

Joint Tactical Exercise Planning Staff



Northwood Headquarters
Sandy Lane
NORTHWOOD
Middlesex
HA6 3HP

BT: (01923) 958788
Fax: (01923) 958779
E-mail: jteps-sm-so2@mod.uk

JTEPS JW122

4 September 2012

JOINT WARRIOR 122 - SUBMARINE, MINEWARFARE AND LIVE FIRING ACTIVITY

1. Joint Warrior (JW) 122, will take place from 1 until 11 October 2012 and will comprise of a programme of exercises conducted by land forces, warships, submarines and aircraft across the UK with the maritime element focussed in the offshore and coastal waters to the north east, north and north west of Scotland. This booklet provides outline information on their scheduled operations as well as details of intended gunnery and aircraft bombing activity at Cape Wrath and in some open ocean areas.

2. The information is correct at the time of going to print but the routine **SUBFACTS and GUNFACTS** broadcasts, made during the exercise, will provide updated information.

3. The information provided in this booklet will also be published in Fleet Ops Notice to Fishermen, Defence Training Estate Scotland Notice to Fishermen and Cape Wrath Range Notices. This document is also on the internet at <http://www.qhm.mod.uk/clyde>

4. This booklet contains the following sections:

- a. Submarine Activity.
- b. Warship Activity.
- c. Minewarfare Activity.
- d. Live Firing and Gunnery Activity.
- e. Denial of GPS Services.
- f. Unexploded Ordnance Advice.

5. The warships taking part have been instructed to offer fishing vessels every assistance in their dealings with exercise activity, especially when in the vicinity of submarines or participants conducting live firing or when GPS is denied for training. You are invited to contact them as required to ensure that our two activities do not come into conflict.

6. Throughout JW 122 the following points of contact are available on a 24/7 basis to attend to any immediate problems or questions:

Primary - Joint Warrior Duty Controller 01436 674321 ext. 6469

Secondary - Duty Submarine Controller 01923 956366

HM Coastguard at Clyde, Stornoway and Aberdeen can also contact my staff directly and will relay information if necessary.

7. If you have any queries, problems, or suggestions as to how JTEPS can improve this booklet, please do not hesitate to contact my Staff Officer Submarines at the above address.

P J Titterton OBE
Captain Royal Navy
Director JTEPS

Submarine Activity

1. The Submarine Activity Grid on the following page shows the areas and time periods where submarine activity associated with Joint Warrior is forecast. Please note that other submarines that are not part of the exercise may transit the areas north west of Scotland; their activity is not covered in this brief. The daily SUBFACTS broadcast by the Coastguard will provide notification of the actual areas where all submarine activity is taking place. During Joint Warrior, in order to keep the SUBFACTS broadcast short, a number Scottish Exercise Areas are grouped together. The groupings are shown in the chartlet and table in this section.
2. Communications can be established with submarines during JW, when they are surfaced or at periscope depth, on VHF Ch 16 (working Ch 73). In the event that they are operating with warships, one of the warships will have been detailed to act as the Fishing Vessel Safety Ship (FVSS) in accordance with the Code of Practice. The FVSS has two overarching duties:
 - a. To make fishing vessels aware of submarine activity in their vicinity and to provide information and advice to minimise the risk of interaction.
 - b. To provide assistance to the participating submarine in compiling a comprehensive surface picture in order to minimise the risk of interaction with non-exercise vessels.
3. It is usually easier to establish communications with the FVSS than with a submarine. However, any warship in the vicinity may be contacted and asked for a report on any exercises involving submarines which are being conducted in the local area. Alternatively, the ship may be used to relay messages or instructions to the submarine if required.

Submarine Activity

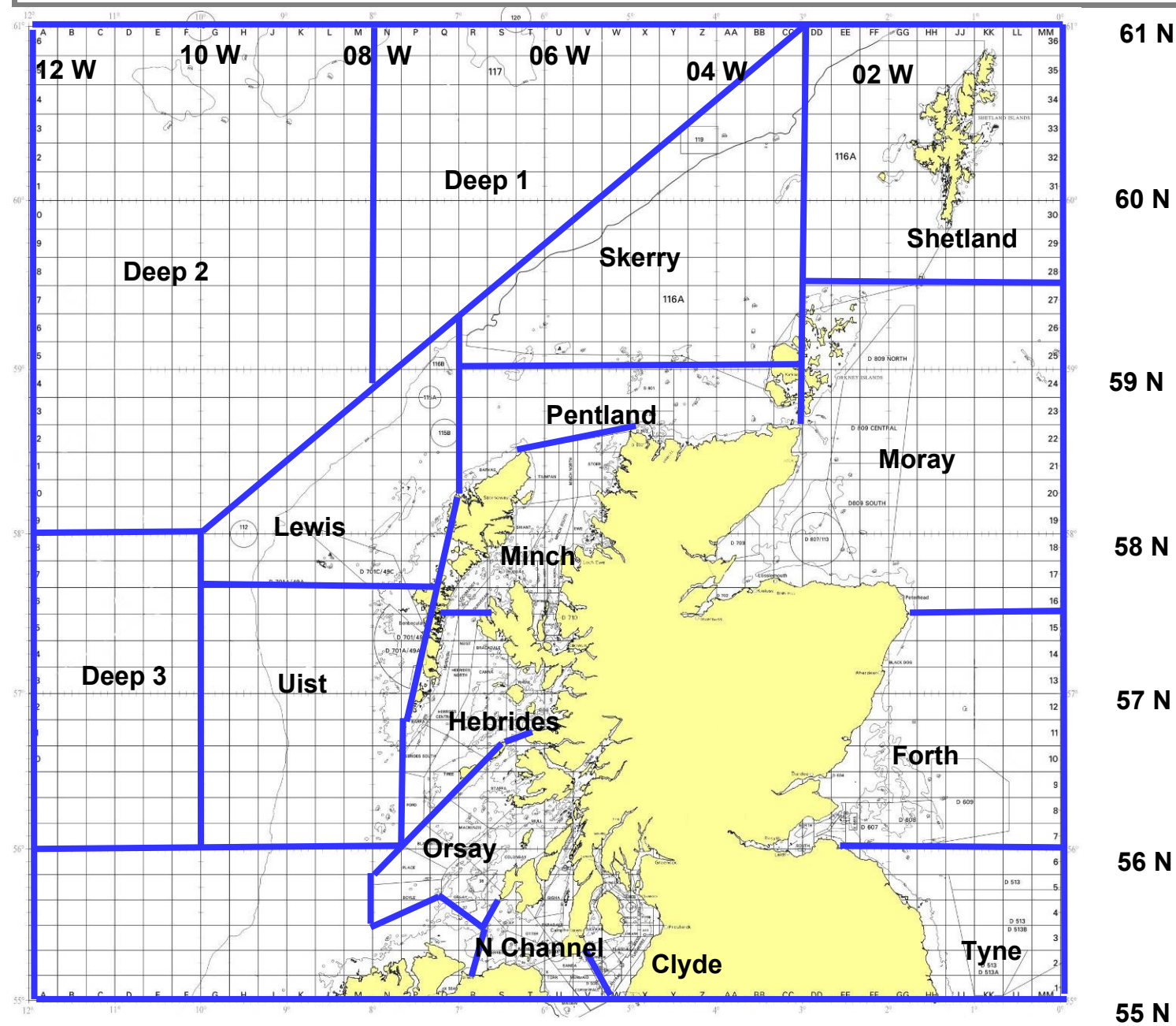
Exercise Joint Warrior 122

SUBFACTS AREAS ACTIVATION GRID

| | 30 SEP | | | 1 OCT | | | 2 OCT | | | 3 OCT | | | 4 OCT | | | 5 OCT | | | 6 OCT | | | 7 OCT | | | 8 OCT | | | 9 OCT | | | 10 OCT | | | 11 OCT | | |
|------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------|--|--|
| | SUN | | | MON | | | TUE | | | WED | | | THU | | | FRI | | | SAT | | | SUN | | | MON | | | TUE | | | WED | | | THU | | |
| Active Time Period BST | 0001 - 0800 | 0800 - 1600 | 1600 - 2359 | 0001 - 0800 | 0800 - 1600 | 1600 - 2359 | 0001 - 0800 | 0800 - 1600 | 1600 - 2359 | 0001 - 0800 | 0800 - 1600 | 1600 - 2359 | 0001 - 0800 | 0800 - 1600 | 1600 - 2359 | 0001 - 0800 | 0800 - 1600 | 1600 - 2359 | 0001 - 0800 | 0800 - 1600 | 1600 - 2359 | 0001 - 0800 | 0800 - 1600 | 1600 - 2359 | 0001 - 0800 | 0800 - 1600 | 1600 - 2359 | 0001 - 0800 | 0800 - 1600 | 1600 - 2359 | 0001 - 0800 | 0800 - 1600 | 1600 - 2359 | | | |
| ORSAY | | | A | A | A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| N.CHANNEL | | | A | A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HEBRIDES | | | | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | | | | | | | | | | | | | | | |
| MINCH | | | | | | | | | | | A | A | A | A | | | | A | A | A | A | A | A | A | A | A | A | | | | | | | | | |
| UIST | | | | A | A | A | A | A | A | | | | | | | | | | | | | | | | | | | | | A | A | A | A | A | | |
| LEWIS | | | | | | | | | | | | | | | | | | | | | | | | | A | A | A | A | A | A | A | | | | | |
| PENTLAND | | | | | | | | | | | | | | | | | | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | | | |
| SKERRY | | | | | | | | | | | | | | | | | | | | | | | | | A | A | A | | | | | | | | | |
| DEEP 1 | | | | | | | | | | | | | | | | | | | | | | | | A | A | A | A | A | A | A | | | | | | |
| DEEP 2 | | | | | | | | | | | | | | | | | | | | | | | | A | A | A | A | A | A | A | A | A | A | | | |
| DEEP 3 | | | | | | | | | | | | | | | | | | | | | | | | A | A | | | | | | A | A | A | | | |
| SHETLAND | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MORAY | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | A | A | A | A | | |
| FORTH | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | A | | | |
| TYNE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

The planned activity in the JW SUBFACTS AREAS is indicated by the letter **A** in the grid above. There may be changes to this planned activity. Daily SUBFACTS Broadcasts will contain the most up to date information regarding the activation of the areas.

Submarine Activity



**JW SUBFACTS
Area Groupings**

Submarine Activity

SCOTTISH EXERCISE AREAS – JW SUBFACTS GROUPING

CLYDE

BALLANTRAE
AILSA
STAFNISH
PLADDA
TURNBERRY
DAVAAR
LAMLASH
GOIL
COVE

AYR
BRODICK
IRVINE
LAGGAN
GARROCH
LOCHRANZA
SKIPNESS
ROSNEATH

TARBERT
MINARD
FYNE
WEST KYLE
EAST KYLE
CUMBRAE
STRIVEN
GARELOCH

ORSAY

STAFFA
MULL
BLACKSTONE
MACKENZIE

EIGG
JURA SOUND
PLACE
ORSAY

COLONSAY
LINNHE
BOYLE

NORTH CHANNEL

ISLAY
EARADALE
RATHLIN
MAGEE
PEEL
TORR

OTTER
KINTYRE
MAIDEN
BEAUFORT
MERMAID

GIGHA
SKERRIES
CORSEWALL
ARDGLASS
SANDA

HEBRIDES

USHENISH
CANNA
HEBRIDES NORTH
TIREE
BARRA

NEIST
RHUM
HEBRIDES CENTRAL
HAWES
FORD

BRACADALE
SLEAT
HEBRIDES SOUTH
EIGG

MINCH

RONA NORTH
RAASAY
SHIANT
MINCH SOUTH
LOCHMADDY

RONA SOUTH
TIUMPAN
EWE
PORTREE
DUNVEGAN

RONA WEST
STOER
MINCH NORTH
TRODDAY
CROWLIN

Warship Activity

VHF Challenges

1. In light of ever changing threats to our Armed Forces, military ships maintain a detailed plot of maritime activity in their vicinity, which includes establishing the identity of small fishing vessels. This can be achieved visually from helicopters or by challenges on IMM VHF radio by ships. Mariners are advised that warships from various Allied Nations will be conducting such reconnaissance and challenges. Areas likely to be affected are the Clyde, North Channel, South of the Sea of Hebrides, the Sea of Hebrides, the Little Minch, North Minch, the area near Cape Wrath, Loch Eriboll and the Outer Hebrides. Mariner's co-operation during this time would be much appreciated. A small number of contracted civilian vessels including high speed craft will be operating in the vicinity of the Minches in support of this training task. Every effort will be made to avoid interference to fishing vessels.

Small Boat Activity

2. On 1 October, north of Arran, small boats (both contracted civilian and military) will operate with Warships and helicopters. This activity will remain clear of the main shipping and ferry routes. Small boats taking part in this will indicate their participation by showing a green flag.

Minewarfare Activity

1. Mine Counter Measures (MCM) vessels will conduct minehunting exercises using sonar to look for potential mines both on the seabed and moored to the seabed that are subsequently investigated by remote controlled submersible vehicles and divers.
2. There is no planned use of towed sweeps for minesweeping during JW 122.
3. All participating MCM vessels will be thoroughly briefed on local fishing operations in advance of the exercise and are instructed to make early liaison calls to fishing vessels on VHF. Skippers of fishing vessels operating in the vicinity of these ships are encouraged to talk to them and discuss intentions.
4. If any difficulty is experienced a call should be made to the Duty Submarine Controller at CTF 311 OPS ROOM on the "Fishermen's Hotline" number, 01923 956366. This line is permanently manned.
5. The following MCM vessels will participate in Ex JW 122:

| Name | Nationality | Pennant No |
|----------------|-------------|------------|
| HMS PENZANCE | British | M106 |
| HMS CATTISTOCK | British | M31 |
| HMS HURWORTH | British | M39 |
| HMS BANGOR | British | M109 |
| BNS GODETIA | Belgium | A960 |
| BNS NARCIS | Belgium | M923 |
| BNS LOBELIA | Belgium | M921 |
| BNS PRIMULA | Belgium | M924 |
| FGS FULDA | German | M1058 |
| FGS PASSAU | German | M1096 |
| HNOMS KARMOEY | Norwegian | M341 |
| ENS SAKALA | Estonian | M314 |

6. Inert mines have been laid for the exercise, in the following areas:

a. **LOCH EWE** (see chartlet 1)

All areas within Loch Ewe between latitudes 57 52.28N and 57 49.20N

b. **MINCHES** (see chartlet 2)

Along the following line:

- A. 57 32.98N 006 52.06W
- B. 57 41.98N 006 35.06W
- C. 57 50.18N 006 16.06W

c. **CARN SKERRIES/HORSE ISLAND** (see chartlet 1)

- A. 57 57.94N 005 20.08W
- B. 57 57.55N 005 20.57W
- C. 57 58.44N 005 23.08W
- D. 57 58.84N 005 22.58 W

Minewarfare Activity

d. **EILEAN DUBH** (see chartlet 1)

- A. 57 59.23N 005 25.60W
- B. 57 58.85N 005 25.50W
- C. 57 58.75N 005 26.84W
- D. 57 59.60N 005 26.90W

e. **PRIEST ISLAND (SOUTH)** (see chartlet 1)

- A. 57 56.91N 005 31.48W
- B. 57 56.50N 005 31.82W
- C. 57 56.83N 005 33.32W
- D. 57 57.27N 005 33.00W

f. **GRUINARD BAY APPROACH** (see chartlet 1)

- A. 57 56.24N 005 28.57W
- B. 57 55.80N 005 28.91W
- C. 57 56.25N 005 30.70W
- D. 57 56.68N 005 30.46W

g. **GRUINARD BAY** (see chartlet 1)

- A. 57 54.00N 005 29.61W
- B. 57 52.80N 005 29.61W
- C. 57 52.80N 005 30.80W
- D. 57 53.02N 005 30.80W
- E. 67 53.02N 005 30.00W
- F. 57 54.00N 005 30.00W

h. **BROAD BAY** (see chartlet 3)

- A. 58 16.60N 006 14.60W
- B. 58 16.60N 006 12.20W
- C. 58 15.40N 006 12.20W
- D. 58 15.40N 006 12.20W

i. **LOCH ERIBOLL APPROACH** (see chartlet 4)

- A. 58 42.97N 004 42.00W
- B. 58 34.00N 004 36.72W
- C. 58 31.96N 004 38.16W
- D. 58 29.70N 004 41.30W

j. **LOCH ERIBOLL ANCHORAGE (NORTH)** (see chartlet 4)

- A. 58 33.30N 004 38.00W
- B. 58 33.30N 004 36.40W
- C. 58 32.00N 004 36.40W
- D. 58 32.00N 004 38.00W

Minewarfare Activity

I. LOCH SNIZORT

- A. 57 33.00N 006 25.00W
- B. 57 37.00N 006 25.00W
- C. 57 37.00N 006 29.50W
- D. 57 33.00N 006 29.50W

7. The planned minelay and recovery programme:

- a. **Minelay.** There is no dedicated minelaying period for JW 122.
- b. **Mine recovery.** Mines will be recovered throughout JW 122.

8. Minehunters will conduct live firings of mine disposal charges in the following area:

- a. **MINE DISPOSAL CHARGE FIRING AREA** (see chartlet 1)

- A. 57 57.58N 005 33.93W
- B. 57 57.85N 005 33.93W
- C. 57 58.25N 005 31.97W
- D. 57 57.02N 005 31.97W

- b. **DIVER PLACED CHARGES FIRING AREA** in Loch EWE will take place within a circle, with a radius of 200m, centred on 57 47.90N 005 38.90W.

9. Any Minesweeping will be restricted to the East Shiant Bank. The previously used minesweeping corridor off Loch Ewe (defined below at para b)_ is no longer in use.

- a. EAST SHIANT BANK

- 1000 yds either side of a line:
- A. 57 56.38N 006 08.40W
 - B. 58 02.80N 005 59.60W

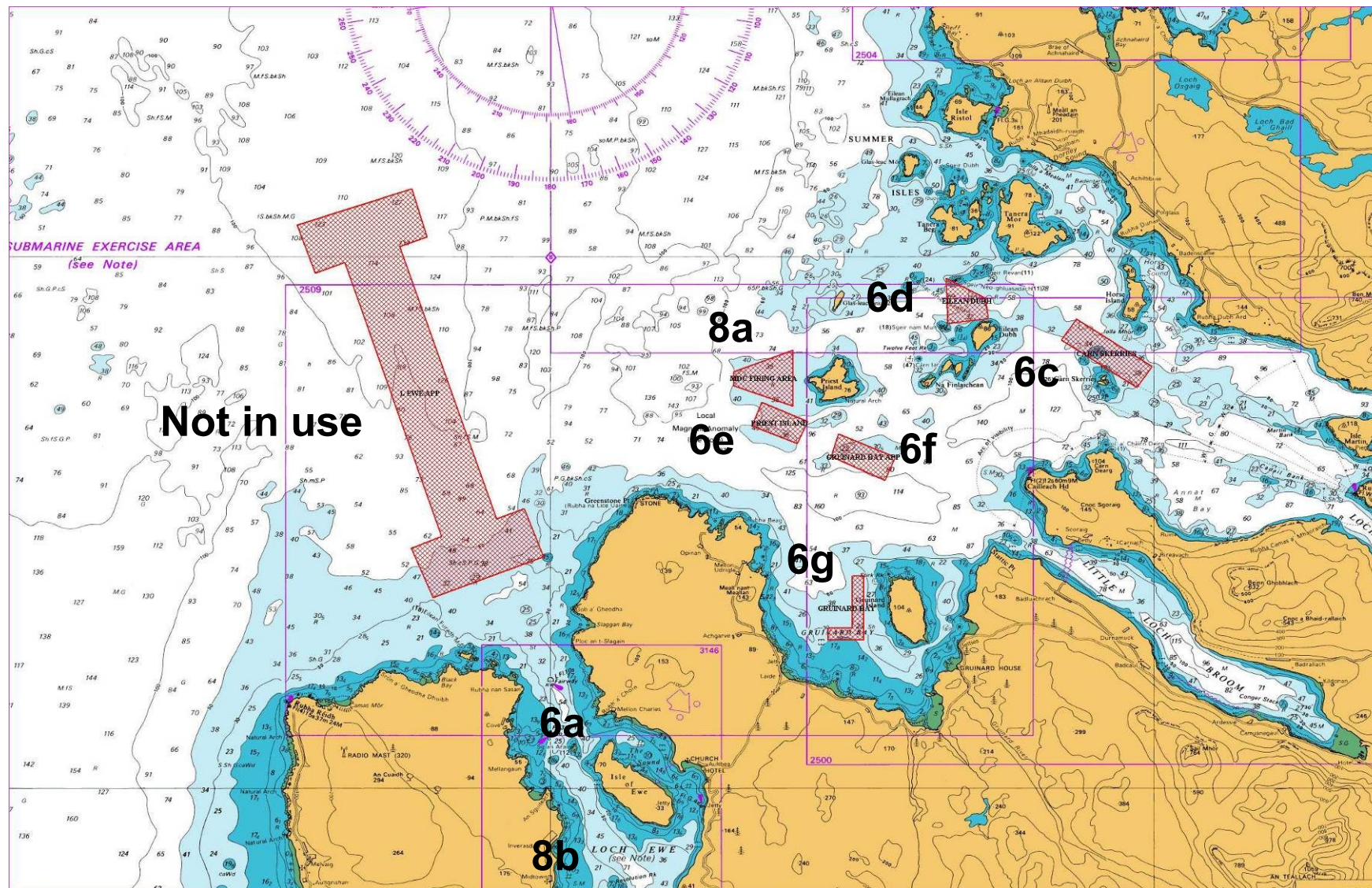
- b. LOCH EWE APPROACH (see chartlet 1)

- 1000 yards either side of a line:
- A. 58 00.00N 005 46.00W
 - B. 57 55.00N 005 43.80W

10. Liaison between the MoD and appropriate fishermen's associations/organisations, in some cases with individual owners/skippers, HM Coastguard and Marine Scotland have been made to use the above areas. Should anyone consider that their organisation/association should be included in this process in future please contact Lieutenant Commander Matt Offord (FOSNNI SMCDO) on 01436 674321 extn 6510.

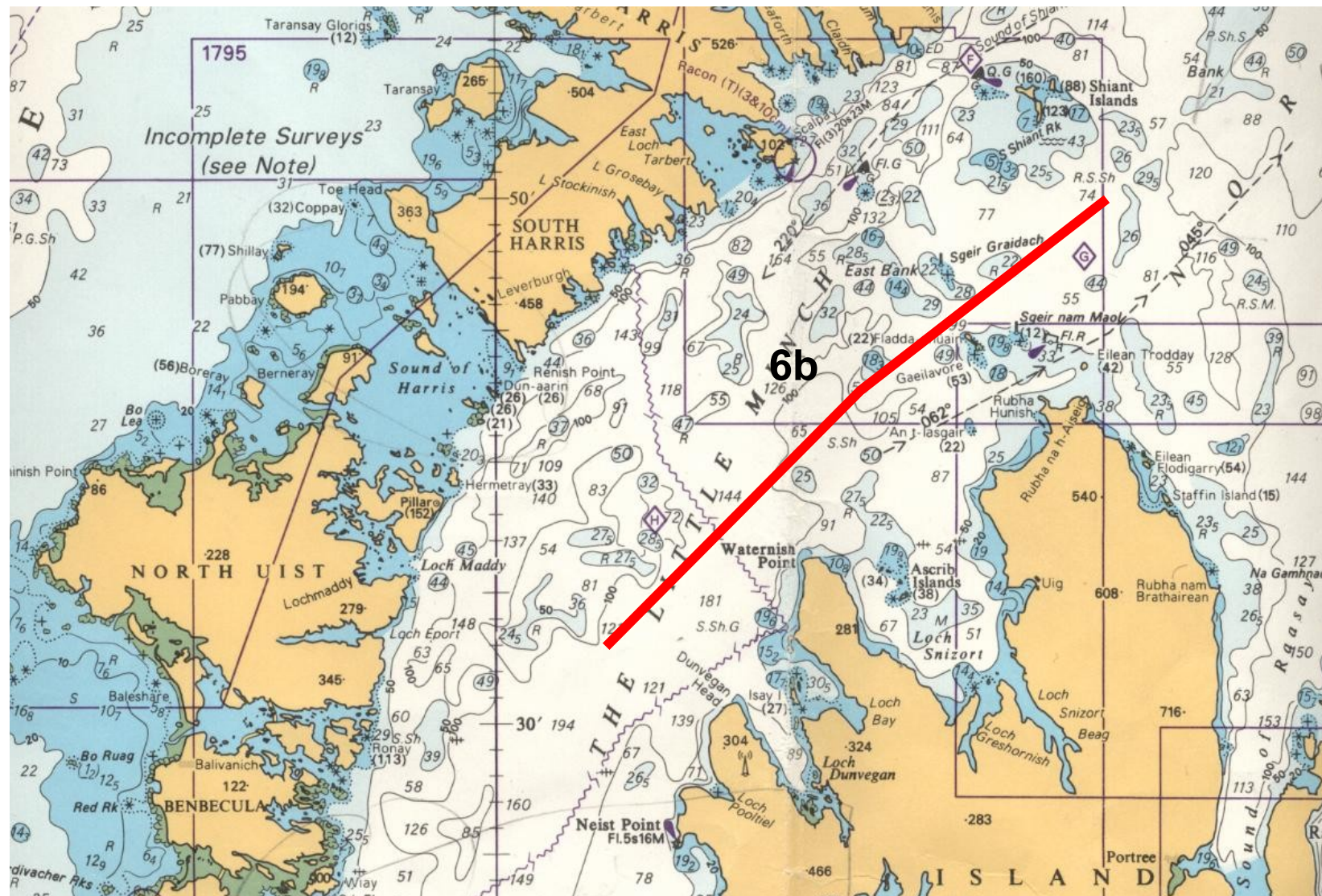
11. All participating MCM vessels will be thoroughly briefed on local fishing operations in advance of the exercise and are instructed to make early liaison calls to fishing vessels on VHF. Skippers of fishing vessels operating in the vicinity of these ships are encouraged to talk to them and discuss intentions.

Minewarfare Activity



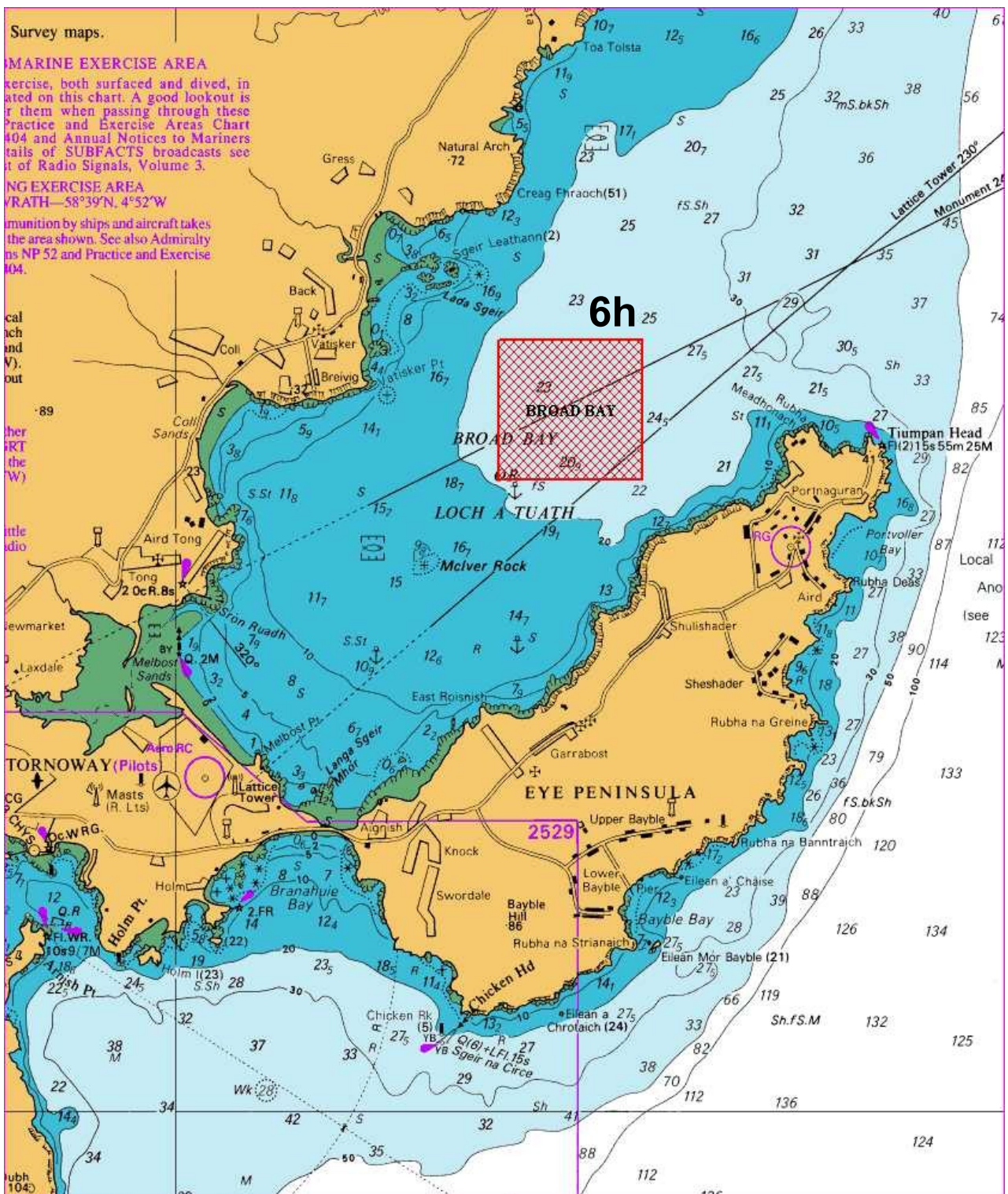
Chartlet 1

Minewarfare Activity



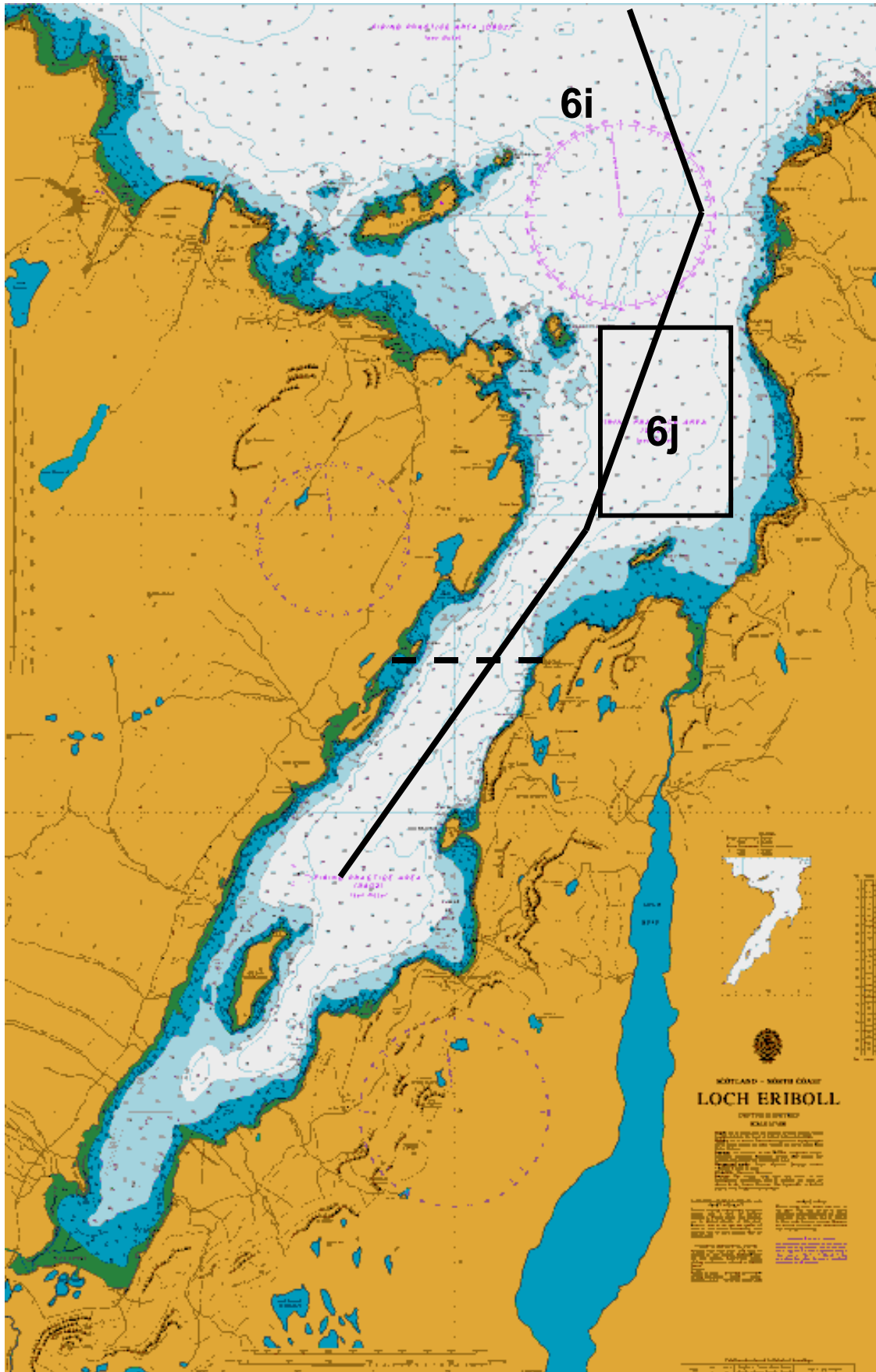
Chartlet 2

Minewarfare Activity



Chartlet 3

Minewarfare Activity



Chartlet 4

Live Firing and Gunnery

1. During Joint Warrior, Cape Wrath Range, including Garvie Island (An Garbh-eilean) will be active with various combinations of air bombardment, naval gunfire support and helicopter operations. In addition a Joint Warrior Firing and Danger Area will be activated for offshore gunnery. The Gunfacts and JW Offshore Firing Areas Activation Grid on the following page shows the areas and time periods where gunnery associated with Joint Warrior is forecast to take place. The daily GUNFACTS Broadcast by the Coastguard and Cape Wrath Range will provide notification of the actual areas where all the gunnery activity is taking place.
2. Joint Warrior Firing and Danger Area coordinates are in the accompanying chartlet.
3. It is mandatory that vessels in the vicinity of the Cape Wrath Range keep a listening watch on VHF Channel 16. Further information regarding firing at can be obtained by telephoning:

**Cape Wrath Information Line on
FREEPHONE 0800 833300.**

or 01862 892185

The number will provide specific information about active/non-active periods and when the Range road (U70) will be open/closed for public access.

Live Firing and Gunnery

Exercise Joint Warrior 122

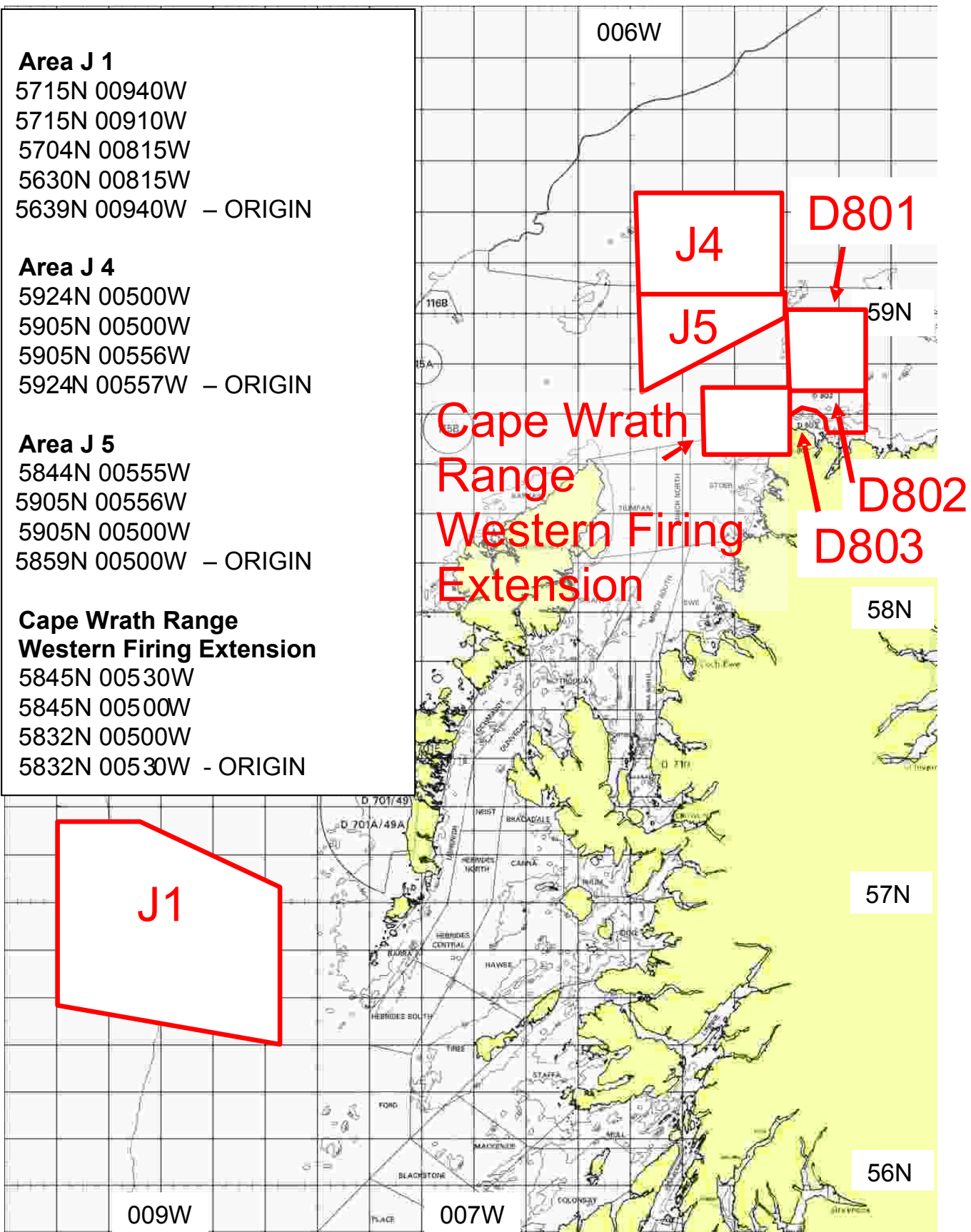
GUNFACTS AND JW OFFSHORE FIRING AREAS ACTIVATION GRID

| | 1 OCT | 2 OCT | 3 OCT | 4 OCT | 5 OCT | 6 OCT | 7 OCT | 8 OCT | 9 OCT | 10 OCT | 11 OCT |
|--|-----------|-----------|------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | MON | TUE | WED | THU | FRI | SAT | SUN | MON | TUE | WED | THU |
| Cape Wrath Range (Ashore) | 0100-2359 | 0100-2359 | 0100-2359 | 0100-2359 | 0100-2359 | 0100-2359 | 0100-2359 | 0100-2359 | 0100-2359 | 0100-2359 | 0100-2359 |
| Cape Wrath D801 | | 1230-1330 | 1100-1300 1700-1900 | | | | | | | | |
| Cape Wrath D802 | | 1200-2200 | 0900-2130 | 1200-2200 | | | | 0800-2200 | 0800-2200 | | |
| Garvie Island D803 | | 1200-2200 | 0900-2130 | 1200-2200 | | | | 0800-2200 | 0800-2200 | | |
| JW Danger Area J1 | | 1100-1630 | | | | | | | | | |
| JW Danger Area J4 | | | | | | | | | | | |
| JW Danger Area J5 | | | | | | | | | | | |
| Cape Wrath Western Firing Extension | | | | | | | | | | | |
| Clyde Areas D 509 | 1700-1930 | 1300-1700 | | | | | | | | | |

The planned times of firings at Cape Wrath Range and JW Firing areas is indicated in the grid above. There may be changes to this planned activity. Daily GUNFACTS Broadcasts and Cape Wrath Range Broadcasts will contain the most up to date information regarding the activation of the areas. Times are Local.

Live Firing and Gunnery

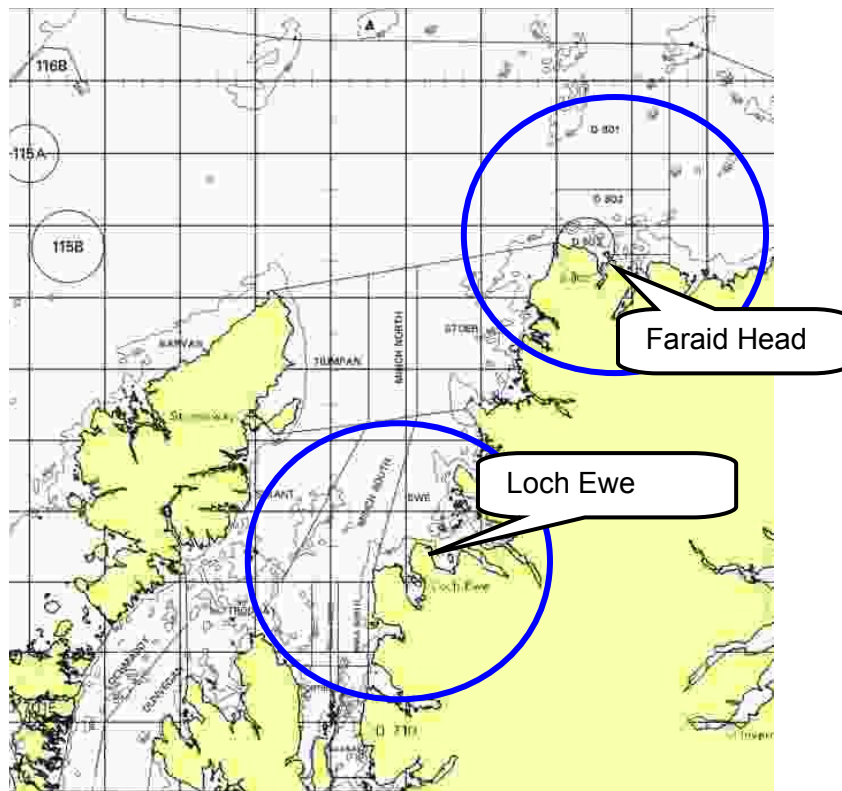
Joint Warrior Firing and Danger Areas



Denial of GPS Service

1. Denial of GPS services through the jamming of the GPS signal is an essential part of preparation for military operations and the training is likely to impact to both military and civilian users on land, sea and in the air. The ability to conduct jamming is spread throughout the modern world. Consequently, Military Forces are required to train under such conditions in order to demonstrate the effects it has systems and to train personnel in other modes of operating. The jamming equipment is located at:

- a. Faraid Head - 58 36.2N 004 46.4W
- b. Loch Ewe - 57 51.9N 005 41.1W



2. Jamming of GPS signals may affect equipment using GPS within the North Minch northwards from Rubha Réidh 57-52N 005-48W to Stoer Head 58-14N 005-24W and within 35 nautical miles line of sight from the Faraid Head jamming site, depending on receiver antenna height. Plots showing predictions of areas where interference can be expected are included at the end of this section.

3. Subject to approval from the MOD to conduct GPS denial training the planned times GPS Denial are shown in the time table on the next page. A sécurité message will be broadcast by Stornoway and Shetland CG prior to and on completion of the jamming period, during which time GPS receivers and any related equipment may suffer intermittent/total failure, or give incorrect position info or default to DR mode. If this occurs, DCS is to be manually updated at regular intervals. Crews should be aware of these limitations and use alternative means of navigation during jamming periods to confirm their position and check the equipment on completion. Military vessels in Faraid Head jamming area are as part of their Gunnery clear range procedure to inform civilian vessels in their

Denial of GPS Service

vicinity via VHF that GPS jamming is taking place and that they should manually update their DSC position.

4. All military vessels and aircraft will be ordered to maintain a lookout for any abnormal vessel behaviour during jamming periods and warn vessels as required. Emergency cease jam via Stornoway CG, the jamming station or joint warrior duty controller 01436 674321 ext. 6469

GPS DENIAL TIME TABLE

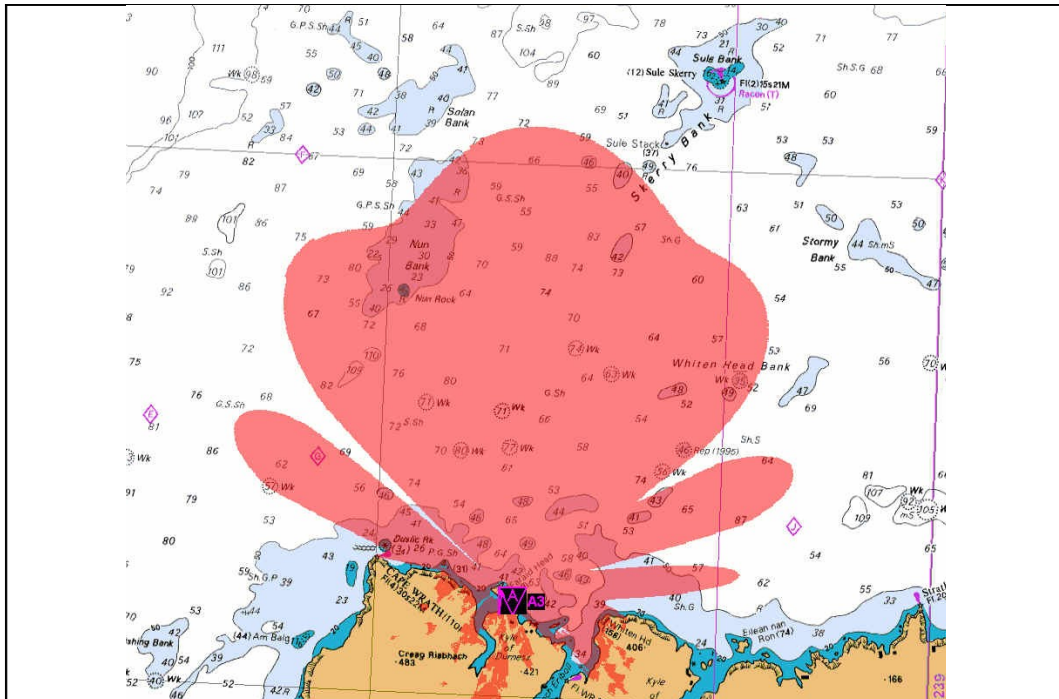
All times are local.

| Date | Loch Ewe 57 51.9N 005 41.1W | Faraid Head 58 36.2N 004 46.4W |
|---------------|--------------------------------|-----------------------------------|
| Tue 2 Oct 12 | 1100 – 1200 | 1130 – 1230 |
| | 1600 – 1700 | 1730 – 1830 |
| Wed 3 Oct 12 | 1100 – 1200 | 1130 – 1230 |
| | 1500 – 1600 | 1700 – 1800 |
| | 1800 – 1900 | |
| Thu 4 Oct 12 | 1100 – 1200 | |
| | 1400 – 1500 | 1500 – 1600 |
| | 1800 – 1900 | 1900 – 2000 |
| Fri 5 Oct 12 | 0900 – 1000 | 1100 – 1200 |
| | 1530 – 1630 | 1400 – 1500 |
| | 1900 – 2000 | |
| Sat 6 Oct 12 | 0900 – 1000 | 1030 – 1130 |
| | 1400 – 1500 | 1500 – 1600 |
| | 2030 – 2130 | |
| Sun 7 Oct 12 | 1230 – 1330 | |
| | 1900 – 2000 | |
| Mon 8 Oct 12 | 0800 – 0900 | 1100 – 1200 |
| | 1200 – 1300 | 1400 – 1500 |
| | 1500 – 1600 | 1600 – 1700 |
| | 1800 – 1900 | |
| Tue 9 Oct 12 | 1030 – 1130 | 1200 – 1300 |
| | 1230 – 1330 | 1500 – 1600 |
| | 1600 – 1700 | 1700 – 1800 |
| | 1930 – 2030 | |
| Wed 10 Oct 12 | 0900 – 1000 | 1100 – 1200 |
| | 1300 – 1400 | 1630 – 1730 |
| | 1500 – 1600 | |
| | 1900 – 2000 | |
| Thu 11 Oct 12 | 0900 – 1000 | |
| | 1200 – 1300 | |

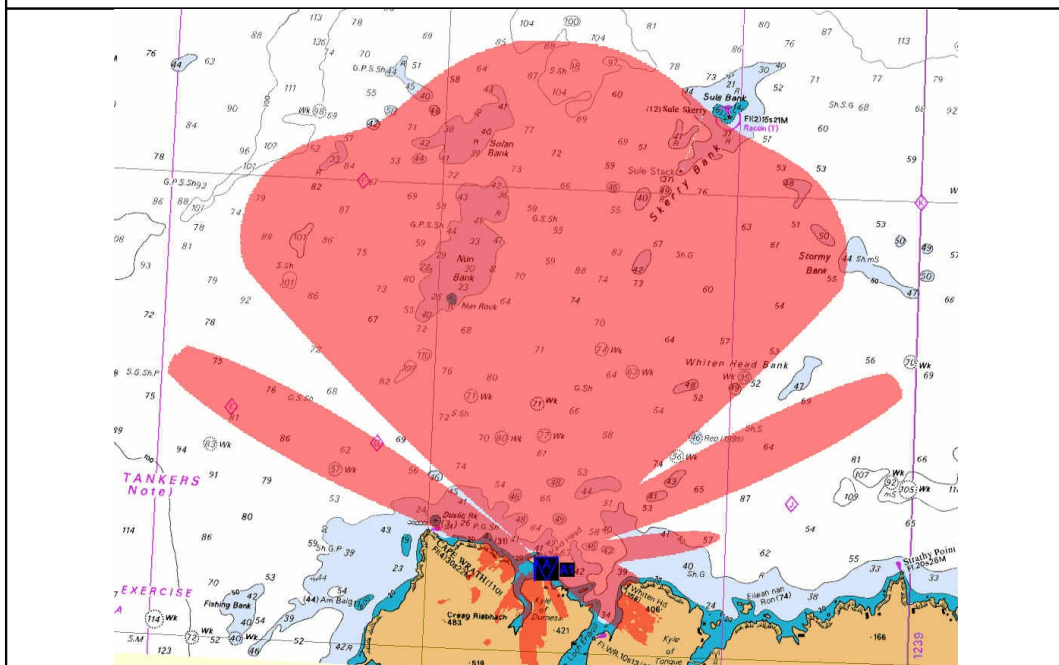
Denial of GPS Service

GPS RECEIVER INTERFERENCE PREDICTION PLOTS FOR FARAIID HEAD

The shaded areas represent the 30dB J/S threshold vs the minimum GPS L1 C/A-Code measured signal strength of -157dBW.



Faraid Head. Receiver antenna height 4m



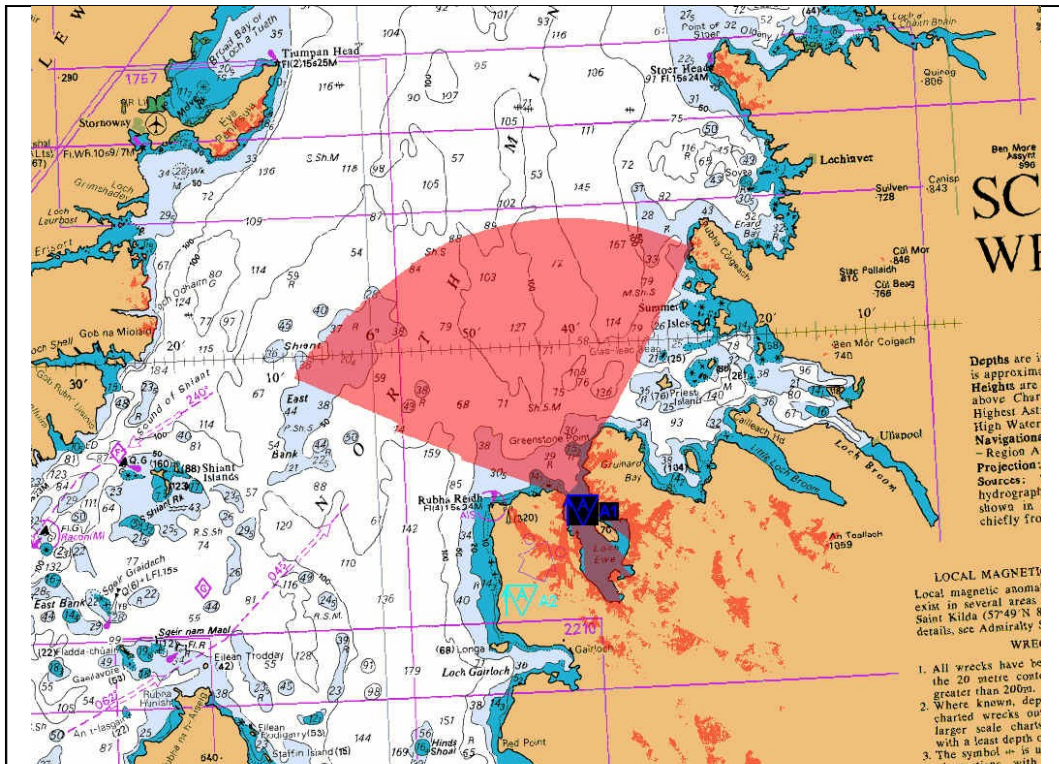
Faraid Head. Receiver antenna height 25m

Plots reproduced with permission of DSTL.

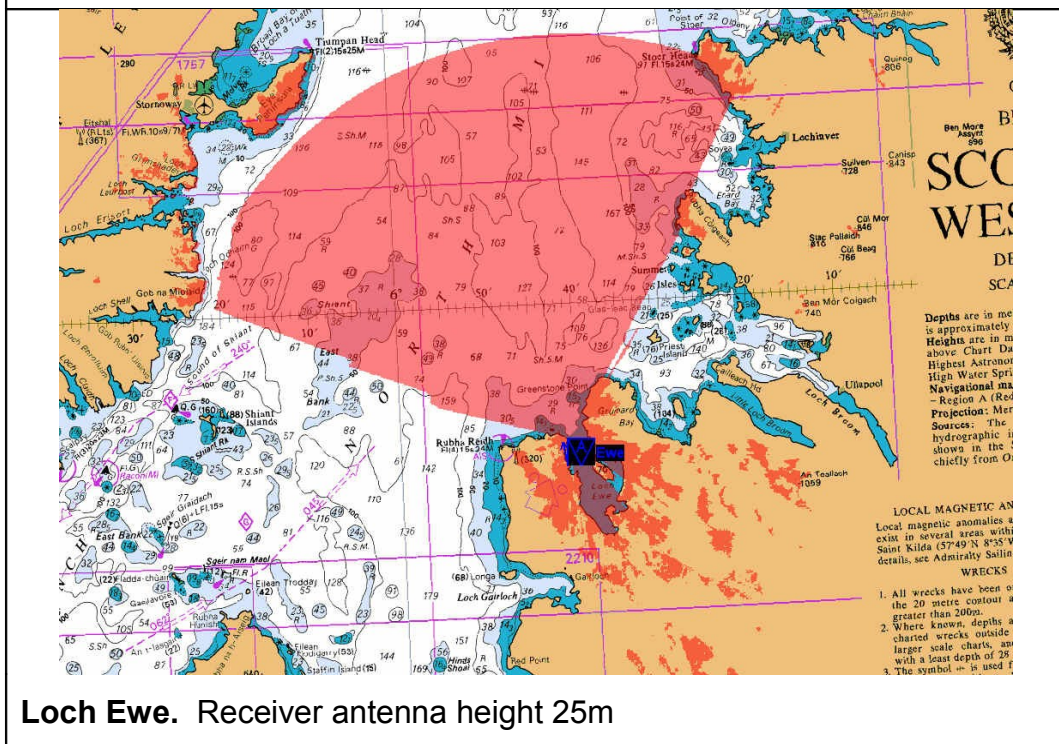
Denial of GPS Service

GPS RECEIVER INTERFERENCE PREDICTION PLOTS FOR LOCH EWE

The shaded areas represent the 30dB J/S threshold vs the minimum GPS L1 C/A-Code measured signal strength of -157dBW.



Loch Ewe. Receiver antenna height 4m



Loch Ewe. Receiver antenna height 25m

Unexploded Ordnance Advice

1. The following general advice is offered to anyone discovering anything believed to be unexploded ordnance:

| | |
|------------------|---|
| DIVERS | DO NOT TOUCH |
| FISHERMEN | Contact the coastguard. If this is not possible, lay the item in about 60ft of water, away from shipping routes and mark the position with a float. |
| EVERYONE | DO NOT TOUCH – dial 999 for coastguard or Police. |

Contact Telephone Numbers

| | |
|--|-------------------------------|
| UNEXPLODED ORDNANCE (FLEET DUTY CONTROLLER) | 01923 956366 |
| FISHERMAN'S HOTLINE (FLEET DUTY CONTROLLER) SUBMARINE RELATED | 01923 956366 |
| HOTLINE (JOINT WARRIOR DUTY CONTROLLER) GPS JAMMING RELATED | 01436 674321 Extn 6469 |
| JOINT WARRIOR CONTROLLER | 01436 674321 Extn 4372 |
| CAPE WRATH INFORMATION LINE | FREEPHONE 0800 833300 |

If future versions of this brief are not required please contact:

Joint Tactical Exercise Planning Staff, JHQ Room 301, Northwood Headquarters,
Sandy Lane, NORTHWOOD, Middlesex HA6 3HP

Telephone: 01923 958788.

E-Mail: JTEPS-SM-SO2@mod.uk