

The Royal Navy Code of Practice for Fishing Vessel Avoidance dated 5 June 2002

UNCLASSIFIED

FISHING VESSEL AVOIDANCE

THE UK CODE OF PRACTICE

This is extracted from Commander-in-Chief
Fleet's Publication SMP 95
(to Change 5 dated 5 June 2002).

SMP 95 should normally be held by Allied
Submarines Operating in UK waters

Issued by the Fleet Publications Officer

UNCLASSIFIED

Extracted from SMP 95 Change 5

FISHING VESSEL AVOIDANCE

THE UK CODE OF PRACTICE

CONTENTS

SUBMARINE OPERATIONS AND FISHING VESSELS.....	3
INTRODUCTION.....	3
TERMS USED IN THIS CODE OF PRACTICE	4
DIVED SUBMARINE OPERATIONS	4
OPERATING PROCEDURES	5
SHIPPING AND NAVIGATION CONSTRAINTS	6
FISHING VESSEL SAFETY OFFICER (FVSO).....	7
QUALIFICATION, TRAINING & BRIEFING OF THE FVSO	9
COMMUNICATIONS.....	9
NOTIFICATION OF SUBMARINE MOVEMENTS	10
ACTION TO BE TAKEN IN THE EVENT OF AN INCIDENT	10
CONSULTATION	10
SUBFACTS AREAS MAP	1A-1
ACTIONS IN THE EVENT OF A COLLISION WITH A FV OR HER GEAR	1B-1

UNCLASSIFIED

CHAPTER 1

THE CODE OF PRACTICE

The Code of Practice, as agreed by the Fishing Industry Safety Group and announced by the Minister (AF) during the SDE debate of October 1993, is re-issued in step with Changes to the RN's Submarine Publication 95. It was revised and re-issued as a result of the deliberations of the Fishing Industry Safety Group sub-committee on Fishing Vessel and Submarine interactions and thereafter the Fishing Industry Liaison Meeting (FILM). The version which follows includes updated communications arrangements in Paragraph 22 of the Code, it also updates titles for Naval and other Government departments where these have recently changed. - Fleet Publications Officer June 2002

SUBMARINE OPERATIONS AND FISHING VESSELS

A Code of Practice

(For the conduct of submarine Operations in
waters frequented by UK vessels engaged in fishing)
Revised June 1999

INTRODUCTION

1. This paper describes the arrangements and procedures that have been put into place for the conduct of dived submarine operations in waters which are frequented by UK vessels engaged in fishing, and the related arrangements for improving fishing vessel safety. These arrangements take account of the work and consultations that have taken place in the Department of Environment Transport and Regions sponsored Fishing Industry Safety Group (FISG), sub-group on submarine and fishing vessel matters, including the views and concerns put forward by the members of the Fishing Industry Liaison Meeting (FILM), representing the UK fishing industry.

2. The arrangements apply to RN submarines in all waters frequented by UK vessels engaged in fishing and to Allied submarines operating in UK territorial and internal waters. Before a foreign submarine dives in UK territorial waters its Commanding Officer is to be briefed comprehensively on the conduct expected of him when operating in the vicinity of UK vessels engaged in fishing as laid down in this Code of Practice. Outside UK territorial waters the Commanding Officer of an Allied submarine cannot be made subject to UK national agreements. However, CINCFLEET will continue to require that submarines of Allied Nations under UK OPGON must adhere to the Code of Practice if they wish to operate dived in UK Exercise areas and UK established Notice of Intent areas.

3. Submarines of Allied Nations under UK OPGON operating outside UK territorial waters, UK exercise areas and UK established Notice of Intention areas are to operate with due care for the safety of UK Vessels engaged in fishing as may be required by their respective governments, International Maritime Law and the practice of good seamanship.

UNCLASSIFIED

TERMS USED IN THIS CODE OF PRACTICE

4. The following terms are used throughout this document and are explained here:
- a. Vessel engaged in fishing. Any vessel fishing with nets, lines, trawls, or other fishing apparatus. These vessels should be exhibiting the appropriate lights and shapes. However, if such lights or shapes are absent or there is any uncertainty about whether the vessel is engaged in fishing or not the Commanding Officer is to assume that it is and act in accordance with these rules.
 - b. Dived. A submarine is "dived" when the hull and fin are fully submerged.
 - c. Diving. The act of changing from the surfaced condition to being dived.
 - d. Periscope Depth. The depth at which a dived submarine can observe surface vessels using periscopes. At this depth it can also operate radar and communications equipment. The term may be abbreviated to PD. For the purposes of the Code of Practice a submarine in transition from surface vessel status (and vice versa) down to and including periscope depth shall be considered to be at periscope depth.
 - e. Deep. Any depth below PD.
 - f. Surfaced. A submarine in an established surfaced condition with the fin and casing clear of the water .
 - g. Intermittent All Round Look. Not maintaining a continuous look out through the periscope while at PD.
 - h. Continuous All Round Look. Maintaining a continuous look out through the periscope while at PD.
 - i. Inner Clyde Areas. Those areas to the North East of, and including STAFNISH, AILSA and BALLANTRAE.(i.e. the Firth of Clyde).

DIVED SUBMARINE OPERATIONS

5. The FISG sub-group has acknowledged that there is an essential military requirement to operate submarines submerged in waters where UK vessels engaged in fishing may be operating and, in particular in coastal waters. The Ministry of Defence accepts that the prime responsibility for these operations to be conducted safely, when vessels engaged in fishing may also be present, rests with the Royal Navy. The Ministry of Defence recognises that the most effective way to eliminate incidents between dived submarines and vessels engaged in fishing is to reduce to a minimum the number of occasions when dived submarines are present when fishing is taking place.

6. In order to reduce the level of dived submarine operations in and around areas where UK vessels engage in fishing, the following general procedures for submarine operations are to be applied:

- a. Where practicable routine transits through coastal waters will be undertaken on the surface.

UNCLASSIFIED

b. Essential dived transits through coastal waters are to be conducted at periscope depth (PD) or, when below PD, at slow transit speeds and only for short periods that are entirely within the prescribed operating parameters.

c. Safety training will be predominantly conducted in deep water, only coming in-shore for the later phases, and maximum use is to be made of outer exercise areas.

d. During weekdays (from 0001 local on Mondays to 2359 local on Fridays) Inner Clyde Areas will only be allocated for dived operations approved by CINCFLEET with the endorsement of FOSNNI and the prior notification to the Clyde Fishermen's Association. Any objection, based on projected fishing activity, by that Association, is to be resolved prior to approval being given.

e. Exercises will where possible and appropriate be relocated away from Inshore areas in which vessels engaged in fishing may be operating.

f. In planning and executing training and exercises full account will be taken of the regular brief on fishing vessel movements received by the Royal Navy:

(1) From UK Fisheries Departments.

and

(2) From CINCFLEET's Fishery Liaison Officer.

7. If the Commanding Officer knows, or suspects that there are, or may be, fishing vessels operating in the vicinity of his submarine, he must assume that the fishing vessels are, or will be, working along his intended track unless he can satisfy himself to the contrary.

OPERATING PROCEDURES

8. In setting procedures for the conduct of dived submarine operations it is necessary to take account of the change in a submarine's characteristics as it moves from being a surface vessel with full buoyancy and showing the appropriate navigation lights or shapes to being fully submerged below periscope depth (PD). This transition, depending on the type of boat, can take between 1 and 8 minutes. At PD, the submarine retains the ability to use its radar and communications equipment. It will also have good visual observation of the surface through its periscopes. A submarine when deep is totally dependant on passively received sonar information, updated from time to time with surface picture data at PD, to determine the positions and movements of other craft. To reflect these changing capabilities, the following operating requirements to ensure that submarines do not come into close proximity with UK vessels engaged in fishing have been implemented:

a. Submarines on the surface, showing all appropriate navigation lights or shapes - normal maritime "rules of the road" apply.

b. Submarines in transition from "surface vessel" status (and vice versa) down to and including PD when operating a continuous all round look - a mandatory separation of at least 1500 yards from all UK vessels engaged in fishing.

UNCLASSIFIED

c. Submarines at PD operating other than a continuous all round look - a mandatory separation of at least 4000 yards (2 nautical miles) from all vessels classified as possible fishing vessels whether or not they are believed to be engaged in fishing, **or**:

d. Submarines at PD adopting an intermittent all round look with an established onboard radar safety cell - a mandatory separation of at least 1500 yards from all UK vessels engaged in fishing.

e. Submarines when deep - a mandatory separation of at least 4000 yards (2 nautical miles) from all vessels classified as possible fishing vessels whether or not they are believed to be engaged in fishing.

9. These separation requirements apply to all RN Submarines in all waters frequented by UK vessels engaged in fishing, irrespective of the tasking of the submarine; i.e. they apply to transits, exercises and other dived activity. These separation distances also apply to Allied submarines operating dived in UK territorial waters and are to be advised to, and adhered to by all Allied submarines under UK operational control whilst dived in UK exercise and Notice of Intent areas.

10. The submarine Commanding Officer shall take account of the prevailing sonar conditions when considering his intention to operate deep in areas frequented by UK fishing vessels. Where the current range prediction against a quiet (late detection) fishing vessel falls below the range required to detect, classify and then to comply with the approach limits required by this code, the submarine can no longer remain deep and must return to periscope depth. This range shall be calculated at actual submarine speed.

11. The Commanding Officer shall, when at PD, frequently use radar to confirm his tactical picture, particularly before operating deep in an area frequented by UK fishing vessels.

12. Distances between submarines when deep and UK fishing vessels are to be established by all means available appropriate to the prevailing circumstances and conditions.

SHIPPING AND NAVIGATION CONSTRAINTS

13. When shipping and navigation constraints arise, and it becomes impractical, for whatever reason, for a submarine below PD to maintain 4000 yards separation, it must return to PD in as short a time as possible, commensurate with the safety of adjacent shipping and the submarine, maintaining a minimum of 1500 yards separation. If the submarine cannot then maintain 1500 yards separation, it must establish communications with the fishing vessels before proceeding, or failing that come to the surface. If a warship or an aircraft, which is exercising with a submarine, observes a fishing vessel in the vicinity of the submarine it is to warn the submarine and the fishing vessel by the most expeditious means possible.

14. When submarines intend to operate dived in specified waters where the geography or navigation constraints would not permit compliance with the separation requirements for dived submarines detailed above, or if submarines are knowingly going to operate in other waters where shipping constraints may prevent full compliance with the operating procedures, a surface craft with a Fishing Vessel Safety Officer (FVSO) embarked will be present. The accompanying surface craft will assist in facilitating the safe navigation of all vessels and will, where appropriate, act as a communications link between the submarine and fishing vessels and as an information

UNCLASSIFIED

link, with regard to fishing vessel dispositions and movements, between other surface and air assets and the submarine. The surface craft may be a warship exercising with the submarine. The specified waters are:

- a. Loch Long;
- b. Loch Fyne;
- c. Loch Goil;
- d. Loch Striven;
- e. Loch Linnhe
- f. The Sound of Sleat
- g. SXA's Skipness, Laggan, Garroch and Lochranza (in these areas the use of an escort vessel and FVSO from 2359 on Friday to 0001 on Monday is not mandatory but strongly recommended).
- h. Other waters, as listed and notified by FOSNNI to the local fishermen's association(s) from time to time.

FISHING VESSEL SAFETY OFFICER (FVSO)

15. Whenever a submarine is operating dived in the areas specified in the paragraph above (paragraph 14) it is the responsibility of the submarine Commanding Officer to ensure that such operations are conducted safely, and in accordance with this Code; particular regard is to be paid to the safety of vessels which are, or may be, engaged in fishing. A suitably qualified officer may be directed to assist the Commanding Officer in discharging this responsibility.

16. This officer will be known as the Fishing Vessel Safety Officer (FVSO). Notwithstanding the title his responsibilities extend equally towards all vessels operating in the same area as the Submarine. The nomination of a Fishing Vessel Safety Officer does not affect the Commanding Officer's primary responsibility for safety. The FVSO can either perform his duties in an attendant surface vessel or, for operations on range at RONA may be landed to the Range Control Building.

17. The primary duty of the FVSO is to facilitate the safe navigation of all vessels operating in the same area as a dived submarine. He is to:

- a. Attempt to establish communications with all FVs in the area before operations are commenced and agree a working VHF channel to discuss routine and safety related matters.
- b. Where possible, identify a Skipper willing to act as the point of contact if operating in the vicinity of a recognised fishing fleet. However, should there be any doubt he should call each vessel individually.
- c. Inform all vessels of the Submarine's intended operations and any changes thereto and be frequently informed of the intentions of FVs in the area.
- d. Advise the Commanding Officer of the Submarine by the most expeditious means available of any objection or complaint represented.

UNCLASSIFIED

- e. Maintain the following records:
 - (1) A General Operations Plot (GOP) of FV movements.
 - (2) A narrative of events, which is to include positive identification (if possible) of all fishing vessels within the area.
 - (3) A log of communications between the Submarine and FVs and FVSO and FVs. If practicable, a cassette recorder should be utilised to record VHF communications.

- f. Before operations are commenced to check the following:
 - (1) Communications with own submarine and other range craft, and in particular the specified means of alerting the submarine of a possible conflict.

 - (2) Marine sound signals are made available for use in any attendant safety craft.

18. The FVSO is to remain on watch throughout his period of duty and ensure that he is familiar with the surface picture throughout the area of interest. Should the operation be of a protracted nature a second FVSO should be nominated to ensure continuous cover. It will often be advisable to provide the FVSO with an assistant to compile the records.

19. The Submarine Commanding Officer is to satisfy himself that all masters of safety craft; trial directors and FVSOs acting on their behalf are fully briefed. The following points are to be covered in such briefings:

- a. The nature, duration and limitations of the trial or exercise to be conducted.
- b. The specific trial requirements including timings, areas run plans etc.
- c. The Communications to be used and the actions to take in the event of a communications failure.
- d. Known fishing activity and fishing methods.
- e. The stationing of safety craft.
- f. The action to be taken in the event of any conflict (threatened or actual) or on receipt of an objection or complaint.
- g. The action to take should the safety of any vessel be in doubt.
- h. That the FVSO has no responsibility for ensuring the completion of the intended submarine operations and has no authority to order other vessels to remain clear of the submarine.

UNCLASSIFIED

QUALIFICATION, TRAINING & BRIEFING OF THE FVSO

20.

a. Before an officer may be nominated to perform the duties of FVSO the officer must meet the following mandatory criteria:

- (1) Be Submarine qualified.
- (2) Hold the Bridge Watchkeeping Certificate (BWC).
- (3) Be Intermediate Warfare Course (IWC) qualified.
- (4) Have received formal training on the duties and responsibilities of the FVSO. (Training to be included as part of the IWC and repeated on the AWC).
- (5) Have received approval from the appropriate Sea Area Commander's Staff Operations Officer (SOO) or his deputy (DSOO).
- (6) In the capacity of FVSO have attended all briefings relating to the intended operations of the Submarine and be familiar with any operating restrictions imposed on the Submarine by the particular trial or exercise.
- (7) Have been specifically approved by the Commanding Officer of the Submarine to act on his behalf and have been briefed personally by the Commanding Officer or Executive Officer as to his responsibilities as FVSO.
- (8) Be thoroughly familiar with the Code of Practice and the provisions of The Fishing Vessel Avoidance Manual (SMP 95).
- (9) Be familiar with the use of VHF and particularly the requirement for a non-military approach to VHF communications when dealing with fishermen.

b. Wherever possible the FVSO should:

- (1) Be a member of the ship's company of the Submarine conducting the operations or from the Submarine's parent squadron.
- (2) Be qualified, as a watchkeeping officer on the class of submarine in question or, if not, be assisted by a Control Room qualified officer from that class of submarine.
- (3) Have spent a day at sea in a commercial Fishing Vessel.

COMMUNICATIONS

21. Before diving, or going deep submarines will take every opportunity to talk to fishing vessels operating in the same area. Wherever possible the Submarine, either directly or through the FVSO, will attempt to establish an agreed point of contact for vessels observed to be operating as a fleet. To this end, the maintenance of a proper guard on VHF channel 16 is essential. RN operating procedures require that a submarine or its accompanying surface craft may only regard communications as having been achieved if the message is acknowledged. Operating intentions must also

UNCLASSIFIED

be established and adhered to unless varied by further communication. If an objection is received, and lack of objection is to be confirmed and not assumed, or if communications cannot be established, or if there is any doubt about respective intentions, the submarine will either operate in full compliance with the standard procedures described above intimating an intention so to do, or surface (or, where surfaced remain on the surface), and report the circumstances to the local sea area commander with a view to seeking fresh instructions.

22. "FVs over 24m in length are required to maintain a continuous watch on Channel 70 DSC. Additionally, until February 2005 those over 12m in length are required, when practicable, to maintain a watch on VHF channel 16. FVs less than 12m in length are only required to carry a handheld VHF radio (a DSC type is recommended). It should be noted that submarines are not currently (2002) fitted with GMDSS equipment and therefore cannot send or receive DSC messages. Therefore, as a major contribution to ensuring separation between FVs and Submarines, it is strongly recommended that FVs working in submarine operating areas maintain a continuous watch on channel 16."

NOTIFICATION OF SUBMARINE MOVEMENTS

23. The "SUBFACTS" scheme, under which the presence of a dived submarine in designated exercise and transit areas at particular times is broadcast by the Coastguard. A map showing the areas covered by the current SUBFACTS notification arrangements is at Annex A to this code. Details of SUBFACTS broadcasts and designation of detailed areas are promulgated locally.

24. In addition to the routine notification of dived submarine activity in the SUBFACTS areas, any periods of intensive submarine activity taking place outside these areas will be notified through the issue of appropriate notices to fishermen and every opportunity will be taken to establish the level of fishing activity in an area before submarine operations are commenced.

ACTION TO BE TAKEN IN THE EVENT OF AN INCIDENT

25. The RN recognises that in the event of an incident between a dived submarine and a fishing vessel, it is important that the submarine commander should have clear, concise and unambiguous instructions on how to proceed. Attached at Annex B to this code is the guidance, which is issued to Commanding Officers on the procedures to be followed in the event of a snagging incident. This guidance has been drawn up taking account of the views and comments of the representatives of the fishing industry.

CONSULTATION

26. The importance of consultation between the RN and fishermen is fully recognised and the following arrangements to improve consultation procedures have been implemented:

a. Regular consultation meetings between the Navy and fishermen's associations in the Clyde, West Coast of Scotland Irish Sea and Portland/Plymouth (South Coast Exercise Areas) areas have been established.

b. Navy submarine operations staff will visit fishing communities in the Clyde/West of Scotland on a regular basis.

UNCLASSIFIED

c. A Clyde area "hotline" has been established to give fishermen direct access to submarine operations staffs.

d. Potential submarine commanding officers and all future submarine Officers' of the Watch spend at least one day during their training courses at sea in a commercial fishing vessel.

e. FOSNNI/FOST Operations staff will take every opportunity to establish levels of fishing activity in advance of intended inshore submarine operations and advise fishermen, through established points of contact, of intended operations.

f. CINCFLEET has appointed a Fishery Liaison Officer to his staff to provide a central point of contact with the UK Fishing Industry, to pass information on fishing activity to exercise authorities and to ensure all submarine crews receive training on fishing vessels and their avoidance.

27. The aim of these arrangements is to exchange as much information as possible about fishing activity and planned submarine exercises. The arrangements will allow the local fishermen's association or representatives to give advice about local fishing practices and on seasonal fishing patterns. The Navy will, so far as is operationally practicable, take account of this information in planning its dived submarine activity. It is also hoped that in certain limited circumstances, agreements can be reached under which fishermen will voluntarily stay out of specified waters required for dived activity in that particular location. It is unlikely that such periods would extend for more than a few hours in any one location, and all such exclusion periods will be agreed on a case by case basis with local fishermen's associations.

28. While the purpose of these arrangements is to minimise the risk of an incident between dived submarines and fishing vessels by specifying minimum separation limits, it should be noted that the MOD will take the final decision about the programming of submarine operations and exercises.

Annexes:

Annex A. SUBFACTS AREAS MAP.

Annex B. ACTIONS IN THE EVENT OF A COLLISION WITH A FV OR HER GEAR (Instructions on procedures to be followed in the event of a snagging incident).

UNCLASSIFIED

ANNEX A

SUBFACTS AREAS MAP



UNCLASSIFIED

1A - 1(RB)

Extracted from SMP 95 Change 5

UNCLASSIFIED

ANNEX B

ACTIONS IN THE EVENT OF A COLLISION WITH A FV OR HER GEAR

1. Having recognised that an incident has occurred, or may have occurred, it is vital that all appreciate the immediate change of priorities, viz:

THE SAFETY OF LIFE IS OF PARAMOUNT IMPORTANCE AND OVER-RIDES ALL OTHER CONSIDERATIONS

2. All actions taken by the Command must be aimed at achieving this primary objective. Once the safety of life has been assured, secondary objectives will be to minimise damage to the fishing vessel and the submarine.

3. The following items are for consideration and may need to be adapted to the circumstances prevailing at the time:

a. **SLOW DOWN** - Reduce forward motion to an absolute minimum commensurate with safe ship control as soon as possible, thus reducing the possibility of the fishing vessel being girded.

b. **RECORDS** – Full records including Big Brother tapes, Little Sister tapes, Narrative, Bow Sonar VGR tapes, sonar paper traces, Fixing Log, Ships Log, LOP, SNAPS tapes, DCB/SMCS tapes, Fishing vessel log and any other record which may aid reconstruction are to be taken.

c. **INDICATE** - Fire White/Yellow smokes to indicate to the FV that he has caught a submarine, and not the bottom. This may also give him an indication of relative motion.

d. **PD** - Prepare at once to return to PD. It should not be difficult, or indeed take long, to clear the surface picture under these circumstances.

e. **STAY SLOW** - Reduce UPWARD velocity to an absolute minimum whilst returning to PD. The victim FV could be directly above you. Use UWL triangulation techniques to fix him relative to you if possible. Use and record FINTEL if fitted.

f. **BROACH** - On arriving at PD come shallow and broach.

g. **TALK** - Raise WT mast or Search Periscope and communicate.

h. **CASING** - Casing Party muster, with appropriate equipment ASAP, ready to proceed topsides.

**THE SUBMARINE IS TO REMAIN ON THE SCENE
UNTIL ORDERED TO PROCEED**

4. Once communications at PD have been established, discuss your intentions. It will be necessary to surface and remain in the vicinity to assist and resolve the incident. Consider asking the skipper/owner onboard to assist in recovering gear. If it has to be slipped, record and report its position exactly.
5. Communications.
 - a. At the very minimum the following signalled reports are to be made:
 - (1) *IMMEDIATE signal to CINCFLEET PORTSMOUTH (Fao: FLEET WAR-SO2N7SMN) and SUBOPAETH info local Exercise area Commander and Parent Squadron, declaring the incident - as soon as possible.*
 - (2) Formal signalled report in accordance with QRRN 4503.
 - (3) Amplifying signal to *CINCFLEET PORTSMOUTH (Fao: FLEET WAR-SO2N7SMN)* info MODUK NAVY (for DNO), Local Sea Area Commander and Parent Squadron providing sufficient material to enable MOD to respond to enquiries.
 - b. In addition to these formal reports, the following local short-haul communications must be attempted:
 - (1) Contact the FV concerned on VHF. Initially on IMM Ch 16, chopping to Ch 6, but if unsuccessful, try IMM frequencies for the area which you are in (listed in SMP 95 Chapter 6). If you suspect you have been involved in an incident but when you return to PD there is no obvious candidate, you must establish communications with the nearest vessel and ensure the safety of the Fleet.
 - (2) Always establish communications with the local Coastguard and liaise with him about your intentions, providing him with a SITREP and reassurance as to the safety of life.
 - c. Do not be unnecessarily secretive - THE FACT THAT YOU ARE THERE IS UNCLASSIFIED INFORMATION. State you are a British (or name of your Nation) Submarine.
6. In your discussions with the skipper be frank and honest. You will need to establish the following:
 - a. Rough narrative of events from the skipper's point of view.
 - b. Assessment of the damage.
 - c. Name of vessel, Registration letters and numbers.

UNCLASSIFIED

- d. Name of owner of vessel.
 - e. Port of Registry.
 - f. Amplifying information relevant to the incident.
7. You should advise that, in the first instance claims should be made to:
- The Scottish Executive Environment & Rural Affairs Department - in Scottish Waters
 - The Department of the Environment, Fisheries and Rural Affairs (DEFRA) - in English/Welsh Waters.
 - The Department of Agriculture and Rural Development (DARD) - in Northern Irish Waters

Marine Safety Agency, Marine Guidance Note 12(F)

Fishing vessels operating in submarine exercise areas

Notice to Owners, Skippers and Crew of Fishing Vessels

INTRODUCTION

1. This Marine Guidance Note describes measures implemented by the Royal Navy to minimise the risk to fishing vessels operating in areas of submarine activity. It also explains how to obtain information about submarine activity and what action fishing vessel skippers need to take when operating in areas of submarine activity, particularly in the event of motive power being lost.

SUBMARINE EXERCISE AREAS

2. All exercise areas around the United Kingdom that are permanently established and used for training by submarines are listed in the Admiralty List of Radio Signals (ALRS) Volume 3, Part 1 (Figure 1) (ALRS 3-NP 283 (Figure 1)). Diagrams indicating these general areas can be seen at the Annex to this notice.

SUBFACTS BROADCASTS

3. Use of these exercise areas by submarines is promulgated to other marine users by SUBFACTS broadcasts. ALRS Volume 3 (Figure 1) gives details of the broadcast frequencies and their times. Notification of activity is outlined on the NAVTEX system and draws marine users' attention to the VHF broadcast schedules. Additionally, any mariner can request information on submarine activity from the nearest Coastguard Rescue Centre or by contacting the following local "hotlines":

Plymouth (for the South coast) (01752) 557550
Faslane (for Scottish areas) (01374) 613097

THE CODE OF PRACTICE

4. The Royal Navy's "Code of Practice for conduct of submarine operations in the vicinity of fishing vessels" (revised in November 1995) governs the arrangements and procedures that have been put into place for the conduct of dived submarine operations in waters frequented by fishing vessels, and the related arrangements for improving fishing

vessel safety. The Code has been approved by the Department of Transport's Fishing Industry Safety Group Sub-Group on Submarine and Fishing Vessel Matters. It is designed for use by submarine Commanding Officers who are required to comply with its provisions, and places the onus for fishing vessel avoidance by dived submarines squarely on their Commanding Officers.

5. The arrangements apply to RN submarines in all waters frequented by UK fishing vessels and to dived Allied submarines operating in UK territorial and internal waters (defined as the territorial sea adjacent to the UK, the Isle of Man and the Channel Islands), and in UK exercise areas. Royal Navy Commanding Officers are expected to be very familiar with the provisions of the Code, which is accorded a high priority in training. Before foreign submarines dive in UK territorial waters, or in UK exercise areas, their Commanding Officers too are briefed comprehensively on the conduct expected of them when operating in the vicinity of fishing vessels.

SONAR CAPABILITY OF SUBMARINES

6. The modern submarine sonar is designed to provide all round coverage of 360°, and to detect noise over a wide frequency range, allowing analysis of engine signatures, gearing, propeller speeds and other machinery which generates noise. This includes hydraulic winches hauling and veering under strain.

7. Submarines are fitted with both active and passive sonar, the main difference being the passive sonar does not listen for the return echo of an emitted sound signal but instead "listens" for sound signals generated from other sources ego other vessels.

8. Under certain circumstances there can be some limitations on the effectiveness of passive sonar. However, these limitations are highly unlikely to affect the capability of the submarine to detect a fishing vessel engaged in normal fishing activities.

FUNCTIONS OF THE FISHING VESSEL SAFETY SHIP (FVSS) IN EXERCISES

9. A FVSS will be appointed (either surface or air unit) in all exercises involving RNI Allied Warships and RN submarines in all waters frequented by UK fishing vessels and RN I Allied Warships operating under UK OPCON (UK OPERational CONtrol) in UK territorial and internal waters and in UK exercise areas.

10. The aim of establishing the FVSS is to

(a) provide assistance to the participating submarine to compile its plot of fishing vessel activity in order to minimise the risk of hazardous incidents.

(b) make fishing vessels aware of submarine exercise activity in their vicinity and to provide a source of information and advice to minimise the risk of hazardous incidents.

11. All exercise participants are required to support the FVSS by providing information of fishing activity in their vicinity, warning any FV detected approaching the area that anti-submarine exercises are being conducted in the vicinity, and warning the submarine of any FV within 6000 yards (3 nautical miles) of the warship.

12. The submarine must not rely upon these services alone but is required to, comply with the Code of Practice, maintain a comprehensive plot of all fishing activity supplemented by the FVSS BROADCAST (communications between the FVSS and the submarine on the designated exercise broadcast frequency), and consider the use of Radar to support information from other sensors whenever the Commanding Officer considers it necessary, regardless of the exercise instructions.

RECOMMENDED ACTION TO BE TAKEN WHEN OPERATING WITHIN A SUBMARINE EXERCISE AREA

13. Before carrying out, and during, fishing operations in a known submarine exercise area skippers are **strongly urged** to make use of the SUBFACTS broadcasts and the other services described at paragraph 3. Unless the skipper consents to a request by naval personnel to do otherwise, or unless there is any doubt that sufficient radiated noise is being generated, normal fishing operations need not be affected by a submarine exercise and skippers need only

ensure that proper navigational and radio watch on VHF Channel 16 is maintained.

14. In the event of a total power failure there would be no radiated noise from the fishing vessel for a submarine to detect. If this were to occur in a known submarine exercise area, which had been declared active in SUBFACTS, the skipper should;

(a) contact the hotline number and the Coastguard immediately advising them of his situation, and

(b) in the best interests of safe navigation, consider marking and releasing the fishing gear for later recovery.

15. If the fishing vessel has stopped in the water but power to work the nets and any other machinery is available, then provided the nets or other machinery are being operated, the radiated noise should be sufficient to alert the submarine. Skippers should also ensure that all electronic equipment which generate impulses in the water (eg sonar/echo sounder) is operating. If motive power can not be restored in a short time scale, or there are any doubts about the vessel's capacity to generate sufficient radiated noise, the skipper should contact the hotline number and the Coastguard to advise them of his situation.

16. Submarines at periscope depth make a careful visual assessment of the surface situation. A number of incidents have occurred because surface craft have been showing incorrect navigation lights, or no lights at all. It is therefore essential that at all times vessels display correct lights and signals in accordance with the International Regulations for Preventing Collisions at Sea.

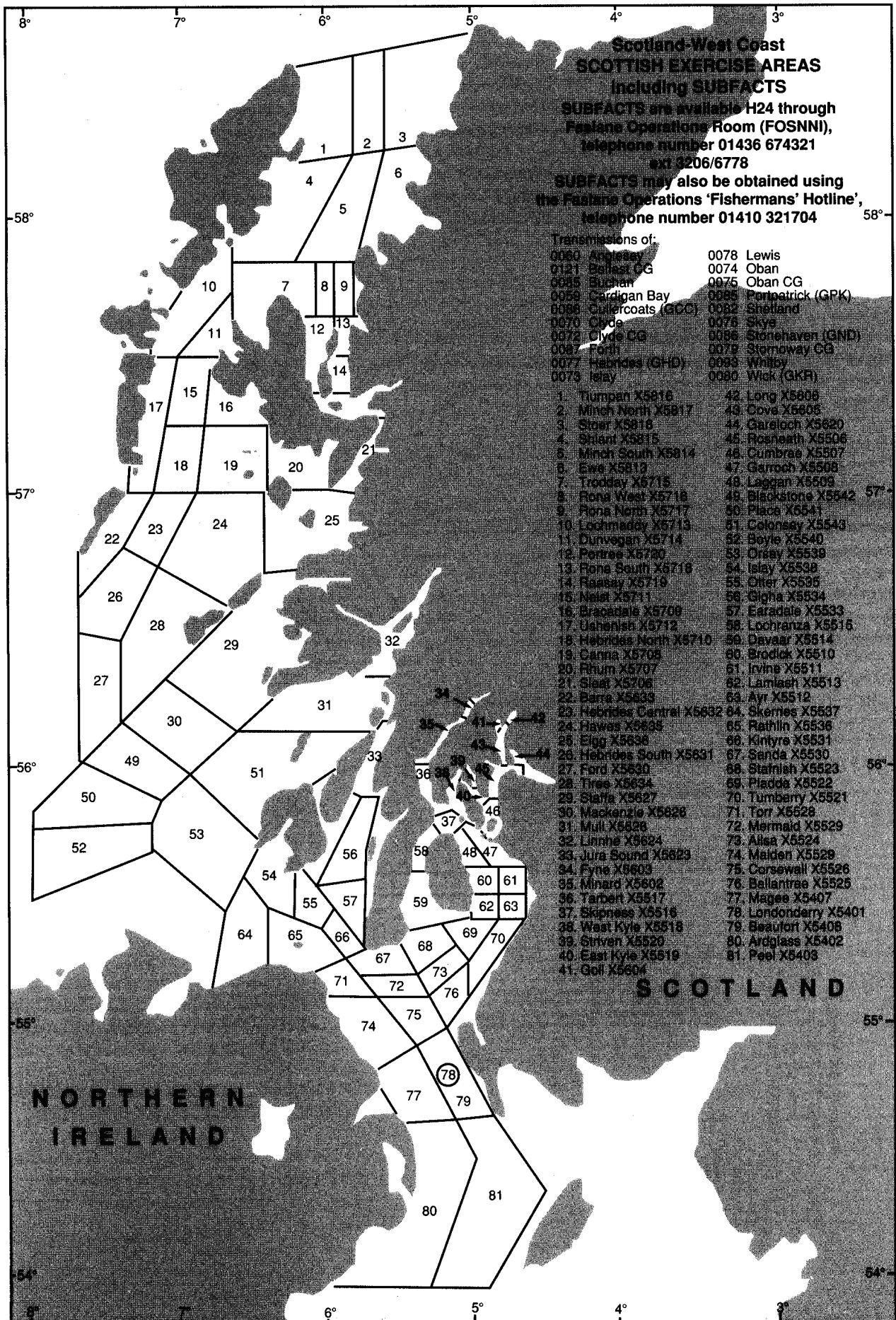
Marine Safety Agency
Spring Place
105 Commercial Road
Southampton SO15 1EG

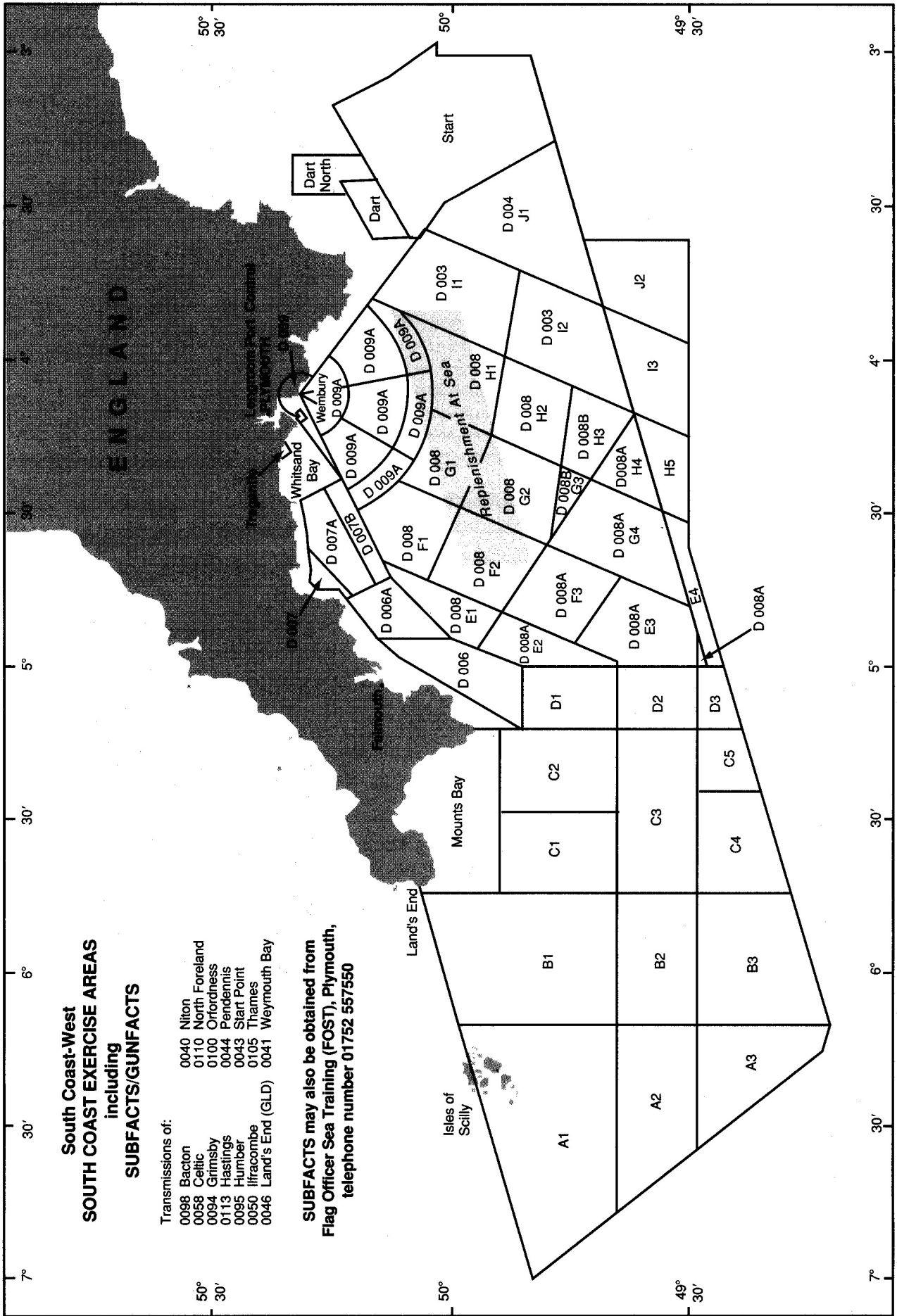
Tel: 01703 329 130
Fax: 01703 329 161

Following the merger of the Departments of Environment and Transport, the Marine Safety Agency is an executive agency of the Department of Environment, Transport and the Regions (DETR).

© Crown copyright 1997
June 1997

Safe Ships Clean Seas





Joint Tactical Exercise Planning Staff letter dated 25 March 2015



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 JW151

25 March 2015

JOINT WARRIOR 151 SUBMARINE, MINEWARFARE, LIVE FIRING AND DENIAL OF GPS TRAINING ACTIVITY

1. Exercise Joint Warrior 151 will take place between 11 and 24 April 2015, delivered by the Joint Tactical Exercise Planning Staff from Faslane (JTEPS). It is a programme of exercises conducted by land forces, warships, submarines and aircraft across the UK. The majority of the exercise is focussed in the airspace, offshore and coastal waters to the north east, north and north west of Scotland. This booklet provides outline information on scheduled activity including 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 and the wider civilian community every assistance in their dealings with exercise activity. This applies especially when in the vicinity of submarines, when warships are conducting live firing or when GPS is denied for military training. You are invited to contact them via VHF to ensure that military training and civilian activities are sensibly and safely deconflicted.

6. Throughout Exercise Joint Warrior 151 the following points of contact are available on a 24/7 basis to attend to any immediate problems or questions:

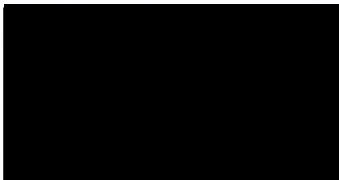
Primary - Joint Warrior Duty Controller 01436 674321 Ext. 3401

Secondary - Duty Submarine Controller 01923 956366

HM Coastguard at Clyde, Stornoway and Aberdeen can also contact the Joint Warrior 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 the Staff Officer Submarines at the above address.

Signed on Dii



Submarine Activity

1. The Submarine Activity Grid on the following page shows the areas and time periods where submarine activity associated with Joint Warrior (JW) 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 of 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. All warships, including the FVSS, can be contacted on VHF Channel 16 (working Channel 73).

Submarine Activity

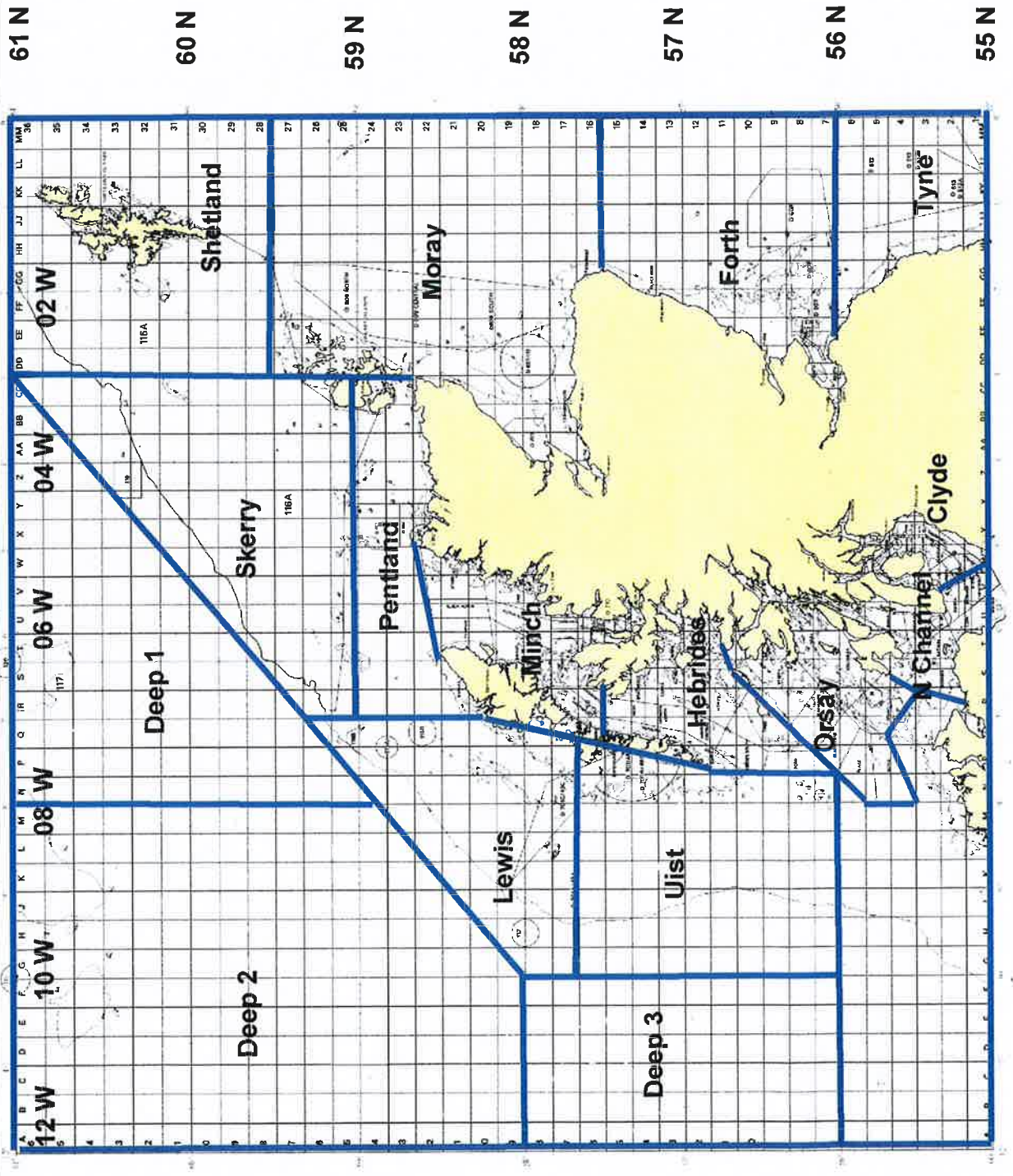
**Exercise Joint Warrior 151
SUBFACTS AREAS ACTIVATION GRID**

Active Time Period BST	12 APR		13 APR		14 APR		15 APR		16 APR		17 APR		18 APR		19 APR		20 APR		21 APR		22 APR		23 APR					
	SUN	SUN	MON	MON	TUE	TUE	WED	WED	THU	THU	FRI	FRI	SAT	SAT	SUN	SUN	MON	MON	TUE	TUE	WED	WED	THU	THU				
ORSAY	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	
N.CHANNEL			A A	A A																								
HEBRIDES			A A	A A	A A	A A	A A	A A	A A	A A	A A	A A	A A	A A	A A	A A	A A	A A	A A	A A	A A	A A	A A	A A	A A	A A	A A	A A
MINCH																												
UIST			A A	A A	A A	A A	A A	A A	A A	A A	A A	A A	A A	A A	A A	A A	A A	A A	A A	A A	A A	A A	A A	A A	A A	A A	A A	A A
LEWIS																												
PENTLAND																												
SKERRY																												
DEEP 1																												
DEEP 2																												
DEEP 3																												
SHETLAND																												
MORAY																												
FORTH																												
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**



61 N

60 N

59 N

58 N

57 N

56 N

55 N

12 W

10 W

08 W

06 W

04 W

02 W

Deep 1

Deep 2

Deep 3

Shetland

Moray

Forth

Clyde

Orsay

Hebrides

Lewis

Uist

Skerry

Pentland

Minch

Tyne

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