

Certificate of Test Cell Correlation

THIS DOCUMENT IS TO CERTIFY THAT THE

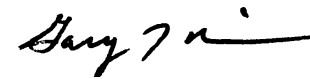
**OGMA
Test Cell**

*SUCCESSFULLY COMPLETED CORRELATION TESTING ON 12/12/2024 AND IS CONSIDERED
QUALIFIED FOR POST-MAINTENANCE/OVERHAUL ACCEPTANCE TESTING OF
PRATT & WHITNEY SERIES ENGINE MODEL(S)*

PW1100G Series Engines

PER PRATT & WHITNEY LETTER OF ACCEPTANCE DATED

December 17, 2024



Gary Michaud
Manager Test Cell Correlations
P&W Aftermarket Operations



GO BEYOND

Pratt & Whitney
400 Main Street
East Hartford, CT 06118

OGMA
Alverca Portugal

December 17, 2024

Attention: Sijtze Smit
Executive Director – Engine & Components

Subject: PW1100G Test Cell Correlation – Preliminary Report

OGMA Industriai Aeronautica de Portugal Parque Aeronautico Test Cell located at Alverca Portugal was correlation tested on December 12, 2024. A Pratt & Whitney (P&W) PW1100G engine, S/N 770154, previously baseline tested at the P&W test facility in Middletown, Connecticut, U.S.A. on February 7, 2024, was used for this correlation. The reason for this correlation was to qualify OGMA's new Test Cell for the PW1100G configuration.

Testing in OGMA test cell was completed in the Auto Air Nacelle configuration using an Auto Air bellmouth P/N XT597124-03, S/N 33 with a Inlet throat area of 5134.3 Sq. In., inlet Transition Duct P/N XT598976-01, S/N 2, left side SFD P/N XT586584-103 S/N 32, Condi Nozzle P/N XT598633-01, S/N 32, right side SFD P/N XT596584-104 S/N 32, Condi Nozzle P/N XT598633-02, S/N 32, with a Total exit area of 3051.5 Sq In and Duct throat area of 2993.7 Sq In. A slave Agilis test nozzle P/N XT596623-100, S/N 00001 with an exhaust exit area of 505.6 Sq. In.

All engine performance parameters were from the EEC: N1, N2, P25, PS3, TT2S, T25, T3, T45, and T49. The P2/T2 Rosemount probe for the EEC was located at approximately 11:00 position looking from the rear. T2 was from the average of the test cell inlet temperature probes, WF was from the average of two Coriolis flowmeters meters, and Thrust (FN), was from the test cell "working" load cell. P2 was obtained from the eight station 10 bellmouth mounted pitot static probes. These same parameter sources should be used for all subsequent performance calculations and acceptance criteria for all future testing of PW1100G engines.

Going forward, the 8 individual PT2 probe readings are required for the first 10 engines tested. The Final report will be issued after reviewing the 10 engines worth of data. The data produced by the correlation engine, when tested at OGMA, was within repeatability limits and was in general agreement with the expected results. As a result of the correlation test, the OGMA is considered fully qualified, on Preliminary basis, for post maintenance/Overhaul acceptance testing of P&W PW1122G, PW1124G, PW1127G, PW1130G, PW1133G and PW1133GA series engines.

Test cell correction factors, in equation are attached to this acceptance letter. These corrections should be entered into the Test Cell Data Acquisition System (DAS) and used for all future testing.

Consistent with FAA AC43-207, re-correlation is recommended within 7 years unless trending of the test data is accomplished, or periodic checks are performed within the 7-year cycle using another valid correlated test cell for engine test data comparisons.

This correlation acceptance is applicable only to engine operation in the same configuration used during the correlation testing and will remain valid as stated above provided no significant alterations are made to the test cell to affect the aerodynamic characteristics, or any changes that could affect the accuracy of the correction factors.

Best Regards,

Gary Michaud
Manager Test Cell Correlations - GTF Aftermarket Operations

Table 1: Correction Factors