



Not fitted with guns, the de Havilland Sea Vixen FAW.1's internal armament comprises hinged packages each housing tubes for 14 spin-stabilized 2in rockets. A further four packs, each of 24 rounds, are here slung from pylons. Made by Microcell, these containers have been proved during high-speed air firing

Round the Stands . . .

Boeing 707s was shown developed for **Air B.P.**, and was mounted on a Karrier Gamecock chassis powered by a light diesel engine. (3) The "Tagus" hydrant dispenser was shown for the first time, as supplied to **Shell Petroleum**. This neat little unit has been designed also for fuelling from hydrant systems, and the dispensing equipment, with as large a capacity as 600 Imp. gal/min, is mounted on a Bedford 10/15 cwt C.A.Z. chassis.

Not shown before by **Blackburn** were a turbo-starter Commer truck and a Commer trailer. In the truck is fitted the Blackburn Palouste 502 power pack, and in the trailer was installed the Artouste 510 power pack. Thus these two well-known units are now available in self-propelled mobile form, either as a trailer or as a truck. It was interesting to note that the body of the trailer was in effect identical with that of the truck.

New from **M.L. Aviation** was an extremely neat multi-purpose handling trolley, now in production for the Royal Navy. Operating on the lazy-tongs principle, controlled by two independent hydraulic jacks, it tilts fore and aft, moves transversely and has limited movement in yaw and roll. It can be used for offering up or detaching almost any kind of underwing store. Its maximum load is 3,000 lb. For the purposes of the display the store mounted on it was a **Bristol** plastic drop tank.

Foamite were showing their new "Fireball," a dry-chemical extinguisher, the body of which is an all-welded steel sphere containing the powder charge. This design achieves a very low c.g., permitting the extinguishers to be moved about by hand very quickly and easily without tipping. The Fireball has a discharge rate of 150 lb/min and an effective range of 30-35ft. Also not seen before were two tenders based on an Austin Gipsy chassis, one for dry-powder fire fighting, the other equipped for water/foam extinguishing.

Vernons had two exhibits new to the display: trailer-mounted and self-propelled aircraft ground power units. Both are being supplied to B.O.A.C. for servicing the Corporation's 707s. Diesel-powered A.C. supplies are at 400 c/s per second and brushless alternators were a noteworthy feature.

Some of **Sir George Godfrey and Partners'** larger equipment could be seen on the stand outdoors. New this year was (1) A vapour-cycle servicing trolley, a private venture for servicing cooling packages; (2) A missile-conditioning system developed for English Electric; and (3) the LEAP. The two last-named are described in the section dealing with weapons.

Lucas-Rotax were showing their new sectional fuel system test rig. These sectional rigs are offered—like domestic sink units—in sections: only one rig, usually the pump rig (the type displayed was R.393), forms the main driving unit for others which can be added to it to form one large composite rig. Alternative types are available to meet the requirements of different aircraft fuel systems.

Airtech showed for the first time their new air transportable containers. The "Aircon" has been developed to meet the demand for complete installations and equipment (e.g., workshops, telephone exchanges, laboratories, communications units) to be readily transported by air and to be in operation as rapidly as possible. Detachable end-walls allow large equipment to be installed, and a chassis unit can be fitted for surface mobility. This is in two sections which can be easily clamped to the sides of the Aircon while it is on the ground. The wheels are raised and lowered by hand-operated screw-jacks. The Aircon can be transported by helicopter. The "Aircon B," which was also displayed, was specifically designed for transporting in R.A.F. Transport Command's Britannias.

New on the **Delaney Gallay** stand was a compact portable

welding kit, a self-contained unit designed for welding stainless and mild steels of all thicknesses up to 22 s.w.g. The electrode can be used in two ways—mounted in a hand gun operated by a trigger switch, or by itself as a pencil electrode with a foot switch. The unit is known as the Incorporall.

Shown for the first time at Farnborough was a 35ft articulated unit which **Marconi Instruments** use to demonstrate their telecommunications-measurement instruments, particularly oscilloscopes, to instrument users. This mobile showroom will undertake a four-month tour of Western Europe next year. The unit itself (supplied by **Coventry Steel Caravans** of Newport Pagnell) is large enough to form an upstairs office which can be used as the manager's room, or if necessary, for emergency living accommodation.

Coupled for "gang operation" was the **Lewin Sweepers'** runway sweeper/collector. Designed to meet the demand for runway cleansing in the jet age, to minimize engine debris-ingestion damage, the coupled sweeper units give a total swath width of 20ft. Among the new products shown by **Simmonds Aeroaccessories** was a fuel dispensing unit designed for operation with hydrant systems. Mounted on a self-propelled chassis, it is capable of dispensing 500 Imp. gal/min through twin hoses. It is fitted with a "Fram" filter/water-separator, fuel meters and pressure controller. The unit can be supplied as self-propelled or as a trailer, and is built under licence from Pryor Manufacturing Co., of Mansfield, Ohio.

Not all the ground support equipment was displayed in the outdoor exhibition. The indoor display contained a number of new or developed ground support ancillaries of smaller dimensions. Picked out was **Avery-Hardoll's** completely new LBM.1000 bulkmeter, with a rated capacity of 1,500 Imp. gal/min, compared with the 650 Imp. gal/min offered by the company's previous largest bulkmeter, the BM.600. The new meter has been designed for high flow rates, including bunkering with heavy fuels; it is equally suitable for light petroleum products.

New at the display from **Goodman's Industries** was a complete vibration testing system incorporating a 10,000 lb thrust vibrator driven from an automatic oscillator providing the input to a 2 kVA powered amplifier used to drive the vibrator (normal power requirement is 20 kVA; 2 kVA was used for demonstration purposes). The amplifier was one of a new range offered by this company to cover output power levels from 30 kVA down to 5 kVA.

An addition to the range of test and research equipment in which **Bryans Aeroequipment** specialize is an "X" and "Y" co-ordinate plotting table, a portable and self-contained aid to such work as analysing servo performance and preparing calibration curves and materials stress-strain diagrams. Unusually high accuracy and quick response are claimed.

For the simultaneous recording of up to 20 speech or coded signals **Thermionic Products** have introduced a new multi-channel recorder, the Model 1A/1B. A voice/carrier stop-start unit is fitted allowing a maximum of 24 hours' unattended operation, extended in proportion to the total time during which signals are not being received. There is continuous monitoring on all channels.

Designed and produced by Airtech Ltd., the Aircon Type B container has been planned for loading and transportation in the R.A.F. Britannia. It includes towbar and combined lifting and running gear

