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INTERNATIONAL CIVIL AVIATION ORGANIZATION

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Frequency Finder

3 Test Frequency



**Workshop/Training on
“Frequency Finder 2023” application**

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Test Frequency (1)

- Click button *Test Frequency* on window *COM list 3*
- Options:
 - Test single frequency
 - Test found frequencies
(all frequencies in the found-set)
- As desired by the user, the calculation results can be displayed on a map with Google Earth.
- When the calculations are completed, the window *Summary Calculations* is displayed

Test Frequency (2)

Summary calculation results (1)

COM Data Base (COM LIST 3) Summary Calculations Active Region SAM ST

Regional COM list **Summary Calculations** Delete all records Co-frequency details Adj. frequency details

Re-do calculations

Date	Key	D	Frequency	Region	Country	Location	Service	Margin	Result Co. freq.	Margin	Result Adj. freq.
21_May_2023 18:23:48	702128	R	118.500	SAM	Ecuador	LATACUNGA COTOPAXI	TWR	156	Compatible	***	Compatible
20_May_2023 13:36:29	702427	R	122.100	SAM	Uruguay	PAYSANDU	AFIS	-151	Not compatible	***	Compatible
20_May_2023 13:23:00	702427	R	122.100	SAM	Uruguay	PAYSANDU	AFIS	-151	Not compatible	***	Compatible

- Presents most recent and earlier test results
- Option to redo earlier tests with button with button *Redo* or click in field *Co-frequency details*
- Option to view detailed co- and adjacent calculation results of the most recent test. Click button Co- or Adj frequency details
- Alternatively the user can navigate to the window *Summary Calculations* with the button *Calculation Results* on the window COM list 3



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Exercises

Test Frequency



Test Frequency (3)

Detailed calculation results – Co-frequency (1)

Frequency Finder

File Edit View Insert Format Records Scripts Window Help

COM Data Base (COM LIST 3) Details Co-frequency compatibility Calculation of CO-frequency separation distances Plot interference - All

Regional COM list 4 / 6 records Show all records Go to Adj channel calc Go to Summary calc.

Test for the frequency

Key	R	Frequency	Range	Height	Radio Horizon	Sectorname	Latitude	Service		
1	R 602176	132.450	260	45000	261		26D17'00" N	ACC-U		
Region		MID	Country Bahrain		Location BAHRAIN		Longitude 050D38'00" E	DOC ACC-U C-260/450		
Not compatible with record #2							Margin -208 NM	Not compatible		
							ACC Upper Circular	Ext. range Plot coverage		
First record is station being tested, records below are stations against which the first station has been tested.										
Compatibility calculations between unprotected services are only shown for information.										
2	R 602250	132.450	260	45000	261		31D43'21" N	ACC-U		
Region		MID	Country Jordan		Location AMMAN ACC		Longitude 035D59'36" E	DOC ACC-U C-260/450		
The distance is measured between the location of the station in record 1 and the location of the station in the current record							Actual distance 834 NM	Required distance 1042 NM	Margin -208 NM	Not compatible
							ACC Upper Circular	Ext. range Plot interference		
3	R 41235	132.450	60	15000	151		37D56'00" N	A/G		
Region		EUR	Country Turkey		Location BATMAN BATMAN		Longitude 041D07'00" E	DOC A/G C-60/150		
The distance is measured between the location of the station in record 1 and the location of the station in the current record							Actual distance 849 NM	Required distance 732 NM	Margin 117 NM	Compatible
							Circular	Ext. range Plot interference		

- Displays for each frequency against which the new/modified frequency has been tested details of the compatibility between the two frequency assignments

Test Frequency (4)

Detailed calculation results – Co-frequency (2)

- Details include
 - Actual distance between the two stations
 - Minimum required distance
 - Margin in NM (positive figure means frequency assignment are compatible; negative figure means frequency assignments are not compatible)
 - Message “Compatible” or “Not Compatible”
 - If the station is part of an extended range family
 - If the station is linked to a specific area (polygon)

Test Frequency (5)

Detailed calculation results – Co-frequency (3)

Buttons (1)

- Regional COM list
 - Returns COM list 3 with the selected frequency
- Show all records
 - Show all records used in the calculation
- Go to Adj channel calc.
 - Navigate to the window with adjacent channel calculation results
- Go to Summary calc.
 - Navigate to the window with summary calculation results

Test Frequency (5)

Detailed calculation results – Co-frequency (3)

Buttons (2)

- Plot interference – all
 - Plot compatibility of all frequency assignments in the table
- Plot coverage
 - Plot coverage of the station that has been tested
- Plot interference
 - Plot interference or compatibility of the station that is being tested with the selected station against which compatibility is tested.

Calculation results (1)

- Button Calculation results.
 - Navigates to the window with the summary of previous compatibility calculations.
- Re-do earlier calculations when COM list 3 was modified
- Navigate to windows with detailed compatibility analysis for co- and adjacent frequency assignments
- More information in slides with Test Results



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Exercises

Test Frequency & Understand the result



Thank You!