

Worries over reactor cracks keep nuclear boats in dock

Polaris subs refused safety certificates

Richard Norton-Taylor

DEFFECTS in Britain's nuclear deterrent fleet are so severe that at least two of the four Polaris submarines have been refused safety certificates, an official adviser to the Defence Secretary, Tom King, has disclosed.

The remainder have been given only temporary safety certificates, issued patrol by patrol, because of cracks in nuclear reactors which raise serious doubts about maintaining an effective fleet until Polaris is replaced by Trident in the mid-1990s.

The disclosures are made by Reg Farmer, a member of the Ministry of Defence Nuclear Powered Warships Safety Committee, in a Thames Television documentary to be broadcast tomorrow. They follow a series of reports about problems con-

fronting Polaris and the persistent refusal by the Ministry of Defence to comment.

Mr Farmer, former head of the UK Atomic Energy Authority's safety directorate, also for the first time gives details of the defect which is affecting Britain's early nuclear-powered, hunter-killer submarines as well as the Polaris fleet.

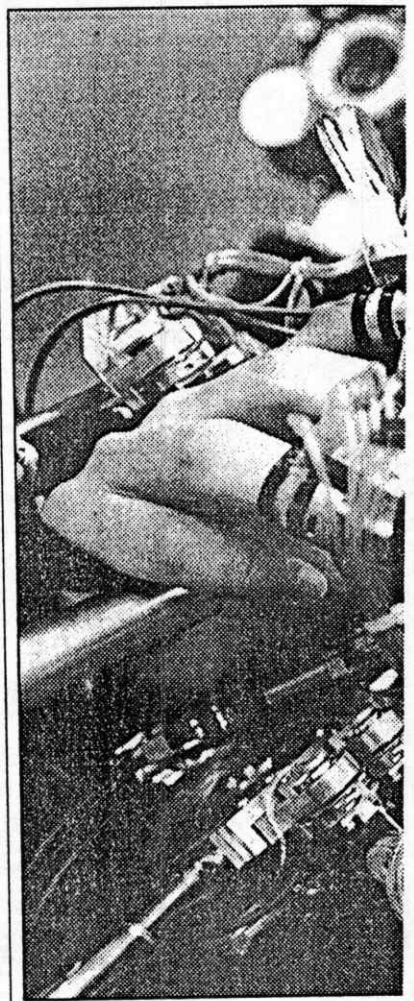
Members of his committee have told the ministry none of these submarines should be allowed to visit foreign ports without express approval.

Although he insists that the risk of a serious accident is minimal and that the faults have been diagnosed, after 18 months' work Rolls Royce engineers have still not found a solution.

Mr Farmer reveals that cracks have been found at the base of steam generators in the nuclear reactors where welds have been made between two kinds of pipe — one of Ameri-

can design, the other British. Ministry officials have refused to answer questions from MPs on the Commons defence committee on the grounds that the problem covers "sensitive military areas".

Colm McConnell, the Rosyth dockyard representative of the IPMS, the union representing nuclear engineers, discloses that HMS Renown — one of four Polaris submarines — completed a £100 million refit on time in early 1990. The reactor fault was only discovered afterwards. The submarine is now in drydock at least until 1993. The Guardian reported in June that HMS Repulse has been refused clearance to sail because of metal fatigue, that HMS Revenge has fuel problems, and that HMS Resolution — the only one fully operational — has been on patrol for up to 16 weeks, well above the recommended, 56-day maximum.



Gentle touch... A remote manipulator

Robots wield swords

Nigel Williams
Science Correspondent

WHILE science fiction writers dream up chilling visions of Robocop and Terminator 2, robots with more delicate skills star in a Japanese exhibition which opened at the Science Museum in London yesterday.

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Over-fish

James Erlichman, Consumer
Affairs Correspondent

COD and haddock may vanish from the North Sea within five years unless drastic steps are taken to force nearly half of fishermen to haul in their nets, one of Britain's leading marine scientists claimed yesterday.

Stocks are falling so fast that 40 per cent of all European Community fishing boats

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PM urged to end uncertainty over Antarctic patrol vessel

David Fairhall
Defence Correspondent

JOHNSON Major has been called on to resolve an inter-departmental argument over who should pay for Britain's future naval presence in the Antarctic, following confirmation that the elderly patrol ship HMS Endurance is not considered strong enough to face another season in the ice.

Talk of withdrawing Endurance 10 years ago triggered the Falklands war. Ministers have agreed that some immediate substitute for her must be found while the question of a long-term replacement is studied.

The Royal Navy, under pressure to cut costs and reduce its fleet, no longer sees any strictly military reason to continue the patrol. It has a frigate on station off the Falklands, and the garrison can be reinforced by air, thanks to the construction of a £200 million airbase

while they are quite prepared to operate a new Antarctic patrol ship, somebody else must pay.

A possible replacement has already been identified in the Norwegian vessel Polar Circle. She could probably be leased for about £3 million a year, not much more than it costs to run Endurance. But time is running out if such a vessel is to make the month-long voyage south for the start of the Antarctic summer. Hence the appeals from a lobby led by Lord Shackleton, son of the Antarctic explorer, and including the British Antarctic Survey and the Falklands Islands Government, for the Prime Minister to bang departmental heads together and produce a decision within the next few days.

The Shackleton lobby argues that although the new patrol ship's role would be primarily scientific — for example to support BAS's research into the ozone layer and to conduct hydrographic surveys — it is im-

Ensign to assert Britain's strategic interest and territorial claims in the region. To buy a second-hand ice-strengthened vessel like the Polar Circle would probably cost about £25 million, a lot less than building from scratch.

HMS Endurance is herself a converted merchant ship. She had a major refit five years ago, providing more space for a pair of helicopters to re-supply the BAS's remote bases. But she is now 35 years old and after years in ice-cold water it is thought she may be suffering from embrittlement.

The results of this summer's dockyard survey in Portsmouth have not been released, leading to suspicions that the navy is merely looking for an excuse to scrap Endurance. But the Ministry of Defence has evidently decided that it would not be safe to send her south again and that provided some sort of financial accommodation can be reached with the Foreign Office or the Treasury, a