In Confidence - Not to be quoted without reference to the Laboratory

6GR82

FRV 'Goldseeker"

Cruise 6/82

REPORT

17 May - 4 June 1982

## Objectives

To investigate gear noise and fish reactions around a 50-100 hp trawl (BT 124 R) on both sand and hard ground.

## Narrative

The "Goldseeker" worked daily from Buckie in the Spey Bay Area. Only one half day was lost due to bad weather when the ship returned to Buckie.

Diving observations and sound measurements were conducted using the divers underwater vehicle TUV II. The hydrophone was fitted on the front of the vehicle and the noise recorded onboard the ship.

## Results

Sound measurements were recorded around the net at positions near to the bridles, sweeps, doors and warps on both sand and hard ground.

First analysis of the results show that on a sand bottom with a light ground-gear very little noise is produced by the components of the gear. The net and door noise is picked up only close to the components. Ships noise can be heard in all areas of the gear.

With the bobbin rigged trawl on sand the ships noise is heard in all areas and the bobbin noise was heard 200 m ahead of the ship or 400 m ahead of the groundgear. On hard ground the doors and bobbin noise is increased but ships noise still prevailed in all areas.

Detailed analysis of the tape recordings are now being conducted in the Laboratory and will be related to previous findings of the sounds of ship and gears.

J Main 15 June 1982

Seen in draft: W Reid