



First of the new Mig-21 fighter/bombers of the Finnish Air Force, taxiing in at Rissala airport on April 24

## Finnish Mig-21s

**W**ESTERN observers had their first close view of one of the Soviet Union's most important types of military aircraft on April 24, when ten Mig-21 fighters were delivered to the Finnish Air Force. Flown by Russian pilots, the Migs were ferried across in a group to Rissala Airport at Kuopio, in eastern Finland.

These aircraft were ordered last year under a Finnish-Soviet trade agreement. Four Mig-15U tandem-seat trainers were delivered earlier this year, but details are not yet available of where the conversion of Finnish pilots will be undertaken. Prior to delivery of these aircraft the Finns' only fighters were Folland Gnats.

Unlike his nine colleagues from the Soviet Air Force, this Mig-21 ferry pilot was dressed in civilian clothes



From their appearance, the Mig-21s have not previously seen service, and the general standard of workmanship and finish appears excellent. The aircraft are unpainted, but bear the national blue/white roundel, identifying letters MG-1 to MG-10, and numerous stencilled instructions in English.

First seen in 1956 (a photograph of a US Navy model appeared in our issue of June 20 of that year), the Mig-21 bears the NATO code-name of Fishbed B. Many thousands have probably been built; the type has been seen at many Soviet functions and has been supplied to most European communist countries and to Cuba, Egypt, Indonesia and India. Plans have been made for its manufacture in India, complete with engine and most of its systems and components, and some have already been imported at a reported unit price of Rs35 lakhs (£262,000), or 21 aircraft and spares for Rs120 lakhs. No Western firm could match such prices.

As an aircraft, the Mig-21 represents a type of aeroplane missing in Britain: the Mach 2 fighter/bomber. In size it falls midway between the Mirage III and the F-105 or F-4, the overall length (discounting the upward-hingeing nose probe) being some 56ft, and the gross weight approximately 25,000lb clean. The single turbojet has a large afterburner, cooled by air from various ram intakes. When Col Mossolov established a 1,484 m.p.h. speed record with a similar aircraft in October 1959 the engine was identified as an "R-37F," rated at 6,000kg (13,230lb). This is almost certainly the non-reheat thrust. This engine is larger than the RD-9 which may be manufactured in India for the HF-24 Mk 2.

Features worth noting include: an inward-retracting main undercarriage, the legs of which have outward-facing torque links and extend to allow the turned wheels to lie vertically within the body; a swept slab tailplane and delta-shaped wing; stores pylons under the wings and centreline (the Finnish aircraft were flown in with large finned tanks on the central pylon); racks on each side of the central pylon and those under the wings may each carry a single air-to-air missile closely resembling Sidewinder in appearance; bulged fairings ahead of each main-wheel bay for 37mm guns (these appear to be faired over in the Finnish aircraft); bulges on the fin for the rudder power unit, and what appear to be q-feel intakes on each side of the three-stage dorsal fin; and the forward-hinged windscreen/canopy unit, inside which is a second flat windscreen, as well as a conventional gun-sight reflector glass, both apparently associated with the sight system and small tracking radar in the intake centre-body. The curved blade above the ejection seat is presumably a safety device, armed when the canopy presses it down.