

# Small Airplane Certification Status and Recent Options for RVSM Compliance



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# Objectives

- Review small aircraft compliance document availability
  
- Review certification options for
  - older airframes
  - airframes not supported by the OEM
  - airframes of unique aerodynamic and/or aircraft systems configuration

# Current Information

- Contact manufacturer for status of RVSM compliance documents
- FAA Website “RVSM Documentation” page also lists approved RVSM compliance documents
- Periodicals/Publications/Internet

# Canadair Service Bulletins

- Global Express
- Challenger 604
- Challenger 601
- Challenger 600
- CL-601R C-RJ (Regional Jet)
- CL-601R SE (Regional Jet)



# Cessna SB's

- Citation I and ISP
- CitationJet, CitationJet CJ2 and CitationJet I/II
- Citation II, SII, IISP, II Bravo
- Citation V, V Ultra, V Encore (mfr'd compliant)
- Citation Excel
- Citation III
- Citation VI
- Citation VII
- Citation X



# Dassault Falcon Jet SB's

- 2000
- 900
- 900EX
- 50
- 50EX
- 200
- 20



# Embraer SB's

- ERJ 135
- ERJ 145
- Legacy
- ERJ 145 XR by 3<sup>rd</sup> quarter 2003
- ERJ 135 K( ) by 3<sup>rd</sup> quarter 2003



# Gulfstream/Israel Aircraft Industries

## → Aircraft Service Changes

→ G2

→ G2B

→ G3

→ G4

→ G5



## → SB's

→ Astra/Astra SP

→ G-100 (formerly Astra SPX)

→ G-200 (formerly Galaxy)



# Learjet SB's

- 31 – 2<sup>nd</sup> quarter 2003
- 31A
- 35/36 (FC 200)
- 35/36 (FC 530)
- 45 - mftr'd RVSM compliant
- 55
- 55 BC
- 60



# Raytheon SB's

- Beech King Air 200 and Beech King Air 350
- Beechjet 400 – 3/Q 2003
- Beechjet 400A - released
- Diamond MU-300 – 3/Q 2003
- HS 125 Series 1 through 600 - none planned
- HS 125 Series 700A - TBD
- HS 125 Series 700B - TBD
- HS 125 Series 800 and 800XP
- HS 125 Series 1000
- Premier I - 4/Q 2002 (SB being completed)
- Beech Starship 2000 – TBD (Probably NG)



# Other General Aviation Airframes

- **Cessna Conquest**: 4<sup>th</sup> qtr 2003
- **Twin Commander**: 4<sup>th</sup> qtr 2003
- **Dassault Falcon 10**: Several STC's available
- **Dassault Falcon 20**: 3<sup>rd</sup> qtr 2003
- **Hawker 700**: Group and NonGroup available
- **IAI Westwind I/II**: STC(s) available
- **Learjet 20**: 3<sup>rd</sup> qtr 2003
- **Lockheed**
  - Jetstar II
  - Jetstar 731 - expected 3/Q 2003
- **Piaggio**: Avanti P180 – SB available
- **Pilatus**: PC 12 - TBD
- **Piper**: PA-42-1000 Cheyenne 4000 - TBD
- **Sabreliner**: NA-265



# RVSM Certification Options

- Older airframes
- Airframes not supported by the OEM
- Airframes of unique aerodynamic and/or aircraft systems configuration



# Recent Options

- Systems have been approved that combine:
  - Altimeter, Air Data Computer and, if desired, altitude alerter
  
- Option not available in 1996-97 for initial North Atlantic RVSM implementation

# Installations Incorporating Recent Options

## General Aviation

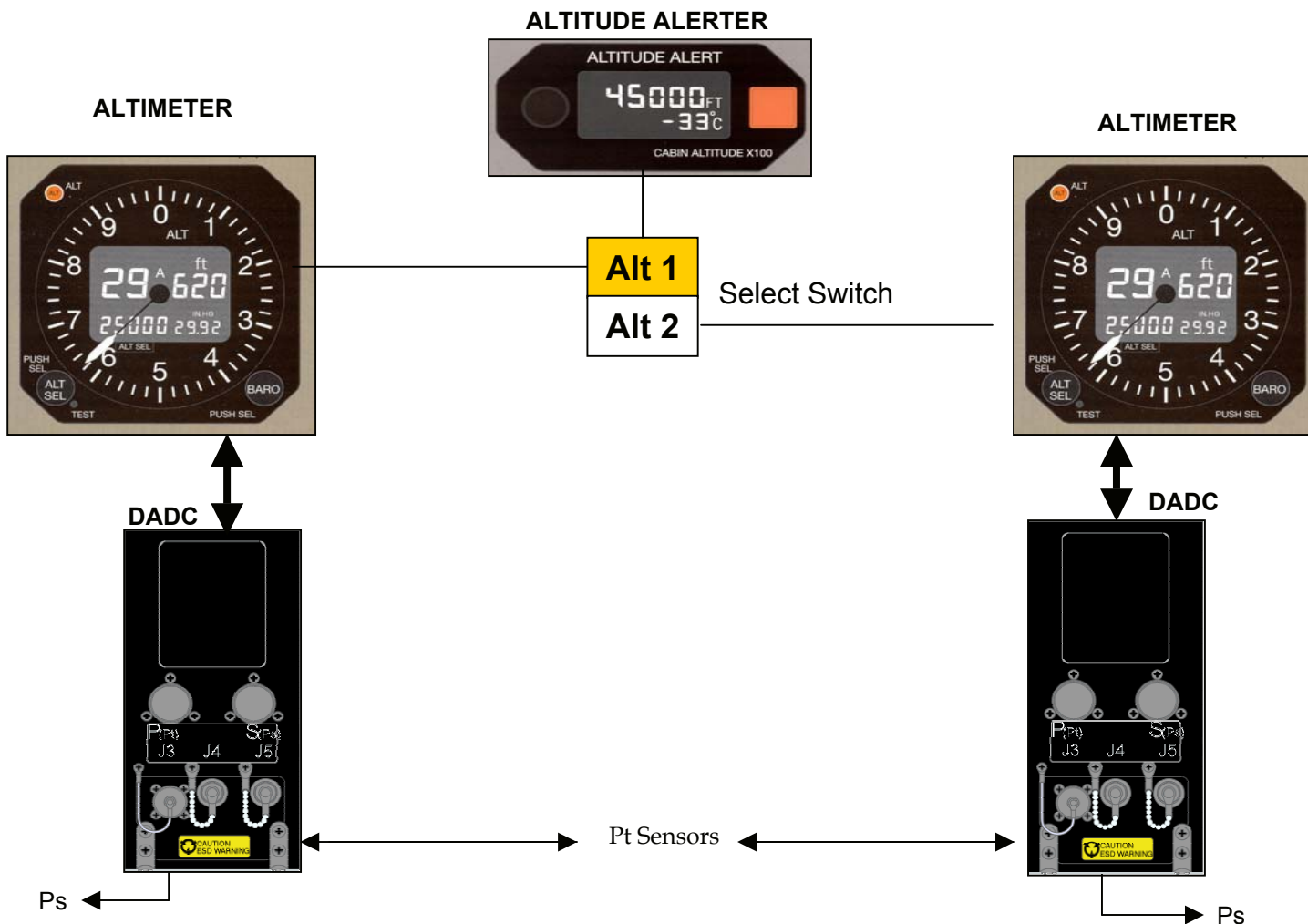
- King Air 200 – 350
- G – 1159, GII
- Citations 500,550,560
- Lear 31,35,36,55
- Hawker 700
- Piaggio 180
- Falcon 10/20
- CL 600
- Jetstar II
- Sabre 80
- Westwind I/II

## Commercial Transp.

- Boeing 737 - 100, 200
- DC - 9
- DC – 8
- KC - 135
- Boeing 727 - 100, 200
- Boeing 707-300 (3/2003)

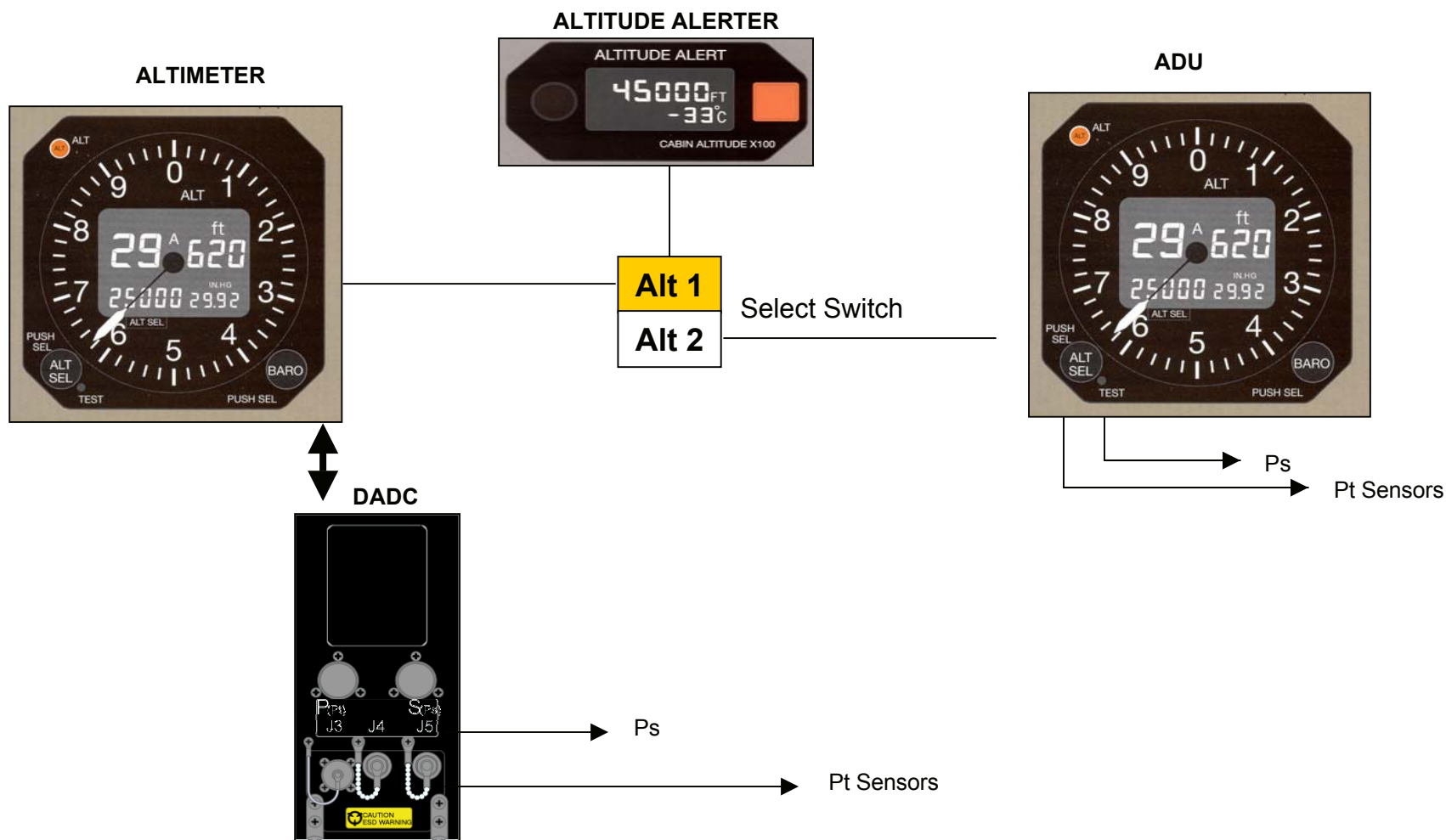
# RVSM Air Data System Diagram

## Dual DADC Configuration



# RVSM Air Data System Diagram

## Single DADC/ADU Configuration



# Conclusion

- Best source of information on RVSM compliance documents is the aircraft manufacturer (Group certifications) or the FAA Website
- RVSM compliance documents for in-service aircraft normally take the form of SB's and/or STC's
- Several airplane model types have more than one RVSM solution (generally related to fleet size)