

**LIST OF GEODETIC POSITIONS
ON EUROPEAN DATUM (E.D.)
OF POINTS USED FOR NAUTICAL CHART CONSTRUCTION
IN THE NETHERLANDS AND NORWAY**

At the VIth International Hydrographic Conference (1952), the following resolution concerning the unification of world geodetic nets was voted:

« The VIth Hydrographic Conference has examined with interest the work carried out under the auspices of the International Association of Geodesy in view of the unification of all the European geodetic nets.

« Having taken into account the difficulties which for the time being prevent general publication of the results obtained, and which the Conference hopes will disappear in the near future, the Conference emphasizes the importance which certain of these results present for navigational problems and makes the following recommendation :

« (a) That this unification be extended to Northwestern European nets;

« (b) That, in any case, all interested States-Members make known to the I.H.B. the discrepancies at present existing, with regard to coastal positions, between the geodetic co-ordinates used for the construction of charts at present published and geodetic co-ordinates belonging to the adjusted European geodetic system. These discrepancies should be given to the greatest possible accuracy and at least to 0''.1. »

Repertory of Technical Resolutions, 4th edition, 1953, page 131.

As a result of this resolution, the I.H.B. endeavoured to obtain the data requested therein through the medium of circular-letters to its State-Members and by participating in discussions on the subject at the General Assemblies of I.U.G.G. Difficulties were however encountered owing to the fact that the majority of Governments were not prepared to authorize the publication by their respective Hydrographers of the E.D. coordinates relating to positions in their particular geodetic systems.

The Governments of the Netherlands and of Norway have now lifted existing restrictions, and the Hydrographers of both these countries have accordingly transmitted, for publication by the I.H.B., lists of the E.D. geodetic coordinates of the points used in the construction of their nautical charts. These lists, which have appeared in the February and May 1956 issues of the International Hydrographic Bulletin together with the former lists contained in I.H.B. Special Publication No. 24, are reproduced herewith.

It is hoped that all other States-Members whose nets have been incorporated in the European Datum will likewise be in a position to communicate similar data to the I.H.B. for publication.

NETHERLANDS:

I. — LIST OF GEODETIC POSITIONS BASED ON EUROPEAN DATUM

Name of Station (1)	Description of Station (2)	Geodetic Latitude N. (3)	Geodetic Longitude E. (4)	Authority Year of Adjustment Source (5)
Aardenburg	Ref. Church	51°16'25",6	03°26'58",3	R.D.M. 1952
Westkapelle	Lighthouse	51°31'48",1	03°26'54",5	R.D.M. 1952
West Schouwen ..	Lighthouse	51°42'34",9	03°41'34",4	R.D.M. 1948
Goeree, West- hoofd (1)	Lighthouse	51°48'50",4	03°51'55",3	R.D.M. 1949
Brielle	Ref. Church	51°54'12",4	04°09'48",6	R.D.M. 1949
Hoek van Holland	Lighthouse (Rear)	51°58'31",1	04°08'03",3	R.D.M. 1950
Monster	Ref. Church	51°01'21",7	04°10'22",1	R.D.M. 1950
Scheveningen ...	Lighthouse	52°06'17",7	04°16'10",5	R.D.M. 1915
Noordwijk	Lighthouse	52°14'58",1	04°26'06",9	R.D.M. 1935
Ymuiden	Lighthouse (Rear)	52°27'41",8	04°35'02",5	R.D.M. 1949
Castricum	Ref. Church	52°32'49",9	04°39'54",9	R.D.M. 1948
Egmond aan Zee..	Lighthouse	52°37'11",2	04°37'22",7	R.D.M. 1936
Zanddijk	Lighthouse (Rear)	52°52'53",7	04°42'57",7	R.D.M. 1946
Den Helder	Lighthouse	52°57'22",5	04°43'39",8	R.D.M. 1946
Texel, Eierland...	Lighthouse	53°10'58",4	04°51'23",7	R.D.M. 1950
Sexbierum	Ref. Church	53°13'11",2	05°29'08",7	R.D.M. 1950
Terschelling-Bran- daris	Lighthouse	53°21'40",0	05°12'56",1	R.D.M. 1926
Ameland	Lighthouse	53°26'59",9	05°37'37",2	R.D.M. 1925
Schiermonnikoog.	Watertower	53°28'56",0	06°09'35",6	R.D.M. 1950
Hornhuizen	Ref. Church	53°23'19",0	06°21'38",3	R.D.M. 1950
Uithuizermeden ..	Ref. Church	53°24'32",5	06°42'39",5	R.D.M. 1950
Vlieland	Lighthouse	53°17'47",7	05°03'34",3	R.D.M. 1926

(1) This position refers to a lighthouse other than the one for which coordinates are given in S.P. No. 24 c.

NOTE. — This list does not include the German points for Borkum (New Lighthouse) and Pilsum (Parish Church) shown in S.P. No. 24 c.

II. — LIST OF GEODETIC POSITIONS

as they appear in S.P. No. 24 c

Name of Station (1)	Description of Station (2)	Geodetic Latitude N. (3)	Geodetic Longitude E. (4)	Authority Year of Adjustment Source (5)
Aardenburg	Ref. Church	51°16'26",273	3°26'53",190	R.D.M. 1896
Westkapelle	Lighthouse	51°31'48",394	3°26'50",330	R.D.M. 1900
West Schouwen ..	Lighthouse	51°42'35",346	3°41'30",402	R.D.M. 1896
Goeree	Former Lighthouse	51°49'09",697	3°58'33",551	R.D.M. 1896
Brielle	Ref. Church	51°54'12",935	4°09'44",924	R.D.M. 1895
Hoek van Holland	Lighthouse	51°58'31",74	4°07'59",52	H.O. 1915
Monster	Ref. Church	52°01'22",333	4°10'18",334	R.D.M. 1897
Scheveningen	Lighthouse	52°06'18",42	4°16'06",78	H.O. 1915
Noordwijk	Lighthouse	52°14'58",89	4°26'03",35	H.O. 1926
Ymuiden	Lighthouse	52°27'42",73	4°34'58",95	H.O. 1915
Castricum	Ref. Church	52°32'50",834	4°39'51",378	R.D.M. 1897
Egmond aan Zee.	Lighthouse	52°37'12",22	4°37'19",22	H.O. 1919
Zanddijk	Upper Lighthouse	52°52'56",94	4°42'54",54	H.O. 1924
Den Helder	Lighthouse	52°57'23",62	4°43'36",33	H.O. 1912
Texel, Eierland ..	Lighthouse	53°10'59",672	4°51'20",252	R.D.M. 1901
Sexbierum	Ref. Church	53°13'12",492	5°29'05",668	R.D.M. 1902
Vlieland	Lighthouse	53°17'48",990	5°03'30",960	R.D.M. 1926
Terschelling-Brandaris	Lighthouse	53°21'41",225	5°12'52",723	R.D.M. 1926
Ameland	Lighthouse	53°27'01",31	5°37'34",25	R.D.M. 1925
Schiermonnikoog ..	South Lighthouse	53°28'57",428	6°09'32",996	R.D.M. 1888
Hornhuizen	Ref. Church	53°23'20",464	6°21'35",777	R.D.M. 1919
Borkum	New Lighthouse	53°35'23",72	6°39'45",97	R.D.M. 1912
Uithuizermeden ..	Ref. Church	53°24'33",980	6°42'37",194	R.D.M. 1904
Pilsum (Germany)	Parish Church	53°29'03",053	7°03'48",731	R.D.M. 1885

NOTE. — S.P. No. 24 c also includes column headings as follows : « Basic Position of Reference », « Altitude » and « Remarks », which have not been reproduced herein.

NORWAY :

I. — LIST OF GEODETIC POSITIONS BASED ON EUROPEAN DATUM

Name of Station (1)	Geodetic Latitude N. (2)	Geodetic Longitude E. (3)	Remarks (4)
Hungeren fyr (Bökfjord)	69°52'38",73	30°10'33",70	
Otterbergnes (Oternes)	69°57'54",34	29°39'32",06	
Lausklubben	70°01'32",30	29°19'45",07	
Styreaksla	70°49'08",07	29°14'44",71	
Vardö kirke	70°22'12",50	31°06'45",69	
Middagstuva-East	71°02'11",61	28°03'32",53	
Nordkyn	71°07'45",67	27°38'48",73	
Laukvikfjell	71°02'08",25	26°08'01",48	
Nordkapp	71°10'10",17	25°47'00",19	
Fruholmen fyr	71°05'36",69	23°59'06",59	
Fuglenes meridianstøtte	70°40'11",22	23°39'53",65	
Naveren	70°30'10",69	22°10'48",36	
Koia sjømerke	70°37'47",74	21°56'57",10	
Tvinaren	70°13'51",53	19°37'31",22	
Risøy	69°58'04",39	18°30'57",51	
Edøy	69°37'00",19	17°54'58",84	(varde) (1)
	69°37'00",09	17°54'58",98	(bolt) (2)
Berg kirke	69°27'20",16	17°15'05",90	
Andenes fyr	69°19'26",36	16°07'03",91	
Anda	69°03'59",35	15°10'22",73	
Anda fyr	69°03'59",22	15°10'19",10	(3)
Geitberget	69°00'42",82	15°07'56",45	
Skjæringstادتind	68°36'39",17	14°19'51",51	
Lamlitind	68°33'04",48	14°40'21",24	
Nordlandsnubben	67°41'16",53	12°42'13",43	
Glapen fyr	67°53'15",05	13°02'16",86	
Moholmen fyr	68°09'27",81	14°24'26",65	(4)
Langholmen sjømerke	68°09'21",30	14°25'12",51	(5)
Skravfjell	68°09'45",95	14°41'30",10	
Maløy, Skarholmen fyr.....	67°46'05",41	14°24'11",35	
Kvigtind (Landegode)	67°24'27",99	14°20'36",71	
Helligvær, nordre fyrtarn.....	67°26'05",92	13°59'25",82	
Helligvær, søndre fyrtarn.....	67°23'22",56	13°50'51",78	
Givær (Tinnholmene)	67°18'07",56	13°29'58",26	
Tennholmene :			
Kalsholmen fyr	66°54'49",89	13°05'35",68	
Myken	66°45'19",86	12°28'10",46	
Træna fyr (Søholmen fyr).....	66°25'51",59	11°58'11",88	
Ytterholmen	66°00'48",87	11°41'20",12	
Bremsteinen :			
Audholmen			
Bremstein vær	65°36'59",13	11°23'18",50	
Steinan (Geiterøy)	65°35'48",85	11°17'18",57	
Sklinna fyr	65°12'08",2	10°59'48",3	
Suren	64°45'46",76	10°35'30",44	

Name of Station (1)	Geodetic Latitude N. (2)	Geodetic Longitude E. (3)	Remarks (4)
Kvernholmen	64°43'35",31	10°46'35",56	
Villa Varde	64°32'52",72	10°42'07",65	
Skrotten	64°26'55",49	10°40'37",20	
Halten fyr	64°10'23",85	9°24'26",15	
Linesfjell	64°00'54",58	9°54'25",55	
Finsværholmen	64°04'22",01	9°09'26",35	
Asenøy	63°55'58",07	9°45'21",24	
Torraskjær	63°51'15",93	9°40'36",44	
Skulen	62°40'34",68	6°18'52",34	
Gohalden	62°37'10",26	6°11'30",04	
Erkna fyr	62°33'01",87	5°56'29",96	
Storhorn	62°28'26",58	5°59'10",23	
Nerlandshorn	62°21'01",51	5°33'30",70	
Kjerringa	62°11'13",69	5°07'42",82	
Batalden	61°38'41",43	4°47'22",12	
Alden	61°19'17",74	4°46'57",51	
Polletind	61°06'16",94	4°51'56",46	
Fedjebjörnen	60°45'50",21	4°44'11",27	
Hellisøy fyr	60°45'09",29	4°42'44",56	
Brattholmen sjømerke	60°24'15",54	5°05'32",95	
Domkirken, Bergen	60°23'39",94	5°19'55",49	
Mehammersata	59°53'52",80	5°27'57",79	
Siggen	59°44'54",13	5°17'49",68	
Adne (Adno)	59°34'44",74	5°11'37",48	
Røvær fyr	59°27'08",05	5°04'15",09	
Utsira fyr	59°18'26",64	4°52'22",18	
Ferkingstadøy	59°14'05",22	5°03'40",02	
Kvittingsøy fyr	59°03'45",31	5°24'05",87	
Hasteinen	58°56'57",11	5°26'23",38	
Hængsøy	58°52'48",33	5°26'08",42	
Feistein fyr	58°49'36",48	5°30'24",18	
Obrestad fyr	58°39'30",73	5°33'20",22	
Egerøy fyr	58°25'52",96	5°52'09",00	
Varnes fyr	58°10'42",68	6°37'31",02	
Lista fyr	58°06'35",48	6°34'06",08	
Rauna fyr	58°03'36",58	6°40'17",95	
Katland fyr	58°03'27",20	6°50'30",34	
Lindesnes fyr	57°58'59",26	7°02'53",29	
Rvvingen fyr	57°58'07",14	7°29'34",80	
Oksøy fyr	58°04'22",25	8°03'15",29	
Homborsund fyr	58°15'16",15	8°31'51",53	
Torungen indre, gamle fyrarn.....	58°24'45",33	8°47'35",01	
Torungen fyr, ytre	58°23'57",85	8°47'29",94	
Bonden merke	58°31'23",33	8°59'12",25	
Sandö merke	58°35'59",77	9°04'37",03	
Lungör fyr	58°38'10",96	9°08'58",87	
Jomfruland fyr	58°51'56",17	9°35'52",10	
Twistein, vestre	58°56'19",22	9°56'15",00	
Twistein, østre	58°56'19",66	9°56'16",61	
Twistein fyr	58°56'19",11	9°56'15",41	
Svenner fyr	58°58'10",81	10°08'57",00	
Guldholmen fyr	59°26'08",62	10°34'41",78	
Struten fyr	59°07'06",63	10°44'32",40	
Torgauten fyr (Strømtangen).....	59°09'05",85	10°49'50",78	
Torbjørnskjær fyr	58°59'49",28	10°46'59",59	
Lille Færder fyr	59°01'38",20	10°31'33",39	
Oslo observatorium	59°54'48",10	10°43'10",59	

(1) The coordinates of this point correspond with those of Edøy (cairn) in the list in S. P. No. 24 a.

(2) This position has been derived from a new observation point.

(3) This position is a new point representing the lighthouse, which is more conspicuous than the Anda cairn.

(4) New position.

(5) Corresponds with Moholmen (sea-mark) in the list in S. P. No. 24 a.

II. — LIST OF GEODETIC POSITIONS

as they appear in S.P. No. 24 a

Name of Station (1)	Geodetic Latitude N. (2)	Geodetic Longitude E. (3)	Remarks (4)
Bökfjord fyr	69°52'37",8	30°10'55",40	Flagstaff of lighthouse
Oternes	69°57'53",5	29°39'53",40	Lighthouse
Lausklubben	70°01'31",5	29°20'06",20	Tripod
Styreaksla	70°49'07",9	29°15'06",30	Cairn
Vardö kirke	70°22'11",9	31°07'08",40	The spire
Middagstua	71°02'11",4	28°03'53",30	Cairn
Nordkyn	71°07'45",6	27°39'09",40	Id.
Laukvikfjell	71°02'08",2	26°08'21",30	Id.
Nordkap	71°10'10",4	25°47'19",70	Id.
Furuholmen fyr	71°05'36",9	23°59'25",20	Lighthouse
Fuglenes meridianstøtte	70°40'11",2	23°40'12",06	Pillar
Naveren	70°30'09",9	22°10'56",70	Cairn
Koia sjømerke	70°37'47",8	21°57'14",70	Sea-mark
Tvinaren	70°13'52",4	19°37'56",30	Cairn
Risøy	69°58'05",3	18°31'21",50	Id.
Edøy	69°37'00",9	17°55'22",10	Id.
Berg kirke	69°27'20",9	17°15'28",60	The spire
Andenes fyr	69°19'27",2	16°07'25",80	Lighthouse
Anda	69°04'00",2	15°10'43",70	Cairn
Gjeitberget	69°00'43",6	15°08'17",30	Id.
Skjæringstادتind	68°36'39",8	14°20'11",50	Id.
Lammlitind	68°33'05",1	14°40'41",70	Id.
Nordlandsnubben	67°41'16",8	12°42'31",20	Id.
Glapen fyr	67°53'15",4	13°02'35",10	Lighthouse
Moholmen	68°09'21",6	14°25'32",40	Sea-mark
Skravfjell	68°09'46",3	14°41'49",80	Cairn
Maløy, Skarholmen fyr.....	67°46'06",0	14°24'31",70	Lighthouse
Kvitind (Landegode)	67°24'27",9	14°20'55",50	Cairn
Helligvær, nordre	67°26'05",9	13°59'44",30	Chimney on lighthouse
Helligvær, søndre	67°23'22",5	13°51'10",10	Lighthouse
Givær (Tennholmen)	67°18'07",5	13°30'16",30	Sea-mark
Tennholmen	66°54'49",8	13°05'53",30	Cairn
Myken	66°45'19",6	12°28'27",40	Id.
Træna fyr (Sörholmen)	66°25'51",2	11°58'28",20	Lighthouse
Ytterholmen	66°00'48",3	11°41'36",00	Cairn
Bremsteinen	65°36'58",3	11°23'33",90	Id.
Steinan (Gjeiterøy)	65°35'48",1	11°17'33",90	Tripod
Skinna fyr	65°12'07",2	11°00'03",10	Lighthouse
Suren	64°45'45",6	10°35'44",70	Cairn
Kvernholmen	64°43'34",1	10°46'49",90	Id.

NAME OF STATION (1)	Geodetic Latitude N. (2)	Geodetic Longitude E. (3)	Remarks (4)
Villa Varde	64°32'51",4	10°42'21",90	Cairn
Skrotten	64°26'54",2	10°40'51",40	Id.
Halten fyr	64°10'22",3	9°24'39",50	Lighthouse
Linesfjell	64°00'52",9	9°54'39",10	Cairn
Finnværholmen	64°04'20",5	9°09'39",50	Id.
Asenøy	63°55'56",6	9°45'35",00	Id.
Torraskjær	63°51'14",2	9°40'49",70	Sea-mark
Skulen	62°40'32",4	6°19'02",70	Cairn
Gohalden (Goalde)	62°37'08",0	6°11'40",40	Id.
Erkna fyr	62°32'59",6	5°56'40",20	Lighthouse
Storhorn	62°28'24",2	5°59'20",40	Cairn
Nerlandshorn	62°20'58",8	5°33'40",50	Id.
Kjaerringa	62°11'10",9	5°07'52",30	Id.
Batalden	61°38'38",3	4°47'31",10	Id.
Alden	61°19'14",2	4°47'06",50	Id.
Polletind	61°06'13",3	4°52'05",50	Id.
Fedjebjörnen	60°45'46",3	4°44'20",10	Id.
Hellisøy fyr	60°45'05",7	4°42'54",10	Lighthouse
Brattholmen	60°24'11",4	5°05'42",10	Sea-mark
Domkirken, Bergen	60°23'35",7	5°20'04",70	The spire
Mehammersata	59°53'48",7	5°28'07",80	Cairn
Siggen	59°44'49",9	5°17'59",30	Tripod
Adne	59°34'54",6	5°11'07",70	(No check)
Rövær fyr	59°27'03",6	5°04'24",70	Lighthouse
Utsira fyr	59°18'22",2	4°52'31",50	Id.
Færkingstadøy	59°14'00",8	5°03'49",40	Cairn
Kvittingsøy fyr	59°03'40",7	5°24'15",60	Lighthouse
Hastenen	58°56'52",4	5°26'32",90	Cairn
Hængsøy	58°52'43",6	5°26'18",00	Sea-mark
Feiesten fyr	58°49'30",1	5°30'34",50	Lighthouse
Obrestad fyr	58°39'25",8	5°33'29",80	Id.
Egerøy fyr	58°25'47",9	5°52'18",60	Id.
Varnes fyr	58°10'37",3	6°37'40",90	Id.
Lista fyr	58°06'30",1	6°34'15",90	Id.
Rauna	58°03'31",1	6°40'27",80	Cairn
Katland fyr	58°03'21",7	6°50'40",30	Lighthouse
Lindesnes fyr	57°58'54",6	7°03'04",50	Id.
Ryvingen	57°58'02",0	7°29'42",90	Id.
Oksøy fyr	58°04'16",6	8°03'25",70	Id.
Homborsund fyr	58°15'10",7	8°32'02",40	Id.
Torungen indre, gamle fyrarn.....	58°24'40",0	8°47'46",10	Id.
Torungen fyr, yttre	58°23'52",2	8°47'40",30	Id.
Bonden merke	58°31'18",1	8°59'23",40	Sea-mark
Sandøy merke	58°35'54",4	9°04'48",10	Id.
Langør fyr	58°38'05",6	9°09'10",00	Lighthouse
Jomfruland fyr	58°51'50",7	9°36'02",50	Id.
Twistein vestre	58°56'14",7	9°56'26",70	Cairn
Twistein, østre	58°56'14",6	9°56'27",40	Id.
Twistein fyr	58°56'14",2	9°56'27",10	Lighthouse
Svenner fyr	58°58'05",9	10°09'08",80	Id.
Guldholmen fyr	59°26'03",9	10°34'53",90	Id.
Struten fyr	59°07'01",6	10°44'44",50	Id.
Torgauten (Strømtangen) fyr.....	59°09'00",9	10°50'02",80	Id.
Torbjørnskjær fyr	58°59'44",2	10°47'11",60	Id.
Lille Færder fyr	59°01'33",2	10°31'45",30	Id.