



Piper Super Cub equipped with novel tandem-wheel undercarriage. The front low-pressure wheels allow the plane to roll over obstacles.

Agile New Super Cub Has Tandem Wheels

A plane which will take off in five lengths of its own fuselage, which will hover at just over 30 mph, and which lands in less than 125 feet is now in production at the Piper Aircraft Corporation plant at Lock Haven, Pennsylvania, according to an announcement by W. T. Piper, president.

It is the 108 horsepower Piper Super Cub, mid-century version of the famous two-passenger, tandem-seated Piper Cub used for a wide variety of purposes from student instruction to agricultural dusting and spraying.

With one person on board, the plane, which has a model designation of "105," climbs in excess of 1,000 fpm and at such a steep angle that it has 1,000 ft. of altitude at the end of a 3,000-ft. runway in still air!

The Super Cub has been flown with as much as 1,000 lb. of dust in addition to fuel and pilot—a load which will be permissible under the projected CAA rules allowing a pilot to carry any load he feels field and air conditions permit.

For agricultural purposes the plane is equipped at the factory with a hopper for dust and tank for spraying with small pipes extending on booms under both wings to discharge the spray through 24 atomizing nozzles. Tankage of as much as 80 gallons is provided.

To add to the Super Cub's

utility in flying freight in and out of otherwise inaccessible places, it may be equipped with either skis, floats or the new, revolutionary tandem landing gear.

Instead of the usual single wheel on each landing gear, two full, balloon-tired wheels are mounted one ahead of the other. The front wheel, which has no brakes, is inflated to only 4 lb. while the rear wheel is at 8 lb. pressure. This permits the front wheel to climb up and over obstacles which would stop a regular landing gear.

RCAF Lancs Photograph Canadian Arctic

Two Lancasters of No. 408 Squadron, from Rockcliffe air station, near Ottawa, are en route to Resolute Bay in the heart of the Canadian Arctic, farthest north the photo squadrons have ever been based. At the same time, two photo Lancs, are at The Pas, Man., ready to fly in to Yellowknife, N.W.T., while another is based at Bagotville, Que. for summer operations.

The Air Force hopes that when the Resolute planes return in the Fall they will have most of the Arctic island area recorded on their aerial-camera negatives. The big four-engine Lancaster will carry specially fitted long-range fuel tanks to enable them to reach the most north-

erly point of the Canadian islands, almost 1,750 miles north of Churchill, Man.

The Lancasters doing the far northern work will take tri-metrogon photos which provide the basis for air navigation charts. Not as detailed as the much slower vertical method, the tri-metrogon system involves the use of three cameras working together, and produces a horizon-to-horizon picture.

The Lancasters will operate from 20,000 feet, each run along a specified line resulting in coverage of a 16-mile wide strip. A single Lancaster, encountering favorable weather conditions, can produce about 25,000 square miles of photo coverage during a 10-hour flying day.

Previous operations in the far north have resulted in startling changes to existing maps, and Air Force officials say that many inaccuracies may be revealed by the two Resolute Bay aircraft. Both tri-metrogon and vertical photography will be done out of Bagotville.

Airline Views on Jets On Conference Agenda

The acceptance of civil jet aircraft by airline operators probably will be influenced to an important degree by the technical discussions in progress at press time during the sessions of the IATA Technical Conference at Asbury Park, N.J. Attended by nearly 200 chief technical representatives of the world's airlines, the conference was expected to cover all technical matters on which the operators will base present action and future planning.

Chief interest centred on a general meeting agenda item: symposium on forthcoming maintenance and operational problems of jet aircraft, which was scheduled for May 18-19. This discussion, with full participation of manufacturers, covered all questions raised by member airlines in respect to operation of jets in scheduled service.

Other subjects included: cross-wind components for take-off and landing and their effect on runway usability; approach lighting; airport servicing and loading problems.

The conference consisted of a general meeting and three working groups: 1. Communications Systems and Radio Aids (COM); 2. Engineering and Maintenance (ENG); and Operations (OPS).

TCA Express Service Toronto-Vancouver

Montreal — A nine-hour air service between Vancouver and Toronto became effective in mid-May with the inauguration by Trans-Canada Air Lines of a fourth transcontinental flight.

TCA's North Star aircraft, which now fly the new express service, make only one stop, at Winnipeg, on the 2,200-mile air route between Vancouver and Toronto. Flight time for the four-engine airliners from the west coast city to Winnipeg is five hours and from Winnipeg to Toronto is four hours.

JATO Operation Shown To Aircraft Group

The operation of "Jato" rocket motors for boosting aircraft out of small landing areas was described to members of the Institute of Aircraft Technicians at their recent meeting in Montreal. Speaker was Jack Beauchamp, sales engineer, The Babb Company (Canada) Ltd. The talk was illustrated with U. S. Navy training films on the use of Jato for launching military aircraft from carriers.

Helicopter Hops Mail Terminal to Airport

First Canadian demonstrations of mail transfer from post office terminal to airport by helicopter were made at Toronto recently by Weston Aircraft Ltd. for the Canadian Post Office. Purpose of the test was to evaluate the time saving in carrying air mail from downtown terminal at Bay and Fleet streets in Toronto to Malton airport.

The tests established that the mail could be transferred in less than half the time required by surface means over the 15-mile route to the airport.

Three return flights were made by the Hiller 360 helicopter on each of two successive days. Best time from take-off at the postal terminal to landing at the airport was 11 minutes. (The helicopter followed the surface route although the time could have been reduced by direct flight.)

A landing area for the helicopter was fenced off in a vacant lot near the postal terminal.