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News

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AUSTER AIRCRAFT LIMITED

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EDITORIAL

After an absence of several issues we are again pleased to be able to publish the "Aircraft News" and thereby continue to keep everybody advised of the latest Auster developments.

We regret the delay since our last issue, but we shall now be distributing the "News" at regular monthly periods again, under the direction of a new Editor.

This particular issue has been prepared in duplicated typewritten style, without photographic features, in order to avoid delay in its preparation and circulation. Subsequent issues will, of course, be printed in the normal style.

The Editor would like to repeat a request which has been mentioned continually in the past. If you have anything which you feel may be of interest to other readers - and they are all over the world - please do not hesitate to let us know immediately. Flying Club news, where and how Austers are operating, special feats by Auster pilots, general overseas marketing conditions ... these are but a few of the many topics which have a wide interest, and will always be gratefully received. Photographs of personnel, establishments and our aircraft in typical overseas settings will also be most welcome.

S.B.A.C. EXHIBITION AND FLYING DISPLAY, 1949

The Society of British Aircraft Constructors will be holding their tenth Annual Exhibition and Flying Display at Farnborough, Hampshire, on September 6th to 11th inclusive. The first day is allocated to technicians of the Industry, the next three days are by invitation only, and the final two days are for the general public.

We shall of course be having a Stand at Farnborough, and everybody is most welcome to visit us (Stand 'S') to obtain first-hand information regarding all current aircraft, available modifications and equipment, and future proposals. In the General Display we shall be represented by a military Mk.7 trainer (which can be alternatively used for A.O.P. duties), and a 4-seater Autocrat fitted with cross-wind landing wheels.

Additionally, we shall probably be showing a new Utility 4-seater aircraft, and an Avis Mk.2, which is an Ambulance version of the Mk.1 but can be adapted to a 4-seater or a light freighter.

MODIFICATIONS OF PARTICULAR INTEREST TO "AUSTER" OWNERS

Adapting all 3-seater types as 4-seaters

A modification, No.1780, has now been approved whereby it is possible to fit a double rear seat into the J.1 Autocrat, Auster 5 and J.5, and so convert these aircraft into 4-seat versions. This makes them ideally suitable for family travel, and there is no difference in their general performance since the total weight authorised has not been increased. When all seats are occupied the aircraft have to be confined to the normal flying category, but for solo or dual flying the aircraft can be classified in the semi-aerobatic category provided a semi-aerobatic seat is installed (see below).

The embodiment of this modification means that the aircraft concerned will be allocated an amended type nomenclature and become J.1A Autocrat, Auster Mk.5A, or J.5 (4-seat).

Redesigned front seats for all 3-seater Austers

This Modification, No.1779, has been introduced to increase the knee room and general comfort for the two rear passengers in the 4-seater converted aircraft already mentioned, without affecting the front passengers' comfort. It is a change which you may not deem necessary where the passengers are your children or adults of average size, but might be usefully considered where somewhat taller people may be carried from time to time.

However, our Service Dept., will always be glad to give you any assistance in arriving at a decision in this connection.

Semi-aerobatic pilot's seat

In order that Austers J.1 and J.1A Autocrat, J.2 Arrow, Series J.4, Series J.5, J.5 (4-seater) and Civil Mk.5 can qualify for the semi-aerobatic category of British Civil Airworthiness Requirements, we have now introduced strengthened front seats which have provision for Sutton type shoulder harness. The rear seats of the Auster 3 and 4-seaters are not adapted for these conditions, and if aerobatics are intended they must not be occupied; this is not considered any disadvantage since it is anticipated that most aerobatic flying will only be contemplated on "Solos", or with dual flying as for instruction.

The redesigned seat costs £47.10. 0. ex-works, complete with all fittings, safety harness and upholstery.

Crop dusting and spraying equipment

The Auster is now the first British fixed-wing aircraft to embody equipment for aerial dusting suitable for treating crops and fruit trees with fertiliser or insecticide. The J.1 Autocrat and Series J.5 can be so equipped, and trials have established the success of these versions. 450 lbs. (200 Kg.) of powder can be

released from a hopper in the rear of the cabin and spread over a wide area through a venturi having a sliding gate to control the flow of powder. Only one control lever is necessary to actuate the system.

A great advantage of the Auster over a helicopter is in its cost to the operator or farmer. Helicopter operational costs are in the region of £10 and £12 an hour, but the Auster can do its job for approximately £3 an hour. No special flying technique is required, since the aircraft behaves quite normally, and it is only necessary to exercise care when flying low in bumpy air with the hopper full, that is, when the C.G. of the aircraft is near the aft limit.

Further details, with photographs, will be included in the next issue of the "News." The price of a dusting installation is £125 when fitted at our Works.

Trials are now being carried out on a spraying installation on these aircraft. Spraying and dusting equipment will ultimately be interchangeable on Austers, so that any one aircraft can do both jobs or fly as 3 or 4-seaters .... but more about this when current trials are satisfactorily completed.

Exhaust silencers for Auster Mk.5

It is now possible to fit twin venturi-type exhaust silencers to the Auster 5 series with

Lycoming O-290-3 engines. Complaints about the noise in the cabin have led to an investigation into the matter. Most of noise is produced by the "high-revving" propeller and therefore cannot be silenced, but the venturis successfully eliminate the exhaust noise and it is possible to carry out normal speech at cruising conditions of 2200 r.p.m. The noise begins to increase a bit at 2300 r.p.m. and is fairly considerable at 2400 r.p.m., but not nearly as intense as in unmodified aircraft at the lower throttle settings. The venturis do not affect performance in any way.

Cross-wind landing wheels

Goodyear cross-wind landing gear has been installed in an Autocrat and widely demonstrated to show exactly how versatile this aircraft has now been made when on the ground. The equipment can be fitted to all types of Auster. Briefly the installation means that the Auster can now be landed and taken-off in far stronger cross-winds than hitherto without the danger of ground looping.

If you operate from a single landing strip just consider what this means. You can disregard the wind direction almost entirely, for the wheels can caster 25 deg. each side of centre and the drift angle can exceed this by at least 10 deg. On landing, the wheels turn in the direction of the landing roll even though the aircraft has drift. Everything is fully automatic, needing no presetting device or extra

controls, and the result is foolproof.

Although none of us likes to say too much about forced landings such things are of course occasionally encountered, and a pilot flying an Auster with cross-wind landing wheels would certainly have very little to worry about. In our next issue we shall give you some of the written comments of impartial British experts on the subject of the cross-wind landing gear in the Autocrat, and we can assure our overseas readers that they too would be very impressed by the exceptional performance which has amazed witnesses both in public and private demonstrations over here. One might think at first that continual cross-wind landings would prove very expensive in tyre replacement, but experiments have definitely established that tyre wear is as good as, and probably even better than, with fixed wheels.

The undercarriage frame and wheel axle needs slight changes before the wheels can be fitted, and the complete modification costs £210 if embodied at our Works or £165 (carriage extra) if supplied as a kit. The added safety and benefits derived from the installation are well worth careful consideration, and if you would like to see a demonstration let us know and we shall be pleased to give you our fullest co-operation.

Picketing equipment

This equipment, consisting of 3 screw-in pickets complete with rope, tommy bar and stowage

bag, is now available for owners who may have cause to tie down their aircraft in the open. The bag is of a size suitable for carrying in the rear of the aircraft, and the equipment is strongly recommended for use with aircraft which may be frequently left in gusty conditions. Price of a complete set is £5 ex-works.

Aerial loud speaker installation

Trials have recently been made at our Works to establish the suitability of installing amplifying equipment into Austers with a view to their use for aerial control of crowds, ground searchers, forest fire fighters, etc., and of course public announcements (where these are not prohibited by local regulations). The trials to date have been highly satisfactory, and if anybody is further interested in this subject we should be only too pleased to give details.

General details concerning modifications

In our next issue of the "News" we propose giving a complete list of modifications which can be embodied on Austers. We feel that many owners and operators would welcome such a list in order to keep aware of all developments. The modifications will be identified by a number, and will be supplemented in future issues by further lists so that you will always be kept up-to-date.

AUSTER AIRCRAFT IN SERVICE WITH THE ROYAL DUTCH AIR FORCE

In service with the R.A.F. during the war, No.6 (A.O.P.) Squadron was the first Dutch unit to fly Auster aircraft, and since then Austers have provided part of the L.S.K's (Dutch Air Force's) equipment.

At the end of the war No.6 Squadron was reformed to 6 ARVA (Artillery Observation Squadron) and was consequently transferred to the Dutch East Indies. There, the Auster III's were used all over Java, operating from bases and airstrips like Andir, Magoewo, Semarang, Salatiga and Soerabaja. The aircraft often had the starboard door removed to facilitate the observer's use of hand grenades and a Sten gun. This proved extremely useful at times. On one occasion for example, an Auster pilot on reconnaissance discovered a sabotage party locating an explosive charge under a bridge, and, the observer dispersed the group by sten-gun fire. After this the Auster kept guard until ground forces arrived to remove the charge.

In Holland a number of Auster III's and V's are in service with TRANSVA (the Communications Squadron) and are mainly engaged on liaison and light anti-aircraft training duties.

AUXILIARY OBSERVERS

___ With acknowledgments to "Flight"

At Kenley recently, "Flight learned something of the composition and work of the Auxiliary Air Observation Post Force, establishment of which was announced earlier this year. The force comprises five squadrons (one to each Group in Reserve Command), which, although part of the R. Aux.A.F., are at the tactical disposal of the Army and possess T.A. commanding officers and pilots.

Kenley is the base of No.661 Squadron Headquarters, which administers five flights and a mobile servicing section.

Auster 5's and 6's, equip the Squadron. Four of the flights - two at Kenley and two at Henlow - were formed on May 1st, and a fifth will begin training at Hendon in July. The Squadron, which is now commanded by Lt.Col. Bazeley, D.S.O., was originally formed in November, 1943, first went into action in North West Europe, and numbers among its achievements some particularly accurate spotting work for the guns, stationed at Dover, which were directed against those at Calais. Similarly, all the new A.O.P. squadrons revive the designations of wartime units.

Each flight is tactically grouped into four mobile and largely self-supporting sections, which consist of a pilot, two T.A. driver-operators, and a fitter and rigger (both R.Aux.A.F., personnel). Sections have their own motor transport, in which stores and radio equipment are carried and which, in action, virtually become a "home" for their members. The self-supporting character of these

sub-units which make up the squadrons is dictated by operational necessities. During battle, a flight might well come under command of a squadron H.Q. other than its own, due to movement of the corps to which it had been assigned. An extremely close working spirit results from this type of operational structure, and when the squadrons are fully established there should be little difficulty in maintaining good recruiting.

Activity at present consists mainly of refresher training - at Kenley, 661 Squadron's regular R.A.F. adjutant, F/L. Bentley, is in charge of flying instruction - but as units get into their stride, there will be full-dress observation exercises, in co-ordination with artillery regiments of the Territorial Army. Efficiency of this combination is guaranteed by the fact that pilots are, first and foremost, specialized gunnery officers, provided with the necessary flying qualifications by R.A.F. methods.

FLYING CLUBS' CONVENTION

The Association of British Aero Clubs and Centres is to hold, on Saturday, September 3rd., what is hoped will be the first of a series of annual summer conventions. The venue is White Waltham Airfield, Maidenhead. As the event is intended mainly to be an opportunity for social meeting and discussion of current affairs between club members, there will be no flying display, but there will be a sealed-time (between 2 p.m. and 3 p.m.) arrival competition with a 20 gn. Philco radio as prize; 160 other prizes, it is stated, will be distributed in connection with the convention; they include a complete aircraft - a new Auster. Full details are obtainable from the A.B.A.C. at Londonderry House, Park Lane, London, W.1.

JOTTINGS FROM THE PRESS

Without comment

According to Walter Horten, the disadvantages of soaring at present are still the high expense and the waste of time. This is the result of handling difficulties of the sailplane on the ground, and the necessity for assistance in order to take off and to reach a useful altitude. It is not the price of the sailplane and its maintenance which renders soaring so very expensive; but all the additional costs of flying and of the movement on the ground result in the fact that, taken per hour of flying, soaring is far more expensive than power flight with light aeroplanes.

The average cost of soaring in Germany (taken over one year) per hour of flight was authentically found to amount to five times the cost of an hour's flying with a 100 h.p. light aeroplane. This explains (not counting the waste of time), why so many people simply cannot afford to soar and have to satisfy themselves with occasional flying on chartered light aeroplanes.

— German views on auxiliary powered sailplanes.