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14GR86

FRV "Goldseeker"

Cruise 14/86

REPORT

14 October - 3 November 1986

<u>Personnel</u>	Part 1 14-20 October	Part 2 21 October - 3 November
	R Priestley SSO	C Wardle SPSO
	C Shand SO	C Hall HSO
	P Barkel PTO	C Glass SO

Objectives

Part 1

Sea trials of the new control and telemetry system, for use with our remotely controlled observation vehicle.

Part 2

Sea trials of the new RCTV mounted instrumentation, for measurement of ambient light and bioluminescence.

Narrative and Results

Part 1

Tuesday 14 October was taken up by travelling to Corpach and loading the gear on to the vessel. Work started the following day in setting up both the towed vehicle and the control gear. Faults in the control system and gale force winds on Friday 17 October, meant that we did not get to sea until Saturday 18 October. Work continued until Monday afternoon when the gear not required in Part 2, was off-loaded for return to Aberdeen.

As mentioned earlier faults in the control gear showed up prior to use and more became apparent later. However all were identified and the equipment is now with the manufacturer for repairs under warranty where applicable.

Part 2

During the half landing (Tuesday 21 October) the RCV was equipped with the light-measurement instrumentation. This equipment was tested in Loch Linnhe on 22 October, and proved initially successful. The instrumentation was then transferred from the vehicle to a non-towed module and further sampling was undertaken in the Loch Linnhe, and Lismore Sound areas; 24-28 October was spent working the Oban area and 15 different water masses were sampled. After

modification of the RCV telemetry system, the RCV was re-equipped with the instrumentation (during the half-landing at Dunstaffnage on 29 October) before being tested in Loch Linnhe on 30 October.

"Goldseeker" then proceeded through the Caledonian Canal and worked out of Inverness for the remainder of the cruise before returning to Buckie on the evening of Sunday 2 November.

The new RCV based monitoring equipment proved successful (after initial problems), and a total of 20 tows were made along with 15 vertical profiles of water columns using a non-towed module. Routine monitoring of bioluminescence and transmission of light through water can now be carried out using the RCV.

R Priestley
C Glass

13 January 1987

Seen in draft: A Mair