

PROPOSED CHANGE NOTICE

Affected Document:
ICD-GPS-870C

IRN/SCN Number
XXX-XXXX-XXX

Date:
DD-MMM-YYYY

Authority:
RFC-00374

Proposed Change Notice
ICD870C_RFC374

Date:
01-MAY-2018

CLASSIFIED BY: N/A
DECLASSIFY ON: N/A

Document Title: NAVSTAR GPS Control Segment to User Support Community Interface

RFC Title: 2018 Proposed Changes to the Public Documents

Reason For Change (Driver):

The following 2 topics were deferred from the 2017 Public ICWG and will now be resolved by this RFC.

1. Currently the OAs that are published and archived contain plane/slot descriptions that are not in the constellation definition provided to the public in the SPS Performance Standard. The OA does not have the capability to correctly publish information regarding fore/aft position since moving to the 24+3 constellation with three expanded slots. In addition, the Points of Contact of the OA are not represented in a way that allows for efficient updates. This is a continuation of RFC-351, which was CCB-approved on 8-Jan-2018.
2. The linkage between different timing systems is not properly captured in the current technical baseline. With the current documentation, MNAV and CNAV users will calculate the wrong UT1 time immediately following a leap second change. This affects user applications that require high precision pointing, which may include optical telescopes or any military system with this requirement. Documents affected: IS-GPS-200, IS-GPS-705, and IS-GPS-800. The topic was part of RFC-354, which will be superseded due to the inclusion of this topic in this RFC.

The following topic resolves 3 document clean-up related activities:

3. a) Signal-in-space topics need clarification, as identified by the public in past Public ICWGs. Documents affected: IS-GPS-200 and IS-GPS-705. b) There were some administrative errors found during the UpRev process of the public documents. c) Contractor signatories are required for government-controlled documents.

(Pre-RFCs 718, 819, 861)

Description of Change:

1. Modify the OA as agreed to in ICD-GPS-240 and ICD-GPS-870.
2. The proposed changes to the impacted technical baseline documents would correctly calculate UT1 during a leap second transition.
3. a) Provide clarity for the list of signal-in-space topics identified by the public in documents IS-GPS-200 and IS-GPS-705. b) Clean up identified administrative changes in all public documents. c) Remove required contractor signatories from government-controlled documents.

Authored By: Philip Kwan

Checked By: Perry Chang, Philip Kwan, Amit Patel

AUTHORIZED SIGNATURES	REPRESENTING	DATE
	GPS Directorate Space & Missile Systems Center (SMC) – LAAFB	
See Next Page	HQ Air Force Space Command (AFSPC/50 OG)	
See Next Page	Raytheon Company	
See Next Page	Department of Homeland Security (DHS), United States Coast Guard (USCG), Navigation Center (NAVCEN)	
See Next Page	Department of Transportation (DOT), Federal Aviation Administration (FAA)	

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Interface Control Contractor:
Engility (GPS SE&I)
200 N. Sepulveda Blvd., Suite 1800
El Segundo, CA 90245

CODE IDENT 66RP1

PROPOSED CHANGE NOTICE

Note: Repeat this Signature Page for each document signatory.

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Proposed Change Notice
ICD870C_RFC374

Date:
01-MAY-2018

RFC Title: 2018 Proposed Changes to the Public Documents

APPROVED BY:

With Comments: Yes No

With Exceptions: Yes No

Name of Approving Organization

Authorized Signature

Date

DISTRIBUTION STATEMENT A: Approved for Public Release; Distribution Is Unlimited

THIS DOCUMENT SPECIFIES TECHNICAL REQUIREMENTS AND NOTHING HEREIN CONTAINED SHALL BE DEEMED TO ALTER THE TERMS OF ANY CONTRACT OR PURCHASE ORDER BETWEEN ALL PARTIES AFFECTED.

Interface Control Contractor:
Engility (GPS SE&I)
200 N. Sepulveda Blvd., Suite 1800
El Segundo, CA 90245

CODE IDENT 66RP1

Operational Advisories Proposed Changes

ICD870-737 :

Insertion after object ICD870-651

Section Number :

3.1.1

WAS :

N/A

Redlines :

[The GPS CS shall update Point of Contact \(POC\) information when it changes within the GPS products provided by the GPS CS.](#)

IS :

The GPS CS shall update Point of Contact (POC) information when it changes within the GPS products provided by the GPS CS.

Rationale :

The POC information within GPS products provided by the GPS CS can change periodically. The GPS CS needs to update the GPS products described throughout this document when those changes occur.

ICD870-189 :**Section Number :**

20.1.0-1

WAS :

The Operational Advisory (OA) message provides a summary of the satellite constellation status. An example is shown in Figure 20-1. The OA is arranged in three sections. The following paragraphs describe each section and subsection of the OA.

Redlines :

The Operational Advisory (OA) message provides a summary of the satellite constellation status. An example is shown in Figure 20-1. The OA is arranged in ~~three~~[two](#) sections. The following paragraphs describe each section and subsection of the OA.

IS :

The Operational Advisory (OA) message provides a summary of the satellite constellation status. An example is shown in Figure 20-1. The OA is arranged in two sections. The following paragraphs describe each section and subsection of the OA.

Rationale :

This RFC proposes to remove section 1 of the OA. The sentence within this object ID that states the OA is arranged in three sections is no longer accurate, it only comprised of two sections. Replaced the word “three” with “two”.

ICD870-190 :

Section Number :

20.1.0-2

WAS :

```
UNCLASSIFIED
GPS OPERATIONAL ADVISORY      086.OA1
SUBJ: GPS STATUS              27 MAR 2009

1. SATELLITES, PLANES, AND CLOCKS (CS=CESIUM RB=RUBIDIUM):
A. BLOCK I : NONE
B. BLOCK II : PRNS 01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14
  PLANE : SLOT B2, D1, C2, D4, B6, C5, A6, A3, A1, E3, D2, B4, F3, F1
  CLOCK : RB, RB, CS, RB, RB, RB, RB, CS, CS, CS, RB, RB, RB, RB
  BLOCK II : PRNS 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28
  PLANE : SLOT F2, B1, C4, E4, C3, E1, D3, E2, F4, D5, A5, F5, A4, B3
  CLOCK : RB, RB, RB, RB, RB, RB, RB, RB, RB, CS, RB, RB, CS, RB
  BLOCK II : PRNS 29, 30, 31, 32
  PLANE : SLOT C1, B5, A2, E5
  CLOCK : RB, CS, RB, RB
C*. BLOCK III: PRNS 33, 34, 35
  PLANE : SLOT A2, C3, F4
  CLOCK : RB, RB, RB

2. CURRENT ADVISORIES AND FORECASTS:
A. FORECASTS: FOR SEVEN DAYS AFTER EVENT CONCLUDES.
  NANU      MSG DATE/TIME      PRN  TYPE      SUMMARY (JDAY/ZULU TIME START - STOP)
2009022    261836Z MAR 2009      18  FCSTDV    092/1600-093/0630
B. ADVISORIES:
  NANU      MSG DATE/TIME      PRN  TYPE      SUMMARY (JDAY/ZULU TIME START - STOP)
C. GENERAL:
  NANU      MSG DATE/TIME      PRN  TYPE      SUMMARY (JDAY/ZULU TIME START - STOP)
2009020    202158Z MAR 2009          GENERAL  /-/
2009021    241836Z MAR 2009      01  LAUNCH    /-/
2009023    262212Z MAR 2009          GENERAL  /-/

3. REMARKS:
A. THE POINT OF CONTACT FOR GPS MILITARY OPERATIONAL SUPPORT IS THE GPS OPERATIONS CENTER
  AT 719-567-2541 OR DSN 560-2541.
B. CIVIL NON-AVIATION: US COAST GUARD NAVCEN AT 703-313-5900 24 HOURS DAILY AND INTERNET
  HTTPS://WWW.NAVCEN.USCG.GOV.
C. CIVIL AVIATION: FAA SATELLITE OPERATIONS GROUP AT 540-422-4178,
  HTTPS://WWW.FAA.GOV/AIR_TRAFFIC/NAS/GPS_REPORTS/.
D. MILITARY SUPPORT WEBPAGES CAN BE FOUND AT THE FOLLOWING HTTPS://GPS.AFSPC.AF.MIL/GPS OR
  HTTPS://GPS.AFSPC.AF.MIL/GPSOC.
```

*Note: Section 1.C of the example OA message shown above contains example data for the GPS III SVs to show the type of data that will go in this section in the OCX era. This example is not meant to represent the actual GPS constellation configuration.

Redlines :

```
UNCLASSIFIED
GPS OPERATIONAL ADVISORY      086.OA1
SUBJ: GPS STATUS              27 MAR 2009

1. SATELLITES, PLANES, AND CLOCKS (CS=CESIUM RB=RUBIDIUM):-
A. BLOCK I : NONE
B. BLOCK II : PRNS 01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14
PLANE : SLOT B2, D1, C2, D4, B6, C5, A6, A3, A1, E3, D2, B4, F3, F1
CLOCK : RB, RB, CS, RB, RB, RB, RB, CS, CS, CS, RB, RB, RB, RB
BLOCK II : PRNS 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28
PLANE : SLOT F2, B1, C4, E4, C3, E1, D3, E2, F4, D5, A5, F5, A4, B3
CLOCK : RB, RB, RB, RB, RB, RB, RB, RB, RB, CS, RB, RB, CS, RB
BLOCK II : PRNS 29, 30, 31, 32
PLANE : SLOT C1, B5, A2, E5
CLOCK : RB, CS, RB, RB
C*. BLOCK III: PRNS 33, 34, 35
PLANE : SLOT A2, C3, F4
CLOCK : RB, RB, RB

21. CURRENT ADVISORIES AND FORECASTS:
A. FORECASTS: FOR SEVEN DAYS AFTER EVENT CONCLUDES.
NANU MSG DATE/TIME PRN TYPE SUMMARY (JDAY/ZULU TIME START - STOP)
2009022 261836Z MAR 2009 18 FCSTDV 092/1600-093/0630
B. ADVISORIES:
NANU MSG DATE/TIME PRN TYPE SUMMARY (JDAY/ZULU TIME START - STOP)
C. GENERAL:
NANU MSG DATE/TIME PRN TYPE SUMMARY (JDAY/ZULU TIME START - STOP)
2009020 202158Z MAR 2009 GENERAL /-/
2009021 241836Z MAR 2009 01 LAUNCH /-/
2009023 262212Z MAR 2009 GENERAL /-/
32. REMARKS:
A. THE POINT OF CONTACT FOR GPS MILITARY OPERATIONAL SUPPORT IS THE GPS OPERATIONS CENTER
AT 719-567-2541 OR DSN 560-2541.
B. CIVIL NON-AVIATION: US COAST GUARD NAVCEN AT 703-313-5900 24 HOURS DAILY AND INTERNET
HTTPS://WWW.NAVCEN.USCG.GOV.
C. CIVIL AVIATION: FAA SATELLITE OPERATIONS GROUP AT 540-422-4178,
HTTPS://WWW.FAA.GOV/AIR_TRAFFIC/NAS/GPS_REPORTS/.
D. MILITARY SUPPORT WEBPAGES CAN BE FOUND AT THE FOLLOWING HTTPS://GPS.AFSPC.AF.MIL/GPS OR
HTTPS://GPS.AFSPC.AF.MIL/GPSOC.
```

*Note: Section 1.C of the example OA message shown above contains example data for the GPS III SVs to show the type of data that will go in this section in the OCX era. This example is not meant to represent the actual GPS constellation configuration.

IS :

```
UNCLASSIFIED
GPS OPERATIONAL ADVISORY      086.OA1
SUBJ: GPS STATUS              27 MAR 2009

1. CURRENT ADVISORIES AND FORECASTS:
A. FORECASTS: FOR SEVEN DAYS AFTER EVENT CONCLUDES.
NANU MSG DATE/TIME PRN TYPE SUMMARY (JDAY/ZULU TIME START - STOP)
2009022 261836Z MAR 2009 18 FCSTDV 092/1600-093/0630
B. ADVISORIES:
NANU MSG DATE/TIME PRN TYPE SUMMARY (JDAY/ZULU TIME START - STOP)
C. GENERAL:
NANU MSG DATE/TIME PRN TYPE SUMMARY (JDAY/ZULU TIME START - STOP)
2009020 202158Z MAR 2009 GENERAL /-/
2009021 241836Z MAR 2009 01 LAUNCH /-/
2009023 262212Z MAR 2009 GENERAL /-/
2. REMARKS:
A. THE POINT OF CONTACT FOR GPS MILITARY OPERATIONAL SUPPORT IS THE GPS OPERATIONS CENTER
AT 719-567-2541 OR DSN 560-2541.
B. CIVIL NON-AVIATION: US COAST GUARD NAVCEN AT 703-313-5900 24 HOURS DAILY AND INTERNET
HTTPS://WWW.NAVCEN.USCG.GOV.
C. CIVIL AVIATION: FAA SATELLITE OPERATIONS GROUP AT 540-422-4178,
HTTPS://WWW.FAA.GOV/AIR_TRAFFIC/NAS/GPS_REPORTS/.
D. MILITARY SUPPORT WEBPAGES CAN BE FOUND AT THE FOLLOWING HTTPS://GPS.AFSPC.AF.MIL/GPS OR
HTTPS://GPS.AFSPC.AF.MIL/GPSOC.
```

Rationale :

This RFC proposes to remove section 1. SATELLITES, PLANES, AND CLOCKS (CS=CESIUM RB=RUBIDIUM) of the OA. Therefore, section 1 was deleted; section 2 & 3 were renumbered to section 1 & 2 respectively.

WAS :

20.3 OA Section 1

Section 1 lists operational satellites by PRN number, assigned plane, and clock in current use. The PRN number is a two digit number that is zero padded. Subsection 1.A previously identified operational satellites in Block I. However, these satellites are no longer operational, so this subsection includes the word "NONE". Subsection 1.B identifies satellites within Block II that are currently in use. Subsection 1.C identifies satellites within Block III that are currently in use. The example data shown for Section 1 is not meant to represent the actual GPS constellation configuration. The abbreviations CS and RB are used to indicate Cesium and Rubidium clocks, respectively. An example of section 1 of the OA is illustrated in Figure 20-3.

1. SATELLITES, PLANES, AND CLOCKS (CS=CESIUM RB=RUBIDIUM):	
A. BLOCK I	: NONE
B. BLOCK II	: PRNS 01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14
PLANE	: SLOT B2, D1, C2, D4, B6, C5, A6, A3, A1, E3, D2, B4, F3, F1
CLOCK	: RB, RB, CS, RB, RB, RB, RB, CS, CS, CS, RB, RB, RB, RB
BLOCK II	: PRNS 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28
PLANE	: SLOT F2, B1, C4, E4, C3, E1, D3, E2, F4, D5, A5, F5, A4, B3
CLOCK	: RB, RB, RB, RB, RB, RB, RB, RB, RB, CS, RB, RB, CS, RB
BLOCK II	: PRNS 29, 30, 31, 32
PLANE	: SLOT C1, B5, A2, E5
CLOCK	: RB, CS, RB, RB
C. BLOCK III	: PRNS 33, 34, 35
PLANE	: SLOT A2, C3, F4
CLOCK	: RB, RB, RB

Figure 20-3 OA Section 1

Redlines :

<DELETED OBJECT>

IS :

<DELETED OBJECT>

Rationale :

This RFC proposes to remove section 1. SATELLITES, PLANES, AND CLOCKS (CS=CESIUM RB=RUBIDIUM) of the OA. Therefore, these object IDs which describe section 1. SATELLITES, PLANES, AND CLOCKS (CS=CESIUM RB=RUBIDIUM) of the OA are no longer needed.

ICD870-200 :

Section Number :

20.4

WAS :

OA Section 1

Redlines :

OA Section ~~2~~1

IS :

OA Section 1

Rationale :

This RFC proposes to remove section 1. SATELLITES, PLANES, AND CLOCKS (CS=CESIUM RB=RUBIDIUM) of the OA. Therefore, renumbering of this object ID is required for consistency throughout the document.

ICD870-201 :

Section Number :

20.4.0-1

WAS :

Section 2 contains a summary of current and recent advisories, forecasts, and general text messages. It is organized into three subsections. Subsection 2A summarizes scheduled NANU messages. Subsection 2B summarizes advisory messages (messages with prefix UNU). Section 2C summarizes general text messages. The PRN number is zero-padded. An example of section 2 of the OA is illustrated in Figure 20-4.

Redlines :

Section ~~2~~1 contains a summary of current and recent advisories, forecasts, and general text messages. It is organized into three subsections. Subsection ~~2A~~1A summarizes scheduled NANU messages. Subsection ~~2B~~1B summarizes advisory messages (messages with prefix UNU). Section ~~2C~~1C summarizes general text messages. The PRN number is zero-padded. An example of section ~~2~~1 of the OA is illustrated in Figure 20-~~4~~3.

IS :

Section 1 contains a summary of current and recent advisories, forecasts, and general text messages. It is organized into three subsections. Subsection 1A summarizes scheduled NANU messages. Subsection 1B summarizes advisory messages (messages with prefix UNU). Section 1C summarizes general text messages. The PRN number is zero-padded. An example of section 1 of the OA is illustrated in Figure 20-3.

Rationale :

This RFC proposes to remove section 1. SATELLITES, PLANES, AND CLOCKS (CS=CESIUM RB=RUBIDIUM) of the OA. Therefore, renumbering of this object ID is required for consistency throughout the document.

ICD870-202 :

Section Number :

20.4.0-2

WAS :

2. CURRENT ADVISORIES AND FORECASTS:				
A. FORECASTS: FOR SEVEN DAYS AFTER EVENT CONCLUDES.				
NANU	MSG DATE/TIME	PRN	TYPE	SUMMARY (JDAY/ZULU TIME START - STOP)
2009022	261836Z MAR 2009	18	FCSTDV	092/1600-093/0630
B. ADVISORIES:				
NANU	MSG DATE/TIME	PRN	TYPE	SUMMARY (JDAY/ZULU TIME START - STOP)
C. GENERAL:				
NANU	MSG DATE/TIME	PRN	TYPE	SUMMARY (JDAY/ZULU TIME START - STOP)
2009020	202158Z MAR 2009		GENERAL	/-/
2009021	241836Z MAR 2009	01	LAUNCH	/-/
2009023	262212Z MAR 2009		GENERAL	/-/

Redlines :

<u>1</u> 2. CURRENT ADVISORIES AND FORECASTS:				
A. FORECASTS: FOR SEVEN DAYS AFTER EVENT CONCLUDES.				
NANU	MSG DATE/TIME	PRN	TYPE	SUMMARY (JDAY/ZULU TIME START - STOP)
2009022	261836Z MAR 2009	18	FCSTDV	092/1600-093/0630
B. ADVISORIES:				
NANU	MSG DATE/TIME	PRN	TYPE	SUMMARY (JDAY/ZULU TIME START - STOP)
C. GENERAL:				
NANU	MSG DATE/TIME	PRN	TYPE	SUMMARY (JDAY/ZULU TIME START - STOP)
2009020	202158Z MAR 2009		GENERAL	/-/
2009021	241836Z MAR 2009	01	LAUNCH	/-/
2009023	262212Z MAR 2009		GENERAL	/-/

IS :

1. CURRENT ADVISORIES AND FORECASTS:				
A. FORECASTS: FOR SEVEN DAYS AFTER EVENT CONCLUDES.				
NANU	MSG DATE/TIME	PRN	TYPE	SUMMARY (JDAY/ZULU TIME START - STOP)
2009022	261836Z MAR 2009	18	FCSTDV	092/1600-093/0630
B. ADVISORIES:				
NANU	MSG DATE/TIME	PRN	TYPE	SUMMARY (JDAY/ZULU TIME START - STOP)
C. GENERAL:				
NANU	MSG DATE/TIME	PRN	TYPE	SUMMARY (JDAY/ZULU TIME START - STOP)
2009020	202158Z MAR 2009		GENERAL	/-/
2009021	241836Z MAR 2009	01	LAUNCH	/-/
2009023	262212Z MAR 2009		GENERAL	/-/

Rationale :

This RFC proposes to remove section 1. SATELLITES, PLANES, AND CLOCKS (CS=CESIUM RB=RUBIDIUM) of the OA. Therefore, renumbering of this object ID is required for consistency throughout the document.

ICD870-203 :

Section Number :

20.4.0-3

WAS :

Figure 20-4 OA Section 2

Redlines :

Figure 20-~~4~~³ OA Section ~~2~~¹

IS :

Figure 20-3 OA Section 1

Rationale :

This RFC proposes to remove section 1. SATELLITES, PLANES, AND CLOCKS (CS=CESIUM RB=RUBIDIUM) of the OA. Therefore, renumbering of this object ID is required for consistency throughout the document.

ICD870-204 :

Section Number :

20.5

WAS :

OA Section 2

Redlines :

OA Section ~~2~~³

IS :

OA Section 2

Rationale :

This RFC proposes to remove section 1. SATELLITES, PLANES, AND CLOCKS (CS=CESIUM RB=RUBIDIUM) of the OA. Therefore, renumbering of this object ID is required for consistency throughout the document.

ICD870-205 :

Section Number :

20.5.0-1

WAS :

Section 3 identifies points of contact for additional technical and support information. It is organized into three subsections, each in text format. An example of section 3 of the OA is illustrated in Figure 20-5.

Redlines :

Section ~~3~~² identifies points of contact for additional technical and support information. It is organized into three subsections, each in text format. An example of section ~~3~~² of the OA is illustrated in Figure 20-~~5~~⁴.

IS :

Section 2 identifies points of contact for additional technical and support information. It is organized into three subsections, each in text format. An example of section 2 of the OA is illustrated in Figure 20-4.

Rationale :

This RFC proposes to remove section 1. SATELLITES, PLANES, AND CLOCKS (CS=CESIUM RB=RUBIDIUM) of the OA. Therefore, renumbering of this object ID is required for consistency throughout the document.

ICD870-206 :

Section Number :

20.5.0-2

WAS :

3. REMARKS:
A. THE POINT OF CONTACT FOR GPS MILITARY OPERATIONAL SUPPORT IS THE GPS OPERATIONS CENTER AT 719-567-2541 OR DSN 560-2541.
B. CIVIL NON-AVIATION: US COAST GUARD NAVCEN AT 703-313-5900 24 HOURS DAILY AND INTERNET [HTTPS://WWW.NAVCEN.USCG.GOV](https://www.navcen.uscg.gov).
C. CIVIL AVIATION: FAA SATELLITE OPERATIONS GROUP AT 540-422-4178, [HTTPS://WWW.FAA.GOV/AIR_TRAFFIC/NAS/GPS_REPORTS/](https://www.faa.gov/air_traffic/nas/gps_reports/).
D. MILITARY SUPPORT WEBPAGES CAN BE FOUND AT THE FOLLOWING [HTTPS://GPS.AFSPC.AF.MIL/GPS](https://gps.afspc.af.mil/gps) OR [HTTPS://GPS.AFSPC.AF.MIL/GPSOC](https://gps.afspc.af.mil/gpsoc).

Redlines :

~~3~~². REMARKS:
A. THE POINT OF CONTACT FOR GPS MILITARY OPERATIONAL SUPPORT IS THE GPS OPERATIONS CENTER AT 719-567-2541 OR DSN 560-2541.
B. CIVIL NON-AVIATION: US COAST GUARD NAVCEN AT 703-313-5900 24 HOURS DAILY AND INTERNET [HTTPS://WWW.NAVCEN.USCG.GOV](https://www.navcen.uscg.gov).
C. CIVIL AVIATION: FAA SATELLITE OPERATIONS GROUP AT 540-422-4178, [HTTPS://WWW.FAA.GOV/AIR_TRAFFIC/NAS/GPS_REPORTS/](https://www.faa.gov/air_traffic/nas/gps_reports/).
D. MILITARY SUPPORT WEBPAGES CAN BE FOUND AT THE FOLLOWING [HTTPS://GPS.AFSPC.AF.MIL/GPS](https://gps.afspc.af.mil/gps) OR [HTTPS://GPS.AFSPC.AF.MIL/GPSOC](https://gps.afspc.af.mil/gpsoc).

IS :

2. REMARKS:

A. THE POINT OF CONTACT FOR GPS MILITARY OPERATIONAL SUPPORT IS THE GPS OPERATIONS CENTER AT 719-567-2541 OR DSN 560-2541.

B. CIVIL NON-AVIATION: US COAST GUARD NAVCEN AT 703-313-5900 24 HOURS DAILY AND INTERNET [HTTPS://WWW.NAVCEN.USCG.GOV](https://www.navcen.uscg.gov).

C. CIVIL AVIATION: FAA SATELLITE OPERATIONS GROUP AT 540-422-4178, [HTTPS://WWW.FAA.GOV/AIR_TRAFFIC/NAS/GPS_REPORTS/](https://www.faa.gov/air_traffic/nas/gps_reports/).

D. MILITARY SUPPORT WEBPAGES CAN BE FOUND AT THE FOLLOWING [HTTPS://GPS.AFSPC.AF.MIL/GPS](https://gps.afspc.af.mil/gps) OR [HTTPS://GPS.AFSPC.AF.MIL/GPSOC](https://gps.afspc.af.mil/gpsoc).

Rationale :

This RFC proposes to remove section 1. SATELLITES, PLANES, AND CLOCKS (CS=CESIUM RB=RUBIDIUM) of the OA. Therefore, renumbering of this object ID is required for consistency throughout the document.

ICD870-207 :

Section Number :

20.5.0-3

WAS :

Figure 20-5 OA Section 3

Redlines :

Figure 20-~~5~~4 OA Section ~~3~~2

IS :

Figure 20-4 OA Section 2

Rationale :

This RFC proposes to remove section 1. SATELLITES, PLANES, AND CLOCKS (CS=CESIUM RB=RUBIDIUM) of the OA. Therefore, renumbering of this object ID is required for consistency throughout the document.

RFC-374 Cleanup Proposed Changes

ICD870-11 :

Section Number :

1.3.0-2

WAS :

The following signatories must approve this ICD to make it effective.

1. Air Force Space Command (AFSPC), GPS Directorate (GP) Space and Missile Systems Center (SMC)
2. Air Force Space Command (AFSPC), 50th Space Wing (50 SW)
3. OCX Contractor
4. Department of Homeland Security (DHS), United States Coast Guard (USCG), Navigation Center (NAVCEN)
5. Department of Transportation (DOT), Federal Aviation Administration (FAA)

Redlines :

The following signatories must approve this ICD to make it effective.

1. Air Force Space Command (AFSPC), GPS Directorate (GP) Space and Missile Systems Center (SMC)
2. Air Force Space Command (AFSPC), 50th Space Wing (50 SW)
3. ~~OCX Contractor~~
4. Department of Homeland Security (DHS), United States Coast Guard (USCG), Navigation Center (NAVCEN)
5. Department of Transportation (DOT), Federal Aviation Administration (FAA)

IS :

The following signatories must approve this ICD to make it effective.

1. Air Force Space Command (AFSPC), GPS Directorate (GP) Space and Missile Systems Center (SMC)
2. Air Force Space Command (AFSPC), 50th Space Wing (50 SW)
3. Department of Homeland Security (DHS), United States Coast Guard (USCG), Navigation Center (NAVCEN)
4. Department of Transportation (DOT), Federal Aviation Administration (FAA)

Rationale :

4/10/2018: Propose removing contractor signatories from these documents because they are GPS-directorate controlled.

ICD870-19 :

Section Number :

2.1.0-2

WAS :

Specifications

Federal

None

Military

None

Other Government Activity

SS-CS-800 GPS III Control Segment Specification Global Positioning
Current Version Systems Wing (GPSW)

Redlines :

Specifications

Federal

None

Military

None

Other Government Activity

- [N/A](#)

IS :

Specifications

Federal

None

Military

None

Other Government Activity

N/A

Rationale :

3/30/2018: Remove the SS-CS-800 reference from this public document since SS-CS-800 is not public.

ICD870-34 :

Section Number :

3.1.1-19

WAS :

The products defined in this ICD are listed in Table 3-I and Table 3-II, in the form of information exchange matrices.

Redlines :

The products defined in this ICD are listed in Table 3-I ~~and Table 3-II,~~ in the form of information exchange matrices.

IS :

The products defined in this ICD are listed in Table 3-I in the form of information exchange matrices.

Rationale :

3/30/2018: Remove the Table 3-II referenece because Table 3-II is not used.

ICD870-36 :

Section Number :

3.1.1-28

WAS :

Producer	Modern & Legacy Data Exchange Identification	Description	Security Classification
CS	<p>Modern Identification: GPS Advisory</p> <p>Legacy Identification: Notice Advisory to Navstar Users (NANU)</p>	<p>The GPS Advisory exchange information product includes a single advisory notification concerning a GPS space event and associated GPS space vehicle. See GPS Advisory IEPD for more details. Published on a periodic basis, based on operational events/needs.</p>	Unclassified / Open / Public Releasable
CS	<p>Modern Identification: GPS Advisory Collection</p> <p>Legacy Identification: Satellite Outage File (SOF)</p>	<p>The GPS Advisory Collection Exchange information product includes a collection of advisory notifications of all available historical, current and predicted satellite outage space events. See GPS Advisory IEPD for more details.</p> <p>Produced in response to the generation of a GPS Advisory (NANU) by the CS.</p>	Unclassified / Open / Public Releasable
CS	<p>Modern Identification: Ops Status</p> <p>Legacy Identification: Operational Advisory (OA)</p>	<p>The Ops Status Exchange information product includes an Ops Status notification concerning the GPS constellation and relevant GPS space events. See Ops Status IEPD for more details. Nominally published once daily.</p>	Unclassified / Open / Public Releasable
CS	<p>Modern Identification: Public Common Almanac</p> <p>Legacy Identification: (1) GPS Almanacs (SEM,YUMA) (2) Anti-Spoof Status (3) ESHS</p>	<p>The Public Common Almanac Exchange information product includes orbital state and health status of the GPS constellation. See Public Common Almanac IEPD for more details. Nominally published once daily.</p>	Unclassified / Open / Public Releasable

Redlines :

Producer	Modern & Legacy Data Exchange Identification	Description	Security Classification
CS	<p>Modern Identification: GPS Advisory</p> <p>Legacy Identification: Notice Advisory to Navstar Users (NANU)</p>	<p>The GPS Advisory exchange information product includes a single advisory notification concerning a GPS space event and associated GPS space vehicle. See GPS Advisory IEPD for more details. Published on a periodic basis, based on operational events/needs.</p>	<p>Unclassified / Open / Public Releasable</p>
CS	<p>Modern Identification: GPS Advisory Collection</p> <p>Legacy Identification: Satellite Outage File (SOF)</p>	<p>The GPS Advisory Collection Exchange information product includes a collection of advisory notifications of all available historical, current and predicted satellite outage space events. See GPS Advisory IEPD for more details.</p> <p>Produced in response to the generation of a GPS Advisory (NANU) by the CS.</p>	<p>Unclassified / Open / Public Releasable</p>
CS	<p>Modern Identification: Ops Status</p> <p>Legacy Identification: Operational Advisory (OA)</p>	<p>The Ops Status Exchange information product includes an Ops Status notification concerning the GPS constellation and relevant GPS space events. See Ops Status IEPD for more details. Nominally published once daily.</p>	<p>Unclassified / Open / Public Releasable</p>
CS	<p>Modern Identification: Public Common Almanac</p> <p>Legacy Identification: (1) GPS Almanacs (SEM,YUMA) (2) Anti-Spoof Status (3) ESHS</p>	<p>The Public Common Almanac Exchange information product includes orbital state and health status of the GPS constellation. See Public Common Almanac IEPD for more details. Nominally published once daily.</p>	<p>Unclassified / Open / Public Releasable</p>

IS :

Producer	Modern & Legacy Data Exchange Identification	Description	Security Classification
CS	<p>Modern Identification: GPS Advisory</p> <p>Legacy Identification: Notice Advisory to Navstar Users (NANU)</p>	<p>The GPS Advisory exchange information product includes a single advisory notification concerning a GPS space event and associated GPS space vehicle. See GPS Advisory IEPD for more details.</p> <p>Published on a periodic basis, based on operational events/needs.</p>	Unclassified / Open / Public Releasable
CS	<p>Modern Identification: GPS Advisory Collection</p> <p>Legacy Identification: Satellite Outage File (SOF)</p>	<p>The GPS Advisory Collection Exchange information product includes a collection of advisory notifications of all available historical, current and predicted satellite outage space events. See GPS Advisory IEPD for more details.</p> <p>Produced in response to the generation of a GPS Advisory (NANU) by the CS.</p>	Unclassified / Open / Public Releasable
CS	<p>Modern Identification: Ops Status</p> <p>Legacy Identification: Operational Advisory (OA)</p>	<p>The Ops Status Exchange information product includes an Ops Status notification concerning the GPS constellation and relevant GPS space events. See Ops Status IEPD for more details.</p> <p>Nominally published once daily.</p>	Unclassified / Open / Public Releasable
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Rationale :

3/30/2018: Remove the stray "9" from this object.

ICD870-75 :

Section Number :

4.0-1

WAS :

This section contains the verification matrix for the objects that contain requirements enumerated in this interface document. The verification matrix indicates what methodology will be used to assure these requirements are met. The information contained within this verification matrix is not intended to change any contractual obligations imposed upon the segment contractors by the government. Regardless of Highest Verification Level designation (System or Segment), the segment contractors still need to demonstrate compliance to all contractual interface documents.

The column headings of the verification matrix are explained here:

Redlines :

~~This section contains the verification matrix for the objects that contain requirements enumerated in this interface document. The verification matrix indicates what methodology will be used to assure these requirements are met. The information contained within this verification matrix is not intended to change any contractual obligations imposed upon the segment contractors by the government. Regardless of Highest Verification Level designation (System or Segment), the segment contractors still need to demonstrate compliance to all contractual interface documents.~~

~~The column headings of the verification matrix are explained~~[Not here:Applicable](#)

IS :

Not Applicable

Rationale :

3/30/2018: Section 4 is not applicable in this document because there are no requirements in this document nor do we release VCRMs to the public.

ICD870-309, ICD870-310, ICD870-311, ICD870-312, ICD870-313, ICD870-314, ICD870-315, ICD870-524, ICD870-523, ICD870-522, ICD870-521 :

WAS :

DOORS ID = Unique DOORS object identification number.

Object Number = Paragraph number of the object.

CS Effectivity = Effectivity of requirement allocated to CS (see Segment column) as defined in SS-CS-800.

SS Effectivity = Effectivity of requirement allocated to SS (see Segment column) as defined in SS-SS-800.

Highest Verification Level = The highest level (System or Segment) at which the requirement is verified. The Highest Verification Level is used to identify those requirements that require joint verification activity as explained below:

A designation of System implies the requirement must be verified by a joint verification activity that includes both sides of the interface and may involve coordination of verification activities through the government.

A designation of Segment implies the segment contractor retains full responsibility for conducting the verification event. The joint use of SS or CS assets such as the GSYS or GSS does not alter the Highest Verification Level designation from Segment.

Segment = Designated segment (Space (SV), Control (CS), or User (US) Segment) involved in the verification of the requirement. A designation of (EXTERNAL ORG) is used to identify the external organization (e.g., (NDS), (AFSCN), (NGA), etc.) involved in the verification of the requirement.

System Verification Method = Method for verifying system requirements. Verification method assignments for segment requirements will not be tracked in this ICD as they are formally described in the segment contractor verification planning CDRLs. The following verification method definitions are derived from SS-SYS-800.

Verification by Inspection (I)

The inspection method verifies conformance of physical characteristics to related requirements without the aid of special laboratory equipment, procedures, and services. This method most commonly uses an examination by the senses (sight, sound, smell, taste, or touch) to determine requirements compliance and may also rely on gauges or simple measures.

Verification by Analysis (A)

The analysis method verifies conformance to requirements based on studies, calculations, and modeling, or is based on the certified usage of similar components under identical or similar operating conditions (similarity). This method may consist of the technical evaluation of data using logic or mathematics to determine compliance with requirements. It is

typically used in verification when a given attribute is impossible or extremely difficult to test, thereby enabling expansion of the verification beyond the range of the test. Review of software listings is considered to be verification by analysis.

Verification by Demonstration (D)

The demonstration method verifies the required operability of hardware and software by means that do not necessarily require the use of laboratory equipment, procedures, items or services. That is, compliance with requirements is verified by operation and function. More detail may be seen in MIL-HDBK-470 and MIL-STD-810. This method may be an un-instrumented test, with compliance determined by observation (e.g., maintenance task performance time).

Verification by Test (T)

The test method verifies conformance to required performance/physical characteristics and design/construction features by instrumented functional operation and evaluation techniques through the use of laboratory equipment procedures, items, and services. This method generally uses procedures and test/measuring equipment to verify compliance with requirements.

Redlines :

<DELETED OBJECT>

IS :

<DELETED OBJECT>

Rationale :

3/30/2018: Remove Section 4, Quality Assurance Provisions, from the document because there are no requirements in this document nor do we release VCRMs to the public.
