## WELCOME

The publishers of this Aviation Maintenance Technician Certification Series welcome you to the world of aviation maintenance. As you move towards EASA certification, you are required to gain suitable knowledge and experience in your chosen area. Qualification on basic subjects for each aircraft maintenance license category or subcategory is accomplished in accordance with the following matrix. Where applicable, subjects are indicated by an "X" in the column below the license heading.

For other educational tools created to prepare candidates for licensure, contact Aircraft Technical Book Company.

We wish you good luck and success in your studies and in your aviation career!

# **REVISION LOG**

VERSION	EFFECTIVE DATE	DESCRIPTION OF CHANGE
001	2016 01	Module Creation and Release
002	2017 03	Format Update/Minor Type Corrections
002.1	2021 05	Formatting Updates - No Content Changes
002.2	2023 04	Inclusion of Measurement Standards for clarification, page iv. Minor appearance and format updates.

#### MODULE EDITIONS AND UPDATES

ATB EASA Modules are in a constant state of review for quality, regulatory updates, and new technologies. This book's edition is given in the revision log above. Update notices will be available Online at <u>www.actechbooks.com/revisions.html</u> If you would like to be notified when changes occur, please join our mailing list at <u>www.actechbooks.com</u>



### **MEASUREMENT STANDARDS**

#### SI Units

Measurements in this book are presented with International System of Units (SI) standards in all cases except when otherwise specified by ICAO (for example, altitude expressed in feet or performance numbers as specified by a manufacturer). The chart below can be used should your studies call for conversions into imperial numbers.

#### Number Groups

This book uses the International Civil Aviation Organization (ICAO) standard of writing numbers. This method separates groups of 3 digits with a space, versus the European method by periods and the American method by commas. For example, the number one million is expressed as:

ICAO Standard	$1\ 000\ 000$
European Standard	1.000.000
American Standard	1,000,000

#### Prefixes

The prefixes in the table below form names of the decimal equivalents in SI units.

MULTIPLICATION FACTOR	PREFIX	SYMBOL
$1\ 000\ 000\ 000\ 000\ 000\ =\ 10^{18}$	exa	Е
$1\ 000\ 000\ 000\ 000\ =\ 10^{15}$	peta	Р
$1\ 000\ 000\ 000\ 000\ =\ 10^{12}$	tera	Т
$1\ 000\ 000\ 000 = 10^9$	giga	G
$1\ 000\ 000 = 10^6$	mega	М
$1\ 000 = 10^3$	kilo	k
$100 = 10^2$	hecto	h
10 = 10 <sup>1</sup>	deca	da
0.1 = 10 <sup>-1</sup>	deci	d
0.0 1 = 10 <sup>-2</sup>	centi	с
$0.001 = 10^{-3}$	milli	m
$0.000\ 001 = 10^{-6}$	micro	μ
$0.000\ 000\ 001 = 10^{-9}$	nano	n
$0.000\ 000\ 000\ 001\ =\ 10^{-12}$	pico	р
$0.000\ 000\ 000\ 000\ 001\ =\ 10^{-15}$	femto	f
$0.000\ 000\ 000\ 000\ 000\ 001\ =\ 10^{-18}$	atto	a

#### **COMMON CONVERSIONS**

IMPERIAL SYSTEM	то	SI (METRIC)	SI (METRIC)	то	IMPERIAL SYSTEM
Distance			Distance	·	
1 Inch	is equal to	2.54 Centimeters	1 Centimeter	is equal to	0.394 Inches
1 Foot	is equal to	0.304 Meters	1 Meter	is equal to	3.28 Feet
1 (Statute) Mile	is equal to	1.609 Kilometers	1 Kilometer	is equal to	0.621 Miles
Weight			Weight		
1 Pound	is equal to	0.454 Kilograms	1 Kilogram	is equal to	2.204 Pounds
Volume			Volume		
1 Quart	is equal to	0.946 Liters	1 Liter	is equal to	1.057 Quarts
1 Gallon	is equal to	3.785 Liters	1 Liter	is equal to	0.264 Gallons
Temperature			Temperature		
°0 Fahrenheit	is equal to	(-)17.778 Celsius (°C)	°0 Celsius (°C)	is equal to	33.8° Fahrenheit
°0 Fahrenheit	is equal to	255.37 Kelvin (K)	°0 Kelvin (K)	is equal to	(-)437.87 Fahrenheit
Area			Area		
1 Square Inch	is equal to	6.451 Square Centimeters	1 Square Centimeter	is equal to	0.155 Square Inches
1 Square Foot	is equal to	0.093 Square Meters	1 Square Meter	is equal to	10.764 Square Feet
1 Square Mile	is equal to	2.59 Square Kilometers	1 Square Kilometer	is equal to	0.386 Square Miles
Velocity			Velocity		
1 Foot Per Second	is equal to	0.304 Meters Per Second	1 Meter Per Second	is equal to	3.281 Feet Per Second
1 Mile Per Hour	is equal to	1.609 Kilometers Per Hour	1 Kilometer Per Hour	is equal to	0.621 Miles Per Hour
1 Knot	is equal to	1.852 Kilometers Per Hour	1 Kilometer Per Hour	is equal to	0.540 Knots
	Pressure				
	pound	s per square inch (psi)	kiloPascals (kPa)	6.897	
	pound	s per square inch (psi)	Pascals (Pa)	6.894	

