

## **Summary of Changes**

### **Summary of Changes and Instructions**

#### **1.1 September 2008 Revision of the January 2008 Edition of the NTIA Manual**

The Cover Page and the Table of Contents was updated.

##### Preface

The introduction was revised and new holders and promulgation letters were added to the preface.

##### Chapter 3

Part 3.2 was revised with current ITU information. (36615/1)

##### Chapter 4

Section 4.1.1, updated the information related to the ITU Regulations.

Section 4.1.3, in the list of international footnotes, revised footnotes 5.155, 5.237, 5.339, 5.438, 5.462A, 5.469A, and 5.476A.

In the list of United States (US) footnotes added footnote US1; revised footnotes US7, US11, US81, US90, US93, US99, US116, US117, US201, US216, US217, US222, US229, US230, US247, US251, US252, US259, US262, US265, US267, US273, US285, US290, US294, US299, US301, US307, US308, US309, US310, US311, US315, US316, US323, US324, US334, US335, US337, US338, US342, US344, US346, US348, US351, US353, US354, US355, US359, US360, US362, US366, US368, US378, US381, US388, US396, US397, US399, and US401; and removed footnotes US215, US302, US321, and US387.

In the list of non-Federal Government (NG) added footnotes NG1 and NG30; revised footnotes NG28, NG51, NG53, NG56, NG66, NG112, NG124, NG141, NG143, NG144, NG147, NG149, NG155, NG158, NG159, NG160, NG163, NG167, NG172, NG173, NG175, NG184 and removed footnote NG31.

In the list of Federal Government (G) footnotes revised G2, G6, and G133; removed G31 and G106; and added G127. New footnote G134 was also added to this section. (36557/1)

Section 4.2.2, modified the title and text in this section (removed frequencies 1720 and 1740 MHz).

Section 4.3.5, an editorial correction was made to the DME/TACAN table (pg. 4-171). The Ground Reply frequency 21Y was corrected to read 1108 vice 982 MHz.

##### Chapter 6

Section 6.1.1, Special Terms (General), added a new definition for Adaptive System (36694/1), Cognitive Radio System and Software Defined Radio. (36750/1)

Part 6.2, Corrected the superscript formating for K = kilo ( $10^3$ ), M = Mega ( $10^6$ ), G = giga ( $10^9$ ), T = tera ( $10^{12}$ ).

Part 6.6 was revised with current ITU information. (36614/1)

Chapter 7

Part 7.3, “Use of Frequencies for National Security and Emergency Preparedness (NS/EP)” was completely revised. (36348/2)

Part 7.11, the information for the Air Force Aeronautical Systems Center (AFMC) was revised. (36437/1)

Part 7.11, the Agriculture site was removed and the Air Force Phillips Laboratory site was revised. (36554/1)

Part 7.24, the current text was deleted and replaced with a new Part 7.24 titled “FEDERAL GOVERNMENT AGENCIES AS END USERS OF FCC LICENSED COMMERCIAL SERVICES”.

Chapter 8

Section 8.1.2, corrected the reference to Public Law 87-975 to read Public Law 87-795 on page 8-3.

Section 8.2.5, added a new section titled “Withholding Funds Pending Availability of Frequency Support”. (36665/1)

Section 8.2.49 was deleted and marked as “Reserved”.

Section 8.3.15 (Table), added Navy Earth Station data for the Naval Air Warfare Center (NAWC) and John Hopkins University, Applied Physics Laboratory (JHU/APL) Earth Station located at Laurel, MD. (36438/1)

Section 8.3.15 (Table) added contour data for the Air Force Trailblazer Micro-Satellite and PnP Sat Earth Station Coordination Contours for Kwajalein, Republic of the Marshall Islands (36555/1) and Commerce Jason-2 DORIS Transmitting Earth Station Coordination Contours for Richmond, FL; Kamuela, HI; Hawaii National Park, HI; Ahua Kilauea, HI; Sandhill Kilauea, HI; Fairbanks, AK; and Guam Seismic Observatory, GUM. (36555/1)

Part 8.4 is a new addition to the manual titled “Cognitive Radio System and Software Defined Radio”. (36750/1)

Chapter 9

Section 9.8.1, revised the Index of Field Codes Table. (36296/1)

Section 9.8.2, (16), revised Pulse emissions L - Modulated in width or duration and M - Modulated in position or phase. (36440/1)

Section 9.8.2, minor edits were made to sub-paragraphs 24, 25, 33 and 34. (36674/1)

Section 9.8.2, 39.k, editorial correction on page 9-51.

Section 9.8.2, 39.m(6)(a), updated the list of frequencies and the footnotes. (36556/1)

Section 9.8.2, 39.u(2)(a), removed the frequency bands 806.0 - 824.0 MHz, 851.0 - 869.0 MHz, 896.0 - 901.0 MHz, and deleted the footnote, “\*\* Limited exclusively to the Specialized Mobile Radio (SMR) service (see 8.2.49)”. (36556/1)

Annex A:

A.6 Special Notes, added new notes S908, S909, S910 and S911. (36609/1) (36469/1)

Annex B:

Corrected the Power Flux-Density Limits Table on page B-8.

## Annex G

All the Part headings were revised in Annex G. (36611/1)

Part G.1, revised some of the Department of Interior information. (36559/1)

Part G-1 added a new bureau abbreviation under the Department of Commerce. (36469/1)

Part G.1, editorial corrections were made to Navy information on page G-9.

Part G.5, added abbreviations BDW and ICX. (36610/1)

Part G.5, added several new Manufacturer Codes. (36469/1)

## Annex H

Page H-8, updated the ITU references on this page. (36613/1)

Some formating changes were made throughout Annex H.

### **1.1.1 Instructions**

**Effected Pages:** Cover Page, Table of Contents, Preface i through iii, 3-2, 3-3, 3-4, All of Chapter 4, 6-1, 6-4, 6-15, 6-31, 6-35, 6-36, 6-37, 6-38, 7-1, 7-2, 7-3, 7-4, 7-5, 7-14, 7-15, 7-32, 8-3, 8-5, 8-6, 8-43, 8-61, 8-62, 8-66, 8-78, 9-14, 9-23, 9-30, 9-31, 9-38, 9-51, 9-52, 9-63, 9-65, 9-66, 10-3, 10-4, 10-28, A-22, B-8, G-1, G-2, G-8, G-11, G-16, G-28 through G-48, all of Annex H, the Summary of Changes and the Index.

**Replace Pages:** Cover Page, Table of Contents, Preface i through iv, 3-1 through 3-6, All of Chapter 4, 6-1 through 6-4, 6-15 through 6-16, 6-31 through 6-32, 6-35 through 6-38, All of Chapter 7, 8-3 through 8-6, 8-43 through 8-52, 8-61 through 8-66, 8-77 through 8-78, 9-13 through 9-14, 9-23 through 9-24, 9-29 through 9-32, 9-37 through 9-38, 9-51 through 9-52, 9-63 through 9-66, 10-3 through 10-18, 10-27 through 10-28, A-21 through A-22, B-7 through B-8, G-1 through G-12, G-15 through G-16, G-27 through G-50, All of Annex H, the Summary of Changes and the Index.

## **1.2 May 2008 Revision of the January 2008 Edition of the NTIA Manual**

The Cover Page and the Table of Contents will be updated.

### Preface

The introduction was revised and new holders and promulgation letters were added.

### Chapter 1

Section 1.3, Section 5, the Radio Conference Subcommittee text was revised. (36376/1)

### Chapter 4

Section 4.1.3, the formating of footnote **5.138** was corrected.

Section 4.1.3, in US216 “MHz” was added after 468.19688.

Section 4.1.3, in US294 the reference was corrected to read Chapter 8 instead of Chapter 7. (36387/1)

Sections 4.2.3 and 4.2.4, editorial corrections were made to these sections. (36400/1)

Section 4.3.7,(2)(a) was revised correcting the formating in the fourth sentence.

## Chapter 5

Section 5.3.5.1 was revised correcting the header spacing.

Sections 5.5.2, 5.5.3, and 5.5.5 were revised correcting the formula

$P_t = P_p + 20\log(N \times t) + 10\log(PPR) - PG - 90$ . The text  $N_t$  was changed to  $(N \times t)$ .

## Chapter 6

Section 6.1.1, the Deep Space distances equation was corrected to read  $2 \times 10^6$  kilometers instead of  $2 \times 106$  kilometers.

Sections 6.1.2 and 6.1.3 were revised adding four station classes (E1 through E4) for Earth Exploration-Satellite (active sensor) Space Stations and Space Research (active sensor) Space Stations. (35932/1)

## Chapter 8

Section 8.1.2 was revised correcting Public Law 87-975 to read Public Law 87-795 and a related information footnote was added.

Section 8.2.6 (2), the spelling of “van-mounted” was corrected.

Section 8.2.28 was rewritten to provide current guidance concerning radio frequency electromagnetic field safety and protection. (36361/1)

Table 8.2.36, major revisions were made to this table. (36322/1)

Section 8.3.11, the reference to Note 141 was corrected to read Note S141.

## Chapter 9

Section 9.8.1 was revised adding new field codes TRN and PRD to the Index of Field Codes. (36296/1)

Section 9.8.2, 15, Station Class (STC) and Section 9.8.2, 39, Circuit Remarks (REM) was revised. These changes clarify the use of FL and MO station classes and require the use of altitude on station classes using aircraft. The existing FAA and DOD flight level formats will be used for AAG and MAG bands, while the M014 format will be used for all other bands. (36214/1)

Section 9.8.2, 16 was revised. (36440/1)

Section 9.8.2 (39.b.5), the spacing in the example was corrected.

Section 9.8.2 (39.f.6), the spacing in the example was corrected.

Section 9.8.2, General, added new text “6. For commercial radars the Manufacturer Code is required to be entered for the first occurrence of \*EQT and \*EQR only.” (36165/1)

Section 9.8.2 (79.h-j), the formating of these paragraphs were modified.

Section 9.10, the abbreviation for Action Number (ACN) was corrected.

## Annex A

Part A.6, a stray mark in the text of S297 was removed.

Part A.6, corrected the references in footnotes S355 and S356. (36400/1)

Part A.6, deleted footnotes S872 and added S401, S905, S906 and S907. (36186/1)

Part A.6, added new footnotes S891 through S899 for FCC satellite systems. (36321/1)

Part A.6, formating corrected between footnotes S698 and S700.

## Annex D

Table 3 was revised updating the email address for the Army Frequency Management Office Continental U.S. (AFMO CONUS). (36295/1)

## Annex G

Part G.1 was revised updating the U.S. Navy/Marine Corps information.

Part G.1.1, added “NON-GOVERNMENT RECORDS (70/80/90 GHz) NGR”. (36320/1)

## Annex H

Formating corrections were made on pages H-5 and H-6.

### 1.2.1 Instructions

**Effected Pages:** Cover Page, Table of Contents, Preface i through iii, 1-13 through 1-14, 4-75, 4-134, 4-139, 4-149, 4-164, 4-165, 4-178, 5-18, 5-31, 5-33, 5-38, 6-4, 6-21, 6-24, 6-27, 8-2, 8-6, 8-17, 8-51, 9-19 through 9-20, 9-23, 9-45, 9-49 through 9-51, 9-55, 9-85, A-13, A-15, A-12, A-17, A-22, D-5, G-6 through G-12, H-5, H-6, the Summary and the Index.

**Replace Pages:** Cover Page, Table of Contents, Preface i through iv, 1-13 through 1-14, 4-75 through 4-76, 4-133 through 4-134, 4-139 through 4-140, 4-149 through 4-150, 4-163 through 4-166, 4-177 through 4-178, 5-17 through 5-18, 5-31 through 5-38, 6-3 through 6-4, 6-21 through 6-32, 8-1 through 8-2, 8-5 through 8-6, 8-17 through 8-58, 9-19 through 9-24, 9-45 through 9-46, 9-49 through 9-94, A-11 through 18, A-21 through A-22, D-5 through D-6, G-5 through G-12, H-5 through H-6, the Summary, and the Index.

## 1.3 January 2008 Edition of the NTIA Manual

The font was changed from CG Times to Times New Roman throughout the manual, except for the allocation table, which continues to use Arial Narrow.

The terms government and non-Government were revised to read Federal and non-Federal in many places in the NTIA Manual. In areas of the manual that reference text from other documents these changes were not made.

Cover Page, Table of Contents and the Preface, these sections of the manual were updated.

### Chapter 1

Section 1.3.2 subsection 3, the last sentence in the first paragragh was rewritten.

Section 1.3.2, “ByLaws”, in this section the articles “Conduct of Work” and “Procedure and Voting” were both listed as Article VII. The article “Procedure and Voting” was renumbered as Article VIII and the remaining articles were renumbered.

### Chapter 3

Section 3.9.9, the text in this section was replaced.

Section 3.9.11, modified the text replacing Treasury with Homeland Security.

Section 3.9.12, modified the text related to CMERAR and other editorial changes.

## Chapter 4

Section 4.1.3, changes were made to the following footnotes:

Deleted US223

Modified G133

Editorial corrections were made to US222, US342 and US362

Sections 4.2.3 and 4.2.4 were previously marked as Reserved, these sections were removed and the following section was renumbered.

Section 4.3.7 was revised.

## Chapter 5

Section 5.2.1, Table 5.2.1 “Table of Frequency Tolerances”, Note (e), changed 1630 kHz to 1610 kHz.  
Section 5.6.2, corrected an error in the “Unwanted Emission Mask” formulas.

## Chapter 7

The “Part” and “Section” numbering for all of this chapter was corrected.

Part 7.11, updated the Air Force, Space and Missile Systems Center and NASA information.

Part 7.27, added this new part titled “Use of Electronic Countermeasures/Equipment In Response To Radio-Controlled Improvised Explosive Devices”.

## Chapter 8

Section 8.2.41, added this new section titled “Space Systems Using Necessary Bandwidths Greater Than 5 MHz for Transmissions from Space in the Band 2200-2290 MHz”.

## Chapter 9

Section 9.8.1, added gg to the Table. Index of Field Codes

Section 9.8.2, added subparagraph 39 (U)

Part 1, updated the text for:

MISC (Miscellaneous) and SPECIAL PROJECTS

added Short Term Incident Response

Part 2, Updated the text for:

OTHER OPERATION

SHIP/SHORE OPERATIONS

CAP was modified to AFAUX/CAP

Added new text for:

WIDEBAND GLOBAL SATCOM

Replaced the definition for CAP and added a definition for AFAUX/CAP

39. Circuit Remarks (REM) (40 Characters-30 Occurrences)

Added gg. Pre-coordination Data (\*PRC)

## Chapter 10

Section 10.8.3A, added this new section to the manual.

## Annex A

Changes were made to the following footnotes.

Added S-Notes 900 – 904

Modified S862

Modified S264 replacing CINCPAC with PACOM

Deleted S846

## Annex G

Part 1, Revised the formating of the table for “Agency, Bureau, and Other Organizational Abbreviations”.

Part 1, removed the Interstate Commerce Commission and updated the Treasury text.

Part 3, updated the text for the Coast Guard Areas and Districts.

Deleted the CAP text and related figures, renumbered the figures following the deleted figure.

Part 5, added CDS – CubicDefense Systems to the list of abbreviations.

### **1.3.1 Instructions**

The January 2008 Edition replaces in its entirety the May 2003 Edition and all revisions.

**(Last Page in this Section)**