

NavAid Service Volumes (DME, VOR and TACAN



Federal Aviation
Administration



Presented to: Aeronautical Charting Meeting

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Date: October 25 - 28, 2021

BACKGROUND

- **VOR MON Program will implement new VOR service volumes to achieve the advertised VOR service above 5,000 feet AGL**
- **NextGen DME Program will implement new DME service volumes to achieve advertised DME-DME RNAV service**
- **Legacy service volumes will also be maintained**
- **New service volumes are frequency protected and evaluated for coverage**

DISCUSSION

- **Current DME, VOR and TACANs that are collocated facilities share the same service volume**
 - Identified as VOR/DME or VORTAC
- **New service volumes will be implemented differently for each NavAid**
 - A VOR/DME may have different service volumes for each NavAid
 - A VORTAC may have different service volumes for each NavAid

ACTIVITIES

- **New DME service volumes are primarily for DME-DME RNAV capability**
 - ARINC 424 adopted standards for these new service volumes and packing instructions so DME-DME aircraft can use them appropriately
- **NASR updated to implement the different service volumes**

UPDATES

- **NASR changes deployed effective 9/9/21**
 - An “SSV” field was added to the TACAN/DME portion of the NavAid record
 - Existing NavAid records reflect new fields
- **New SSV types starting 12/2/21**
 - Include VL, VH, DL, and DH
 - Add approximately 25 new types per cycle

Previous eNASR ADW VORTAC

NAVAID ADW					
General		Types		Navigation Use	
General Information					
NAS Use:	<input checked="" type="checkbox"/>	Monitor Category Code:	1	Auto Voice ID:	<input checked="" type="checkbox"/>
Low Altitude Nav On High Chart:	<input type="checkbox"/>	Public Use:	<input checked="" type="checkbox"/>	HIWAS:	<input type="checkbox"/>
Pitch:	<input type="checkbox"/>	Catch:	<input type="checkbox"/>	SUA ATCAA:	<input type="checkbox"/>
Responsible FSS:	DCA	NOTAM Accountability ID:	ADW	Simultaneous Voice:	<input type="checkbox"/>
Frequency MHz:	113.1	Voice Call:	NONE	Frequency Used For Approach Control:	<input type="checkbox"/>
Frequency Used For ATIS:	<input type="checkbox"/>	Altitude:	LOW	Class Code:	L - VORTACW
Phone:		Restriction:	<input type="checkbox"/>	Hours:	
Owner Code:	F	Owner Name:	FEDERAL AVIATION ADMIN	Operator Name:	FEDERAL AVIATION ADMIN
Operator Code:	F				
				Magnetic Variation	
				Variation:	10
				Direction:	W
				Source:	AVN-160
				Year:	1995
				Domestic NAVAID	
				High Altitude ARTCC:	ZDC
				Low Altitude ARTCC:	ZDC
				International NAVAID	
				Responsible Agency:	
				VFR Facility ID:	
				IFR Facility ID:	
				Colocated Communication Outlet	
				Comm Loc ID:	
				Type:	
				Associated FSS:	

Current eNASR ADW VORTAC

NAVAID ADW			
General Typ... Navigation Use			
General Information			
NAS Use: <input checked="" type="checkbox"/>	Monitor Category Code: 1	Auto Voice ID: <input checked="" type="checkbox"/>	Magnetic Variation Variation: 10 Direction: W Source: AVN-160 Year: 1995 Domestic NAVAID High Altitude ARTCC: ZDC Low Altitude ARTCC: ZDC International NAVAID Responsible Agency: VFR Facility ID: IFR Facility ID: Colocated Communication Outlet Comm Loc ID: Type:
Low Altitude Nav On High Chart: <input type="checkbox"/>	Public Use: <input checked="" type="checkbox"/>	HIWAS: <input type="checkbox"/>	
Pitch: <input type="checkbox"/>	Catch: <input type="checkbox"/>	SUA ATCAA: <input type="checkbox"/>	
Responsible FSS: DCA	NOTAM Accountability ID: ADW	Simultaneous Voice: <input type="checkbox"/>	
Frequency MHz: 113.1	Voice Call: NONE	Frequency Used For Approach Control: <input type="checkbox"/>	
Frequency Used For ATIS: <input checked="" type="checkbox"/>	Class Code: L - VORTACW	VOR SSV? LOW ALT (L)	
Phone:	Restriction: <input type="checkbox"/>	Hours:	
Owner Code: F	Owner Name: FEDERAL AVIATION ADMIN	Operator Name: FEDERAL AVIATION ADMIN	



Future eNASR ADW VORTAC (page 2)

NAVAID ADW

General

Typ...

Navigation Use

Non VOR Type

Identification
Signal:

Quadrant
Identifier:

Power Output:

Fan Marker
Shape:

Z Marker
Available: ☐

Bearing:

TACAN

Channel: 078X

Frequency:

Latitude: 38
-
48
-
25.99N

Longitude: 76
-
51
-
58.52W

Status: OPERATIONAL
RESTRICTED

Status Date: 2018
-
02
-
06

Survey Date: 2012
-
04
-
13

Source: AIR
FORCE

DME SSV: DME
HIGH
(DH)

DME

Channel:

Frequency:

Latitude:

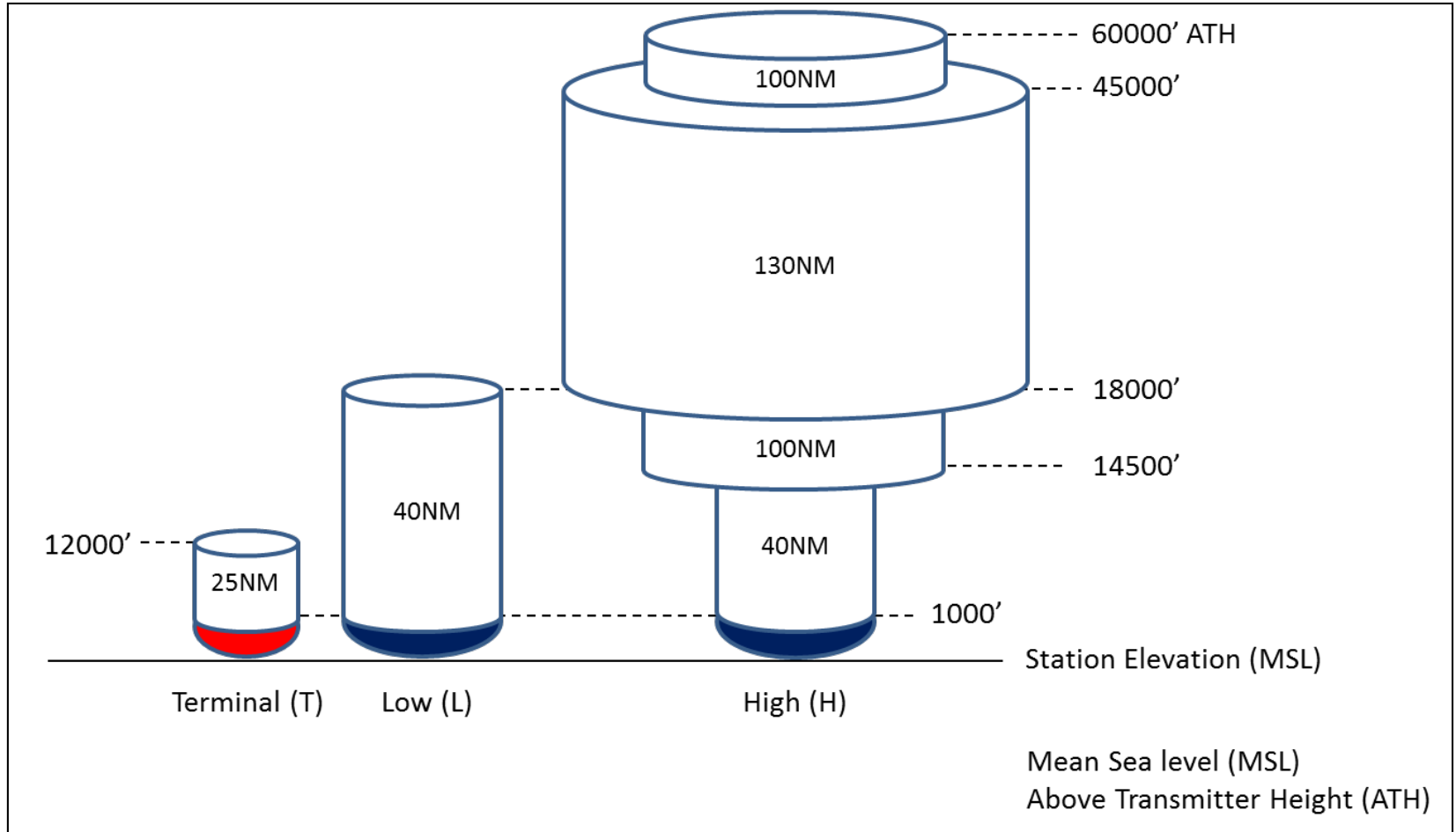
Longitude:



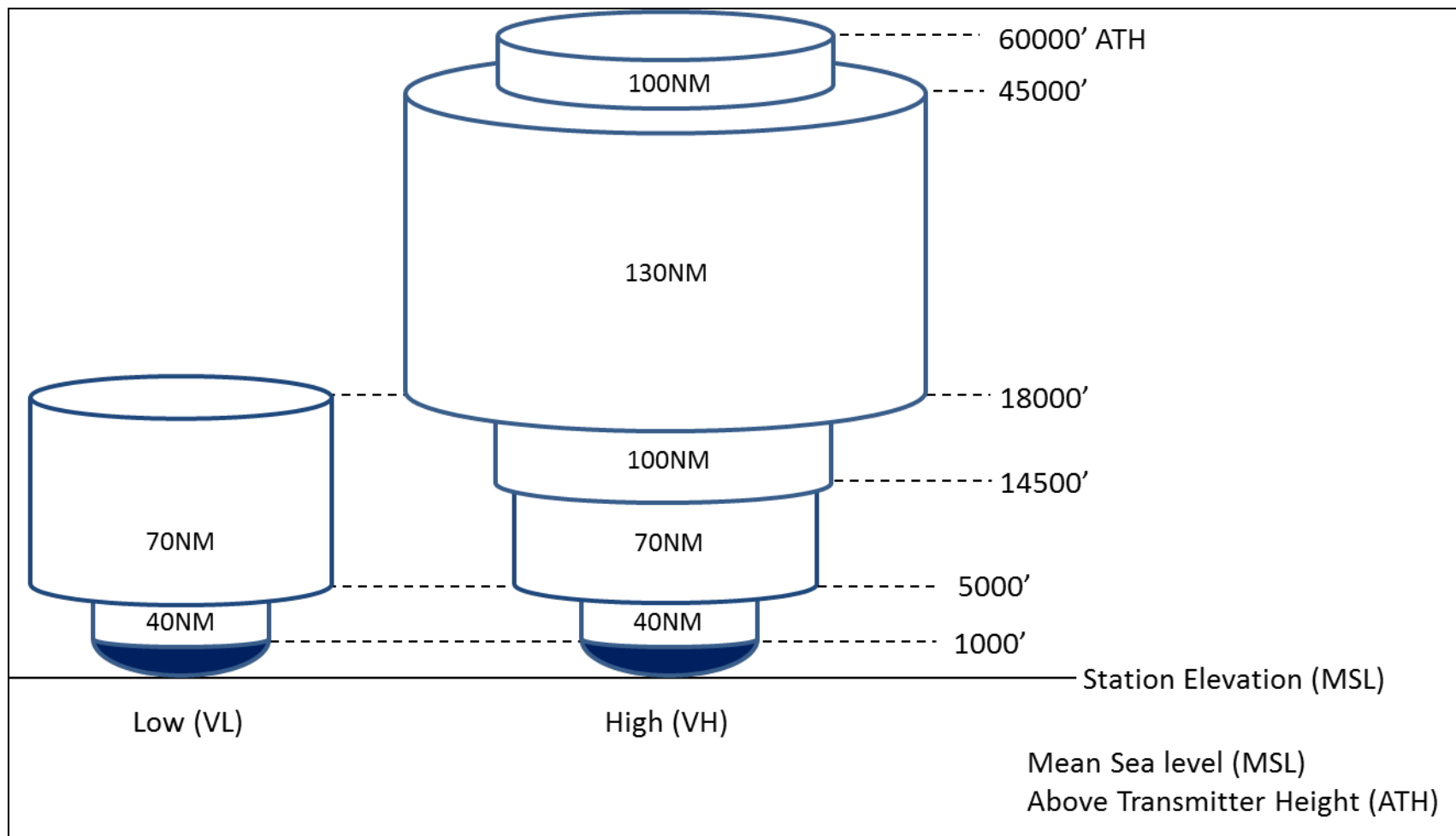
Current eNASR DCU VOR/DME (page 2)

Identification Signal:	Quadrant Identifier:	Power Output:	Fan Marker Shape:
Z Marker Available: <input type="checkbox"/>	Bearing:		
TACAN			
Channel:	Frequency:	Latitude:	Longitude:
Status:	Status Date:	Survey Date:	Source:
DME SSV:			
DME			
Channel:	Frequency:	Latitude:	Longitude:
075X		34	86
		-	-
		38	56
		-	-
		53.9324N	22.2459W
Status:	Status Date:	Survey Date:	Source:
OPERATIONAL IFR		2017	3RD PARTY SURVEY
		03	
		-	
		09	
DME SSV:			
LOW ALT (L)			

LEGACY SERVICE VOLUMES



NEW VOR SERVICE VOLUMES



NEW DME SERVICE VOLUMES

