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Frequency Finder

3 Test Frequency



Frequency Management Workshop for GCC

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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		Regional COM list		Delete all records		Redo calculations		Co-frequency details		Adj. frequency details			
Date	Key	D	Frequency	Region	Country	Location	Service	Margin	Result	Co. freq.	Margin	Result	Adj. freq.
01_Jun_2022 11:21:09	602176	R	132.450	MID	Bahrain	BAHRAIN	ACC-U	-208	Not compatible	235	Compatible		
16_May_2022 10:17:41	601275	R	125.900	MID	United Arab Emirates	ABU DHABI INTL	APP-U	-308	Not compatible	52	Compatible		
16_May_2022 8:14:29	602420	R	124.700	MID	Egypt	ALEXANDRIA INT	ACC-U	-944	Not compatible	400	Compatible		
16_May_2022 8:10:19	602420	R	124.700	MID	Egypt	ALEXANDRIA INT	ACC-U	-944	Not compatible	400	Compatible		
13_May_2022 14:04:35	601275	R	125.900	MID	United Arab Emirates	ABU DHABI INTL	APP-U	-308	Not compatible	52	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)

The screenshot shows the 'Frequency Finder' application window. The title bar reads 'Frequency Finder'. The menu bar includes 'File', 'Edit', 'View', 'Insert', 'Format', 'Records', 'Scripts', 'Window', and 'Help'. The main window has a green header bar with the text 'Calculation of CO-frequency separation distances' and a button 'Plot interference - All'. Below the header, there are buttons for 'Regional COM list', '4 / 6 records', 'Show all records', 'Go to Adj channel calc', and 'Go to Summary calc.'. The main content area displays three records for testing against a frequency of 132.450.

Record #	Key	Region	Country	Frequency	Range	Height	Radio Horizon	Sectorname	Latitude	Longitude	Service	DOC	Ext. range	Compatibility
1	R 602176	MID	Bahrain	132.450	260	45000	261		26D17'00" N	050D38'00" E	ACC-U	ACC-U C-260/450		Not compatible
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	MID	Jordan	132.450	260	45000	261		31D43'21" N	035D59'36" E	ACC-U	ACC-U C-260/450		Not compatible
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				
3	R 41235	EUR	Turkey	132.450	60	15000	151		37D56'00" N	041D07'00" E	A/G	A/G C-60/150		Compatible
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				

- 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!