

## FALKLAND ISLANDS.

# Harbour and Aviation Department Annual Report, 1954.

### General Review.

The main emphasis of the work of the department this year has again been centred on the operation of the *M.F.V. "Philomel"* and the *M.L. "Alert"* on the marine side, and the Beaver and Auster seaplanes on the aviation side. In both spheres the results obtained during the year have proved to be the most successful to date, and although it has been found impossible for any one section of the department to become self-supporting, it is felt that the benefit to the community at large amply justifies the loss sustained.

It is interesting to note that the staff of the whole department consists of only fourteen men at present, and throughout much of the period under review has, through leave and undermanning aboard the "*Philomel*" been reduced to twelve effectives. This comparatively small number have operated both vessels and aircraft, only one member of the department not being actually engaged in active operations - the clerk. From time to time even he has been called upon to act as co-pilot with the Beaver and more frequently to assist the crew of the "*Alert*" on long voyages for which the two man crew is inadequate.

The list of equipment operated by the department is formidable: there is the 75 ton *M.F.V. "Philomel"*, the 3 ton launch "*Alert*", two motor boats, three dinghies, three light beacons in the camp, three harbour lights, four navigational beacons, and, on the aviation side the Beaver and Auster seaplanes with their associated equipment. It is therefore hardly surprising that although the improvement in the operation of the equipment of most service to the public has been maintained, little has been done during the year to improve the efficiency of the other departmental duties, namely those of Registrar of Shipping, Receiver of Wrecks and Naval Reporting Officer. Favourable mention should however be made of the particularly capable work of the clerk in attending to the accounts of the "*Philomel*", "*Alert*" and the Air Service, where a great change for the better may be seen.

### M.F.V. "Philomel".

The year under review started with the "*Philomel*" but recently withdrawn from the coasting trade in order that Government operations should not embarrass the newly established private ventures the Inter-Coastal Trading Company and the "*Gambler*". This withdrawal gave the engineer an opportunity to overhaul the vessel's engines and auxiliaries, many vitally required spare parts at last being available in the Colony. This overhaul has subsequently proved its worth by nine months trouble-free operation of the "*Philomel*".

After this refit, which included alteration of the hold to form a mobile X-ray department, the vessel was controlled for three months by the medical department carrying out a T.B. survey of the settlements. This survey was most successfully completed, and indeed were it not for the availability of the "*Philomel*" for this task, it is difficult to visualise how this work could have been done either as expeditiously or economically. The actual cost involved to the Government in fuel, wages, victualling and sundry charges amounted to little more than £1,000 altogether, and by this means it was possible for over 800 persons to be examined in the camp by the Chest Specialist, 35 settlements in all being visited in a voyage of 1,522 miles.

At the completion of the survey it was hoped that the ship could be used exclusively for the maintenance and erection of the coastal lights which have, since the outbreak of the war, been sadly neglected. A start was made on this work, but before it could be completed the "*Philomel*" was again called upon to take part in the coasting trade when the Inter-Coastal Trading Company operating the "*Protector III*" suspended their traffic *sine die* at the end of September. Since that date it is satisfactory to note that the "*Philomel*" has been able to help the farmers considerably with coastal voyages, particularly in so far as Christmas mail deliveries were concerned, and has also been able to fit into some very full itineraries the maintenance of the coastal lights, only one of which now requires attention.

With a system of accounting which does not charge other Government departments for work carried out, the revenue figures for the year appear disappointing at first sight. But the only fair way to judge these now is to review the work carried out, and I feel confident that the majority of the settlers in the camp will confirm the vessel's utility to the Colony.

One last point of interest concerning the "*Philomel*": the vessel earned a poor reputation at one stage for the manner in which the crew (with a few exceptions) was constantly changing. These alterations in the crew naturally detracted from the efficiency of the vessel as a whole, and it is encouraging to note that under the present conditions of service only two changes have occurred during the past twelve months, one caused by dismissal. This new found stability is the more surprising in view of the high wages paid to seamen in certain other vessels, and the retention of a full crew of good quality by the Government may be attributed in large measure to the personal qualities of the Master of the "*Philomel*".

### M.L. "Alert".

Here again the work achieved during the twelve months has been most encouraging. The "*Alert*" was completely refitted by the department at the end of the previous year, and among the alterations was the installation of a new Lister diesel engine - the first production model to be fitted in a boat - and the improvement of the cockpit canopy. Both caused considerable controversy and have fortunately completely vindicated themselves. The new engine has given perfect service since its installation, which is much to the credit of the mechanic who undertook the fitting without external assistance. The spare parts for this engine are interchangeable with those for the "*Philomel's*" winch engine, making for economy in spares holdings.

The first major duty for the "*Alert*" after her refit was a survey of the entrance to Salvador Waters, which was successfully carried out by a Royal Naval party from *H.M.S. "St. Austell Bay"*. By using the chart produced the frigate was able to visit settlements in these waters shortly afterwards - the first time a warship has ventured through this confined channel for many years.

The "Alert" has also made many voyages to settlements in Berkeley Sound during the past year - generally in an effort to cut out some of the short distance passengers from the Air Service waiting list. In all over one hundred passengers have been carried in this way, not always in comfort, but at least more quickly than other means of transport would allow, and the fact that frequent visits by ministers of the Roman Catholic Church have been possible at Johnson's Harbour has been greatly appreciated by that settlement where nearly all the residents are of that persuasion.

#### Lights and Beacons.

As has been mentioned earlier a considerable effort has been made during the past year to square up the position regarding coastal lights - a situation which has required attention for a considerable time, but which, like much other maintenance work in the Colony, has had to give place to more urgent tasks. Belatedly this work has now been undertaken and the position is that all but one of the established lights and beacons are in operation and have received attention such as chipping and painting. If no further difficulty is experienced in maintaining these lights, the establishment of further coastal lights will be undertaken during the coming year provided this adequate maintenance can be assured.

#### The Air Service.

F.I.G.A.S. has now operated for six years, and during this time problems have arisen which tended to detract from the efficiency of the service provided to the public. It is only during the past twelve months that the solutions to many of these have been found, and it is now possible to say with confidence that the Air Service has passed from the experimental to the permanent stage. The late Governor, Sir Miles Clifford, stated early in 1954 "the Air Service has come to stay". So far as popular demand was concerned that assertion was as true then as it is today, but it must be admitted that in the minds of some of the more professional critics there were at the time doubts concerning the handling, servicing and flying of the aircraft which still required solution before the service could be regarded as permanent in the full sense of the word. These solutions have now been reached, or are at least in sight, and the public can look forward with confidence to a steadily improving Air Service.

Appendix 'A' to this report presents in tabular form the progress made since the inception of the service six years ago, and as can be seen, the results obtained since December 1953, have considerably exceeded those in any previous year and it is worth noting that whereas in the previous five years a total of more than one hundred passengers per month was only achieved twice, during the thirteen months December 1953 - December 1954 this figure has been reached eight times.

Examining the reasons for this rise in efficiency in detail it is found that on the operational side the utilisation of two aircraft simultaneously, better flight planning and to some extent early morning flying have been the main contributory factors. The training of the Harbour Master as a pilot has enabled the Beaver and the Auster to fly at the same time, and more than that, it has released the pilot from many comparatively unproductive flights such as mail dropping and 'of-the-route' medical calls. Unfortunately it is impossible to calculate exactly what difference there would have been in the final total had there been only one pilot available, but it can be confidently stated that there would have been a drop of at least 35% in the number of passengers carried. Tied in with aircraft utilisation is flight planning, to which more thought was given in the past year than previously, resulting in a better 'load/mileage flown' ratio. Some improvement is still necessary in this sphere and the subject is reviewed continuously in the light of widening experience. Early morning flying has to some extent increased the volume of traffic, although during the past year it was essentially only an experiment with the Auster to check the theory that the early morning weather was more suitable for flying operations. In all, early flights were made on sixty five days during 1954: none resulted in the aircraft becoming weatherbound, and on eighteen days flying was impossible later in the day. This experiment has now been extended to the Beaver, and although positive assertions are inadvisable on the meagre evidence available, it appears that it will prove most useful.

One retrograde step, if it may be called such, has occurred in the flying operations: this concerns the payload of the Beaver seaplane when compared with that of the Norseman. Strictly speaking the carrying capacity of the Beaver is only half that of the Norseman, so that in the same number of hours flying only half the number of passengers can be carried with the new aircraft. Fortunately this reduction is offset by the easier maintenance of the Beaver which has considerably increased its availability, and it must also be remembered that it was often impossible to utilise all the seats in the Norseman during a flight owing to the number of stops this would entail.

Improvement in the system of maintenance has also contributed to the achievements of the Air Service. Less time is now lost than ever before through breakdowns and lack of spare parts, although this will inevitably continue to happen as the cost of carrying complete spares would be prohibitive. Inspections of the Beaver and Auster are carried out now after 25 and 50 hours flying respectively and are rigidly adhered to in order to eliminate salt water corrosion. The use of lanoline to protect susceptible parts has proved invaluable, and after a slight amount of superficial corrosion soon after the Beaver was assembled, this problem has practically ceased to exist.

The Certificate of Airworthiness overhaul of both aircraft has been satisfactorily undertaken and that of the Beaver completed. As this involves both aircraft in turn being laid up for an appreciable period and the reasons are not always understood by the public, some explanation of the work involved is felt to be necessary in this report. In the United Kingdom, whose legislation in aeronautical matters is followed by the Colonial Empire, an annual overhaul of an aircraft is obligatory to ensure its compliance with the safety regulations. This overhaul requires an almost complete strip-down to the component parts, and the inspection is made, not only by the maintenance staff of the company concerned, but is checked by a qualified representative of the Air Registration Board, which is a Government department responsible for the constructional and maintenance regulations governing aircraft and also the licensing of ground staff and pilots in these subjects. It is outside the jurisdiction of, but works in close conjunction with, the Ministry of Transport and Civil Aviation. This independent check by a Government department safeguards against the unscrupulous operator neglecting essential repair work during the overhaul.

In this Colony no supervisory inspection is possible: for this reason the maintenance staff err, if error it can be called, on the side of safety and in cases of any doubt repair or replacement is effected.

And the fact that the pilots are on the spot to see for themselves the condition of the aircraft components does to some extent provide the independent check as there can be no one more interested in an aircraft's safety than the pilot who is flying it.

These annual overhauls will without doubt contribute greatly to the safety and operational life of the aircraft: without them the Norseman became unserviceable and a total loss after a mere three years during which it flew barely 750 hours. Ten years of life is not an over-ambitious target for the Beaver, during which it is hoped to fly at least 4,000 hours. When more adequate equipment is available in the Colony, these annual overhauls will be speeded up to some extent.

In addition to the normal routine operations of F.I.G.A.S. outlined above, one or two specialised items of work have been undertaken during the year and are worthy of brief mention: the Royal Naval survey of the entrance to Salvador Waters was greatly assisted by a mosaic of some thirty aerial photographs of the coastline taken from the Auster flying at 5,000 feet, and without these the ground party would have been involved in at least a fortnight's extra work to attain the same degree of accuracy. These photographs were taken after the party was established in Salvador Waters and their exact requirements were known, and after processing in Stanley proofs were available to the party in the field 48 hours later. A similar operation was when the Auster carried the manager of Fitzroy Farm on an inspection flight over the ditches used for draining the camp. The value of these ditches can best be appreciated by aerial observation, and it is not only the results to date that the farmer is able to evaluate, but aerial reconnaissance is useful for planning future ditching policy.

The personnel of the Air Service now consists of the Pilot, Engineer, Second Engineer and Coxswain while the Harbour Master and the Clerk also take part in the activities. Mr. Devrell completed his contract in September, his relief, Mr. Kerr, having arrived by the previous "*Fitzroy*" sailing. The relief was carried out smoothly without any undue interruption in the passenger services and Mr. Kerr has now settled down to his duties in the Colony with complete success. The Engineer has been placed in the permanent establishment (he was previously employed on contract) and his management of the maintenance work during the mechanic's seven months leave deserves considerable praise as extremely few flying days have been lost owing to inspections and breakdowns during the year.

Mr. Jones qualified for his engineer's licences ('A' & 'C') while on leave and has now been re-designated "Second Engineer". He is also on the permanent staff, so stability in the aircraft maintenance staff is assured for some years ahead. During his leave Mr. Jones also undertook a short welding course as it was considered desirable that one of the engineers at least should have qualifications in this subject.

Despite the failure of the apprenticeship scheme for an engineer the Government has now embarked upon a scheme to train a pilot for the Air Service from local aspirants. Past experience has proved that to obtain pilot replacements for F.I.G.A.S. is neither easy nor reliable. When the Air Service was started Mr. Spencer was obtained through the Crown Agents at a time when ex-service pilots with civil licences were finding it difficult to obtain posts in the United Kingdom since commercial flying had not then recovered from the chaos of war. By the time his three year contract had expired however, this position had radically altered and there was a growing shortage of commercial pilots in the United Kingdom. Despite attractive offers to renew his contract, Mr. Spencer left the Colony and his successor, Mr. Halls, could only be engaged for twelve months as the Crown Agents were unable to discover any pilot willing to except a longer term contract. Halls' failure here as a pilot due to medical unfitness is too well known to reiterate, and the Air Service remained virtually without a pilot until Mr. Devrell was obtained, and after a short seaplane conversion course in Norway, arrived out here. The available pilots were still strictly limited and Mr. Devrell also could only be persuaded to engage for twelve months, although he later extended his contract for a further twelve months.

A replacement for Mr. Devrell was not quite so difficult to obtain as the acute pilot shortage in Britain has been eased temporarily by the dismissal of 250 instructors employed by the civilian contract training establishments of the R.A.F., thus releasing this number of pilots onto the commercial market. Despite this temporary surplus, F.I.G.A.S. received only one suitable application for the final interview, and it should be remembered that the gross salary now offered is almost double that advertised when Mr. Spencer's services were obtained six years earlier.

From this it can be seen that the problem of pilot replacement is a very real one, which is liable to become even more acute in the future since the annual wastage of pilots in Britain exceeds the supply from the civil training establishments. A scheme was therefore drafted to train a Falkland Islander as a pilot, which had the following advantages:-

(a) by undertaking to train a local recruit the Air Service could engage the candidate on a contract for a considerably longer period than has proved possible with United Kingdom candidates. In fact, with his roots in the Colony there is an excellent chance of his remaining as a permanency and thus saving much anxiety about replacement;

(b) by establishing continuity in this way, disruption of the Service while a new pilot "feels his way" is eliminated, and it was also hoped that because he was brought up to endure the rather severe weather of the Colony a local recruit would prove less susceptible to the nerve strain of flying here than a pilot from the United Kingdom, all of whom in the past were adversely affected by this to a greater or lesser extent before the termination of their contract;

(c) the scheme accorded with the policy of training local recruits for senior Government posts.

(a) and (c) above are unquestionable: (b) remains to be proved by the success of the scheme now in hand. The cost to the Colony is negligible - the total additional expenditure necessary amounting to little more than £200 per annum for three years.

Little remains to be said about the Air Service: the reorganisation of the stores is now completed, and the accounting system is improved sufficiently to reach the standard required by the Auditor. Some useful modifications have been made to the installations during the year: a toilet for the use of the hangar staff and passengers has been provided at the hangar: petrol tanks are in the process of being sunk in the ground to the eastward of the slipway to obviate the dangerous necessity of storing high octane petrol in the hangar: with Royal Navy assistance many rocks have been blasted from the approach to the slipway, making it possible to be used at all states of the tide, although the final six feet of concrete still requires

attention. A further aid to slipping and unslipping has been the provision of waist-length waders which enable the beaching gear to be quickly put on even in the roughest weather without the ground crew getting soaked. A small electric power pump has been mounted in the hangar to provide quicker and better facilities for washing the aircraft with fresh water at the end of a days flying. A landrover has been provided for the use of the staff, but it is unfortunately not always appreciated that this is intended primarily to speed up actual flying operations and not to provide a public taxi service.

During the year the Senior Meteorological Officer and his staff have made a considerable effort to improve the forecasting services provided for the pilots which has been of great assistance in enabling the Air Service to utilise the maximum possible amount of flying weather. In particular, it is hoped that the experiment of having a trained observer with pilot balloon equipment stationed at Fox Bay may be continued, as this will enable early morning flying to extend further afield with safety.

Although this is a report of past activities, some mention should be made here concerning future policy as much time and thought has been given to this matter during the past year. Basically the Air Service is faced with the problem that the present demand for passages exceeds the facilities that can be offered by the existing staff and equipment, and even those services at present provided are carried out to the detriment of various other departmental duties.

To satisfy the present demand for passages, it is probable that two Beaver seaplanes will be required with possibly two full-time pilots and the Harbour Master acting as stand-in for leaves, sickness and other occasional duties. With this establishment it is believed that the service required by the public could be provided. The operating loss would be further increased by approximately £1,000 per annum.

However before any further extension of the existing service takes place, it would be necessary to assess more accurately the effect on the Air Service of two outside factors :-

- (a) the effect of the proposed camp tracks upon the demand for passages.
- (b) the effect of a private aircraft being operated.

JOHN HUCKLE.

*Harbour Master.*

APPENDIX 'A'.

	Passengers Carried	Revenue £	Flying Days
1948 (December only)	1	10	1
1949 First Quarter	1	10	2
Second Quarter	4	45	10
Third Quarter	0	0	0
Fourth Quarter	27	195	23
1949 Total	32	250	35
1950 First Quarter	90	450	42
Second Quarter	234	820	44
Third Quarter	254	1100	45
Fourth Quarter	169	670	47
1950 Total	747	3040	178
1951 First Quarter	156	730	47
Second Quarter	226	925	32
Third Quarter	235	800	33
Fourth Quarter	293	1200	38
1951 Total	910	3655	150
1952 First Quarter	90	315	19
Second Quarter	1	5	2
Third Quarter	45	195	23
Fourth Quarter	206	575	42
1952 Total	340	1090	84
1953 First Quarter	229	800	41
Second Quarter	117	450	30
Third Quarter	160	625	37
Fourth Quarter	236	905	35
1953 Total	742	2780	143
1954 First Quarter	398	1535	47
Second Quarter	323	1150	48
Third Quarter	313	1120	38
Fourth Quarter	260	985	36
1954 Total	1294	4790	169