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RECONNECTING THE WORLD



Frequency Finder *SSR II Code Module*

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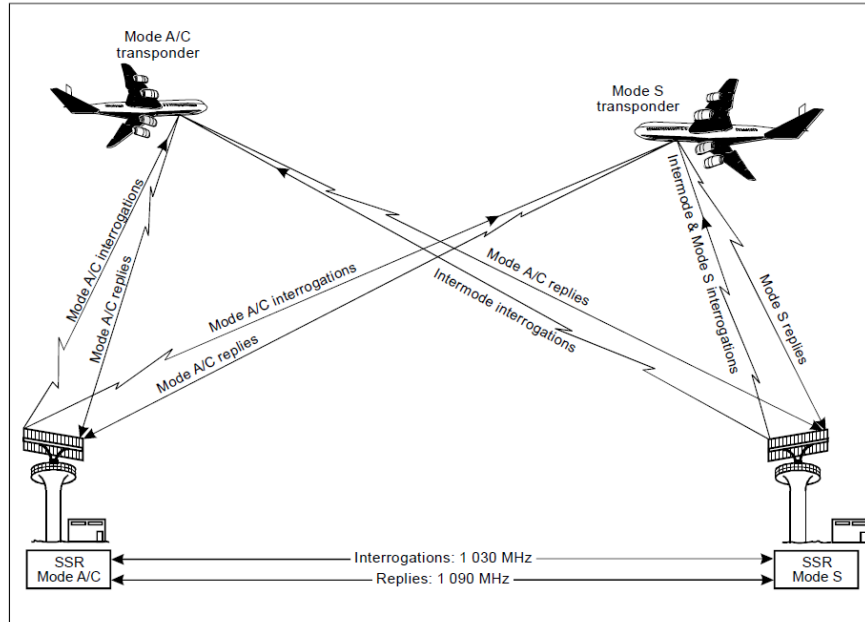
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Planning Criteria for SSR Mode S II Code

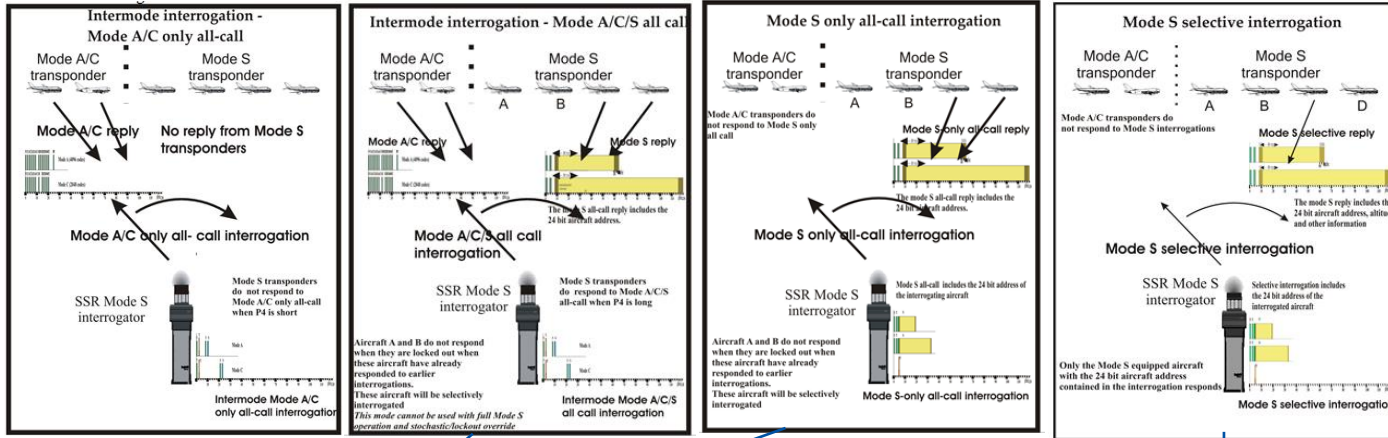


Introduction- SSR Operation





Introduction- SSR Mode S Operation



All call activities

Roll call activities

SSR MODE S

All call	Roll call	All call	Roll call	All call	Roll call	All call
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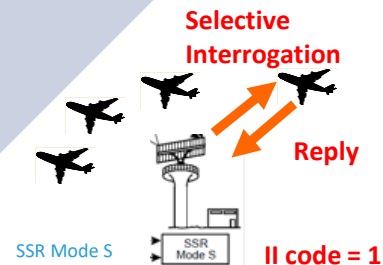
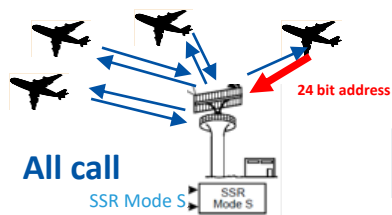


How SSR Mode S interrogator acquire all aircraft in coverage

Mode A/C and Mode S activities (All call)

- To perform surveillance of SSR Mode A/C equipped aircraft
- To acquire new Mode S aircraft
 - 24 bit address and
 - Position of the aircraft

Mode S **selective Interrogation** (Roll call)





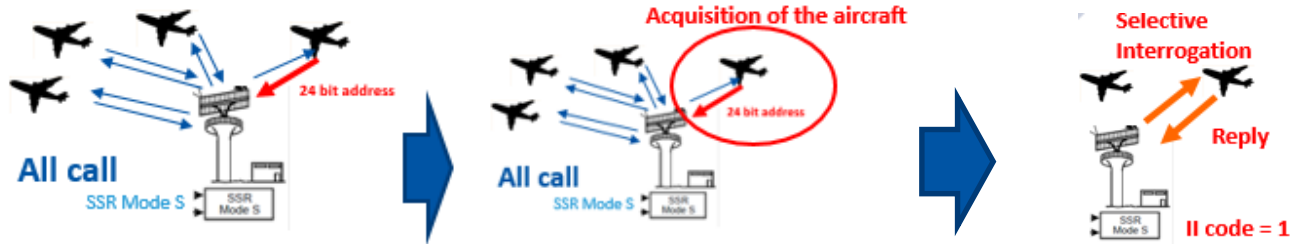
Selective addressing

Both the SSR Mode S ground station and the aircraft are capable of identifying each other.

Aircraft side : 24 bit address is required

Then...what should be used for ground side???

IC codes are required





What is IC codes

The SSR Mode S ground station is identified by its interrogator code (IC), which can either be an Interrogator Identifier (II) code or a Surveillance Identifier (SI) code.

Four bits are available for 16 different II codes.

- II code 0 requires special handling.
- **II codes 1-15 for assignment to fixed Mode S ground stations with overlapping coverage.**

Frequency Finder is the tool to manage those II codes.

In some regions certain II codes have been reserved for specific purposes and are not available for general assignment.

For aircraft complying with the provisions of Annex 10, Volume IV, Amendment 73 (or later) an additional 63 codes known as SI codes can be used, which adds significant complexity required for the assignment and operation with SI codes.

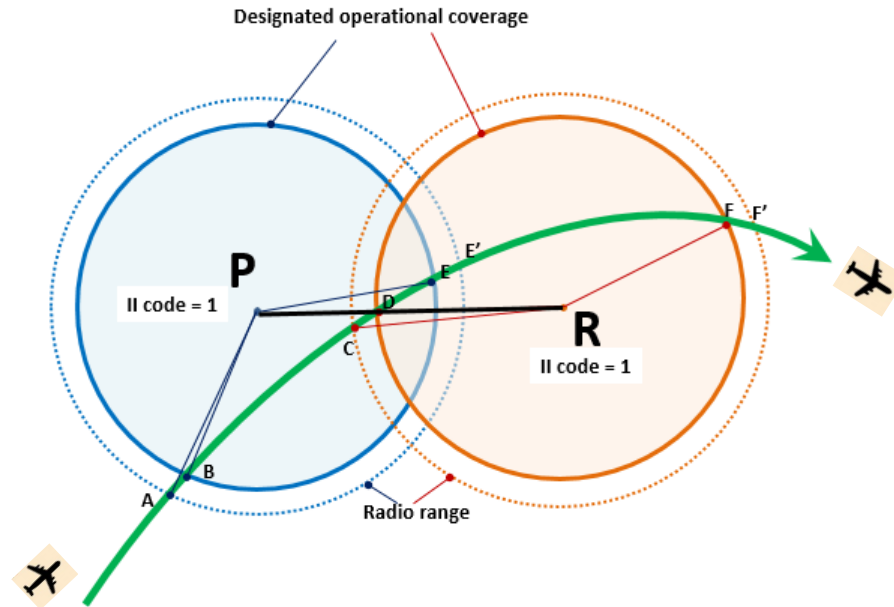


Coordination of II codes of adjacent SSR Mode S interrogators

- When adjacent Mode S ground stations have overlapping designated operational coverage
- Between adjacent States and regions
- Should coordinate with other authorities such as Military radars...

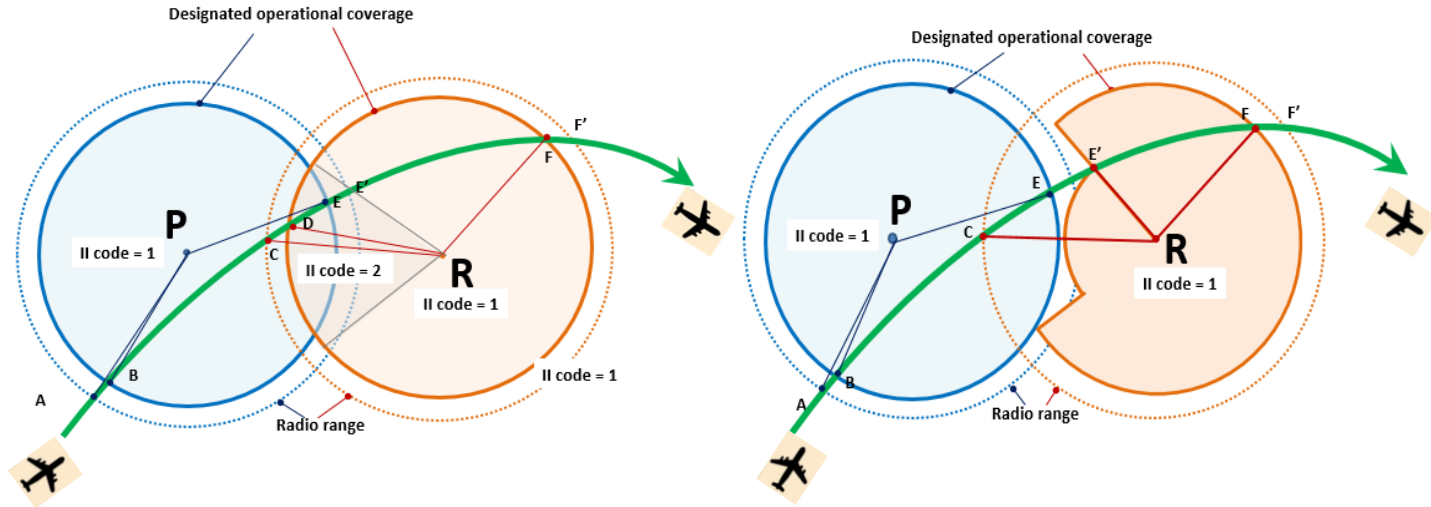


SSR Mode S interrogator clustering (interrogators with same II code)



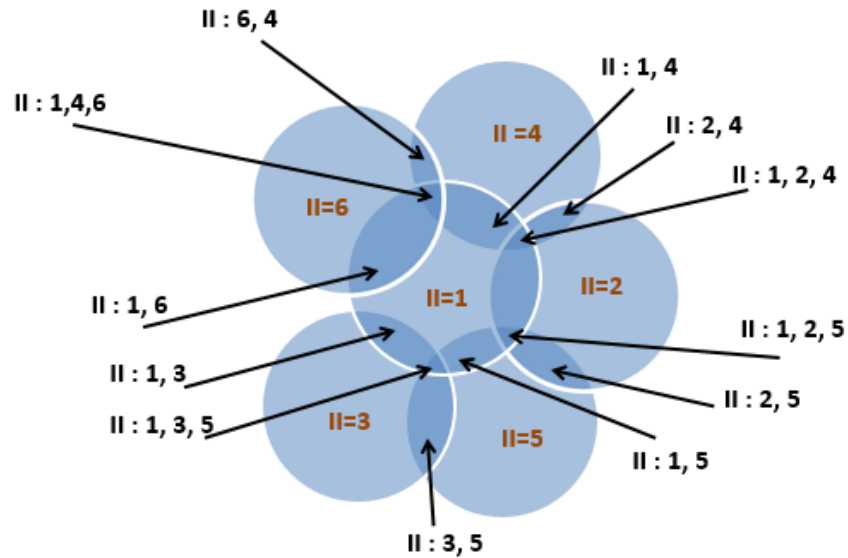


Sectorized use of II codes





Practical examples of Interrogator Identifier code assignments





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Frequency Finder *SSR II Code Module*

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Start page and SSR Home page



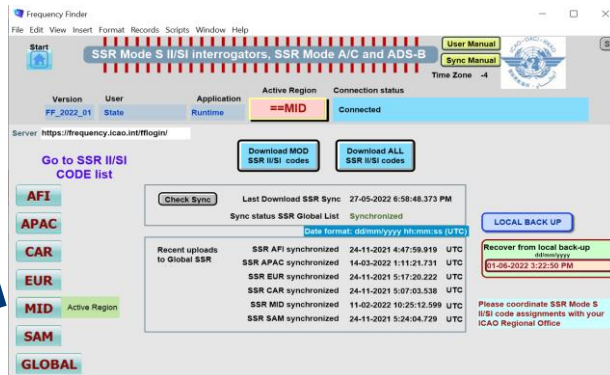
Start page

① Click "SSR"



Home page

② Click "MID"



③ "Integrity Check" will start
– See Next slide



Main functions on the window SSR Table

Regular and new functions – NewMod Facility and Test Mode Facility

Frequency Finder

File Edit View Insert Format Records Scripts Tools Window Help

State Active Region ==AFI SSR Table SSR Table SSR Table SSR Table SSR Table State User Manual Sync Manual ST

Return Mode S code list: 1 record # 537 total 59 found

GLOBAL AFI

SELECT Query

NEW

New/Mod Facility TEST Mode S Facility

CANCEL NEW Facility ADD Facility MODIFY Facility

Cancel Single Mode S Facility Found Mode S Facilities

Summary test results Special Functions - Export submissions -

US KEY REGION SSR code COUNTRY LATITUDE LONGITUDE DOC (NM) Cluster ATS Unit served Interrogator RE

US	KEY REGION	SSR code	COUNTRY	LATITUDE	LONGITUDE	DOC (NM)	Cluster	ATS Unit served	Interrogator	RE
E 5000	AFI	01	Benin	BEN Cotonou	06D21'31" N 002D22'59" E	200			Il only	
E 5119	AFI	04	Benin	BEN Cotonou	06D21'31" N 002D22'59" E	88			Il only	
E 5100	AFI	00	BOTSWANA	BOT Gaborone	24D32'33" S 025D55'52" E	200			Il only	Sir Se
E 5101	AFI	00	BOTSWANA	BOT Letlhakane	21D22'37" S 025D35'21" E	200			Il only	Letlha



Main functions on the window SSR Table Regular and new functions – New Facility

File Edit View Insert Format Records Scripts Tools Window Help

State Active Region ==AFI NEW/MOD SSR NEW/MOD SSR NEW/MOD SSR NEW/MOD SSR User Manual Sync Manual ST

Start Home Go to Regional SSR list Delete draft facility **NEW/MOD SSR** Mode S II, Mode S SI, A/C, ADS-
View Summary calculations Save as draft facility Mapping Save as registered facility

total 538 found 1

Go to SSR Codes

KEY D 5127 US DN New assignment

REGION AFI

COUNTRY Enter Country name

NAME location Enter Location name

LATITUDE DD D MM ' " E W **1** **Mode S II code**

LONGITUDE DDD D ' " E W **2** **Mode S II code**

REMARK

Interrogator capability

Cluster **II/SI** **3**

Select Text_SSR

Test

Interrogator capability

II/SI

DOC

COVERAGE Enter DOC NM

Sector1 Sector13

Insert the SSR Mode of the interrogator

Is the Mode S interrogator

- II only capable or
- II/SI capable

Click "II only" if the Mode S interrogator is only capable for Mode S II codes

Click "II/SI" if the Mode S interrogator is capable for II codes AS WELL AS SI codes.

II/SI **II only**

Test II/SI Code

SEARCH

Mode S II **Mode Code** **Margin**

Search Range Start End

FF1

Matching codes

SI-A

SI-B

SI-C

SI-D

II

ATS Unit 1 ATS Unit 2 ATS Unit 4 Search range 01..15 Blocked II

ChBy ChDate Submission# 63787128092025

If the interrogator is only capable of using Mode S II codes, a search is undertaken for II codes that do overlap with matching SI codes.
If the interrogator is capable of using II/SI codes, a search is undertaken for SI codes that do not overlap with a Mode S II-only interrogator operating on the matching II code.

SSR Mode S Interrogator Identifier (II) and Surveillance Identifier (SI) Code list



Main functions on the window SSR Table

Regular and new functions – New facility

State Active Region ==APAC NEW/MOD SSR

Start Home Go to Regional SSR list Delete draft facilities

 View Summary calculations Save

total found Mapping Save as

544 1

KEY D 63779610 US DN New assignment STA

REGION AFG

COUNTRY AFG

NAME location AFG

LATITUDE 30 D 22 ' 45 " N

LONGITUDE 060 D 49 ' 27 " E

REMARK Test ICAO

Cluster

Select Text_SSR

6 Test

The selected SSR Mode S II Code is compatible Margin (NM) 32

FIR

4

Enter [circular] coverage

Set in the field "Set Coverage" the range (NM) of the SSR or ADS-B facility.

Click "Enter" to set all sectors for the coverage to the specified

Set Coverage

250

Cancel

Enter

5

Print on map

Do you want to print to results of the compatibility calculations on a map with Google Earth.

Click "Print" to print the calculation results on a map.

Click "No Print" in case no calculation results are to be printed on a map.

Click "Terminate" to terminate the compatibility calculations

Terminate

No Print

Print



Main functions on the window SSR Table Regular and new functions – Mod / Add Facility

File Edit View Insert Format Records Scripts Tools Window Help

State Active Region ==AFI NEW/MOD SSR NEW/MOD SSR NEW/MOD SSR NEW/MOD SSR User Manual Sync Manu

Start Home

total found
544 1

Go to Regional SSR list

View Summary calculations

Mapping

NEW/MOD SSR

Mode S II, Mode S SI, A/C, ADS-

Delete draft facility

Save as draft facility

Save as registered facility

Go to S

KEY D 2162 US DR Mod assignment

REGION

COUNTRY

NAME location

LATITUDE 05 D 56 37 N

LONGITUDE 116 D 03 40 E

REMARK System Identifier: 092; 15 JAN 2019

Cluster

Select Text_SSR

Test 1

The selected SSR Mode S II Code is NOT compatible

FIR

STATION

DOC

COVERAGE 250 NM

Sector1	250	Sector13	250
Sector2	250	Sector14	250
Sector3	250	Sector15	250
Sector4	250	Sector16	250
Sector5	250	Sector17	250
Sector6	250	Sector18	250
Sector7	250	Sector19	250
Sector8	250	Sector20	250
Sector9	250	Sector21	250
Sector10	250	Sector22	250
Sector11	250	Sector23	250
Sector12	250	Sector24	250

Re-calculate test points

PolyID

SEARCH

Mode S II Search Range Start End

01 15

START SEARCH

MAX II/SI codes 10

FOUND II/SI codes 0

Searching

Selected II code

Test II/SI Code

ATS Unit 1 KK ACC ATS Unit 2 ATS Unit 3 ATS Unit 4 Search range 01...15 Blocked



Main functions on the window SSR Table Regular and new functions – Mod / Add Facility

State: [] Active Region: ==AFI NEW/MOD SSR NEW/MOD SSR NEW/MOD SSR NEW/MOD SSR User Manual Sync Manual ST

Start Home Go to Regional SSR list Delete draft facility **NEW/MOD SSR**
View Summary calculations Save as draft facility Mode S II, Mode S SI, A/C, ADS-
Mapping Save as registered facility Go to SSR Codes

KEY D 2162 US DR Mod assignment

REGION []

COUNTRY []

NAME location []

LATITUDE 05 D 56 37 N

LONGITUDE 116 D 03 40 E

REMARK System Identifier: 092: 15 JAN 2019

Cluster []

Select Text_SSR []

Test 5

The selected Mode S II Code is compatible Margin (NM) 76

STATION

DOC

COVERAGE 250 NM

Sector1	250	Sector13	250
Sector2	250	Sector14	250
Sector3	250	Sector15	250
Sector4	250	Sector16	250
Sector5	250	Sector17	250
Sector6	250	Sector18	250

Print on map

Do you want to print to results of the compatibility calculations on a map with Google Earth.

Click "Print" to print the calculation results on a map.
Click "No Print" in case no calculation results are to be printed on a map.
Click "Terminate" to terminate the compatibility calculations

Terminate No Print Print

SEARCH

Mode Code Margin

FF1	II 03	76
FF2	II 09	59
FF3	II 13	374
FF4		
FF5		
FF6		
FF7		
FF8		
FF9		
FF10		

Matching codes

SI-A	03
SI-B	19
SI-C	35
SI-D	51
II	03

Search completed []

Tested []

3

6

4




Main functions on the window SSR Table (cont'd) Regular and new functions - Mapping

Frequency Finder

File Edit View Insert Format Records Scripts Tools Window Help

State SSR Table SSR Table SSR Table SSR Table SSR Table State [User Manual](#) [Sync Manual](#) ST


 Halt Return Mode S code list: 1 record #
 GLOBAL 538 total
 AFI 60 found
 Delete Record Query

New/Mod Facility TEST Mode S Facility Summary test results
 MAPPING Export facilities to file Special Functions
 Cancel Single Station Found Stations - Export submissions -

US	KEY	REGION	SSR code	COUNTRY		LATITUDE	LONGITUDE	DOC (NM)	Cluster	ATS Unit served	Interrogator	RT
E	5007	AFI	03	Chad		12D08'10"	N 015D02'36"	E	200		II only	
E	5008	AFI	01	Comoros	COM	11D32'08"	S 043D16'32"	E	200		II only	
E	5009	AFI	03	Congo	CON	04D14'06"	S 015D15'41"	E	200		II only	
E	5010	AFI	03	Cote d'Ivoire	CTI	05D15'33"	N 003D55'53"	W	200		II only	
E	5103	AFI	14	ETHIOPIA	ETH	08D58'36"	N 038D47'53"	E	200		II only	
E	5011	AFI	04	Gabon	GAB	00D27'39"	N 009D24'44"	E	200		II only	
E	5012	AFI	04	Ghana	GHA	05D36'43"	N 000D10'04"	W	200		II only	
E	5013	AFI	05	Ghana	GHA	09D33'24"	N 000D51'59"	W	200		II only	
E	5014	AFI	ADS- B	Guinea	GUI	09D34'36"	N 013D37'37"	W	200		ADS	
E	5015	AFI	ADS- B	Guinea	GUI	10D26'46"	N 009D14'18"	W	200		ADS	
E	5016	AFI	ADS- B	Guinea	GUI	11D20'25"	N 012D17'24"	W	200		ADS	
E	5017	AFI	ADS- B	Guinea	GUI	07D48'53"	N 008D42'16"	W	200		ADS	
E	5018	AFI	ADS- B	Guinea	GUI	08D37'06"	N 011D03'01"	W	200		ADS	
E	5019	AFI	03	Guinea-Bissau	GUB	11D54'15"	N 015D38'53"	W	200		II only	
E	5115	AFI	03	ICAO TEST AFI	ZZA	38D38'38"	N 001D03'01"	W	100		II only	

frdeglat frdeglong SSR Mode S Interrogator Identifier (II) Code and Surveillance Identifier (SI) code list, SSR Mode A/C and ADS-B



Main functions on the window SSR Table (cont'd)

Regular and new functions - Query

File Edit View Insert Format Records Scripts Tools Window Help

State Active Region: ==AFI SSR Table SSR Table SSR Table SSR Table SSR Table State User M

Return Mode S code list: 15 record #
 GLOBAL 538 total
 AFI 60 total

Halt Start Home
 DU D

SELECT MAPPING TEST Mode S Facility Summary test results
 Export facilities to file Special Functions

Delete Record Query - Export submissions -

US	KEY	REGION	SSR code	NAME location	LATITUDE	LONGITUDE	DOC (NM)	Cluster	ATS Unit served
DN	D	5127	AFI						
E	5000	AFI	01	Benin	BEN	Cotonou	06D21'31" N	002D22'59" E	200
E	6410	AFI	04	Benin	BEN	Cotonou	06D21'31" N	002D22'59" E	88

Frequency Finder

File Edit View Insert Format Requests Scripts Tools Window Help

User State Region: ==AFI SSR QUERY SSR QUERY SSR QUERY SSR QUERY User Manual Sync Manual ST

Return to Mode S code list: **SSR Query**
 Query the data base for SSR or ADS-B facilities

Start Home
 Global AFI

Find New Query

QUERY DATABASE QUERY DATABASE QUERY DATABASE QUERY DATABASE QUERY

Enter your QUERY

Query Database

REGION ==AFI Country code: Select SSR Mode ADS
 COUNTRY No country selected R
 NAME location No location selected R Select SSR Code II

Select criteria for the query from the fields in the box Query Database:
 1. Select geographic parameters (Region, Country Location) first, if required
 2. Select SSR Mode (II or SI or A/C or ADS-B), if required
 3. Select SSR Code, if required
 4. Click FIND

Use this window to only enter criteria for your query

==APAC Region
 N/A Country
 N/A Location
 N/A SSR Mode (II, SI, A/C or ADS-B)
 N/A SSR Mode S Code

Last Query - parameters
 [Modify/redo] last find

Click here to use the parameters of your most recent query; you can modify these parameters in the box "Query Database"

SSR QUERY SSR QUERY SSR QUERY SSR QUERY SSR QUERY SSR QUERY SSR QUERY SSR QUERY

Frequency Finder has been activated for the Region ==AFI



Main functions on the window SSR Table (cont'd)

Regular and new functions – Export submissions

File Edit View Insert Format Records Scripts Tools Window Help

State AFI SSR Table SSR Table SSR Table SSR Table State User Manual Sync Manual

Return Mode S code list: 1 record # Active Find NewMod Facility TEST Mode S Facility Summary test results
 GLOBAL 538 total SELECT MAPPING Export facilities to file Special Functions
 AFI 1 found Query

DU D Delete Record

US KEY REGION SSR code COUNTRY NAME location LATITUDE LONGITUDE DOC (NM) Cluster ATS Unit served Interrogator R

M	E	5126	AFI	II	02	ICAOTEST AFI	ZZA	Test	23D00'00"	N	053D00'00"	E	200				
<110> Open excel file																	

An Excel file will be created containing your submissions which you can attach later to an email message to the Regional Office.

Click "Open" to look at and save the Excel file
 Click "Cancel" to cancel.

Notes:
 1. The Excel file is saved in the folder C:\Frequency Finder\Save Submissions of your computer.
 2. From this folder you can attach the Excel file to your email to the Regional Office.

Cancel Open

US KEY REGION SSR code COUNTRY NAME location LATITUDE LONGITUDE DOC (NM) Cluster ATS Unit served Interrogator R

SM	E	5126	AFI	II	02	ICAOTEST AFI	ZZA	Test	23D00'00"	N	053D00'00"	E	200				
Sector1																	
1									200								
2									200								
3																	
4																	
5																	
6																	

SSR AFI ZZA 02-05-2022 70338 PM.xlsx

File Home Insert Page Layout Formulas Data Review View Tell m. Chou... Share

Clipboard Font Cell Styles

File Home Share View

Pin to Quick access Copy Paste Move to Delete Rename New folder Properties Select all Select none Invert selection Select

Clipboard Organize New Open

frequencyfinder > SaveSubmissions

Search SaveSub

Dropbox Name Date modified 22 Type

OneDrive SSR AFI ZZA 02-05-2022 70338 PM.xlsx 02/05/2022 7:05 PM Micrc



Main functions on the window SSR Table (cont'd)

Regular and new functions – Export facilities to file

Frequency Finder

File Edit View Insert Format Records Scripts Tools Window Help

State Region AFI SSR Table SSR Table SSR Table SSR Table SSR Table State User Manual Sync Manual ST

Halt Return Mode S code list: 2 record # Active Find New/Mod Facility TEST Mode S Facility Summary test results

Start Home GLOBAL 540 total SELECT MAPPING Export facilities to file Special Functions

DU D Delete Record Query

Cancel Ctry/Loc/II Code II Code/Ctry/Loc

- Export submissions -

KEY	REGION	SSR code	COUNTRY	NAME location	LONGITUDE	DOC (NM)	Cluster	ATS Unit served	Interrogator	RI
E 5000	AFI	01	Benin	BEN Cotonou	002D22'59"	E 200			II only	
E 5119	AFI	04	Benin	BEN Cotonou	002D22'59"	E 88			II only	
E 5100	AFI	00	BOTSWANA	BOT Gaborone	025D55'52"	E 200			II only	Sir Se
E 5101	AFI	00	BOTSWANA	BOT Letlhakane	025D35'21"	E 200			II only	Letiha
E 5102	AFI	00	BOTSWANA	BOT Maun	023D25'47"	E 200			II only	Maun

Frequency Finder

File Edit View Insert Format Records Scripts Tools Window Help

SSR Mode S Interrogator Identifier (II) Code list

Select Sort Order

Filename_SSR: 2022 5 10 AFI 133512

Date_SSR: 10 May 2022

EXPORT SSR Table (Mode S II, Mode S SI, A/C and AD)

Go to Regional SSR Table

Sort order: Country-Location-II/SI Code

Print Set printer to landscape printing

Select Export Format

- Export FMP (FileMaker 12)
- Export Excel
- Export XML
- Export CSV
- Export PDF (not in runtime)

KEY	REGION	SSR II/SI code	COUNTRY	NAME location	LATITUDE	LONGITUDE
D 5127	AFI	01				
Sector1 200	Sector2 200	Sector3 200	Sector4 200	Sector5 200	Sector6 200	Sector7 200
Sector8 100	Sector9 50	Sector10 200	Sector11 200	Sector12 200	Sector13 200	Sector14 200
Sector15 200	Sector16 200	Sector17 200	Sector18 200	Sector19 50	Sector20 200	Sector21 200
Sector22 50	Sector23 200	Sector24 200	Sector25 200	Sector26 200	Sector27 200	Sector28 200
Sector29 200	Sector30 200	Sector31 200	Sector32 200	Sector33 200	Sector34 200	Sector35 200
Sector36 200	Sector37 200	Sector38 200	Sector39 200	Sector40 200	Sector41 200	Sector42 200
Sector43 200	Sector44 200	Sector45 200	Sector46 200	Sector47 200	Sector48 200	Sector49 200
Sector50 200	Sector51 200	Sector52 200	Sector53 200	Sector54 200	Sector55 200	Sector56 200
Sector57 200	Sector58 200	Sector59 200	Sector60 200	Sector61 200	Sector62 200	Sector63 200
Sector64 200	Sector65 200	Sector66 200	Sector67 200	Sector68 200	Sector69 200	Sector70 200
Sector71 200	Sector72 200	Sector73 200	Sector74 200	Sector75 200	Sector76 200	Sector77 200
Sector78 200	Sector79 200	Sector80 200	Sector81 200	Sector82 200	Sector83 200	Sector84 200
Sector85 200	Sector86 200	Sector87 200	Sector88 200	Sector89 200	Sector90 200	Sector91 200
Sector92 200	Sector93 200	Sector94 200	Sector95 200	Sector96 200	Sector97 200	Sector98 200
Sector99 200	Sector100 200	Sector101 200	Sector102 200	Sector103 200	Sector104 200	Sector105 200
Sector106 200	Sector107 200	Sector108 200	Sector109 200	Sector110 200	Sector111 200	Sector112 200
Sector113 200	Sector114 200	Sector115 200	Sector116 200	Sector117 200	Sector118 200	Sector119 200
Sector120 200	Sector121 200	Sector122 200	Sector123 200	Sector124 200	Sector125 200	Sector126 200
Sector127 200	Sector128 200	Sector129 200	Sector130 200	Sector131 200	Sector132 200	Sector133 200
Sector134 200	Sector135 200	Sector136 200	Sector137 200	Sector138 200	Sector139 200	Sector140 200
Sector141 200	Sector142 200	Sector143 200	Sector144 200	Sector145 200	Sector146 200	Sector147 200
Sector148 200	Sector149 200	Sector150 200	Sector151 200	Sector152 200	Sector153 200	Sector154 200
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Sector169 200	Sector170 200	Sector171 200	Sector172 200	Sector173 200	Sector174 200	Sector175 200
Sector176 200	Sector177 200	Sector178 200	Sector179 200	Sector180 200	Sector181 200	Sector182 200
Sector183 200	Sector184 200	Sector185 200	Sector186 200	Sector187 200	Sector188 200	Sector189 200
Sector190 200	Sector191 200	Sector192 200	Sector193 200	Sector194 200	Sector195 200	Sector196 200
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Sector323 200	Sector324 200	Sector325 200	Sector326 200	Sector327 200	Sector328 200	Sector329 200
Sector330 200	Sector331 200	Sector332 200	Sector333 200	Sector334 200	Sector335 200	Sector336 200
Sector337 200	Sector338 200	Sector339 200	Sector340 200	Sector341 200	Sector342 200	Sector343 200
Sector344 200	Sector345 200	Sector346 200	Sector347 200	Sector348 200	Sector349 200	Sector350 200
Sector351 200	Sector352 200	Sector353 200	Sector354 200	Sector355 200	Sector356 200	Sector357 200
Sector358 200	Sector359 200	Sector360 200	Sector361 200	Sector362 200	Sector363 200	Sector364 200
Sector365 200	Sector366 200	Sector367 200	Sector368 200	Sector369 200	Sector370 200	Sector371 200
Sector372 200	Sector373 200	Sector374 200	Sector375 200	Sector376 200	Sector377 200	Sector378 200
Sector379 200	Sector380 200	Sector381 200	Sector382 200	Sector383 200	Sector384 200	Sector385 200
Sector386 200	Sector387 200	Sector388 200	Sector389 200	Sector390 200	Sector391 200	Sector392 200
Sector393 200	Sector394 200	Sector395 200	Sector396 200	Sector397 200	Sector398 200	Sector399 200
Sector400 200	Sector401 200	Sector402 200	Sector403 200	Sector404 200	Sector405 200	Sector406 200
Sector407 200	Sector408 200	Sector409 200	Sector410 200	Sector411 200	Sector412 200	Sector413 200
Sector414 200	Sector415 200	Sector416 200	Sector417 200	Sector418 200	Sector419 200	Sector420 200
Sector421 200	Sector422 200	Sector423 200	Sector424 200	Sector425 200	Sector426 200	Sector427 200
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Sector463 200	Sector464 200	Sector465 200	Sector466 200	Sector467 200	Sector468 200	Sector469 200
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Sector477 200	Sector478 200	Sector479 200	Sector480 200	Sector481 200	Sector482 200	Sector483 200
Sector484 200	Sector485 200	Sector486 200	Sector487 200	Sector488 200	Sector489 200	Sector490 200
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Sector498 200	Sector499 200	Sector500 200	Sector501 200	Sector502 200	Sector503 200	Sector504 200
Sector505 200	Sector506 200	Sector507 200	Sector508 200	Sector509 200	Sector510 200	Sector511 200
Sector512 200	Sector513 200	Sector514 200	Sector515 200	Sector516 200	Sector517 200	Sector518 200
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Sector673 200	Sector674 200	Sector675 200	Sector676 200	Sector677 200	Sector678 200	Sector679 200
Sector680 200	Sector681 200	Sector682 200	Sector683 200	Sector684 200	Sector685 200	Sector686 200
Sector687 200	Sector688 200	Sector689 200	Sector690 200	Sector691 200	Sector692 200	Sector693 200
Sector694 200	Sector695 200	Sector696 200	Sector697 200	Sector698 200	Sector699 200	Sector700 200
Sector701 200	Sector702 200	Sector703 200	Sector704 200	Sector705 200	Sector706 200	Sector707 200
Sector708 200	Sector709 200	Sector710 200	Sector711 200	Sector712 200	Sector713 200	Sector714 200
Sector715 200	Sector716 200	Sector717 200	Sector718 200	Sector719 200	Sector720 200	Sector721 200
Sector722 200	Sector723 200	Sector724 200	Sector725 200	Sector726 200	Sector727 200	Sector728 200
Sector729 200	Sector730 200	Sector731 200	Sector732 200	Sector733 200	Sector734 200	Sector735 200
Sector736 200						



Main functions on the window SSR Table (cont'd)

Regular and new functions – Export facilities to file

SSR Mode S Interrogator Identifier (II) Code list

Select Sort Order Filename_SSR 2022 5 10 AFI 133512 **EXPORT SSR Table (Mod**
Date_SSR 10 May 2022 Print Set print landscape

Go to Regional SSR Table Sort order: Country-Location-II/SI Code

KEY REGION SSR II/SI code COUNTRY NAME location LATITUDE

200 Sector6 200 Sector7 200 Sector8 100 Sector9 50 Sector10

SaveExcel

Share View

Paste Move to > Delete > New folder Properties Select all Select none Invert selection

Copy to > Rename Organize New Open Select

« FrequencyFinder » SaveExcel Search SaveExcel

Name Date modified Type

SSR_II_Code_Ctry_2022 5 10 AFI 133512.xlsx 10/05/2022 1:36 PM Microsoft Excel

Page Layout Formulas Data Review View Tell m Chou... Share

10 Conditional Formatting > Cells Editing

Alignment Number Format as Table > Cell Styles >

Styles

fx SSR II_SI

	B	C	D
	SSR II code	DR	Key
		D	5127
01		E	5000
04		E	5119
00		E	5100



RECONNECTING THE WORLD



Questions





Background information

Refer to Annex 10 Volume 4

2.1.2.1.1 Recommendation.— Administrations should coordinate with appropriate national and international authorities those implementation aspects of the SSR system which will permit its optimum use.

2.1.2.1.2 The assignment of interrogator identifier (II) codes, where necessary in areas of overlapping coverage, across international boundaries of flight information regions, shall be the subject of regional air navigation agreements.

2.1.2.1.3 The assignment of surveillance identifier (SI) codes, where necessary in areas of overlapping coverage, shall be the subject of regional air navigation agreements.

Note.— The SI lockout facility cannot be used unless all Mode S transponders within coverage range are equipped for this purpose.

2.1.3.3.1 Requirements for mandatory carriage of SSR Mode S transponders shall be on the basis of regional air navigation agreements which shall specify the airspace and the airborne implementation timescales.



Background information

Annex 10 Volume 4

3.1.2.11.6 Lockout coordination. A Mode S interrogator shall not be operated using all-call lockout until coordination has been achieved with all other operating Mode S interrogators having any overlapping coverage volume in order to ensure that no interrogator can be denied the acquisition of Mode S-equipped aircraft.

Note.— This coordination may be via ground network or by the allocation of interrogator identifier (II) codes and will involve regional agreements where coverage overlaps international boundaries.

Etc.....



Background information

- Refer to Doc 9924 Aeronautical Surveillance Manual for more details related to:
 - SSR Mode S
 - ADS-B
 - ACAS
 - Multilateration (MLAT) etc...

Also for your convenience, we provided “Appendix J Chapter 8 of the Unedited version of second edition of Doc 9924 ” during the workshop.