INTERNATIONAL TELECOMMUNICATION UNION

Radiocommunication Bureau
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Circular Letter
CR/150

12 October 2000

To Administrations of Member States of ITU

Subject: Coordination contours of transmitting earth stations already recorded in the Master International Frequency Register (MIFR) in the bi-directionally allocated bands

References:
- Document 1-6/97-E of 22 September 1999
- No. S9.17A of the Radio Regulations (1998 edition)
- Recommendation ITU-R IS.848-1, Volume 4 of the Radio Regulations (1998 edition)

To the Director-General

Dear Sir/Madam,

1 During its meeting of 10-18 May 1999 held in Paris, Task Group 1/6 discussed the examination of earth stations with respect to bi-directional coordination areas and a number of suggestions arose from those discussions. Since there is no method to determine the bi-directional coordination area for a receiving earth station, Task Group 1/6 requested the Radiocommunication Bureau, as a possible solution, to determine the transmitting earth station coordination areas for all specific transmitting earth stations recorded in MIFR in the bi-directionally allocated bands for future use in the examination of any new specific receiving earth station.

2 The Bureau studied the request of Task Group 1/6 and concurred with its proposal (Annex 1). To this effect, the Bureau agreed to establish the coordination contour for all specific transmitting earth stations already recorded in MIFR, in the frequency bands allocated to space radiocommunication services for bi-directional use, and make them available to administrations. This would enable administrations wishing to notify to the Bureau or bring into use any frequency assignment to any receiving earth station, to use the coordination area data of the earth station recorded in MIFR and any additional information relating to the coordination area received from other administrations with respect to their transmitting earth stations in order to verify whether the planned receiving earth station is located within the coordination area of any transmitting earth station of another administration and thereafter proceed with the application of Nos. S9.29 and S9.31 coordination procedure as required.

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3 This process has now been endorsed by WRC-2000 and § 1.4.4 of the new Appendix S7 approved by it provides that "In this case, where two earth stations are operating in opposite directions of transmission it is only necessary to establish the coordination area for the transmitting earth station, as receiving earth stations will automatically be taken into consideration. Hence, a receiving earth station operating in a bi-directionally allocated frequency band will only be involved in coordination with a transmitting earth station if it is located within the transmitting earth station's coordination area."

4 The methodology for calculating the coordination area of the transmitting earth station operating in the bi-directionally allocated bands provided in Recommendation ITU-R IS.848-1 in Volume 4 of the Radio Regulations (1998 edition) is used for calculating the coordination area of the attached transmitting earth stations (Annex 2), since all these transmitting earth stations were recorded in MIFR when the Radio Regulations (1998 edition) entered into force on 1 January 1999.

4.1 Before an administration brings into use or notifies to the Bureau any frequency assignments to a transmitting or receiving earth station it shall follow the procedure explained below.

4.1.1 In the case of transmitting earth stations: The administration should use the provisions of Appendix S5 and the methodology of Recommendation ITU-R IS.848-1 in Volume 4 of the Radio Regulations in order to calculate the coordination area and effect coordination of the assignments with each administration whose territory lies wholly or partly within that coordination area. The procedure given in the new Appendix S7 adopted by WRC-2000 will have to be used from the date when it becomes effective.

4.1.2 In the case of receiving earth stations: The administration should use the coordination area data of the existing earth stations recorded in MIFR and enclosed with this Circular Letter and any additional coordination area data received from other administrations for planned transmitting earth stations (described in § 2 above) to verify whether the receiving earth station falls within the coordination area of any transmitting earth station of another administration and thereafter proceed with the Nos. S9.29/S9.31 coordination process as required.

5 Examination by the Bureau: After completion of the coordination process specified above, when an administration notifies to the Bureau a frequency assignment to a transmitting or receiving earth station, the Bureau examines, among other things, its conformity with the procedures relating to coordination with other administrations in accordance with the provisions of No. S11.32. For a transmitting earth station, the Bureau calculates the coordination area and checks whether or not the notifying administration successfully completed coordination with those administrations whose territory lies wholly or partially within the coordination area of the planned earth station. For a receiving earth station, the Bureau checks whether the earth station is located within the coordination area of any of the existing transmitting earth stations, and if so, whether or not the notifying administration successfully completed coordination with that administration. Further, in accordance with the Rules of Procedure (§ 5 relating to No. S11.32) "If, within a period of three years following the date of notification of the earth station operating in the opposite direction of transmission, the Bureau receives a comment from another administration, indicating that the concerned assignment was included in a coordination procedure initiated by this later administration pursuant to No. S9.29 in respect to its earth station(s) coordination under No. S9.17A, and was not agreed to, or was agreed with different technical characteristics, the Bureau will review the situation in accordance with the relevant provisions of Article S14 and will proceed accordingly."

6 Since the procedure of using the coordination contours of transmitting earth stations has now been endorsed by WRC-2000, the Bureau has prepared the coordination contours of specific transmitting earth stations already recorded in MIFR operating in the frequency bands allocated with equal rights to space radiocommunication services in both directions of transmission. The administrations could use these contours as explained in § 4.1 above for verifying the coordination requirements of their planned receiving earth stations.

Yours faithfully,

Robert W. Jones
Director, Radiocommunication Bureau

Annexes : 2

Distribution:

- Administrations of Member States of the ITU
- Members of the Radio Regulations Board

INTERNATIONAL TELECOMMUNICATION UNION

RADIOCOMMUNICATION STUDY GROUPS

Document 1-6/97-E
22 September 1999
Original: English only

Annex 1

Received: 22 September 1999

Director, Radiocommunication Bureau

EXAMINATION OF EARTH STATIONS WITH RESPECT TO BIDIRECTIONAL COORDINATION AREAS

1 The Radiocommunication Bureau examined the Note to the Director, BR from Task Group 1/6 (Reference Document 1-6/TEMP/45-Edited dated 20 May 1999, Paris, 10-18 May 1999) regarding the examination of earth stations with respect to bidirectional coordination areas and requesting the BR to study this matter further in order to identify possible solutions to the problem.

2 TG 1/6 concluded that the BR could help by examining, in bi-directionally allocated bands:

- any new specific transmitting earth station with respect to the requirement to coordinate with any administration the territory of which falls inside the bidirectional coordination area;
- any new specific receiving earth station with respect to already notified transmitting earth stations to determine whether it falls inside the bidirectional coordination area of such a transmitting earth station; and
- all specific transmitting earth stations recorded in the MIFR when a future WRC changes a previous earth-to-space allocation of a frequency band into a bidirectional allocation by determining the bidirectional coordination areas for future use in the examination of any new specific receiving earth station.

3 The Bureau concurs with the solution suggested by TG 1/6. To this effect, the Bureau will establish the coordination contours for all notified specific transmitting earth stations in the frequency bands allocated to space radiocommunication services for bidirectional use and make them available to administrations through the SRS on CD-ROM. Then the coordination process envisaged in Nos.**S9.29** and **S9.31** for planned transmitting or receiving earth stations in bi-directionally allocated band will be possible as explained below.

3.1 Before an administration notifies to the Bureau or brings into use any frequency assignment to a transmitting earth station, the administration should use the provisions of AP**S5** for calculation of the coordination area and effect coordination of the assignment with each administration whose territory lies wholly or partly within the coordination area of the planned earth station.

3.2 Before an administration notifies to the Bureau or brings into use any frequency assignment to a receiving earth station, the administration should use the coordination area data of the existing earth stations recorded in MIFR and provided by the Bureau on CD-ROM and any additional information relating to coordination area received from other administrations with respect to the transmitting earth stations (described in § 3.1 above) to verify whether the receiving earth station located within the coordination area of any transmitting earth station of another administration and thereafter proceed with the application of Nos.**S9.29** and **S9.31** coordination procedure as required. This situation is similar to the coordination of terrestrial stations with earth stations and vice versa, as specified in Nos.**S9.18.**

3.3 In accordance with paragraph 5 of Rules of Procedure relating to **S11.32**, the Bureau when applying the procedure of Article **S11**, in its examinations of a frequency assignment notice to an earth station operating in the opposite direction of transmission, from the point of view of its conformity with the procedures relating to coordination with respect to earth stations of other administrations, it takes into account those earth stations which are recorded in the Master Register. Any other information if communicated to the Bureau relating to the result of coordination of a transmitting or receiving earth station operating in the opposite direction of transmission when successfully completed, would also be reflected in the appropriate column in the Master Register. If, within a period of three years following the date of notification of the earth station operating in the opposite direction of transmission, the Bureau receives a comment from another administration, indicating that the concerned assignment was included in a coordination procedure initiated by this later administration pursuant to No.**S9.29** in respect to its earth station(s) coordination under No.**S9.17A**, and was not agreed to, or was agreed with different technical characteristics, the Bureau will review the situation in accordance with the relevant provisions of Article **S14** and will proceed accordingly.

4 If this coordination procedure is adopted, the Bureau is of the opinion that it is not necessary to establish a methodology to determine the bidirectional coordination contour for receiving earth stations. Taking into account the above information Task Group 1/6 may wish to propose this solution in the TG1/6 contribution to the CPM in order to clarify the coordination procedure for earth stations in bi-directionally allocated bands.

Annexe/ Annex/ Anexo 2

BR Space Radiocommunication Stations Query List

List of Earth Stations Operating in Frequency Slot(s)

Query Criteria: Station type(s): Specific only
Frequency band(s): 10700.000000 to 11700.000000 MHz
12500.000000 to 12750.000000 MHz
15430.000000 to 15650.000000 MHz
1675.000000 to 1710.000000 MHz
17700.000000 to 18400.000000 MHz
19300.000000 to 19600.000000 MHz
2655.000000 to 2690.000000 MHz
40000.000000 to 40500.000000 MHz
5150.000000 to 5216.000000 MHz
6700.000000 to 7075.000000 MHz
8025.000000 to 8400.000000 MHz

+/-	Ntwk ID	Cty	Station Name	T	Longitude	Latitude	Satellite Name	OrbLong	R	St
	90500729	USA	FT DETRICK MD	S	-77.4170	39.4500	USGCSS PH3 ATL	-12.00	N	50
	90500730	USA	FT MCPHERSON GA	S	-84.4170	33.7000	USGCSS PH3 ATL	-12.00	N	50
	90500731	USA	MANCHESTER NH	S	-71.6330	42.9300	USGCSS PH3 ATL	-12.00	N	50
	90500736	USA	NORTHWEST VA	S	-76.3000	36.9500	USGCSS PH3 ATL	-12.00	N	50
	90500755	USA	MANCHESTER NH	S	-71.6300	42.9200	USGCSS PH3 W ATL	-52.50	N	50
	90502466	BEL	KESTER	S	4.1000	50.7700	SATCOM PHASE-3	-18.00	N	50
	90502467	CAN	CARP ONT	S	-76.0570	45.3500	SATCOM PHASE-3	-18.00	N	50
	90502468	CAN	FOLLY LAKE NS	S	-63.5430	45.5800	SATCOM PHASE-3	-18.00	N	50
	90502469	D	BAD BERGZABERN	S	7.9830	49.1200	SATCOM PHASE-3	-18.00	N	50
	90502470	D	EUSKIRCHEN	S	6.7500	50.6700	SATCOM PHASE-3	-18.00	N	50
	90502473	DNK	LUNDBAKKE	S	9.1500	56.2300	SATCOM PHASE-3	-18.00	N	50
	90502475	G	BALADO BRIDGE	S	-3.4670	56.2200	SATCOM PHASE-3	-18.00	N	50
	90502477	GIB	GIBRALTAR	S	-5.3500	36.1200	SATCOM PHASE-3	-18.00	N	50
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	90502483	GRC	ATALANTI	S	23.0170	38.6800	SATCOM PHASE-3	-18.00	N	50
	90502485	I	CIVITAVECCHIA	S	11.7330	42.1700	SATCOM PHASE-3	-18.00	N	50
	90502487	I	PAPORTELLO	S	14.8170	37.5800	SATCOM PHASE-3	-18.00	N	50
	90502489	I	VERONA	S	11.0000	45.5800	SATCOM PHASE-3	-18.00	N	50
	90502490	ISL	KEFLAVIK	S	-22.5000	63.9700	SATCOM PHASE-3	-18.00	N	50
	90502491	ISL	KEFLAVIK 1	S	-21.9500	64.1500	SATCOM PHASE-3	-18.00	N	50
	90502495	POR	LISBOA	S	-9.1670	38.5500	SATCOM PHASE-3	-18.00	N	50
	90502497	TUR	ANKARA	S	32.7170	39.9000	SATCOM PHASE-3	-18.00	N	50
	90502498	TUR	ANKARA 1	S	32.7000	39.9000	SATCOM PHASE-3	-18.00	N	50
	90502500	TUR	IZMIR	S	27.2330	38.2500	SATCOM PHASE-3	-18.00	N	50
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	90503464	USA	FT DETRICK MD	S	-77.4170	39.4500	USGCSS PH3 ATL	-12.00	N	50
	90503466	USA	MANCHESTER NH	S	-71.6330	42.9300	USGCSS PH3 ATL	-12.00	N	50
	90503471	USA	NORTHWEST VA	S	-76.3000	36.9500	USGCSS PH3 ATL	-12.00	N	50
	90503490	USA	MANCHESTER NH	S	-71.6300	42.9200	USGCSS PH3 W ATL	-52.50	N	50
A	90910001	FRO	FAROES	S	-6.9650	62.0700	SATCOM PHASE-3	-18.00	N	50
A	91910060	D	AUGSBURG	S	10.8670	48.4500	USGCSS PH3 W ATL	-52.50	N	50
A	95500276	TUR	PIRINCLIK	S	39.9940	37.9000	USGCSS PH3 INDOC	60.00	N	50
A	95500281	RUS	KHABAROVSK	S	135.1670	48.5500	GOMS-M	76.00	N	50
A	96500571	AZR	LAJES	S	-27.0960	38.7600	USGCSS PH3B ATL	-12.00	N	50
A	97500364	HOL	SCHOONHOVEN	S	4.8500	51.9500	SATCOM-4	-17.80	N	50

CONTOURS DE COORDINATION DE LA STATION TERRIENNE DE TRANSMISSION
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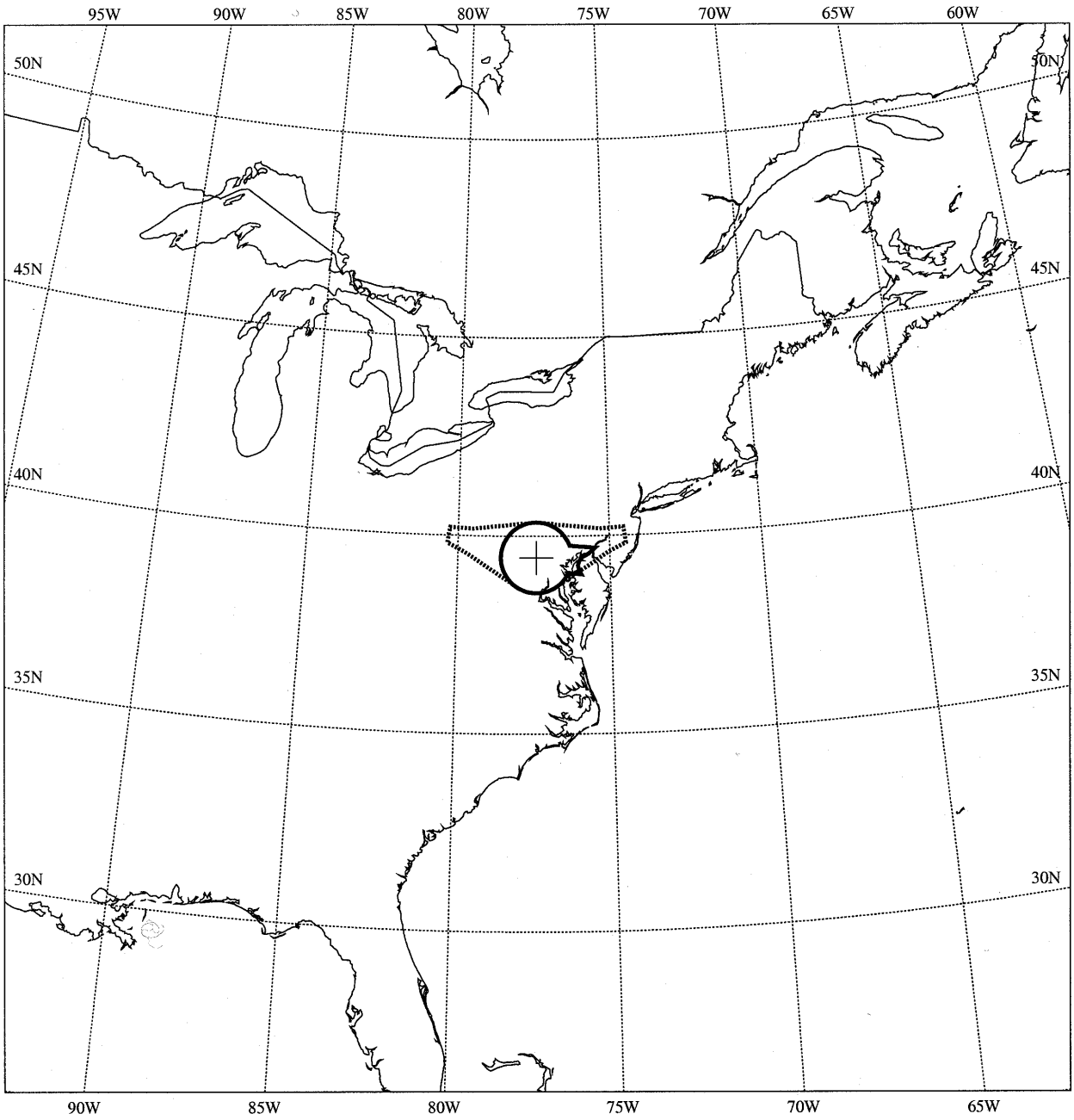

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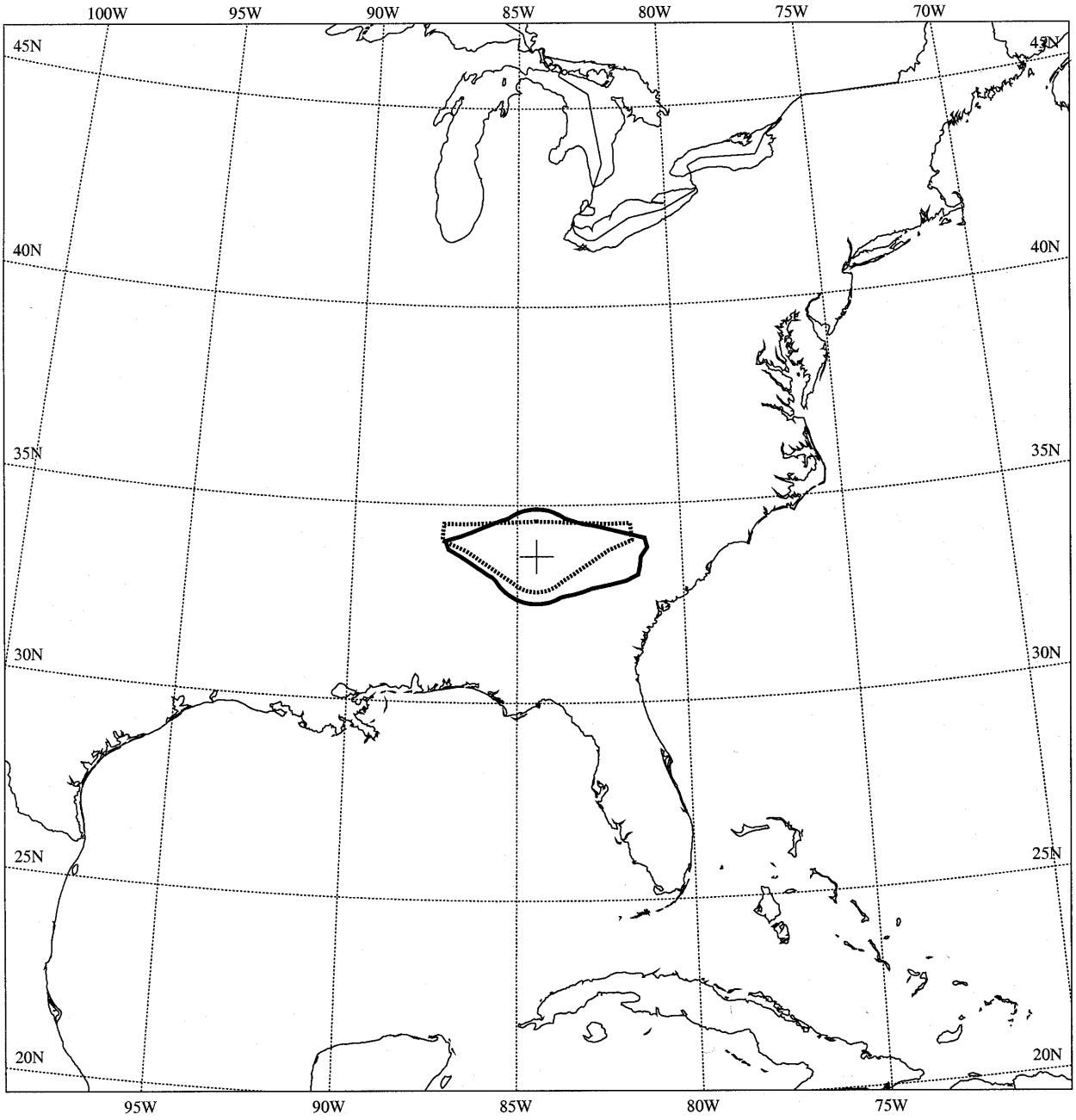

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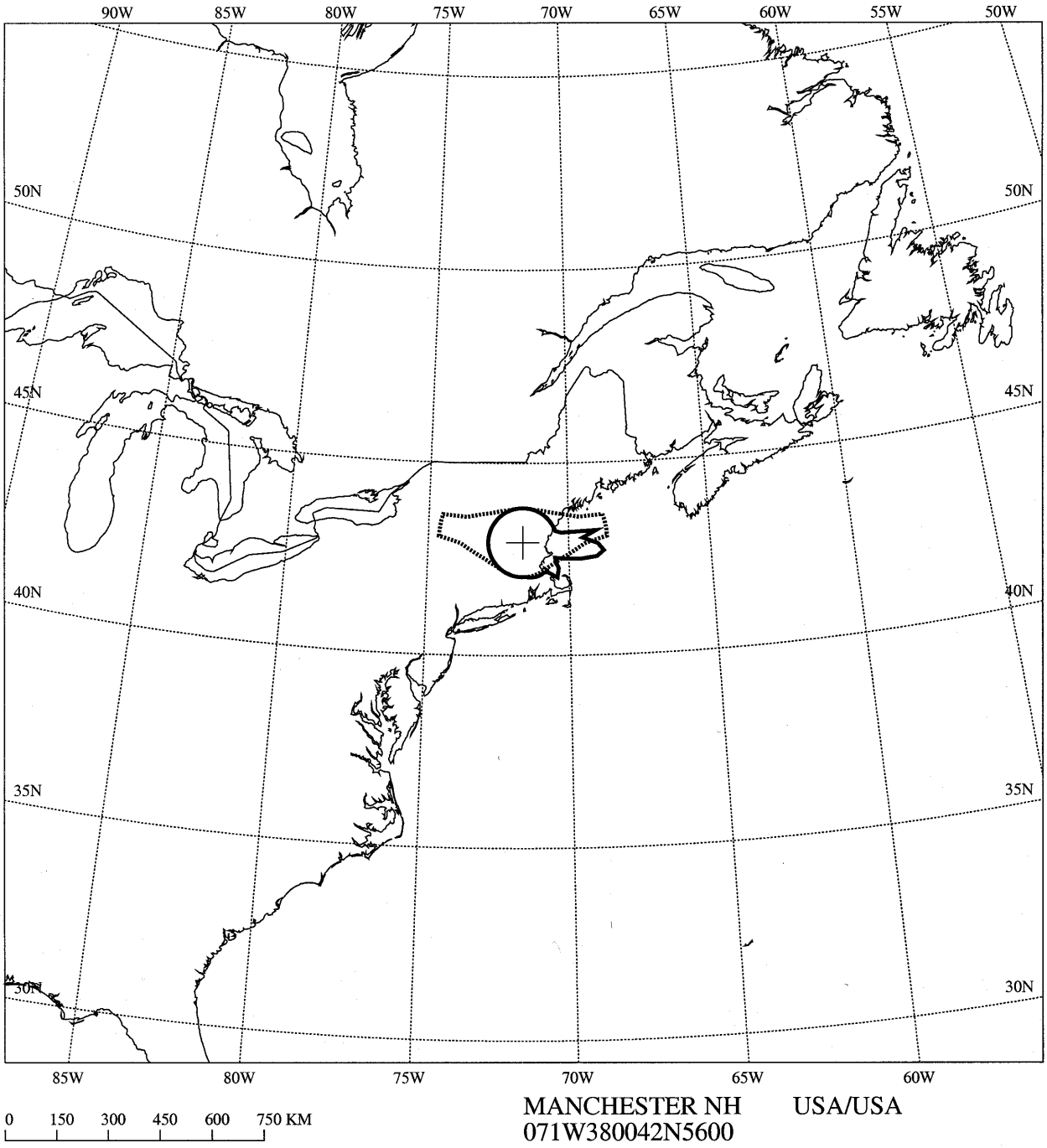

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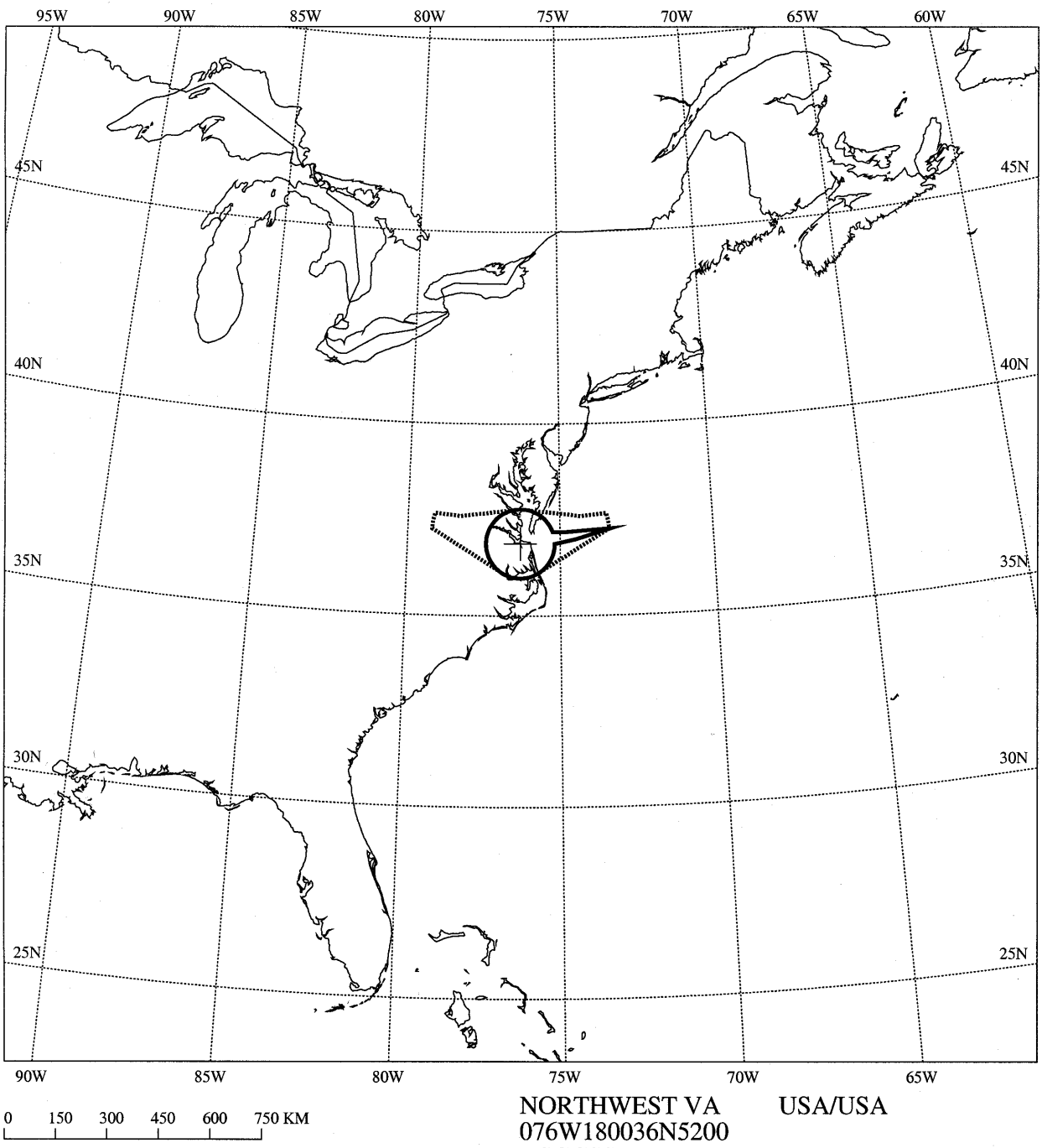

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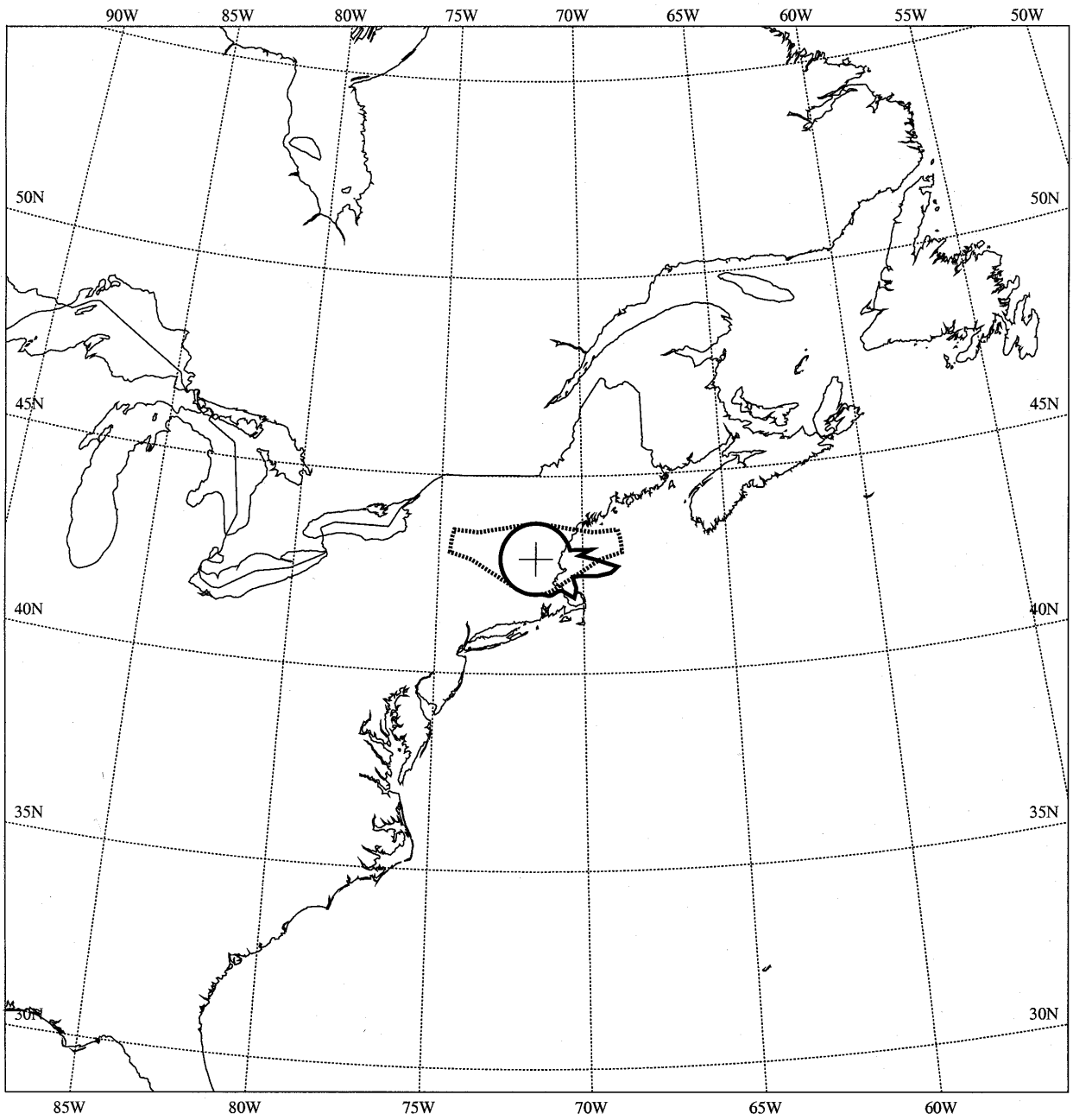

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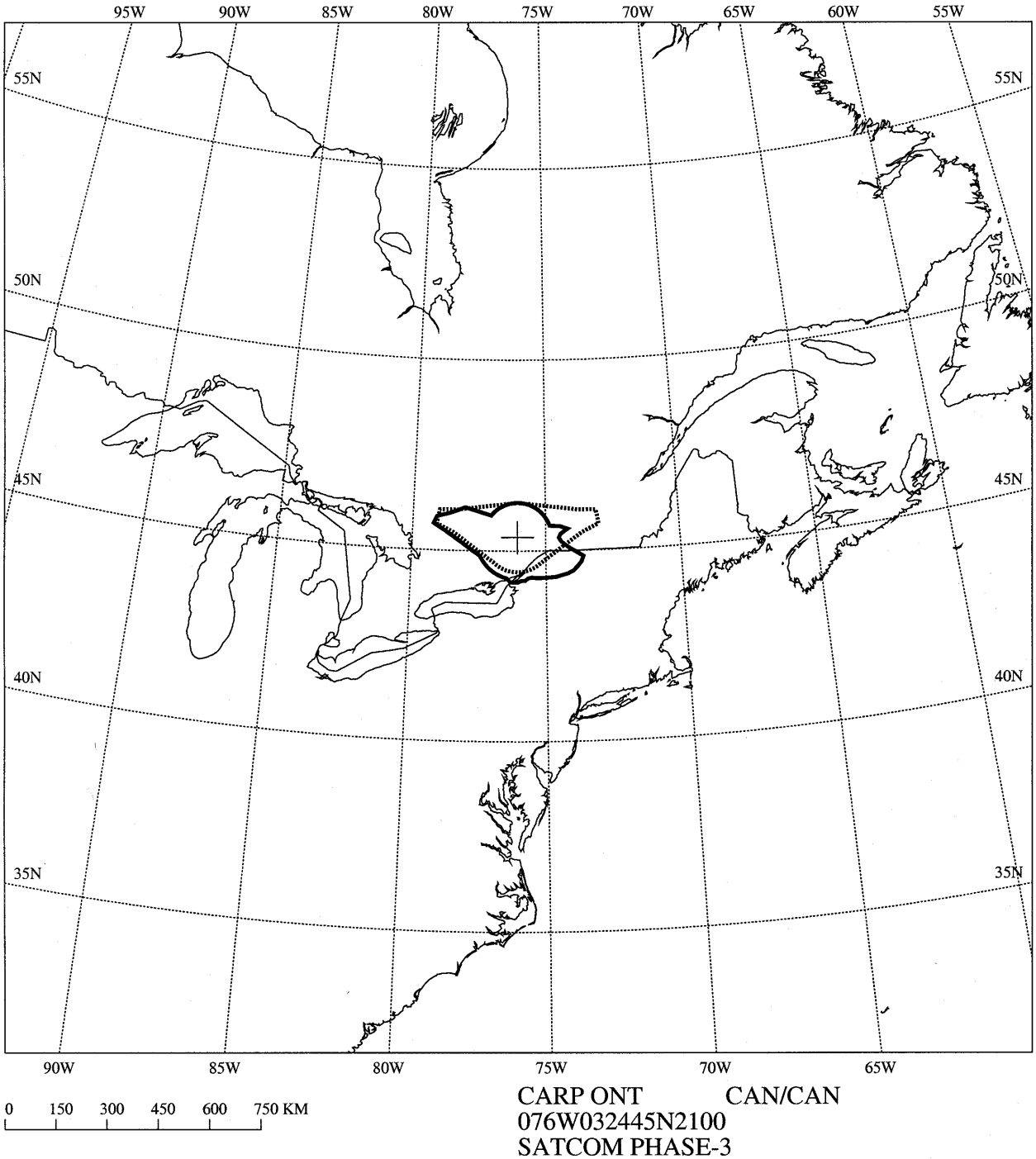

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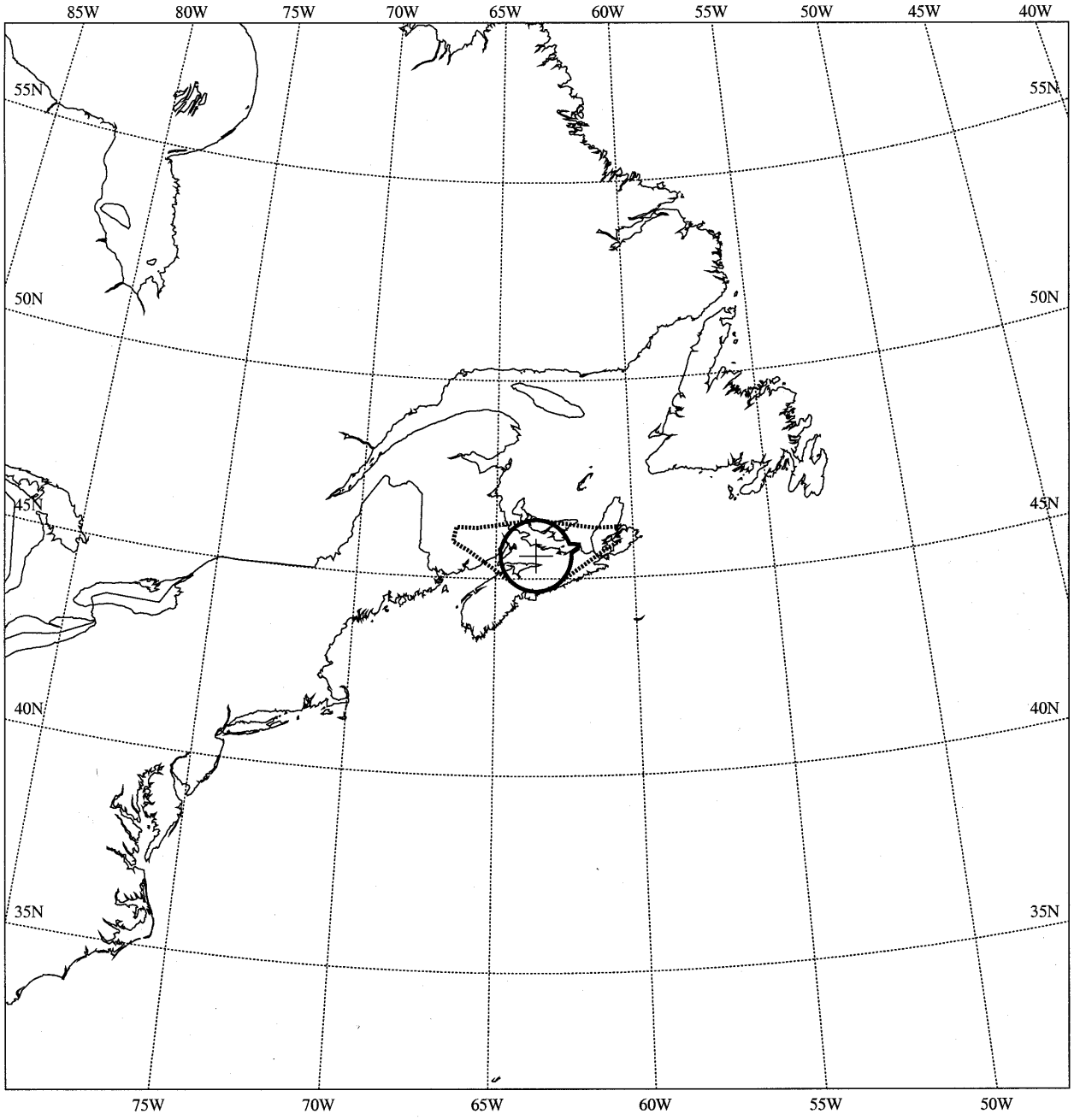

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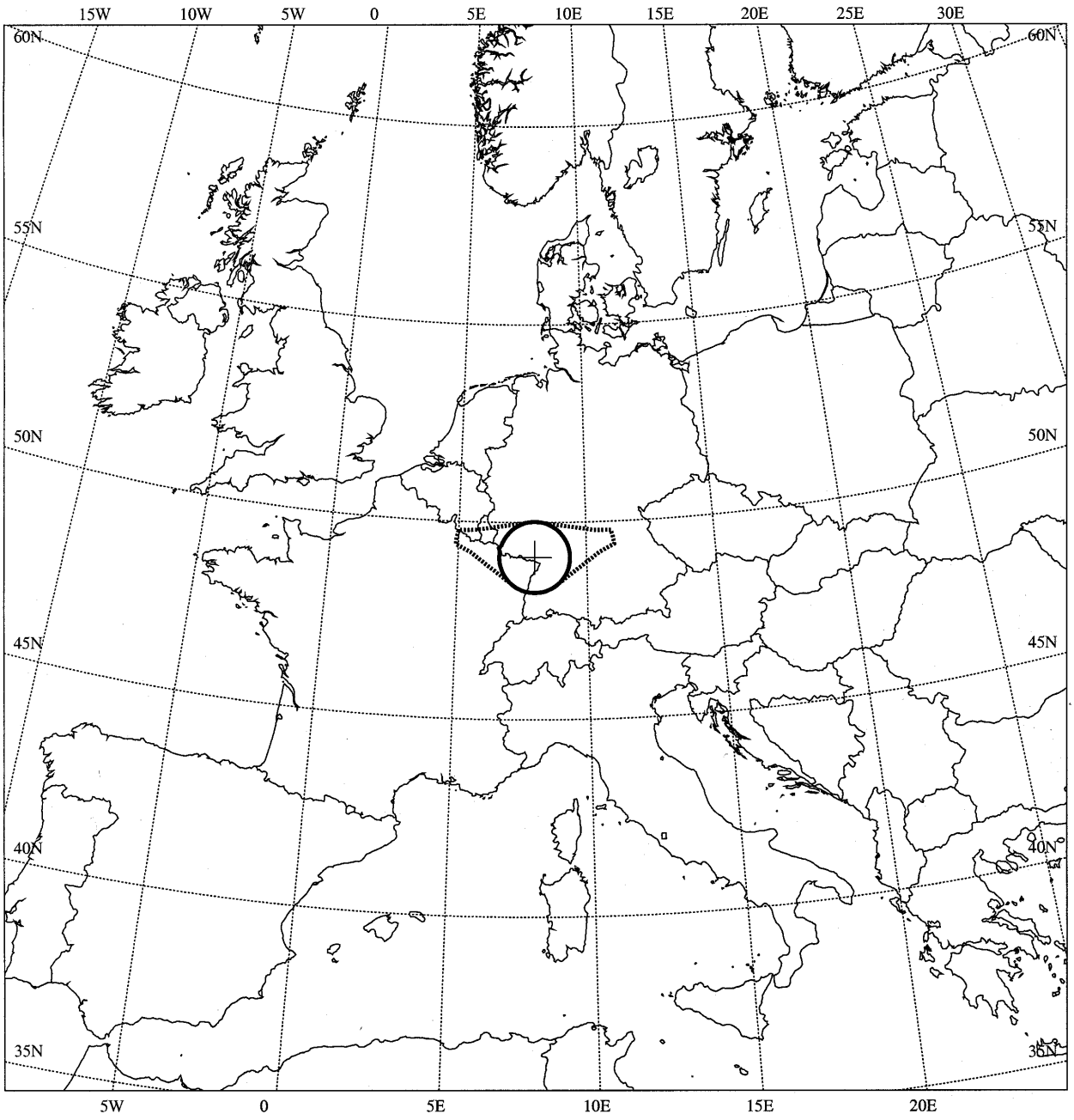

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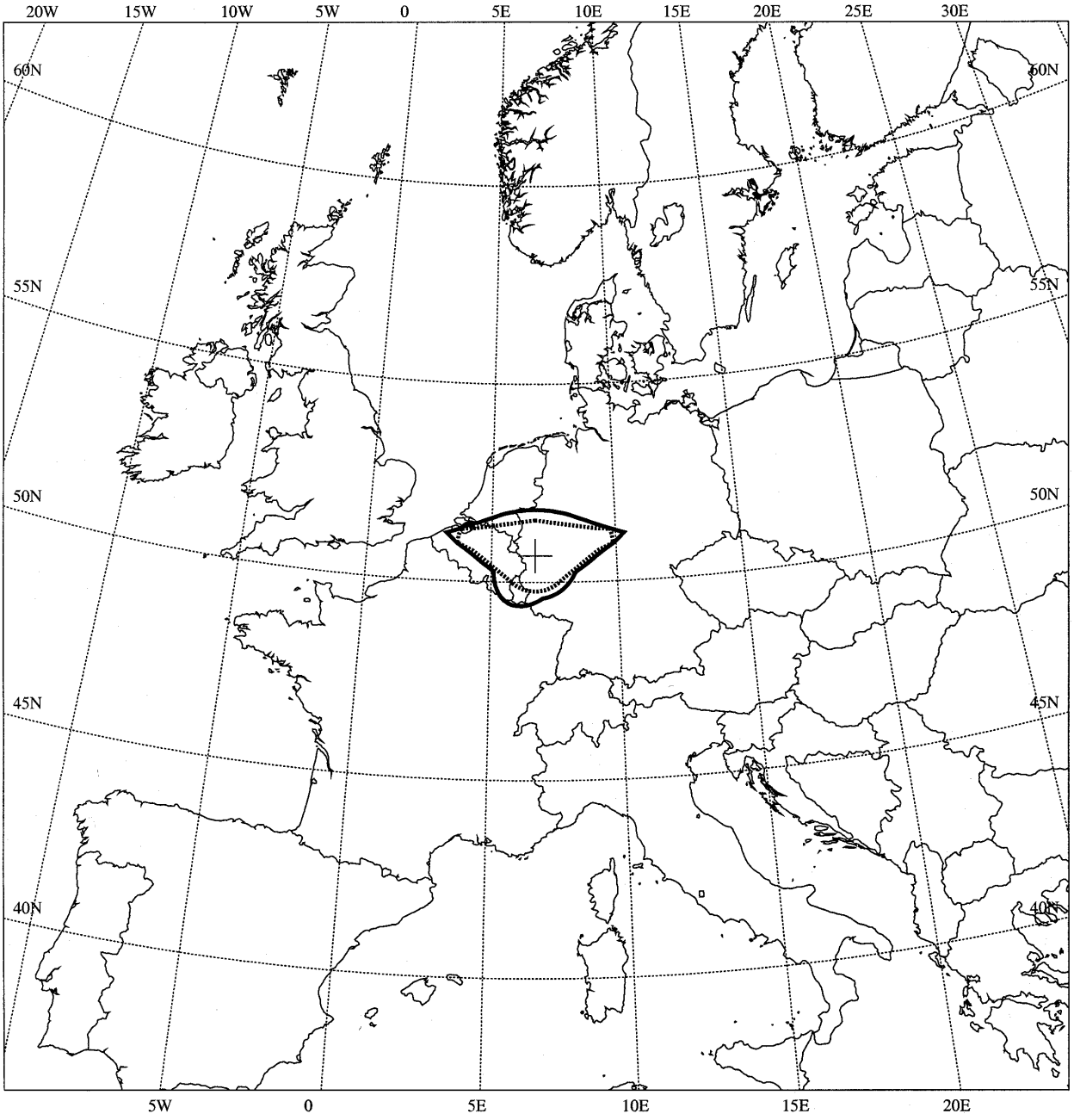

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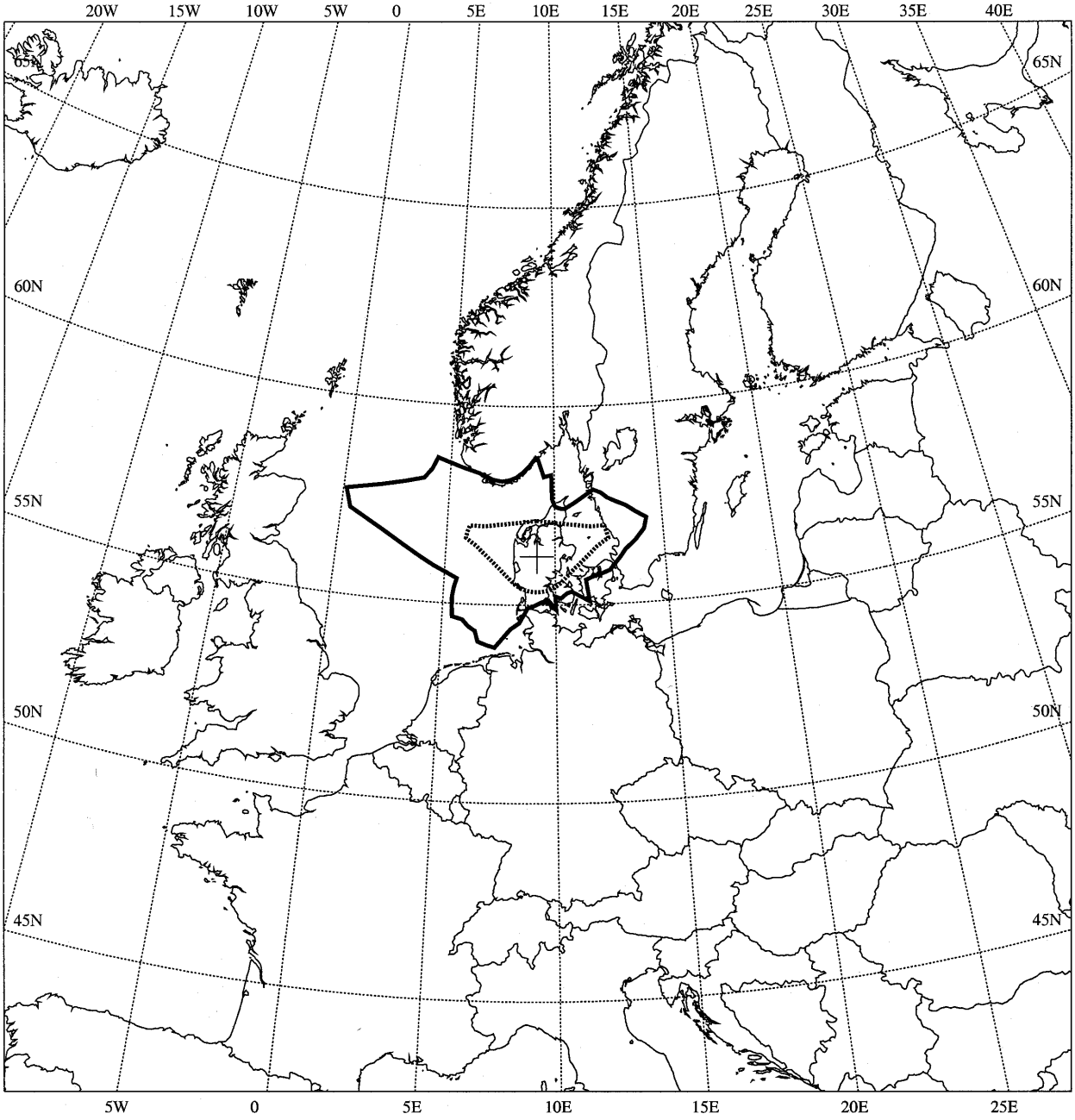

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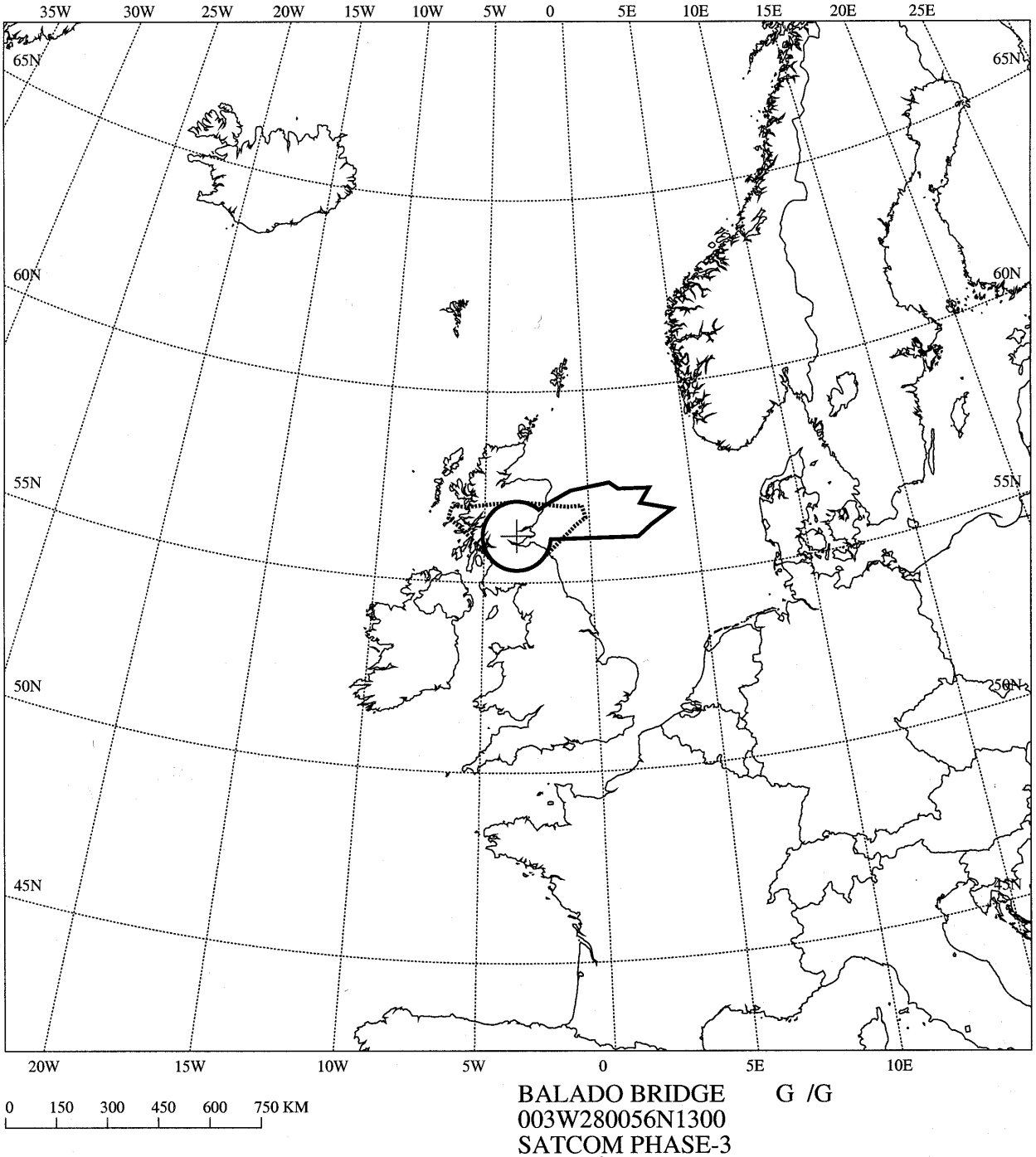

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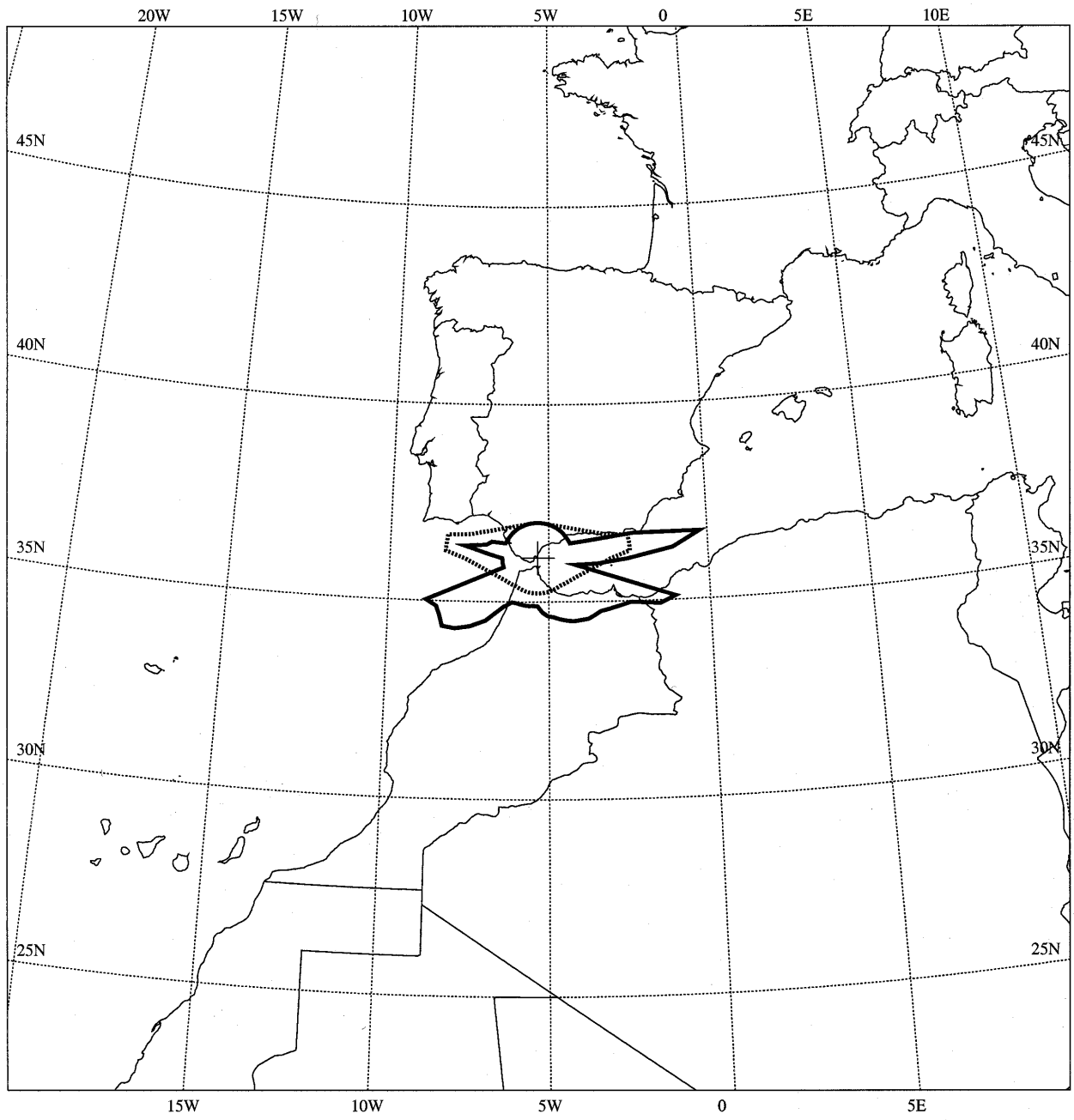

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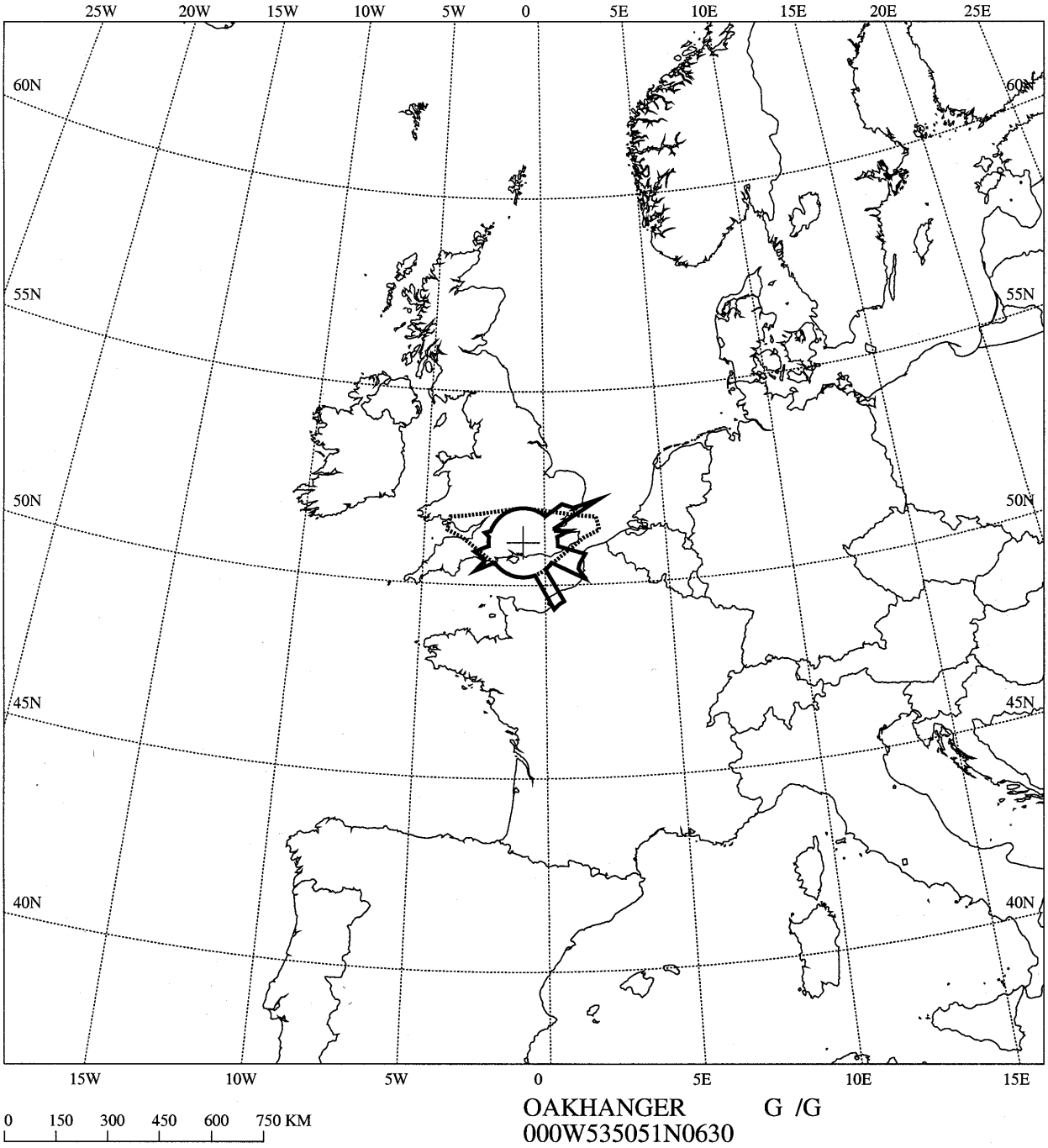

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CONTOURS DE COORDINATION DE LA STATION TERRIENNE DE TRANSMISSION
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CONTOURS DE COORDINATION DE LA STATION TERRIENNE DE TRANSMISSION
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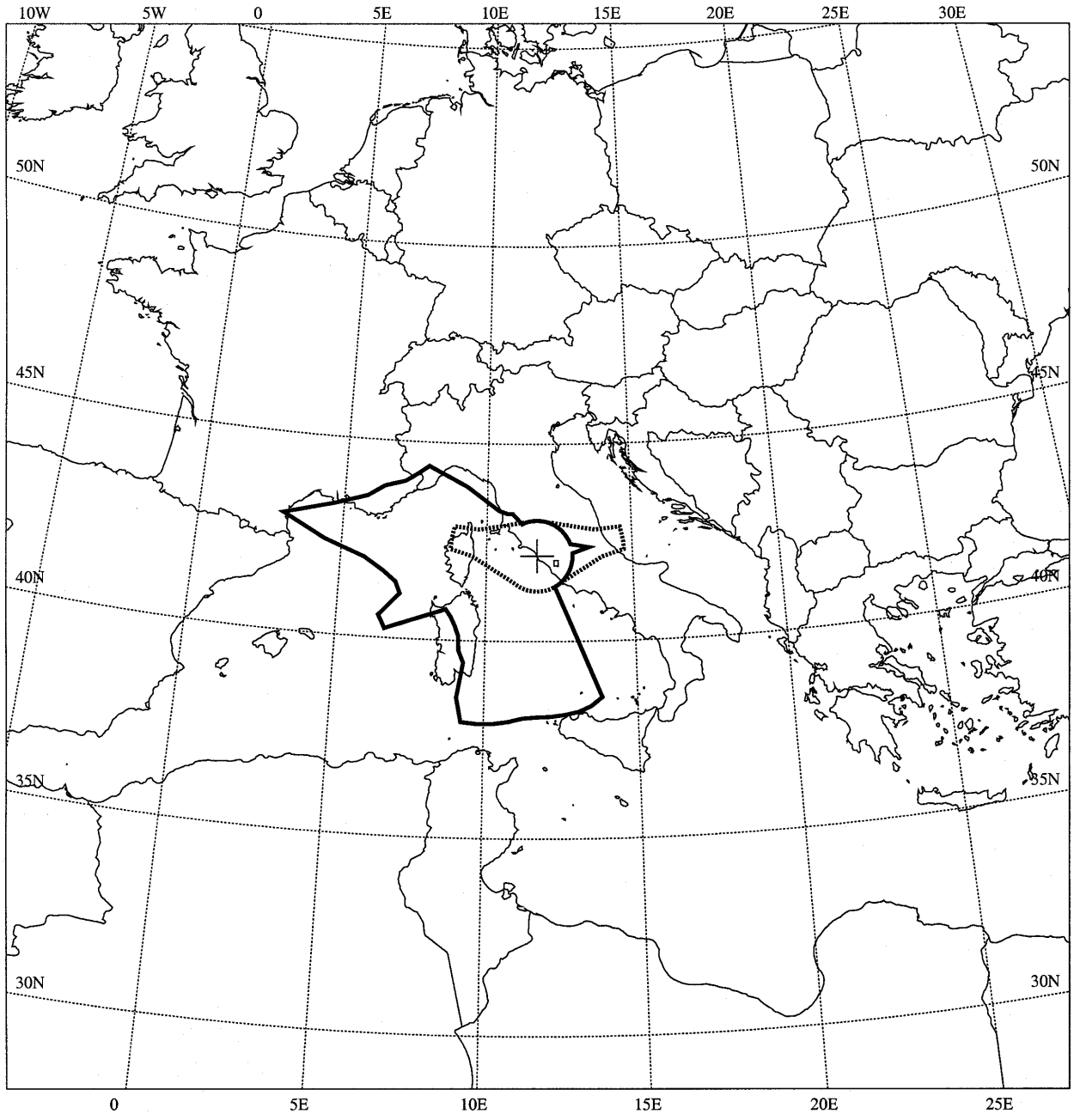

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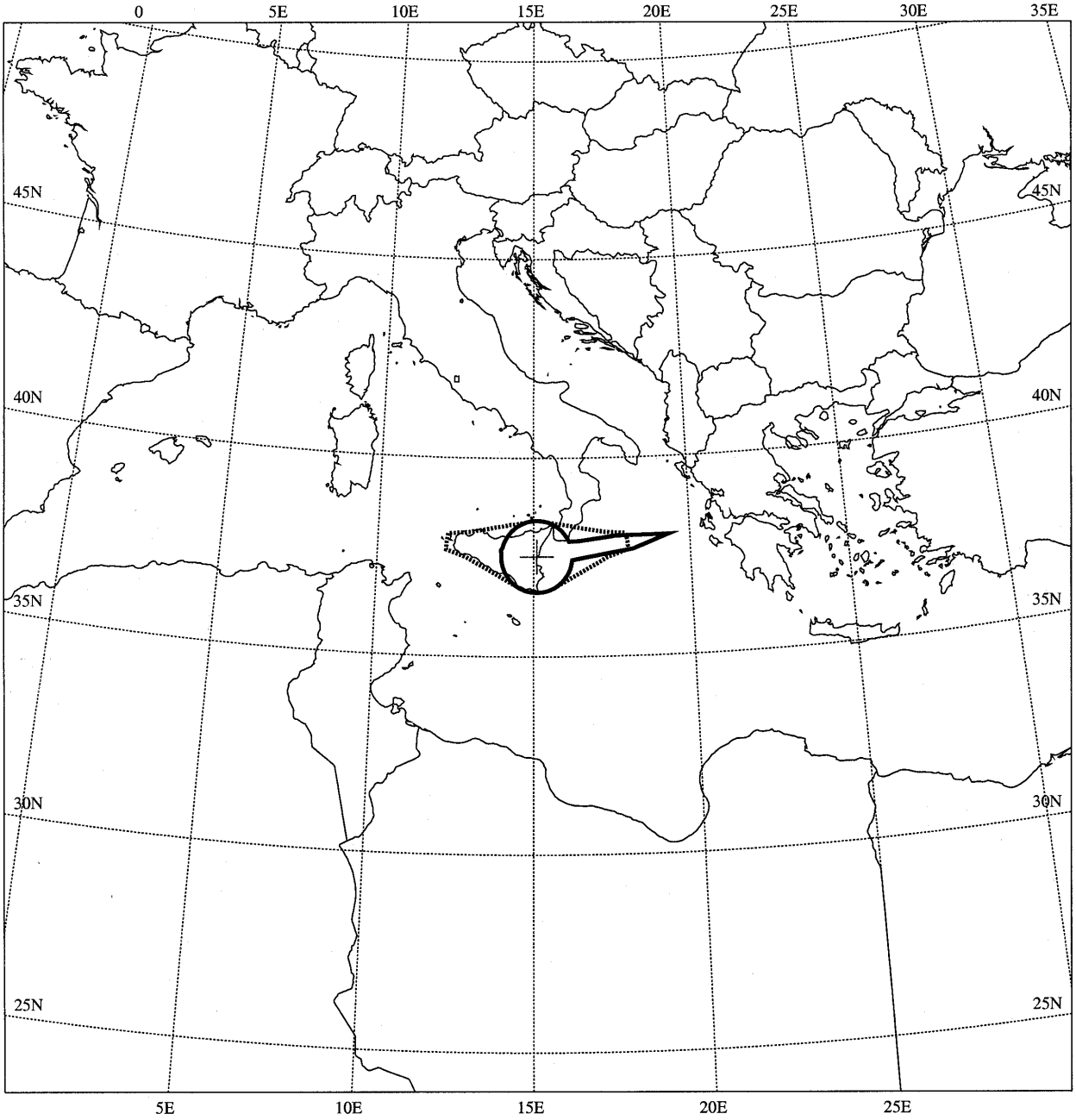
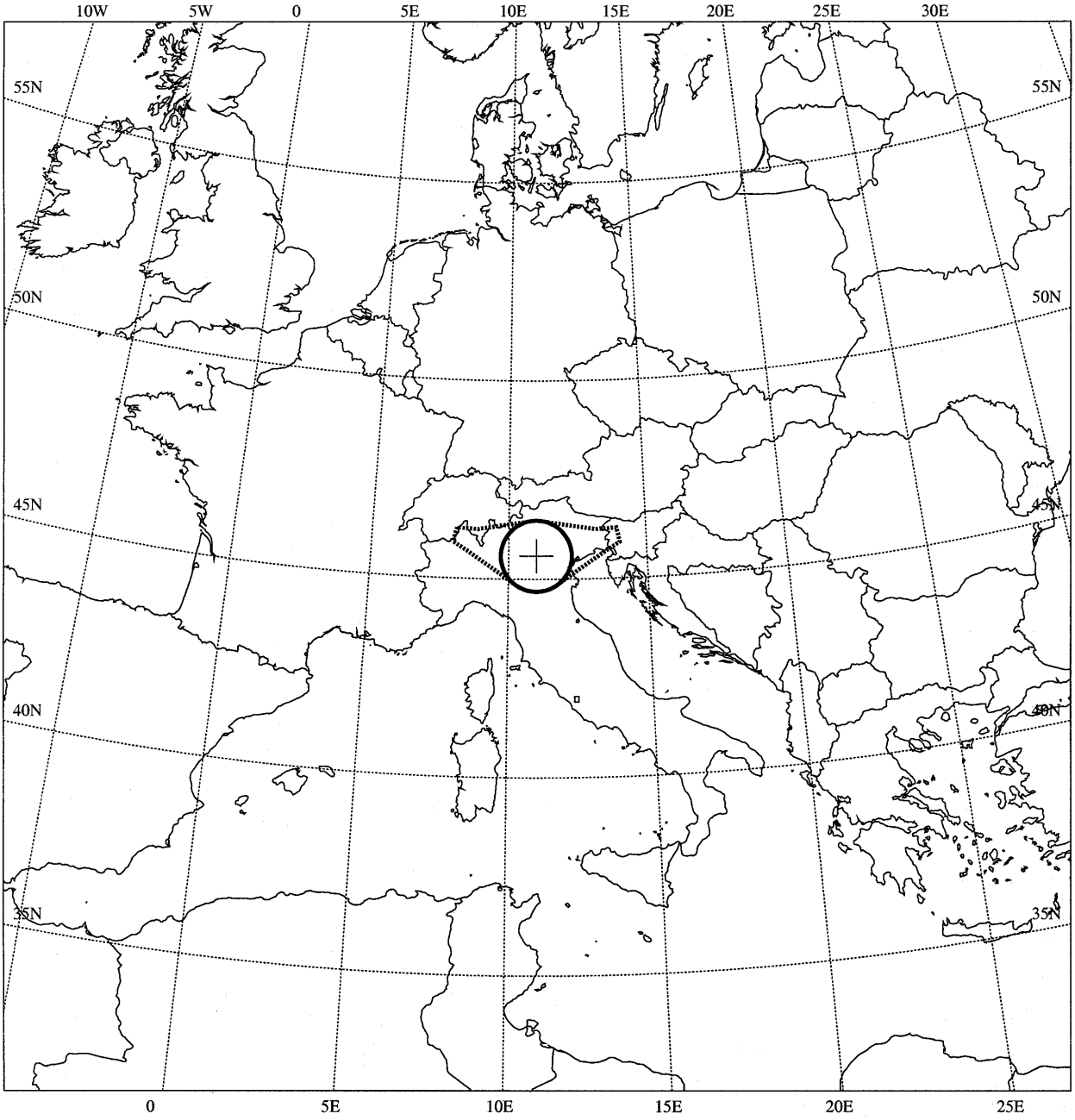
CONTORNOS DE COORDINACION DE LA ESTACION TERRENA TRANSMISORA



PAPORTELLO I /I
015E060037N3100
SATCOM PHASE-3
8025.0- 8165.0 MHZ

510063021

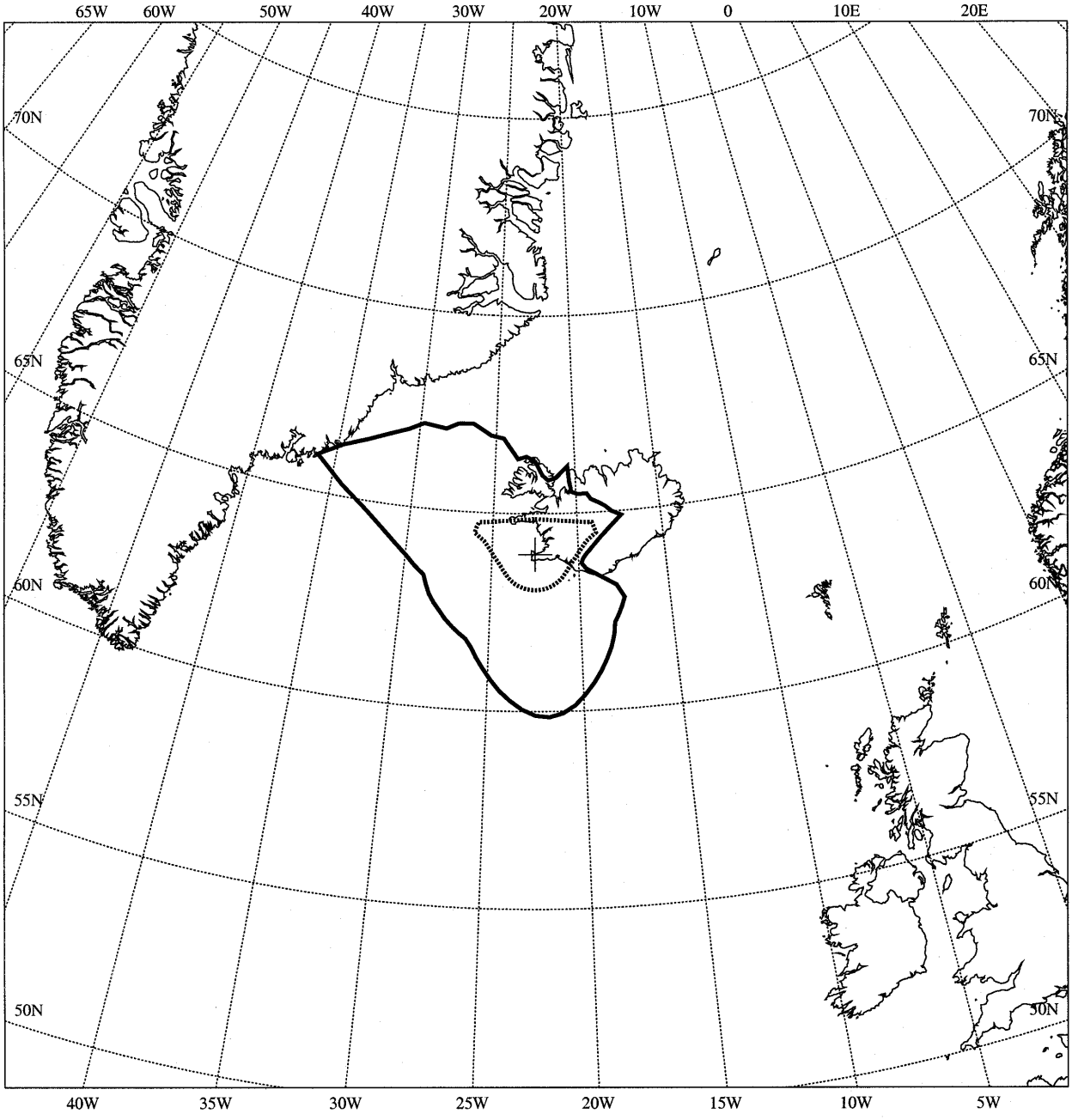
CONTOURS DE COORDINATION DE LA STATION TERRIENNE DE TRANSMISSION
TRANSMITTING EARTH STATION COORDINATION CONTOURS
CONTORNOS DE COORDINACION DE LA ESTACION TERRENA TRANSMISORA



VERONA I /I
011E000045N3500
SATCOM PHASE-3
8025.0- 8165.0 MHZ

510063071

CONTOURS DE COORDINATION DE LA STATION TERRIENNE DE TRANSMISSION
TRANSMITTING EARTH STATION COORDINATION CONTOURS
CONTORNOS DE COORDINACION DE LA ESTACION TERRENA TRANSMISORA



KEFLAVIK ISL/ISL
022W300063N5800
SATCOM PHASE-3
8025.0- 8165.0 MHZ

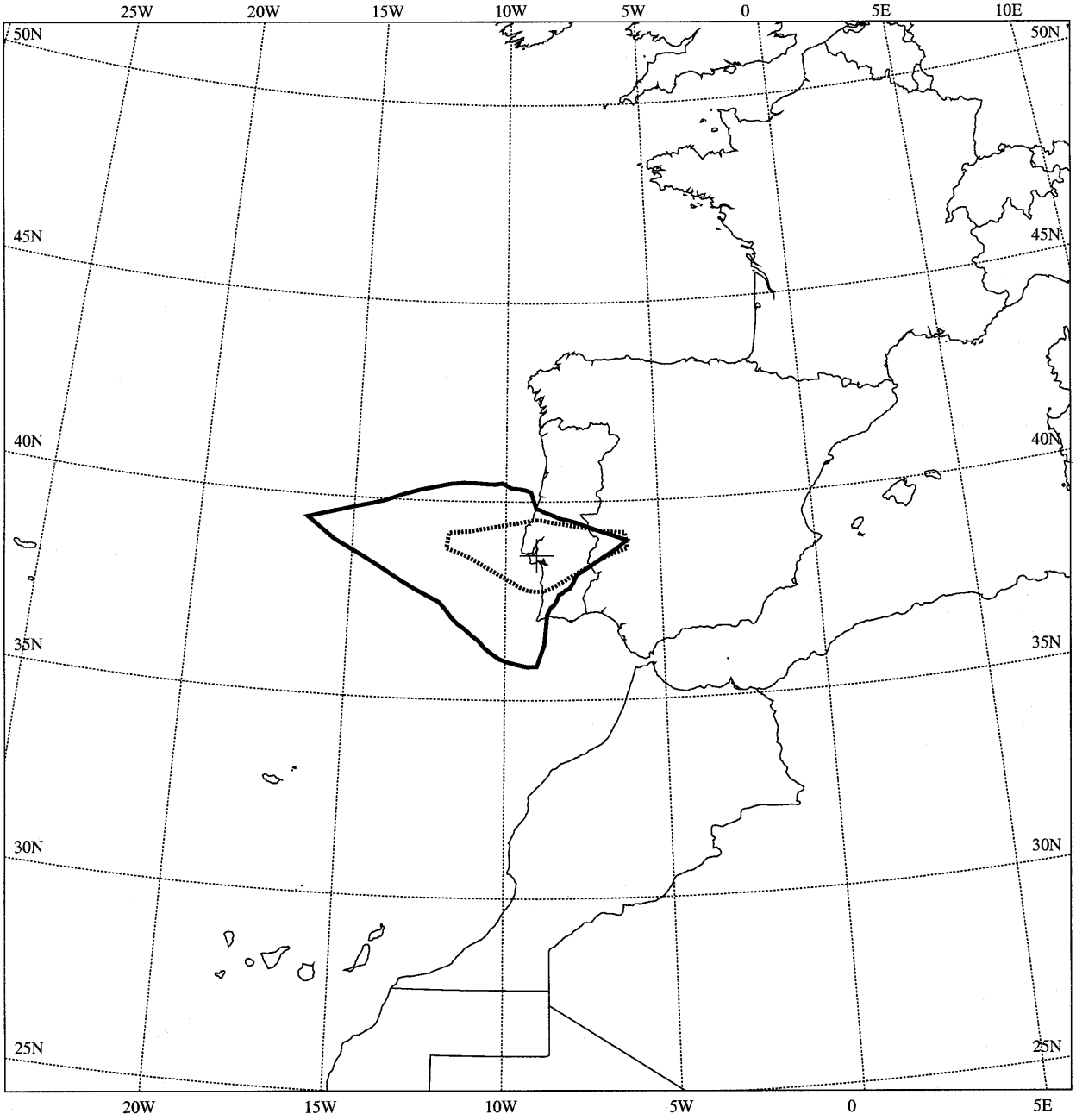
510063031

CONTOURS DE COORDINATION DE LA STATION TERRIENNE DE TRANSMISSION
TRANSMITTING EARTH STATION COORDINATION CONTOURS
CONTORNOS DE COORDINACION DE LA ESTACION TERRENA TRANSMISORA

KEFLAVIK 1 ISL/ISL
021W570064N0000
SATCOM PHASE-3
8035.3- 8125.8 MHZ

510063041

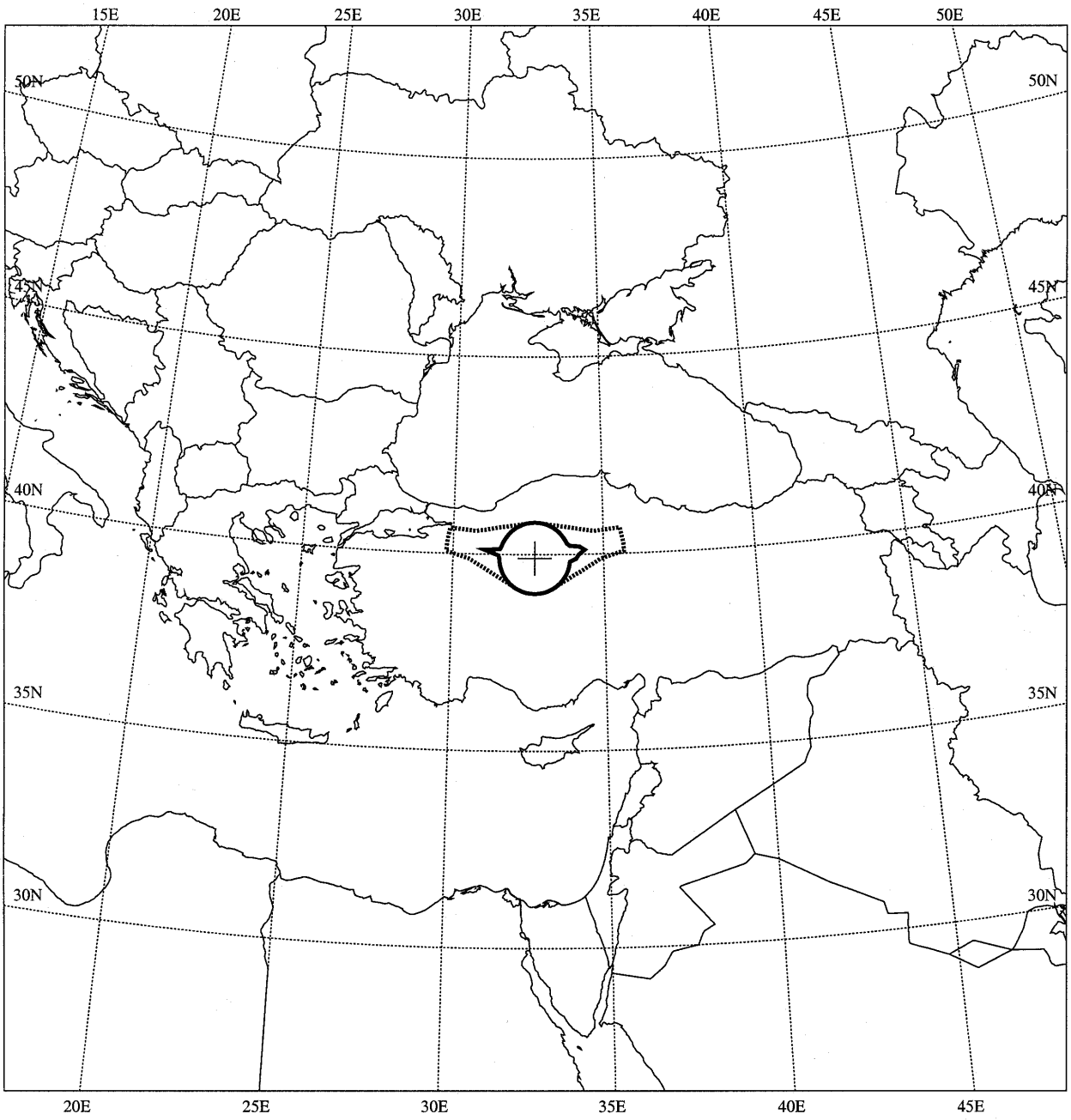
CONTOURS DE COORDINATION DE LA STATION TERRIENNE DE TRANSMISSION
TRANSMITTING EARTH STATION COORDINATION CONTOURS
CONTORNOS DE COORDINACION DE LA ESTACION TERRENA TRANSMISORA



LISBOA POR/POR
009W000038N3800
SATCOM PHASE-3
8025.0- 8165.0 MHZ

510063081

CONTOURS DE COORDINATION DE LA STATION TERRIENNE DE TRANSMISSION
TRANSMITTING EARTH STATION COORDINATION CONTOURS
CONTORNOS DE COORDINACION DE LA ESTACION TERRENA TRANSMISORA



ANKARA TUR/TUR
032E430039N5400
SATCOM PHASE-3
8096.1- 8146.4 MHZ

510063091

CONTOURS DE COORDINATION DE LA STATION TERRIENNE DE TRANSMISSION
TRANSMITTING EARTH STATION COORDINATION CONTOURS
CONTORNOS DE COORDINACION DE LA ESTACION TERRENA TRANSMISORA

ANKARA 1 TUR/TUR
032E420039N5400
SATCOM PHASE-3
8025.0- 8165.0 MHZ

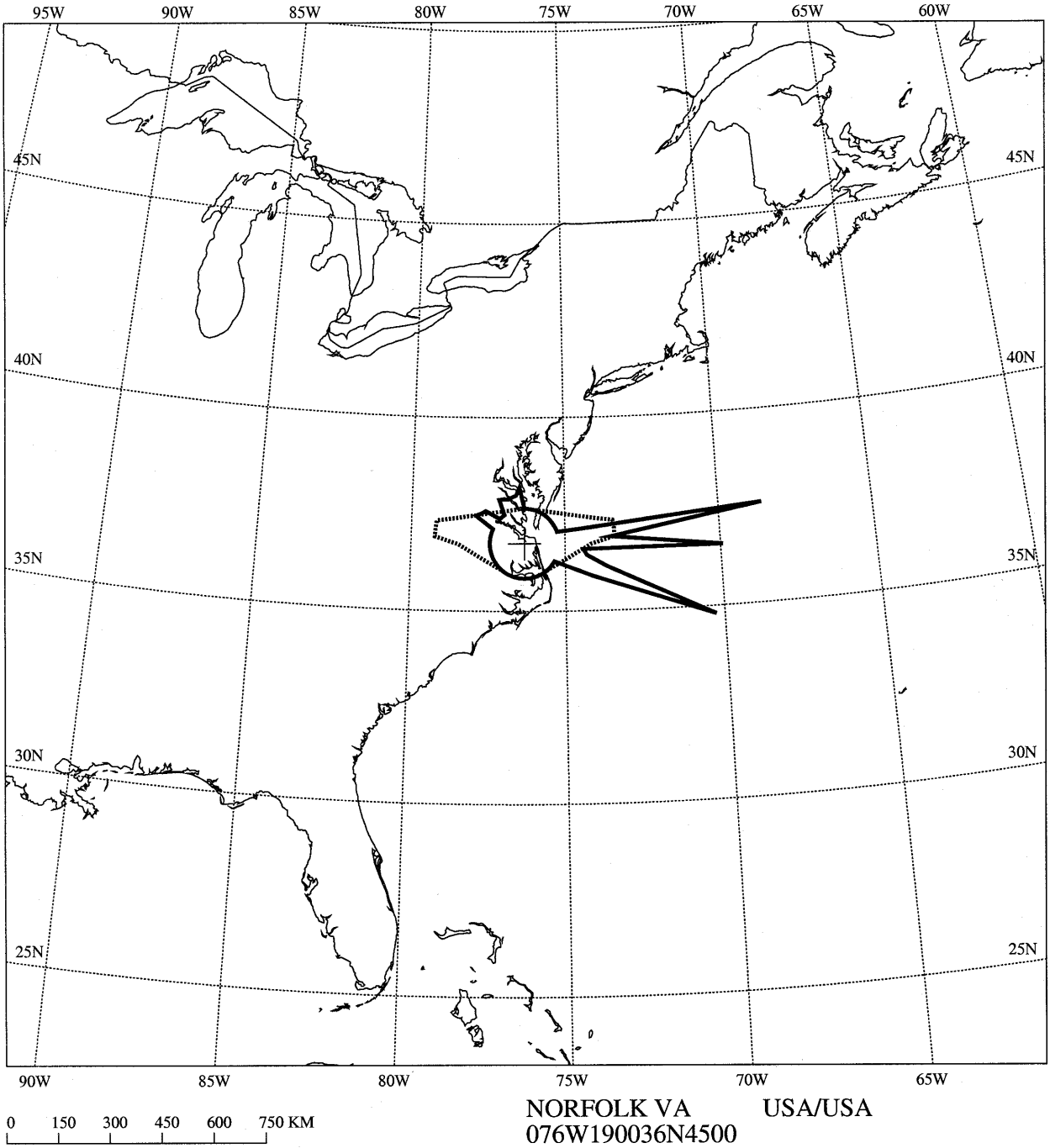
510063101

CONTOURS DE COORDINATION DE LA STATION TERRIENNE DE TRANSMISSION
TRANSMITTING EARTH STATION COORDINATION CONTOURS
CONTORNOS DE COORDINACION DE LA ESTACION TERRENA TRANSMISORA

IZMIR TUR/TUR
027E010038N1900
SATCOM PHASE-3
8025.0- 8165.0 MHZ

510063111

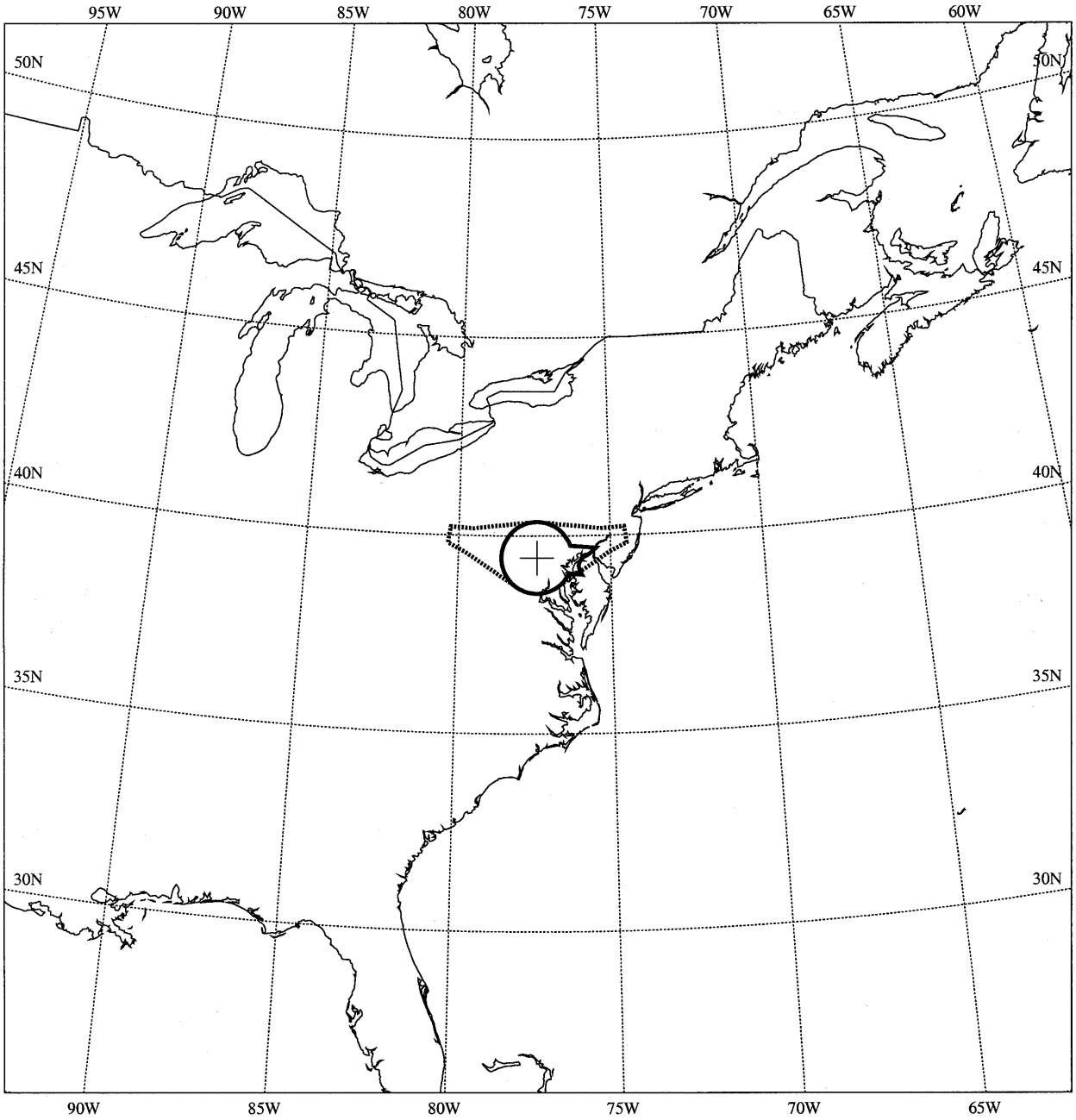
CONTOURS DE COORDINATION DE LA STATION TERRIENNE DE TRANSMISSION
TRANSMITTING EARTH STATION COORDINATION CONTOURS
CONTORNOS DE COORDINACION DE LA ESTACION TERRENA TRANSMISORA



NORFOLK VA USA/USA
076W190036N4500
SATCOM PHASE-3
8025.0- 8165.0 MHZ

510063121

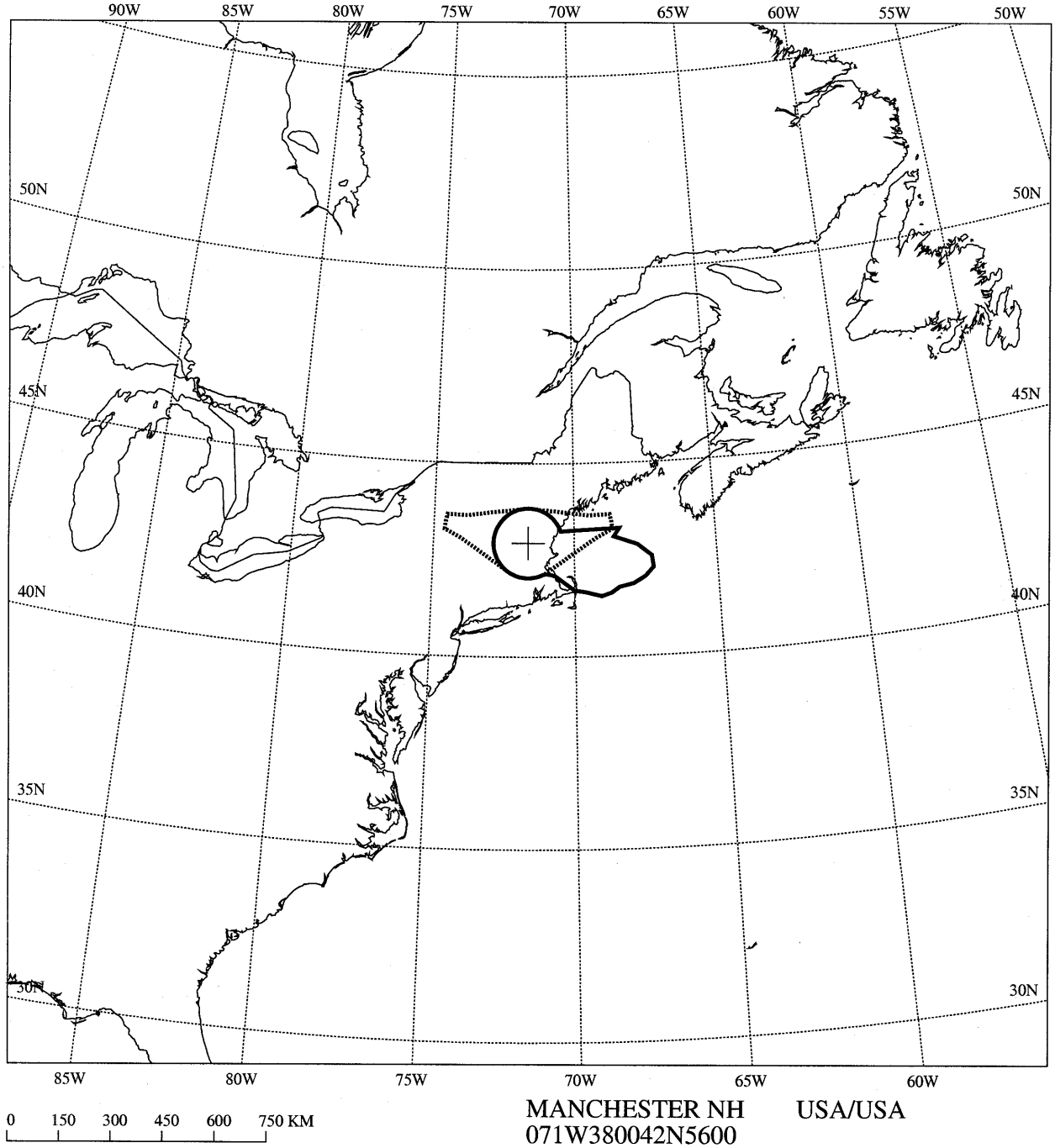
CONTOURS DE COORDINATION DE LA STATION TERRIENNE DE TRANSMISSION
TRANSMITTING EARTH STATION COORDINATION CONTOURS
CONTORNOS DE COORDINACION DE LA ESTACION TERRENA TRANSMISORA



FT DETRICK MD USA/USA
077W250039N2700
USGCSS PH3 ATL
8025.0- 8400.0 MHZ

510063331

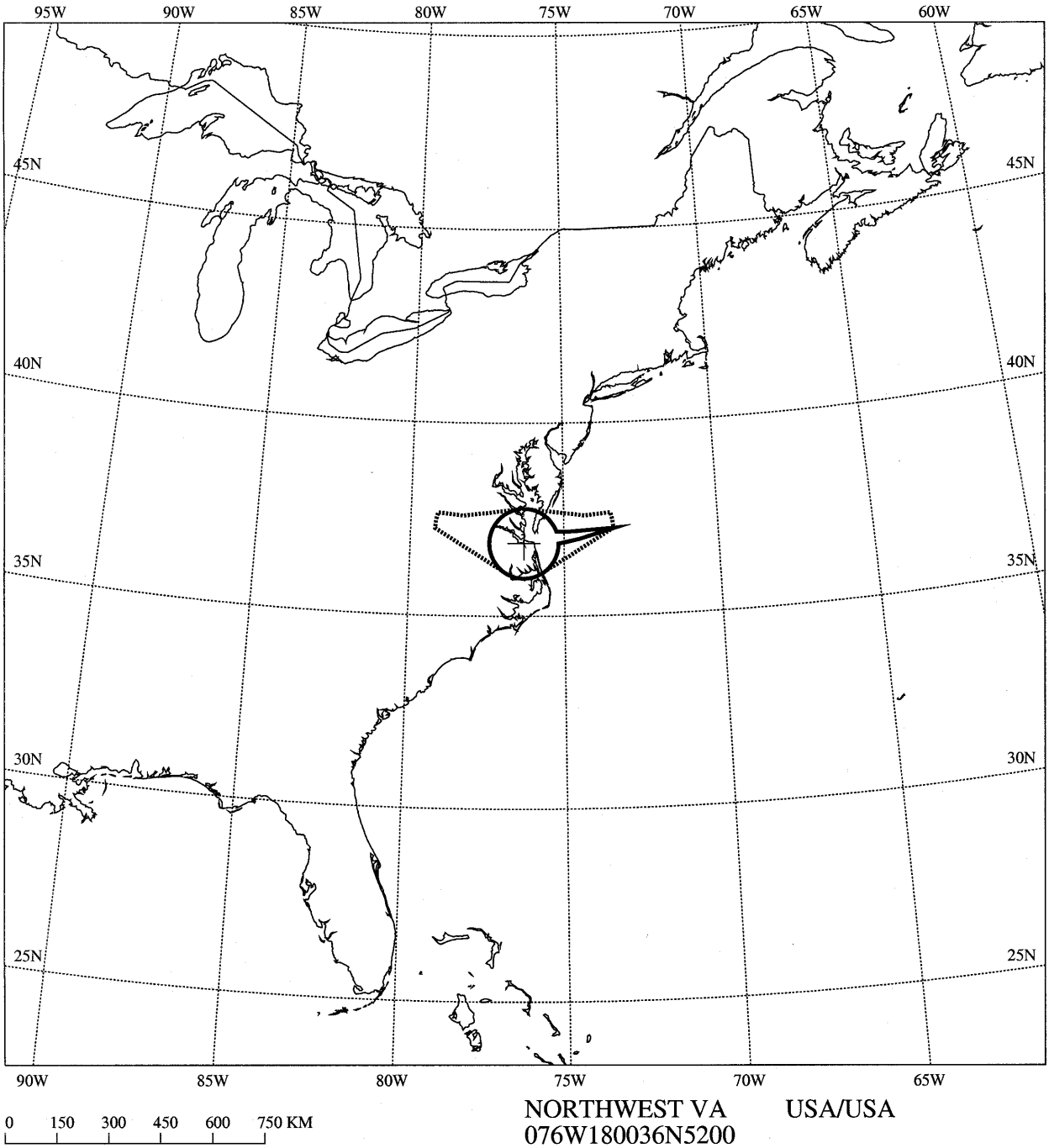
CONTOURS DE COORDINATION DE LA STATION TERRIENNE DE TRANSMISSION
TRANSMITTING EARTH STATION COORDINATION CONTOURS
CONTORNOS DE COORDINACION DE LA ESTACION TERRENA TRANSMISORA



MANCHESTER NH USA/USA
071W380042N5600
USGCSS PH3 ATL
8025.0- 8400.0 MHZ

510063341

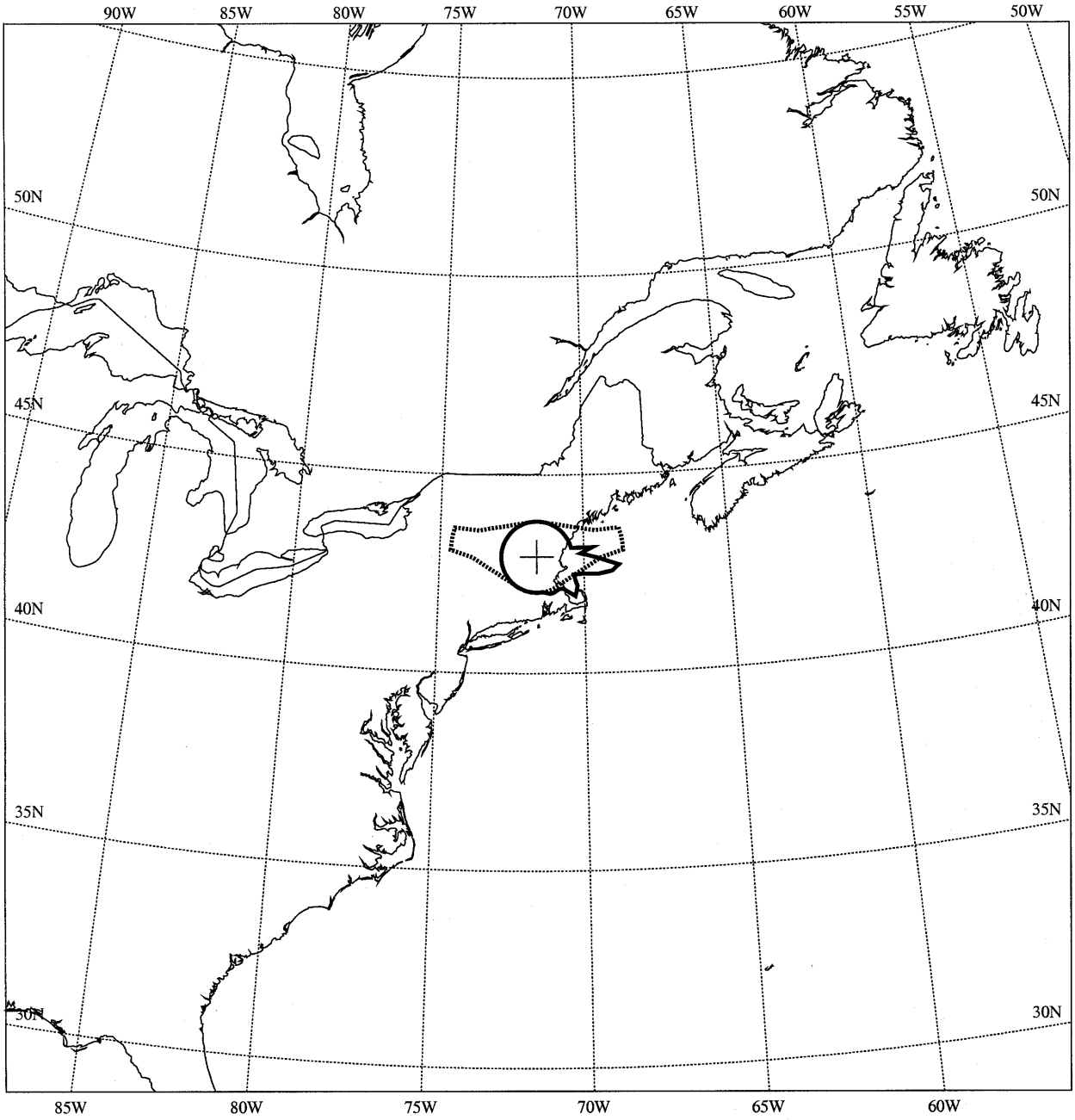
CONTOURS DE COORDINATION DE LA STATION TERRIENNE DE TRANSMISSION
TRANSMITTING EARTH STATION COORDINATION CONTOURS
CONTORNOS DE COORDINACION DE LA ESTACION TERRENA TRANSMISORA



NORTHWEST VA USA/USA
076W180036N5200
USGCSS PH3 ATL
8025.0- 8400.0 MHZ

510063351

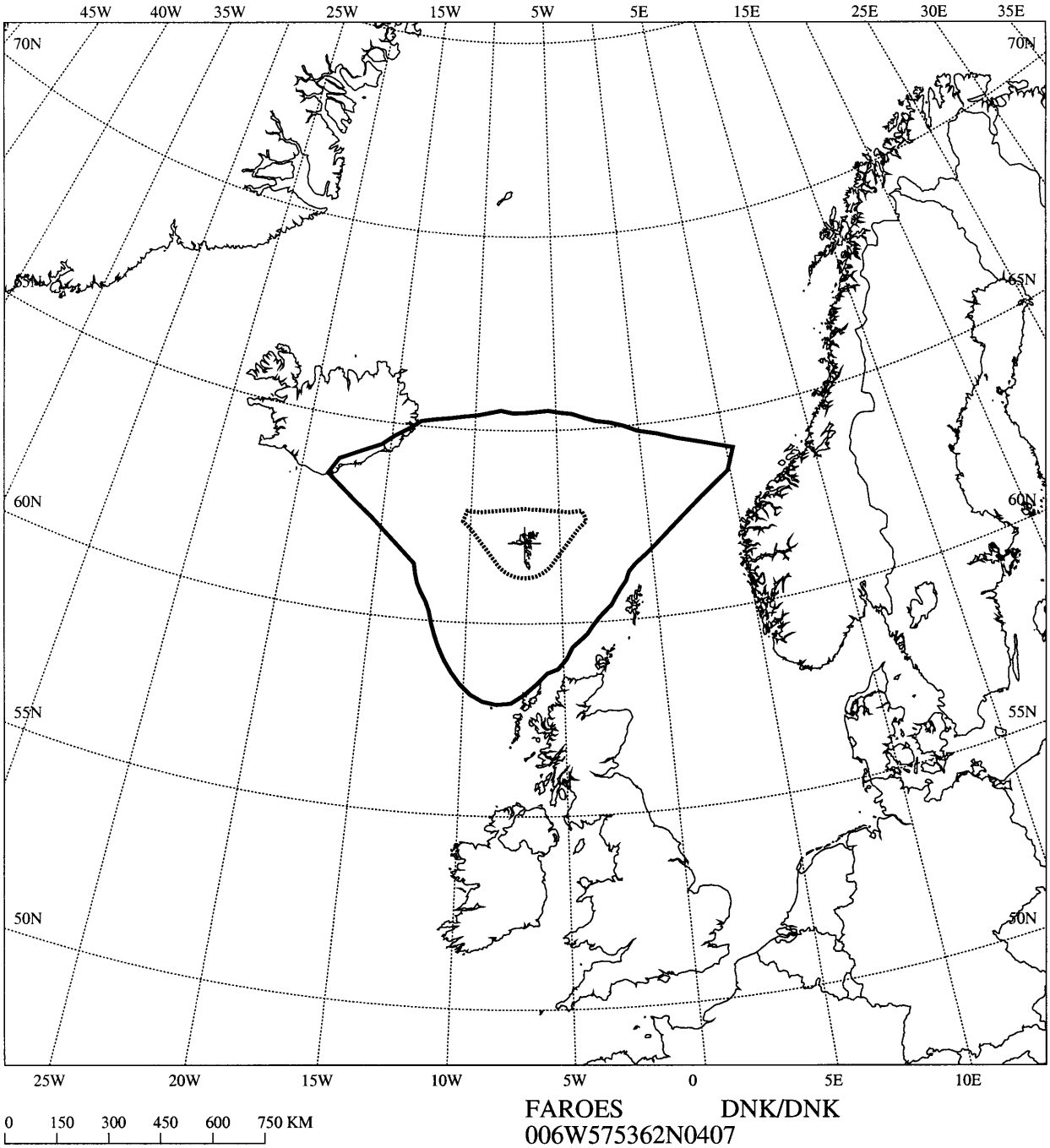
CONTOURS DE COORDINATION DE LA STATION TERRIENNE DE TRANSMISSION
TRANSMITTING EARTH STATION COORDINATION CONTOURS
CONTORNOS DE COORDINACION DE LA ESTACION TERRENA TRANSMISORA



MANCHESTER NH USA/USA
071W374842N5512
USGCSS PH3 W ATL
8025.0- 8400.0 MHZ

510063791

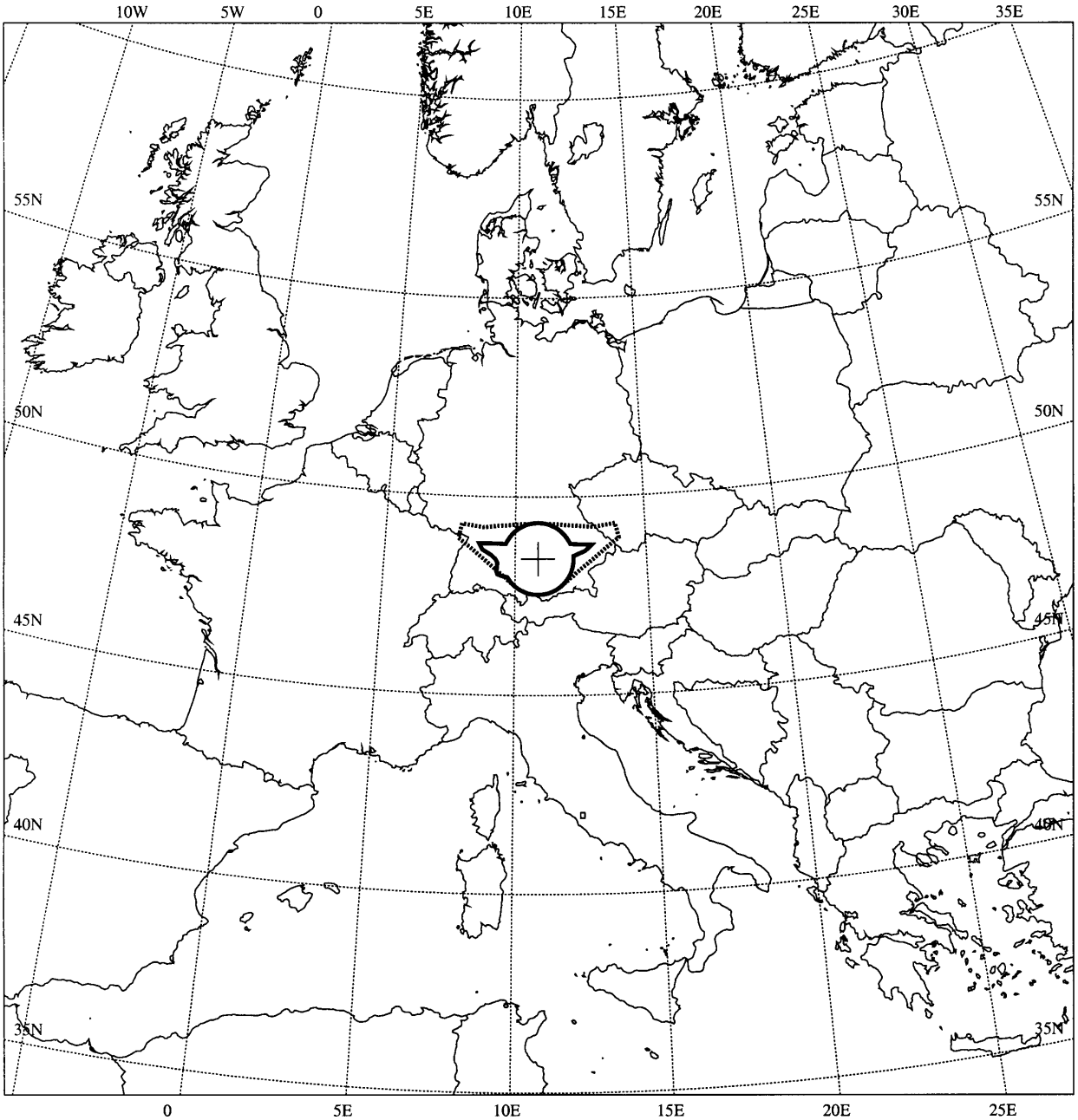
CONTOURS DE COORDINATION DE LA STATION TERRIENNE DE TRANSMISSION
TRANSMITTING EARTH STATION COORDINATION CONTOURS
CONTORNOS DE COORDINACION DE LA ESTACION TERRENA TRANSMISORA



FAROES DNK/DNK
006W575362N0407
SATCOM PHASE-3
8125.4- 8126.9 MHZ

510063451

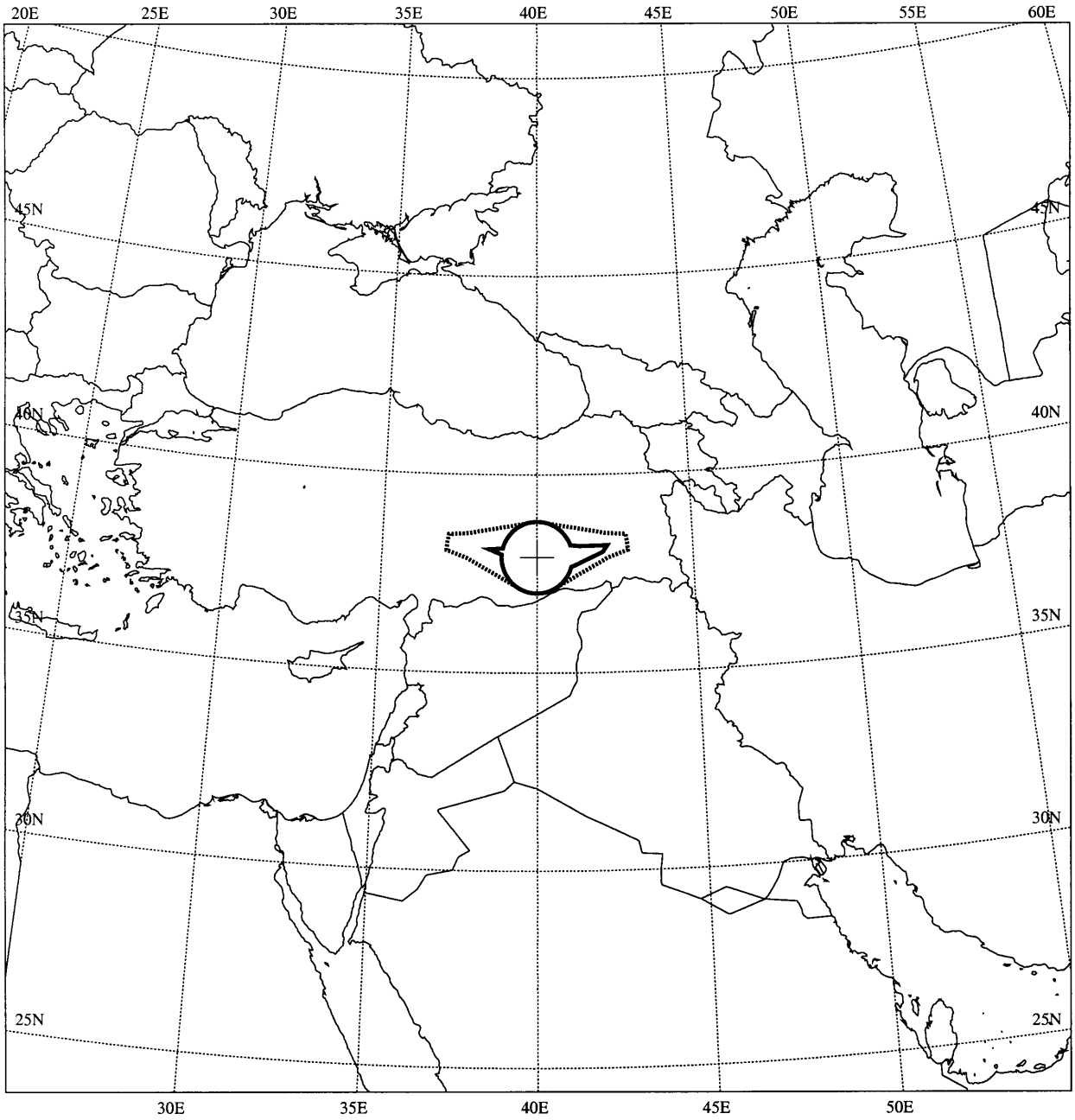
CONTOURS DE COORDINATION DE LA STATION TERRIENNE DE TRANSMISSION
TRANSMITTING EARTH STATION COORDINATION CONTOURS
CONTORNOS DE COORDINACION DE LA ESTACION TERRENA TRANSMISORA



AUGSBURG D /D
010E520048N2700
USGCSS PH3 W ATL
8271.8- 8272.2 MHZ

510063461

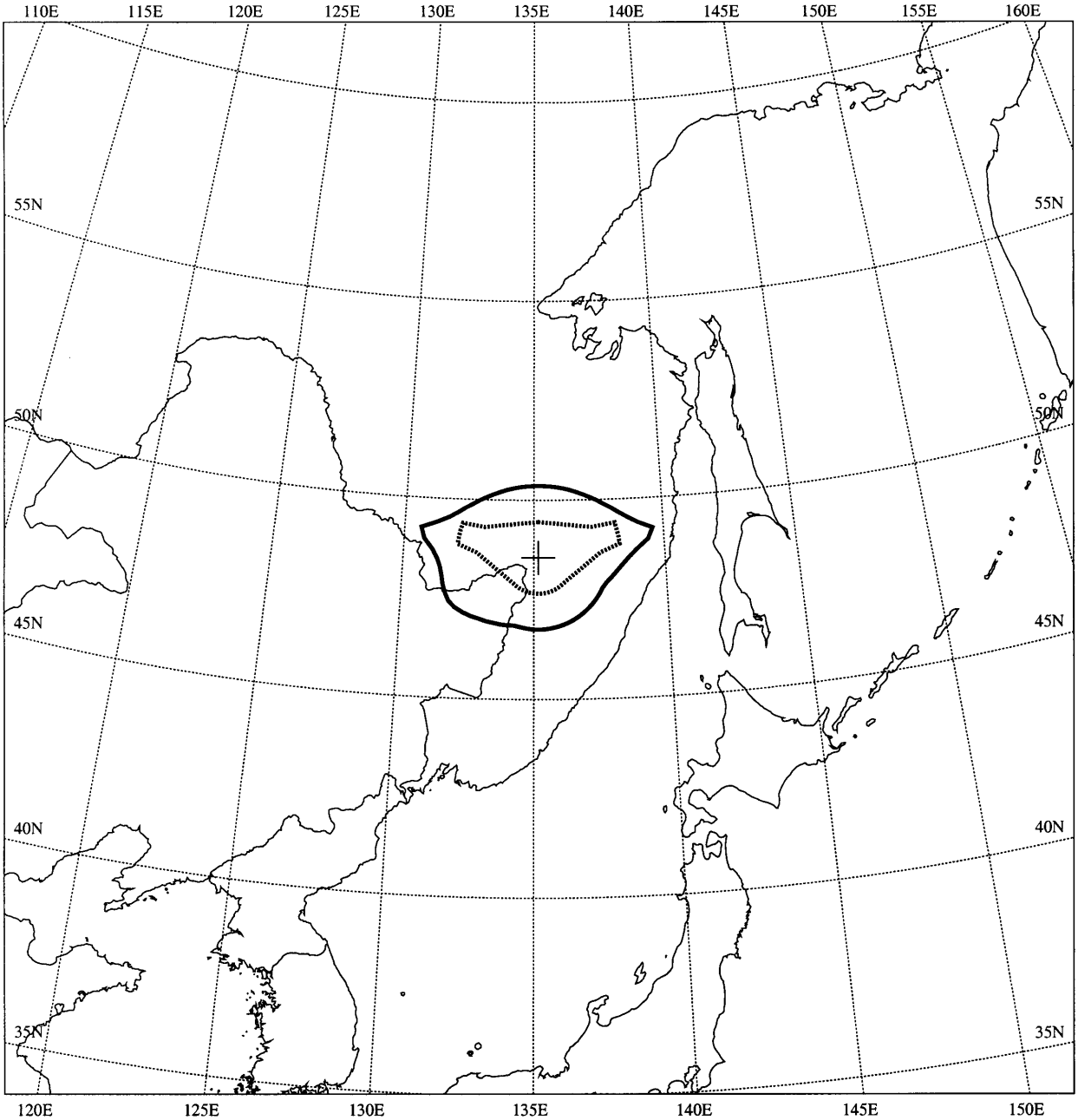
CONTOURS DE COORDINATION DE LA STATION TERRIENNE DE TRANSMISSION
TRANSMITTING EARTH STATION COORDINATION CONTOURS
CONTORNOS DE COORDINACION DE LA ESTACION TERRENA TRANSMISORA



PIRINCLIK TUR/TUR
039E593737N5417
USGCSS PH3 INDOC
8298.7- 8340.6 MHZ

510063511

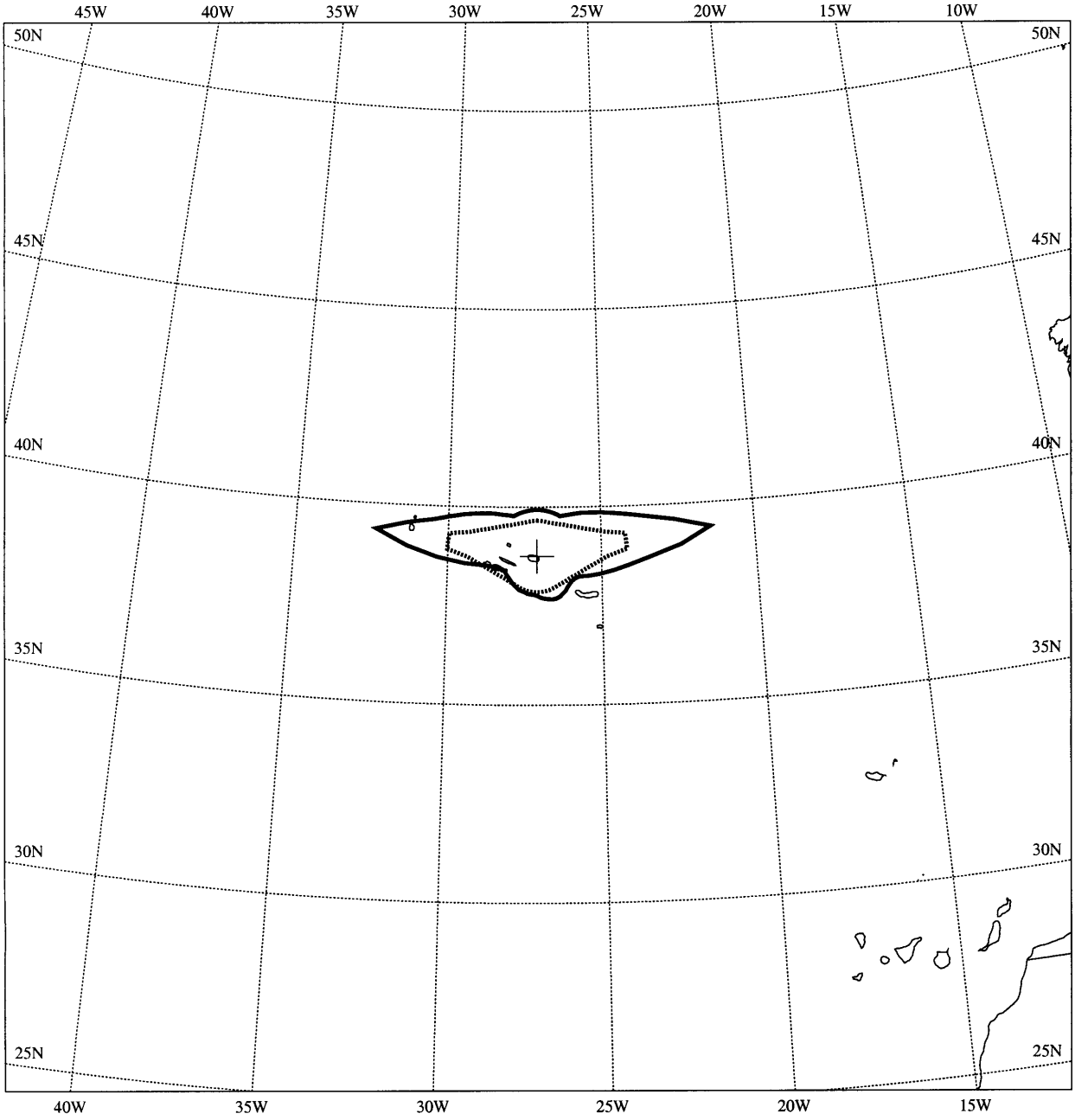
CONTOURS DE COORDINATION DE LA STATION TERRIENNE DE TRANSMISSION
TRANSMITTING EARTH STATION COORDINATION CONTOURS
CONTORNOS DE COORDINACION DE LA ESTACION TERRENA TRANSMISORA



KHABAROVSK RUS/RUS
135E100048N3300
GOMS-M
8175.0- 8215.0 MHZ

510064161

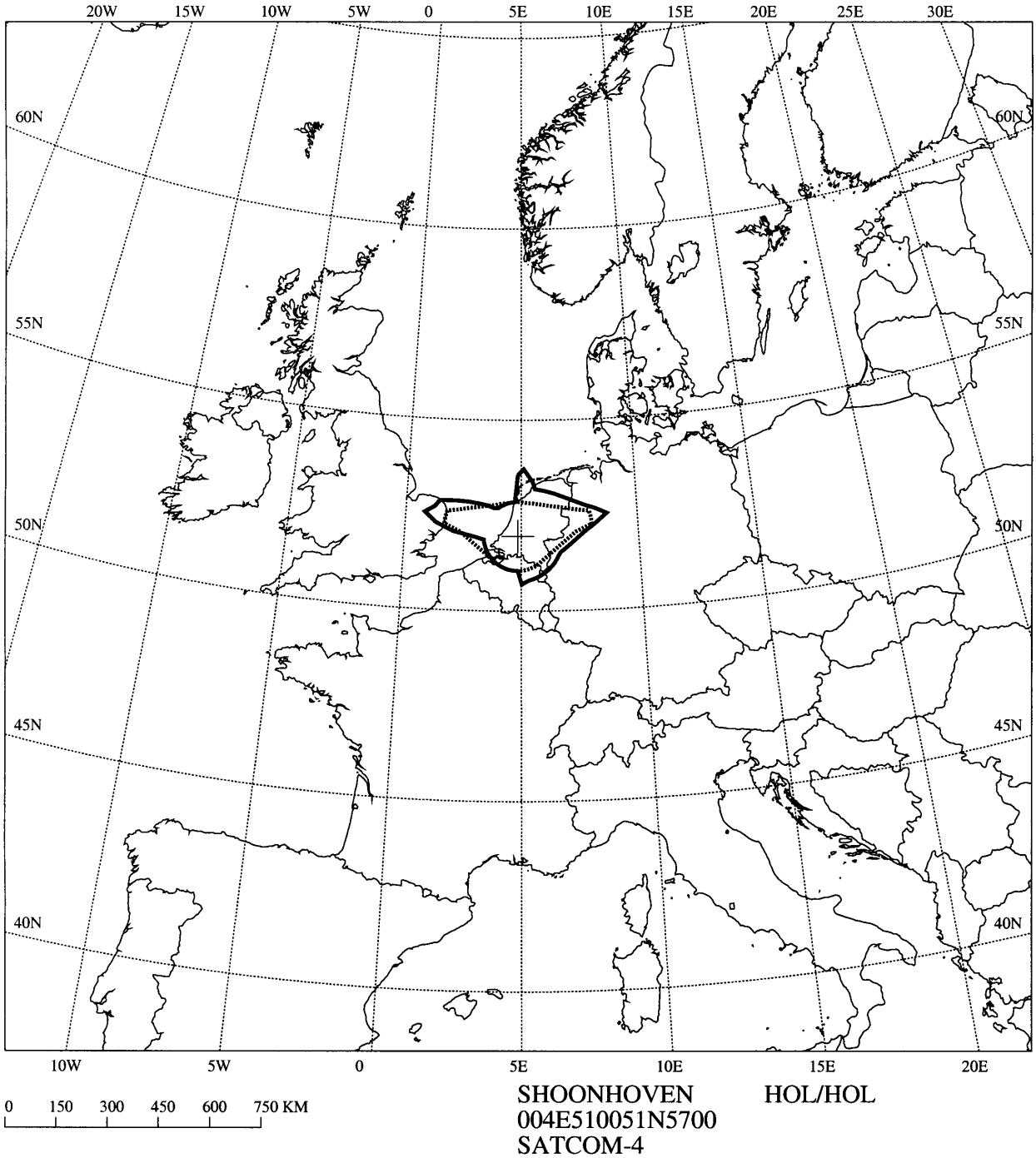
CONTOURS DE COORDINATION DE LA STATION TERRIENNE DE TRANSMISSION
TRANSMITTING EARTH STATION COORDINATION CONTOURS
CONTORNOS DE COORDINACION DE LA ESTACION TERRENA TRANSMISORA



LAJES POR/AZR
027W054538N4550
USGCSS PH3B ATL
8180.8- 8264.0 MHZ

510063531

CONTOURS DE COORDINATION DE LA STATION TERRIENNE DE TRANSMISSION
TRANSMITTING EARTH STATION COORDINATION CONTOURS
CONTORNOS DE COORDINACION DE LA ESTACION TERRENA TRANSMISORA



SHOONHOVEN HOL/HOL
004E510051N5700
SATCOM-4
8025.0- 8400.0 MHZ

510063541