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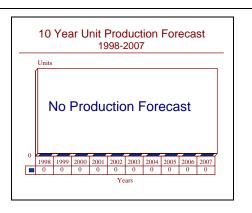
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Zlin Z-37T/137T Agro Turbo - Archived 8/99

Outlook

- Production has ended
- Most recent production models were the Z-137T single-seat agricultural aircraft and the Z-37T-2 trainer



Orientation

Description. Single-engine, turboprop-powered, single/two-seat agricultural aircraft.

Sponsor. The Agro Turbo was sponsored by Moravan Inc.

Contractor. Moravan Inc; Otrokovice, Czech Republic.

Status. Production has ended.

Total Produced. Approximately 56 aircraft were produced, including prototypes.

Application. Agricultural aircraft.

Price Range. Basic aircraft, estimated at \$204,000; with agricultural equipment installed, estimated at \$230,500 – both in 1997 US dollars.

Technical Data

	Metric	<u>US</u>
Dimensions		
Length overall	10.46 m	34.32 ft
Height	3.51 m	11.50 ft
Wingspan	13.63 m	44.72 ft
Weight		
Weight, empty	1,250 kg	2,756 lb
Max take-off weight, agricultural and forestry work	2,525 kg	5,566 lb
Max payload	900 kg	1,984 lb
Max fuel	280 kg	617 lb
Capacities		
Standard fuel	350 liters	92.5 gal



Met	ric	US

Performance^(a)

Max cruise speed at 500 m (1,640 ft)	190 km/h	103 kt
Climb rate, sea level	252 m/m	827 ft/m
T-O to 15 m (50 ft)	580 m	1,905 ft
Landing from 15 m (50 ft)	720 m	2,365 ft
Range, max internal fuel	350 km	188 nm
Swath width: granules	30 m	98 ft
Swath width: liquids	40 m	131 ft

Propulsion

Z-137T (1) Motorlet Walter M 601Z reverse-flow, axial-centrifugal turboprop engine rated 365 kW (490 shp), driving an Avia three-bladed constant-speed propeller.

Variants/Upgrades

<u>XZ-37T</u>. Designation of developmental turboproppowered derivative of the piston-powered Z-37. This variant first flew in September 1981. It was powered by a Walter M 601B turboprop rated at 515 kW (691 shp).

<u>Z-37T-2</u>. Two-seat version for training agricultural pilots, this model was certificated in 1986.

<u>Z-137T</u>. Most recent single-seat production version. It incorporated winglets. The aircraft's M 601Z engine was fitted with an auxiliary drive system rated at 30 kW which operated the various applicator systems, including spraying gear with atomizing nozzles for liquid chemicals and a rotary duster to distribute powdered, crystallized or granulated fertilizers and pesticides.

Program Review

Background. After having produced more than 700 piston-powered Z-37A Cmelak (Bumblebee) agricultural aircraft, Moravan built an XZ-37T prototype powered by a 515-kW (691-shp) Walter M 601B turboprop powerplant. This aircraft flew for the first time in 1981. The following year, Moravan initiated the design of the Z-37T, fitted with a less powerful (365 kW/490 shp) M 601Z engine and

winglets. Two prototypes flew in 1983. Certification and initial delivery took place in 1984 and 1985, respectively. The most recent single-seat production aircraft were designated Z-137T.

Approximately 51 single-seat agricultural aircraft and two Z-37T-2 two-seat trainers were produced. Sales were garnered in Bolivia, the Czech Republic, France, Hungary, Slovakia, South Africa, Sudan and Turkey.

Funding

Not available.

Timetable

Month	Year	Major Development
Sep	1981	XZ-37T first flight
Jul	1983	First flight of second prototype

⁽a) At maximum take-off weight of 2,525 kilograms (5,566 pounds).

1984	BCAR certification received
1985	Initial delivery
1986	Two-seat Z-37T-2 certificated

Worldwide Distribution

Slovak operator Slov Air took delivery of at least 24 aircraft. A complete breakdown of customers is not available.

Forecast Rationale

Moravan has ended production of the Z-37T/137T series. Among the company's current products are new Lycoming-powered aerobatic and trainer aircraft.

These include the two-seat Z-242L and the four-seat Z-143L.

Ten-Year Outlook

ESTIMATED CALENDAR YEAR PRODUCTION

			High Confidence Level		Good Confidence Level		<u>Speculative</u>						
Aircraft	(Engine)	thru 97	98	99	00	01	02	03	04	05	06	07	Total 98-07
ZLIN AIRCRAFT MORAVAN NATIONAL													
ZLIN Z-37T/137T	M 601Z	56	0	0	0	0	0	0	0	0	0	0	0
Total Production		56	0	0	0	0	0	0	0	0	0	0	0

