

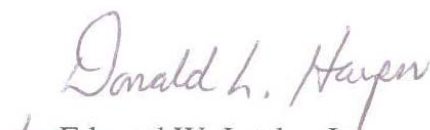
**03/25/12****SUBJ:** United States Standard Flight Inspection Manual

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- 1. Purpose of This Change.** This change transmits revisions to the United States Standard Flight Inspection Manual (USSFIM), FAA Order 8200.1C; Department of the Army Technical Manual TM 95-225; Department of the Navy Manual NAVAIR 16-1-520; and Department of the Air Force Manual AFMAN 11-225, dated October 1, 2005.
- 2. Audience.** Air Traffic Technical Operations Eastern, Central, and Western Service Areas; Flight Inspection Operations Offices and crewmembers in Flight Inspection Services; Flight Standards Flight Technologies and Procedures Division; NAS Implementation Centers; and special military addressees.
- 3. Where Can I Find This Change?** Go to [http://www.faa.gov/regulations\\_policies/orders\\_notices/#browseTopics](http://www.faa.gov/regulations_policies/orders_notices/#browseTopics). Distribution within the Department of Defense is handled by the National Geospatial Intelligence Agency. For the U.S. Air Force, this revision is included in the AF STDPUBs CD-ROM and is available on the Internet (<http://afpubs.hq.af.mil/>).
- 4. Explanation of Policy Changes.** Chapter 17, Paragraph 17.12g. This Change corrects the Tolerance Table on page 17-18. The Lateral Alignment tolerance is 0.1<sup>0</sup>, but was incorrectly changed to 0.01<sup>0</sup> in Change 4.

**PAGE CONTROL CHART**

<b>REMOVE PAGES</b>	<b>DATED</b>	<b>INSERT PAGES</b>	<b>DATED</b>
17-17	05/30/11	17-17	05/30/11
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for Edward W. Lucke, Jr.  
Director  
Flight Inspection Services

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(6) **Frequency Interference (Spectrum Analysis).** The RF spectrum from 1559 to 1595 MHz should be observed when GPS parameters indicate possible RF interference. Monitor the GBAS VDB frequency during all inspections. Monitor the GPS or other appropriate frequencies anytime interference or anomalies are suspected and **document** all spectrum anomalies for analysis. Other validation checks may be requested by facilities maintenance. Interference signals are not restrictive unless they affect receiver/ sensor performance. Loss of differential data is an indication of interference, multi-path, or shadowing of the VHF transmission. The RF Spectrum  $\pm 100$  kHz either side of the VHF Data Link (VDL) frequency must be observed on the spectrum analyzer in the case of suspected interference.

The SNR values being recorded may indicate RF interference problems. The normal GPS signal strength is -130 to -123 dBm. Use the SNR values, along with the spectrum analyzer, to investigate the RF interference, the location of its occurrence, and possible sources. Particular attention must be given to harmonics on or within 20 MHz of GPS L1 (1,575.42 MHz), L5 (1,176.45 MHz), and those on or within 10 MHz of GPS L2 (1,227.6 MHz). If GPS interference is suspected, annotate on the flight inspection report any visual observation of radio, cellular, or other facilities which may be a possible source for emitting RFI.

During a GLS procedure, document all spectrum anomalies.

**NOTE:** Report interference to the FICO, who will in turn forward the report to the ATCSCC/ Spectrum Assignment and Engineering Office.

(7) **CRC Remainder.** The FAS data integrity must be confirmed by an exact match of the FAS Data CRC remainder as documented on FAA Form 8260-10 (or equivalent) and the FAS Data CRC remainder computed by the FIS and the GBAS avionics.

(8) **Restriction(s).** In order for the GBAS to be classified “UNRESTRICTED”, coverage tolerances must be met throughout the service volume. Restrictions to GBAS coverage at distances less than the service volume are permitted, provided the GBAS meets all coverage tolerances throughout all procedural approach segments. When facility restrictions are based on a commissioning only type of inspection (e.g., VDB unusable above 8,000’), document the condition and type of inspection check on the Facility Data Sheet. Conditions found in these type checks do not require revalidation on periodic inspections. Establish facility restriction(s) and take appropriate NOTAM action based upon facility performance IAW Chapter 5, Section 1.

(9) **Documentation.** GBAS reports must be completed in accordance with FAA Order 8240.36, Flight Inspection Report Processing System. Restrictions must be defined and documented on flight inspection reports. All recordings and documentation (paper **and** electronic) must be retained and handled in accordance with FAA Order 8200.1.

## Chg 6

**g. Tolerances. Flight Inspection Reference System.** FIS with differential GPS (DGPS) corrected data or TVPS will be used to provide FAS data analysis.

Parameter	Paragraph Reference	Tolerances
Terminal Area Path	17.12c(1)	(Reserved)
Airport Surface	17.12c(6)	(Reserved)
Initial/ Intermediate Approach Segment	17.12c(2)	FAA Order 8200.1, Chapters 6 and 13
Final Approach Segment	17.12	
GBAS RPI (Morse Code) <sup>1</sup>	17.12f(2)	Exact Match
FAS Data CRC	17.12f(2)	Exact Match
Glide Path Angle	17.12f(2)	$\pm 0.05^\circ$
Lateral Alignment	17.12f(2)	$\pm 0.1^\circ$ true course
TCH	17.12f(2)	$\pm 2\text{m}$
Message Type 4 Alert Limits	17.12f(3)	
FASLAL		40 m
FASVAL		10 m
		<b>Note:</b> Values apply at 200' DA point to LTP/ FTP
Missed Approach Segment	17.12c(4)	FAA Order 8200.1, Chapters 6 and 13
Broadcast VDB Message	17.12b	Required message types
Coverage VDB, minimum field strength, horizontal polarization		$>-99\text{ dBW/m}^2$ or $>215\text{ }\mu\text{V/m}$
Coverage VDB, minimum field strength, vertical polarization		$>-103\text{ dBW/m}^2$ or $>136\text{ }\mu\text{V/m}$
RF Interference	17.12f(6)	Interference must not cause out-of-tolerance condition or loss of GBAS data continuity.
Maximum Use Distance ( $D_{\text{max}}$ )	17.12b(2)(a) <u>1</u>	As defined by GBAS Site

<sup>1</sup> The RPI may be verified visually or aurally (via Morse code), depending on the aircraft integration. Flight inspection aircraft will display the RPI for verification with the relevant approach chart.

**h. Adjustments.** (Reserved)