

# **Flight Data Monitoring Conference**

## **Introduction**

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***European FDM Conference – Cologne 12 January 2012***  
***Capt. Bertrand de Courville***  
***ECAST Co-Chair***

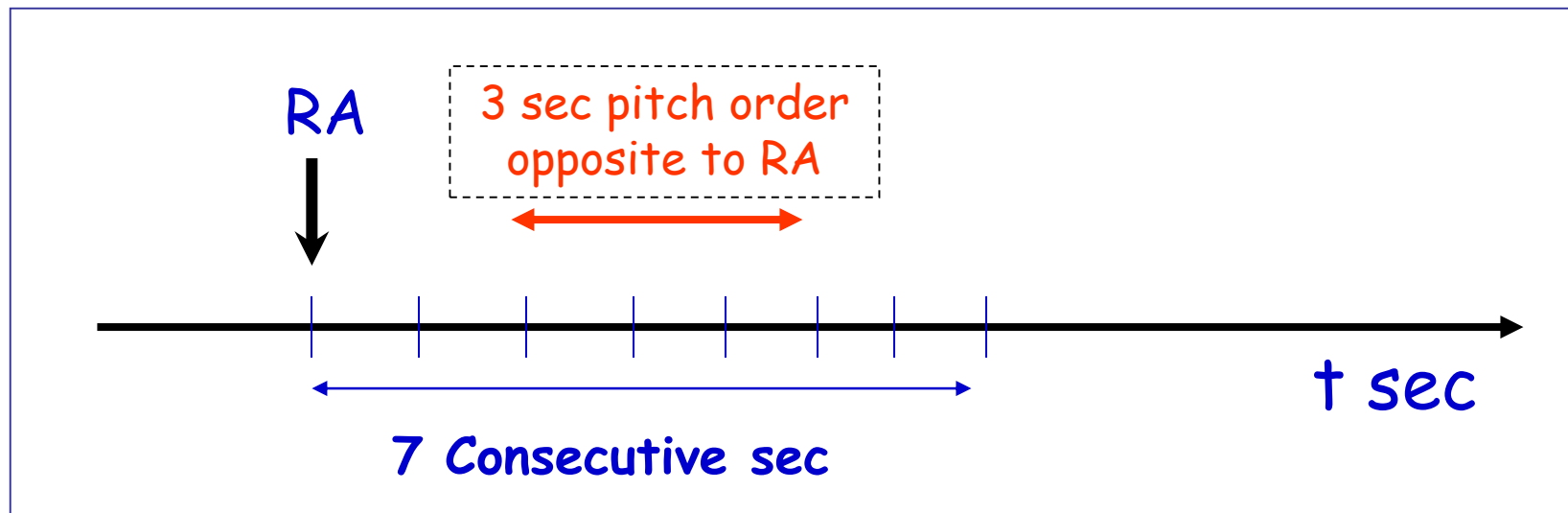
San Diego - 1978 - B727  
Approach - 2600 ft



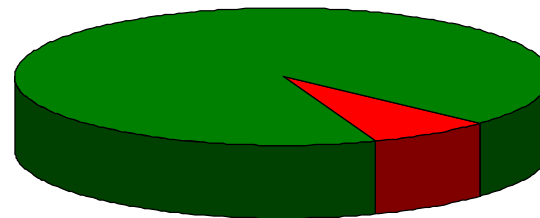
Los Angeles-1986- DC9  
Approach - 6000ft



## Monitoring opposite reaction to TCAS



**RA TCAS "AVS"**



**Correct actions  
93%**

**7%  
Opposite actions**

## Safety information sharing : ACAS Bulletins

### Airline operational feedback on initial "Adjust Vertical Speed" RAs

A major European airline is routinely monitoring flight crew responses to RA indications. It has identified an issue related to the "Adjust Vertical Speed" RAs.

- About 4% of initial responses are wrong and opposite to the RAs;
- Most of the errors are **quickly corrected** but a few serious events have occurred.

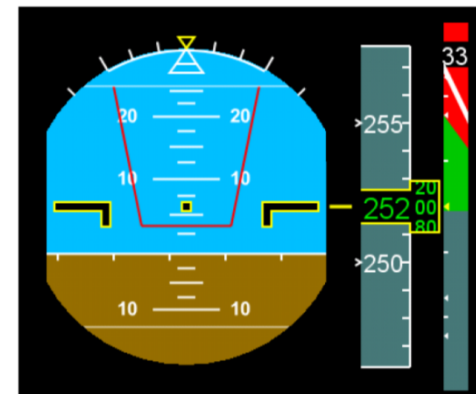
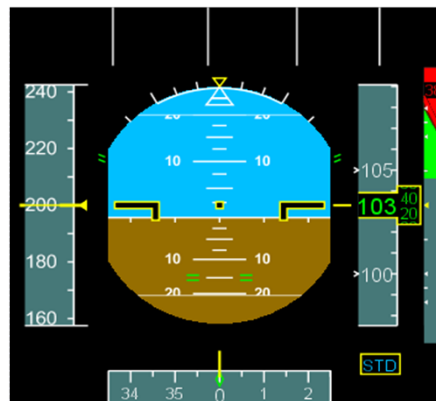
Some contributing factors have been identified by this operator:

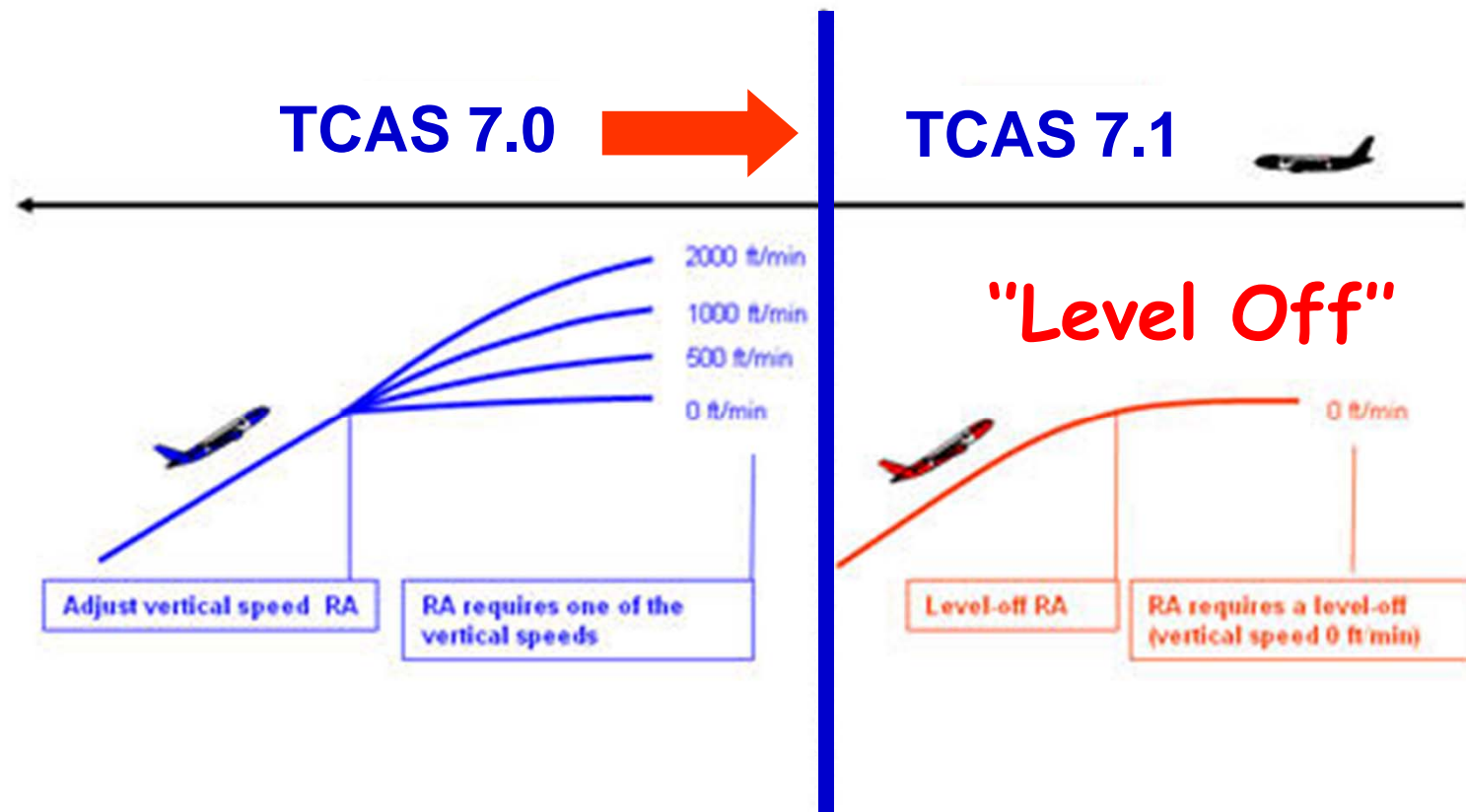
- Only "Climb" and "Descend" RA scenarios are exercised on its flight simulators. An "Adjust Vertical Speed" RA can only be generated subsequently, depending upon the pilots' reactions;
- The aural "Adjust Vertical Speed, Adjust" does not specify the direction of the manoeuvre required;
- Interpretation of the RA display on the vertical speed tape of the PFD is less intuitive than the pitch cue.

This experience is shared by some other major European airlines.



- ✓ Ambiguous Call out : "Adjust"
- ✓ Non intuitive Interface, Flying V/S iso Attitude
- ✓ Simulateur AVS non adaptés aux "AVS"





## **SMS Best practice : Operator Flight Data Monitoring**

- ☐ **Dedicated to European Operators**
  - ✓ Facilitate implementation of FDM by operators
  - ✓ Support operators in drawing the maximum safety benefits
- ☐ **Pioneer group of operators (Roma meeting)**
- ☐ **Priority areas of work**
- ☐ **May 2011 survey**
- ☐ **January 2012 conference**