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LONG COMMUNICATION COURSE OFFICERS' RADAR

SYLLABUS

H.M.S. COLLINGWOOD,
Fareham,
Hants.

LONG COMMUNICATION COURSE OFFICERS' RADAR SYLLABUS

DAY	SUBJECT
1	0900-0930 Introductory talk by the Training Commander, "The Electrical Branch and the work of H.M.S. COLLINGWOOD". Introduction to Radar - requirements, classification of sets, the radar equation. Block diagram of basic set.
2	0830-0900 Morse instruction. Pulse circuits - fundamentals (pulse amplifiers C-R circuits, ringing, clamping and limiting). Trigger Units (275 and 293).
3	0830-0900 Morse instruction. Modulators - principle of the discharge line (275 and 293). Metric transmitters - development of high power v.h.f. and u.h.f. pulsed oscillators (960).
4	0830-0900 Morse instruction. The Magnetron and Centimetric transmitters. Waveguides. Metric aerial systems, reflectors and directors. Arrays (960, 285).
5	0830-0900 Morse instruction. Centimetric aerials. Radar receivers - requirements (960). Centimetric mixers (275 and 293). The Klystron (293).
6	0830-0900 Morse instruction. Displays - requirements. Time Bases Simple C-R time base. Principle of the Miller time base. P.P.Is (JE). The principle of auto follow and gunnery radar.
7	0830-0900 Morse instruction. Propagation with special respect to centimetric wavelengths. Polarisation - horizontal and vertical anomalous propagation. Equipments: Type 293/277, 960 and 275. Block diagrams. Demonstrations.
8	0830-0900 Morse instruction. Typical ships' electrical organisation. Responsibilities of User and Maintainer. Performance testing and routine maintenance. Use and extent of C.N.R.T.E. Demonstration of typical maintenance procedure. Radio equipment log. Form S1183 and defective radio equipment.