

UNCLASSIFIED
Change Topic: Almanac Intervals

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This change package accommodates the text changes to support the proposed solution (see table below) within the public Signals-in-Space (SiS) documents. All comments must be submitted in Comments Resolution Matrix (CRM) form.

The columns in the WAS/IS table following this page are defined below:

Section Number: This number indicates the location of the text change within the document.

(WAS) <Document Title>: Contains the baseline text of the impacted document.

Proposed Heading: Contains proposed changes to existing section titles and/or the titles to new sections

Proposed Text: Contains proposed changes to baseline text.

Rationale: Contains the supporting information to explain the reason for the proposed changes.

<i>PROBLEM STATEMENT:</i>
The language in IS-GPS-200 contains ambiguous/erroneous language with respect to the almanac transmission intervals for the current and future generations of SVs. At present, the ground network is based on almanac transmission intervals that are specified for SV generations II and IIA. The transmission intervals need to be specified for generation IIR, IIR-M, IIF, and IIIA so that the OCX can build to this specification. Users cannot account for the higher accuracy since there is in now 5 sets of almanac data being transmitted (vice only 3).
<i>SOLUTION: (Proposed)</i>
Provide the exact language that details the almanac transmission with respect to II-R, IIR-M, II-F, and IIIA so that the OCX may build to the correct specification for SV generations II-R, IIR-M, II-F, and III-A.

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Start of WAS/IS for IS-GPS-200E Changes

Section Number	Almanac Intervals Proposed Heading	IS-GPS-200 Rev E Navstar GPS Space Segment/Navigation User Interfaces	Almanac Intervals Proposed Text	Rationale
20.3.3.5.1.2		For Block II and IIA SVs, three sets of almanac shall be used to span at least 60 days. The first and second sets will be transmitted for up to six days each; the third set is intended to be transmitted for the remainder of the 60 days minimum, but the actual duration of transmission will depend on the individual SV's capability to retain data in memory. All three sets are based on six-day curve fits that correspond to the first six days of the transmission interval. For Block IIR/IIR-M, IIF, and IIIA SVs, multiple sets of almanac parameters shall be uploaded to span at least 60 days.	For Block I and IIA SVs, three sets of almanac shall be used to span at least 60 days. The first and second sets will be transmitted for up to six days each; the third set is intended to be transmitted for the remainder of the 60 days minimum, but the actual duration of transmission will depend on the individual SV's capability to retain data in memory. All three sets are based on six day curve fits that correspond to the first six days of the transmission interval. For Block IIR/IIR-M, IIF, and IIIA SVs, multiple sets of almanac parameters shall be uploaded to span at least 60 days.	No definitive guidance is provided for IIR/IIR-M, IIF, and IIIA SVs other than "multiple sets to span at least 60 days". The interval defined in the "Suggested Change" is the interval currently being used for IIR/IIR-M/IIF and is projected to be used for IIIA SVs.
20.3.3.5.1.2			<u>For Block IIR/IIR-M, IIF, and GPS III SVs, five sets of almanac shall be used to span at least 60 days.</u>	
20.3.3.5.1.2			<u>The first set will be transmitted for up to six days,</u>	
20.3.3.5.1.2			<u>and the second set will be transmitted for up to six days,</u>	
20.3.3.5.1.2			<u>the third set is intended to be transmitted for the remainder of the 60 days minimum,</u>	
20.3.3.5.1.2			<u>but the actual duration of transmission will depend on the individual SV's capability to retain data in memory.</u>	
20.3.3.5.1.2			<u>The first, second, and third sets are based on six day curve fits. The fourth and fifth sets are based on 32 day curve fits.</u>	

End of WAS/IS for IS-GPS-200E