

AUSTER NEWS

Published by AUSTER AIRCRAFT Limited
REARSBY AERODROME · LEICESTER · ENGLAND



Vol. 6 : No. 1



EQUIPMENT for AIRCRAFT

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A Light Aircraft Rescue Organisation?

IN ENGLAND as in many other countries ones peaceful existence is often given a jolt by the exercises organised by Civil Defence units who normally carry out their work in a very quiet and efficient way. It is during these tests that one appreciates the somewhat gigantic tasks that confront the serious minded Civil Defence planner. Let us not doubt that if another war should come the after effects in the form of damage to property and persons would require the attention of some highly organised body for the rescue and clearing up processes.

There is currently, talk of using helicopters for the evacuation of casualties from heavily damaged areas and for the transport of doctors and medical supplies. Who is going to pay for the helicopters is not mentioned which is rather convenient when the cost of these machines is set against the comparative pittance which is allotted to Civil Defence as a whole.

The argument for the use of helicopters is that after an atomic attack most ground-borne rescue aids would be paralysed due to the destruction of railways and roads. One thing however was not considered and that is the large number of light planes which could be brought into service very quickly. The main point in their favour is that they are at all times widely dispersed and never in city centres. This means that a surprise

attack would never be able to destroy all their bases nor all their numbers.

Speaking for the thousands of Austers scattered around the globe, many of these are entirely suitable for the fitting of stretcher equipment. Their take-off performance is such that there would be no need for special air-strips to be built for them to operate from. When the risk from radiation had lessened they could make use of Parks, Playing fields, or even wide roads. The former two are more to be relied upon as their open nature would prevent them from suffering to any great extent from the effects of blast or heat flash damage.

In addition, the natural versatility of Austers will allow them to be used for other emergency duties which may include, telephone cable laying, communications flying, aerial broadcasting, (instructions to survivors in radioactive areas), and of course the delivery of urgent medical supplies. Added to these, aerial reconnaissance would provide potential rescuers with the safest and quickest method of sizing up the situation.

There then is the basic theme of a system which for the want of development lays dormant at the feet of nearly every world government. The aircraft and pilots are there, and with some concerted planning would be available to serve their country in situations ranging from World war, to national disasters such as floods, and earthquakes.

JUST WHAT IS TOPDRESSING?

NEW ZEALAND can truly claim to have pioneered aerial top-dressing which is now becoming an essential part of the vast scheme to improve marginal land in that country.

Some 250 aircraft are engaged in this activity which consists of dropping superphosphate or similar material from heights varying between 50 and 250 feet. The ultimate effect is to increase the area, and raise the quality of grassland, thereby allowing sheep farmers to graze more sheep per acre than was ever possible before. Some experts say that aerial top-dressing (or fertilising) is capable of increasing New Zealand's meat and wool production by 50% in 10 years.

Most of the top-dressing is carried out over inferior land which is too hilly and rugged to permit ground-borne methods to be used. If it were not for the use of aircraft much of this land would remain undeveloped.

The average top-dressing flight lasts only about 3 to 4 minutes and is made from a spare paddock adjoining the area destined to be fertilised. In this relatively short time the pilot has taken off, flown to the top-dressing area, released the load of superphosphate and returned to the airstrip. Loading the phosphate is a highly organized operation timed to seconds, the object being of course to keep the aircraft airborne, for as long as phosphate is being dropped the unit is earning money.

The total time taken from touch-down to take-off including loading can be as little as 25 seconds! It involves if possible, landing downwind, and uphill, straight towards the loading area. This saves much time through the elimination of taxiing.

Whilst the aircraft is flying the loading crew fill the loading hopper which is normally attached to the

front of a lorry or tractor by hydraulically operated arms. It is lowered to receive its load of fertiliser then raised to a height sufficient to give clearance to the aircraft. When the aircraft has landed, turned into wind and stopped rolling, the loading vehicle moves forward and the phosphate is transferred to a hopper within the aircraft. The aircraft's engine is left running during this operation, and the pilot carries out his cockpit check ready for take-off which is made as soon as the loading vehicle pulls clear. The whole operation is then repeated and can involve the aircraft in some 230 separate flights in one day.

This brief description of aerial top-dressing illustrates the special nature of the work and serves to emphasize the need for aircraft to be designed for the job instead of being modified. At present the majority of the work is done using either obsolete aircraft or types that have been 'doctored' in an attempt to provide enough aircraft to meet the ever increasing demand from farmers for more top-dressing.

It is with these special requirements in mind that the Auster company has produced the Agricola—the first aircraft in the world to be designed from the outset as a top-dresser.

WE HEAR THAT . . .

.. A jet pilot flying at 700 m.p.h. travels 100 yards during a blink.

COVER PHOTO

Using an Auster Autocrat the Morton brothers of Bundoran station, Richmond, Queensland, show how they muster their sheep the modern way in Australia.

A Courier Mail photo

THE AUSTER AGRICOLA

. . . An aircraft with a future in farming

THE AGRICOLA has been produced after careful study by Auster designers of the exact operational requirements of scores of topdressing * (see page 2) units in New Zealand. Backed by 10 years experience with previous Auster agricultural planes, they have evolved an aircraft combining an excellent performance with high load capabilities and exceptional measures for pilot safety.

An ability to perform topdressing economically with the maximum safety, stems from the incorporation of many features unique to the Agricola. New phosphate resistant paints and dust proof "sealed in" airframe units, lead to a prolonged operational life. Pilots will find its cockpit layout

pleasingly simple—and consistent with the aircraft's duties. Only the most essential instruments and equipment are fitted. Non-tiring, power assisted hopper and flap controls plus a superb field of vision lead to improved pilot efficiency—and safer flying with fewer accidents.

Following Auster tradition the Agricola is not limited to a single role and restricted earning capacity. Alternative duties can include spraying, fence dropping, aerial baiting and light freighting.

The overall simplicity of the Agricola's construction provides an unusually high degree of accessibility. Provision for service engineers to carry out on-the-spot inspection and mainten-



*The functional lines of the Agricola are apparent in this take-off view.
(*Flight Photograph)*

ance will mean more time in the air which is of paramount importance to topdressing units.

Tubular Steel Fuselage

The Agricola's fuselage is built from welded tubular steel and for ease of repair the rear section is fabric covered. The hopper filling trunk is positioned behind the pilot ensuring that no dust is blown onto the windscreen even though the engine is running. Aft of the trunk is a two-seat compartment this is provided to allow two ground operators to be flown to the airstrip selected for topdressing operations,—or for other occasional passengers. During normal operations this seat would be unoccupied.

With conventional aircraft modified to perform top-dressing, dust finds its way into the rear of the fuselage eventually making the aircraft tail heavy and dangerous to fly. In the Agricola the fuselage aft of the rear passenger compartment is completely sealed off. To counter any changes in pressure or humidity "Vokes" filters are fitted into the surface of the fabric.

The flying control cables to the tail unit are passed along the *outside* of the fuselage in which position they are easily inspected. To resist corrosion a tough nylon covering will be applied to these cables on production aircraft. Ample provision is made for servicing—the entire front fuselage forward of the cockpit may be uncovered in minutes through the use of quick release metal panels. The fuselage structure ends immediately in front of the cockpit where a stainless steel firewall is positioned.

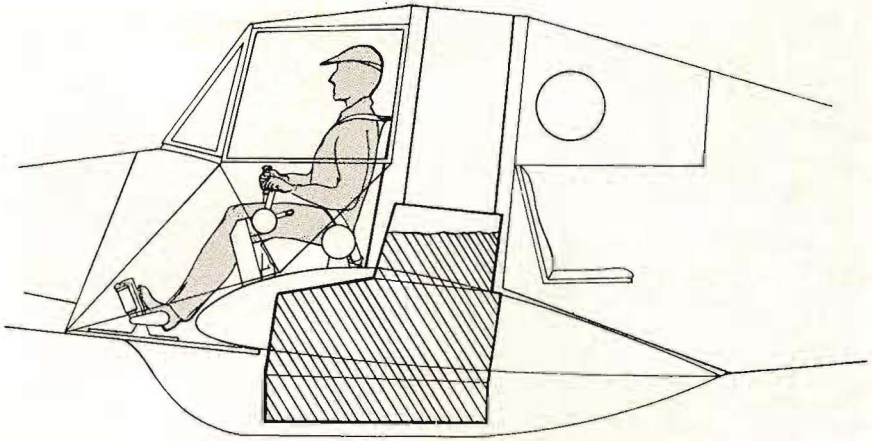
Safety Features

The very nature of topdressing work demands a structure around the pilot capable of withstanding high crash loads. The cockpit therefore has a tough structure designed to give the pilot the maximum protection, espec-

over. For greater strength the pilot's seat is attached to the wing centre section and also to the overturn structure. A heavy shoulder harness affording extra protection is made of a material resistant to the corrosive effects of phosphate.

Visibility from the cockpit is excellent. The top cowl line of the nose is sloped downward away from the windscreen providing an unimpaired forward view. Even when the aircraft is in the tail down position, the nose remains horizontal greatly reducing the risk of taxiing accidents. Permanent clear vision is ensured through the fitting of 'Triplex' panels in the windscreen—to resist the scratching caused when cleaning off phosphate. The remaining transparent panels are of simple flat sheets of 'perspex,' thus, no expensive moulded canopies need be held as spares. Sliding panels are provided to give controlled ventilation in flight as well as improved visibility in bad weather. If desired, the aircraft may be flown with the entire canopy removed. Once the pilot's canopy is closed the cockpit is completely sealed against the ingress of any super-phosphate spilt whilst loading.

In keeping with the overall simplicity of the aircraft, the instrument panel contains only the most essential instruments—an engine speed indicator, altimeter, oil pressure gauge, oil temperature gauge, compass, ignition switches and two air speed indicators. Duplication of the last instrument is intended as an aid to safe flying,—one A.S.I. is positioned at each end of the instrument panel in which position they are easily referred to during turns on the approach to land. The instrument panel is set as far forward and as low as possible to reduce the possibility of the pilot striking his head against it in the event of a severe crash-landing. Further protection is given by a thick sponge-rubber pad on the panel itself. The



In the event of a crash landing with a full hopper, the load can move forward with little risk of pilot injury.

throttle, trim, flap, and hopper operating controls are mounted within easy reach of the pilot on his left hand side. A stick type control column is fitted. The rudder pedals are adjustable for reach and incorporate toe operated hydraulic brakes.

Hopper Below the Pilot

Months before the Agricola first flew flight dropping trials were carried out with various types of hoppers fitted in the Auster Company's Ambulance/Freighter aircraft. Pilots' and observers' reports were then studied to select the most efficient hopper shape and this has been built into the Agricola. Of $\frac{3}{4}$ ton (1,680 lbs.) capacity, the hopper is set well below the pilot to afford him ample protection in the event of a crash. Pilot fatigue is lessened by the hydraulic actuation of the hopper doors which can pass up to 8 inch lumps. Phosphate filling can be accomplished in seconds. A loading operator can use the low wing as a walkway and guide the loading funnel quickly into position above the eighteen inch diameter filling trunk. In emergencies the entire phosphate load can be dumped in five seconds. Hopper life is lengthened

through the stainless steel interior lining.

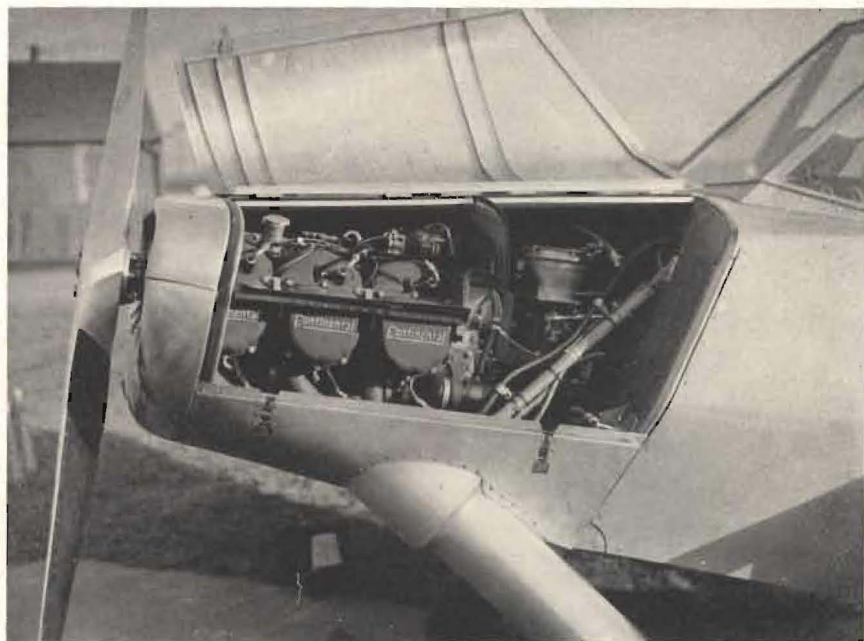
Low Wing, All-metal Structure

Many factors appealing to operators were considered when the choice of wing position was made. With 14 years of high wing experience behind them, Auster designers selected a low wing giving these advantages for the specialist's agricultural aircraft.

- * Ease of hopper filling (operator can jump onto wing to guide filling trunk)
- * An undercarriage of very wide track.
- * Excellent visibility during contour flying.
- * Easy filling and cleaning of spray tanks.
- * Quick refuelling.
- * Simplified installation of spray gear.
- * Ground cushion effect for take-off and landing.

The wing structure is all-metal with a fabric covering for ease of repair aft of the front spar. Split type flaps are fitted, these are metal covered and hydraulically operated. A simple hydraulic system was chosen in preference to a mechanical linkage in order to ease the pilot's job during continuous take-offs and landings.

A replaceable wing tip is fitted so



For easy maintenance hinged cowls are provided on the Agricola. Once the cowl has been raised to this position it can be completely detached by sliding it forwards.

that in the unlikely event of a wing dropping and striking the ground during landing, the damage may be restricted to this part. Built into the centre section are the two spray tanks which have a total capacity of 168 Imp. (202 U.S.) gallons. Provision is made for under wing pressure filling of the tanks and large access panels make for easy inspection and removal. To combat costly corrosion, the wings and ailerons are sealed preventing contamination by superphosphate, as in the case of the fuselage, breathers are fitted to counter atmospheric pressure changes.

The wide track (14 ft. 4 in.) undercarriage is hydraulically damped—absorption capacity is equal to that of Naval deck landing fighters! Low pressure tyres enable the aircraft to operate from soft ground with comparative ease.

Cost cutting maintenance features include: a two bolt fixing for each undercarriage leg, interchangeable main legs and wheels, and the provision of automobile type valves in the hydraulic damping system permitting topping up of the air pressures with a car type pump.

Hydraulic disc type brakes are fitted operated from cylinders connected to the rudder pedals. Effective brakes and a wide track greatly simplify taxiing and parking.

A hydraulic unit also provides shock absorption for the tail wheel unit. Easy maintenance is also prominent here for most of the leg is permanently exposed. A simple two bolt fixing provides for quick detachment when required. The tail wheel is a light weight pneumatic tyre of 10 inch diameter, which is an ample size to cope with the rough surfaces of airstrips.

The unit is steerable through the rudder pedals and also fully castoring. To ease ground handling the steering mechanism is provided with an over riding device which automatically disconnects when the aircraft is man-handled.

American Engine

The choice of the 6 cylinder 240 h.p. Continental motor will be an advantage to operators of the Agricola. As a current production engine the supply of spares for the entire life of the aircraft is assured. An electric starter is fitted, connected to a standard ground starter socket. For reasons of weight saving and simplicity no battery is fitted, it is expected that power for engine starting will be taken from a ground truck. Added safety comes from the complete lack of an electrical system. For easy servicing the engine can be exposed in seconds as large one-piece hinged cowls are provided for this purpose.

Engine cooling has been made entirely automatic by Auster technicians. Long before the aircraft first flew, a special test bed had been built enabling extensive ground tests to be carried out on a complete power unit. An Auster designed "jet-cooling" system was tested and found to be very effective. This consists of two large ducts one on each side of the engine bay into which are fed the gases from the exhaust pipes. The effect is to draw engine cooling air through the ducts, cooling therefore remains proportional to the amount of power being given by the engine. This system is particularly effective during idling on the ground (during phosphate loading for instance) when no ram air is forthcoming for cooling purposes.

No oil tank is required as the Continental motor is a wet sump type with a 12 (U.S.) quart capacity, an oil cooler is positioned in the main engine air intake. The engine mount is of welded

steel tube and incorporates 5 degrees of offset to minimise swing developing during take-off. To allow for re-drilling and bushing, should wear develop in service, ample metal is left around the attachments to the fuselage.

The fuel capacity is 25 Imp. (30 U.S.) gallons, this carried in a flexible crash-proof tank in the port wing root. When filled to capacity the Agricola has a useful range of 260 miles cruising at 100 m.p.h.

The Agricola is already in production to accommodate an order for 15 aircraft received from the Company's New Zealand agent,—The British Aeroplane Co., Ltd. (N.Z.).

PERFORMANCE

(At 3250 lb. A.U.W., I.S.A. Conditions.
Sea Level.)

Take-off run, short grass ..	170 yds.
Take-off distance to clear 20 ft.	290 yds.
Landing distance from 20 ft.	315 yds.
Landing run	175 yds.
Initial rate of climb, flaps up	790 ft/min.
Speed for best rate of climb	80 m.p.h.
Service ceiling	15,300 ft.
Normal cruise speed, 2400 R.P.M.	111 m.p.h.
Range at normal cruise	212 st. miles
Economic cruise speed, 2200 R.P.M., 3000 ft.	95 m.p.h., T.A.S.
Range at economic cruise	260 st. miles
Maximum level cruise	122 m.p.h.
Stalling speed, flaps up	57 m.p.h.
Stalling speed, flaps down.	53 m.p.h.

Overload case, 3810 lb. A.U.W.

Take-off run, short grass.	250 yds.
Take-off distance to clear 20 ft.	420 yds.
Initial rate of climb.	600 ft./min.

Hopper empty, 2130 lb. A.U.W.

Landing distance from 20 ft.	225 yds.
Landing run.	115 yds.
Stalling speed, flaps down.	44 m.p.h.

ELSTREE FLYING CLUB

. . . a potted history

by DAVID F. OGILVY, C.F.I./Manager

THE LAST WELLINGTON BOMBER to be repaired by Fairfield Aviation Limited, for the Royal Air Force had hardly left their workshops at Elstree Aerodrome before a new firm moved in under the name of London Aero and Motor Services, who took delivery of their first machine, a new Auster Autocrat, quite early in 1946. Not many months passed before they were in full operation as the United Services Flying Club, taking delivery of two more Autocrats and a Proctor 5.

In actual practice, the history of the aerodrome itself dates to pre-war days, when Lord Aldenham used a portion of the present site for his private aeroplane and an instructor flew a Moth over from Hanworth on Saturdays and Sundays to cater for the smattering of pupils then resident in the Elstree

district. A relic of this rather pleasantly haphazard existence still remains in a brace of small hangars positioned just inside the present gate. Throughout the war, when initially Hurricanes and Spitfires were nursed for their Battle of Britain wounds and later Lysanders and Wellingtons received similar treatment, an already dilapidated Foster-Wikner Wicko became more and more so as the years took toll of its fabric.

However, we are concerned more with the comparatively recent events than those of camouflage and guns, for a flying club must essentially be peaceful in intent and is certainly becoming further and further divorced from the peculiar complexities of modern military aviation. Now that the old familiar Elementary Flying Training School with its Tiger Moths



The Club lounge and dining room.



Left to Right: Captain W. H. Bailey (Commercial Pilot and Instructor), Mr. A. Noyes (Instructor), Mr. D. F. Ogilvy (C.F.I. and Manager), holding the Lennox Boyd Trophy for efficiency, 1954, Mr. G. Hilder (Club Secretary).

and Magisters has given way to a different school of thought of V.P. propellers, full panels and electrical systems, with jet pipes and Machmeters well on the way, the flying club has become the sole medium for instilling the more pure aspects of aviation into new blood.

Elstree itself certainly suffered the difficulties met with by the majority of clubs and schools in the unbalanced times of the late forties and very early fifties, and the United Services Flying Club was unable to survive more than the odd two years or so until the bloated pockets caused by post-war gratuities burst with a big bang and life returned to something slightly nearer reality.

However, the aerodrome was never long without some form of instructional facilities, and no fewer than four entirely separate bodies or organisations tried their hands at operating flying clubs, until early in 1952 when the Air Schools Group moved in and opened the

present Elstree Flying Club as a subsidiary of Wolverhampton Aviation Limited.

With a company having considerable experience in the operation of flying schools for the R.A.F. and for civilians, both at Derby and Wolverhampton, the Elstree situation became more stable and merely introduced a third party into the circle within which aircraft and facilities could be borrowed, exchanged or stolen according to taste and requirements. Gradually the entire fleet of twenty aircraft, comprising seven Auster Autocrats, eight Hawk Trainers and two Geminis together with three Rapides used for charter and scheduled services, took on the light and dark blue coats now so well associated with the organisation's activities.

With London virtually on the doorstep it was obvious that Elstree would be a potential source of private flying and before long the two Autocrats initially allocated to the group's new

baby were joined by one then two Hawks, then a third Autocrat and so on until today seven aeroplanes are on the resident strength. This expansion created a form of (semi!) friendly rivalry, for the company "posted" its available aeroplanes to wherever the demand was greatest, and soon a Peter and Paul arrangement (rather than agreement!) was established.

From the flying angle, this naturally increased proportionately too, for in 1952 only 600 hours were flown at Elstree, whilst 1953 boasted 2,360 and by the time 1955 was out 3,180 hours had been completed, up to that time using a maximum of five aircraft. The Staff increased from one instructor to the present number of four, while it is generally agreed now that the aeroplane/instructor level has reached a virtual saturation figure if operations are to be maintained at a practically-balanced level. This does not mean, however, that available flying hours have reached a maximum, for we intend never to be satisfied and hope to achieve a slightly higher figure each year!

Now for a few remarks about some members of the Staff, perhaps the first of whom that we should mention being Ron Paine, without whom the existing Elstree Club would never have been formed. In addition to his normal activities as technical director of the operating company, he acts largely as liaison between headquarters at Derby and the club at Elstree.

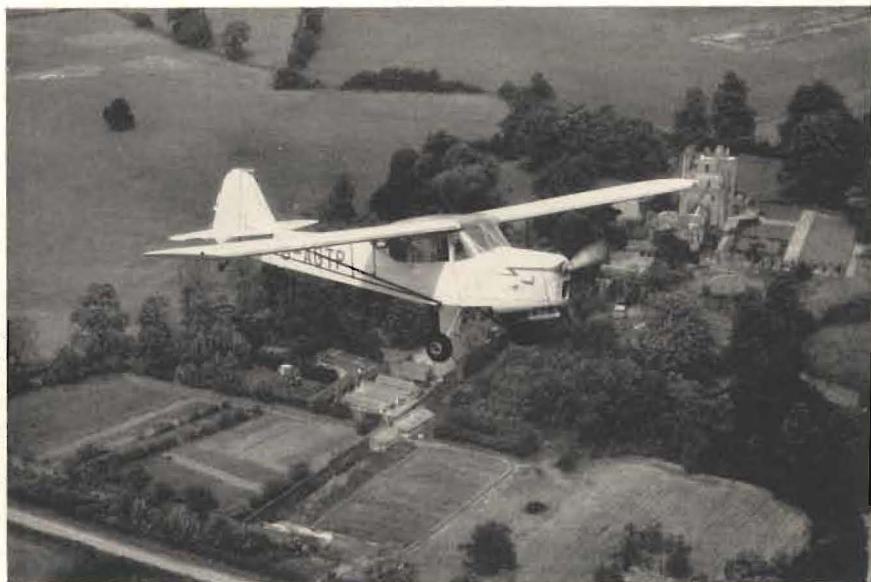
The writer, although nominally C.F.I. and Manager, alternates between the two bases on various duties and in his frequent absence the school is run under Bill Bailey who, before holding his present position, was an instructor at the Civil operated R.A.F. Basic Flying School at Desford. Also, using the resident Gemini and occasionally a Rapide, he is in charge of all charter activities undertaken from Elstree. The other two instructors are

Bob Moffat, who spent many of the war years on the Staff of a Flying Instructors School, and Jim Vernon who came south after a brief stay at Blackpool.

In addition to the permanent staff, we have always welcomed the services of qualified instructors in a part time capacity, for they enable the regulars to have an occasional summer evening 'off' as well as easing the pressure that otherwise exists at weekends. For eighteen months Dereck Pickup, a banker by profession but not by nature, was with us every Saturday and Sunday, but unfortunately he departed to the Scilly Isles (about which, a spot later on) to the call of his employers. Strangely enough our present part-timer, Peter Hastings-Heywood, works locally for the same bank as Pickup!

Although flying training occupies by far the greater amount of the club's activities, the sporting spirit is encouraged among qualified members and every effort is made to send pilots and aircraft to all the major rallies and meetings at home and sometimes on the continent, too. Also, "outings" are organised to other clubs and aerodromes, perhaps the most successful exercise so far being a massed attack by six aeroplanes in May of last year to the Scilly Isles, where the party spent a most enjoyable weekend on diminutive St. Mary's, an attractive island in the Gulf Stream stuck in the depth of the Atlantic! A repeat visit is planned for the not-too-distant future.

On the training side, the policy is one of organised discipline. The opinion of the instructional staff is that there can be only one way of learning to fly and that is the right, and perhaps hard, way. There is a Pilot's Order Book which must be read and signed by any person before he is permitted to fly as captain of a club machine, and pilots are fined on a graduated scale for any wilful airmanship offences. The immediate reaction to this by an outsider



An Auster Autocrat of Elstree flying Club Flying in the vicinity of the airfield.

may well be that surely Elstree is intended as a flying club and not a service training school, but when one realises that we share the same sky with the airlines, the R.A.F. and all other users it must be obvious that there can be no room for half-hearted aviators. This policy has proved most successful and is appreciated by all those with a responsible attitude towards flying.

Naturally any club must depend for its bread and butter mostly on elementary courses, but at Elstree we endeavour to provide full facilities for all forms of advance instruction. Several members have completed courses for the assistant instructor's rating, others have indulged in instrument flying, while a few have graduated to night flying and twin-engine conversions. Ground instruction is fully provided and throughout the winter months two evening lectures are held each week.

On the competitive side, a showcase in the club lounge boasts a number of trophies that are awarded each year

to the winners of contests in navigation, the circuit and landing, forced landings and technical knowledge, while another cup is presented to the best student pilot. Considerable enthusiasm is aroused at and near the time of these competitions, which serve largely to keep the progressive spirit alive among members who have recently obtained their Private Licences.

Today the membership stands at a figure just short of the three hundred mark, so with three Autocrats, three Hawk Trainers and a Gemini on strength there is a balance between the attraction of variety and the necessity of standardisation for instructional purposes. From three to five instructors are always available, so heavy commitments in the training field can be absorbed quite easily into the organisation which includes, of course, the usual contract for the A.T.C./C.C.F. Flying Scholarship and Air Experience Schemes.

With London "just along the road"

(Continued on page 13)



INDIAN AIR FORCE CHOOSES THE AUSTER A.O.P. Mk. 9

THE ARMED FORCES of many countries are equipped with Auster aircraft of different types and use them for many varied purposes. The main function however of military Austers is as Observation aircraft for the direction from the air, of artillery gun-fire.

One of the countries to use Austers

in this capacity is India, and now, in continuance of this policy, the Indian Air Force has ordered a quantity of Auster A.O.P. Mk. 9 aircraft. The first aircraft to be built for this order have already been dispatched on schedule.

Further Mk. 9's are being built and it is on these aircraft that three members of the Indian Air Force are gaining



With flaps set at 'Take-off', and ailerons drooped, an Indian Air Force Mk. 9 climbs away at a characteristic angle. The Mk. 9 can be lifted off the ground in a three-point attitude and will continue to climb without any tendency to sink back or stall.

experience at the Auster factory. They are, Flg. Off. Shri Prakash, Wt. Off. Gurbuxani and Flt. Sgt. Humza whose home base is Palam aerodrome, New Delhi. Within the next few days they will return to India and supervise the assembly of the delivered Mk. 9's at the Indian Air Force's Base Repair Depot at Kanpur.

These aircraft have been built to the same specification as those ordered by the British Army. (A description of the Mk. 9 appeared in the Auster News Vol. 5 No. 9 issue).

AUSTER SKI PLANE IN N.Z.

SINCE THE AUSTER AIGLET equipped with skis first landed on New Zealand's Southern Alps late last year, many landings have been successfully made and much useful work done. The aircraft is owned by the Mount Cook and Southern Lakes Tourist Company and is flown by a Mr. H. R. Wigley of Timaru. The first landing was made at an altitude of 7,000 ft., it took only 35 minutes from Weheka Airfield at Fox Glacier compared with the two days required on foot.

Skiers' mountain huts have been restocked with supplies flown to their back doors, and skiers and climbers with their equipment have been flown high up the mountains.

The chief mountain guide, Mr. R. M. Bowie, has made several flights in the Aiglet and is enthusiastic about the possibilities of using the aircraft for mountain rescue work.

BRITISH TRANS-ANTARCTIC EXPEDITION . . . PROGRESS REPORT

AT THE TIME of going to print we are pleased to hear that the Motor Vessel Theron has departed from Vahsel Bay leaving, as planned, eight men to establish a base on the Antarctic Continent.

The world has followed with interest the dramatic bid by the Theron to

break through pack ice that nearly prevented the expedition from reaching its proposed base area.

After a delay due to solid ice the ship's Auster was hoisted overboard into a clear patch of water some 350 yards long so that an air reconnaissance could be made. After taking off successfully, the Auster was headed north by Squadron Leader Lewis and a very extensive search for a path through the ice was made. It is reported that a very anxious three and a quarter hours was spent by those on board before the aircraft engine was heard again. Whilst circling the ship Sqdn. Ldr. Lewis was warned of the presence of whales in the landing 'strip'.

After landing he reported that he had seen 20 miles of passable channels leading to a broad belt of broken pack-ice. This information subsequently proved invaluable for the Theron's captain who was able to steer his ship clear of the ice.

The latest message to be received by the Air Ministry in London from Dr. V. E. Fuchs, Leader of the expedition, was as follows:—

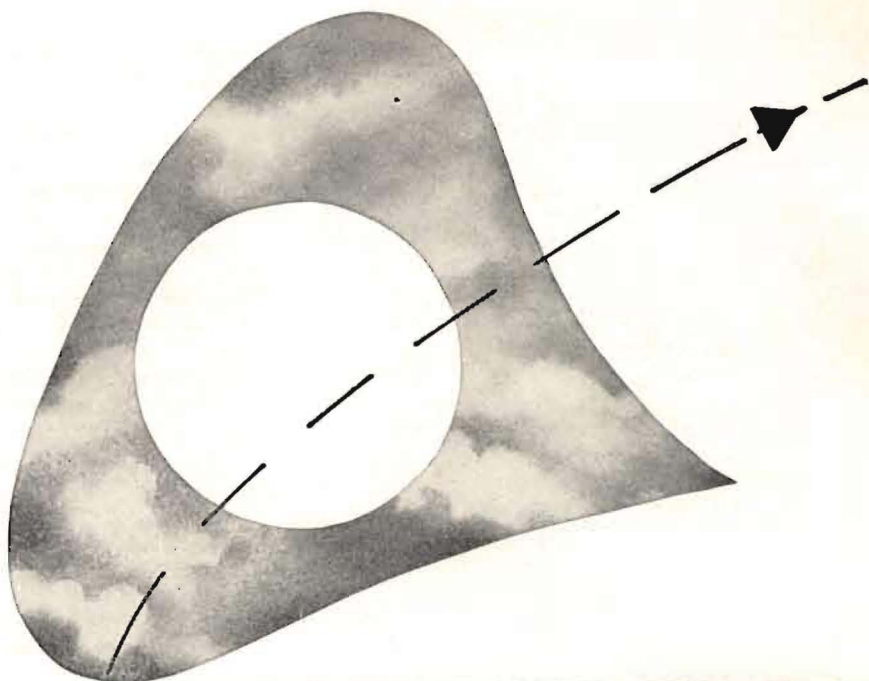
"Expedition's R.A.F. flight have done first class job; first in helping us to escape from the ice, and second on coastal and inland reconnaissances. Aircraft now on skis, Flying continues."

ELSTREE FLYING CLUB—Contd.

and the aerodrome on the verge of a green-belt area we look forward to a progressive increase in activity, the extent of which continues to be governed almost entirely by the annual decline in health of our dear old friend called English weather.

Acknowledgement

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AUSTER PUBLICATIONS . . .

and Amendments thereto

RECENTLY WE HAVE been carrying out a revision of old Manuals and the issue of new. Taking it for granted you have an Auster, we also take it for granted that you are always pleased to read up any literature appertaining thereto that may come your way, e.g., the "Auster News" you are now reading, and our Service Bulletins, etc.

Also, as an Auster owner, you no doubt have in your possession a Manual of Instruction relevant to your

type of aircraft but—and now we come to the point—is it up-to-date?

To show our sympathy in material form, and to lighten that terrible task of checking your copy, we append a list of all "Auster Publications" now available, together with price and (where applicable) number of the latest Amendment.

Each Instruction Manual is issued complete with a copy of the relevant Pilots Notes but, if required, further

LIST OF AUSTER PUBLICATIONS

Manuals of Instruction

Description	Reference No.	Price	Amendment state. (Up to and including)
J.1 Autocrat	TAY/PUB/17	35/-	A.L. No. 3
J.1B Aiglet	TAY/PUB/13	35/-	" " 5
J.2 Arrow	TAY/PUB/5	15/-	
J.3 Atom	TAY/PUB/6	15/-	
J.5	TAY/PUB/18	35/-	" " 2
J.5B Autocar	TAY/PUB/12	35/-	" " 5
J.5B Autocar	AUS/PUB/24	42/-	" " 1
J.5F Aiglet Trainer	TAY/PUB/15	35/-	" " 4
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If, on perusal of the ensuing list, you find you are 'out-of-date', let us have a note of your requirements and we shall be pleased to tend your needs, but do please ensure that you quote the correct reference number as you will note there are two editions of some of our publications.

We would respectfully remind you that you will benefit if you *complete and return the registration card* provided in the front cover of each publication. By so doing it will ensure that you are kept up-to-date with all relevant amendments. To receive the services of the Publications Department you should

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Civil Repair Manual

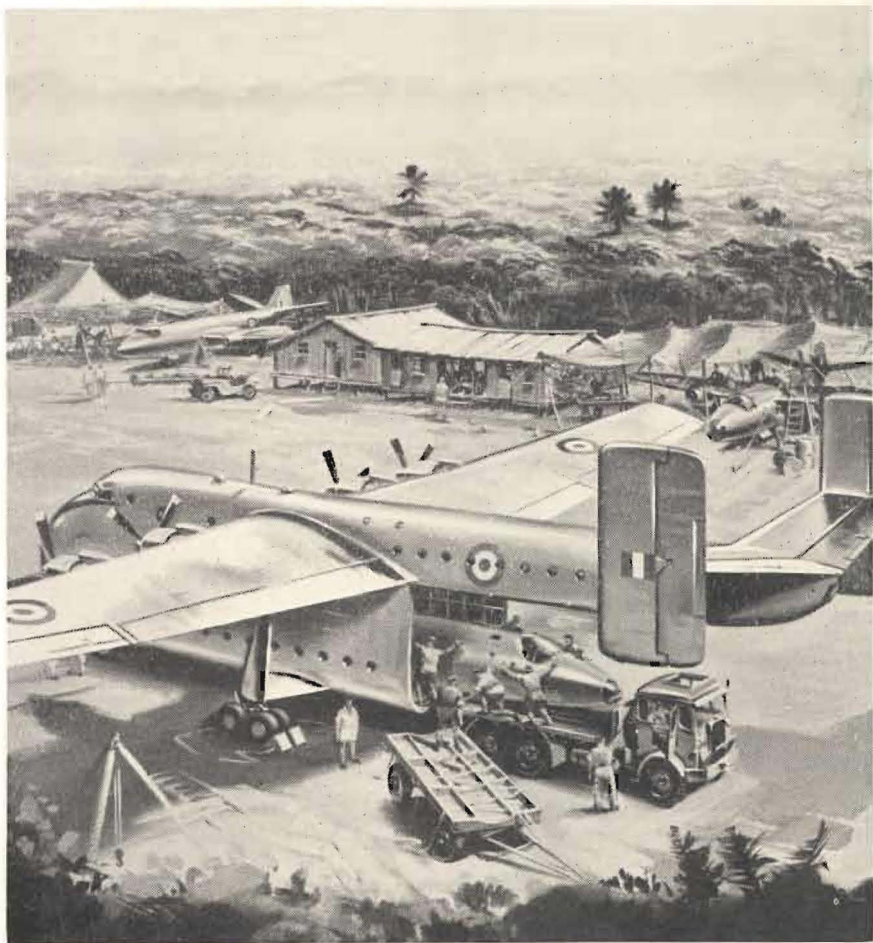
After a long delay, for which we must apologise, we are now able to advise that a new Edition of the Auster Repair Manual will definitely be available in the very near future. In order to expedite the issue it may, however, be advantageous to publish this, in the first instance, in a partly completed form. The price of this publication has not yet been fixed.

To assist us in estimating the approximate number of copies of this Manual that may be required, will anyone interested please inform the Publications Department of the number of copies they are likely to require.

There is no SERVICE BULLETIN in this issue of "Auster News."



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