

## CHANGE NOTICE

**Affected Document:**  
ICD-GPS-240B

**IRN/SCN Number**  
XXX-XXXX-XXX

**Date:**  
DD-MMM-YYYY

**Authority:**  
RFC-00374

**Proposed Change Notice**  
ICD240B\_RFC374

**Date:**  
28-NOV-2018

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

**Document Title: NAVSTAR GPS Control Segment to User Support Community Interfaces**

**RFC Title: 2018 Proposed Changes to the Public Documents**

**Reason For Change (Driver):**

The following topic was deferred from the 2017 Public ICWG and will now be resolved by this RFC.

1. Currently the Operational Advisories (OAs) that are published and archived contain plane/slot descriptions that are not in the constellation definition provided to the public in the Standard Positioning Service (SPS) Performance Standard (PS). 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 follow-up to RFC-351, which was CCB-approved on 8-Jan-2018.

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

2. a) Signal-in-space topics need clarification, as identified by the public in past Public ICWGs. 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 819, 861)

**Description of Change:**

1. Modify the OA as agreed to in ICD-GPS-240 and ICD-GPS-870.
2. a) Provide clarity for the list of signal-in-space topics identified by the public. b) Clean up identified administrative changes in all public documents. c) Remove required contractor signatories from government-controlled documents.

**Authored By: RE: Philip Kwan**

**Checked By: RE: Jennifer Lemus**

<b>AUTHORIZED SIGNATURES</b>	<b>REPRESENTING</b>	<b>DATE</b>
	GPS Directorate Space & Missile Systems Center (SMC) – LAAFB	
	USAF, AFSPC, 50th Space Wing (50 SW)	
	United States Coast Guard (USCG), Navigation Center (NAVCEN)	
	The Boeing Company	

## Document Markings Verify with CM

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. Pacific Coast Hwy, Suite 1800  
El Segundo, CA 90245

CODE IDENT 66RP1

# **RFC-374 Operational Advisory Proposed Changes**

**ICD240-336 :**

Insertion after ICD240-91, ICD240-92, ICD240-93, ICD240-94, ICD240-95:

“NANUs are used to notify users of scheduled and unscheduled satellite outages and general GPS information. The paragraphs that follow describe the different types of NANUs. The NANU descriptions are arranged into four groups, as follows:

- Scheduled outages
- Unscheduled outages
- General text message
- Others

”

**Section Number :**

10.1.0-6

**WAS :**

N/A

**Redlines :**

<INSERTED OBJECT>

**IS :**

Users should be advised that the Point of Contact (POC) information contained in the NANU samples are subject to change, specifically the Organization Name and Organization Primary Contact Information (i.e. Contact Website URI, Contact Email ID, Contact Telephone Number, and Contact DSN Telephone Number). The NANU examples include POC information that reflects the time of release of this ICD. However, users should refer to the POC information provided in the most recent NANUs for up-to-date information.

**Rationale :**

8/24/2018: Add POC caveat statement so that users are aware that the ICDs are updated less often than the POC information contained within the GPS products.

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ICD240-115 :

Section Number :

10.1.4.0-5

WAS :

```
NOTICE ADVISORY TO NAVSTAR USERS (NANU) YYYYSSS
SUBJ: SVN XX (PRN XX) LAUNCH JDAY JJJ
1.   NANU TYPE: LAUNCH
     NANU NUMBER: YYYYSSS
     NANU DTG: HHHHDDZ MMM 2007
     SVN: XX
     PRN: XX
     LAUNCH JDAY: JJJ
     LAUNCH TIME ZULU: HHHH

2.   GPS SATELLITE SVN XX (PRN XX) WAS LAUNCHED ON JDAY JJJ A USABINIT NANU WILL BE SENT WHEN THE SATELLITE IS SET ACTIVE TO SERVICE.

3.   POC: CIVIL NON-AVIATION - NAVCEN at 703-313-5900, HTTPS://WWW.NAVCEN.USCG.GOV,
     CIVIL AVIATION - FAA Satellite Operations Group at 540-422-4178, https://www.faa.gov/air-traffic/nas/gps-reports/,
     MILITARY - GPS Operations Center at HTTPS://GPS.AFSPC.AF.MIL/GPSOC, DSN 560-2541, COMM 719-567-2493,
     GPS\_SUPPORT@SCHRIEVER.AF.MIL, HTTP://WWW.SCHRIEVER.AF.MIL/GPS/,
     MILITARY ALTERNATE - JOINT SPACE OPERATIONS CENTER, DSN 276-9994, COMM 805-606-9994, JSPOCCOMBATOPS@VANDENBERG.AF.MIL
```

Figure 10-2 LAUNCH NANU Message Template

Redlines :

```
NOTICE ADVISORY TO NAVSTAR USERS (NANU) YYYYSSS
SUBJ: SVN XX (PRN XX) LAUNCH JDAY JJJ
1.   NANU TYPE: LAUNCH
     NANU NUMBER: YYYYSSS
     NANU DTG: HHHHDDZ MMM 2007
     SVN: XX
     PRN: XX
     LAUNCH JDAY: JJJ
     LAUNCH TIME ZULU: HHHH

2.   GPS SATELLITE SVN XX (PRN XX) WAS LAUNCHED ON JDAY JJJ A USABINIT NANU WILL BE SENT WHEN THE SATELLITE IS SET ACTIVE TO SERVICE.

3.   POC: CIVIL NON-AVIATION - NAVCEN at 703-313-5900, HTTPS://WWW.NAVCEN.USCG.GOV,
     CIVIL AVIATION - FAA Satellite Operations Group at 540-422-4178, https://www.faa.gov/air-traffic/nas/gps-reports/,
     MILITARY - GPS Operations Center at HTTPS://GPS.AFSPC.AF.MIL/GPSOC, DSN 560-2541, COMM 719-567-2493,
     GPS\_SUPPORT@SCHRIEVER.AF.MIL, HTTP://WWW.SCHRIEVER.AF.MIL/GPS/,
     MILITARY ALTERNATE - JOINT SPACE OPERATIONS CENTER, DSN 276-9994, COMM 805-606-9994, JSPOCCOMBATOPS@VANDENBERG.AF.MIL

     CIVIL NON-AVIATION - NAVCEN AT 703-313-5900, HTTPS://WWW.NAVCEN.USCG.GOV,
     CIVIL AVIATION - FAA NASEO AT 540-422-4178, HTTPS://WWW.FAA.GOV/AIR TRAFFIC/NAS/GPS REPORTS/,
     MILITARY - GPS OPERATIONS CENTER AT HTTPS://GPS.AFSPC.AF.MIL/GPSOC/, DSN 560-2541, COMM 719-567-2493,
     GPSOPERATIONSCENTER@US.AF.MIL, HTTP://WWW.SCHRIEVER.AF.MIL/GPS/,
     MILITARY ALTERNATE - JOINT SPACE OPERATIONS CENTER, DSN 276-3514, COMM 805-606-3514, JSPOCCOMBATOPS@VANDENBERG.AF.MIL
```

Figure 10-2 LAUNCH NANU Message Template

IS :

```
NOTICE ADVISORY TO NAVSTAR USERS (NANU) YYYYSSS
SUBJ: SVN XX (PRN XX) LAUNCH JDAY JJJ
1.   NANU TYPE: LAUNCH
      NANU NUMBER: YYYYSSS
      NANU DTG: HHHHDDZ MMM 2007
      SVN: XX
      PRN: XX
      LAUNCH JDAY: JJJ
      LAUNCH TIME ZULU: HHHH
2.   GPS SATELLITE SVN XX (PRN XX) WAS LAUNCHED ON JDAY JJJ A USABINIT NANU WILL BE SENT WHEN THE SATELLITE IS SET ACTIVE TO SERVICE.
3.   POC: CIVIL NON-AVIATION - NAVCEN AT 703-313-5900, HTTPS://WWW.NAVCEN.USCG.GOV,
      CIVIL AVIATION - FAA NASEO AT 540-422-4178, HTTPS://WWW.FAA.GOV/AIR\_TRAFFIC/NAS/GPS\_REPORTS/,
      MILITARY - GPS OPERATIONS CENTER AT HTTPS://GPS.AFSPC.AF.MIL/GPSOC/, DSN 560-2541, COMM 719-567-2493,
      GPSOPERATIONSCENTER@US.AF.MIL, HTTP://WWW.SCHRIEVER.AF.MIL/GPS/,
      MILITARY ALTERNATE - JOINT SPACE OPERATIONS CENTER, DSN 276-3514, COMM 805-606-3514, JSPOCCOMBATOPS@VANDENBERG.AF.MIL
```

**Figure 10-2 LAUNCH NANU Message Template**

**Rationale :**

7/6/2018: Update POC information to be current as this has more value added than keeping it outdated.

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ICD240-117 :

Section Number :

10.1.4.0-7

WAS :

```
NOTICE ADVISORY TO NAVSTAR USERS (NANU) YYYYJJJ
SUBJ: SVNXX (PRNXX) DECOMMISSIONING JDAY JJJ/HHHH
1.  NANU TYPE: DECOM
    NANU NUMBER: YYYYSSS
    NANU DTG: HHHHDDZ MMM YYYY
    REFERENCE NANU: YYYYSSS
    REF NANU DTG: HHHHDDZ MMM YYYY
    SVN: XX
    PRN: XX
    UNUSABLE START JDAY: JJJ
    UNUSABLE START TIME ZULU: HHHH
    UNUSABLE START CALENDAR DATE: DD MMM YYYY
    DECOMMISSIONING START JDAY: JJJ
    DECOMMISSIONING START TIME ZUU: HHHH
    DECOMMISSIONING START CALENDAR DATE: DD MMM YYYY

2.  CONDITION: GPS SATELLITE SVNXX (PRNXX) WAS UNUSABLE AS OF JDAY JJJ (DD MMM YYYY) AND REMOVED
    FROM THE GPS CONSTELLATION ON JDAY JJJ (DD MMM YYYY) AT HHHH ZULU.

3.  POC: CIVIL NON-AVIATION - NAVCEN at 703-313-5900, HTTPS://WWW.NAVCEN.USCG.GOV,
    CIVIL AVIATION - FAA Satellite Operations Group at 540-422-4178, https://www.faa.gov/air-traffic/nas/gps-reports/,
    MILITARY - GPS Operations Center at HTTPS://GPS.AFSPC.AF.MIL/GPSOC, DSN 560-2541, COMM 719-567-2493,
    GPS\_SUPPORT@SCHRIEVER.AF.MIL, HTTP://WWW.SCHRIEVER.AF.MIL/GPS,
    MILITARY ALTERNATE - JOINT SPACE OPERATIONS CENTER, DSN 276-9994, COMM 805-606-9994, JSPOCCOMBATOPS@VANDENBERG.AF.MIL
```

Figure 10-3 DECOM NANU Message Template

**Redlines :**

NOTICE ADVISORY TO NAVSTAR USERS (NANU) YYYYJJJ  
SUBJ: SVNXX (PRNXX) DECOMMISSIONING JDAY JJJ/HHHH

1. NANU TYPE: DECOM  
NANU NUMBER: YYYYSSS  
NANU DTG: HHHHDDZ MMM YYYY  
REFERENCE NANU: YYYYSSS  
REF NANU DTG: HHHHDDZ MMM YYYY  
SVN: XX  
PRN: XX  
UNUSABLE START JDAY: JJJ  
UNUSABLE START TIME ZULU: HHHH  
UNUSABLE START CALENDAR DATE: DD MMM YYYY  
DECOMMISSIONING START JDAY: JJJ  
DECOMMISSIONING START TIME ZUU: HHHH  
DECOMMISSIONING START CALENDAR DATE: DD MMM YYYY
2. CONDITION: GPS SATELLITE SVNXX (PRNXX) WAS UNUSABLE AS OF JDAY JJJ (DD MMM YYYY) AND REMOVED FROM THE GPS CONSTELLATION ON JDAY JJJ (DD MMM YYYY) AT HHHH ZULU.
3. POC: ~~CIVIL NON AVIATION – NAVCEN at 703-313-5900, [HTTPS://WWW.NAVCEN.USCG.GOV](https://www.navcen.uscg.gov),~~  
~~CIVIL AVIATION – FAA Satellite Operations Group at 540-422-4178, <https://www.faa.gov/air-traffic/nas/gps-reports/>,~~  
~~MILITARY – GPS Operations Center at [HTTPS://GPS.AFSPC.AF.MIL/GPSOC](https://gps.afspc.af.mil/gpsoc), DSN 560-2541, COMM 719-567-2493,~~  
~~[GPS-SUPPORT@SCHRIEVER.AF.MIL](mailto:GPS-SUPPORT@SCHRIEVER.AF.MIL), [HTTP://WWW.SCHRIEVER.AF.MIL/GPS/](http://www.schriever.af.mil/gps/),~~  
~~MILITARY ALTERNATE – JOINT SPACE OPERATIONS CENTER, DSN 276-9994, COMM 805-606-9994, [JSPOCCOMBATOPS@VANDENBERG.AF.MIL](mailto:JSPOCCOMBATOPS@VANDENBERG.AF.MIL)~~  
[CIVIL NON-AVIATION – NAVCEN AT 703-313-5900, \[HTTPS://WWW.NAVCEN.USCG.GOV\]\(https://www.navcen.uscg.gov\),](mailto:CIVIL-NON-AVIATION-NAVCEN@USCGOV)  
[CIVIL AVIATION – FAA NASEO AT 540-422-4178, \[HTTPS://WWW.FAA.GOV/AIR TRAFFIC/NAS/GPS REPORTS/\]\(https://www.faa.gov/air-traffic/nas/gps-reports/\),](mailto:CIVIL-AVIATION-FAA@FAA)  
[MILITARY – GPS OPERATIONS CENTER AT \[HTTPS://GPS.AFSPC.AF.MIL/GPSOC/\]\(https://gps.afspc.af.mil/gpsoc/\), DSN 560-2541, COMM 719-567-2493,](mailto:MILITARY-GPS-OPS@AFSPC)  
[GPSOPERATIONSCENTER@US.AF.MIL, \[HTTP://WWW.SCHRIEVER.AF.MIL/GPS/\]\(http://www.schriever.af.mil/gps/\),](mailto:GPSOPERATIONSCENTER@USAF.MIL)  
[MILITARY ALTERNATE – JOINT SPACE OPERATIONS CENTER, DSN 276-3514, COMM 805-606-3514, \[JSPOCCOMBATOPS@VANDENBERG.AF.MIL\]\(mailto:JSPOCCOMBATOPS@VANDENBERG.AF.MIL\)](mailto:MILITARY-ALTERNATE@JSPC)

**Figure 10-3 DECOM NANU Message Template**

IS :

```
NOTICE ADVISORY TO NAVSTAR USERS (NANU) YYYYJJJ
SUBJ: SVNXX (PRNXX) DECOMMISSIONING JDAY JJJ/HHH
1.  NANU TYPE: DECOM
    NANU NUMBER: YYYYSSS
    NANU DTG: HHHHDDZ MMM YYYY
    REFERENCE NANU: YYYYSSS
    REF NANU DTG: HHHHDDZ MMM YYYY
    SVN: XX
    PRN: XX
    UNUSABLE START JDAY: JJJ
    UNUSABLE START TIME ZULU: HHHH
    UNUSABLE START CALENDAR DATE: DD MMM YYYY
    DECOMMISSIONING START JDAY: JJJ
    DECOMMISSIONING START TIME ZULU: HHHH
    DECOMMISSIONING START CALENDAR DATE: DD MMM YYYY

2.  CONDITION: GPS SATELLITE SVNXX (PRNXX) WAS UNUSABLE AS OF JDAY JJJ (DD MMM YYYY) AND REMOVED
    FROM THE GPS CONSTELLATION ON JDAY JJJ (DD MMM YYYY) AT HHHH ZULU.

3.  POC: CIVIL NON-AVIATION - NAVCEN AT 703-313-5900, HTTPS://WWW.NAVCEN.USCG.GOV,
    CIVIL AVIATION - FAA NASEO AT 540-422-4178, HTTPS://WWW.FAA.GOV/AIR TRAFFIC/NAS/GPS REPORTS/,
    MILITARY - GPS OPERATIONS CENTER AT HTTPS://GPS.AFSPC.AF.MIL/GPSOC/, DSN 560-2541, COMM 719-567-2493,
    GPSOPERATIONSCENTER@US.AF.MIL, HTTP://WWW.SCHRIEVER.AF.MIL/GPS/,
    MILITARY ALTERNATE - JOINT SPACE OPERATIONS CENTER, DSN 276-3514, COMM 805-606-3514, JSPOCCOMBATOPS@VANDENBERG.AF.MIL
```

**Figure 10-3 DECOM NANU Message Template**

**Rationale :**

7/6/2018: Update POC information to be current as this has more value added than keeping it outdated.

---

**ICD240-125 :**

**Section Number :**

10.3.0-1

**WAS :**

The NANU message structure for all messages, except the General, LAUNCH and DECOM messages, is based on a tabular format that simplifies the readability of data. A template for these messages is illustrated in Figure 10-4. These messages are arranged into a header and three sections. The following paragraphs explain this message format in more detail.

```
NOTICE ADVISORY TO NAVSTAR USERS (NANU) YYYYNXX
SUBJ: SVNxx (PRNXX) FORECAST OUTAGE JDAY JJJ/HHMM JDAY JJJ/HHMM
1. NANU TYPE: FCSTDV
   NANU NUMBER: YYYYNXX
   NANU DTG: DDHHMMZ MMM YYYY
   REFERENCE NANU: YYYYNXX
   REF NANU DTG: DDHHMMZ MMM YYYY
   SVN: XX
   PRN: XX
   START JDAY: JJJ
   START TIME ZULU: HHMM
   START CALENDAR DATE: DD MMM YYYY
   STOP JDAY: JJJ
   STOP TIME ZULU: HHMM
   STOP CALENDAR DATE: DD MMM YYYY
2. CONDITION: GPS SATELLITE SVNXX (PRNXX) WILL BE UNUSABLE ON JDAY JJJ
   (DD MMM YYYY) BEGINNING HHMMZULU UNTIL JDAY JJJ (DD MMM YYYY) ENDING HHMM ZULU.
3. POC: CIVIL NON-AVIATION - NAVCEN at 703-313-5900, HTTPS://WWW.NAVCEN.USCG.GOV,
   CIVIL AVIATION - FAA Satellite Operations Group at 540-422-4178, https://www.faa.gov/air\_traffic/nas/gps\_reports/,
   MILITARY - GPS Operations Center at HTTPS://GPS.AFSPC.AF.MIL/GPSOC, DSN 560-2541, COMM 719-567-2493,
   GPS\_SUPPORT@SCHRIEVER.AF.MIL, HTTP://WWW.SCHRIEVER.AF.MIL/GPS,
   MILITARY ALTERNATE - JOINT SPACE OPERATIONS CENTER, DSN 276-9994, COMM 805-606-9994, JSPOCCOMBATOPS@VANDENBERG.AF.MIL
```

**Figure 10-4 NANU Message Template**

## Redlines :

The NANU message structure for all messages, except the General, LAUNCH and DECOM messages, is based on a tabular format that simplifies the readability of data. A template for these messages is illustrated in Figure 10-4. These messages are arranged into a header and three sections. The following paragraphs explain this message format in more detail.

```
NOTICE ADVISORY TO NAVSTAR USERS (NANU) YYYYNNN
SUBJ: SVNXX (PRNXX) FORECAST OUTAGE JDAY JJJ/HHMM JDAY JJJ/HHMM
1. NANU TYPE: FCSTDV
   NANU NUMBER: YYYYNNN
   NANU DTG: DDHHMMZ MMM YYYY
   REFERENCE NANU: YYYYNNN
   REF NANU DTG: DDHHMMZ MMM YYYY
   SVN: XX
   PRN: XX
   START JDAY: JJJ
   START TIME ZULU: HHMM
   START CALENDAR DATE: DD MMM YYYY
   STOP JDAY: JJJ
   STOP TIME ZULU: HHMM
   STOP CALENDAR DATE: DD MMM YYYY
2. CONDITION: GPS SATELLITE SVNXX (PRNXX) WILL BE UNUSABLE ON JDAY JJJ
   (DD MMM YYYY) BEGINNING HHMMZULU UNTIL JDAY JJJ (DD MMM YYYY) ENDING HHMM ZULU.
3. POC: CIVIL NON-AVIATION - NAVCEN at 703-313-5900, HTTPS://WWW.NAVCEN.USCG.GOV,
CIVIL AVIATION - FAA Satellite Operations Group at 540-422-4178, https://www.faa.gov/air-traffic/nas/gps-reports/,
MILITARY - GPS Operations Center at HTTPS://GPS.AFSPC.AF.MIL/GPSOC, DSN 560-2541, COMM 719-567-2493,
GPS-SUPPORT@SCHRIEVER.AF.MIL, HTTP://WWW.SCHRIEVER.AF.MIL/GPS/,
MILITARY ALTERNATE - JOINT SPACE OPERATIONS CENTER, DSN 276-9994, COMM 805-606-9994, JSPOCCOMBATOPS@VANDENBERG.AF.MIL
CIVIL NON-AVIATION - NAVCEN AT 703-313-5900, HTTPS://WWW.NAVCEN.USCG.GOV,
CIVIL AVIATION - FAA NASEO AT 540-422-4178, HTTPS://WWW.FAA.GOV/AIR TRAFFIC/NAS/GPS REPORTS/,
MILITARY - GPS OPERATIONS CENTER AT HTTPS://GPS.AFSPC.AF.MIL/GPSOC/, DSN 560-2541, COMM 719-567-2493,
GPSOPERATIONSCENTER@US.AF.MIL, HTTP://WWW.SCHRIEVER.AF.MIL/GPS/,
MILITARY ALTERNATE - JOINT SPACE OPERATIONS CENTER, DSN 276-3514, COMM 805-606-3514, JSPOCCOMBATOPS@VANDENBERG.AF.MIL
```

**Figure 10-4 NANU Message Template**

**IS :**

The NANU message structure for all messages, except the General, LAUNCH and DECOM messages, is based on a tabular format that simplifies the readability of data. A template for these messages is illustrated in Figure 10-4. These messages are arranged into a header and three sections. The following paragraphs explain this message format in more detail.

```
NOTICE ADVISORY TO NAVSTAR USERS (NANU) YYYYN  
SUBJ: SVNXX (PRNXX) FORECAST OUTAGE JDAY JJJ/HHMM JDAY JJJ/HHMM  
1. NANU TYPE: FCSTDV  
   NANU NUMBER: YYYYN  
   NANU DTG: DDHHMMZ MMM YYYY  
   REFERENCE NANU: YYYYN  
   REF NANU DTG: DDHHMMZ MMM YYYY  
   SVN: XX  
   PRN: XX  
   START JDAY: JJJ  
   START TIME ZULU: HHMM  
   START CALENDAR DATE: DD MMM YYYY  
   STOP JDAY: JJJ  
   STOP TIME ZULU: HHMM  
   STOP CALENDAR DATE: DD MMM YYYY  
2. CONDITION: GPS SATELLITE SVNXX (PRNXX) WILL BE UNUSABLE ON JDAY JJJ  
   (DD MMM YYYY) BEGINNING HHMMZULU UNTIL JDAY JJJ (DD MMM YYYY) ENDING HHMM ZULU.  
3. POC: CIVIL NON-AVIATION - NAVCEN AT 703-313-5900, HTTPS://WWW.NAVCEN.USCG.GOV,  
   CIVIL AVIATION - FAA NASEO AT 540-422-4178, HTTPS://WWW.FAA.GOV/AIR\_TRAFFIC/NAS/GPS\_REPORTS/,  
   MILITARY - GPS OPERATIONS CENTER AT HTTPS://GPS.AFSPC.AF.MIL/GPSOC/, DSN 560-2541, COMM 719-567-2493,  
   GPSOPERATIONSCENTER@US.AF.MIL, HTTP://WWW.SCHRIEVER.AF.MIL/GPS/,  
   MILITARY ALTERNATE - JOINT SPACE OPERATIONS CENTER, DSN 276-3514, COMM 805-606-3514, JSPOCCOMBATOPS@VANDENBERG.AF.MIL
```

**Figure 10-4 NANU Message Template**

**Rationale :**

7/6/2018: Update POC information to be current as this has more value added than keeping it outdated.

ICD240-289 :

Section Number :

10.3.4-2

WAS :

3. POC: CIVILIAN - NAVCEN AT 703-313-5900, [HTTPS://WWW.NAVCEN.USCG.GOV](https://www.navcen.uscg.gov)  
MILITARY - GPS OPERATIONS CENTER AT [HTTPS://GPS.AFSPC.AF.MIL/GPSOC/](https://gps.afspc.af.mil/gpsoc/), DSN 560-2541,  
COMM 719-567-2541, [gps\\_support@schriever.af.mil](mailto:gps_support@schriever.af.mil), [HTTPS://GPS.AFSPC.AF.MIL](https://gps.afspc.af.mil)  
MILITARY ALTERNATE - JOINT SPACE OPERATIONS CENTER, DSN 276-9994,  
COMM 805-606-9994, [JSPOCCOMBATOPS@VANDENBERG.AF.MIL](mailto:JSPOCCOMBATOPS@VANDENBERG.AF.MIL)

Figure 10-11 Contact Information

Redlines :

3. POC: ~~CIVILIAN - NAVCEN AT 703-313-5900, [HTTPS://WWW.NAVCEN.USCG.GOV](https://www.navcen.uscg.gov)~~  
~~MILITARY - GPS OPERATIONS CENTER AT [HTTPS://GPS.AFSPC.AF.MIL/GPSOC/](https://gps.afspc.af.mil/gpsoc/), DSN 560-2541,~~  
~~COMM 719-567-2541, [gps\\_support@schriever.af.mil](mailto:gps_support@schriever.af.mil), [HTTPS://GPS.AFSPC.AF.MIL](https://gps.afspc.af.mil)~~  
~~MILITARY ALTERNATE - JOINT SPACE OPERATIONS CENTER, DSN 276-9994,~~  
~~COMM 805-606-9994, [JSPOCCOMBATOPS@VANDENBERG.AF.MIL](mailto:JSPOCCOMBATOPS@VANDENBERG.AF.MIL)~~  
[CIVIL NON-AVIATION - NAVCEN AT 703-313-5900, HTTPS://WWW.NAVCEN.USCG.GOV,](https://www.navcen.uscg.gov)  
[CIVIL AVIATION - FAA NASEO AT 540-422-4178, HTTPS://WWW.FAA.GOV/AIR TRAFFIC/NAS/GPS REPORTS/.](https://www.faa.gov/air_traffic/nas/gps_reports/)  
[MILITARY - GPS OPERATIONS CENTER AT HTTPS://GPS.AFSPC.AF.MIL/GPSOC/, DSN 560-2541, COMM 719-567-2493,](https://gps.afspc.af.mil/gpsoc/)  
[GPSOPERATIONSCENTER@US.AF.MIL, HTTP://WWW.SCHRIEVER.AF.MIL/GPS/.](mailto:GPSOPERATIONSCENTER@US.AF.MIL)  
[MILITARY ALTERNATE - JOINT SPACE OPERATIONS CENTER, DSN 276-3514, COMM 805-606-3514,](https://www.schriever.af.mil/gps/)  
[JSPOCCOMBATOPS@VANDENBERG.AF.MIL](mailto:JSPOCCOMBATOPS@VANDENBERG.AF.MIL)

Figure 10-11 Contact Information

IS :

3. POC: CIVIL NON-AVIATION - NAVCEN AT 703-313-5900, [HTTPS://WWW.NAVCEN.USCG.GOV,](https://www.navcen.uscg.gov)  
CIVIL AVIATION - FAA NASEO AT 540-422-4178, [HTTPS://WWW.FAA.GOV/AIR TRAFFIC/NAS/GPS REPORTS/,](https://www.faa.gov/air_traffic/nas/gps_reports/)  
MILITARY - GPS OPERATIONS CENTER AT [HTTPS://GPS.AFSPC.AF.MIL/GPSOC/](https://gps.afspc.af.mil/gpsoc/), DSN 560-2541, COMM 719-567-2493,  
[GPSOPERATIONSCENTER@US.AF.MIL, HTTP://WWW.SCHRIEVER.AF.MIL/GPS/,](mailto:GPSOPERATIONSCENTER@US.AF.MIL)  
MILITARY ALTERNATE - JOINT SPACE OPERATIONS CENTER, DSN 276-3514, COMM 805-606-3514,  
[JSPOCCOMBATOPS@VANDENBERG.AF.MIL](mailto:JSPOCCOMBATOPS@VANDENBERG.AF.MIL)

Figure 10-11 Contact Information

Rationale :

7/6/2018: Update POC information to be current as this has more value added than keeping it outdated.

## ICD240-159

**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 sections. The following paragraphs describe each section and subsection of the OA. [Users should be advised that the Point of Contact \(POC\) information contained in Section 3 of the OA samples are subject to change, specifically the Organization Name and Organization Primary Contact Information \(i.e. Contact Website URI, Contact Email ID, Contact Telephone Number, and Contact DSN Telephone Number\). The OA examples include POC information that reflects the time of release of this ICD. However, users should refer to the POC information provided in the most recent OAs for up-to-date information.](#)

### **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 three sections. The following paragraphs describe each section and subsection of the OA. Users should be advised that the Point of Contact (POC) information contained in Section 3 of the OA samples are subject to change, specifically the Organization Name and Organization Primary Contact Information (i.e. Contact Website URI, Contact Email ID, Contact Telephone Number, and Contact DSN Telephone Number). The OA examples include POC information that reflects the time of release of this ICD. However, users should refer to the POC information provided in the most recent OAs for up-to-date information.

### **Rationale :**

8/24/2018: Add POC caveat statement so that users are aware that the ICDs are updated less often than the POC information contained within the GPS products.

---

ICD240-160 :

Section Number :

20.1.0-2

WAS :

```
UNCLASSIFIED
GPS OPERATIONAL ADVISORY          086.0A1
SUBJ: GPS STATUS          27 MAR 2XXX

1. SATELLITES, PLANES, AND CLOCKS (CS=CESIUM RB=RUBIDIUM)
A. BLOCK I : NONE
B. BLOCK II : PRNS 1, 2, 3, 4, 5, 6, 7, 8, 9, 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
C. BLOCK III: PRNS 29, 30, 31, 32
  PLANE : SLOT C1, B5, A2, E5
  CLOCK : RB, 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)

2XXX022 261836Z MAR 2XXX 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)

2XXX020 202158Z MAR 2XXX GENERAL /-/
2XXX021 241836Z MAR 2XXX 32 LAUNCH /-/
2XXX023 262212Z MAR 2XXX GENERAL /-/

3. REMARKS:
A. THE POINT OF CONTACT FOR GPS MILITARY OPERATIONAL SUPPORT IS THE GPS
OPERATIONS CENTER AT (XXX)XXX-XXXX OR DSN XXX-XXXX
B. CIVIL NON-AVIATION: FOR INFORMATION, CONTACT US COAST GUARD NAVCEN AT COMMERCIAL 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
```

Figure 20-1 Sample Operational Advisory

Redlines :

```
UNCLASSIFIED
GPS OPERATIONAL ADVISORY      086.0A1
SUBJ: GPS STATUS              27 MAR 2XXX

1. SATELLITES, PLANES, AND CLOCKS (CS=CESIUM RB=RUBIDIUM)
A. BLOCK I : NONE
B. BLOCK II : PRNS 1, 2, 3, 4, 5, 6, 7, 8, 9, 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
C. BLOCK III: PRNS 29, 30, 31, 32
  PLANE : SLOT C1, B5, A2, E5
  CLOCK : RB, 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)

2XXX022 261836Z MAR 2XXX 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)

2XXX020 202158Z MAR 2XXX GENERAL /-/
2XXX021 241836Z MAR 2XXX 32 LAUNCH /-/
2XXX023 262212Z MAR 2XXX GENERAL /-/

3. REMARKS:
A. THE POINT OF CONTACT FOR GPS MILITARY OPERATIONAL SUPPORT IS THE GPS
OPERATIONS CENTER AT (XXX)XXX-XXXX OR DSN XXX-XXXX.
B. CIVIL NON-AVIATION: FOR INFORMATION, CONTACT US COAST GUARD NAVCEN AT
COMMERCIAL 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
3. REMARKS:
A. THE POINT OF CONTACT FOR GPS MILITARY OPERATIONAL SUPPORT IS THE GPS
OPERATIONS CENTER AT HTTPS://GPS.AFSPC.AF.MIL/GPSOC/, DSN 560-2541, COMM 719-567-2493,
GPSOPERATIONSCENTER@US.AF.MIL,
B. CIVIL NON-AVIATION - NAVCEN AT 703-313-5900, HTTPS://WWW.NAVCEN.USCG.GOV,
C. CIVIL AVIATION - FAA NASEO AT 540-422-4178, HTTPS://WWW.FAA.GOV/AIR TRAFFIC/NAS/GPS REPORTS/,
D. MILITARY ALTERNATE - JOINT SPACE OPERATIONS CENTER, DSN 276-3514, COMM 805-606-3514,
JSPOCCOMBATOPS@VANDENBERG.AF.MIL
```

Figure 20-1 Sample Operational Advisory

IS :

```
UNCLASSIFIED
GPS OPERATIONAL ADVISORY          086.0A1
SUBJ: GPS STATUS                  27 MAR 2XXX

1. SATELLITES, PLANES, AND CLOCKS (CS=CESIUM RB=RUBIDIUM)
A. BLOCK I : NONE
B. BLOCK II : PRNS 1, 2, 3, 4, 5, 6, 7, 8, 9, 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
C. BLOCK III: PRNS 29, 30, 31, 32
  PLANE : SLOT C1, B5, A2, E5
  CLOCK : RB, 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)

2XXX022 261836Z MAR 2XXX 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)

2XXX020 202158Z MAR 2XXX GENERAL /-/
2XXX021 241836Z MAR 2XXX 32 LAUNCH /-/
2XXX023 262212Z MAR 2XXX GENERAL /-/

3. REMARKS:
A. THE POINT OF CONTACT FOR GPS MILITARY OPERATIONAL SUPPORT IS THE GPS
OPERATIONS CENTER AT HTTPS://GPS.AFSPC.AF.MIL/GPSOC/, DSN 560-2541, COMM 719-567-2493,
GPSOPERATIONSCENTER@US.AF.MIL,
B. CIVIL NON-AVIATION - NAVCEN AT 703-313-5900, HTTPS://WWW.NAVCEN.USCG.GOV,
C. CIVIL AVIATION - FAA NASEO AT 540-422-4178, HTTPS://WWW.FAA.GOV/AIR\_TRAFFIC/NAS/GPS\_REPORTS/,
D. MILITARY ALTERNATE - JOINT SPACE OPERATIONS CENTER, DSN 276-3514, COMM 805-606-3514,
JSPOCCOMBATOPS@VANDENBERG.AF.MIL
```

Figure 20-1 Sample Operational Advisory

**Rationale :**

8/16/2018: Only maintain POC updates; notes in the paragraphs will discuss the scenario when Section 1 of the OA has no data.

7/6/2018: Update Section 1 of the OA in ICD-GPS-240 to have NO DATA to ensure backward compatibility, due to updates in ICD-GPS-870. Update POC information to be current as there is more value added.

**ICD240-167 :****Section Number :**

20.3.0-1

**WAS :**

Section one lists operational satellites by PRN number, assigned plane, and clock in current use. 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. Section 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 one of the OA is illustrated in Figure 20-3

**Redlines :**

Section one lists operational satellites by PRN number, assigned plane, and clock in current use. 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. Section 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 one of the OA is illustrated in Figure 20-3.

**IS :**

Section one lists operational satellites by PRN number, assigned plane, and clock in current use. 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. Section 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 one of the OA is illustrated in Figure 20-3.

**Rationale :**

8/9/2018: Update ICD-GPS-240 so that if it has no data, Section 1 will be denoted with "RESERVED" because AEP currently outputs data there and will be sunset. This will still ensure backward compatibility. This description will be added in another place; what remains are grammatical/punctuation changes.

7/6/2018: Update Section 1 of the OA in ICD-GPS-240 to be consistent with updates in ICD-GPS-870 to ensure backward compatibility.

---

**ICD240-333 :**

Insertion after object ICD240-318: Figure 20-3 OA Section One

**Section Number :**

20.3.0-4

**WAS :**

N/A

**Redlines :**

<INSERTED OBJECT>

**IS :**

If no data are available, section one is denoted with "RESERVED." An example is illustrated in Figure 20-3a.

**Rationale :**

8/10/18: Split into multiple objects to introduce the RESERVED case.

---

**ICD240-334 :**

Insertion after object ICD240-333

**Section Number :**

20.3.0-5

**WAS :**

N/A

**Redlines :**

<INSERTED OBJECT>

**IS :**

1. RESERVED

**Rationale :**

8/9/18: Insert figure with section 1 of the OA with "RESERVED".

---

**ICD240-335 :**

Insertion after object ICD240-334

**Section Number :**

20.3.0-6

**WAS :**

N/A

**Redlines :**

<INSERTED OBJECT>

**IS :**

Figure 20-3a OA Section One (No Data)

**Rationale :**

8/10/18: Show figure caption for Section 1 if it has no data.

---

ICD240-176:

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. CIVILIAN: FOR INFORMATION, CONTACT US COAST GUARD NAVCEN AT COMMERCIAL (703)313-5900 24 HOURS DAILY AND INTERNET  
[HTTP://WWW.NAVCEN.USCG.GOV](http://www.navcen.uscg.gov)  
C. MILITARY SUPPORT WEBPAGES CAN BE FOUND AT THE FOLLOWING  
[HTTPS://GPS.AFSPC.AF.MIL/GPS](https://gps.afspc.af.mil/gps) OR [HTTP://GPS.AFSPC.AF.MIL/GPSOC](http://gps.afspc.af.mil/gpsoc)

Figure 20-5 OA Section Three

Redlines:

~~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. CIVILIAN: FOR INFORMATION, CONTACT US COAST GUARD NAVCEN AT COMMERCIAL 703-313-5900 24 HOURS DAILY AND INTERNET  
[HTTPS://WWW.NAVCEN.USCG.GOV](https://www.navcen.uscg.gov)  
C. 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)~~  
3. REMARKS:  
A. THE POINT OF CONTACT FOR GPS MILITARY OPERATIONAL SUPPORT IS THE GPS OPERATIONS CENTER AT [HTTPS://GPS.AFSPC.AF.MIL/GPSOC/](https://gps.afspc.af.mil/gpsoc/), DSN 560-2541, COMM 719-567-2493, [GPSOPERATIONSCENTER@US.AF.MIL](mailto:GPSOPERATIONSCENTER@US.AF.MIL).  
B. CIVIL NON-AVIATION - NAVCEN AT 703-313-5900. [HTTPS://WWW.NAVCEN.USCG.GOV](https://www.navcen.uscg.gov).  
C. CIVIL AVIATION - FAA NASEO AT 540-422-4178, [HTTPS://WWW.FAA.GOV/AIR\\_TRAFFIC/NAS/GPS\\_REPORTS/](https://www.faa.gov/air_traffic/nas/gps_reports/).  
D. MILITARY ALTERNATE - JOINT SPACE OPERATIONS CENTER, DSN 276-3514, COMM 805-606-3514, [JSPOCCOMBATOPS@VANDENBERG.AF.MIL](mailto:JSPOCCOMBATOPS@VANDENBERG.AF.MIL)

Figure 20-5 OA Section Three

IS:

3. REMARKS:  
A. THE POINT OF CONTACT FOR GPS MILITARY OPERATIONAL SUPPORT IS THE GPS OPERATIONS CENTER AT [HTTPS://GPS.AFSPC.AF.MIL/GPSOC/](https://gps.afspc.af.mil/gpsoc/), DSN 560-2541, COMM 719-567-2493, [GPSOPERATIONSCENTER@US.AF.MIL](mailto:GPSOPERATIONSCENTER@US.AF.MIL),  
B. CIVIL NON-AVIATION - NAVCEN AT 703-313-5900, [HTTPS://WWW.NAVCEN.USCG.GOV](https://www.navcen.uscg.gov),  
C. CIVIL AVIATION - FAA NASEO AT 540-422-4178, [HTTPS://WWW.FAA.GOV/AIR\\_TRAFFIC/NAS/GPS\\_REPORTS/](https://www.faa.gov/air_traffic/nas/gps_reports/),  
D. MILITARY ALTERNATE - JOINT SPACE OPERATIONS CENTER, DSN 276-3514, COMM 805-606-3514, [JSPOCCOMBATOPS@VANDENBERG.AF.MIL](mailto:JSPOCCOMBATOPS@VANDENBERG.AF.MIL)

Figure 20-5 OA Section Three

**Rationale:** 7/6/2018: Update POC information to be consistent with the latest products. There is more value added here than keeping it as-is.

# **Clean-Up and Clarification Proposed Changes**

**ICD240-17 :**

**Section Number :**

1.3.0-6

**WAS :**

The Boeing Company

**Redlines :**

<DELETED OBJECT>

**IS :**

<DELETED OBJECT>

**Rationale :**

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

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**ICD240-38 :**

**Section Number :**

2.1.0-15

**WAS :**

IS-GPS-200 Current Version	Navstar GPS Space Segment/Navigation User Interface
GP-03-001 14 November 2003	GPS Interface Control Working Group (ICWG) Charter
MOA February 1992	Memorandum of Agreement Between the United States Coast Guard and the United States Space Command, "Distribution of Navstar Global Positioning System (GPS) Status Information" (Signatories: USCG/G-NRN and USSPC/DOO)
MOA February 1996	Support Agreement Between the United States Coast Guard and the United States Air Force Space Command, "Distribution of Navstar Global Positioning System (GPS) Status Information" (Signatories: Commanding Officer NAVCEN and AFSPC/DOO)
MOA February 2010	Memorandum of Agreement between the Joint Functional Component Command for Space; the US Coast Guard Navigation Center and the FAA National Operations Control Center with respect to the

---

Support of Users of the Navstar Global Positioning System

MOA  
June 2014

Interagency Memorandum of Agreement with Respect to Support of Users of the Navstar Global Positioning System (GPS)

**Redlines :**

IS-GPS-200 Current Version	Navstar GPS Space Segment/Navigation User Interface
GP-03-001 <del>14 November 2003</del> <u>Current Version</u>	GPS Interface Control Working Group (ICWG) Charter
<del>MOA February 1992</del>	<del>Memorandum of Agreement Between the United States Coast Guard and the United States Space Command, "Distribution of Navstar Global Positioning System (GPS) Status Information"  (Signatories: USCG/G-NRN and USSPC/DOO)</del>
<del>MOA February 1996</del>	<del>Support Agreement Between the United States Coast Guard and the United States Air Force Space Command, "Distribution of Navstar Global Positioning System (GPS) Status Information"  (Signatories: Commanding Officer NAVCEN and AFSPC/DOO)</del>
<del>MOA February 2010</del>	<del>Memorandum of Agreement between the Joint Functional Component Command for Space; the US Coast Guard Navigation Center and the FAA National Operations Control Center with respect to the Support of Users of the Navstar Global Positioning System</del>
MOA <del>June 2014</del> <u>Current Version</u>	Interagency Memorandum of Agreement with Respect to Support of Users of the Navstar Global Positioning System (GPS)

**IS :**

IS-GPS-200	Navstar GPS Space Segment/Navigation User Interface
------------	---

Current Version	
GP-03-001	GPS Interface Control Working Group (ICWG)
Current Version	Charter
MOA	Interagency Memorandum of Agreement with Respect
Current Version	to Support of Users of the Navstar Global Positioning System (GPS)

**Rationale :**

5/9/2018: Update the "Other Publications" to include the most current versions. All prior versions of the MOA need to be removed because they have been superseded by the most recent version.

**ICD240-128 :**

**Section Number :**

10.3.1.0-1

**WAS :**

The first line of the header includes the title "NOTICE ADVISORY TO NAVSTAR USERS (NANU)" and the assigned identification (ID) number for that NANU message. The ID number consists of the four-digit year followed by a sequentially assigned three-digit number which begins at 001 for the first NANU on the first day of a new year. The second line identifies the subject of the message including the Space Vehicle Number (SVN), SV Pseudo Random Noise (PRN) number, type of message, and effective dates for the event. The date is in Julian day-of-year format (JDAY), numbered from 001 to 366, and the time is Zulu referenced in a 24-hour, two digit hour (HH), two digit minute (MM) format. The NANU header is illustrated in Figure 10-5.

**Redlines :**

The first line of the header includes the title "NOTICE ADVISORY TO NAVSTAR USERS (NANU)" and the assigned identification (ID) number for that NANU message. The ID number consists of the four-digit year followed by a sequentially assigned three-digit number which begins at 001 for the first NANU ~~on the first day~~ of a new year. The second line identifies the subject of the message including the Space Vehicle Number (SVN), SV Pseudo Random Noise (PRN) number, type of message, and effective dates for the event. The date is in Julian day-of-year format (JDAY), numbered from 001 to 366, and the time is Zulu referenced in a 24-hour, two digit hour (HH), two digit minute (MM) format. The NANU header is illustrated in Figure 10-5.

**IS :**

The first line of the header includes the title "NOTICE ADVISORY TO NAVSTAR USERS (NANU)" and the assigned identification (ID) number for that NANU message. The ID number consists of the four-digit year followed by a sequentially assigned three-digit number which begins at 001 for the first NANU of a new year. The second line identifies the subject of the message including the Space Vehicle Number (SVN), SV Pseudo Random Noise (PRN) number, type of message, and effective dates for the event. The date is in Julian day-of-year format (JDAY), numbered from 001 to 366, and the time is Zulu referenced in a 24-hour, two digit hour (HH), two digit minute (MM) format. The NANU header is illustrated in Figure 10-5.

**Rationale :**

5/9/2018: Update "first NANU on the first day of a new year" to "first NANU of a new year" because the first NANU of a new year may not necessarily occur on the first day of that year.

**ICD240-207 :****Section Number :**

40.4.0-6

**WAS :**

Table 40-II Almanac Description (Sheet 1 of 2)

Line No.	Almanac Name	Description	Units	Range	Accuracy	Precision
1	Number of records	The number of satellite almanac records contained in the file	Records	0 to 32	1	2 significant digits
	Name of Almanac	Descriptive name for the Almanac in the file	N/A	Any combination of valid ASCII characters	N/A	24 significant characters
2	GPS Week Number	The almanac reference week number (WNa) for all almanac data in the file	Weeks	0 to 1024 *	1	4 significant digits
	GPS Time of Applicability	The number of seconds since the beginning of the almanac reference week. The almanac reference time ( $t_{oa}$ ) for all almanac data in the file	Second	0 to 602,112	1	6 significant digits
3	Blank line for format spacing					
<b>Record Format</b>						
R-1	PRN Number	The satellite PRN number. This is a required data item as it is the GPS user's primary means of identifying GPS satellites	None	1 to 32	None	2 significant digits
R-2	SVN	The SV reference number. It is equivalent to the space vehicle identification (SVID) number of the SV	None	0 to 255 (zero denotes that this field is empty)	None	3 significant digits

<b>R-3</b>	Average URA Number	The satellite "average" URA** number. This is not an item in the raw almanac file but is based on the average URA value transmitted by this satellite in subframe 1. The URA is taken in the range of 730 hours	None	0 to 15	1	2 significant digits
<b>R-4</b>	Eccentricity	This defines the amount of the orbit deviation from a circular orbit (e)**	Unitless	0 to 3.125 E-2	4.77 E-7	7 significant digits
<b>b</b>	Inclination Offset	Satellite almanac orbital "inclination angle offset" ( $\delta_i$ )** This does not include the 0.30 semicircle reference value ( $i_0$ )**	Semi circles	-6.25 E-2 to +6.25 E-2	1.91 E-6	7 significant digits

**Redlines :**

Table 40-II Almanac Description (Sheet 1 of 2)

<b>Line No.</b>	<b>Almanac Name</b>	<b>Description</b>	<b>Units</b>	<b>Range</b>	<b>Accuracy</b>	<b>Precision</b>
<b>1</b>	Number of records	The number of satellite almanac records contained in the file	Records	0 to 32	1	2 significant digits
	Name of Almanac	Descriptive name for the Almanac in the file	N/A	Any combination of valid ASCII characters	N/A	24 significant characters
<b>2</b>	GPS Week Number	The almanac reference week number (WNa) for all almanac data in the file	Weeks	0 to 10243 *	1	4 significant digits
	GPS Time of Applicability	The number of seconds since the beginning of the almanac reference week. The almanac reference time ( $t_{oa}$ ) for all almanac data in the file	Second	0 to 602,112	1	6 significant digits
<b>3</b>	Blank line for format spacing					
<b>Record Format</b>						
<b>R-1</b>	PRN Number	The satellite PRN number. This is a required data item as it is the GPS user's primary means of identifying GPS satellites	None	1 to 32	None	2 significant digits

<b>R-2</b>	SVN	The SV reference number. It is equivalent to the space vehicle identification (SVID) number of the SV	None	0 to 255 (zero denotes that this field is empty)	None	3 significant digits
<b>R-3</b>	Average URA Number	The satellite "average" URA** number. This is not an item in the raw almanac file but is based on the average URA value transmitted by this satellite in subframe 1. The URA is taken in the range of 730 hours	None	0 to 15	1	2 significant digits
<b>R-4</b>	Eccentricity	This defines the amount of the orbit deviation from a circular orbit (e)**	Unitless	0 to 3.125 E-2	4.77 E-7	7 significant digits
<b>b</b>	Inclination Offset	Satellite almanac orbital "inclination angle offset" ( $\delta_i$ )** This does not include the 0.30 semicircle reference value ( $i_0$ )**	Semi circles	-6.25 E-2 to +6.25 E-2	1.91 E-6	7 significant digits

IS :

Table 40-II Almanac Description (Sheet 1 of 2)

Line No.	Almanac Name	Description	Units	Range	Accuracy	Precision
<b>1</b>	Number of records	The number of satellite almanac records contained in the file	Records	0 to 32	1	2 significant digits
	Name of Almanac	Descriptive name for the Almanac in the file	N/A	Any combination of valid ASCII characters	N/A	24 significant characters
<b>2</b>	GPS Week Number	The almanac reference week number (WNa) for all almanac data in the file	Weeks	0 to 1023 *	1	4 significant digits
	GPS Time of Applicability	The number of seconds since the beginning of the almanac reference week. The almanac reference time ( $t_{oa}$ ) for all almanac data in the file	Second	0 to 602,112	1	6 significant digits
<b>3</b>	Blank line for format spacing					
<b>Record Format</b>						

<b>R-1</b>	PRN Number	The satellite PRN number. This is a required data item as it is the GPS user's primary means of identifying GPS satellites	None	1 to 32	None	2 significant digits
<b>R-2</b>	SVN	The SV reference number. It is equivalent to the space vehicle identification (SVID) number of the SV	None	0 to 255 (zero denotes that this field is empty)	None	3 significant digits
<b>R-3</b>	Average URA Number	The satellite "average" URA** number. This is not an item in the raw almanac file but is based on the average URA value transmitted by this satellite in subframe 1. The URA is taken in the range of 730 hours	None	0 to 15	1	2 significant digits
<b>R-4</b>	Eccentricity	This defines the amount of the orbit deviation from a circular orbit (e)**	Unitless	0 to 3.125 E-2	4.77 E-7	7 significant digits
<b>b</b>	Inclination Offset	Satellite almanac orbital "inclination angle offset" ( $\delta_i$ )** This does not include the 0.30 semicircle reference value ( $i_0$ )**	Semi circles	-6.25 E-2 to +6.25 E-2	1.91 E-6	7 significant digits

**Rationale :**

5/9/2018: The GPS Week Number range is actually from 0-1023 (due to the number being modulo-1024). This is also evidenced in ICD-GPS-870.