DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

A17NM

TRANSAVIA
PL-12/T-300
December 24, 1986

TYPE CERTIFICATE DATA SHEET NO. A17NM

This data sheet, which is a part of Type Certificate A17NM prescribes conditions and limitations under which the product for which the Type Certificate was issued meets the Airworthiness requirements of the Federal Aviation Regulations.

Type Certificate Holder: Transfield Pty. Ltd.,
Transavia Division,
73 Station Road,
Seven Hills N.S.W. 2147
AUSTRALIA

Model PL-12/T-300 (Restricted Category), Approved December 24, 1986

Engine	Lycoming IO-540-K1A5 or IO-540-K1B5 (24 Volt Electrical System)
Engine Limits	For all operations 2700 rpm (300 b.h.p.)
Fuel	100/130 or 100LL minimum grade aviation gasoline.
Oil and Oil Limits	MIL-L-22851 - Ashless Dispersant Grades. Above 15.6°C. ground ambient air temperature, SAE40 or SAE50. From -18° C to 21° C ground ambient air temperature, SAE40 or SAE50. Below - 12° C ground ambient air temperatures SAE30.
Propeller and Propeller Limits	Hartzell, constant speed, metal propeller, HC-C3YR-1RF/F8468A-2R blades. Diameter:: not more than 84 inches and not less than 83 inches. Pitch Settings at 30 inch station: High - 28°± 0.5° , Low - 11°± 0.5°
Airspeed Limit	Never Exceed (170 MPH) 148 kts C.A.S. Max. Structural Cruising (Normal Operating Limit) (144 MPH) 125 kts C.A.S. Maneuvering (126.5 MPH) 110 kts C.A.S. Max. Wing Flaps Extended 7° (170 MPH) 148 kts C.A.S. Max. Wing Flaps Extended 13° - 30° (95 MPH) 83 kts C.A.S.
Crosswind Component	Maximum take-off and landing 18 kts
Center of Gravity Range	Forward Limit: - 20.9 inches aft of the datum at 3800 lb. and 16.4 inches aft of the datum at 2300 lb. or less, with linear variation between 2300 lb. and 3800 lb. Rear Limit: - 23.2 inches aft of the datum at all weights. (See Note 1).

Empty Weight C.G. Range	None
Datum	Mainplane root leading edge
Leveling Means	Longitudinal: - Two recessed screws in right side of hopper skin about 15 inches above the stubwing. Lateral: - Two steel washers, 0.5 inch diameter, welded to upper skin of starboard stubwing, about 18 inches outboard of the fuselage.
Maximum Gross Weight	Both take-off and landing - 3800 lb. (See Note 1).
Number of Seats	Three (1 at +17.0 inches and 2 at +56.0 inches).
Loading	Maximum hopper structural load 2000 lb. (at 30.0 in.) Maximum structural rear seat load 340 lb.
Fuel Capacity	Standard 2 wing tanks (at +26.0 inches) 48 U.S. gals. total 39.5 U.S. gals. usable. Optional 4 wing tanks (at +26.0 inches 96 U.S. gals. total 83 U.S. gals. usable. See Note 2 for additional data on unusable fuel.
Oil Capacity	3.0 U.S. gals. total (at -22.0 inches). 2.3 U.S. gals. usable. See Note 2 for data on oil system.
Control Surfaces	Aileron: Angle of droop 4.5°± 0.5° Up 16.0°± 1° Down 22°± 1° - measured from center line of mainplane trailing edge. Elevator: Up 27°± 1° Down 24°± 1° Rudder: Left 23°± 2° Right 23°± 2° Flap: Up 0° Down 30°
Manufacturer's Serial Number	Aircraft with Serial Numbers commencing F are manufactured to conform with the Federal Aviation Regulations of the United States of America.
Certification Basis	FAR 23 to Amendment No. 23-28, effective April 28, 1982 with exceptions to FAR 23 Amendment 28 as detailed in Note 4. Date of application for Type Certificate December 16, 1975 (original), October 9, 1979 (Amended) Restricted Type Certificate No. A17NM Issued December 24, 2986.
Production Basis	Ref: FAR 21.29
Equipment	The basic required equipment as prescribed in the applicable Airworthiness Regulations (See certification basis) must be installed in the aircraft for certification. Transavia Equipment List Transavia PL-12/T-300 Skyfarmer dated December 18, 1986 contains a list of all required equipment as well as optional equipment approved by the DOA. In addition, the following documents are required: - 1. DOA approved Airplane Flight Manual (See Note 5) 2. Pilot's Handling Notes, dated September 1986. 3. Transavia PL-12/T-300 Maintenance and Overhaul Manual, dated October 15, 1978 and including Amendment Lists 2 and 3, dated March 18, 1981 and August 10, 1982.

Note 1: The airplane as certified in the Restricted Category with a Gross Weight for Take-off 3800 lbs, for day VFR Operations only. Operations into known or forecast icing conditions prohibited.

The handling and stability qualities of the aircraft have been examined at weights up to but not beyond the Australian Agricultural Gross Weight for Take-off of 4250 lb., as scheduled in the performance data given in the 'Pilot's Handling Notes'. However, operation of the airplane at Gross Weights in excess of 3800 lbs. is not approved by the FAA for U.S. registered aircraft.

Since the hopper load is disposable, landings at weights of 3800 lbs. should not be required.

Pilots should exercise caution in handling the aircraft at weights beyond the Gross Weight for Take-off and should restrict speeds and maneuver load factors to prevent over-stressing the aircraft structure.

Note 2: Current weight and balance report, including list of equipment included in certificated empty weight and loading instructions when necessary, must be provided for each aircraft at the time of original certification. The certificated empty weight and corresponding center of gravity locations must include full oil and unusable fuel as noted below: -

Unusable Fuel and Oil Quantity: -

Standard - Unusable Fuel	(8.5 U.S. gals.) - 51.0 lb. at (+26.0 in).
Optional - Unusable Fuel	(13.0 U.S. gals.) - 78.0 lb. at (+26.0 in).
Full Oil -	(3.0 U.S. gals.) - 22.5 lb. at (-22.0 in).

Note 3: All placards as detailed in Transavia Drawing No's. STD 56 Issue C and 1-329 Issue C must be installed in the appropriate locations.

Note 4: Exceptions to the Airworthiness standards of the Federal Aviation Regulations Part 23 to Amendment No. 23-28, effective from April 28, 1982, are listed below: -

(i) FAR 23.161 (c) - Considered inappropriate for intended agricultural operations.
(ii) FAR 23.629 (f) - Considered equivalent level of safety provided.
(iii) FAR 23.771 (b) - Considered inappropriate for intended agricultural operations.

Note 5: This aircraft must be operated in accordance with the Department of Aviation approved airplane flight manual for FAA operations, dated 29th September 1986 and subsequent revisions.

Note 6: Life Limits of 11,650 hours for the upper main wing (P/N 3-201-1 & 3-01-2 and 8680 hours for the lower tub wing (P/N 2-155) have been established.

Note 7: AFT cabin area limited to transportation of persons essential to the agricultural operation 1) During Day VFR, 2) When intercom is functioning, 3) with no chemicals aboard.

Note 8: Noise abatement - This airplane has not been shown to comply with the noise limits in FAR Part 36 and must be operated in accordance with the noise operating limitation prescribed under FAR Part 91.56.

Note 9: Import Requirements - A U.S. Standard Certificate of Airworthiness may be issued on the basis of an Australian Certificate of Airworthiness for Export signed by an authorized representative of the Australian Department of Aviation containing the following statement:

"The airplane covered by this certificate has been examined, tested, and found to conform to the type design approved under U.S. Type Certificate A17NM and to be in condition for safe operation."

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