

U.S. Coast Guard Merchant Marine Examination Branch

REFERENCE LIBRARY

This lists the publications currently in active use in the Engineering reference library at the U.S. Coast Guard Headquarters Merchant Marine Examination Branch (G-MVP-5). These are the primary references being used to develop questions for Engineering licenses and certificates. Government publications are available at Government bookstores and the U.S. Government Printing Office, Washington D.C. 20402. Many questions in the data bank were developed from publications that have now been superseded; however, the answers can usually be determined from the current references. While these publications are currently in use, any authoritative, recognized publication, similar to the texts listed, can substitute as a study resource.

Government Publications - Coast Guard

A Manual for Safe Handling of Flammable Liquids - CG 174
Chemical Data Guide for Bulk Shipment by Water - M16616.6
Firefighting Manual for Tank Vessels - CG 329
Navigation and Vessel Inspection Circulars

Government Publication - Navy

Basic Electricity - NAVPERS 10086-A
Basic Electronics Vol 1 - NAVPERS 10087-C
Basic Electronics Vol 2 - NAVEDTRA 10087-C1
Basic Machines - NAVPERS 10624-A
Blue Print Reading and Sketching - NAVEDTRA - 10077-F
Boilermaker 1 & C - NAVPERS 10537
Boiler Technician 1 & C - NAVEDTRA 10536-E
Boiler Technician 3 & 2 - NAVEDTRA 10535-H
Combustible Gas Indicators and Flame Safety Lamp - NAVEDTRA 465-08-00-82
Compartmentation and Watertight Integrity - NAVEDTRA 465-01-00-83
Damage Controlman 1 & C - NAVPERS 10572-C
Damage Controlman 3 & 2 - NAVPERS 10571-F
Desmoking & Emergency Ventilation Equipment - NAVEDTRA 465-07-00-77
Diesel Engines - NAVEDT1IA 10625
Diesel Engines Maintenance - NAVEDTRA 16179
Disaster Control - NAVPERS 10899-B
Electrician's Mate 1 & C - NAVEDTRA 10547-E
Electrician's Mate 3 & 2 - NAVEDTRA 10546-E
Electronic Technician 3 & 2 Vol 1 - NAVEDTRA 10196-A
Electronic Technician 3 & 2 Vol 2 - NAVEDTRA 10195-A1
Engineman 1 & C - NAVEDTEA 10543-E
Engineman 3 & 2 - NAVEDTRA 10541-C1
Fire and Firefighting - NAVEDTRA 465-02-00-83
Fireman - NAVEDTRA 10 520-G
Fluid Power - NAVPERS 16193-B
Fundamentals of Diesel Engines - NAVPERS 16178-A
Fundamentals of Petroleum - NAVEDTRA 10883-B
Halon 1301 - NAVEDTRA 465-15-00-83
Hot Work Operations - NAVEDTRA 465-14-00-78
Hull Maintenance Technician 1 & C - NAVTXA 10574
Hull Maintenance Technician 2 & 3 - NAVTRA 10571-1
IC Electrician 1 & C - NAVEDTRA 10557-B
IC Electrician 2 - NAVEDTRA 10555
IC Electrician 3 - NAVEDTRA 10559
Instrumentman 1 & C - NAVEDTRA 10194-C1
Instrumentman 3 & 2 - NAVPERS 10193-C
Life Support Devices - NAVEDTRA 465-09-00-81
Machinist's Mate 1 & C - NAVEDTRA 10525-D

Machinist's Mate 3 & 2 - NAVPERS 10524-C
Machinery Repairman 1 & C - NAVPERS 10531-C
Machinery Repairman 3 & 2 - NAVEDTRA 10530-E
Marine Sewage Collection, Holding & Transfer NAVEDTRA 253-01-00-84
Naval Ships Technical Manuals
Principle of Naval Engineering - NAVPERS 10788-B
Refrigeration & Air Conditioning - NAVPERS 16163-A
Shipboard Electrical Systems - NAVEDTRA 10864-B
Shipboard Electronic Equipment - NAVEDTRA 10794-B
Tools and Their uses - NAVEDTRA 10085-B1
Utilitiesman 1 & C - NAVEDTRA 10657-F
Utilitiesman 3 & 2 Vol 1 - NAVEDTRA 10660
Utilitiesman 3 & 2 Vol 2 - NAVEDTRA 10661

Government Publications - Miscellaneous

Marine Fire Prevention, Firefighting and Fire Safety - Maritime Administration
The Ships Medicine Chest and Medical Aid at Sea - Department of Health,
Education and Welfare
33 CFR Parts 1 - 199 - Pollution
46 CFR Parts 1 - End - Shipping

Auxiliaries

Applied Marine Hydraulics - Stutman
Automatic Control of Heating and Air Conditioning - Haines
Basic Applied Fluid Power - Oster
Centrifugal Pumps, Selection, Operation & Maintenance - Karassik & Carter
Commercial and Industrial Refrigeration - Nelson
Compressed Air and Gas Data - Ingersoll-Rand
Deck Machinery - Smith
Handbook of Air Conditioning Systems Design - Carrier
Handbook of Hydraulics - King, Brater
Industrial Hydraulics - Pippenger and Hicks
Industrial Hydraulics Manual - Sperry, Vickers
Marine Air Conditioning and Refrigeration - Shulters
Marine Auxiliary Machinery - Souchette, Smith
Modern Air Conditioning Practice - Harris, Conde
Modern Refrigeration & Air Conditioning - Althouse, Turnquist, Bracciano
Modern Refrigeration Practice - King
Naval Auxiliary Machinery - U.S. Naval Institute
Pneumatics and Hydraulics - Stewart
Principles of Refrigeration - Dossat
Principles of Refrigeration - Marsh, Olivo
Pump Handbook - Karassik, Krutzch, Fraser, Messina
Pump Operation and Maintenance - Hicks
Pump Questions and Answers - Carter, Karassik & Wright
Refrigeration, Air Conditioning and Cold Storage - Gunther
Refrigeration and Air Conditioning - Jordan, Priester
Refrigeration Servicing - Goliber
Refrigeration Systems Maintenance Manual - Thermo King
Simplified Hydraulics - McNickle
Standard Industrial Hydraulics - Elonka, Johnson
Standard Refrigeration and Air Conditioning Q & A - Elonka, Minich

Electrical

Basic Electricity - Marcus
Basic Electricity - Van Valkenburgh, Nooger and Neville.
Basic Electronics - Grob
Digital Computer Principles - Burroughs Corp.
Direct and Alternating Current Machinery - Rosenblatt & Friedman
Electrical Circuits - Siskind
Electrical Engineering Vol. II - Dawes
Electrical Machines - Siskind
Electrical Motor Controls & Circuits - Fuchs, Carstang
Electric Circuits and Machines - Lister
Electric Motor Control Fundamentals - McIntyre
Electricity One-Seven - Mileaf
Elements of Electricity - Timbie
Elements of Electronics - Hickey, Villines
IEEE Standard 45-1971 - Recommended Practice for Electric Installations - IEEE
Instruments and Measurements for Electronics - Herrick
Marine Electrical Practice - Watson
Modern Electricity and Electronics - Smith
Practical Electricity - McPartland, Novak
Preventive Maintenance of Electrical Equipment - Hubert
Standard Electronics Q & A - Elonka, Bernstein
Standard Handbook for Electrical Engineers - Fink, Carroll
Storage Batteries - Vinal
Transistors - Kiver

Hull and Welding

Industrial X-Ray Interpretation - Schneeman
Introduction to Physical Metallurgy - Avner
Introduction to Steel Shipbuilding - Baker
Modern Welding - Althouse, Turnquist, Bracciano
Naval Architecture for Marine Engineers - Muckle
Oxyacetylene Welding - Potter
Principles of Magnetic Particle Testing - Betz
Principles of Penetrants - Betz
Procedure Handbook of Arc Welding - Lincoln Electric Company
Rules for Building and Classing Steel Vessels - ABS
Ultrasonic Testing of Materials - Krautkramer
Welding Engineering - Rossi
Welding Metallurgy - Henry, Claussen
Metals and How to Weld Them - Jefferson and Woods

Instrumentation and Controls

ABC's of Pneumatic Circuits - Stewart, Storer
Automatic Control Engineering - Raven
Basic Instrumentation - O'Higgins
Control Engineers Handbook - Truxal
Encyclopedia of Instrumentation and Control - Considine
Feedback Control System - Brims, Saunders
Feedback Control System Analysis and Synthesis - D'Azzo, Houpis
Handbook of Applied Instrumentation - Considine & Ross
Handbook of Automation Computation and Control Vol 1, 2, & 3 - Grabbe,
Ramo, Wooldridge
Handbook of Instrumentation and Controls - Kallen
Industrial Instrument Servicing Handbook - Carroll
Industrial Instrumentation Fundamentals - Fribance
Instrumentation - Kirk, Rimboi
Instrumentation for Process Measurement and Control - Anderson
Standard Instrumentation Q & A Vol. I & II - Elonka, Parsons

Internal Combustion Engines

Diesel and High Compression Gas Engines - Kates & Luck
Diesel Engines - Anderson
Diesel Engines - Block
Diesel Engine Manual - Black
Diesel Engine Operation & Maintenance - Maleev
Diesel Engine Reference Book - Lilly
Diesel Engineering Handbook - Stinson
Diesel: Fundamentals, Service and Repair - Toboldt
Diesel Motor Ships Engines & Machinery Text & Drawings - Knak
Internal-Combustion Engines - U.S. Naval Institute
Internal Combustion Engines & Air Pollution - Obert
Marine Diesel Engines - Pounder
Marine Diesel Standard Practices - DEMA
Medium & High Speed Diesel Engines for Marine Use - Henshall
Questions and Answers on the Marine Diesel Engine - Lamb
Prime Movers - Staniar
Standard Practices for Stationary Diesel and Gas Engines - DEMA

Safety

Firefighting Strategy and Leadership - Walsh
Marine Firefighting First Edition - International Fire Service Training Assoc.

Steam

Boiler Room Questions and Answers - Higgins, Elonka
Boilers, Types, Characteristics, and Functions - Shield
Combustion Engineering - Fryling
Fundamentals of Steam Generators as Applied to Marine Propulsion - MEBA #2
Introduction to Marine Engineering - Latham
Marine Boiler Details Part 2 - U.S. Maritime Service Institute
Marine Boiler Feeding Part 2 - U.S. Maritime Service Institute
Marine Steam Boilers - Milton
Marine Steam Engines and Turbines - McBirnie & Fox
Naval Boilers - U.S. Naval Institute
Naval Turbines - U.S. Naval Institute
Practical Boiler Water Treatment - Pincus
Standard Boiler Operator Questions & Answers - Elonka, Kohan
Steam/Its Generation and Use - Babcock & Wilcox
Steam and Gas Turbines Vol I & II - Stodula & Loewenstein
Steam Turbines - Church

General

Basic Thermodynamics - Skrotzki
Brown's Arithmetical Guide for Marine Engineers Vol I & II - Thorn
Deepwater Floating Drilling Operations - Harris
De Laval Engineering Handbook - Gartmann
Engineering Drawing - French, Vierck
Engineering for Nautical Students - Fisher
Engineering Manual - Perry
Engineering Tables - ASME
Engineering Technical Drafting and Graphics - Giachino, Beukema
Gear Handbook - Dudley
Handbook of Engineering Mechanics - Flugge
How to Read Shop Drawings with Special Reference to Arc Welding, Lincoln Electric
How to Run a Lathe - South Bend Lathe
Lubrication - Gunther
Machine Tool Metalworking - Feirer, Tatro
Machine Tool Operation - Burghardt, Axlerod, Anderson

Marine Chemistry - Martin
Marine Engineering Vol I & Vol II - Seward
Marine Engineering - Barrington
Marine Power Plant Guide - Paterson
Mathematical Handbook for Scientists and Engineers - Korn
Modern Marine Engineer's Manual Vol I - Osbourne
Modern Marine Engineer's Manual Vol II 2nd Ed 1991 - Osbourne
Petroleum Products Handbook - Guthrie
Piping Handbook - Crocker, King
Relief Engineers Training Manual for Automated Vessels - MEBA
Rotary Air Compressor - Instruction Manual - Sullair Corporation
Standard Plant Operators Q and A Vol I & II - Elonka and Robinson
Tanker Operations - Marton
The New American Machinist's Handbook - Le Grand
Troubleshooting Handbook for Mechanical Systems - Emerick
Valve Actuators - Instruction Manual - Limitorque Valve Controls
Work Boat Engineer and Oiler Book 1 & 2 - Ward

*Reference Bibliography As Indicated in IMO Model Courses EOICW , and Chief Engineer /
Second Engineering Officer*

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General Engineering Knowledge for Marine Engineers, 5th Edition
(London, Thomas Reed Publications Ltd., 1990) (ISBN 0-947637-761)

Jackson, L.
Instrumentation and Control Systems 4th edition
Sunderland, Thomas Reed Publications Ltd 1992 (ISBN 0-94763-786-9)

J. Hannah - Hillier
Applied Mechanics
(Harlow, Longman, 1995) (ISBN 0582-5632-1)

R. Joel
Basic Engineering Thermodynamics in S.I. Units, 5th Edition
(Harlow, Longman 1996) (ISBN 0-5822-5629-1)

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Applied Mechanics, 2nd Edition
(London, McGraw Hill, 1982) (ISBN 0-07-084659-6)

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Progressive Engineering Drawing for T.E.C. Students
(London, Hodder and Stoughton Ltd., 1983) (ISBN 0-340-26196-X)

J. Carvill
The Student Engineer's Companion
(London, Butterworth, 1980) (ISBN 0-408-00438-X)

M. A. Parker and F. Pickup
Engineering Drawing with Worked Examples
(London, Hutchinson, 1976) (ISBN 0-09-126451-0)

J. C. Rowlands and B. Angell
Corrosion for Marine and Offshore Engineers
(London, Institute of Marine Engineers, 1976) (ISBN 0-900976-55-1)

S. H. Frederick and H. Capper
Materials for Marine Machinery
(London, Institute of Marine Engineers, 1976) (ISBN 0-900976-42-X)

J. D. Skelley
Water Treatment
(London, Institute of Marine Engineers, 1976) (ISBN 0-900976-66-7)

G. T. H. Flanagan
Feed Water Systems and Treatment
(London, Stanford Maritime Ltd., 1978) (ISBN 0-540-07343-1)

C. R. Flood
Fabrication, Welding and Metal Joining Processes
(London, Butterworth, 1981) (ISBN 0-408-00448-7)

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Technician Workshop Processes and Materials
(London, Hodder and Stoughton, 1979) (ISBN 0-340-22100-3)

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Motor Engineering Knowledge for Marine Engineers, 3rd Edition
(London, Thomas Reed Publications Ltd., 1994) (ISBN 0-901 281 565)

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Introduction to Marine Engineering, 2st Edition
(London, Butterworth, 1990) (ISBN 07-50-6253-9)

D. A. Taylor
Merchant Ship Construction 3rd edition
London, Institute of Marine Engineers 1992 (ISBN 0-9072-0646-8)

Code of Safe Working Practices for Merchant Seamen
London, The Stationary Office Publications Center (ISBN 0115518363)

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London, Witherby & Co. 1997 (ISBN 1 85609 123 6)

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Operation of Machinery in Motor Ships: Main Diesels, Boilers and Auxiliary Plant
(London, The Institute of Marine Engineers, 1981) (ISBN 0-900976-14-2)

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(London, Heinemann, 1994) (ISBN 0-7506-1842-6)

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Marine Medium Speed Diesel Engines
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R. G. Smith
Application of Automatic Machinery and Alarm Equipment in Ships
(London, Institute of Marine Engineers, 1974)(ISBN 0-900976-15-2)

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Ship Stability for Masters and Mates, 4th Edition
London Stanford Maritime 1984 (ISBN 0-540-07388-1)