S.BIRMINGHAM is attached for information.

GENERAL REMARKS.

19. It was stated at the Defence Committee meeting that the proposed new 6" mountings could be landed, taken to the Mount Low site, and mounted by local resources.

I do not agree with this, as I feel that the size and weight of a 45° mounting compared to the P.III mounting is not appreciated, nor is there any lifting appliance suitable for the job. The guns and mountings might be got to the site, but the risk of damage is considerable. The only means of transport is by horses and wooden sled. Adequate arrangements for transporting and erecting guns and mountings, and the necessary personnel, are considered essential. It should also be borne in mind that there is practically no accommodation available for extra personnel.

20. It should be appreciated that the defences are primitive from a coast defence point of view. There are no position finders, depression rangefinders, auto-sights, allowances for height of mountings above sea level, tide allowance etc. nor could any improved system be operated without drafting ratings

experienced in coast defences. Much has been done recently to improve the defences, but at present they can hardly be considered satisfactory against modern raiders, and the state of the defences at present would hardly permit of fighting the guns at night.

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STATEMENT OF WORK CARRIED OUT BY ORDNANCE STAFF. H.M.S. BIRMINGHAM ON FIXED DEFENCES - FALKLAND ISLANDS NOVEMBER 1941.

Mount Low (Signal Hill) 4" Mk.IV S.A. on P.IX Mounting.

Elevating Gear. Was in very bad condition. Casting carrying the elevating handles, together with the handles and adjustable throw levers, was twisted in two places.

Firing Gear. Adjustable throw levers carrying the brass sleeve for the firing gear, spindle and trigger, bent and distorted.

Re-cocking Gear. Would not function due to being out of alignment, caused by incorrect insertion of packing piece.

The above gear was dismantled and taken on board for repair. Re-assembled.

Training Gear. Very stiff; excessive backlash; grinding of gears. Bandbrake seized up.

All dismantled; bandbrake freed. Oil bath of training gear was found to be half full of salt water. Cleaned; backlash eliminated, re-assembled.

Footstep bearing examined. Condition satisfactory.

Breech stripped and examined. Condition very good.

Open sight bar bent. Straightened and refitted.

Sights. Backlash removed. Adjusting bolts eased. Sight test carried out.

General Remarks.

Two rounds had previously been fired to test the mounting, but it is reported that the cylinders were not ejected in S.A. As no hauling back tackle has been supplied, slip test could not be carried out. It is probable that an adjustment should be made to the adjustable spigot.

All wiring for loading lights and night sights requires complete renewal.

The gear and mounting were in a very bad state, but are now in good condition and fit for firing, except for the doubt about run-out and ejection in S.A.

Charles Point. Two 12pdr. 12cwt. 9' FQ2 Rangefinder.

Rangefinder. Face piece removed, all optical parts accessible cleaned and replaced.

Connections made and fitted to end covers to enable desiccating gear to be used. Tube and end connections made and fitted in place of missing parts.

Various minor repairs to focussing lever, broken screws etc.

Now in very good condition.

No.1.Gun.

1. Stripped, cleaned and examined breech mechanism and spare.

2. Stripped and examined sights; re-assembled, carried out sight test.

3. Elevating gear cleaned and lubricated.

4. Plain portions of breech ring chamber and rifling very badly pitted, which is liable to cause stiff ejection of case.

No.2.Gun.

1. Stripped and examined sights; re-assembled, carried out sight test.

2. Elevating gear cleaned and lubricated.

3. Line error of 3 knots found by sight test, error removed.

4. Recoil cylinder leaking. Examination showed no packing existed. Defect remedied.

5. Chamber very good condition, rifling satisfactory. Clock and Dumaresq tested. Correct and in very good condition.

General remarks.

Battery now in very good condition and is the most efficient of the defences.

Ordnance Point. Two 3pdr.Hotchkiss. 1 metre base range-finder.

No.2721. Chamber has been badly pitted at one time, but repaired by fillings.

New sear springs fitted.

Lanyard Plate missing; demand should be made on R.N.A.D. Good condition.

No.2593. Crank pin bush and cocking arm worn; replacements should be demanded on R.N.A.D. Otherwise very good.

Rangefinder. Movement of one objective suspected; dockyard job. Some co-incidence error present.

Canopus 6" Mk.VII on P.III Mounting. 12' FQ2 Rangefinder. Clock and Dumaresq.

Training gear very stiff, excessive backlash, bandbrake seized. All defects made good.

Breech screw and breech ring threads were badly burred and out of profile; threads were dressed back and profile restored.

Trainers telescope stripped and cleaned.

Breech inspected and cleaned.

Backlash in deflection eliminated.

Chamber and rifling very good condition.

Defects still to be made good.

Elevation indicator.

Wooden plug in recoil cylinder to be replaced by screw.

Strip and examine recoils (last done February 1939).

General remarks.

Vent was not clean and rust was present.

Firing is by lanyard. Fitting of G.L.'s percussion firing gear was asked for; this was beyond ship's staff in the time available.

12' FQ2 in good condition except for trainers telescope which was dirty. This has been stripped and cleaned.

Clock and Dumaresq tested. In good condition.

Sappers Hill. 6" Mk.VII on P.III Mounting. 12' FQ2 range-finder Clock and Dumaresq.

Elevating and training gear; covers removed, gear greased. 6 knots backlash in sights caused by a missing washer, eliminated.

Breech screw and breech ring badly burred and out of profile; threads were dressed back and profile restored.

Layers telescope dirty optically; stripped and cleaned.

Defects still to be made good.

Strip and examine recoils.

FQ2 rangefinder, silvering on right pentagonal very bad, and that on left pentagonal is beginning to deteriorate. Last re-silvered at Devonport in 1932. Dockyard job.

General remarks.

Method of firing and proposed fitting of B.L. firing gear as for 6" at Canopus.

There is some pitting along the whole barrel at 6 o'clock; not serious.

Clock and Dumaresq. Tested. In good condition.

H.M.S.WILLIAM SCORESBY. 12pdr.12cwt.

Bore badly pitted half way along barrel at 6 o'clock.
Threads of breech ring and breech screw burred and out of profile.
Threads dressed back and profile restored. (H.M.S.CUMBERLAND is
believed to have reported this defect).

Striker was badly packed out, protrusion low. Proper
washer made and fitted, protrusion brought up to gauge.

Elevation buffer stripped and examined.

All training and elevation rollers, run out springs and
recoil in very good condition. Recoil required topping up.

Sights, Trainers very good.

Layers. Broken thumbscrew replaced.

Work to be done.

Tapered hole and pin on layers sight badly worn, requires
refitting and new taper pin.

Lubrication holes require tapping out and new lubricators
fitted. (Rotherham's Type L1, pattern 129). Ship should demand.

General Remarks.

Gun and mounting well looked after, but lack of attention
from ordnance staff point of view is obvious.

Drifter AFTERGLOW.

6pdr. being well looked after. A minor defect was remedied.

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APPENDIX "B".
(Report of Squadron Torpedo Officer).

FALKLAND ISLANDS DEFENCES - ELECTRICAL.

(1) Defence Electric Lights. Present position is that the engine and engine house have been erected at Charles Point but the engine is not yet completed, (fuel tank and various connections to be fitted). The concrete bed and the engine have been erected at Ordnance Point but no hut; engine has now been under a canvas cover for over a month. Spare engine is in the Governor's garage and remaining gear mostly in cases in the Defence Headquarters. It was reported at the Defence meeting that the switchboards had arrived in a badly damaged condition. They were inspected and two boards made up from the three supplied; it is considered that the report of the damage was exaggerated as these two boards were refitted in one afternoon by one E.A. and the work involved was very simple.

(2) Future action. Sufficient information is available for erection to be completed but no handbook on the lamp itself is available and this will be necessary before they can be put into operation.

Mr. Mercer, the Colonial Government Electrical Engineer originally undertook to erect the lamps. It is considered that he should have the assistance of the E.A. from the W/T station in this work as some of it is rather specialised and outside ordinary electrical practice. There is no one else in the colony capable of doing the job and instructions regarding the circuits are meagre in the extreme.

Two damaged voltmeters are now in H.M.S. BIRMINGHAM for repair.

None of the above factors should have prevented erection of the gear however, and in view of the fact that most of it has now been in the colony for about a year, it is unsatisfactory that so little progress has been made. As it is, Mr. Mercer and the E.A. have other work to do and it will be many months before the lamps are in operation.

(3) Hydrophones. Naval Officer-in-Charge reported that these were not working but that repairs were in hand and no assistance was required. In view of the "lash up" character of the hydrophone installations and the continuous record of repairs required particularly to tail cables on the beaches, it is suggested that these should be kept ashore and only laid when it is considered that danger from U-boats or E-boats exists. Laying can be done by H.M.S. WILLIAM SCORESBY. They are reported to be quite efficient when they do work.

(4) Minefield. The fact that this is dummy is now pretty well known in the Islands, and it was suggested that it might be a good thing to drop a depth charge in this position just to raise doubts. There was no opportunity to do this when BIRMINGHAM was in.

It was put to the Naval Officer-in-Charge and D.A.S.O. that if the need for a real minefield was urgent, depth charges laid on the bottom, primed with fitted T.N.T. charges and fired electrically from shore would prove very effective. Plans will be prepared in BIRMINGHAM and forwarded.

(5) Minesweeping. WILLIAM SCORESBY sweeps half the channel every day. ROYDUR is scarcely ever used now, and is badly in need of an electrical refit.

Mark III or later skids or a double L sweep is required. Present gear can deal with two magnetic mines only, one skid each.

(6) Night Sights for Shore Defence Batteries. Will be required when Defence Electric Lights are completed. A certain amount of gear is already supplied with the guns and could be made up with ship supplies on another visit. Four six-volt windcharger batteries are required at each gun battery to provide 20-volt supply. All gun batteries already possess a windcharger.

(7) Personnel. There appears to be a considerable waste of effort by the scattering of the available electrical personnel, E.A. at W/T Station, L.T.O. Coxswain of H.M.S. PURSUIVANT and S.T. in WILLIAM SCORESBY.

It is suggested that the torpedo ratings - and, when not required at the W/T Station, the E.A. - might be banded together as a central electrical repair party at the direct disposal of the Naval Officer-in-Charge.

There is no other possible justification in the retention of a Leading Seaman (L.T.O) as coxswain of PURSUIVANT in view of the pressing need for all higher torpedo ratings for new construction, and failing the above, he should be sent home forthwith; he has already been there since EXETER left and will soon be useless as an L.T.O. through lack of practice.

ELECTRICAL EQUIPMENT AS FITTED IN H.M. VESSELS AT FALKLAND ISLANDS.

ROYDUR. The dynamo in this ship is mechanically sound but is badly in need of an overhaul. There is a large accumulation of dirt and grease around the brush gear and the field coils, which is to be expected as it is an open ended machine.

It is recommended that the machine be thoroughly cleaned internally and that a thin metal dust cover be fitted over the brush gear.

The wiring of the electric lighting circuits, particularly those to the after end of the ship is defective, and needs re-wiring. At present nearly all the lighting circuits are fed by temporary leads run straight to a temporary switchboard, (fitted by BIRMINGHAM), and from thence to the lights. The switchboard itself also needs re-wiring.

AFTERGLOW. The electrical system is in a sound condition, but as in ROYDUR, the dynamo is an open ended machine which needs cleaning. It is recommended that here too, a light metal dust cover be fitted over the brush gear. A diesel generator is fitted in this ship for supplying current to an anti-magnetic mine sweep. Its position makes it difficult to start as the starting handle cannot be swung properly, and when running, the machine vibrates excessively; a possible solution to the above would be the re-siting of the machine.

WILLIAM SCORESBY. The electrical installation has been refitted recently and is in a sound condition.

A defect was reported on the echo sounding installation which, upon inspection, was found to be only a choked pipe in the water supply to the transmitter tank.

APPENDIX "C".

(Report of Squadron Engineer Officer).

FALKLAND ISLANDS DEFENCES - ENGINEERING.

The machinery of all plants and vessels inspected was found to be in a satisfactory condition.

2. The lack of a Technical Officer to co-ordinate the existing engineering facilities to their full efficiency is very apparent.

3. The Falkland Islands Company have a 12" gap lathe which is bedded down, but has no driving shafting. The Manager of the Falkland Islands Company has agreed to get this installed and the lathe should be available for use early in the New Year.

4. A close and friendly liaison appears to exist between the Naval Officer-in-Charge and the Manager of the Falkland Islands Company. The senior engine room ratings must be impressed with the fact that, although it is their duty to bring to the Naval Officer-in-Charge's notice any apparent excessive charge by the Falkland Islands Company, it is still more important to repair defects as they arise, asking assistance from Falkland Islands Company where necessary, and to keep their equipment in the highest possible state of efficiency.

5. I consider that if the Engineer Officer appointed to the Falkland Islands Base is not due to arrive for some months, either the Engineer Officer of the SAN CASTO or Paymaster Sub-Lieutenant Lloyd Hirst, who is a Railway Engineer by profession should be given a temporary appointment to carry out these duties.

6. If, in the opinion of the Naval Officer-in-Charge, or his technical advisers, the Falkland Islands Company appears to make excessive charges, I suggest that in future, all contracts be endorsed "subject to the approval of the Admiralty Costing Department". Nearly all contracts are placed in this manner in England today. Such a course would relieve the minds of the engine room personnel, and would remove any suspicion of profiteering by the Falkland Islands Company, thus satisfying all parties.

CONDITION OF MINESWEEPERS ATTACHED TO THE FALKLAND ISLANDS.

H.M.S. William Scoresby.

Machinery - has been generally maintained in good condition. Boiler was cleaned on 13th September 1941, and next due for cleaning 13th December 1941. Condenser has 55 tubes out of 2,000 plugged due to leakage. Tubes have not been renewed owing to crumbling of ferrules under pressure of the removal tool. Spare tubes, ferrules and gromets are carried. The H.P. Cylinder of the dynamo engine was removed for examination. Wear was considerable (up to 90/1000"), and cylinder was rebored by Ship's Staff, H.M.S. BIRMINGHAM, and a new piston with rings and spares manufactured and supplied. On a high speed emergency run in October 1941, a speed of 9.84 knots was maintained for 39 hours, and machinery ran quite satisfactorily. Divers from BIRMINGHAM examined and cleaned the circulating water inlets on 24th November 1941.

Hull and Fittings. Plates, frames, wood deck and fittings are in good condition. There are no spare hot plates and rings available for galley range; it is recommended that these should be ordered immediately. Rollers to Capstan are severely scored; new rollers have been ordered by ship's officers.

Masts. Masts, yards and fittings are in good condition. Port Forward bollards required "bedding" and securing; this was completed by artificers from H.M.S. BIRMINGHAM. H.M.S. WILLIAM SCORESBY is in good condition and seaworthy.

H.M.S. ROYDUR.

General condition of machinery satisfactory. A great deal of refitting work has been done on the boiler, which was in hand for cleaning, including the fitting of a new boiler door. Ship's staff of BIRMINGHAM undertook to test the boiler. Boiler withstood a satisfactory water pressure test to 270lbs. square inch. Main stop valve was leaking badly, this being expected, as valve seat is in bad condition, and there is no facility in the Falkland Islands to machine a valve of this size.

Main engine was reported in fair condition, with smaller journals filed away at sides to a considerable extent to counteract wear of journal working surfaces of rocking arms etc.

Hull and Fittings. In all accessible places internally, the plates, frames and steel decking were found to be in good condition. It was reported that on last occasion of docking, the hull plating externally was badly pitted. Guard rails and stanchions are badly distorted. Wood decking is in poor condition, requires renewal in places, and the whole requires caulking. Port after fairlead appears to have been fitted temporarily and has broken away; to secure permanently, a new base plate bevelled to fit waterway is required. Thickness of base plate - 20lbs approximately. Dimensions 2'x2 1/2".

Masts. Foremast, topmast, yard and fittings in good condition. Mainmast and fittings in good condition. After derrick, (used for hoisting sweeps), requires renewal, the centre portion being decayed.

The following work was carried out by BIRMINGHAM:-

Decks caulked in position causing discomfort to the crew.
Mess table repaired and altered to enable better accommodation for the crew.

Teak cut and planed to size supplied for renewal of door frame to after lobby.

H.M.S. ROYDUR is considered seaworthy.

H.M.S. AFTERGLOW.

Condition of machinery good. Slight knock is present in H.P. big end bearing, but the spare bearing has been re-metalled and bored by ship's staff of BIRMINGHAM and is now ready for fitting in place.

I.P. big end bearing had a slight knock and is in need of refitting.

Boiler bottom door requires two new dogs as these are badly corroded away due to constant damping of ashes. If material is available they could be forged by the Falkland Islands Company.

Two minor defects were reported (a) Deck winch exhaust pipe branch, brazing carried away, and (b) Forward capstan steam supply pipe leaking at joint. These defects are small, but should be remedied at an early date.

Hull and Fittings. Hull planking in good condition.

The major defects in structure are as follows:-

Fore peak. Port side. The 1st and 2nd main stringers below the foc's'le deck; dry rot has rendered them useless as regards strength members for the bow. Wood packing to gun platform requires renewal (decayed).

Boiler Room. Port side; three deck beams are badly fractured and require renewal. Coal bunkers were half full, therefore a thorough inspection was not possible, the inboard steel bulkheads are corroded, getting very thin in places but not yet holed.

Captain's Quarters. One of the main deck beams fractured in way of deck bolt; this could be stiffened by strapping with plating.

Crew Space Aft. Two frames to counter, and all deck beams (3 in no) require renewal. (dry rot). The whole wood decking requires caulking. Deck house and casing is severely pitted in many places. Corrosion is active under several layers of paint, also between laps of plating; much of the plating will require renewal.

Mast. The mast has been sheathed with light plating in way of chafe of derrick wires, depth of chafe could not be ascertained; otherwise the mast is sound. The trunnion fitting for Derrick is poor. It is recommended that the two bands be made into one solid fitting, e.g. being connected by vertical plates; welded.

The two sides of the Tabernacle are split. They have been tie-bolted but should be renewed at the first opportunity.

The whole of the wood lining in the ship is in poor condition.

It is considered that AFTERGLOW is serviceable except for very heavy weather.

GENERAL.

The Falkland Islands Company carry practically no spare plating and find it impossible to obtain.

It is recommended that a number of plates of 7.5 lbs. plating be supplied for the repairs to the deck house and casing.

It is thought that all the defects to hulls and fittings could be undertaken by the Falkland Islands Company.