



ICAO Frequency Finder Easy Reference for Exercise AFI Introductory Virtual Workshop Presentation 2

Presented by

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Home Page for VHF/UHF NAV ILS (Localizer and Glide Path), VOR, DME and GBAS

Exploration of the main functions - VHF NAV module Start page

Frequency Finder

File Edit View Insert Format Records Scripts Tools Window Help



VIEW ROUTES



User Manual Time Zone -4

Sync Manual Application State

Server <https://frequency.icao.int/fflogin/>

User State

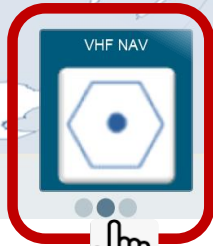
The server <http://frequency.icao.int/fflogin> is not operational until the compatibility issues with Windows 10 have been addressed.

Select from the field below the Region from which you are operating

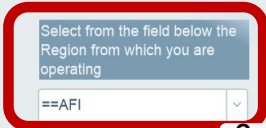
==AFI

The ICAO Regional Offices are responsible for the coordination of frequency assignments.

Master copy Fabiola 21 January 2022



Click "VHF-NAV"



Select "AFI"



VHF-NAV Home page and Integrity check

File Edit View Insert Format Records Scripts Tools Window Help

Start VHF/UHF radio navigation systems. ILS (localizer and Glide Path), VOR, DME and GBAS User Manual Sync Manual

Version	User	Application	Active Region	Connection status
		State	AFI	Connected

Time Zone -4

Server

Download MOD NAV list 2 **Download ALL NAV COM list 2**

Go to COM list 2:

- AFI** Active Region
- APAC
- CAR
- EUR
- MID
- SAM
- GLOBAL

Synchronization (all times in UTC; dd/mm/yyyy hh:mm):

Recent download from Global COM list 2:
21/02/2022 15:53:49

Check Sync

Synchronization Global NAV list 2 modified

<2A> Update NAV COM list 2

The global NAV COM List 2 was modified.

Click "Download" to download these modifications.
Click "Cancel" to Cancel

Click Download

LOCAL BACK UP

Recover from local back-up
dd/mm/yyyy

21-01-2022 4:40:23 PM

Synchronization (all times in UTC; dd/mm/yyyy hh:mm):

Recent download from Global COM list 2:
29/04/2022 17:17:40

Check Sync

Synchronization NAV list 2 synchronized

Click "AFI"





Home Page for VHF/UHF NAV ILS (Localizer and Glide Path), VOR, DME and GBAS

Frequency Finder

File Edit View Insert Format Records Scripts Tools Window Help

Home **Go to** AFI COM list 2

records found 1 MOD DR Key 930049 D

Save as draft record
Save as registered record
Delete draft record

NEW / MOD / DEL FACILITY
Press Esc to cancel running scripts

Insert here new or modified characteristics

Region AFI Mod assignment Cat I
Country Côte d'Ivoire Ctry CTI
Location BOUAKE

Latitude 07 D 43 ' 00 " N Frequency 109.100
Longitude 005 D 04 ' 00 " W Channel 028X
Facility ILS/DME
ID ILS
ILS
DME
Remarks

System
ILS 1
VOR 2
DME 3
GBAS 5
VDL M4 6

Channel spacing
100 kHz
150 kHz
25 kHz

Insert here parameters for finding new frequency

Set VHF or UHF (DME) range
START 108.100 MHz
END 111.950 MHz
START 018X Ch
END 056Y Ch
SEARCH RANGE 108.099...111.951 MHz
018X...056Y Ch
Max. # of frequencies 10
FOUND 0

START SEARCH

Frequencies/Channels found

Select	VHF	DME	Glide Path
FF1			
FF2			
FF3			
FF4			
FF5			
FF6			
FF7			
FF8			
FF9			
FF10			

VHF margin

VHF freq Summ
UHF ch Summ

View calculation results

Not tested

MLs selection is currently not included.
Frequency Finder inserts automatically the user name and the date of the modification to the table COM list 2 (NAV systems).

Add a DME to an existing ILS facility
or for VOR Select VOR, VOR/DME, DME, TACAN, VOR/TAC



Home Page for VHF/UHF NAV ILS (Localizer and Glide Path), VOR, DME and GBAS

Frequency Finder

File Edit View Insert Format Records Scripts Tools Window Help

Home Go to AFI COM list 2

records found 1 MOD DR Key 930049 D

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Region AFI Mod assignment Cat I
Country Côte d'Ivoire Ctry CTI
Location BOUAKE

Latitude 07 D 43 ' 00 " N S Frequency 109.100
Longitude 005 D 04 ' 00 " W E Channel 028X

System
ILS 1
VOR 2
DME 3
GBAS 5
VDL M4 6

Set VHF or UHF (DME) range
START 108.100 MHz
END 111.950 MHz
START 018X Ch
END 056Y Ch

START SEARCH

Frequencies/Channels found

Select	VHF	DME	Glide Path
FF1			
FF2			
FF3			
FF4			
FF5			
FF6			
FF7			
FF8			
FF9			
FF10			

Selected Frequency / Channel

View calculation results

Important

For the ILS, Frequency Finder inserts the standard DOC of 25 NM

When a DME is added to an ILS facility, the DOC is also set to these values.

The user can modify these as necessary.

MLs selection is currently not included. Frequency Finder inserts automatically the user name and the date of the modification to the table COM list 2 (NAV systems).

Not tested

Required fields

VHFcoSumm
VHFadjSumm
GPadjSumm
GPadjMargin

DMEcoSumm
DMEadjSumm

Facility ILS/DME
ID ILS
ILS ILS/DME
DME
VOR
VOR/DME
DME
TACAN
VOR/TAC
GBAS
VDL 4

ID BUA
Range (NM) Height (feet) eirp (dBW)
ILS 25/62.5 25 6250 17
DME 25/62.5 25 6250 27

Add a DME to an existing ILS facility or for VOR Select VOR, VOR/DME, DME, TACAN, VOR/TAC)



Other ongoing improvements (cont'd)

NAV module – plotting interference contours

Start Home Global COM list 2 Active Find Delete Record New or Mod or Del Test Frequency Calculation results

MID COM list 2 RESET QUERY Mapping Export COM list

total 6522 455 found D ID Query

MOD Key Region Country Ctry Location test Latitude Longitude Facility ID Freq. GI. P. Ch. TRD VHFDOC VHFpwr DMEDOC DMEPwr Cat Remarks

R 928182			QTR		25D15'10" N 051D36'23" E	ILS/DME	QAT	108.100	334.700	018X	25/62.5	17	80/100	27	I	RWY 16R
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Summary of CO- and ADJ frequency calculations Delete all records Show all records

Calculation details Co freq. compatibility ADJ freq. compatibility

Calculation details Calculation details

Details of station tested

Date	Key	D	Frequency	UHF ch	Region	Country	Location	Service	Margin VHF	Result VHF	Margin VHF	Result VHF	ADJ frequency compatibility				
													Co frequency compatibility		ADJ frequency compatibility		
													Result VHF	Result DME	Result VHF	Result DME	
										-16	Not Compatible	-88	Not Compatible	352.11	Compatible	xxx	Compatible
										-16	Not Compatible	-88	Not Compatible	352.11	Compatible	xxx	Compatible
										-16	Not Compatible	-88	Not Compatible	352.11	Compatible	xxx	Compatible



Other ongoing improvements (cont'd) NAV module – plotting interference contours

Frequency Finder

File Edit View Insert Format Records Scripts Tools Window Help

Calculation of CO-CHANNEL separation distances

Summary calculation

ADJ freq.compatibility

Calculation details

Map interference all

Calculates compatibility with any DME facility

Go to Prop Curve

Key	Region	Country	Location	Facility	frdeglat	frdeglong
R 928182	MID	Saudi Arabia	Saudi Arabia	ILS/DME	25.2527778	51.6063889
2	1					
Frequency	Height	Range	Minimum transmission loss between the location of the facility in that record and the facility in record 1			
VHF 108.100	6250	25	This field calculates the minimum transmission loss between the location of the facility in record 1 and the facility in record 2			
DME 018X	10000	80				
VHF Margin	-16	NM	Not Compatible			
DME Margin	-88	NM	Not Compatible			

Key	Region	Country	Location	Facility	frdeglat	frdeglong
R 928033	MID	Saudi Arabia	DAMMAM	ILS/DME	26.4500000	49.7930556
1	2					
Frequency	Height	Range	PWRD Copy	Measured from location to test points		Minimum Required Separation
VHF 108.100	6250	25	17	L xx to 1	Dist to 1	L 1 to xx
DME 018X	6250	25	27	153	112	153
				146	129	146
						Dist to xx
						105
						209
						Actual Separation
						121
VHF Margin	-16	NM	Not Compatible			
DME Margin	-88	NM	Not Compatible			

The fields Dist to 1 and Dist to xx present the minimum separation distance between any undesired facility to the edge of the DOC of the desired facility

Map interference VHF

Map interference DME

Key	Region	Country	Location	Facility	frdeglat	frdeglong
R 928217	MID	Saudi Arabia	Saudi Arabia	ILS/DME		
1	2					
Frequency	Height	Range	PWRD Copy	Measured from location to test points		Minimum Required Separation
VHF 108.100	6250	25	17	L xx to 1	Dist to 1	L 1 to xx
DME 018X	10000	80	27	153	112	153
				146	129	146
						Dist to xx
						129
						209
						Actual Separation
						121
VHF Margin	52	NM	Compatible			
DME Margin	-20	NM	Not Compatible			



Other ongoing improvements (cont'd)

NAV module – plotting interference contours – Map interference VHF and DME



Questions

