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INTERNATIONAL CIVIL AVIATION ORGANIZATION

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Frequency Finder

3 Test Frequency



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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

APAC

Regional COM list

Summary Calculations

Delete all records

Re-do calculations

Co-frequency details

Adj. frequency details

Date	Key	D	Frequency	Region	Country	Location	Service	Margin	Result	Co. freq.	Margin	Result	Adj. freq.
04_Oct_2023 19:41:25	419527	R	126.700	APAC	Japan	ATMC	ACC-U	-560	Not compatible	***		Compatible	
04_Oct_2023 19:40:06	419979	R	118.125	APAC	ICAOTEST APAC	Zaandam	ACC-U	89	Compatible	22		Compatible	
04_Oct_2023 19:39:54	419988	R	118.075	APAC	ICAOTEST APAC	Zwolle	ACC-I	230	Compatible	37		Compatible	
04_Oct_2023 19:38:55	417693	R	124.400	APAC	Australia	Kilger	ACC-U	***	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



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

3 / 3 records

Regional COM list Show all records

Test for the frequency ...126.700MHz

Go to adj. frequency calc. Go to Summary Plot interference - All

Key	R	Frequency	Range	Height	Radio Horizon	Sectorname	Latitude	Longitude	Service	DOC	Ext. range		
1	R 419527	126.700	260	45000	261		37D59'00" N	140D50'00" E	ACC-U	ACC-U C-260/450			
Region		APAC	Country		Japan		Location		ATMC				
Not compatible with record #2										Margin	-560 NM	Not compatible	
ACC Upper Circular										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 418778	126.700	260	45000	261		34D05'00" N	132D09'00" E	FIS-U	FIS-U C-260/450			
Region		APAC	Country		Japan		Location		FUKUOKA				
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	482 NM	Required distance	1042 NM
										Margin	-560 NM	Not compatible	
Flight Information Service - Upper Circular										Plot interference			
First record is station being tested, records below are stations against which the first station has been tested.													
3	R 404415	126.700	260	45000	261		25D04'00" N	121D33'00" E	FIS-U	FIS-U C-260/450			
Region		APAC	Country		China		Location		TAIBEI TAOYUAN				
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	1250 NM	Required distance	1042 NM
										Margin	208 NM	Compatible	
Flight Information Service - Upper Circular										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



Exercises

Test Frequency & Understand the result



Thank You!