



NUCLEAR SUBMARINE MANOEUVRING ROOM—OVERALL VIEW

FASMAT

NUCLEAR SUBMARINE SIMULATOR

A comprehensive simulator for the nuclear propulsion unit of a British Polaris submarine was recently officially opened by Vice-Admiral J. Y. C. Roxburgh, C.B., C.B.E., D.S.O., D.S.C., the Flag Officer Submarines.

Built by Marconi Space and Defence Systems, Limited, this unit will provide realistic crew training facilities for R.N. personnel in actual operational conditions and save a very great amount of the training which would otherwise have to be carried out at much greater expense in the operational submarines.

The simulator provides a complete replica of the propulsion control room in a Polaris submarine, which is called the manoeuvring room, with all the instruments and controls of the real submarine systems.

An ICL 4130 computer with simulation units designed and built by Marconi, will provide all the reactions and indications of the real systems.

A separate control position enables an instructor to present trainees with emergency situations of all types, including the most serious that can be envisaged. This type of training is virtually impossible to produce safely in an actual submarine.

The simulator, code named Fasmats, is installed at H.M.S. *Neptune*, the Clyde Submarine Base. The installation was completed and final tests successfully carried out more than five weeks in advance of the scheduled time and the complete training facility is in full operation.