MOBILE MONITORING

1. This Annex outlines the background to, and the procedures to be used in, Mobile Monitoring missions from Controls or Posts.

REASONS FOR MOBILE MONITORING MISSIONS

- 2. Mobile Monitoring missions should be ordered only when, in the judgment of the appropriate senior officer, the needs of urgent wartime operational tasks justify the exposure risk. Mobile Monitoring teams may be deployed to:
 - a. cover the loss of information from a Monitoring Post;
 - b. ascertain levels of radiation in areas where dose-rates cannot accurately be determined by interpolation or extrapolation;
 - assess radiological hazards at specific points or along specific routes, and
 - d. obtain other relevant operational information in the course of radiological reconnaissance.
- 3. Personnel will not normally be deployed on a Mobile Monitoring mission when:
 - a. Fallout maximum has not been reached and when there is threat of further fallout arrivals in the area concerned.
 - b. Radiological hazards to personnel beyond those referred to in para 4b exist.
 - c. The Post personnel have already carried out a mission, except in cases of absolute necessity.
 - d. There are not three persons in the Monitoring Post.
 - e. There is not a vehicle available.

RESPONSIBILITIES

- 4. a. At Sector Controls the Sector Controller will have overall authority for ordering Mobile Monitoring missions to be carried out from the local Group Control and from Monitoring Posts within the local group or (through the appropriate Group Controller) from constituent Groups of the Sector subject to the limits of the Wartime Emergency Dose.
 - b. At Group Controls the Group Controller (who should previously have consulted the Sector Controller on any restrictions within the Sector) will have overall authority for ordering Mobile Monitoring missions to be carried out from the Group Control and from Monitoring Posts within his Group subject to the same limits.

Exceptionally, when operational tasks are judged by the Sector Controller to be of sufficient urgency and priority, he may, within his own discretion, order deployments from the local Group or (through the appropriate Group

Controllers) from constituent Groups of the Sector, up to a maximum total accumulated dose detailed in para 8. In the event of loss of all direct and indirect communications between a Group Control and its parent Sector Control the Group Controller will assume delegated responsibility for ordering deployments from within his Group up to the maximum Wartime Emergency Dose. Mobile Monitoring missions involving a total accumulated dose of more than 150r may not be ordered by a Sector Controller or a Group Controller unless so directed by the Sub-Regional/Zone Commissioner.

c. At Sector Controls the Group Controls the Group Commandant will have overall responsibility for ensuring the issue and proper execution of orders for all Mobile Monitoring missions.

OPERATIONAL PROCEDURES AT THE CONTROL

- 5. The Chief Warning Officer will normally be responsible for initiating Mobile Monitoring missions. Before any mission is undertaken he will:
 - a. consult the Sector Controller/Group Controller on any reservations the Sector Controller/Group Controller may wish to make about priorities of tasks for Post/Group personnel;
 - b. satisfy himself that the mission could not be carried out more effectively by non-UKWMO personnel;
 - c. ensure that dose-rates at all Monitoring Posts in the mission area have reached maximum;
 - d. ensure there is no threat of further fallout in the mission area during the deployment time;
 - e. in consultation with the Senior Duty Officer (SDO), establish the operational availability of personnel and vehicles;
 - f. ensure that the mission will not involve personnel exceeding the maximum permitted total accumulated dose detailed in para 8.
 - g. arrange for a deployment order (Appendix 1) to be completed; and
 - h. arrange for the deployment order to be passed to the Senior Duty Officer.
- 6. In the event of a Mobile Monitoring mission requiring a briefing the Chief Warning Officer may, by arrangement with the Group Commandant, provide for this to be carried out by a member of the Warning Team.

WARTIME EMERGENCY DOSE

- 7. The Wartime Emergency Dose (WED) is to be taken as the maximum permissible in the execution of operational tasks.
- 8. The Wartime Emergency Dose is:
 - a. A dose of 100 cGy in any one day, or
 - b. a dose of 200 cGy in total, except that
 - c. a dose of 15 cGy per day may be received for up to 100 days.

DEPLOYMENT ORDER

9. The deployment order should be completed in duplicate <u>and the original</u> passed to the Senior Duty Officer for action, one copy being retained for reference and correlation with the Mobile Monitoring Report. The order will indicate:

a. Objectives

The precise objectives of the mission expressed succinctly and unambiguously.

b. Timing

- i. The start time of the mission (this should be a future time and should allow for the deployment order to be passed, the route to be plotted by the Group or Post personnel and any necessary briefings to be carried out).
- ii. An estimated completion time (point to point journeys in excess of 10 miles will normally be limited to a total operational time not exceeding 2 hours duration).

c. Estimated Dose

The estimated transit dose (having regard to the dose rate to be encountered en route, the speed (assumed not to exceed 15 mph) and the protective factor of the vehicle (assumed to be 2); the speed and protective factor data will be those generally assumed unless any other positive factual data to the contrary is available).

d. Location(s) of dose rate reading(s) required and route to be followed

The locations, serially numbered, for which information is required, defined by topographical description and National Grid Reference; the precise route to be followed and any permitted deviations (generally the outer limits will be approximately 10 miles from the post; knowledge of road conditions and areas of damage may be sketchy and possible alternative routes limited; in the preparation of the route to be followed local knowledge should not be assumed).

e. Other Instructions

Other reconnaissance tasks should be specified, together with their priority in relation to radiological monitoring tasks.

f. Safety Limits

The personal accrued dose and/or dose rate at which the mission is to be aborted. The team should always return by the route traversed, unless otherwise instructed.

10. The report to be made by the Mobile Monitoring team should be in the form as shown in Appendix 2.

PREPARATION OF THE MONITORING POST

11. The Post will be equipped with a quantity of disposable paper towelling. Before a mission adequate supplies of the paper, a stock of water and a number of boxes, provided by the members, are to be moved into the hatchway. One box is to be taken to the outside of the hatch.

DRESS FOR THE MISSION

12. Posts are provided with a quantity of foul weather suits and gloves which, together with the rubber boots, will enable personnel on a mission to be dressed in a covering of light material to which dust will not adhere. Trousers will be worn outside the rubber boots. The purpose of this covering is to prevent dust lying on the ground that is disturbed by movement, or dust falling from trees and buildings, adhering to the person. Face covering or masks will not be required or issued.

CONDUCT OF THE MISSION

- 13. Having dressed for the mission, assembled the items necessary and satisfied themselves that they know where to go and what is required of them, the team is to leave the Post, enter the vehicle and drive carefully and slowly, consistent with the timings of the Deployment Order, to the first and subsequent mission points.
- 14. During the journey the RSM and personal Dosimeters are to be checked from time to time to ensure that the safety limit dose is not likely to be exceeded.
- 15. When a mission point is reached the vehicle is to be stopped and the passenger is to leave the car, move 10 metres from it without haste, switch on the RSM, take and record the reading and return to the vehicle again without haste.
- 16. If there are several mission points the driver and passenger may take turns to make and record the readings.
- 17. All records required are to be made at the time of action and not left to memory.
- 18. Should the mission be taking appreciably longer than planned or the safety limit dose is likely to be exceeded, the mission is to be aborted, again without haste.
- 19. During the mission no attempt is to be made to communicate with the Control, or anyone else, unless specifically ordered.

RE-ENTRY TO THE POST OR CONTROL

20. On return to the Control or Post the re-entry and decontamination procedure is to be carried out as detailed in Annex S.

21. Appendices

- Appendix 1 Mobile Monitoring Deployment Order
- Appendix 2 Mobile Monitoring Deployment Report

22. References

Annex S - Decontamination

MOBILE MONITORING DEPLOYMENT					
PART 1 DEPLOYMENT REQUIREMENT					
GROUP/POST DATE/TIME SERIAL NO SHEET NO					
PART 2 DEPLOYMENT ABILITY					
The GROUP/POST has not the necessary personnel, equipment and transport to enable it to undertake the task.					
DOSES accumulated so far are; Nº1 r Nº2 r Nº3 r					
* Delete as appropriate Signed					
PART 3 DEPLOYMENT ORDER					
OBJECTIVES:					
START TIME COMPLETION TIME ESTIMATED DOSE					
INSTRUCTIONS					
SAFETY LIMITS (Not to be exceeded) Abort at personal accrued Dose ofr or Dose Rate ofrph SignedrD					
PART 4 DEPLOYMENT CONFIRMED					
The DEPLOYMENT ORDER has been issued to Group/Post					
Signed SDO Date/Time					

MOBILE MONITORING REPORT					
GROUP/POST		DATE/TIME	SERIAL NO	SHEET NO	
Nº REPORT					
REMARKS					