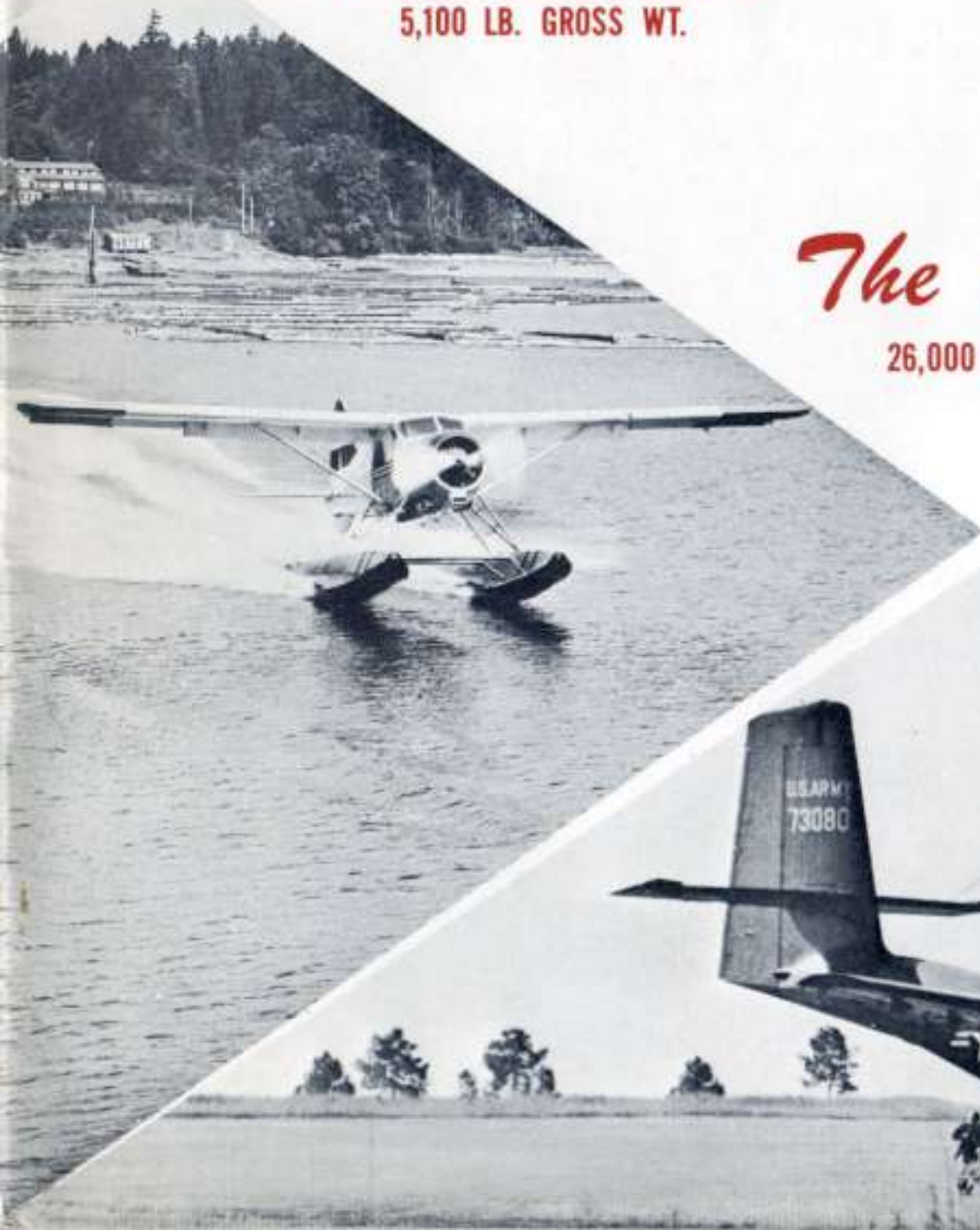


THE *De Havilland* AIRCRAFT OF CANADA LIMITED

PRESENTS S.T.O.L. AIRCRAFT WITHOUT EQUAL

The Beaver

5,100 LB. GROSS WT.



The Otter

8,000 LB. GROSS WT.



The Caribou

26,000 LB. GROSS WT.





THE VERSATILE *Beaver*



The de Havilland Beaver is a sturdy, rugged transport airplane designed and built to stand up to continuous hard use under the most exacting operating conditions. Designed to operate on wheels, floats or skis, this aircraft is easily modified to combinations of these as wheel-ski or amphibian models, and are available as such from the manufacturer. Extremes of climate are no deterrent to the Beaver, as has been proved by successful use in a wide variety of operations, ranging from Tropical to Arctic areas. The versatility of the Beaver is evident when considering some of the operations on which it is employed:

- Passenger transport
- Cargo transport
- Oil survey
- Pipe line patrol
- Mining exploration
- Forestry patrol
- Fire fighting
- Spraying and fertilizing
- Police duties
- Air Ambulance
- Aerial mapping
- Photography

- Supply dropping, as well as the many other duties as demanded by the military forces of the U.S. Air Force and Army, Columbian Air Force, Chilean Air Force, and the Dominican Republic Air Force.



PERFORMANCE

	Landplane	Seaplane
Take-off (full load, zero wind).....	560 ft..... 171 m.	885 ft..... 270 m.
Take-off (10 mile wind).....	450 ft..... 137 m.	680 ft..... 207 m.
Take-off (20 mile wind).....	326 ft..... 99 m.	506 ft..... 154 m.
Rate of Climb (sea level).....	1020 fpm... 5.2 m/s.	920 fpm... 4.7 m/s.
Cruising Speed (5000 ft.).....	143 mph... 229 kmh.	127 mph... 204 kmh.
Maximum Speed (5000 ft.).....	163 mph... 262 kmh.	151 mph... 242 kmh.
Landing Roll (zero wind).....	500 ft..... 152 m.	702 ft..... 214 m.
Service Ceiling.....	18,000 ft... 5,486 m.	15,750 ft... 4,800 m.
Absolute Ceiling.....	20,000 ft... 6,096 m.	17,500 ft... 5,334 m.
Maximum Range, Normal Tanks.....	650 sm... 1,045 km.	570 sm... 913 km.
Maximum Range, Long Range Tanks.....	945 sm... 1,518 km.	828 sm... 1,325 km.

SPECIFICATIONS

An all metal, general utility transport, powered by a Pratt & Whitney "Wasp Junior" 450 B.H.P. engine, driving a Hamilton Standard Constant Speed Propeller.

Wing Span.....	48 ft..... (14.6 m.)
Height.....	9 ft..... (2.7 m.)
Length.....	30 ft. 4 in.... (9.2 m.)
Cabin area.....	9x4x4.25 ft.. (2.7x1.2x1.3m.)
Cabin doors... 39x40 in... (99x102 cm.)	
Cargo capacity.....	134 cu. ft.... (4 cu. m.)
Wheel track... 10 ft. 2 in.... (3.1 m.)	
Float track... 9 ft. 7 in.... (2.9 m.)	



	Landplane	Seaplane
Basic Weight (includes 35 lb. Radio).....	2,960 lbs... 1,342 kg.	3,254 lbs... 1,476 kg.
Disposable Load.....	2,140 lbs... 971 kg.	1,836 lbs... 833 kg.
Gross Weight.....	5,100 lbs... 2,313 kg.	5,090 lbs... 2,309 kg.

PAYLOAD — RANGE

200 sm. (322 km.).....	1,745 lbs... 792 kg.	1,430 lbs... 649 kg.
500 sm. (804 km.).....	1,480 lbs... 671 kg.	1,123 lbs... 509 kg.
Maximum Range Normal Tanks.....	1,510 lbs... 685 kg.	1,293 lbs... 587 kg.

CAPACITIES

The seating capacity is ample, with accommodation for 6 to 7 people besides the pilot, or, as an air ambulance, 2 litter cases, 2 sitting patients, the pilot and one attendant. The cargo capacity includes a baggage storage compartment aft, which also may be useful when loading long pieces of material. The fuel capacity of the Beaver is normally 79 Imp. gal. (95 U.S. 360 litres). Long range tanks increase the capacity to 115 Imp. gal. (138 U.S., 523 litres).

ABOVE FIGURES INCLUDE ALLOWANCE FOR CLIMB TO 5,000' BUT NO OTHER ALLOWANCE OR RESERVES



Fuel filler caps are located at ground level—eliminating necessity for climbing up on the wings to re-fuel.

The Beaver boasts many built-in features to make it exceptionally efficient for the transportation of passengers and/or cargo in remote areas in either summer or winter, on land, water or snow.

SPECIAL OF THE

The passenger chairs are quickly removable.

Cabin floor is highly stressed for concentrated freight loads, carrying up to 2140 lbs., depending on range and version of the aircraft.

Floor is built flush with the door to facilitate freight loading.

Doors are easily removable and of exceptionally large dimensions (39" wide x 40" high).

Hatch in rear wall permits loading long pieces of freight.

Separate pilot's access doors on both sides of cockpit.

Cargo drop hatch in floor for dropping supplies or water-bombing forest fires. Can be used for camera installation.

Batteries mount on sliding rail, makes the battery tray easily accessible from the outside. Battery connections made automatically by spring contacts.

Convenient fuel filler caps, accessible from ground level at a dock or on a tarmac.



The cabin doors (39 inches wide by 40 inches high) are easily removable and permit 45-gallon gas drums to be rolled in sideways or pushed in upright.

As an air ambulance, the Beaver can carry 2 stretchers with 3 passenger seats, or 4 stretchers with 1 passenger seat.

Its ability to land and climb out of exceedingly restricted areas with

heavy loads, made the Beaver a highly valued piece of equipment to the U.S. Army in the Korean War.

Canoe carrier permits quick mounting of canoe on seaplane floats.



FEATURES

Beaver

The Beaver's amazing take-off and climb performance makes it possible to operate out of tiny lakes or landing strips where few aircraft of its load carrying capacity would attempt to venture.

Fully loaded to 5,100 lbs. gross weight, with zero wind, the Beaver landplane is capable of taking off in a distance of 560 feet—and clearing a 50-ft. obstacle in 1,014 ft. It will land in 1000 ft. over a similar object. Operating from a base 8,400 ft. above sea level, it will take off fully loaded in 810 ft.

The seaplane at 5090 lbs. all-up weight, can take off from glassy water in 885 ft., which makes it possible to operate out of a lake no longer than a half-mile in length. Landing distance is 702 ft.

A Beaver seaplane has been successfully operated out of a mountain lake three-quarters of a mile long at an altitude of 5,000 feet above sea level.



Excellent forward visibility is afforded the pilot at all times but especially on the landing approach.

THE
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Beaver

Particularly convenient for in-land to coastal operations the Beaver Amphibian has also proved to be a tremendous asset to operators faced with the problem of supplying prospectors, lumber camps and out-lying settlements situated in small-lake areas.



The latest development of the Beaver has been an amphibious model. This amphibian offers all the advantages of the seaplane and landplane, and has a higher payload, range and performance than amphibians of basic flying boat design. Take-off and landing distances are affected but slightly, as the landplane it gets off in 595 ft. and, as the seaplane, in 885 ft., both with full load and zero wind conditions.

THE AGRICULTURAL *Beaver*

The Beaver has proved an outstanding agricultural aircraft in many parts of the world—including New Zealand, Malaya and Pakistan, as well as in Canada.

The Beaver is available as an easily convertible liquid sprayer with conventional boom and nozzle type spray rig. It is also available as a combination fertilizer-liquid sprayer, with equipment for carrying and dropping bundles such as fence posts, etc.



Beavers AROUND THE WORLD

Since 1947 the Beaver has achieved international fame as a rugged, reliable work airplane, currently operating in some 62 countries on 7 continents throughout the world.

Militarily the Beaver is serving many South American Air Forces, the Coast Guard of Finland, and in quantity with the United States Army. Civily it serves from Canada's Arctic — in the blistering heat of the Middle East — in the rarefied mountain air of Colombia, to the jungles of British and Dutch Guinea, where operators have learned, and acclaim, the reliability and durability of this aircraft for the type of operation in which they are involved.

The roles vary — in Japan the Beaver is an aerial "newsboy", delivering Tokyo newspapers to outlying areas . . . in Rhodesia, Beavers fly passengers, supplies and the mail to isolated communities . . . in India, fitted with spray equipment, they help protect the crops . . . in Antarctica, 6 of 11 countries with geophysical expeditions use Beavers for aerial photography and re-supply of ground parties — all over the world Beavers successfully fulfill their roles, no matter what the undertaking.



The Otter IN THE MILITARY FORCES

The Otter has been selected by the Royal Canadian Air Force, the U.S. Army and U.S. Navy to meet their requirements in widely diversified areas of operations. On many occasions the RCAF have successfully completed mercy missions in the far north, flying the sick or injured from small isolated communities to larger centers where proper medical care has been administered in time to save a life. The high position of the tail assembly on the Otter makes it particularly suitable for parachute jump training.

The U.S. Navy found the Otter a reliable and capable aircraft during their Antarctic expedition "Operation Deepfreeze"—an aircraft able to endure and operate continuously under the most adverse winter conditions. In the more temperate zones the Otter's reputation is equally renowned and continues to grow in the eyes of its operators who rely on the aircraft no matter what the job or the conditions under which the Otter must operate.



The Otter as a military transport is designed to provide:

- Personnel and cargo transport
- Search and Rescue
- Aerial ambulance
- Liaison transport
- Paratroop operations
- Supply dropping
- Aerial photography
- Communications
- Reconnaissance
- Aerial evacuation

THE DURABLE *Otter*

The Otter is a sturdy, all-metal transport airplane, designed to maintain the performance tradition of the famous Beaver, and is built to operate on wheels, floats, skis, or combinations thereof. Standard seating provides ten passenger seats in the cabin and one beside the pilot. Cargo payload is in excess of one ton.

Equally efficient on land, water or snow, the Otter fills the need for a high payload capacity passenger cargo transport suitable for:

- Airline or Charter Operation
- Forest Protection and Timber Cruising
- Mining Exploration and Field Service
- Industrial Transportation
- Oil Pipe Line Patrol
- Aerial Photographic Survey
- Oil Exploration and Field Service
- Police and Coastguard Services
- Air Ambulance
- Military Search and Rescue, Liaison, Transport
- Supply Dropping, Communications, Reconnaissance, etc.

Otters now operated by charter operators serving the northern mining and oil territories have proved capable of moving exceptionally large tonnages of freight at amazingly low costs per ton-mile.





FEATURES OF *The Otter*

CARGO CAPACITY

PASSENGER SEATING

LARGE LOADING DOORS



With seats folded, the Otter becomes literally a "flying boxcar"—capable of handling tremendous loads of bulk cargo.

The cabin is 5 feet high by 5 feet wide, and has an over-all length of 16 feet 5 inches. This provides a total cubic volume of 345 cubic feet.

The floor is highly stressed for the weight of concentrated loads.

Cargo tie-down rings are generously provided.

The cabin interior is shown fitted to accommodate eleven passengers—ten passenger seats in the cabin and one beside the pilot. The seats are easily folded against the cabin wall to enable all or any portion of the cabin space to be



utilized for cargo. If desired, they can be quickly removed and their weight deducted to obtain additional freight payload. A tenth (jump) seat may be fitted in the rear door way, making eleven passenger seats in the cabin, or twelve including a passenger in the co-pilot's seat.

The Otter has a double freight loading door on the port side which measures 46½ inches wide, by 45 inches high. The standard door on the starboard side measures 30 inches by 45 inches.

Doors are also provided on both sides of the cockpit, permitting entry and exit for the pilot on either side when the cabin is loaded to capacity with freight.

THE DHC-4 *Caribou*



..... S.T.O.L. TRANSPORT

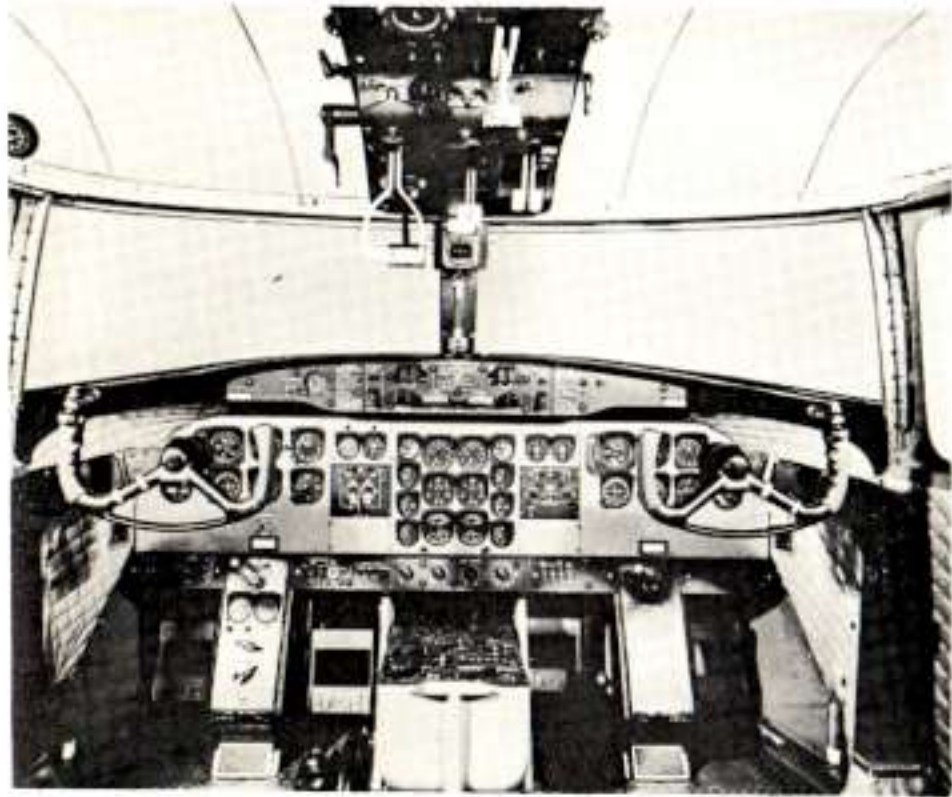
The latest de Havilland Canada design in its Short Take-Off and Landing series of transport aircraft is the DHC-4 "Caribou". Developed primarily for low-cost commercial transportation of passengers and freight in under-developed areas, it was immediately evident the Caribou could also meet the armed forces' need for increased mobility of troops and supplies. As a "big sister" to the Beaver and Otter, the Caribou will consequently complement their work on both civil and military operations out of short, unprepared strips or rough fields. With a gross weight of 26,000 lb. (11,974 kg.), a payload of over 3 tons (2,722 kg.) and a maximum range of 1,450 sm. (2,333 km.), the DHC-4 is the largest aircraft of its type developed and operating to date.

The most important feature of this twin-engined, all-metal transport is its remarkable S.T.O.L. capability. At full gross weight, zero wind, the Caribou is airborne in 540 ft. (165 m.), and with a 15 mile wind (13 kts.) this take-off distance is reduced to 370 ft. (113 m.). The landing performance is equally impressive. After a very steep, low speed approach, the aircraft touches down and stops in 525 ft. (160 m.) with zero wind, or 365 ft. (111 m.) with a 15 mile wind. Power is supplied by two Pratt & Whitney R-2000 engines, developing 1450 bhp. each.



Wing Span.....	96 ft.	(29 m.)
Length.....	72.6 ft.	(22 m.)
Height.....	31.8 ft.	(9.7 m.)
Wing Area.....	912 sq. ft.	(84.7 m.)
Wheel Track.....	23 ft.	(7 m.)
Cabin Capacity.....	1150 cu. ft.	(32.5 cu. m.)
Fuel Capacity.....	700 Imp. gal.,	840 U.S. 3174 l.

..... A PILOT'S AIRPLANE



The Caribou was designed not only as a rugged, versatile transport, but also with high priority on crew comfort. In a well laid-out, airline instrumented cockpit well above cabin level, the pilot and co-pilot are guaranteed maximum freedom of movement. The complete engine control quadrant is situated in an overhead console between the pilots, within comfortable reach. A unique feature in this modern "office" is the radio console which slides forward under the instrument panel when not in use.

In-flight control is assisted by spring tabs on rudders and elevators and geared tabs on the ailerons. This gives quick response to all control movements at cruising speed, and achieves a high degree of maneuverability throughout the speed range of 70 mph to 182 mph (113-292 kmh.). Behind a "wrap-around" windscreen of bird-proof glass, the crew have unobstructed visibility through a 265° forward arc. Additional safety is provided by the automatic feathering of a low thrust propeller, if a thrust differential equivalent to 4 in. of water should develop on take-off.

The Caribou is a highly maneuverable vehicle both in flight and on the ground. A small handwheel on the port side of the cockpit wall provides pilot control of the hydraulic nose-wheel steering through 60° each side of center, giving the aircraft a turning radius of 30.5 ft. Dual wheels are used throughout, and the specially designed landing gear can absorb a vertical component of velocity of 14 ft./sec. — a necessity for its planned operations out of rough, unprepared strips. Fully retractable in 5-6 secs., the undercarriage legs are designed with two-stage shock struts to minimize dipping when taxiing over rough ground, and to maintain the cabin at a mean truck-bed height whether loaded or empty. The 7° anhedral of the wing root section to the engine nacelles and the 5° dihedral on the outboard section contribute greatly to the pilot's rearward visibility.



..... A WORKING AIRPLANE



The Caribou has a cabin capacity of 1150 cu. ft. (32.5 cu. m.), with 69 recessed floor studs to accommodate 30 utility seats, or quickly removeable tie-down fittings of 5,000 lb. ultimate load each. The seats fold against the wall to convert to the straight cargo configuration. 73.5 x 75 in. (187 x 191 cm.) rear loading doors provide easy access to the cabin.



The up-swept tail provides 9½ ft. of ground clearance, allowing a truck to back directly to the loading ramp. Over 3 tons of cargo can be transferred easily and quickly into the truck-bed height cabin. With the rear loading doors open in flight, unimpeded airdrops of troops and/or supplies are possible from low level at low speed (70 mph.-113 kmh.).



A multi-purpose transport, the Caribou can accommodate passengers and/or cargo, 2 jeeps and a carrier, or stretchers when used as an aerial ambulance. Bulky cargo may be loaded from trucks or by fork lift onto portable metal runners to slide easily into the spacious cabin. Portable ramp extensions may be quickly installed to drive vehicles directly on board.



THE MILITARY *Caribou*



The first Caribou went into service with the U.S. Army in October, 1959. Designated the AC-1 (Air Cargo class transport), the S.T.O.L. Caribou is an all-purpose aircraft ideally suited to the armed forces' emphasis on mobility — fast transfer of troops and logistics into unprepared, temporary forward strips.



Capable of accommodating 32 fully equipped troops or 24 paratroops, an important feature of the Caribou is the bottom section of the rear loading door, which when lowered, serves as a ramp for quick loading and off-loading of battle-ready troops. A full complement may be loaded in less than a minute.



A variety of seating arrangements is possible in the passenger configuration, although it is found that wall type seats at 20 in. pitch are practical for troop carrying. As an aerial ambulance the AC-1 accommodates 14 standard Army litters plus 12 seats available for sit-up patients or attendants.



The DHC Family of S.T.O.L. Transports

The 1/2 Ton Flying Truck



The 1 Ton Flying Truck

The 3 Ton Flying Truck



Designed and built by

DE HAVILLAND AIRCRAFT OF CANADA
DOWNSVIEW ONTARIO