

Divers' month at 1,181 ft

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ON July 23 four divers from the Royal Navy's seabed operations vessel HMS Challenger will "surface" from a month-long test of new breathing and heating systems which included nine days living and working at a simulated depth of 360 metres or 1,181 feet.

That is the depth of the Norwegian trench across which Norsk Hydro, the oil company which paid most of the £1.5 million bill for the test in a Canadian naval centre, plans to lay a pipeline.

The divers are in Toronto, where on June 25 they climbed into a complex of small steel chambers, one of them was half-filled with water, which was gradually pressurised to 36 times atmospheric pressure to simulate increasing depth and is being slowly released to prevent decompression "bends".

Deeper dives have been made, in pressure chambers and the sea, but neither the navy nor commercial diving firms have much experience at such depths.

In this case the immediate task was to check Gasmizer breathing equipment, which enables expensive and limited supplies of helium gas to be breathed by the divers and then cleaned and reused, instead of venting it into the sea. A computer deciphered the divers' helium-distorted voices.

A hose-supplied hot water suit, which has to keep the diver's body temperature stable to within one degree, was also tested.

The four volunteers are being paid a bonus of £2,000 to undertake the trials, in acknowledgment of their commercial value to Norsk Hydro.

As Royal Navy divers they normally get paid about £12,000 a year, compared with perhaps £33,000 a year if they were working for one of the North Sea oil companies.

The £150 million Challenger, at present on a goodwill visit to the Pool of London, carries a manned submersible which can reach about 450 metres depth and a remotely-controlled, unmanned craft which can swim thousands of metres down. Intended for anti-submarine warfare, she will become operational in late 1987.