



Frequency Finder

VHF/UHF NAV Module

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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 Record
version FF_2022_01

VIEW ROUTES

MEXICO, LIMA, PARIS, DAKAR, CAIRO, NAIROBI, BANGKOK

User Manual Time Zone -4
Sync Manual Application Runtime

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

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

Region from which you are operating
==MID

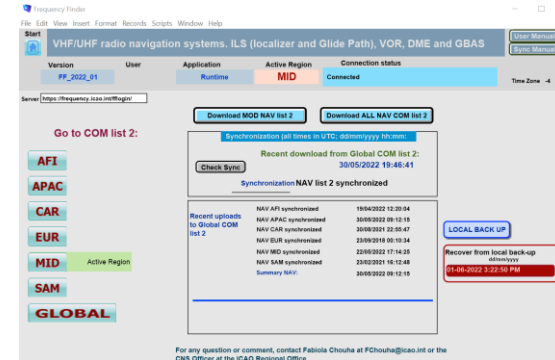
VHF NAV

Select "MID"

Click "VHF-NAV"



Start page → Home page VHF/UHF NAV



- Navigate to Home Page: Automatic Connection Test and check if the COM list 2 was modified
- Also with button Check Sync
- Dialog box is displayed if a download synchronization is necessary
- Message field
- Download button
- Back-up and Recovery



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

Frequency Finder

File Edit View Insert Format Records Scripts 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 | Time Zone |
|------------|------|-------------|---------------|-------------------|-----------|
| FF_2022_01 | | Runtime | MID | Connected | -4 |

Server:

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

Go to COM list 2:

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

LOCAL BACK UP

Recover from local back-up
dd/mm/yyyy
01-06-2022 3:22:50 PM

<2A> Update NAV COM list 2

The global NAV COM List 2 was modified.

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

Cancel Download

Click "MID"



If required, click download





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
Height (feet) 6250
Height (NM) 17
eirp (dBW) 27
GlidePath 331.400
TRD 30

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

Channel spacing
100 kHz
50 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

| 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

Searching

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).

Required fields
VHFcoSumm
VHFadjSumm
GPadjSumm
GPadjMargin

Not tested
DMEcoSumm
DMEadjSumm

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

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 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

Searching

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).

Insert here parameters for finding new frequency

Important

For the ILS, Frequency Finder inserts the standard DOC of 25 NM / 6250 ft.
When a DME is added to an ILS facility, the DOC is also set to these values.
The user can modify these as necessary.

Remarks

Required fields

VHFcoSumm
VHFadjSumm
GPadjSumm
GPadjMargin

changes **Not tested**

DMEcoSumm
DMEadjSumm

ID BUA

| | Range (NM) | Height (feet) | eirp (dBW) |
|-----|------------|---------------|------------|
| ILS | 25/62.5 | 6250 | 17 |
| DME | 25/62.5 | 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 Mapping Export COM list - Export submit

MID COM list 2 RESET QUERY Query

total 6522 455 found D ID

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 |
|----------|--|--|--|-----|--|-------------|--------------|---------|-----|---------|---------|------|---------|----|--------|----|---|---------|



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

| | | 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 |

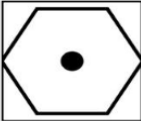


Other ongoing improvements (cont'd)

NAV module – plotting interference contours

Frequency Finder

File Edit View Insert Format Records Scripts Tools Window Help

Calculation of CO-CHANNEL separation distances **Calculation of CO-CHANNEL separation distances**  Calculates compatibility with any DME facility

| Key | Region | MIC | Country | Location | Facility | ILS/DME | frdeglat | frdeglong | | | | | | |
|----------|-------------|--------------|--------------|------------------------------------------------------------------------------------------------------------|----------|-----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|------------|-----------------------------|-------------------|------------|-----|----|----------------|
| R 928182 | MIC | Saudi Arabia | Saudi Arabia | | ILS/DME | 018X | 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 | | This field calculates the minimum transmission loss between the location of the facility in record 1 and the facility in record 2 | | | | | | | | |
| | VHF 108.100 | 6250 | 25 | | | | | | | | | | | |
| | DME 018X | 10000 | 80 | | | | | | | | | | | |
| | VHF Margin | -16 | NM | Not Compatible | | | | | | | | | | |
| | DME Margin | -88 | NM | Not Compatible | | | | | | | | | | |
| R 928033 | MIC | Saudi Arabia | Saudi Arabia | DAMMAM | ILS/DME | | 26.4500000 | 49.7930556 | | | | | | |
| 1 2 | Frequency | Height | Range | PWR | RD | Copy | Measured from location to test points | | Minimum Required Separation | Actual Separation | VHF Margin | -16 | NM | Not Compatible |
| | VHF 108.100 | 6250 | 25 | 17 | | | L xx to 1 | Dist to 1 | L 1 to xx | Dist to xx | 137 | 121 | | |
| | DME 018X | 6250 | 25 | 27 | | | 153 | 112 | 153 | 112 | 209 | | | |
| | | | | | | | 146 | 129 | 146 | 105 | | | | |
| | VHF Margin | -16 | NM | Not Compatible | | | | | | | | | | |
| | DME Margin | -88 | NM | Not Compatible | | | | | | | | | | |
| R 928217 | MIC | Saudi Arabia | Saudi Arabia | | ILS/DME | | | | | | | | | |
| 1 2 | Frequency | Height | Range | PWR | RD | Copy | Measured from location to test points | | Minimum Required Separation | | VHF Margin | 52 | NM | Compatible |
| | VHF 108.100 | 6250 | 25 | 17 | | | L xx to 1 | Dist to 1 | L 1 to xx | Dist to xx | 137 | | | |
| | DME 018X | 10000 | 80 | 27 | | | 153 | 112 | 153 | 112 | 209 | | | |
| | | | | | | | 146 | 129 | 146 | 129 | | | | |
| | VHF Margin | 52 | NM | Compatible | | | | | | | | | | |
| | DME Margin | -20 | 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



Other ongoing improvements (cont'd)

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

