

Aviation Mechanic Handbook

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Section 1 - General information

(fractions, decimals, conversions, abbreviations, A/C nomenclature, phonetic alphabet, nationality identification, taxi signals, etc...)

Section 2 - Physical and Chemical

(temp conversion, standard atmosphere, density of materials, hydraulic relationships, liquid measurements, etc...)

Section 3 - Mathematics

(symbols, constants, systems, geometry, trigonometric functions, metric system, number systems, etc...)

Section 4 - Aircraft Drawings

(types of drawings, meaning of lines, material symbols, location identification, etc...)

Section 5 - Electrical

(electrical symbols, alternating current terms, Ohm's law, formulas, system installations, wire selection, limits, batteries, etc...)

Section 6 - Aircraft Materials

(composition of aluminum alloys, designation systems, temper designations, heat treatment designations, bearing and shear strength, SAE classification, color of steel and oxides at temperature)

Section 7 - Tools

(measuring tools, holding tools, safety wiring tools, forming tools, cutting tools, chisels, hole cutting tools, threading tools, torque wrenches, pounding tools, punches, wrenches, screw drivers, etc...)

Section 8 - Aircraft Hardware

(standards, threaded fasteners, screws, nuts, safetying, washers, special rivets, cowling fasteners, thread repair hardware, etc...)

Section 9 - Metal Aircraft Fabrication

(sheet metal layout and forming, bend radii, setbacks, bend allowance, riveting, etc...)

Section 10 - Aircraft Fabric Covering

(rib stitch spacing, rib stitch knots, etc...)

Section 11 - Corrosion Detection

(types, oxidation, pitting, intergranular, stress, galvanic, fretting, filiform, cell, control, etc...)

Section 12 - Nondestructive testing

(visual, tap test, penetrant, magnetic, eddy current, ultrasonic, radiography, etc...)

Section 13 - Aircraft Control Systems

(types, cables, terminals, turnbuckles, tension, etc...)

Section 14 - Fluid Lines

(rigid lines, flexible lines, identification, etc...)

Section 15 - Oxygen Systems

(servicing, filling pressures, etc...)

Section 16 - Weight & Balance

(locating CG, datum measurements, mean chord, etc...)

Appendices

(hydraulic fittings, engines, aircraft tires)