color requirements within given types of airplanes.

The new regulations will not include DC-3 or Lockhead Lodestar aircraft, as these models are not certificated under the transport category requirements.

Aeronautical Engineers

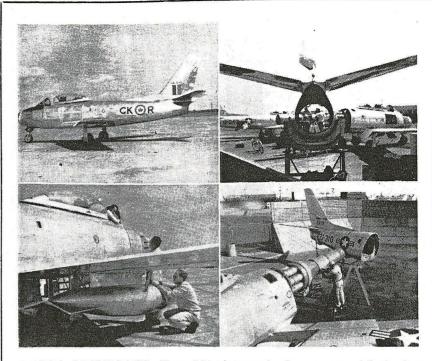
The Department of Labor reports that there are 54 student aeronautical engineers enrolled in the 1950 class, 31 in the 1951 class and 8 in the 1952 class.

Thrust Bearing Design

A thrust bearing which automatically adjusts itself to minor misalignments in the bearings of a rotating shaft has been developed at Avro Canada for use in the Orenda.

Avro Canada says that it is important for the bearings of a shaft to be aligned, and although spherical housings have been used in the past for this purpose, they tend to stick under high thrust loads and must be lubricated. The Avro Canada bearing is said to be not subject to these difficulties because it floats on an incompressible but deformable ring of plastic material supported in a recess in the frame in which the shaft is mounted.

The bearing is mounted in a housing which holds it firmly to the shaft, the housing and the recess in the frame together forming an annular trough that is completely filled with the plastic material. Thus any slight misalignment of the shaft is accommodated by deformation of the plastic ring, the



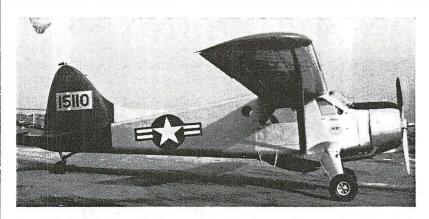
PARTING OF THE WAYS: These F-86 photographs show at upper left the first Canadair-built model; at upper and lower right, an illustration of how the fuselage splits just behind the trailing edge root, thus giving almost complete accessibility to the engine. Only four bolts hold fuselage together. The picture at lower left shows the long range wing tanks which may not be dropped. Note fins on tanks.

incompressibility of the ring serving to maintain the required resistance of thrust loading. Springloaded pins prevent relative rotation of the housing and hold it in contact with the supporting frame.

Briefly

•The last five Mosquitoes to be held in storage at London Airport, Ontario, are to be turned over to War Assets Corporation for disposal. The Merlin engines were removed a short time ago and are to be used in Lancasters being converted at Avro Canada for the RCAF. The five are the last of 60 that were cocooned and stored at London. All but these five were later sold to Nationalist China. The remainder were kept in order to study the effectiveness of the cocooning process.

- •A new flame-resistant Royalite thermoplastic sheet material which will not support combustion, has been announced by the United States Rubber Company. For airplanes, the new material is considered practical for interior fairways, instrument boards, cable covers, covers for protruding instruments, etc.
- •The Boeing Airplane Company says that more than 63° of the airframe cost of all USAF airplanes now under contract for manufacture by the Company goes to subcontractors and to parts and material suppliers.
- •A new publication, known as "Heat Treat Review", and designed to present current technical and operating information on heat treating metallurgy and practice, has been instituted by Surface Combustion Corporation, Toledo, Ohio.



CAUGHT IN THE DRAFT: Shown is the first Beaver C-127 to be delivered to the USAF by The de Havilland Aircraft of Canada, complete to USAF specifications. Equipment includes floats, wheels, and skis. The aircraft is completely winterized with winter nose cowl, oil dilution, etc. Long range belly tank evident gives aircraft a still-air range of 910 miles (seven hours).