



## The Boeing Edge

### Fleet Services

#### Maintenance and Engineering

- Boeing Operations Centers
- Engineering Services
- Lease Transition Services
- Maintenance Manuals
- Maintenance Performance Toolbox
- Maintenance Programs
- Maintenance Training
- Reliability Analysis
- Scheduled Maintenance Analytics
- Technical Support

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- AOG Services
- Boeing Shanghai Aviation Services
- GoldCare

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- Boeing Business Jet Services
- Blended Winglets
- Boeing Converted Freighters
- Interior Upgrades
- Performance Improvement Packages
- Performance Upgrades

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## Modification Services TCAS 7.1

Modification Services

# TCAS 7.1

The Safety Related Enhancements (TSO C119) change current TCAS II aural warning from “Adjust Vertical Speed, Adjust” to “Level Off, Level Off” (Figure 1) and correct TCAS-TCAS reversals to address missed reversals and late reversals (Figure 2).

**Background**

EUROCONTROL identified enhancements through extensive analysis of pilot responses to TCAS II commands in European airspace.

Boeing is prepared to work with you to streamline your ability to implement TCAS II Version 7.1.

Further information regarding regulatory mandate, operational approval, and flight crew operating requirements is available at:  
<http://www.eurocontrol.int/acas-ii/tcas-ii-version-71>.

- Hardware remains the same
- Existing TCAS unit is modified using a software upgrade
- Pricing is based on software-only revision

**Offering 737 Classic, Next-Generation 737, 747, 757, 767, 777**

Forward fit deliveries: March 1, 2012

Retrofit aircraft: December 1, 2015

**Price ACSS 3000, Honeywell and Rockwell**

- Blockpoint<sup>1</sup> Service Bulletin: \$20,200/customer fleet (per model)\*
- Blockpoint<sup>1</sup> Service Bulletin: \$23,300/customer fleet (only for 737 Classic with Honeywell or Rockwell)\*
- Stand-alone Service Bulletin: \$37,294/customer fleet (per model)\*

**Price ACSS 2000**

- Blockpoint<sup>1</sup> Service Bulletin: \$36,600/customer fleet (per model)\*
- Stand-alone Service Bulletin: \$43,700/customer fleet (per model)\*

<sup>1</sup>Blockpoint is defined as a predetermined release date where multiple customers are included on one service bulletin. If a customer opts not to be included in the blockpoint release, a stand-alone bulletin may be provided at additional cost.

\*Pricing in 2013 U.S. dollars, STE.

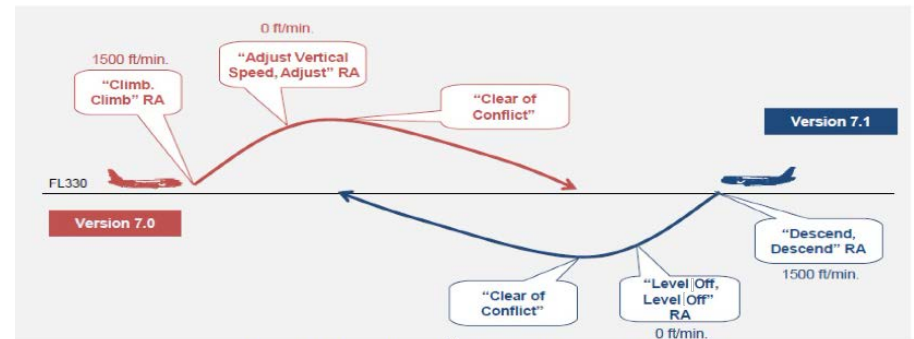


Figure 1. Comparison of “Adjust Vertical Speed. Adjust” and Level Off, Level Off” RAs (Source: EUROCONTROL)

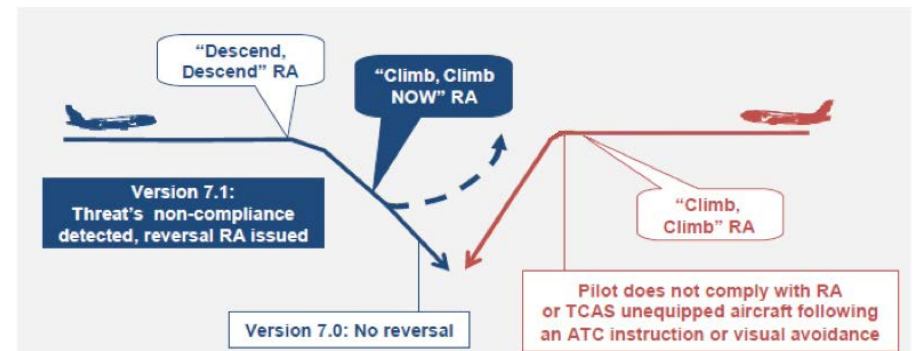


Figure 2. Improved Reversal Logic (Source: EUROCONTROL)

**For further information, please send a request to [airplaneservices@boeing.com](mailto:airplaneservices@boeing.com) or contact your CAS Sales Representative.**