



Cdr. P. C. S. Chilton, R.N., the Commanding Officer of the Naval Test Squadron, flew the aircraft on board H.M.S. *Ark Royal* under conditions of marked ship movement, this being further aggravated by the sun reflecting on the deck-landing mirror. Only four catapult launches and deck landing were achieved during the remainder of that day and the following day, shared between the Commanding Officer and Mike Lithgow. The reason for the low total was bad weather and sea state.

Although too few deck landings were achieved to consolidate entirely the decisions reached during A.D.D.L.s, it was confirmed that the view cut off by the nose of the aircraft was not acceptable, as insufficient of the carrier deck could be seen to be certain of aligning the aircraft with the centre line. Modification to the aircraft is in hand to correct this defect and the next deck-landing trial will take place using aircraft with improved forward view.

Catapult launches at various weights were carried out. No undue difficulties in lining-up on the catapult were experienced. It was found necessary to apply the aircraft brake once the hold-back was attached to the aircraft prior to tensioning forward, as

aircraft movement in sympathy with ship movement caused snatching of the hold-back itself which might have resulted in premature failure. On tensioning forward the aircraft rotated into the flying attitude until the tail-skid rested on the deck. The position was very comfortable, the launch itself was uneventful and no tendency to sink off the end was observed.

Although the trials were not as successful as they might have been, due firstly to shortage of available engine hours and secondly to weather, sufficient has been done to know that there are no major handling problems associated with flap blowing.

Further trials will be taking place this year at Boscombe Down on both prototype and production versions of this aircraft. Successful completion of these will ensure that the aircraft will be released to the Royal Navy before the end of the year.

Since this article was written another series of deck-landing trials has been successfully completed on board H.M.S. *Ark Royal*. The trials were carried out at operational weight, using the minimum catapulting speed, and were completed within the estimated time schedule.

BIG U.H.F. RADIO ORDER

AN order for airborne U.H.F. communications radios worth no less than \$8.3m has been placed by the R.C.A.F. with Collins Radio Company of Canada, Ltd. The equipment involved is the AN/ARC-552, which is a direct Canadian adaptation of the American Collins AN/ARC-52. The R.C.A.F. is now undergoing a planned conversion from V.H.F. to U.H.F. for air-to-air and air-to-ground communications radio.

The ARC-552 and 52 offer a total of 1,750 channels over the frequency band between 225 Mc/s and 400 Mc/s. While all these are available to the pilot, nineteen of them are pre-set and can be selected for immediate use. An entirely separate guard channel is also available for emergency. ARC-52 and ARC-552 are completely interchangeable for installation purposes.

The new Collins equipment offers considerable advantages over its widely used predecessor, the AN/ARC-27. It has 20 per cent fewer valves; and its weight, at 51.5 lb, is 35 per cent lower. The volume has been reduced by 51 per cent. The ARC-552 is pressurized for operation at heights up to 70,000ft; printed circuitry and modular construction with standardized sub-assemblies are used; and all components are conservatively rated to increase their service life.

U.S. CIVIL CERTIFICATIONS

TYPE certification by the U.S. Civil Aeronautics Administration has recently been awarded to the Beechcraft Travel Air and the Piper Comanche. The former, a four-seat, twin-engined machine, first flew in August 1956; the Comanche, a single-engined four-seater, made its maiden flight in May 1956. Both aircraft are powered by 180 h.p. Lycomings.

B.S.I. ANNUAL REPORT

IN its annual report* the British Standards Institution refers in the aircraft section to standards either published or in preparation concerning metallic and non-metallic materials, components, electrical equipment and instruments. International work is also reported on, in particular the revision of B.S. M23 concerning aircraft identification markings, and a new standard (soon to be published) relating to aircraft connections for ground electrical supplies.

Both new and revised standards published between April 1, 1956, and March 31 this year are fully listed; and work in hand on new standards is catalogued in alphabetical order under categories.

*Published by the B.S.I. from British Standards House, 2 Park Street, London, W.1; price 7s 6d to non-members.

AIR-TO-SEA PHOTOGRAPHY

IN contrast to the Scimitar pictures above, the fine photograph below, though again a nautical subject, is essentially unwarlike in character. The work of Skyfotos, of Lympne Airport, it shows m.v. *Valdes*, a cargo and passenger vessel of 2,196 tons gross, proceeding down Channel while one of Skyfotos' Auster Autocrats circles above. The Lympne company specialize in air-to-sea pictures of shipping, and nearly 150 examples of their work are currently on exhibition at the Ilford Gallery, 106-107 High Holborn, London.

Marine photography in the modern manner (see news-item above).

