



HUMBERSIDE FIRE AND RESCUE SERVICE

EMERGENCY RESPONSE

WATER RESCUE AND FLOOD

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1. INTRODUCTION

Humberside Fire and Rescue Service (HFRS) attend a number of incidents each year where personnel are potentially at risk from injury or loss of life due to working in close proximity to water.

This policy and associated Guidance Note details Humberside Fire and Rescue Service's (HFRS's) position and the procedures to be adopted when working in, on or near water for the purposes of carrying out rescues.

2. POLICY STATEMENT

Humberside Fire and Rescue Service (HFRS) personnel may attempt water rescues only when appropriately qualified, equipped and where the Incident Commander deems that life can be saved.

3. EQUALITY AND INCLUSION

HFRS aims to continuously improve the standards of service we provide to the community we serve. We recognise the importance of and are committed to promoting equality and inclusion in the provision of our services and to our employees. We are committed to encouraging equality and diversity amongst our workforce and to eliminating unlawful discrimination. We aim for our workforce to be truly representative of the community we serve and for each of our employees to feel respected and to be able to give their best.

4. LEGISLATIVE REQUIREMENTS

- [The Fire and Rescue Services Act 2004](#)

5. AIM

The aim of this policy is to confirm and standardise operational response levels throughout HFRS and to establish inter-agency support. This will be in line with the Fire Services Act 2004, DEFRA Flood Concept of Operations and National Operational Guidance (NOG's).

6. OBJECTIVES

To ensure that a water rescue response for saveable life, and inter-agency assistance, is available throughout the Service area, and to establish parameters for safe systems of work for all personnel in the event of the following types of incident:

- Working near water
- Rescues from still water (including flooding)
- Rescues from moving water (including flooding)
- Rescues from unstable surfaces

7. GUIDANCE AND FURTHER INFORMATION

The procedures and guidance to comply with this policy will be either wholly or in part based upon the NOG, DEFRA Flood Rescue Concept of Operations and HFRS Standard Operating Procedures (SOP's).

Where there is a variation from the national guidance the service will provide such information, instruction, training and supervision to personnel as required.

8. WATER RESCUE

Operational personnel must be made aware of the dangers presented when responding to water incidents. The safety of all concerned must be maintained through planning and the use of operational risk assessments.

Appropriate control measures must be implemented wherever risks are identified.

Appropriate levels of training and personal protective equipment (PPE) will be provided along with safe systems of work. Consideration will be given to current national guidance for each level of response.

An analytical risk assessment (ARA) will be completed at the earliest practicable opportunity.

HFRS will identify risks and develop its own response to water related incidents.

Limitations

Sub-surface rescue attempts may only be undertaken where they do not involve operational personnel placing themselves or colleagues sub-surface e.g. firefighters will not place their head below the surface of the water.

Cold Water Immersion

Should a rescue be required of a submerged casualty from water, it is accepted that survival /resuscitation is extremely unlikely if a casualty is submerged for more than 90 minutes.

Submersion is defined as:

“The complete immersion of an individual, including the airway” (Tipton & Golden (2010))

For further guidance refer to the Survivability Model NOG Water Rescue and Flooding and SOP Water and Flood Rescue 2.8.

Water Response Capability

An individual's degree of capability to enter water and/or respond to rescues from water, mud or unstable ground will be determined by their level of training they have received.

9. MODULE OUTLINE

Module 1 Water Awareness

General water safety awareness training and basic land based rescue techniques.

Module 2 HFRS Moving Water Responder, (including Water Responder certification)

To work safely near and in water using land based and wet rescue techniques.

Training to Module 2 HFRS moving water responder, will be in line with national standards with the addition of the HFRS moving water responder syllabus.

Moving water responders trained to HFRS Moving Water Responder Syllabus can operate within the 3-metre hazard area when wearing correct PPE, and will use the techniques of talk, reach, throw, go.

A Moving Water Responder may enter water, under **exceptional circumstances** e.g. to save a saveable life, that is moving **less than 4mph** to perform a rescue. A DRA must be implemented which must include safe systems of work before deployment takes place. The IC will send an assistance message “**Water Rescue in progress**” and request the attendance of Water Rescue Technician teams. **The message must include the tactical mode.**

Various rescue methods can be utilised depending on prevailing conditions at the time and simultaneous rescue activities should be considered.

A DRA must be implemented which must establish safe systems of work before deployment takes place.

The training modules are detailed within the **DERFA Flood Rescue Concept of Operations: Water Rescue Credentialing Standards section.**

Module 3 Water Rescue Technician

Specialist rescue operation in water moving greater than 4 mph.

Module 4 Water Rescue Power Boat Operator

Rescue boat operation.

Module 5 Water Incident Management

Water related incident command.

Flood Rescue Tactical Advisors – (See [Appendix 1](#) for National Deployment Protocol).

10. FLOOD RESPONSE

Deployment of DEFRA Provided Boats, Equipment and limitations.

Use of the DEFRA supplied assets should be considered to support any water related incidents.

Boats should not be used in the Humber Estuary (other than for pre-planned training) or on the open sea. These response areas are covered by the maritime activities of the RNLI and Humber Rescue. The Humber Estuary can be used for pre-planned training on class 2 water, but only when a minimum of two boats are operating together.

Operations in rivers and tributaries are restricted to inland of the Humber Estuary, unless carrying out casualty landing or transfer operations where not entering the Humber Estuary would result in loss of life, or a worsening of the condition of the casualty. **All single boat operations in the estuary must stay as close as practicable to the shore or in any case within 25m of the shoreline.**

In this instance boats may enter the Humber Estuary subject to a decision by the IC, and a DRA by the boat crew commander. Control is to be informed and the following message passed to control; **“(boat call sign) Boat entering the Estuary casualty on board”** and state the intended landing point.

If not already in attendance, consider the attendance of the Humber Rescue through HFRS control.

Operational boat movement limitations and boat training activities will be covered by the OSRA and SSRI processes for each geographical location.

Flood Response Levels

HFRS have divided the flood response into three levels; Local Response within Capability, Local Response Requiring Assistance, and Responding to National Events. Response levels detailed below will generally apply to the following team types:

- Team Type B – Water Rescue Boat Team
- Team Type C – Water Rescue Technician Team

Local Response within Capability

HFRS resources responding locally will be deployed in accordance with normal Standing Operating and mobilising procedures. Resources may be pre-deployed to identified locations within the Service area if deemed appropriate in order to mitigate the effect of floods or prepare for any anticipated lead-out or rescue operations. Pre-deployment will be considered by the Flood Tac Advisors as per the Tac Advisors guidance and in consultation with the duty Director.

Incidents involving boat operations or Technical Rescue teams will normally be managed by a Water Incident Manager (WIM) FDS officer.

Dependant on the levels of activity, crews will normally operate within normal duty shift parameters, however this may vary subject to been dynamically assessed by a level 5 WIM. Additional resources may be requested, or consideration given to “recalling to duty” appropriately trained personnel.

Local Response Requiring Assistance of National Resources

Any requests for assistance will be made via the Fire and Rescue Service National Coordination Centre (FRSNCC) from Service control, the duty Director will have the final say before a request is forwarded to the FRSNCC. Fire and Rescue Services Act 2004, Section 13 “Reinforcement Schemes”, or Section 16 “Arrangements for Discharge of Functions by Others” may be utilised in such situations.

The on-call WIM Officer in consultation with a Tac Advisor where available will coordinate the receipt of external resources ensuring:

- External Resources are given a nominated RV point and guided to the RV point on entering the county.
- An officer is nominated to liaise with the OIC of the responding resources ensuring a full brief, sit rep, details of the Command Structure and risk assessment is provided.
- An initial estimate of the time period the resources will be required should also be given.
- It should be clearly determined if the resources are required to operate with external FRS personnel or will be handed over to HFRS personnel for the duration of the incident.
- Contact details of both the host and responding FRS nominated officer(s) must be provided and logged with Service Control.
- Assistance should be provided to the responding FRS personnel in terms of Welfare arrangements, as per the principles set out in the National Resilience policy.
- Once the deployment has ended the responding FRS should undertake an inventory check and supply details to HFRS who should nominate a recovery officer to investigate and attempt to locate any missing items of equipment.
- At the conclusion of the incident arrangements should be made to return resources back to the responding FRS and the FRSNCC must be informed that assistance is no longer required, and assets have been returned.

Responding to National Events

Any requests for deployment will be received from the Fire and Rescue Service National Coordination Centre (FRSNCC) to Service control, approval must be obtained from the duty AM before a deployment is made.

A National Asset Register is maintained by the FRSNCC and is updated monthly. Personnel from (Emergency Preparedness Team) EP will maintain this register on behalf of HFRS.

When any HFRS national resources are engaged the term engaged (to include periods of significant breakdown) or deployed internally or externally for any significant period of time which would adjust the status on the NA register to unavailable. HFRS Control must inform the FRSNCC and the register amended accordingly.

Availability

The availability of teams and individuals will be supervised and coordinated by the FDS WIM located in Service Control.

Team allocation and roles will be subject to individual and team competence and skills requested by the FRSNCC. The duty WIM will request the availability of personnel prior to any deployment and seek authorisation from the Duty Manager to release them from their duties.

The FDS WIM will coordinate the deployment of the teams from SHQ. An on-duty FDS officer (ideally a Module 5 Water Incident Manager) will be nominated as welfare officer and deployed to lead the teams out of county.

In order to ensure HFRS Resilience under normal circumstances a maximum of 2 type B teams will be deployed at any one time. Requests for deployment of type C technician teams will be made dynamically by the Flood Tac Advisor and D (assuming P.O. approval) dependent on the number of teams requested, duration of deployment and local circumstances.

Mobilisation levels

There are a number of ways in which crews can be mobilised.

Adequate and prior notice.

Duty watch systems can be utilised with minimal disruption to shift patterns

Short Notice/No Notice.

HFRS available assets that are declared on the National Assets Register must be able to deploy declared teams within a 2-hour period.

Recall to duty:

To ensure local sustainability and cover a maximum of two teams will be deployed out of service area at any one time. The deployment will involve crews working back to back over an agreed deployment period.

NB: It is to be noted that if a request is made for one boat only this is all the receiving fire & rescue service will be expecting and will cater for HFRS will therefore deploy one team only and respectively if two teams are requested.

A type B team will consist of the following:

- 1 x Module 5 FDS Officer to manage, co-ordinate and act as Welfare & Liaison Officer
- 1 x Team leader
- 5 x Team members

Competencies of personnel and crew members can be found in the DERFA Flood Rescue Concept of Operations: Water Rescue Credentialing Standards section.

Before deployment crews will rendezvous at SHQ where deployment welfare packs will be issued if necessary and a full briefing will be given by the WIM (crews will not take fire appliances on the deployment and should travel in the allocated Vehicle to SHQ and any additional supporting vehicles).

The deployment will be on a voluntary basis and crews should be expected to be on scene for up to four days before returning.

During the deployment a nominated FDS WIM will be the primary contact for the deployed teams. This officer will ensure that the other WIMs are kept updated for resilience purposes. Throughout the deployment, the crews should update Humberside control via telephone of all movements they make and their location (i.e. arrival at SHA, deployment to incident, stood up/down). Control will create an incident on Vision for the deployment and record all messages within it.

Consideration to requesting and accessing Resilience Direct from the Host service.

Any engagement or deployment of NR assets should be communicated to the FRSNCC by HFRS Control amendments made to the National Asset Register to reflect. Engagement must include any significant period of unavailability due to mechanical breakdown or suitability to deploy.

Payment for Personnel Deployed Out of County

For further guidance please refer to: National Fire Chiefs Council Guidelines on FRS Charging for Mutual Assistance.

Liaison with Other Agencies - Interoperability

Whilst responding to flooding incidents personnel will often work with in conjunction with other agencies. It is critical to ensure that personnel from all agencies operate in a safe and effective manner. To assist in this process primacy for the incident should be established prior to the commencement of operations and recorded via Service Control.

In terms of primacy HFRS will normally assume primacy as the lead responder for the rescue elements of all incidents, this is particularly applicable in a flood rescue situation, This has been agreed locally through Local Resilience Forum (LRF) and applies to Category 1&2 and volunteer organisations and is defined in the Emergency Procedures Manual that HFRS will be the lead responder for "Any emergency on land where search & rescue is the main focus of response, where a life is still believed to be viable and no other agency is better suited to co-ordinate".

As far as reasonably possible personnel from all agencies should be instructed and operations co-ordinated as per the principles of JESIP and NOG Incident Command.

This applies equally to resources from other Fire & Rescue Services.

These principles are supported by an overarching agreement between HFRS & Humberside Police which again specifies primacy at incidents and protocols for Incident Command and requesting each other's resources.

Local Resilience Forum - Interagency Command & Control Arrangements

The LRF will co-ordinate these arrangements and multi-agency Tactical Co-ordination groups or a Strategic Co-ordination Group will be established.

The structure and working principles for these groups are again detailed within the Emergency Procedures Manual.

Flood Rescue Tac Advisors may be required to provide Strategic and tactical advice in relation to major or wide-spread Flood or Water Rescue Incidents.

During deployment out of the Service the WIM will act as the conduit to ensure HFRS teams have the latest information.

11. COMMUNICATIONS

Communications will be essential to ensure that operations are undertaken successfully, and that the safety of personnel is assured. During flooding or severe weather/spate conditions communication structures and networks can be particularly vulnerable. Consideration to utilising an Airwave Tac Ad to producing a communications plan.

Normal Incident ground communication arrangements should always be utilised in the 1st instance, however due to the nature of flooding incidents and particularly the geographical areas that may be involved the following alternative communications assets should be considered to ensure effective, resilient and safe working:

- Use of Airwave Radio's particularly in a multi-agency context and when operating with rescue boat resources over a widespread area. (Additional Handsets are held by Humberside Police and can be requested as part of multi-agency arrangements).

On deployment of personnel and appliances radio contact must be established with the designated AIRWAVE National Talk Group.

- For further guidance see: DERFA Flood Rescue Concept of Operations: Water Rescue Credentialing Standards section.

LRF Communication Resources

Mobile Phones utilising MTPAS (Mobile Telephone Privileged Access Scheme) this can be invoked via Humberside Police. All FDS and appliances mobile phone have

MTPAS SIM cards. However, invoking this scheme would severely restrict public use within a “network cell”

HITS (High Integrity Telecommunications System) a satellite based communication system operated by Humberside police. Only 10 licenses available.

Raynet (Radio Amateur Emergency network) a national network of amateur radio enthusiasts who can be requested to provide Emergency Communication.

Military Aid. The military has various equipment for providing telecommunications during disruptive events. Requests for assistance must be made under the MACA scheme.

For further guidance see: DERFA Flood Rescue Concept of Operations: Communications.

Inter-Agency Liaison Inter-Operability

For further guidance see: DERFA Flood Rescue Concept of Operations: Communications.

Resilience Arrangements

It is recognised that during spate conditions or extreme weather events the demands placed on the Service may impact significantly on our ability to meet normal response standards. HFRS Operational Resilience Cadre may comprise of operational personnel who are not station based and have agreed to be available during periods of staff shortages.

In addition, a number of Reserve Firefighters including some HFRS support staff are may be trained and may be utilised to undertake defensive operational activities (i.e. pumping out operations) this must be strictly controlled and supervised by operational personnel qualified and competent to Supervisory Incident Command level.

In order to pre-plan for these activities any personnel who may be involved in flooding operations directly or in-directly as part of their normal role (i.e. stores personnel/mechanics) will be trained to Water Awareness Level.

12. POST INCIDENT

HFRS will provide adequate decontamination facilities for personnel operating in a water rescue incident. Counselling is available dependant on nature of incident.

The procedure for monitoring personnel following exposure to Hazardous Substances including those outlined below can be found in Standard Operating Procedure (SOP) 5.3.1 Decontamination.

Viral Hazards Associated with Personal Contamination

Personal contamination and associated viral hazard events should be reported through the most current H+S reporting mechanism.

Welfare

The Flood Rescue Tac Advisor will source all necessary welfare arrangements for teams that are deployed out of the Service in liaison with the host FRS.

Further Guidance can be found the HFRS Welfare policy.

Definitions

Not all bodies of water will necessarily present the same hazard or repeat a previous hazard. Therefore, each situation should be risk assessed individually.

Water Hazard:

A water hazard is defined as any body of water, such as a river, canal, or flooded area, etc., where the potential exists for drowning or other physical harm.

Still Water:

Still water is defined as static water that has no flow and consequent hazards. Slow moving water that is almost still, and presents no additional hazards, falls within this definition.

Moving Water:

Moving water is defined as water that presents additional hazards to those posed by still water, due to the speed of its flow and the nature of the features and obstacles associated with it. The maximum speed of moving water is defined as no more than 4 miles per hour (mph) (walking pace) and will be the maximum level that a Moving Water Responder (MWR) can undertake a controlled water entry.

Swift Water:

Swift water is defined as any body of water moving greater than 4mph that presents additional hazards to those posed by still water and moving water, due to the speed of its flow and the nature of the features and obstacles associated with it. Entry into swift water is limited to Water Rescue Technician (WRT) qualified personnel.

Flood Water:

Flood Water can be very dynamic and therefore spans across all definitions and change without warning. It is therefore subject to the above definitions of still, moving and swift water and will be assessed as part of the operational risk assessment process.

13. RISK AND EQUALITY IMPACT ASSESSMENTS

Separate Risk and Equality Impact Assessments have been completed to support this policy.

14. POLICY REVIEW

Emergency Response will review this policy every three years.

**If anyone needs any further information regarding this document please
contact Emergency Response**

APPENDIX 1

Humberside Fire & Rescue Service - Flood Rescue Tactical Advisors – National Deployment Protocol

Humberside Fire & Rescue Service (HFRS) currently has 1 Flood Rescue Tac Advisors trained to Module 6 as per the DEFRA Flood Rescue Concept of Operations. The Tac Advisor is currently registered on the National Flood Tac Advisors register and is available to be deployed nationally. The register is currently administered through the Fire & Rescue Service National Coordination Centre (FRNCC).

Any request for a Tac Advisor deployment must originate from the FRSNCC via Service Control and will be subject to approval by the duty Director. Humberside Fire & Rescue Service has fully committed to cooperate fully with these arrangements. However, given the substantial and inherent risk to Humberside from flooding the statutory needs of the Service and impact upon the Service and specialist cover will always remain a priority. Therefore, given the nature of National Flood deployments Flood Tac Advisors may be deployed whilst not on prime duty or potentially on a recall to duty basis.

Flood Tac Advisors will be deployed to perform a specific role as allocated by the FRSNCC and this will be more tactical in nature or strategic in terms of advice to Principle Officers, TCG SCG Commanders etc. Given the nature of their skill sets (Water Incident Managers – DEFRA Concept of Operations Module 5 and Technical Rescue) they may also be considered for deployment in an operational/tactical nature with boat crews. They may also assist with welfare arrangements for boat crews also deployed nationally however this is not their primary role.

Flood Tac Advisors once deployed will at times be acting in a “lone worker” capacity particularly when proceeding to an incident. Therefore, contact details must be forwarded to Service Control on departure from Humberside FRS area and a specific point of contact within HFRS nominated. They must also identify and liaise closely with any nominated officer within the host Service. (The details of the nominated “Host” Service officer should also be forwarded to HFRS Control preferably before departing from the Humberside area.)

Experience of previous incidents has indicated that often a flood Tac Advisors can quickly become overwhelmed with information or strands of responsibility. Therefore, consideration should be given and again with the approval of the Duty Director to deploying an FDS WIM to accompany and assist the deployed Flood Tac Advisor as required.

Previous incidents have indicated that officers involved in these types of incidents can be prone to working excessive hours which ultimately may lead to fatigue and poor decision making. Therefore, deployed officers must be mindful of this and ensure they have adequate sleeping and welfare provision in place prior to becoming engaged at an incident.