NAVIGATION AID (NAVAID) DATA

COMMA-SEPARATED VALUES (CSV) RECORD LAYOUT

(NAV-FILES)

INFORMATION EFFECTIVE DATE: 03/21/2024

> RECORD FORMAT: COMMA DELIMITED WITH TEXT FIELDS ENCLOSED WITHIN DOUBLE-QUOTE CHARACTERS

> LOGICAL RECORD INTERVAL: ALL RECORDS WITHIN A SPECIFIC NAV FILE HAVE THE SAME NUMBER OF FIELDS, IN THE SAME ORDER AND RECORD ENDS AT A LINE TERMINATOR

> DATA HEADERS: FIRST ROWS CONTAIN FIELD NAMES

> NAV FILES: NAV_BASE, NAV_RMK, NAV_CKPT

> COMMON TO ALL NAV FILES: EFF_DATE, NAV_ID, NAV_TYPE, STATE_CODE, CITY, COUNTRY_CODE

GENERAL INFORMATION:

1. The NAV_*.csv files were designed to replace the legacy NAV.txt Subscriber File.
2. The Ordered By list for each NAV FILE documented below is also the Unique Record Key.
3. NAV_*.csv files contain the data found in the legacy NAV.txt Subscriber File. Data while comparable to the legacy NAV.txt is in some cases organized and presented in a different way.
4. Please enter any feedback in the Aeronautical Information Portal.
   https://nfdc.faa.gov/nfdcApps/controllers/PublicSecurity/nfdcLogin

FIELD DESCRIPTIONS

COMMON TO ALL

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EFF_DATE – The 28 Day NASR Subscription Effective Date in format 'YYYY/MM/DD'.

NAV_ID – NAVAID Facility Identifier.

NAV_TYPE – NAVAID Facility Type.

TYPE	Description
CONSOLAN	A Low Frequency, Long-Distance NAVAID Used Principally for Transoceanic navigation.
DME	Distance Measuring Equipment only.

FAN MARKER	There are 3 types of EN ROUTE Market Beacons. FAN MARKER, Low powered FAN MARKERS and Z MARKERS. A FAN MARKER Is used to provide a positive identification of positions at Definite points along the airways.
MARINE NDB	A NON Directional Beacon used primarily for Marine (surface) Navigation.
MARINE NDB/DME	A NON Directional Beacon with associated Distance measuring Equipment; used primarily for Marine (surface) Navigation.
NDB	A NON Directional Beacon
NDB/DME	Non Directional Beacon with associated Distance Measuring Equipment.
TACAN	A Tactical Air Navigation System providing Azimuth and Slant Range Distance.
UHF/NDB	Ultra High Frequency/NON Directional Beacon.
VOR	A VHF OMNI-Directional Range providing Azimuth only.
VORTAC	A Facility consisting of two components, VOR and TACAN, Which provides three individual services: VOR AZIMITH, TACAN AZIMUTH and TACAN Distance (DME) at one site.
VOR/DME	VHF OMNI-DIRECTIONAL Range with associated Distance Measuring equipment.
VOT	A FAA VOR Test Facility.

STATE_CODE – Associated State Post Office Code standard two letter abbreviation for US States and Territories.

CITY– NAVAID Associated City Name

COUNTRY_CODE - Country Post Office Code NAVAID Located

NAV_BASE ordered by NAV_ID, NAV_TYPE, COUNTRY_CODE, CITY

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NAV_STATUS – Navigation Aid Status

NAME – Name of NAVAID

STATE_NAME – Associated State Name

REGION_CODE – FAA Region responsible for NAVAID (code)

CODE	REGION NAME
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AAL	ALASKA
ACE	CENTRAL
AEA	EASTERN
AGL	GREAT LAKES

ANE   NEW ENGLAND
ANM   NORTHWEST MOUNTAIN
ASO   SOUTHERN
ASW   SOUTHWEST
AWP   WESTERN-PACIFIC

COUNTRY_NAME – Country Name NAVAID Located

FAN_MARKER – Name of FAN MARKER

OWNER – A Concatenation of the NAVAID OWNER CODE - NAVAID OWNER NAME

OPERATOR – A Concatenation of the NAVAID OPERATOR CODE - NAVAID OPERATOR NAME

NAS_USE_FLAG – Common System Usage (Y or N) Defines how the NAVAID is used.

PUBLIC_USE_FLAG – NAVAID PUBLIC USE (Y or N) Defines by whom the NAVAID is used.

NDB_CLASS_CODE – Class of NDB

CLASS CODE/DESCRIPTION

DME   UHF STANDARD (TACAN COMPATIBLE) DISTANCE MEASURING EQUIPMENT.
H   NON-DIRECTIONAL RADIO BEACON (NDB), (HOMING), POWER 50 WATTS TO LESS THAN 2000 WATTS (50 NM AT ALL ALTITUDES).
HH   NON-DIRECTIONAL RADIO BEACON (NDB), (HOMING), POWER 2000 WATTS OR MORE (75 NM AT ALL ALTITUDES)
LOM   COMPASS LOCATOR STATION WHEN INSTALLED AT OUTER MARKER SITE (15 NM AT ALL ALTITUDES).
MH   NON-DIRECTIONAL RADIO BEACON (NDB) (HOMING), POWER LESS THAN 50 WATTS (25 NM AT ALL ALTITUDES)
SABH   NON-DIRECTIONAL RADIO BEACON (NDB) NOT AUTHORIZED FOR IFR OR ATC. PROVIDES AUTOMATIC WEATHER BROADCASTS.
W   WITHOUT VOICE ON RADIO FACILITY FREQUENCY.
Z   VHF STATION LOCATION MARKER AT A LF RADIO FACILITY.

EXAMPLES: H, HH, MH-SAB, MHW/LOM, H-SAB/LOM
NOTE: MULTIPLE CLASS CODE TYPES MAY BE SEPARATED BY A / (SLANT) OR A - (DASH)

**** AUXILIARY CANADA CLASS CODES   ****

THESE CODES MAY APPEAR SINGLY, IN MULTIPLES, OR COMBINED WITH THE CODES LISTED ABOVE:

CLASS CODE/DESCRIPTION

C   TRANSCRIBED WEATHER BROADCAST STATION
B   SCHEDULED WEATHER BROADCAST

T   FSS OR OTHER ATC AGENCY (EXCEPT PAR) CAN TRANSMIT ON THIS NAVIGATION FRE-
QUENCY BUT NOT RECEIVE

P   PRECISION APPROACH RADAR BACK-UP FREQUENCY

L   NDB POWER OUTPUT LESS THAN 50 WATTS

M   NDB POWER OUTPUT 50 TO LESS THAN 2000 WATTS

H   NDB POWER OUTPUT 2000 WATTS OR MORE

Z   75 MHZ STATION LOCATION MARKER OR FAN MARKER

OPER_HOURS – HOURS of Operation of NAVAID.

HIGH_ALT_ARTCC_ID – Identifier of ARTCC with High Altitude Boundary That the NAVAID Falls Within.

HIGH_ARTCC_NAME – Name of ARTCC with High Altitude Boundary That the NAVAID Falls Within.

LOW_ALT_ARTCC_ID – Identifier of ARTCC with Low Altitude Boundary That the NAVAID Falls Within.

LOW_ARTCC_NAME – Name of ARTCC with Low Altitude Boundary That the NAVAID Falls Within.

LAT_DEG – NAVAID Latitude Degrees

LAT_MIN – NAVAID Latitude Minutes

LAT_SEC – NAVAID Latitude Seconds

LAT_HEMIS – NAVAID Latitude Hemisphere

LAT_DECIMAL – NAVAID Latitude in Decimal Format

LONG_DEG – NAVAID Longitude Degrees

LONG_MIN – NAVAID Longitude Minutes

LONG_SEC – NAVAID Longitude Seconds

LONG_HEMIS – NAVAID Longitude Hemisphere

LONG_DECIMAL – NAVAID Longitude in Decimal Format

SURVEY_ACCURACY_CODE – Latitude/Longitude Survey Accuracy (Code)

SURVERY ACCURACY CODE/DESCRIPTION
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0 = UNKNOWN
1 = DEGREE
2 = 10 MINUTES
3 = 1 MINUTE
4 = 10 SECONDS
5 = 1 SECOND OR BETTER
6 = NOS
7 = 3RD ORDER TRIANGULATION

TACAN_DME_STATUS – Status of TACAN or DME Equipment.

TACAN_DME_LAT_DEG – Latitude Degrees of TACAN Portion of VORTAC when TACAN is not sited with VOR

TACAN_DME_LAT_MIN – Latitude Minutes of TACAN Portion of VORTAC when TACAN is not sited with VOR

TACAN_DME_LAT_SEC – Latitude Seconds of TACAN Portion of VORTAC when TACAN is not sited with VOR

TACAN_DME_LAT_HEMIS – Latitude Hemisphere of TACAN Portion of VORTAC when TACAN is not sited with VOR

TACAN_DME_LAT_DECIMAL – Latitude in Decimal Format of TACAN Portion of VORTAC when TACAN is not sited with VOR

TACAN_DME_LONG_DEG – Longitude Degrees of TACAN Portion of VORTAC when TACAN is not sited with VOR

TACAN_DME_LONG_MIN – Longitude Minutes of TACAN Portion of VORTAC when TACAN is not sited with VOR

TACAN_DME_LONG_SEC – Longitude Seconds of TACAN Portion of VORTAC when TACAN is not sited with VOR

TACAN_DME_LONG_HEMIS – Longitude Hemisphere of TACAN Portion of VORTAC when TACAN is not sited with VOR

TACAN_DME_LONG_DECIMAL – Longitude in Decimal Format of TACAN Portion of VORTAC when TACAN is not sited with VOR

ELEV – Elevation in Tenth of a Foot (MSL).

MAG_VARN – Magnetic Variation Degrees (DME, VOT and FM NAVAID Types do not have MAG VAR. Any value in this column for those NAVAID Types should be ignored.)

MAG_HEMIS – Magnetic Variation Direction (DME, VOT and FM NAVAID Types do not have MAG HEMIS. Any value in this column for those NAVAID Types should be ignored.)

MAG_VARN_YEAR – Magnetic Variation Epoch Year (DME, VOT and FM NAVAID Types do not have MAG VAR YEAR. Any value in this column for those NAVAID Types should be ignored.)

SIMUL_VOICE_FLAG – Simultaneous Voice Feature

PWR_OUTPUT – Power Output (In Watts)

AUTO_VOICE_ID_FLAG – Automatic Voice Identification Feature

MNT_CAT_CODE – Monitoring Category

        MONITORING CATEGORY (1, 2, 3, 4)

1-Internal Monitoring Plus A Status Indicator Installed At Control Point. (Reverts to a Temporary Category 3 Status When the Control Point is not is Not Manned.)

2-Internal Monitoring with Status Indicator at Control Point Inoperative but Pilot Reports Indicate facility is operating normally. (This Is A Temporary Situation That Requires No Procedural Action.)

3-Internal Monitoring Only. Status Indicator Non installed at control point.

4-Internal Monitor Not Installed. Remote Status indicator provided at control point. This Category Is Applicable Only To Non-Directional Beacons.

VOICE_CALL - Radio Voice Call (Name) or Trans Signal

CHAN - Channel (TACAN) NAVAID Transmits On

FREQ - Frequency the NAVAID Transmits On (Except TACAN)

MKR_IDENT - Transmitted Fan Marker/Marine Radio Beacon Identifier

MKR_SHAPE – Fan Marker Type (E - ELLIPTICAL)

MKR_BRG - True Bearing of Major Axis of Fan Marker

ALT_CODE - VOR Standard Service Volume

H=HIGH ALTITUDE,
L=LOW ALTITUDE,
T=TERMINAL,
VH=VOR HIGH,
VL=VOR LOW

CLASS	ALTITIUDE	MILES
T	Between 1000' and 12,000'	25
L	Between 1000' and 18,000'	40
H	Between 1000' and 14,499'	40
H	Between 14,500' and 17,999'	100
H	Between 18,000' and FL 450	130
H	Above FL 450	100
VL	Between 1000' and 4999'	40
VL	Between 5000' and 17,999'	70
VH	Between 1000' and 4999'	40
VH	Between 5000' and 14,499'	70
VH	Between 14,500' and 17,999'	100
VH	Between 18,000' and FL 450	130
VH	Above FL 450	100

DME_SSV - DME Standard Service Volume

H=HIGH ALTITUDE,
L=LOW ALTITUDE,
T=TERMINAL,
DH=DME HIGH,
DL=DME LOW

CLASS	ALTITIUDE	MILES
T	Between 1000' and 12,000'	25
L	Between 1000' and 18,000'	40
H	Between 1000' and 14,499'	40
H	Between 14,500' and 17,999'	100
H	Between 18,000' and FL 450	130
H	Above FL 450	100
DL	Between 12,900' and 18,000'	130
DH	Between 12,900' and FL 450	130
DH	Above FL 450	100

LOW_NAV_ON_HIGH_CHART_FLAG - Low Altitude Facility Used in High Structure

Z_MKR_FLAG - NAVAID Z Marker Available

FSS_ID - Associated/Controlling FSS (IDENT)

FSS_NAME - Associated/Controlling FSS (Name)

FSS_HOURS - Hours of Operation of Controlling FSS

NOTAM_ID - NOTAM Accountability Code (IDENT)

QUAD_IDENT - Quadrant Identification and Range Leg Bearing (LFR Only)

PITCH_FLAG – Pitch Flag

CATCH_FLAG – Catch Flag

SUA_ATCAA_FLAG – SUA/ATCAA Flag

RESTRICTION_FLAG – NAVAID Restriction Flag

HIWAS_FLAG – HIWAS Flag

NAV_RMK ordered by NAV_ID, NAV_TYPE, COUNTRY_CODE, CITY, TAB_NAME, REF_COL_NAME, REF_COL_SEQ_NO

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TAB_NAME – NASR table associated with Remark.

REF_COL_NAME – NASR Column name associated with Remark. Non-specific remarks are identified as GENERAL_REMARK.

REF_COL_SEQ_NO – Sequence number assigned to Reference Column Remark.

REMARK – Remark Text (Free Form Text that further describes a specific Information Item.)

NAV_CKPT ordered by NAV_ID, NAV_TYPE, COUNTRY_CODE, CITY, AIR_GND_CODE, BRG

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ALTITUDE - Altitude Only When Checkpoint is in Air

BRG – Bearing of Checkpoint

AIR_GND_CODE – Air/Ground Code: A=AIR, G=GROUND, G1=GROUND ONE

CHK_DESC – Narrative Description Associated with the Checkpoint in AIR/Ground

ARPT_ID – Airport ID

STATE_CHK_CODE - State Code in Which Associated City is Located