

IN CONFIDENCE

CRUISE REPORT

FRS "CLUPEA"

12-20 November 1973

STAFF: G M Cameron	HSO
J Main	HSO
G I Sangster	SO
C C Hemmings	PSO (Part-time)
W R Leys	PTO IV (Part-time)

OBJECTIVES:

1. To carry out an extensive series of handling trials using a mock-up of the TUV and to evaluate the equipment that has been manufactured to service and handle the vehicle.
2. To familiarise staff with the problems associated with the launch, recovery and service of the vehicle.

GENERAL:

Due to delays caused by late completion of shipyard work and very bad weather the boat did not sail till the 14 November and only two days work was obtained due to the severe sea conditions which were general to the whole NE of Scotland. The main limitation in this exercise is that the weather must be suitable for the launch and operation of a rubber boat from "Clupea".

RESULTS:

The complete cycle of launch and recovery was carried out a total of nine times during the cruise and although no serious problems were found the following improvements will be carried out.

1. Rotation of the lifting wire attachment points by 90° to enable the swimmers operation to be improved.
2. Stops should be added to the lifting attachments to prevent excess load being applied by the lifting winch onto the TUV hull.
3. The aft stops for the cradle should be re-positioned to ensure that the cradle can easily be positioned for lowering onto rails.
4. Stops should be fitted into the cradle channel to prevent the TUV being moved too far forward on the cradle.
5. A hinged cover should be made to protect the hydraulic pump from the various ropes that are used in the handling system.
6. A retaining guard should be fitted to prevent the port lifting wire from jumping out of its guide roller.
7. The copine clip on the drogue line should be supplemented by a snap link shackle so that if the trip line parts then the drogue can still be released.

8. The vehicle should be towed as close as possible to "Clupea" during the surface connection period.

9. Consideration should be given to fixing a ladder to the port side of the stern to give the swimmers access to the vehicle without the need for a rubber boat.

After completion of the normal launch and recovery cycles a simulated emergency recovery was successfully carried out. In conclusion it must be said that this cruise went only part way to completing the required tests and a further set of trials will be necessary.

George Cameron
22 November 1973