

Round the Stands . .

GROUND SUPPORT EQUIPMENT

THERE was more new ground-support equipment to be seen—mainly in the outdoor exhibition—than in previous years. In general, this review highlights the items which were making their debut, though certain equipment previously displayed is mentioned where it has been the object of considerable development.

H. W. Edghill showed a new development of their Autostair, the Mk III version of their self-propelled airliner embarkation steps, carried on a Commer Karrier truck. The example shown was for T.C.A. It had a hydraulically adjustable elevation ranging between 9ft and 13½ft approximately. New from **Rellumit** was a neat mobile hose elevator unit developed for Shell International Petroleum. It is designed to assist refuelling personnel to handle heavy loaded fuel hoses during the underwing fuelling of big aircraft like the 707 and the DC-8. One of the dominating exhibits in the outdoor exhibition was **Esso's** brand new Python fueller, a 12,000 Imp. gal giant weighing 26 tons empty and 75 tons laden, and measuring 55ft in length. It is claimed to be one of the world's largest articulated refuellers, and the trailer section was built by the **Steel Barrel Company** of Uxbridge. Delivery rate is 1,000 gal/min and it is claimed that a 707 can be refuelled in ten minutes by two Pythons.

Pyrene were displaying the newest version, Mk 7A, of their airfield crash tender, mounted on a Thornycroft chassis and powered by a Rolls-Royce B.81 engine. The vehicle shown is one of a substantial number being supplied to the Canadian Government Department of Transport. Foam is discharged simultaneously from two four-inch lines, and discharge can be sustained for as long as required, since the tender can take on additional supplies of water and foam-compound without breaking the continuity of foam production. The vehicle incorporates a Thornycroft-designed auxiliary drive which makes it possible for foam or water to be pumped while the vehicle is in motion. The vehicle can therefore change its position quickly in order to tackle the fire efficiently without interruption of the foam discharge.

Morfax showed their range of aero engine strip-build platforms and servicing stands, including a new roll-over servicing stand for the Tyne. In addition to their displays in the outdoor exhibition, Morfax again made available to aircraft participating in the flying programme the services of their mobile workshop. Facilities included sheet-metal work, "Argonaut" and argon arc welding, gas welding and cutting, and fluorescent crack detection.

Auto Diesels displayed their new 60 kVA 400 c/s ground power unit, designated G.P.U.7. It is trailer-mounted and has a diesel-driven alternator. It was built to M.o.S. contract and is supplied to the R.A.F. Also offered by this company, though not shown, was the new Aydee air starting unit fitted in a van as an alternative to the trolley-mounted version.

Well worth watching was **Palmer's** display of a brand-new type of passenger escape chute, as supplied to B.O.A.C. for installation in the Corporation's Boeing 707 fleet. Stowed near the passenger door, this chute is self-inflating and in an emergency landing can be launched for passenger-evacuation in an elapsed time of less than 25 sec. The chute can, if necessary, be used as a dinghy, and it is claimed to offer many advantages over non-rigid chutes which have to be located at ground level before escaping passengers can slide down them. The Palmer unit is stated to weigh 20 lb plus the weight of a small air bottle supplied pneumatic system.

H.M.L. Engineering's display included entirely new exhibits. One was the "Brill" light gas turbine (45/60 h.p.) used as the power unit for a cabin pressurization trolley developed for the

Shell's Severn refueller was a giant among the outdoor exhibits. It is the first of five 50-ton superfuellers which are to be used at London Airport, particularly for replenishing the heavy jets



Dowty have been developing hydraulic wheel drives for tractors for over two years. This Dowty Transmatic-equipped David Brown tractor was lent to the S.B.A.C. for the duration of the Show

M.o.S. This delivers 1,000 cu ft/min at 15 lb/sq in. The "Basilisk," a larger gas turbine, can be used in air bleed form for engine starting at 2½ lb/sec at 60 lb/sq in, or to provide a direct shaft output of 500 h.p. at 1,500 r.p.m. It has a development power-potential claimed to be of the order of 1,000 h.p.

"The most powerful D.C. servicing trolley to date" was the claim made by **Houchin** for their ground power unit, new to the S.B.A.C. Display, developed during the past year and ordered by B.E.A. for their Comet 4B and Vanguard fleets. Primary power is supplied by a diesel engine coupled to 28.5 V generators giving outputs of 1,200 amp continuous (2,250 amp intermittent), and 112 V, 300 amp continuous (900 amp intermittent). The unit is mounted on a heavy-duty chassis with four solid rubber-tyred wheels with independent rubber suspension. It is not, for B.E.A.'s requirements, motorized. Also new from this firm is a smaller motor alternator set, the alternator giving an output of 500 VA at 115 V single-phase.

For the very first time **Dexion** were participating in an S.B.A.C. Display. The word Dexion has become almost a generic expression for slotted angle which this firm has made so successful, and a selection of the many different uses to which this basic constructional material can be put were exhibited on the stand. The use of Dexion for crates used in the air freighting business is reported to be increasing.

A new ground power unit was shown by **Rover Gas Turbines**. (This was in addition to their airborne 60-90 h.p. A.P.U.) The new unit, small and compact, is designed to be easily transportable and it can be used for ground servicing jobs requiring electrical power and low pressure air. The unit consists of a Rover 1S/60 gas turbine engine of 60 h.p., coupled to a Rotax 28 V, 300 amp D.C. generator. The weight of the unit is 500 lb; length and height are only 67in and 48in respectively.

Zwicky displayed a good year's development work: three completely new fuel vehicles shown were as follows: (1) The "Severn," as supplied to **Shell-Mex and B.P.**, a 10,000 Imp. gal monster mounted on an A.E.C. Mammoth Major Mk 3 six-wheel chassis. Refuelling rate is 750 gal/min and it is claimed that the 2.22:1 ratio of laden to unladen weight is much superior to the average of comparable vehicles. (2) The "Super Jet" dispenser, designed to dispense fuel from hydrant systems to DC-8s and

Telecommunication measuring equipment was on display in this mobile display unit supplied to Marconi Instruments by Coventry Steel Caravans. Later it will tour Europe

