

# "What's in the Air"

Capt. Al Lilly, chief test and demonstration pilot for Canadair Ltd. in the cockpit of the Canadair Four, which he flew through its paces for the editor.



**WHAT is the Canadair Four?**—As the presses roll this issue into production, a great many in the aircraft industry are awaiting certain developments in England with considerable suspense. There seems to be a strong possibility that the Canadian-built Canadair Four aircraft will be ordered in substantial quantity by British Overseas Airways.

It is known that BOAC have been approached by Canadair Limited and that the Canadian-built transport has strong appeal for the Corporation. Not only can it deliver the payload and performance, but it is powered by British-built civil Merlin engines.

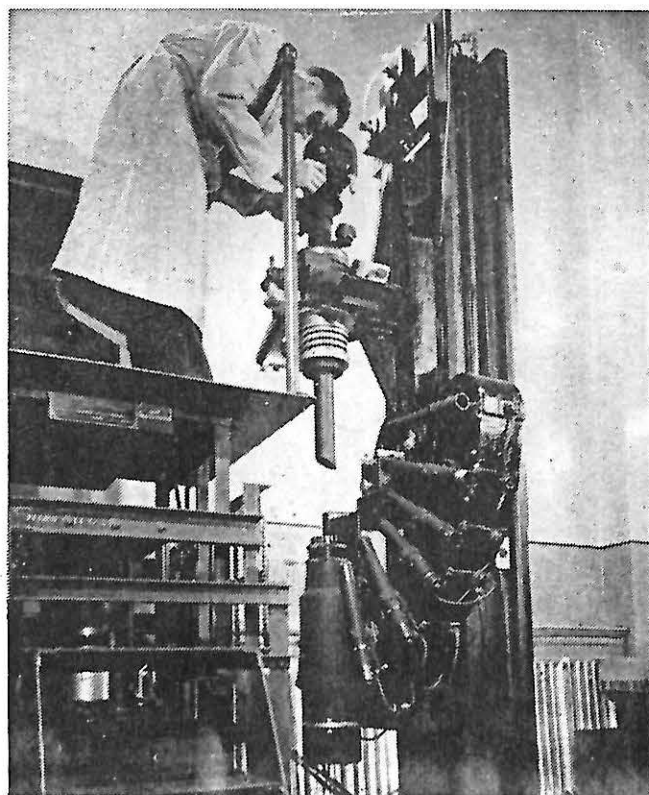
Because of the unique importance of the Canadair Four at this moment, we felt it was timely to tell its story. Accordingly, the editor virtually took up residence at the Canadair plant for a week. Our report occupies eight pages of this issue and presents, we hope, a pretty complete answer to the question: What is the Canadair Four?

The date Sept. 14, 1946, marked a

milestone in the history of the million-and-a-half-square-foot aircraft plants at Cartierville airport. For on that day the vast Government property was leased by a reorganized Canadair Limited with virtually all of the latter's shares acquired by the Electric Boat Company (a leading U. S. submarine-building concern).

As a matter of record, the total value of production at the Cartierville plant up to Sept. 14, 1946, was just over \$105 millions. This included: DC-3 conversions for foreign customers, \$10,480,000; DC-3 conversions for TCA, \$2,730,000; RCAF contracts for PBY's, \$27,440,000; U. S. Government contracts, \$54,780,000; inventory on hand \$9,750,000.

**WHILE** in Montreal, we called in to see our long-time friend Alfred Bandi at Aviation Electric Ltd.



The modern drift meter is levelled by built-in gyro. Its optical accuracy is checked on this test stand in the Aviation Electric plant at Montreal.

That was how we happened to get acquainted with the drift sight test stand illustrated on this page.

Inspection of the Eclipse-Pioneer Drift Meter, as it is known, indicated that drift sights have come a long way since the early days of the war. The test stand is even more impressive.

A 10,000-rpm gyroscope in the drift meter keeps the reticule of the instrument level despite the aircraft's attitude. Thus the line of vision for taking drift and ground speed reading is accurate at all times.

## Use Stop Watch

The controls consist of two knobs. One, the line-of-sight control, allows you to follow a ground object with the cross-hairs of the instrument. Its scale is marked at 0, 18, 36, 50, 60, 70.9 and 85 deg. from the vertical. There are indents at the 50-deg. and 70.9-deg. marks. By timing with a stop watch from the zero to the indents, the navigator can read the actual ground speed against the altitude on a special chart.

Drift is measured on the same instrument by operation of the second control, the tangent knob, which aligns the grid lines of the reticule with the track of objects on the ground. Drift is then read directly from the instrument scale.

In the illustration herewith, the operator is peering through one of these drift meters mounted on the test stand. We do not propose to get involved in the complicated optics concerned, but those "telescopes" set at various angles are "collimators." They test the accuracy of the instrument at the successive inclinations from the vertical. Are there any questions?

---THE EDITORS