

UTILITY TRANSPORT EVALUATED

The Lockheed "JetStar", first multi-purpose jet utility-transport, is being evaluated by various commercial interests and government agencies in Ottawa, Trenton and Winnipeg. Officials from the Department of Transport, which has already purchased the aircraft, will also fly in it.

The specially-fitted Department of Transport model, to be delivered next year, will be used to evaluate navigational aids at altitudes up to ten miles. It will set up traffic-control procedures for the quickly-expanding airline and military-jet traffic across Canada. The "JetStar" has also been selected by various commercial interests that desire an economy-sized jet transport as a time-saver for business executives.

Two prototypes of the "JetStar" have been undergoing extensive static and flight tests since they were built by Lockheed in 1957 in response to a USAF request for a small jet utility plane. The first production model is scheduled to take to the air in July.

The 10-passenger transport has a performance of 500-600 miles an hour and duplicates the flight characteristics of the newest and fastest jet air-liners. The "JetStar" is pressurized and air-conditioned for all-weather flying, has a non-stop range of 3,000 miles, and will fly two to three times as fast as propeller-driven planes now in military and corporate fleets. Production models will take off and land in less than 2,000 feet of runway.

Four lightweight JT-12 jet engines, with a thrust of 3,000 pounds each, will power the production-model "JetStar." These engines were initially developed by Canadian Pratt & Whitney Aircraft Co. Ltd. in Montreal. The prototype "JetStar" at present under evaluation has two Bristol "Orpheus" engines. The "JetStar" has its engines mounted toward the rear of the fuselage instead of in the normal locations on the wings or attached to the forward fuselage. Many manufacturing and engineering "firsts" are incorporated in this plane. For the first time, titanium and stainless steel are used to reinforce vital fail-safe areas in the aircraft's fuselage. Sound levels in the passenger compartment and flight stations are lower, since the engines are behind the pressurized area. The engines are high on the fuselage, protected by the low-swept wings, thereby eliminating chances of picking up debris from runways. The wings and fuselage also offer protection to the engines in the event of a wheels-up landing. Their location also provides easier maintenance.

The economy-sized jet transport is capable of jet airliner performance at only a fraction of the cost of the larger aircraft. There will be savings to tax-payers or stockholders when military leaders or business executives can

use the smaller jet plane on missions where the number of personnel or size of high-priority cargo does not require the larger aircraft.

The "JetStar" was initially designed to service a multiplicity of roles in the military field - particularly those requiring high-performance combat-readiness training, top-priority transportation between key military commands, high speed for critically-needed items, and multi-jet crew-training. Lockheed is also selling commercial versions of the "JetStar" to corporate users. The plane's interior configuration is such that it can be custom-built to meet a variety of requests from business men on arrangement of seats, desks and other facilities for work and relaxation.

SASKATCHEWAN SWEEPS SNOW

Saskatchewan's 8,200 miles of highways ribboning through city and hamlet, form an arterial system as vital to the pulse of economy as blood vessels to the pulse of man.

No phase of highway maintenance is so responsive to efficient organization as snow removal and ice treatment, and Saskatchewan, with its severe winter conditions, boasts the finest programme in Canada.

Some years ago, winter maintenance was almost entirely a matter of snow-drift control and removal. Little emphasis was placed upon ice control. Reconstruction of most provincial highways to a uniformly high standard has all but eliminated the serious snow problems posed by the average winter, at least to a point where routine snow ploughing is all that is required to keep highways open. As a result, winter travel has increased to the extent that a public demand now exists for safe winter-driving conditions at normal highway speeds. To meet this demand, a continuously expanding programme of ice control is necessary. Personnel must be well-organized in advance, if they are to win the vital battles for control of Saskatchewan's highways.

FIRST STEPS

As turning leaves herald winter's approach measures are taken to minimize the hazards of drifting snow. Snow fences appear on the windward side of the right-of-way, and plans for the annual "operation snow removal" are prepared. One important item: the listing of highways to be cleared first. In bad weather, heavy demands upon men and machines make it impossible to clear all roads at once. So priorities must be assigned, with principal highways being opened first, and work deferred on less important roads.

Since it is impossible to plough the pavement bare, thin layers of packed snow must remain. These layers quickly glaze under the