Automatic Altitude Control System Performance Test

Please provide the following information on the test aircraft, along with the completed autopilot hold test sheets included below. Send a fax copy of the completed form to AeroMech Inc. at 425.257.9756.

- Airframe Model: _____
- Airframe Serial Number: _____
- Airframe Registration Number: _____
- Aircraft Typical Cruise Mach: _____
- Aircraft Empty Weight: _____
- Aircraft Minimum Weight at FL290: _____
- Aircraft Engine Model and Manufacturer : _____
- Year of Airframe Manufacture: _____

RVSM Autopilot Performance Check Table
Cruise Conditions ~ 1st Altitude

Airplane Model/SN:_____ Date:_____

Altitude:_____ Pilot:_____

Test Procedure

1) During normal cruise flight at an altitude between FL270 and FL430 (Baro 29.92 inHg or 1013 mb) activate altitude hold on the autopilot panel. Allow the aircraft to stabilize on the selected altitude. **The air must be stable (no turbulence) during this check. Maintain flight level and cruise Mach number.**
2) With the airplane in the normal (cruise) mode and altitude hold engaged, record the data from the primary displays (using Table 1) *every minute* for a minimum flight segment of 20 minutes.

Time (Minutes)	Pilot's Altimeter (Feet)	Copilot's Altimeter (Feet)	Pilot's Mach	Copilot's Mach	Pilot's Airspeed (Knots)	Copilot's Airspeed (Knots)
0:00						
0:01						
0:02						
0:03						
0:04						
0:05						
0:06						
0:07						
0:08						
0:09						
0:10						
0:11						
0:12						
0:13						
0:14						
0:15						
0:16						
0:17						
0:18						
0:19						
0:20						

Table 1. Autopilot Performance Tracking Form – Cruise Test

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RVSM Autopilot Performance Check Table
Cruise Conditions ~ 2nd Altitude

Airplane Model/SN:_____ Date:_____

Altitude:_____ Pilot:_____

Test Procedure

3) During normal cruise flight at an altitude between FL270 and FL430 (Baro 29.92 inHg or 1013 mb) activate altitude hold on the autopilot panel. Allow the aircraft to stabilize on the selected altitude. **The air must be stable (no turbulence) during this check. Maintain flight level and cruise Mach number.**
4) With the airplane in the normal (cruise) mode and altitude hold engaged, record the data from the primary displays (using Table 2) *every minute* for a minimum flight segment of 20 minutes.

Time (Minutes)	Pilot's Altimeter (Feet)	Copilot's Altimeter (Feet)	Pilot's Mach	Copilot's Mach	Pilot's Airspeed (Knots)	Copilot's Airspeed (Knots)
0:00						
0:01						
0:02						
0:03						
0:04						
0:05						
0:06						
0:07						
0:08						
0:09						
0:10						
0:11						
0:12						
0:13						
0:14						
0:15						
0:16						
0:17						
0:18						
0:19						
0:20						

Table 2. Autopilot Performance Tracking Form – Cruise Test

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RVSM Autopilot Performance Check Table
Cruise Conditions ~ 3rd Altitude

Airplane Model/SN:_____ Date:_____

Altitude:_____ Pilot:_____

Test Procedure

5) During normal cruise flight at an altitude between FL270 and FL430 (Baro 29.92 inHg or 1013 mb) activate altitude hold on the autopilot panel. Allow the aircraft to stabilize on the selected altitude. **The air must be stable (no turbulence) during this check. Maintain flight level and cruise Mach number.**
6) With the airplane in the normal (cruise) mode and altitude hold engaged, record the data from the primary displays (using Table 3) *every minute* for a minimum flight segment of 20 minutes.

Time (Minutes)	Pilot's Altimeter (Feet)	Copilot's Altimeter (Feet)	Pilot's Mach	Copilot's Mach	Pilot's Airspeed (Knots)	Copilot's Airspeed (Knots)
0:00						
0:01						
0:02						
0:03						
0:04						
0:05						
0:06						
0:07						
0:08						
0:09						
0:10						
0:11						
0:12						
0:13						
0:14						
0:15						
0:16						
0:17						
0:18						
0:19						
0:20						

Table 3. Autopilot Performance Tracking Form – Cruise Test

Notes:

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