# SOCATA TBM 700 Model Guide

The SOCATA TBM 700 is a single-engine turboprop. The family covers the TBM 700, TBM700 A, B, C1, C2 and N variants. Registry data for the whole family shows up to 1700 nm range, 252 kt cruise, 3400 kg MTOW, 8 passengers and a 31000 ft ceiling. The only document supplied is one aircraft's PT6A-66D engine logbook, so this guide focuses on engine history and what to check.

## KEY TAKEAWAYS

- The engine in the supplied log is a Pratt & Whitney Canada PT6A-66D, fitted new to N836EA (serial 657). The logbook was opened 15 FEB 2013.
- Hot section inspections were logged at 1220.9 hours (Dec 2016, after FOD was found on borescope) and at 1693.1 hours (Oct 2019).
- The 9/27/2024 annual shows 2516.8 hours total time since new, with regular washes, chip detector checks and fuel nozzle cleaning logged.

## ENGINE HISTORY FROM THE LOG

The first 100 hour inspection at 101.8 hours blended minor first-stage compressor blade erosion. A 400 hour borescope in Oct 2015 found minor compressor turbine blade impact damage, within limits. The 2019 hot section inspection replaced 10 shroud segments and a PT seal ring, and the final CT blade tip clearance was 0.018 inches.

## WHAT TO CHECK WHEN BUYING

Ask for the full engine logbook and the borescope reports. Confirm the 400 hour fuel nozzle cleaning and flow checks, the chip detector checks and the hot section records. The log shows oil conversion to Aeroshell 560 in 2016, a reverse linkage swivel joint replaced in 2019, and salt-laden environment washes with anti-corrosion treatment of the compressor inlet.

### PERFORMANCE

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|---|---|
| Family Max Range Nm | 1700 |
| Family Max Cruise Speed Kt | 252 |
| Family Max Service Ceiling Ft | 31000 |

## SAFETY NOTES

- FOD was found during the Dec 2016 borescope, which led to a hot section inspection. Review the borescope history of any TBM 700 you are considering.
- A damaged reverse linkage swivel joint was replaced in Oct 2019. Check the condition and records of the reverse linkage.
- Salt-laden operation is recorded in the log. Inspect for corrosion at the engine inlet and compressor.

AI-aggregated guide for the SOCATA TBM 700 · sources: N836EA Engine Log - Power Section (#100622) · generated 2026-10-21 · Reference only, not for flight. Check the original documents before relying on this guide.