

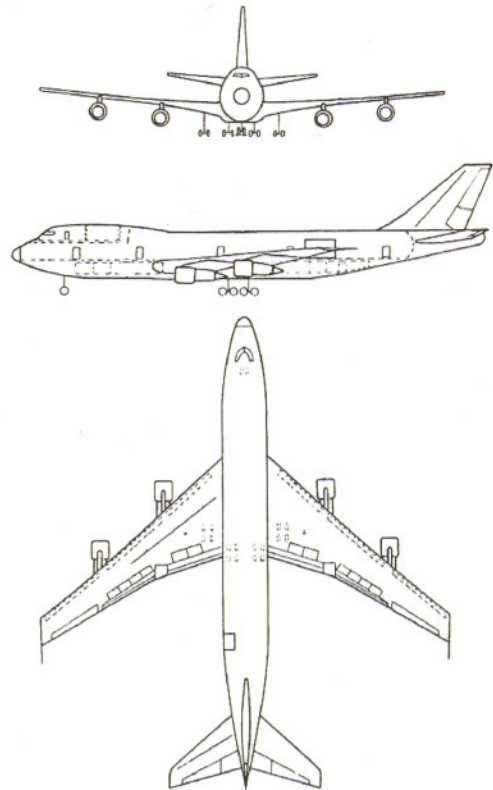
747-100/200/300 (Classics) General Familiarization



By Steve Oebermann

Presented by AeroEd LLC
Tel: 585-935-7239
Fax: 585-935-7272
www.AeroEd.com

July 2005
First Edition
Self Paced Training Study Guide



Distributed Exclusively by:



Tel: 800-780-4115
Fax: 970-887-2197
www.ACTechbooks.com

Upgrade this book to the Full Certification Program and receive a

Certificate of Completion for 40 Hours of Training and

40 Hours FAA AMT Awards Credit.

See inside for details.

Vol 1



747 100/200/300 (CLASSICS) GENERAL FAMILIARIZATION SELF-PACED

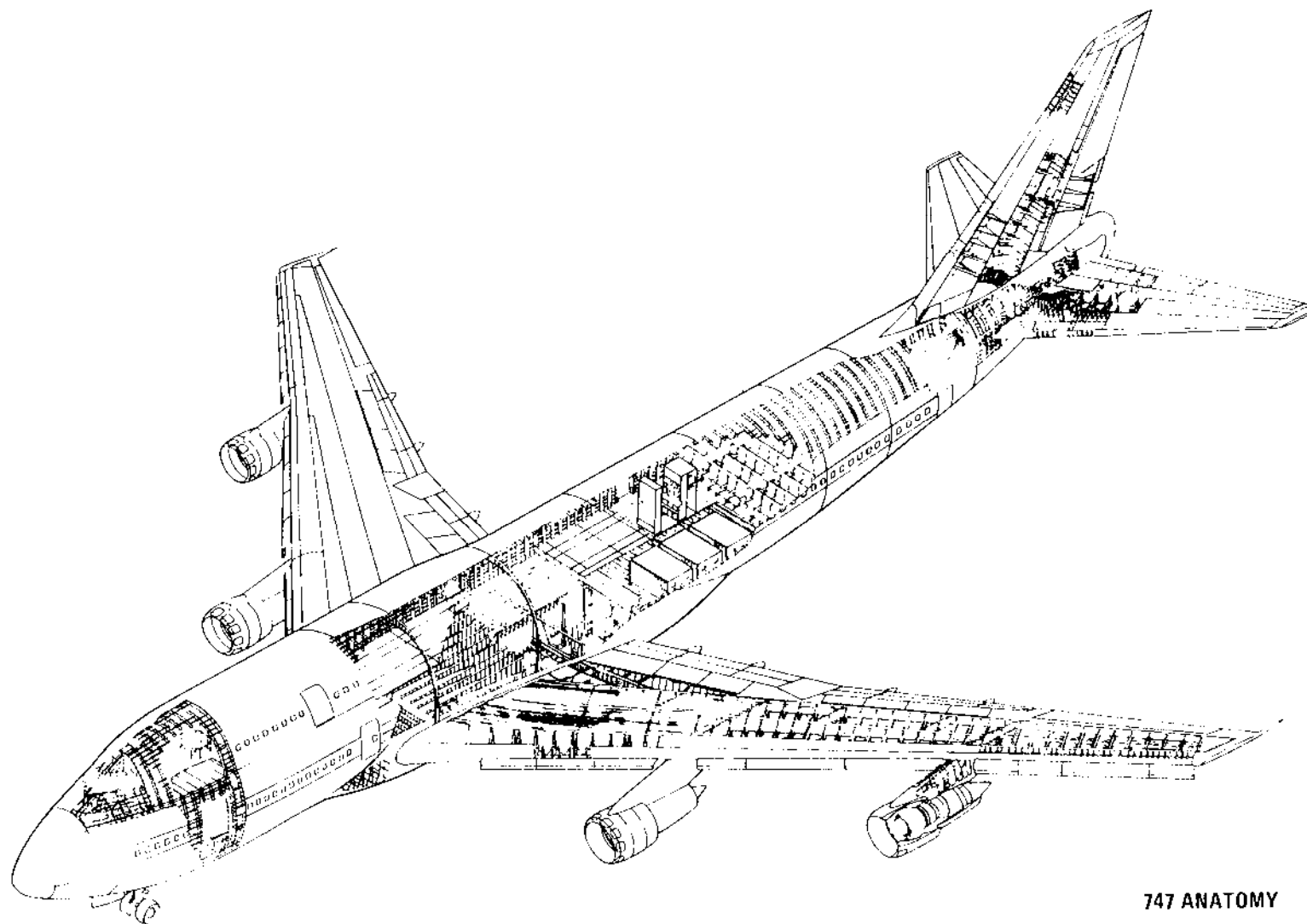
This course covers an overview of the Mechanical Systems to include:

Description and Operation, Controls and Indications, Component Location, & Servicing.

OBJECTIVES

On completion of this training, using the study guide provided and the appropriate Maintenance Manuals, the student will be able to:

- 1) Describe the safety precautions to be observed when working on or near the aircraft and its systems
- 2) Describe the locations of principle components
- 3) Describe the normal functions of each major system, including terminology and nomenclature
- 4) Perform all aircraft system servicing tasks using the proper maintenance manual reference



747 ANATOMY



TABLE OF CONTENTS
747-100/200/SP GENERAL FAMILIARIZATION SELF-PACED
ATA-06

OBJECTIVES.....	1
MAINTENANCE MANUAL ARRANGEMENT AND NUMBERING SYSTEM.....	9
DIMENSIONS AND AREAS	14
Overview.....	14
Reference Planes and Lines.....	14
Standard Abbreviations and Definitions	14
GENERAL ARRANGEMENT.....	20
Airplane.....	20
Attitude.....	20
Engine Toe-In	20
Fuselage	20
Wing	20
GROUND SERVICE RECEPTACLE LOCATIONS.....	22
Locations and Height	22
JACKING POINTS (PASSENGER 200B).....	23
BODY DIAGRAM - FORWARD	26
STRINGERS.....	26
BODY STATION LINES	26
BODY DIAGRAM - AFT.....	28
SECTION 48.....	28
FUSELAGE CROSS SECTION.....	30
WATER LINE	30
BUTTOCK LINES	30
FUSELAGE PRESSURE ENVELOPE.....	32
KEEL BEAM	32



WING STRUCTURE	34
STRUCTURE.....	34
SPARS	34
RIBS	34
STRINGERS.....	34
SKIN	34
WING STRUCTURE DIAGRAM.....	36
PRIMARY	36
AUXILIARY	36
PRIMARY	36
AUXILIARY	36
WING CENTER SECTION	38
CENTER SECTION.....	38
BEAMS	38
FUEL BARRIER.....	38
ACCESS	38
ENGINE STRUT	40
HORIZONTAL TAIL.....	42
STRUCTURE.....	42
MATERIAL	42
WEIGHT	42
TYPICAL HORIZONTAL TAIL STRUCTURE	44
AFT TORQUE BOX.....	44
FORWARD TORQUE BOX	44
FIXED T. E.	44
ELEVATORS	44
BALANCE WEIGHTS.....	46
HAZARDOUS MATERIAL	46



VERTICAL STABILIZER	48
STRUCTURE.....	48
ATTACHMENT	48
FIN TIP & L. E.....	48
ACCESS	48
INSIDE ACCESS	48
TIP ACCESS.....	48
TYPICAL VERTICAL FIN STRUCTURE	51
AFT TORQUE BOX.....	51
FORWARD TORQUE BOX	51
FIXED T.E.	51
RUDDERS.....	51
STRUCTURE.....	51
MATERIAL	52
WEIGHT	52
BALANCE WEIGHTS.....	52
HAZARDOUS MATERIAL	52
SUPPLEMENT SERVICE & FLIGHT INTERPHONE SYSTEM.....	54
Overview Of Service Interphone.....	54
The Service Interphone Amplifier	56
Interphone Control Card.....	57
Interphone Switching Card.....	58
Service Interphone Switch	59
Operation	60
FLIGHT INTERPHONE SYSTEM.....	63
Overview	63
Audio Selector Panels.....	64
Jack Panels.....	66



Handheld Microphones	66
Boom Microphones	66
Oxygen Mask Microphones	66
Headsets	66
Flight Interphone Amplifier	67
Interphone Speakers	67
Operation	67