

FLIGHT PLANNING

- Aircraft **approved** for RVSM (operator has current 91 LOA or 135 OpSpec change, documents present in aircraft)
- Minimum equipment** requirements
 - Two independent altitude measurement systems
 - Altitude alerting system
 - Automatic altitude control system
- Restrictions/equipment issues** affecting RVSM operation
 - Altimetry system accuracy
 - Airspeed, altitude, weight
 - Other restrictions as documented in AFM
- Forecast/actual **WX** (turbulence) and RVSM **NOTAMs**
- "W" or "Q" in "Aircraft Type/Special Equipment" of **Flight Plan**

PREFLIGHT

- Maintenance logs / MEL** — reviewed and checked
- Pitot/static sources** — inspected
 - Surrounding skin condition (paint chips, dents, etc.)
 - Pitot tubes — clear, no clogs or deformations
- Altimeters**
 - Set to local altimeter setting
 - Difference between settings, field elevation < 75 feet
 - Difference between settings — within AFM limits
- Other RVSM-related checks**
 - Required equipment — working
 - ATC-related phraseology — reviewed
 - Contingency procedures — reviewed
 - Equipment quirks — known and understood

FLIGHT IN RVSM AIRSPACE**PRIOR TO ENTRY IN RVSM AIRSPACE**

- Automatic altitude control system** — working properly
- Altitude alerting system**
 - working properly
 - set to assigned FL
- Altimeters**
 - Crossing transition altitude — all set to 29.92

[If any system fails before entering RVSM airspace, notify ATC]

IN LEVEL FLIGHT

- Automatic altitude control system** — engaged
- Transponder** (if required) — coupled to aircraft control altimeter
- Aircraft maintaining **CFL** — verified
- Altimeters**
 - At first level-off — cross-checked, primary agree within ± 200 feet, values recorded
 - Hourly — cross-check recommended, primary agree within ± 200 feet

WHEN CHANGING FLIGHT LEVELS

- Climb / descent rate** — ≤ 1000 fpm within
 - last 1,000 ft of altitude change
 - 5 nm and $\pm 2,000$ ft of other aircraft
- Altitude control system** — on altitude capture (over/undershoot maximum: 150 ft)
- Altimeters** — all set to 29.92 when CFL reached

POST FLIGHT

- RVSM issues/problems** (including TVE, AAD, or ASE events) recorded (and reported within 72 hours, if required)

RVSM: CONTINGENCY CHECKLIST

SYSTEM FAILURES
A. Automatic Altitude Control or Altitude Alerting System Fails
1. Notify ATC
? Able to maintain CFL
✓ Yes — ATC applies CVSM or asks you to leave RVSM airspace
✗ No — Request clearance out of RVSM airspace
B. Primary Altimetry System Readings Diverge By > 200 ft
1. Determine defective system
? Able to determine defective system
✓ Yes — Go to C
✗ No — Go to D
C. One Primary Altimetry System Fails
1. Couple working altimetry system to altitude control system
2. Hold assigned altitude
3. Notify ATC
D. All Altimetry Systems Fail
1. Maintain CFL using standby altimeter (if fitted)
2. Notify ATC
3. Determine course of action
○ Fly aircraft under manual control (as in A above)
○ Request clearance out of RVSM airspace
○ Declare emergency

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RVSM: CONTINGENCY CHECKLIST

SEVERE TURBULENCE / MWA
1. Contact ATC and report magnitude and location of turbulence or MWA
2. Altitude deviation:
? ≥ 200 ft — request vector to avoid traffic
? < 200 ft — (vector to avoid traffic optional)
3. Watch for conflicting traffic, if possible
To leave airspace with severe turbulence or MWA, request a Flight Level change and/or reroute if necessary
WAKE TURBULENCE
<input type="checkbox"/> Contact ATC and request
○ A vector away from other aircraft's flight path
○ A change to a different FL
○ A lateral offset

RVSM: FACTS & FIGURES

Conventional Vertical Separation Minimum (CVSM)	2000 ft
Reduced Vertical Separation Minimum (RVSM)	1000 ft
Recommended climb/descent rate	1000 ft
Max. AAD or TVE	300 ft
Max. ASE	245 ft
Max. difference between primary altimeter readings	200 ft
Max. assigned FL under/overshoot	150 ft
Max. difference between altimeters and field elevation	75 ft
Filing deadline with FAA for ASE, AAD, or TVE events	72 hours