

APPENDIX I

GLOSSARY

ABORT —To cut short or break off an action, operation, or procedure with an aircraft, guided missile, or the like, especially because of equipment failure; for example, to abort a mission.

ACCELERATION —A change in the velocity of a body, or the rate of such change with respect to speed or direction.

ACCESSORY —A part, subassembly, or assembly designed for use in conjunction with or to supplement another assembly or unit. For example, the fuel control is an accessory for a turbojet engine.

ADDITIVE —A chemical that is added in minor proportion to a parent substance (fuel or oil) to create, enhance, or suppress a certain property or properties in the parent material.

AERODYNAMICS —The science that deals with the motion of air and other gaseous fluids and the forces acting on bodies in motion relative to such fluids.

AFTERFIRE —The term used when a tailpipe fire develops after engine shutdown.

AIRCRAFT INTERMEDIATE MAINTENANCE DEPARTMENT (AIMD) —Ship-based aircraft maintenance activity.

AIRCRAFT MAINTENANCE AND MATERIAL READINESS LIST (AMMRL) —A list that categorizes support equipment

AIRCRAFT TEST AND EVALUATION FACILITY (ATEF) —An acoustically treated facility used to run Aircraft and aircraft engines for performance testing.

ALLOY —A substance composed of two or more metals.

AMBIENT —Surrounding; adjacent to; next to. For example, ambient conditions are physical conditions of the immediate area such as ambient temperature, humidity, pressure, etc.

ANGLE OF ATTACK —The angle at which a body, such as an airfoil or fuselage, meets a flow of air. The acute angle between the chord of an airfoil and the direction of the relative wind.

ANODIC —The term used for the terminal point where electricity passes from the electrolyte to an external point; for example, the negative terminal on a cell or battery.

ANODIZE —To coat a metal by chemical or electrolytic processes.

ANTI-ICING —To prevent ice formation on an aircraft's surface or engines.

APU —Auxiliary power unit.

ARTICULATED —A movable joint between segmented parts. An articulated rotor system is one whose individual or collective main rotor blades are free to flap, feather, and drag individually or collectively.

ASW —Anti-submarine warfare

ATABS —Automated track and balance set.

ATMOSPHERE —The body of air surrounding the earth. The atmospheric pressure at sea level is 14.7 psi.

ATOMIZE —To reduce a fluid (fuel) to a fine spray or mist.

AUTOROTATION —The process of producing lift with airfoils that rotate freely and are not engine driven. When a helicopter auto-rotates the air flows upward through the rotor system rather than downward, as is the case when the rotors are driven by the engines.

AVGAS —Aviation gasoline for reciprocating engines.

AXIAL FLOW —Straight line flow of air.

AXIS —An imaginary line that passes through a body about which the body rotates or may be assumed to rotate. For example, the horizontal axis, the lateral axis, and the longitudinal axis about which an aircraft rotates.

BAROMETRIC —The term used for instruments and devices that measure atmospheric pressure and respond in some way to the changes in pressure.

BERNOULLI'S PRINCIPLE —If a fluid flowing through a tube reaches a constriction, or narrowing of the tube, the velocity of fluid flowing through the constriction increases and the pressure decreases.

BITE —Built-in test equipment.

BORESCOPE —Inspecting an engine internally, requiring a minimum amount of disassembly.

BTU —British thermal Unit. A unit of heat commonly used in heat engineering. It is the amount of heat necessary to raise the temperature of 1 pound of water 1 degree Fahrenheit.

CAUTION —An operating procedure, practice, or condition, etc., that may result in damage or destruction to equipment if not carefully observed or followed.

CELSIUS —The temperature scale using the freezing point of water as zero and the boiling point as 100, with 100 equal divisions between called degrees. A reading is usually written in the abbreviated form; for example, 75°C. This scale was formerly known as the centigrade scale, but was renamed Celsius in recognition of Anders Celsius, the Swedish astronomer who devised the scale.

CENTRIFUGAL —Moving or directed outward away from the center or axis.

COLLECTIVE PITCH —The mechanical means of simultaneously increasing or decreasing the pitch of all main rotor blades.

COMNAVAIRFORINST —The instruction referring to the 4790.2 series manuals.

COMPRESSOR INLET TEMPERATURE (CIT or T2) —The temperature of the air entering the gas turbine compressor as measured at the front frame. One of the parameters used to calculate engine power output (torque) and scheduling combustion fuel flow and variable stator vane angle.

CONCENTRIC —Having a common center.

CONDENSATION —The act of reducing a gas or vapor to a liquid or solid form.

CONING —The upward flexing of the rotor blades resulting from the vectorial combined effects of centrifugal force and lift.

CONTAMINATION —Any foreign material or substance whose presence in a fluid is capable of adversely affecting the performance or reliability of a system.

CONVERGING —To tend to meet at a point or line; incline toward each other.

COORDINATOR —An electromechanical unit that mounts to the back of the fuel control in turboprop engines. It coordinates the propeller, electrical temperature datum control, and the fuel control through signals received from the power levers.

COWLING —A removable cover or housing placed over or around an aircraft component or section, especially an engine.

CURE —The changing of matrix properties (hardening) by chemical reaction, usually accomplished with heat and vacuum pressure.

CYCLIC PITCH —The mechanical means to change the pitch of the main rotor blades during the rotor system cycle of rotation to control the tilt of the rotor disk.

DE-ICING —The breaking off or melting of ice from aircraft surfaces or fuel induction systems.

DELAMINATE/DELAMINATION —The splitting or separating of a laminated composite material between laminate plies.

DENSITY —The weight per unit volume of a substance.

DIFFUSER —A specially designed duct, chamber, or section equipped with guide vanes, which decrease velocity and increase pressure in the gas turbine engine.

DILUTENT —A substance or medium to reduce the strength of another substance or make it thinner.

DISILICATES —Compounds containing two atoms of silicon in conjunction with other elements.

DISSIPATE —To scatter or spread.

DIVERGENT —To extend in different directions from a common point.

DYNAMICALLY —As in balanced by rotating at high speed.

ELECTROCHEMICAL —Chemical changes produced by electricity and the production of electricity through chemical reactions.

ELECTROLYTE —A conducting medium in which the flow of current is accompanied by the movement of ions.

ELECTROPLATE —To coat with a metal through the use of electricity.

ENERGY —The ability or capacity to do work.

ENGINE TRIMMING —The term used for fine tuning a newly installed engine to the airframe or whenever engine fuel system major components have been removed and/or replaced.

FAIRING —A part or structure that has a smooth, streamlined outline, used to cover a non-streamlined object.

FAHRENHEIT —The temperature scale that registers the freezing point of water at 32 degrees and the boiling point at 212 degrees.

FERRIC —Containing iron.

FLAMMABLE —Describes any combustible material that can be easily ignited and that will burn rapidly.

FLASH POINT —The lowest temperature at which a sufficient amount of vapor is given off by a liquid to form an ignitable mixture with air.

FLEET READINESS CENTER (FRC) —Shore aircraft maintenance component of the Intermediate Maintenance Activity (IMA)

FOD —Foreign object damage. Damage resulting from foreign objects (nuts, bolts, rocks, etc.) entering the engine inlet.

FORCE —The action of one body on another tending to change the state of motion of the body acted upon. Force is usually expressed in pounds.

FRICTION —Surface resistance to relative motion.

GAS GENERATOR SPEED —(Ng), See N.

GAS TURBINE MAINTENANCE PROGRAM —Engine repair program that defines the repair functions of IMA facilities.

GRAPHITE —A soft, native black to dark gray carbon used for pencil leads and lubricants.

HELICAL —Pertaining to or having the form of a spiral.

HERO —Hazard of electromagnetic radiation to ordnance.

HORSEPOWER —A unit of power equal to the power necessary to raise 33,000 pounds 1 foot in 1 minute.

HOT START —The term used when exhaust gas temperatures rise above specified limits during the engine starting cycle.

HYDRAULICS —The branch of mechanics that deals with the action or use of liquids forced through tubes and orifices under pressure to operate various mechanisms.

HYDROUS —Containing water or its elements in some form.

IMPEL —To propel or impart motion.

IMPINGEMENT —The act of striking against. An impingement starting system is where starter air is directed to strike against the turbine blades, causing the engine to rotate.

INERTIA —The tendency of a body at rest to remain at rest, and a body in motion to continue to move at a constant speed along a straight line, unless the body is acted upon in either case by an unbalanced force.

INHIBITOR —A substance that decreases the rate of or stops completely a chemical reaction.

INTERMEDIATE MAINTENANCE ACTIVITY (IMA) —Authorized aircraft repair facility within the Navy.

JET ENGINE TEST INSTRUMENTATION SYSTEM (JETI) —Updated equipment used for testing gas turbine engine performance parameters.

JETTISON —To throw or dump overboard. For example, to drop or eject fuel, tanks, or gear from an aircraft to lighten the load for emergency action.

JOAP —Joint Oil Analysis Program.

KINETIC —Energy in motion.

LABYRINTH SEALS —Oil seals with a non-rubbing surface. Designed to allow minimal amounts of leakage, which is controlled by air pressure on one side.

LAMINATE —A combination of two or more single plies of laminae bonded together to form a structure.

LATERAL —The width dimension; for example, the lateral axis of an aircraft runs lengthwise from wing tip to wing tip.

LONGITUDINAL —The lengthwise dimension; for example, the longitudinal axis of an aircraft runs lengthwise from the nose to the tail.

MACH —A number indicating the ratio of the speed of an object to the speed of sound in the medium through which the object is moving.

MASS —The amount of fundamental matter of which an object is composed.

MATTER —The substance or substances of which all physical objects consist or are composed.

MAY AND NEED NOT —Terms indicating that the application of a procedure is optional.

MICA —Any member of a group of minerals, hydrous disilicates of aluminum with other bases, that separate readily into thin, tough, often transparent laminates.

MICRON —A millionth of a meter or about 0.000039 inches.

MIL-C —Military compounds.

MIL-G —Military grease

MIL-H —Military hydraulic fluids.

MIL-PRF —Military lubricants.

MILSPEC —Military Specification.

MILSTD —Military standard.

MOLECULES —The smallest physical units of an element or compound.

N —Abbreviation for speed or rpm. When used with other letters, it indicates the speed of that section. Examples include Ng for compressor speed and Nf for power turbine or fan speed.

NACELLE —A streamlined structure, housing, or compartment on an aircraft; for example, a housing for the engine.

NAVOSH —Navy Occupational Safety and Health.

NOAP —Navy Oil Analysis Program.

NOTE —An operating procedure, practice, or condition, etc., that is essential to emphasize.

OCCUPATIONAL STANDARDS —The minimum requirements for rating and rate, as set forth by the Chief of Naval Personnel.

OXIDATION —In general, the process where oxygen is added to a compound. The oxidation process in petroleum may lead to gum or resin formations.

OXIDE —A compound containing oxygen and one or more elements.

PLENUM CHAMBER —A chamber in which the gas or air pressure is greater than atmospheric pressure.

POSITIVE DISPLACEMENT —The term used for oil, fuel, and hydraulic pumps that deliver more fluid to the system than is actually required.

PPB —Power plants bulletin.

PPC —Power plants change.

PRESSURE DIFFERENTIAL —The difference or ratio between input and output pressure.

PRESSURE —The amount of force distributed over each unit of area. Pressure is expressed in pounds per square inch (psi).

PROPAGATION —The act of transmitting and controlling heat in a flame.

PROPORTIONAL —Having the same or constant ratio or relation.

PSE —Peculiar support equipment.

PSI —Position sensitive indicator. Pounds per square inch.

PYLON —A structure or strut that supports an engine pod, external tank, etc., on an aircraft.

QEC —Quick engine change.

QECA —Quick engine change assembly.

QECK —Quick engine change kit.

RAM AIR —Air forced into an air intake or duct by the motion of the intake or duct through the air.

RAM RECOVERY —Air speed at which ram pressure rise is equal to friction pressure loss.

RAM EFFECT —More air arriving at the engine intake than the engine can ingest.

RATIO —The relation between two similar items in respect to the number of times the first contains the second.

RESERVOIR —A receptacle or chamber for holding a liquid or fluid.

ROTOR —A system of rotating airfoils.

RPM —Revolutions per minute.

SCAVENGE OIL —The term used for oil that has been through the engine lubrication system and is on its way back to the tank.

SCUPPER —Any drain for fluid runoff.

SE —Support equipment. All of the equipment, on the ground, needed to support aircraft in a state of readiness for flight.

SELECTOR VALVE —A valve used to control the flow of fluid to a particular mechanism, as in a hydraulic system.

SERVICING —The refilling of an aircraft with consumables such as fuel, oil, and compressed gases to predetermined levels, pressures, quantities, or weights.

SHALL —Term indicating that application of a procedure is mandatory.

SHOULD —Term indicating that application of a procedure is recommended.

SLIPSTREAM —The stream of air driven backward by a rotating propeller.

SLUG —English measurement of mass.

SOAPSTONE —A hand talc with a soapy or greasy feel.

SPECIFIC GRAVITY —The ratio of the weight of a given volume of a substance to the weight of an equal volume of some standard substance, such as water.

SPECTROMETER —An optical device used to determine the amounts and types of contaminants in oil sample droplets under the Navy Oil Analysis Program.

SPEED —The distance a body in motion travels per unit of time

STANDARD DAY —Reference or standard that is standard at sea level.

STATOR —A system of stationary airfoils.

SUMP —A chamber into which a fluid drains for pickup and recirculation.

T —Abbreviation for temperature. Combined with a number it will indicate temperature at a specific engine station. For example, T2 indicates compressor inlet temperature.

TEFLON —Trademark used in making a tough, non-sticking coating for gaskets, backup rings, bearings, electrical insulators, etc.

TENSION —A force or pressure that exerts a pull or resistance.

THERMOCOUPLE —A device for measuring temperature, consisting of two dissimilar metallic conductors joined at their ends.

THERMODYNAMICS —The science concerned with the relations between heat and mechanical energy or work, and the conversion of one to the other.

THRUST —The forward-direction pushing or pulling force developed by an aircraft engine or rocket engine.

TOOL CONTROL PROGRAM (TCP) —Established program used to reduce FOD related mishaps.

TORQUE —A turning or twisting force.

TOXIC —Harmful, destructive, deadly, poisonous.

TRACKING —To ensure that helicopter blades rotate in the same horizontal plane.

TURBULENCE —The flow of a fluid (liquid or gaseous) within an object such that the velocity at any fixed point in the fluid varies irregularly.

VARIABLE GEOMETRY —A design that allows the angle of a wing, intake ramp, or exhaust duct to adjust to the best condition for the most efficient use.

VELOCITY —The rate of motion in a particular direction.

VERTREP —Vertical replenishment.

VISCOSITY —The internal resistance of a liquid that tends to prevent it from flowing.

VOLATILITY —The ability of a fluid to evaporate.

WARNING —An operating procedure, practice, or condition, etc., that may result in injury or death if not carefully observed or followed.

WILL —A term used to indicate futurity, never to indicate any degree of requirement for application of a procedure.

WINDMILLING —Rotating a gas turbine engine without energizing the ignition system.

APPENDIX II

REFERENCES USED TO DEVELOP THIS RTM

NOTE

Although the following references were current when this NRTC was published, their continued currency cannot be assured. When consulting these references, keep in mind that they may have been revised to reflect new technology or revised methods, practices, or procedures; therefore, you need to ensure that you are studying the latest references.

If you find an incorrect or obsolete reference, please use the Rate Training Manual User Update Form provided at the end of each chapter to contact the CNATT Rate Training Manager.

Chapter 1

Aerodynamics for Naval Aviators, NAVAIR 00-80T-80, Commander, Naval Air Systems Command, Washington, DC, January 1965.

Aviation Maintenance Technician Handbook-Powerplant, Volume 1, FAA-H-8083-32, Federal Aviation Administration, Airman Testing Standards Branch, Oklahoma City, OK, March 2012.

Naval Aviation Maintenance Program (NAMP), COMNAVAIRFORINST 4790.2 (series), Naval Air Systems Command, Patuxent River, MD, May 2012.

Type Designation, Assignment and Method for Obtaining, MIL-HDBK-1812 Department of Defense, Washington DC, February 1997.

Chapter 2

Aircraft and Missile Repair/Structural Hardware, NAVAIR 01-1A-8. Commander, Naval Air Systems Command, Patuxent River, MD, August 2012.

Aviation Hose and Tube Manual, NAVAIR 01-1A-20, Commander, Naval Air Systems Command, Washington, DC, July 2007.

Naval Aviation Maintenance Program (NAMP), COMNAVAIRFORINST 4790.2 (series), Naval Air Systems Command, Patuxent River, MD, May 2012.

Tools and Their Uses NAVEDTRA 14256, Naval Education and Training Professional Development and Technology Center, Pensacola, FL June 1992.

Chapter 3

Aviation Support Equipment Technician, NAVEDTRA 14329, Naval Education and Training Professional Development and Technology Center, Pensacola, FL, July 2002.

Naval Aviation Maintenance Program (NAMP), COMNAVAIRFORINST 4790.2 (series), Naval Air Systems Command, Patuxent River, MD, May 2012.

Navy Support Equipment Common Basic Handling and Safety Manual, NAVAIR 00-80T-96, Commander, Naval Air Systems Command, Washington, DC, July 2001.

Organizational, Intermediate, and Depot Maintenance, Inspection and Proof Load Testing of Lifting Slings for aircraft and Related Components, NAVAIR 17-1-114-1 thru -12 Commander, Naval Air Systems Command, Washington, DC, July 2007.

Chapter 4

Aircraft Fuel Cells and Tanks, NAVAIR 01-1A-35, Commander, Naval Air Systems Command, Washington, DC, September 2012.

Aircraft Refueling NATOPS Manual, NAVAIR 00-80T-109, Commander, Naval Air Systems Command, Patuxent River, MD, August 2011.

Aviation Hose and Tube Manual, NAVAIR 01-1A-20, Commander, Naval Air Systems Command, Washington, DC, July 2007.

Fuel Systems SH-60B, Helicopter Maintenance Procedures, Organizational Maintenance, A1-H60BB-460-300, Commander, Naval Air Systems Command, Washington, DC, March 1995.

Naval Aviation Maintenance Program (NAMP), COMNAVAIRFORINST 4790.2 (series), Naval Air Systems Command, Patuxent River, MD, May 2012.

Plane Captain Manual, A1-F18AC-PCM-000, Commander, Naval Air Systems Command, Washington, DC July 2010.

Chapter 5

Aviation Maintenance Technician Handbook-Powerplant, Volume 2, FAA-H-8083-32, United States Department of Transportation, Federal Aviation Administration, Oklahoma City, OK, March 2012.

Joint Oil Analysis Program Manual, NAVAIR 17-15-50, Volumes 1-4, Commander, Naval Air Systems Command, Washington, DC, July 2012.

Naval Aviation Maintenance Program (NAMP), COMNAVAIRFORINST 4790.2 (series), Naval Air Systems Command, Patuxent River, MD, May 2012.

NATOPS Flight Manual, Navy Model SH-60B Aircraft, A1-H60BB-NFM-000, Commander, Naval Air Systems Command, Washington, DC, January 2006.

Plane Captain Manual, A1-F18AC-PCM-000, Commander, Naval Air Systems Command, Washington, DC, July 2010.

Chapter 6

Aviation Electricians Mate (AE), NAVEDTRA 14009A, Naval Education and Training Professional Development and Technology Center, Pensacola, FL, May 2012.

Aviation Hydraulics Manual, NAVAIR 01-1A-17, Commander, Naval Air Systems Command, Washington DC August 2008.

Aviation Structural Mechanic (AM), NAVEDTRA 14315A, Naval Education and Training Professional Development and Technology Center, Pensacola, FL, April 2011.

Naval Aviation Maintenance Program (NAMP), COMNAVAIRFORINST 4790.2 (series), Naval Air Systems Command, Patuxent River, MD, May 2012.

Utility and Environmental Systems, A1-C2AHA-410-200, Commander, Naval Air Systems Command, Washington DC, June 1998.

Chapter 7

Helicopter History and Aerodynamics Manual, NAVAIR 00-80T-88, Commander, Naval Air Systems Command, Washington, DC, January 1961.

NATOPS Flight Manual, Navy Model SH-60B Aircraft, A1-H60BB-NFM-000, Commander, Naval Air Systems Command, Washington, DC, January 2006.

Naval Aviation Maintenance Program (NAMP), COMNAVAIRFORINST 4790.2 series, Naval Air Systems Command, Patuxent River, MD, May 2012.

Powerplants system, Organizational Maintenance Principles of Operation, A1-H60CA-220-100, Commander, Naval Air Systems Command, Washington, DC, October 2009.

Rotor System, organizational Maintenance Procedures, A1-H60CA-150-300, Commander, Naval Air Systems Command, Washington, DC, October 2009.

Rotor System, Organizational Principles of Operation, A1-H60CA- 150-100, Commander, Naval Air Systems Command, Washington, DC, July 2004.

Rotor Systems, Organizational Principles of Operation, NAVAIR A1-H53CE-150-100, Commander, Naval Air Systems Command, Washington, DC, November 2010.

Transmission System, Organizational Principles of Operation, A1-H60CA-260-100, Commander, Naval Air Systems Command, Washington, DC, July 2004.

Transmission System, Organizational Maintenance Procedures, A1-H60CA- 260-300, Commander, Naval Air Systems Command, Washington, DC, December 2010.

Vibration Analysis Manual (ATABS), A1-H60CA-VIB-100, Commander, Naval Air Systems Command, Washington DC, April 2012.

Chapter 8

Aviation Maintenance Technician Handbook-Powerplant, Volume 2, FAA-H-8083-32, United States Department of Transportation, Federal Aviation Administration, Oklahoma City, OK, March 2012.

Intermediate Maintenance Instructions T56-A-14, T56-A-16, T56-A-425, NAVAIR 02B-5DH-6-1V1, Commander, Naval Air Systems Command, Washington, DC, September 2012.

Organizational and Intermediate Maintenance with Illustrated Parts Breakdown T56 Propulsion System Vibration Analysis, NAVAIR 03-20VAM-1, Commander Naval Air System Command, Washington, DC, August 2012.

Power Plant Related Electrical Systems, NAVAIR 01-75PAC-2-13.1.2, Commander, Naval Air Systems Command, Washington, DC, May 2012.

Propeller Navy Models P-3A, P-3B, and P-3C Aircraft Organizational Maintenance, NAVAIR 01-75PAA-2-4-6, Commander, Naval Air Systems Command, Washington, DC, March 2008.

Chapter 9

Aviation Electricians Mate (AE), NAVEDTRA 14009A, Naval Education and Training Professional Development and Technology Center, Pensacola, FL, May 2012.

Aviation Hydraulics Manual, NAVAIR 01-1A-17, Commander, Naval Air Systems Command, Washington, DC, August 2008.

Blueprint Reading and Sketching, NAVEDTRA 14040, Commander, Naval Air Systems Command, Washington, DC, May 1994.

Power Plant and Related Systems Navy Models F/A 18A/B/C/D, A1-F18AC-270-310, Commander, Naval Air Systems Command, Washington, DC, March 2010.

Chapter 10

Aviation Maintenance Technician Handbook-Powerplant, Volume 1, FAA-H-8083-32, United States Department of Transportation, Federal Aviation Administration, Oklahoma City, OK, March 2012.

Cleaning and Corrosion Control, Volume 1, NAVAIR 01-1A-509-1, Commander, Naval Air Systems Command, Washington, DC, March 2005.

Cleaning and Corrosion Control, Volume 4, NAVAIR 01-1A-509-4, Commander, Naval Air Systems Command, Washington, DC, July 2009.

F405-RR-401 T-23 Outdoor Test Cell Operating and Servicing Procedures, AG-200GT-000-000, Commander, Naval Air Systems Command, Washington, DC, November 2006.

T56 Turbo Prop Engine Test System, Volume 1, NAVAIR 17-15AH-28-1, Commander, Naval Air Systems Command, Washington, DC, March 2008.

APPENDIX III

Answers to End of Chapter Questions

Chapter 1 – Jet Engine Theory and Design

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1-4.	A
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1-7.	D
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1-9.	D
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Chapter 5 – Jet Aircraft Engine Lubrication Systems

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Chapter 6 – Engine and Aircraft Related Systems

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6-10.	D
6-11.	A
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Chapter 7 – Helicopters and Turboshaft Power Plants

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7-10.	C

7-11.	D
7-12.	C
7-13.	A

Chapter 8 – Turboprop Engines and Propellers

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Chapter 9 – Powerplant Troubleshooting

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9-4.	A
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9-7.	B
9-8.	B
9-9.	C
9-10.	C

9-11.	D
9-12.	A

Chapter 10 – Powerplant Inspection, Repair, and Testing

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10-10.	C

10-11.	A
10-12.	B