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

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FISHING VESSEL AVOIDANCE

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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 June1999

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 OPCON 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 OPCON 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.
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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 BALLANTRAЕ.(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.
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 CINCFLFLEET 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 CINCFLFLEET'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.
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
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.
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.
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
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.
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).
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.
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 **CINCFLIGHT PORTSMOUTH (Fao: FLEET WAR-SO2N7SMN)** and **SUBOPAUTH** 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 **CINCFLIGHT 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.
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