

1984 Syllabus for Marine Engineering Artificer Apprentices

(Transcribed from the book "HMS Caledonia – A Short History" by Lt's Hunter & Rogers, 1984)

1a The Caledonia term consists of :

11 standard weeks 8 periods per day Mon, Tues, Thurs, Fri.

6 periods per day weds

4 periods per day Saturday

3 Non standard weeks: Week 7 – 26 periods (mid term break)

Week 8 28 periods (mid term break)

Week 14 – 8 periods for open day & passing out parade

Total periods in a term is 550 each of 50 minutes duration.

1b The Collingwood term consists of;

15 weeks of 34 periods. Total periods in a term is 510, each of 55 minutes duration.

2 TERM 4 HMS CALEDONIA (also known as 4 Class) – ½ term spent onboard HMS Eastbourne in Rosyth Dockyard Basin, ½ term spent onboard HMS Caledonia.

Technical Education	TEC Unit	Periods
1 Maths III	14	26
2. Applied Heat I	16	26
3. G&C IV	54	6
Technical Training		
1. Auxiliary Machinery I (AMC) Includes Aux boilers, Steering gear, Air Compressors, Refrig & air Cond.	23	108
Craft Training		
1. Fitting	56	48
Naval General Training (NGT)		
1.R&IT (Resource & Initiative training)	33	28
2.Sports	33	12
3. Divisions	33	6
4.G&C III	33	1
5.PT	33	2
6.Divisional period	57	1
General		
Joining Routine		18
TOTAL	282 periods	

3 TERM 5 - HMS CALEDONIA (also known as 5 Class) –spent onboard HMS Caledonia.

Technical Education	TEC Unit	Periods
1 Maths III	14	28
2. Applied Mechanics I	15	52
3. Applied Heat I	16	35
4.Elect Drawing	17	24
5.Eng Drawing	17	26
Technical Training		
1. Auxiliary Machinery I (AMC) Includes Aux boilers, Air Compressors, Hydraulics, Refrig & air cond, Distilling plants, Steam Turbo Alternators	24	82
Craft Training		
1. Workshop Technology	18	26
2. Fitting & Turning	56	196
Naval General Training (NGT)		
1.R&IT (Resource & Initiative training)	33	13
2.Sports	33	26
3. PT	33	10
4.Swimming test		1
5.Divisional period	33	2
6.Divisions	57	10
7.Religion	33	4
8.Parade training	33	4
9.Leadership Training	33	4
10.Small Arms	33	4
General		
1.Crombie visit/lecture	-	2
2.Passports	-	1
TOTAL	550 periods	

4 TERM 6 - HMS CALEDONIA (also known as 6 Class) –spent onboard HMS Caledonia.

Technical Education	TEC Unit	Periods
1 Maths III	14	56
2. Applied Mechanics I	15	44
3. Electro technology	20a	36
4.Electrical measurements	20b	36
1. Auxiliary Machinery II Includes Aux boilers, Air Compressors, Hydraulics, Refrig & air cond, Distilling plants, Steam Turbo Alternators	24	50
Craft Training		
1. Workshop Technology	18	28
2. Fitting & Turning	56	208

Naval General Training (NGT)		
1.R&IT (Resource & Initiative training)	33	13
2.Sports	33	26
3. PT	33	4
4.Swimming test		10
5.Divisional period	33	3
6.Divisions	57	10
7.Religion	33	4
8.Parade training	33	15
9.Leadership Training	33	4
10.Small Arms	33	2
General		
1.Tropical kit issue	-	1
TOTAL	550 Periods	

5 TERM 7 - HMS CALEDONIA (also known as 7 Class) –spent onboard HMS Caledonia.

Technical Education	TEC Unit	Periods
1 Electronics I	22	36
2. Applied Heat II	32	32
Technical Training		36
Hull Structure I: Includes: Hull construction, Hull maintenance & protection, Vent & Air Cond. systems	25	
Boilers & Pumps: Includes: Boilers, pumps,	28	28
Turbines, Transmissions & Gearing: Includes: Steam turbines, Gearing,	29	38
Pipe Systems: Includes: Heat exchangers, pipework & jointing, Valves, Steam Traps, salt water systems, Fresh water systems, Fuel Systems.	27	44
Craft Training		
1. Fitting & Turning	56	180
NBCD		
1.One day PJT Fire fighting	26	8
2.NBCD	26	20
Naval General Training (NGT)		
1.Sports	33	26
2. PT	33	10
3.Divisional period	33	3
4.Small Arms	33	4
5.Divisions	57	10

6.Religion	33	4
7.G & G III	33	15
8.Parade training	33	5
9.Leadership Training	33	1
General		
1.Draft Routine	-	4
2.Faslane Visit	-	8
3.ML/EL Presentation	-	2
4.Chest X-Ray	-	2
TOTAL	546 Periods	

6 TERM 8 – SEA TRAINING SHIP (also known as 8 Class) – (803 entry spent this time onboard HMS Londonderry & HMS Fearless)

To be programmed by Apprentice training Officer:

- 1 Consolidate formal syllabus training: Hull corrosion & maintenance, upper deck fittings & boats hull, ventilation & air-conditioning systems, shock & vibration mountings
- 2 Consolidate ME Electrical instruction: STS ME electrical introduction, work in the high power section to include Switchboard watch keeping, floodlighting, pre sea checks, sea duties
- 3 Consolidate boiler & related instructions during practical watchkeeping; watchkeeping routines, test & associated circuits, control system operations, associated machinery and equipment function and operation Auxiliary machinery operation
- 4 Be introduced to engines, transmissions and related equipment during practical watchkeeping; watchkeeping routines, main turbine operation, lubricating oil systems, shafting, associated machinery and equipments function and operation, auxiliary machinery operation
- 5 Consolidate systems instruction during on-watch periods with the appropriate section: air conditioning, chilled water, fresh water, salt water, fuel, hydraulics, HP, servo, and general air services,
- 6 Carry out ME Section work: assist ship's staff during SMP, AMP, DED and pre re-fit periods. Assist FMG staff during AMP's or when accommodated ashore as appropriate

NBCD – Consolidate formal syllabus training: LMEM (L & ML) 'Special to Branch', Senior rate 'Any', Senior rate (ME) 'Special to rate', NBCD and fire-fighting exercises

NGT –

- 1 Live for 1 term on Sea Training Ship
- 2 Carry out Sea General Training including: an introduction to the S&S, WE, and Ops. Depts., Ship Sea and harbour duties, Explosives & safety routines, evolutions.
- 3 Work in the communal party.

TOTAL – 14 weeks

7 TERM 9 – HMS CALEDONIA (also known as 9 Class) –spent onboard HMS Caledonia.

Technical Education	TEC Unit	Periods
1 G & C IV	54	12
Technical Training		
Turbines, Transmissions & Gearing: Includes: Shafting, bearings & lubrication, gas turbines,	29	51
Diesels I	31	72
Controls I	30	32
Maintenance Fitting	55	40
Craft Training		
1. Fitting & Turning (includes trade Test)	56	262
Naval General Training (NGT)		
General		
1.Draft Routine	-	1
2.ML/EL Presentation	-	2
3.COLLINGWOOD Lecture	-	1
4.Admin	-	2
TOTAL		
	550 Periods	

8 TERM 10/11 – MEA/ML - HMS COLLINGWOOD (also known as 10 & 11 Class) –spent onboard HMS Collingwood.

Technical Education	TEC Unit	Periods
1. Electronics II (ML) including final exams	36	21
2. Control systems II (ML) including final exams	41	21
3. Power & Distribution (ML) including final exams	38	170
4. Electrical Machines (ML) includes final exams	37	116
5. Electrical measurements including final exams	43	34
NGT (Integrated - time not to count)		
1.Sports	33	24
2. PT	33	7
3.Religion	33	6
Craft Training		
1. Electrical Craft I (ML)	60	64
General		
1.Joining Routine	-	14
2.Leaving Routine	-	7
TOTAL	447 Collingwood Periods	68 days – 13.6 weeks.

9 TERM 10/11 – MEA/ML - HMS SULTAN (also known as 10 & 11 Class) –spent onboard HMS Sultan (i.e. one and a half terms in total)

Technical Education	TEC Unit	Periods
1. Control systems II (ML) including final exams	41	40
2. Hull structure II; Hull construction, underwater fittings, Dockings.	34 34	32
3. Diesels II	35	56
4. Gas turbines	29	24
NGT (Integrated - time not to count)		
1.Sports	33	8
General		
1.Joining Routine	-	4
2.Leaving Routine	-	4
TOTAL	160 Sultan Periods	20 days – 4 weeks.

Classes are to rejoin HMS CALEDONIA having completed 18 weeks instruction in COLLINGWOOD/SULTAN

10 TERM 11 – MEA/ML - HMS CALEDONIA (also known as 11 Class) –spent onboard HMS Caledonia (second half of 11 Class)

Technical Education	TEC Unit	Periods
1. G & C IV	54	30
Technical Training		
1. Diesels II	35	60
2. Maintenance Fitting	59	96
Craft Training		
1. Outside Trades	60	28
NBCD		
1.NBCD	26	50
NGT		
1.Sports	33	16
2. PT	33	7
3.Divisional periods	58	4
4.Divisions	33	6
5.Religion	33	4
6.Parade training	33	4
7.Small Arms	33	4
8.R & IT	33	17
9.Industrial Visits	33	12
General		
1.Security Leave (weeks 12 & 13)	-	84
2.Duties of LH (MAA)	-	2
TOTAL	424 Periods	

11 TERM 12 – MEA/ML - HMS CALEDONIA (also known as 12 Class) –spent onboard HMS Caledonia (second half of 11 Class)

Craft Training		
1. Outside Trades	60	346
2. Workshop Technology	60	20
NBCD		
1.Firefighting PJT	26	12
NGT		
1.Sports	33	22
2. PT	33	12
3.Divisional periods	58	4
4.Divisions	33	6
5.Parade training	33	4
6.Religion	33	4
7.Final Term Project (FTP)	33	68
8. G & C III		3
9. Small Arms	33	4

10. Leadership Training	33	4
11. Industrial Visits		20
General		
1. Drafting Lecture	-	1
2. Sea Brief & Drafting routine	-	16
3. Kit Inspection	-	4
TOTAL	550 Periods	

12 TERM 10 – MEA/EL - HMS COLLINGWOOD (also known as 10) –spent onboard HMS Collingwood.

Technical Education	TEC Unit	Periods
1. Electro technology II (EL) including final exams	42	30
2. Electrical measurements II (EL) including final exams	43	48
3. Electronics II (EL) including progress test & final exams	46	150
NGT (Integrated - time not to count)		
1. Sports	33	27
2. PT	33	7
3. Religion	33	5
4. Divisional G & C studies V	53	11
Craft Training		
Electrical Craft I (EL)	60	210
ED		
1. G & C Studies IV	54	8
General		
1. Joining Routine	-	14
TOTAL	510 Collingwood Periods	

12 TERM 11 – MEA(EL) - HMS COLLINGWOOD (also known as 11 Class) –spent onboard HMS Collingwood.

Technical Education	TEC Unit	Periods
1. Power & Distribution (EL) including final exams	47	222
2. Control Systems II (EL) including final exams	44	60
3. Electrical Machines (EL) including final exams	51	120
NGT		
1. PT	33	8
2.Sports	33	30
3. Divisional G & C studies V	53	4
4.Religion	33	6
5.R&IT	33	55
ED		
1. G & C Studies IV	54	5
TOTAL	510 Collingwood Periods	

12 TERM 12 – MEA(EL) - HMS COLLINGWOOD/ HMS CALEDONIA (also known as 12 Class) – spent onboard HMS Collingwood, returning to HMS Caledonia to rejoin with ML classes.

AT HMS COLLINGWOOD

Technical Education	TEC Unit	Periods
1. Power & Distribution (EL)	47	24
2. Power & Distribution (SFC)	47	30
NGT		
2.Sports	33	3
3. First aid	53	4
General		
1.Leaving routine	-	7
TOTAL	68 Collingwood Periods	

Rejoin HMS Caledonia by Monday week 4.

AT HMS CALEDONIA

Technical education		
1. G & C IV	54	14
Technical Training		
1. Maintenance fitting	59	96
NBCD		
1.2 day Fire fighting course	26	12

2. NBCD	26	50
Craft Training		
1. Outside Trades	60	96
NGT		
1.Sports	33	16
2. PT	33	7
3.Divisional periods	58	3
4.Divisions	33	4
5.Parade training	33	4
6.Final Term Project (FTP)	33	68
7.Leadership Training	33	4
8. Small Arms		4
9. Religion	33	2
10. G & C III	33	3
11.Industrial Visits	-	20
General		
1.Drafting Lecture	-	1
2. Sea Brief & Drafting routine	-	16
3.Kit Inspection	-	4
TOTAL	424 Periods	

That completes the 1984 Syllabus for Marine Engineering Apprentices.