

AIRBUS A320 FAMILY

Level (2) Type Training Course

Instructor: Hassan Javaherinia





ATA 05-12

AIRCRAFT GENERAL



ATA 05-12 AIRCRAFT GENERAL

- A320 FAMILY**
- AIRCRAFT GENERAL
- AIRCRAFT DIMENSIONS
- FAMILY RANGE
- MAXIMUM WEIGHTS AND OPERATING LIMITS
- THE CABIN
- DOOR HEIGHTS
- COMPOSITE STRUCTURES
- ZONE NUMBERS
- STRUCTURAL BREAKDOWN AND ZONING
- ACCESS DOORS AND PANELS
- FUNCTION ITEM NUMBER
- COCKPIT PRESENTATION
- COCKPIT PHILOSOPHY
- GROUND SUPPORT EQUIPMENT AND TOOLS**
- STANDARD TOOLS
- SPECIFIC TOOLS
- STANDARD GSE
- 05 TIME LIMITS AND MAINTENANCE CHECKS (1)**
- SCHEDULED MAINTENANCE TASKS & CHECKS IN MPD
- SCHEDULED REPETITIVE REQUIREMENTS THROUGH MPD
- 06 JACKING**
- 09 TOWING**
- SAFETY ITEMS**
- 12 SERVICING POINTS**
- A/C SERVICING ARRANGEMENT
- TURNING RADII



ATA 21

AIR CONDITIONING



ATA 21 AIR CONDITIONING

AIR CONDITIONING, VENTILATION & PRESSURIZATION

INTRODUCTION

BASIC AIR CONDITIONING SYSTEM INTRODUCTION

PACK INTRODUCTION

CABIN TEMPERATURE CONTROL

CONTROL AND INDICATING.....

COMPONENT LOCATION

MAINTENANCE/TEST FACILITIES

SAFETY PRECAUTIONS

PRESSURIZATION SYSTEM PRESENTATION

SYSTEM INTRODUCTION

CONTROL AND INDICATING.....

VENTILATION SYSTEM PRESENTATION

GENERAL

AVIONICS VENTILATION.....

LAVATORY AND GALLEY VENTILATION.....

VENTILATION PANEL

ECAM CAB PRESS PAGE

COMPONENT LOCATION

MAINTENANCE/TEST FACILITIES

SAFETY PRECAUTIONS

CARGO VENTILATION & HEATING SYS PRESENTATION ...

SYSTEM INTRODUCTION

CONTROL AND INDICATING.....

COMPONENT LOCATION

MAINTENANCE/TEST FACILITIES

SAFETY PRECAUTIONS

COMPONENT LOCATION

MAINTENANCE/TEST FACILITIES

SAFETY PRECAUTIONS



ATA 22

AUTO FLIGHT SYSTEM



ATA 22 AUTO FLIGHT SYSTEM

AUTOMATIC FLIGHT SYSTEM DESIGN PHILOSOPHY (2)

FAC GENERAL (2)

FMGC GENERAL (2).....

MANAGEMENT

GUIDANCE

DISPLAYS.....

AUTOPILOT PRESENTATION (2).....

FLIGHT DIRECTOR PRESENTATION (2)

AUTOTHRUST PRESENTATION (2)

AUTOMATIC FLIGHT SYS CONTROL & INDICATING (2).....

AUTOMATIC FLIGHT SYS MAINTENANCE SYSTEM D/O (3).....

YAW AXIS CONTROL D/O (3).....

FAC ENGAGEMENT D/O (3).....

YAW DAMPER FUNCTION D/O (3).....

FLIGHT ENVELOPE PROTECTION D/O (3)

FAC WARNINGS (3).....

FLIGHT GUIDANCE AUTOTHRUST D/O (3).....

Flight guidance priority logic (3)

FLIGHT CONTROL UNIT D/O (3)

FLIGHT MANAGEMENT PRIORITY LOGIC (3).....

FLIGHT PLANNING D/O (3).....

FMGS WARNINGS (3).....

SAFETY PRECAUTIONS.....



ATA 23 COMMUNICATION



ATA 23 COMMUNICATION

COMMUNICATIONS LEVEL 2 (2).....

RADIO MANAGEMENT PANEL INTERFACES (3).....

AUDIO SWITCHING D/O (3)

AUDIO MANAGEMENT UNIT INTERFACES (3).....

COCKPIT LOUDSPEAKER MUTING CIRCUIT D/O (3).....

FLIGHT INTERPHONE SYSTEM D/O (2).....

RADIO COMMUNICATION D/O (2).....

FREQUENCY SELECTION

VHF SYSTEM Architecture D/O (3).....

HF SYSTEM ARCHITECTURE D/O (3).....

SPEECH COMMUNICATION WARNINGS (3)

SELCAL AND COCKPIT CALL SYSTEM D/O (3).....

ACARS ARCHITECTURE (3).....

ACARS VHF 3 OPERATION (2).....

MCS SATCOM D/O (3).....

CVR OPERATIONAL MODES D/O (3).....

CVR ELECTRICAL SCHEMATIC (3)

EMERGENCY LOCATOR TRANSMITTER SYSTEM D/O (3)

CIDS DIRECTOR/DEU ARCHITECTURE (3).....

CIDS DIRECTOR DESCRIPTION/OPERATION (3).....

CIDS TYPE A DEU DESCRIPTION/OPERATION (3).....

CIDS TYPE B DEU DESCRIPTION/OPERATION (3).....

CIDS DEU MOUNT DESCRIPTION (3).....

FAP PAGES PRESENTATION (2).....

ATTENDANT INDICATION PANEL (AIP) D/O (3).....

AREA CALL PANEL (ACP) INDICATIONS (3).....

CABIN ATTENDANT HANDSET PRESENTATION (3)

PASSENGER ADDRESS SYSTEM DESCRIPTION (3).....

PASSENGER ADDRESS SYSTEM OPERATION (3).....

CABIN INTERPHONE SYSTEM D/O (3)

SERVICE INTERPHONE D/O (3).....

PASSENGER CALL SYSTEM D/O (3)

PASSENGER LIGHTED SIGNS D/O (3).....

PRERECORDED ANNOUNCEMENT & BOARDING MUSIC (3)

CIDS EVACUATION SIGNALLING D/O (3).....

CIDS WARNINGS (3).....

CIDS DIRECTOR INTERFACES (3).....

FAP & AAP INTERFACES (3).....

CIDS PROGRAMMING (3).....

CIDS DIRECTOR DESCRIPTION/OPERATION CLASSIC (3)

CIDS TYPE A DEU DESCRIPTION/OPERATION CLASSIC (3)

CIDS TYPE B DEU DESCRIPTION/OPERATION CLASSIC (3)

CIDS DEU MOUNT DESCRIPTION CLASSIC (3)

PRERECORDED ANNOUNCEMENT & BOARDING MUSIC CLASSIC (3)

CIDS WARNINGS CLASSIC (3).....

PTP SYS TEST & SYS STS PAGES PRESENTATION CLASSIC (3).....

PTP CABIN RECONFIGURATION CLASSIC (3)

PASSENGER ENTERTAINMENT SYSTEM PRESENTATION (2).....

PASSENGER MUSIC ENTERTAINMENT SYSTEM D/O (3).....

VIDEO ENTERTAINMENT SYSTEM D/O (OPTION) (3).....

PAX VISUAL INFORMATION SYS D/O (OPTION) (3)

CABIN MANAGEMENT SYSTEM D/O (3).....

ELECTROSTATIC DISCHARGE (2).....

STATIC DISCHARGING PRESENTATION (2).....



ATA 24

ELECTRICAL POWER



ATA 24 ELECTRICAL POWER

System Diagram description (2)

System Warnings (3).....

Electrical System and Circuit identification (2).....

Electrical Power (2).....

IDG cooling system (3).....

IDG monitoring (2).....

IDG DRIVE PART (3).....

IDG DRIVE PART CLASSIC (3).....

IDG generator part (3)

AC main generator (3).....

GCU (3)

AC MAIN GENERATION CLASSIC D/O (3).....

AC Auxiliary Generation general description (2)

AC Auxiliary generation (3)

EXTERNAL POWER SUPPLY GENERAL DESCRIPTION (2)

EXTERNAL POWER SUPPLY D/O (3).....

GAPCU D/O (3).....

GPCU D/O CLASSIC (3)

AC/DC GROUND SERVICE DISTRIBUTION D/O (3).....

BUS TIE LOGIC D/O (3).....

GALLEY SUPPLY D/O (3).....

EGIU INTERFACE CLASSIC (3)

AC GENERATION INTERFACES (3).....

IDG REMOVAL AND INSTALLATION (3).....

AC EMERGENCY GENERATION D/O (3).....

EMER ELECTRICAL POWER LOGIC DESCRIPTION (3).....

RAT ACTIVATION (3)

CSM/G GCU D/O (3).....

CSM/G OPERATIONAL TEST ELECTRICAL CIRCUIT (3).....

STATIC INVERTER DESCRIPTION/OPERATION (3).....

AC ESSENTIAL BUS SWITCHING (3).....

FUEL PUMPS ELEC PWR SUPPLY IN SMOKE CONFIG (3).....

AC/DC SHEDDABLE BUS SUPPLY (3).....

REFUELING ON BATTERY (3).....

DC MAIN GENERATION D/O (3)

DC NORMAL/ESSENTIAL GENERATION SWTG D/O (3)

TRANSFORMER RECTIFIER D/O (3).....

BATTERY SYSTEM D/O (3).....

BATTERY CHARGE LIMITER D/O (3).....

SAFETY PRECAUTIONS.....



ATA 25

EQUIPMENT & FURNISHING



ATA 25 EQUIPMENT AND FURNISHING

GENERAL
COCKPIT SEATS
CABIN LAYOUTS.....
PASSENGER SEATS
CABIN ATTENDANT SEATS.....
GALLEYS.....
LAVATORIES
CURTAINS AND PARTITIONS
CABIN PANEL LAYOUT
LOWER SIDE WALL PANELS
UPPER SIDE WALL PANELS
COVER LIGHT PANELS
OVERHEAD STOWAGE COMPARTMENT
CEILING PANELS
PSU/PIU
PASSENGER DOOR AND ESCAPE SLIDE.....
EMERGENCY EXITS
EMERGENCY EXIT ESCAPE SLIDE
PURSER STATION
AFT CREW STATION.....
AREA CALL PANEL.....
LOWER DECK CARGO COMPARTMENT.....
FWD AND AFT CARGO COMPARTMENT
CARGO LOADING
CARGO COMPARTMENT DOORS
CARGO COMPARTMENT CAPABILITIES.....
EMERGENCY EQUIPMENT
COCKPIT EMERGENCY EQUIPMENT LIST
CABIN EMERGENCY EQUIPMENT LIST
EVACUATION COMMAND SYSTEM

COCKPIT EVACUATION PANEL.....
SAFETY PRECAUTIONS.....



ATA 26

FIRE PROTECTION



ATA 26 FIRE PROTECTION

GENERAL

FIRE PROTECTION LEVEL 2 (2)

SYSTEM OVERVIEW

SERVICING

DAILY CHECKS.....

MEL/DEACTIVATION

MAINTENANCE TIPS.....

ENGINE FIRE PROTECTION

ENGINE FIRE DETECTION LOGIC (3)

GENERAL.....

FIRE WARNING.....

LOOP FAULT WARNING.....

DETECTION FAULT WARNING

ENGINE FIRE PUSHBUTTON INTERFACES (3)

GENERAL.....

MONITORING INTERFACES

SUPPLY INTERFACES

SYSTEM WARNINGS (3).....

ENGINE FIRE.....

SYS OPERATION IN CASE OF ENG FIRE IN FLIGHT (3).....

GENERAL.....

FIRE PROCEDURE

SYS OPERATION IN CASE OF ENG FIRE ON GND (3).....

GENERAL.....

FIRE PROCEDURE

PRECAUTIONS (3)

GENERAL.....

FIRE BOTTLE.....

DISCHARGE CARTRIDGE

ELECTRICAL CIRCUITS (3)

FIRE DETECTION CIRCUIT

FIRE EXTINGUISHING CIRCUIT

INTERFACES.....

APU FIRE PROTECTION

APU FIRE DETECTION LOGIC (3)

GENERAL

FIRE WARNING

LOOP FAULT WARNING

DETECTION FAULT WARNING.....

APU FIRE PUSHBUTTON INTERFACES (3)

GENERAL

MONITORING INTERFACES.....

SUPPLY INTERFACES

AUTO EXTINGUISHING ON GROUND.....

APU FIRE DETECTION SYSTEM WARNINGS (3)

APU FIRE

SYSTEM OPERATION IN CASE OF APU FIRE (3)

GENERAL

FIRE DETECTION.....

APU ISOLATION

FIRE EXTINGUISHING.....

AUTO EXTINGUISHING ON GROUND (2)

GENERAL

FIRE DETECTION.....

APU ISOLATION

FIRE EXTINGUISHING.....

PRECAUTIONS (3)

GENERAL

FIRE BOTTLE.....

DISCHARGE CARTRIDGE.....

ELECTRICAL CIRCUITS (3)

DETECTION CIRCUIT.....

EXTINGUISHING CIRCUIT.....

AUTO EXTINGUISHING CIRCUIT

FIRE DETECTED

TEST PUSHBUTTON.....

RESET PUSHBUTTON.....

AVIONICS SMOKE DETECTION

AVIONICS SMOKE PROCEDURE (3).....

MASTER CAUTION



OXYGEN MASK.....
CABIN AND COCKPIT ISOLATION
SMOKE SOURCE ISOLATION.....
ESSENTIAL ELECTRICAL NETWORK.....
CARGO & LAVATORY FIRE PROTECTION.....
CARGO FIRE PROTECTION SYSTEM PRESENTATION (2).....
GENERAL.....
SMOKE DETECTORS.....
CIDS SMOKE DETECTION FUNCTION.....
WARNINGS.....
DISCH PUSHBUTTON.....
BOTTLE.....
TEST PUSHBUTTON.....
A321 SYSTEM.....
CARGO & LAVATORY SMOKE DETECTION SYSTEM D/O (3).....
GENERAL.....
LAVATORY SMOKE.....
LAVATORY FAULT.....
CARGO SMOKE.....
CARGO FAULT.....
BOTTLE FAULT.....
CIDS SDF FAULT.....
FAP SMOKE DETECTION PAGE (2).....
INDICATIONS.....
CARGO SMOKE DETECTION WARNINGS (3).....
AFT (FWD) CARGO SMOKE.....
CARGO SMOKE PROCEDURE (3).....
AURAL AND VISUAL INDICATIONS.....
EXTINGUISHING PROCEDURE.....
A321 CONFIGURATION.....
LAVATORY SMOKE DETECTION WARNINGS (3).....
LAVATORY SMOKE.....
PRECAUTIONS (3).....
GENERAL.....
FIRE BOTTLE.....

DISCHARGE CARTRIDGE.....
FLOW METERING SYSTEM FOR ETOPS (OPTION) (3).....
ETOPS SYSTEM AND PANEL 22VU.....
A321 CONFIGURATION.....



ATA 27

FLIGHT CONTROLS



ATA 27 FLIGHT CONTROLS

FLIGHT CONTROLS

SYSTEM OVERVIEW

MEL/DEACTIVATION

MAINTENANCE TIPS - EXT/RET OF THE SPOILERS

PITCH

SYSTEM OVERVIEW

PITCH CONTROL NORMAL D/O (3)

PITCH CONTROL ABNORMAL D/O (3)

DIRECT LAW

MECHANICAL BACK-UP

PITCH LAW RECONFIGURATION.....

ELEVATOR SERVO CONTROL OPERATION (3)

THS ACTUATOR OPERATION (3)

MEL/DEACTIVATION

ROLL/YAW.....

SYSTEM OVERVIEW

ROLL CONTROL NORMAL D/O (3).....

ROLL CONTROL ABNORMAL OPERATION (3).....

SYSTEM OVERVIEW

YAW CONTROL NORMAL D/O (3).....

YAW CONTROL ABNORMAL D/O (3).....

AILERON SERVO CONTROL OPERATION (3).....

SYSTEM OVERVIEW

SPOILER SERVO CONTROL OPERATION (3)

RUDDER TRIM ACTUATOR D/O (3).....

RUDDER LIMITER OPERATION (3).....

RUDDER LIMITER OPERATION (3).....

YAW DAMPER SERVO ACTUATOR OPERATION (3).....

SPEED BRAKE & GROUND SPOILER D/O (3).....

MEL/DEACTIVATION

EFCS GENERAL.....

FLIGHT CONTROL WARNINGS (3).....

SYSTEM DESCRIPTION.....

EFCS CONTROL INTERFACE (3)

EFCS MONITOR INTERFACE (3).....

SLATS AND FLAPS.....

SYSTEM OVERVIEW

SLATS/FLAPS CONTROL D/O (3).....

SLATS/FLAPS ABNORMAL LOCKING OPERATION (3).....

SLATS/FLAPS ABNORMAL HALF SPEED OPERATION (3)

SLATS MECHANICAL DRIVE D/O (3).....

FLAPS MECHANICAL DRIVE D/O (3).....

FLAPS MECHANICAL DRIVE D/O (A321) (3).....

FLAPS DRIVE STATIONS D/O (3)

FLAPS DRIVE STATIONS D/O (A321) (3)

FLAPS ATTACHMENT FAILURE DET DESCRIPTION (3)

SLATS/FLAPS WARNINGS (3).....

MEL/DEACTIVATION

SFCC CONTROL INTERFACES (3).....



ATA 28

FUEL



ATA 28 FUEL

FUEL DISTRIBUTION

A318/A319/A320 ENGINE FEED SYSTEM D/O
FUEL QUANTITY INDICATING A318/A319/A320 (3)
FUEL LEVEL SENSING (3)
A321 ENGINE FEED SYSTEM D/O
FUEL QUANTITY INDICATING A321 (3)
FUEL LEVEL SENSING A321 (3)

STORAGE, VENTING AND RECIRCULATION

VENTING SYSTEM DESCRIPTION/OPERATION (3)
FUEL IDG COOLING SYSTEM PRESENTATION (3)

REFUEL/DEFUEL

GENERAL
REFUEL/DEFUEL CONTROL PANEL PRESENTATION (2)
COCKPIT PRESELECTOR PRESENTATION (2)
REFUEL/DEFUEL SYSTEM D/O (3)
AUTOMATIC REFUEL OPERATION (2)

APU FEED SYSTEM D/O (3)

GENERAL
DESCRIPTION

FUEL SYSTEM WARNINGS (3)

L TK PUMP 1 LO PR
CTR TK PUMP 2 LO PR
R TK PUMP 1 + 2 LO PR
CTR TK PUMPS LO PR
X FEED VALVE FAULT
ENG 1 LP VALVE OPEN
L WING TK LO LVL
R XFR VALVE CLOSED
L OUTER TK HI TEMP
R INNER TK LO TEMP
AUTO FEED FAULT

APU LP VALVE FAULT

FUEL QUANTITY MANUAL MEASUREMENT (2)

FUEL LEVEL MAGNETIC INDICATOR LOCATION
FUEL LEVEL MAGNETIC INDICATOR OPERATION
A/C ATTITUDE
FUEL QUANTITY TABLES

SERVICING

DAILY CHECKS
DRAIN WATER CONTENT
ENVIRONMENTAL PRECAUTIONS
WATER DRAIN VALVE OPERATION (2)

MEL/DEACTIVATION

MANUAL REFUEL VALVE OPERATION

ADDITIONAL CENTER TANK ACT A319/A320 OPTION

ACT SYSTEM PRESENTATION (2)
ACT INSTALLATION PRESENTATION (2)
ACT SYSTEM CONTROLS AND INDICATING (2)
ACT SYSTEM WARNINGS (3)
ACT SYSTEM D/O (3)
ACT REFUEL/DEFUEL SYSTEM PRESENTATION (2)
ACT REFUEL/DEFUEL CONTROL PANEL (2)
ACT TO CTR TK FUEL XFR OPERATION (3)
1 ACT TO 2 ACTS DIFFERENCES (3)
ACT SYSTEM CONTROLS AND INDICATING A321 (2)

ADDITIONAL CENTER TANK CJ A319 OPTIONAL

ACT SYSTEM PRESENTATION (2)
ACT INSTALLATION PRESENTATION (2)
ACT SYSTEM CONTROLS AND INDICATING (2)
ACT SYSTEM WARNINGS (3)
ACT SYSTEM D/O (3)
ACT REFUEL/DEFUEL SYSTEM PRESENTATION (2)
ACT REFUEL/DEFUEL CONTROL PANEL (2)
ACT TO CTR TK FUEL XFR OPERATION (3)



ATA 29 HYDRAULICS



ATA 29 HYDRAULICS

HYDRAULIC POWER SYSTEM PRESENTATION

SYSTEM INTRODUCTION

ECAM HYDRAULIC PAGE

PANEL LOCATION

COMPONENT LOCATION

HYDRAULIC SYSTEM USERS

GREEN, BLUE, YELLOW USERS

PRIORITY VALVES

HYDRAULIC POWER

SERVICING.....

DAILY CHECKS

MEL/DEACTIVATION

MAINTENANCE TIPS

'A' CHECK ITEMS

CIRCUIT IDENTIFICATION AND ROUTING

PIPE ROUTING

PIPE IDENTIFICATION

COMPONENT IDENTIFICATION

CONNECTIONS

HYDRAULIC SYSTEM WARNINGS

G+Y SYS LO PR

Y ELEC PUMP LO PR.....

G RSVR LO AIR PR.....

Y RSVR OVHT

Y ELEC PUMP OVHT

PTU FAULT

RAT FAULT

G ENG 1 PUMP LO PR.....

GREEN HYDRAULIC SYSTEM D/O

DESCRIPTION.....

BLUE HYDRAULIC SYSTEM D/O

DESCRIPTION.....

YELLOW HYDRAULIC SYSTEM D/O

DESCRIPTION.....

HYDRAULIC RESERVOIR PRESSURIZING SYS D/O

GENERAL.....

SOURCES

HYDRAULIC RESERVOIR FILLING PRESENTATION

DESCRIPTION.....

SEAL DRAIN SYSTEM PRESENTATION

GENERAL.....

FWD SYSTEM.....

AFT SYSTEM

TANK DRAINAGE

WARNING.....

RESERVOIR DEPRESSURIZATION/PRESSURISATION

DEPRESSURIZATION OPERATION

PRESSURIZATION OPERATION

RESERVOIR FILLING

WARNING.....

PRECAUTION

INSTALLATION

PROCEDURE

CLOSE-UP.....

RAT STOWAGE AND SERVICING

EXTENSION PROCEDURE

JOB SET-UP

CLOSE-UP.....

RAT TEST

PRECAUTIONS & GROUND CHECKOUT UNIT PRESENTATION



HYDRAULIC LEAKAGE

WARNING

PREVENTING HYDRAULIC LEAKS.....

LEAK MEASUREMENT SYS PRESENTATION (OPTION)

GENERAL

HYDRAULIC SYSTEM TEST

FULL SYSTEM CHECK.....

COMPONENT CHECK.....

INTERNAL LEAK CHEK

ULTRASONIC FLOW METERING SYS PRESENTATION

GENERAL

INSTALLATION AND SETUP.....

INTERNAL LEAKAGE OF THE GREEN HYDRAULIC SYSTEM

PERMITTED LEAKAGE RATES OF THE COMPONENTS.....



ATA 30 ICE AND RAIN PROTECTION



ATA 30 ICE AND RAIN PROTECTION

WING ICE PROTECTION

SYSTEM PRESENTATION (2)

SYSTEM WARNINGS (3)

SYSTEM INTERFACES ENHANCED (3)

SYSTEM INTERFACES CLASSIC (3)

ENGINE AIR INTAKE ICE PROTECTION

SYSTEM PRESENTATION (2)

SYSTEM WARNINGS (3)

SYSTEM INTERFACES ENHANCED (3)

SYSTEM INTERFACES CLASSIC (3)

PROBE ICE PROTECTION

SYSTEM PRESENTATION

SYSTEM DESCRIPTION/OPERATION (3)

SYSTEM WARNINGS (3)

WINDOW ANTI-ICING AND DEFOGGING

SYSTEM PRESENTATION (2)

SYSTEM DESCRIPTION/OPERATION (3)

SYSTEM WARNINGS

RAIN REPELLENT SYSTEM OPTION

RAIN REPELLENT SYSTEM PRESENTATION (2)

RAIN REPELLENT SYSTEM D/O (3)

DRAIN MAST ICE PROTECTION

SYSTEM PRESENTATION ENHANCED (2)

SYSTEM PRESENTATION CLASSIC (2)

POTABLE/WASTE WATER LINES ANTI-ICING

SYSTEM PRESENTATION (2)

AIR STOP VALVE CARGO DRAINAGE SYS D/O (OPT) (3)

SERVICE PANEL HEATING

POTABLE WATER SERVICE PNL ANTI-ICE SYS D/O (3)

TOILET SERVICE PNL ANTI-ICE SYS D/O (OPT) (3)

ICE INDICATOR ILLUMINATION

SYSTEM PRESENTATION (3)

SYSTEM WARNINGS



ATA 31 INDICATING AND RECORDING



ATA 31 INDICATING AND RECORDING

INDICATING SYSTEM	
<i>EIS ARCHITECTURE ENHANCED (2)</i>	
<i>ENGINE/WARNING DISPLAY PRESENTATION (2)</i>	
<i>ECAM ADVISORY & FAILURE RELATED MODES (3)</i>	
<i>LEVEL 3</i>	
<i>ECAM WARNINGS PRESENTATION (2)</i>	
<i>ECAM DESCRIPTION/OPERATION (3)</i>	
<i>EFIS DESCRIPTION/OPERATION (3)</i>	
<i>EIS ABNORMAL OPERATION (3)</i>	
<i>DMC ARINC BUS RECONFIGURATION (3)</i>	
<i>EIS WARNINGS (3)</i>	
<i>Indicating/Recording system CLASSIC Differences</i>	
<i>EIS ARCHITECTURE CLASSIC (2)</i>	
<i>Engine/warning display presentation CLASSIC (2)</i>	
<i>ECAM DESCRIPTION/OPERATION CLASSIC (3)</i>	
<i>EFIS DESCRIPTION/OPERATION CLASSIC (3)</i>	
<i>EIS ABNORMAL OPERATION CLASSIC (3)</i>	
<i>DMC ARINC BUS RECONFIGURATION CLASSIC (3)</i>	
<i>EIS WARNINGS CLASSIC (3)</i>	
<i>ELECTRICAL CLOCK D/O (2)</i>	
<i>CFDS FAULT PROCESSING (3)</i>	
<i>CFDS AIRCRAFT SYSTEM TYPES (2)</i>	
<i>CFDS FAILURE CLASSIFICATION (2)</i>	
<i>CLASS 2</i>	
<i>CFDS REPORTS (2)</i>	
<i>CFDS PHASES (2)</i>	
<i>CFDIU FUNCTIONS (3)</i>	
<i>POST FLIGHT REPORT FILTERING FUNCTION (3)</i>	
<i>PRINTER PRESENTATION (2)</i>	
<i>PRINTER DESCRIPTION/OPERATION (3)</i>	
<i>PRINTER SYSTEM INTERFACES (3)</i>	
<i>PRINTER PAPER LOADING (2)</i>	
<i>COMPUTER REMOVAL AND INSTALLATION (3)</i>	
<i>PUSHBUTTON REMOVAL AND INSTALLATION (3)</i>	
<i>E-LOGBOOK DESCRIPTION (OPTION) (2)</i>	

<i>AIRMAN GATE OPERATION DESCRIPTION (OPTION) (2)</i>	
<i>RECORDING SYSTEM</i>	
<i>UP & DOWN DATA LOADING SYSTEM PRESENTATION (2)</i>	
<i>UP & DOWN DATA LOADING SYSTEM UTILIZATION (2)</i>	
<i>DFDRS DESCRIPTION/OPERATION (3)</i>	
<i>DFDRS WARNINGS (3)</i>	
<i>FDIMU INTERFACES (3)</i>	
<i>PRINT REPORT STD HEADER DESCRIPTION (3)</i>	
<i>INDIVIDUAL PRINT REPORT DESCRIPTION (3)</i>	
<i>AIDS PROGRAMMING (3)</i>	
<i>PRINT REPORT STD HEADER DESCRIPTION (3)</i>	
<i>INDIVIDUAL PRINT REPORT DESCRIPTION (3)</i>	
<i>AIDS INTERFACES (3)</i>	



ATA 32 LANDING GEAR



ATA 32 LANDING GEAR

SYSTEM OVERVIEW
LANDING GEAR NORMAL OPERATION (3)
LANDING GEAR FREE FALL EXTENSION (3).....
LANDING GEAR SAFETY PRECAUTIONS (2).....
LANDING GEAR DOORS GROUND OPERATION (2).....
LANDING GEAR DOORS GROUND OPENING D/O (3).....
LGCIU CONTROL SIGNALS (3).....
LANDING GEAR WARNINGS (3).....
LGCIU MONITORING INTERFACES (3).....
MAIN LANDING GEAR DESCRIPTION (2).....
MAIN LANDING GEAR DOORS DESCRIPTION (2).....
NOSE LANDING GEAR DESCRIPTION (2).....
NOSE LANDING GEAR DOORS DESCRIPTION (2).....
WHEELS AND BRAKES
SYSTEM OVERVIEW
BRAKE SYSTEM DESCRIPTION (3) ENHANCED
AUTO-BRAKE SYSTEM D/O (3)
ANTI-SKID FUNCTION (3).....
BRAKE SYSTEM OPERATION (3).....
BRAKE SYSTEM DESCRIPTION (3).....
BRAKE SYSTEM OPERATION (3) CLASSIC
MAINTENANCE PROCEDURES CLASSIC
BRAKE TEMPERATURE SYSTEM D/O (3).....
BRAKE COOLING SYSTEM D/O (OPTION) (3)
WHEELS AND BRAKES SYSTEM WARNINGS (3).....
NOSE WHEEL STEERING ENHANCED
SYSTEM OVERVIEW
SYSTEM DESCRIPTION/OPERATION (3).....
SYSTEM WARNINGS (3)
NOSE WHEEL STEERING CLASSIC.....
BSCU CONTROL INTERFACES (3).....

BSCU ARCHITECTURE & MONITORING INTFC (3).....
ABCU ARCHITECTURE & MONITORING INTFC (3).....
TIRE PRESSURE INDICATION SYSTEM
SYSTEM DESCRIPTION/OPERATION (3).....
SYSTEM WARNINGS (3)
MAINTENANCE PRACTICES
SERVICING.....
DAILY CHECK
MEL/DEACTIVATION
MAINTENANCE TIPS
A CHECK ITEMS
MAIN LANDING GEAR SERVICING (3)
WHEEL AND BRAKE REMOVAL & INSTALLATION (2).....
MAINTENANCE PROCEDURE.....
INSTL OF SAFETY DEVICES ON THE L/G DOORS (3).....
FLIGHT CONFIGURATION PRECAUTIONS (3).....
GND CONFIGURATION AFTER FLT CONFIG (3).....
OPEN THE MAIN GEAR DOORS FOR ACCESS (3).....
CLOSE MAIN GEAR DOORS AFTER ACCESS (3).....
CLOSE THE APPLICABLE DOOR(S).....



ATA 33 LIGHTS



ATA 33 LIGHTS

*COCKPIT LIGHTS SYSTEM
CKPT ANNUNCIATOR LIGHT TEST & DIMMING D/O (3)
CABIN LIGHTS SYSTEM DESCRIPTION (3)
FAP CABIN LIGHTING PAGE (3)
SEAT & FLOOR MOUNTED EMER LIGHTS SYS D/O (3)
Cabin Lights system description CLASSIC (3)
FAP CABIN LIGHTING PAGE CLASSIC (3)
Reading/work light test using PTP CLASSIC (3).....
SEAT & FLOOR mounted emer lights sys D/O CLASSIC (3)
Seat & floor mounted emer lights sys d/o CLASSIC (3).....
Emergency lights test classic (3).....
Service Compartment Lights
EXTERIOR LIGHTS D/O (3).....
SAFETY PRECAUTIONS.....*



ATA 34

NAVIGATION



ATA 34 NAVIGATION

ADIRS PRINCIPLE (2).....

AIR DATA PROBES PRESENTATION (2).....

ADIRS SWITCHING (2).....

ADIRS ALIGNMENT THROUGH MCDU (2).....

ADIRS ECAM WARNINGS (2).....

ISIS D/O (3).....

ISIS INTERFACES (3).....

ISIS BITE AND TEST (3).....

RADIO NAVIGATION FREQUENCY SELECTION (3).....

ADF SYSTEM PRESENTATION (2).....

ADF DESCRIPTION/OPERATION (3).....

VOR/MKR SYSTEM PRESENTATION (2).....

VOR/MKR DESCRIPTION/OPERATION (3).....

DME SYSTEM PRESENTATION (2).....

DME DESCRIPTION/OPERATION (3).....

MMR SYSTEM PRESENTATION (2).....

MMR SYSTEM DESCRIPTION/OPERATION (3).....

RADIO ALTIMETER SYSTEM PRESENTATION (2).....

RADIO ALTIMETER DESCRIPTION/OPERATION (3).....

WXR/PWS SYSTEM PRESENTATION (2).....

WXR/PWS DESCRIPTION/OPERATION (3).....

WXR/PWS OPERATIONAL PRECAUTIONS (2).....

EGPWS PRESENTATION (2).....

EGPWS DESCRIPTION/OPERATION (3).....

EGPWS MODES (3).....

ATC SYSTEM PRESENTATION (2).....

ATC DESCRIPTION/OPERATION (3).....

TCAS PRESENTATION (2).....

TCAS DESCRIPTION/OPERATION (3).....

NAVIGATION SYSTEM WARNINGS (EXCEPT ADIRS) (2).....

SAFETY PRECAUTIONS.....



ATA 35 OXYGEN



ATA 35 OXYGEN

GENERAL

OXYGEN LEVEL 2 (2)
SYSTEM OVERVIEW
DAILY CHECK
MAINTENANCE TIPS.....

CREW OXYGEN

CREW OXY MASK UTILIZ/STOWAGE/TESTS (2)
UTILIZATION.....
STOWAGE
TESTS.....

PASSENGER OXYGEN

PASSENGER OXYGEN SYSTEM D/O (3).....
TRIGGERING
AUTOMATIC OPERATION
MANUAL OPERATION
RESET OPERATION
FAULT OPERATION
PASSENGER OXYGEN UNIT D/O (3)
MASK OPERATION
CHEMICAL OXYGEN GENERATION
GENERATOR OPERATION
PASSENGER GASEOUS OXYGEN SYS D/O (OPTION) (3).....
GENERAL.....
SYSTEM DESCRIPTION.....
OPERATION AND COMPONENTS DESCRIPTION.....
OVERPRESSURE PROTECTION.....
ENGINE BURST / RIM RELEASE PROTECTION.....
CONTROL & INDICATION.....
SERVICING.....

PORTABLE OXYGEN

CREW PORTABLE OXYGEN SYSTEM D/O (3)
GENERAL.....
LOCATION.....
DESCRIPTION.....

OPERATION
CABIN PORTABLE OXYGEN EQUIPMENT D/O (3).....
BOTTLE
FIRST AID MASK
PORTABLE BREATHING EQUIPMENT.....
MAINTENANCE PRACTICE.....
CREW OXYGEN CYLINDER REMOVAL & INSTALLATION (3)
REMOVAL.....
INSTALLATION.....



ATA 36 PNEUMATICS



ATA 36 PNEUMATICS

PNEUMATIC
SYSTEM OVERVIEW
ENGINE BLEED
APU BLEED/EXTERNAL AIR
ENGINE BLEED AIR SYTEM
GENERAL
HP VALVE.....
IP CHECK VALVE.....
PRV/CONTROL SOLENOID.....
OPV
REGULATED PRESSURE.....
TRANSFERRED PRESSURE.....
FAV/CONTROL THERMOSTAT
PRECOOLER
HEAT EXCHANGER OUTLET TEMPERATURE SENSOR
ENGINE BLEED AIR SYTEM (CONTROL SOLENOID THERMOSTAT)
GENERAL
HP VALVE.....
IP CHECK VALVE.....
PRV/CONTROL SOLENOID &THERMOSTAT.....
OPV
REGULATED PRESSURE.....
TRANSFERRED PRESSURE.....
FAV/CONTROL THERMOSTAT
PRECOOLER
HEAT EXCHANGER OUTLET TEMPERATURE SENSOR
MEL/DEACTIVATION
PRV AND HPV DEACTIVATION.....
WING LEAK DETECTION
MAINTENANCE TIPS

TROUBLESHOOTING NOTE.....
ENGINE START WITH GROUND AIR
APU BLEED
X-BLEED SYSTEM.....
HP GROUND CONNECTION.....
AIR BLEED SELECTION
APU AIR BLEED SELECTION
ENGINE AIR BLEED SELECTION
HP/IP ENGINE STAGE PRIORITY.....
THRUST LEVERS IN IDLE POSITION
THRUST LEVER IN TAKE-OFF POSITION
ENGINES SHUT DOWN.....
GROUND AIR SUPPLY.....
PNEUMATIC SYSTEM WARNINGS (3)
ENG 1 (2) BLEED ABNORM PR
ENG 1 (2) BLEED LO TEMP
X BLEED FAULT
ENG 1 (2) HP VALVE FAULT
BLEED MONITORING FAULT
L (R) WING LEAK DET FAULT
L (R) WING LEAK.....
BMC INTERFACES
INPUTS
OUTPUTS
PNEUMATIC LEAK DETECTION SYSTEM D/O
SYSTEM OVERVIEW
ROUTING
WARNING LOGIC
FAULT LOGIC.....
LEAK CONSEQUENCE



ATA 38

WATER AND WASTE



ATA 38 WATER AND WASTE

GENERAL

- WATER/WASTE LEVEL 2 (2)
- SYSTEM OVERVIEW
- SERVICING
- MEL/DEACTIVATION
- MAINTENANCE TIPS

POTABLE WATER (A320)

- POTABLE WATER SYSTEM D/O (2)
- STORAGE
- PRESSURIZATION
- DISTRIBUTION
- USER SUPPLY
- HEATING
- INDICATING
- FILLING
- DRAINING
- POTABLE WATER SYSTEM CONTROLS & INDICATING (2)
- GENERAL
- POTABLE WATER SERVICE PANEL
- WATER DRAIN PANELS
- FAP

POTABLE WATER (A318/A319/A321)

- POTABLE WATER SYSTEM D/O (2)
- STORAGE
- PRESSURIZATION
- DISTRIBUTION
- HEATING
- INDICATING
- SERVICING
- POTABLE WATER SYSTEM CONTROLS & INDICATING (2)
- GENERAL
- POTABLE WATER SERVICE PANEL
- FORWARD WATER DRAIN PANEL
- FAP

WASTE WATER

- WASTE WATER SYSTEM D/O (3)
- GENERAL
- DRAIN ASSEMBLY
- DRAIN VALVE
- DRAIN MAST
- TOILET**
- TOILET SYSTEM PRINCIPLE (2)
- GENERAL
- RINSE/FLUSH CONTROL
- VACUUM CONTROL
- TOILET SYSTEM DESCRIPTION (2)
- GENERAL
- FLUSHING
- VACUUM
- STORAGE
- CONTROL/MONITORING
- INDICATING
- SERVICING
- TOILET SYSTEM CONTROLS & INDICATING (2)
- GENERAL
- TOILET SERVICE PANEL
- FAP WATER/WASTE PAGE
- TOILET SYSTEM MONITORING (3)
- GENERAL
- FLUSH CONTROL UNIT
- VSC FUNCTION
- FAP WATER/WASTE PAGE INDICATING



ATA 46

AIR TRAFFIC INFORMATION

AND MANAGEMENT SYSTEM



ATA 46 AIR TRAFFIC INFORMATION AND MANAGEMENT SYSTEM

ATIMS DESCRIPTION/OPERATION (3).....

ATIMS WARNINGS (3).....

ATIMS MCDU MENUS DESCRIPTION (2).....

ATSU ROUTER INIT & TESTS THROUGH MCDU (2).....

ATIMS INTERFACES (3).....



ATA 49

APU



ATA 49 APU HONEYWELL 131-9(A)

HONEYWELL 131-9(A)	
APU DRAIN SYSTEM PRESENTATION (2)	
APU DRAIN SYSTEM	
FUEL CONTROL UNIT/OIL PUMP SEAL DRAIN	
INLET GUIDE VANE ACTUATOR DRAIN	
GEARBOX VENT	
SURGE CONTROL VALVE DRAIN	
LOAD COMPRESSOR CAVITY DRAIN	
TURBINE PLENUM DRAIN	
EXHAUST MUFFLER DRAIN	
APU COMPARTMENT DRAIN	
DRAIN TANK	
APU BASIC DESCRIPTION (3)	
GENERAL	
ENGINE COMPRESSOR	
COMBUSTION CHAMBER	
TURBINE	
LOAD COMPRESSOR	
INLET GUIDE VANES	
ACCESSORY GEARBOX	
APU IGNITION & STARTING D/O (3)	
STARTER CONTROL	
IGNITION CONTROL	
APU FUEL SYSTEM D/O (3)	
GENERAL	
FUEL CONTROL UNIT	
FUEL SCHEDULE	
MUSCLE PRESSURE	
FUEL SHUT-OFF	
FLOW DIVIDER AND SOLENOID VALVE	
FUEL SUPPLY	
FUEL DRAIN	
CONTROL	
MONITORING	

APU OIL SYSTEM D/O (3)	
GENERAL	
STORAGE	
SUPPLY	
SCAVENGE	
VENTING	
CONTROL	
PROTECTION	
MONITORING	
OIL HEATER	
APU AIR SYSTEM D/O (3)	
GENERAL	
BLEED SUPPLY	
BLEED CONTROL	
SURGE PROTECTION	
OIL COOLING	
COMPARTMENT COOLING	
OIL VENT	
CONTROL	
MONITORING	
APU SYSTEM MANAGEMENT D/O (3)	
APU START SEQUENCE	
APU ACCELERATION SEQUENCE	
APU ON-SPEED	
APU NORMAL SHUTDOWN	
APU PROTECTIVE SHUTDOWN	
APU EMERGENCY SHUTDOWN	
APU WARNINGS (3)	
EMERGENCY SHUT DOWN	
AUTOMATIC SHUT DOWN	
ECB INTERFACES (3)	
POWER SUPPLY	
MASTER SWITCH P/B	
AIR INTAKE FLAP	
START P/B	
BACK-UP AND MAIN START CONTACTORS	

AIRBUS A318/A319/A320/A321



EMERGENCY STOP.....
LGCIU 1
APU FUEL FEED SYSTEM
EIU
BMC.....
TSO/JAR.....
ENVIRONMENTAL CONTROL SYSTEM (ECS)
A320/A321 IDENTIFICATION.....
SDAC.....
CFDS.....
DMU PART.....
DATA MEMORY MODULE.....



ATA 52 DOORS



ATA 52 DOORS

SYSTEM INTRODUCTION
PASSENGER DOORS
EMERGENCY EXITS
ESCAPE SLIDE AND SLIDING WINDOWS
CARGO DOOR
AVIONICS COMPARTMENT DOORS
COCKPIT DOOR
GENERAL
DOOR ELEMENTS
COCKPIT DOOR LOCK SYSTEM
OPERATING MODES
CONTROL AND INDICATING.....
PASSENGER DOORS
EMERGENCY EXITS.....
CARGO DOORS
ECAM DOOR/OXY PAGE
MAINTENANCE/TEST FACILITIES
SAFETY PRECAUTIONS



ATA 70-80

POWER PLANT (CFM 56)



ATA 70-80 ENGINE - CFM56-5B

GENERAL
POWER PLANT LEVEL 2 (2)
SYSTEM OVERVIEW
ENGINE OIL SERVICING
MASTER CHIP DETECTOR CHECK
MEL/DEACTIVATION
MAINTENANCE TIPS
ENVIRONMENTAL PRECAUTIONS
POWER PLANT DRAIN PRESENTATION (2)
PYLONS DRAINS
ENGINE DRAINS
POWER PLANT INSTALLATION D/O (3)
INLET COWL
AIR INTAKE FUNKTIONS
FAN COWL DOORS
THRUST REVERSER COWL DOORS
FIREWALLS AND ACOUSTIC PANELS
PRIMARY NOZZLE
CENTERBODY
FORWARD MOUNT
AFT MOUNT
FLUID DISCONNECT PANEL
FAN ELECTRICAL CONNECTOR PANEL
CORE ELECTRICAL JUNCTION BOX
BOOTSTRAP SYSTEM INSTALLATION
ENGINE TRANSPORTATION STAND ATTACHMENT POINTS
ENGINE
ENGINE SYSTEM D/O (3)
ENGINE CHARACTERISTICS
ENGINE GENERAL PARAMETERS
TURBINE OPERATION
ENGINE BEARINGS
ENGINE SEALS
FUELS

COMPRESSOR
COMPRESSOR OPERATION
COMBUSTION CHAMBER
COMBUSTION CHAMBER OPERATION
TURBINE SECTION
AERODYNAMIC STATIONS
BOROSCOPE PORTS
FUEL
ENGINE FUEL SYSTEM D/O (3)
GENERAL
FUEL FEED
METERED FUEL
SERVO FUEL
IDG OIL COOLING
FUEL RETURN VALVE
FUEL RETURN VALVE D/O (3)
GENERAL
DESCRIPTION
OPERATION
FADEC
FADEC PRESENTATION (2)
GENERAL
FADEC FUNCTIONS
POWER SUPPLY
FADEC ARCHITECTURE (2)
DUAL CHANNEL
DUAL INPUTS
HARDWIRED INPUTS
DUAL OUTPUTS
BITE CAPABILITY
FAULT STRATEGY
FAIL SAFE CONTROL
MAIN INTERFACES
FADEC PRINCIPLE (2)
GENERAL
FADEC



- ENGINE INTERFACE UNIT
- POWER MANAGEMENT
- ENGINE LIMIT PROTECTION
- ENGINE SYSTEM CONTROL
- STARTING AND IGNITION CONTROL
- THRUST REVERSER.....
- ECU INTERFACES (3)
- GENERAL.....
- ECU CHANNEL A INPUTS.....
- ECU CHANNEL B INPUTS.....
- ECU CHANNEL A OUTPUTS.....
- ECU CHANNEL B OUTPUTS.....
- EIU INTERFACES (3).....
- INPUTS
- OUTPUTS
- SUPPLY MODULE
- ECU ELECTRICAL PWR SPLY CONTROL (3)
- GENERAL.....
- POWERING N2<15%
- POWERING N2>15%
- AUTO DE-POWERING.....
- FADEC GROUND POWER PANEL.....
- IGNITION AND STARTING.....**
- IGNITION & STARTING SYSTEM PRESENTATION (2).....
- GENERAL.....
- CONTROL AND INDICATING.....
- AUTOMATIC START.....
- MANUAL START
- CRANKING.....
- CONTINUOUS IGNITION
- SAFETY PRECAUTIONS.....
- MAINTENANCE PRACTICES.....
- IGNITION & STARTING SYSTEM D/O (3).....
- GENERAL.....
- AUTOMATIC START.....
- MANUAL START.....

- CONTINUOUS RELIGHT
- ENGINE CRANK
- START FAILURES (3).....
- GENERAL
- HIGH PRESSURE FUEL VALVE NOT OPEN FAULT IN AUTOMATIC MODE ..
- HIGH PRESSURE FUEL VALVE NOT OPEN IN MANUAL MODE
- STARTER TIME EXCEEDED FAULT IN AUTOMATIC MODE
- STARTER TIME EXCEEDED FAULT IN MANUAL MODE.....
- STARTER SHUT OFF VALVE NOT OPEN FAULT
- STARTER SHUT OFF VALVE NOT CLOSED FAULT.....
- IGNITION FAULT IN AUTOMATIC MODE
- IGNITION FAULT IN MANUAL MODE.....
- EGT OVERLIMIT OR STALL FAULT IN AUTOMATIC MODE
- EGT OVERLIMIT OR STALL FAULT IN MANUAL MODE
- AIR**
- AIR SYSTEM PRESENTATION (2)
- GENERAL
- COMPRESSOR AIRFLOW CONTROL.....
- ACTIVE CLEARANCE CONTROL AND TRANSIENT BLEED
- ELECTRONIC CONTROL UNIT COOLING.....
- NACELLE COOLING.....
- PNEUMATIC SOURCES
- ENGINE CONTROLS.....**
- ENGINE THRUST MANAGEMENT (3)
- BASIC INFORMATION
- AUTOTHURST CONTROL MODE.....
- MANUAL CONTROL MODE.....
- ENGINE HP FUEL SHUT-OFF VALVE CONTROL (3)
- GENERAL
- ENGINE MASTER LEVER OPENING COMMAND.....
- ENGINE MASTER LEVER CLOSURE COMMAND.....
- MONITORING.....
- ENGINE LP FUEL SHUT-OFF VALVE CONTROL (3).....
- GENERAL
- ENGINE MASTER CONTROL SWITCH.....
- ENGINE FIRE PUSHBUTTON COMMAND



ENGINE INDICATING.....

ENGINE WARNINGS (3)

LOW N1.....

EGT, N1 OR N2 OVERLIMIT

THROTTLE LEVER DISAGREE.....

THROTTLE LEVER FAULT.....

OIL LOW PRESSURE.....

OIL HIGH TEMPERATURE

OIL FILTER CLOG.....

FUEL FILTER CLOG

ENGINE MONITORING D/O (3)

INTRODUCTION.....

PRIMARY PARAMETERS.....

SECONDARY PARAMETERS.....

OPTIONAL PARAMETERS.....

COMBUSTION AND HPT SECTION PARAMETERS DESCRIPTION.....

COMPRESSOR SECTION PARAMETERS DESCRIPTION

EXHAUST - THRUST REVERSER

THRUST REVERSER SYSTEM PRESENTATION (2)

REVERSER DESIGN

HYDRAULIC SUPPLY.....

ACTUATION.....

REVERSER CONTROL

REVERSER INDICATING

MAINTENANCE PRACTICE

THRUST REVERSER MANAGEMENT (3).....

GENERAL.....

THRUST REVERSER ACTUATION.....

THRUST REVERSER CONTROL

THRUST REVERSER INDICATION.....

CFDS INTERFACE.....

THRUST REVERSER SYSTEM D/O (3)

GENERAL.....

DEPLOY SEQUENCE - SELECTION AND SYSTEM PRESSURIZING.....

DEPLOY SEQUENCE - LATCHES UNLOCKING AND ACTUATORS

DEPLOY SEQUENCE - AMBER REVERSER INDICATION.....

DEPLOY SEQUENCE - GREEN REVERSER INDICATION.....

DEPLOY SEQUENCE - DOOR DEPLOYED.....

STOW SEQUENCE - SELECTION

STOW SEQUENCE - AMBER REVERSER INDICATION.....

STOW SEQUENCE - DOOR STOWED INFORMATION.....

STOW SEQUENCE - ELECTRICAL SUPPLY CUT OFF.....

OIL.....

OIL SYSTEM D/O (3).....

GENERAL

OIL SUPPLY.....

OIL SCAVENGE.....

OIL VENT.....

APPROVED OILS.....

MAINTENANCE PRACTICE.....

OPENING & CLOSING OF ENGINE COWL DOORS (2)

INITIAL PRECAUTIONS.....

OPENING OF THE ENGINE FAN COWL DOORS

OPENING OF THE ENGINE THRUST REVERSER COWL DOORS

CLOSING OF THE ENGINE THRUST REVERSER COWL DOORS.....

CLOSING OF THE ENGINE FAN COWL DOORS.....

FAN COWL LATCHES.....

FAN COWL HOLD OPEN RODS.....

THRUST REVERSER COWL LATCHES.....

INSTRUCTION PLATE.....

THRUST REVERSER COWL QUICK DISCONNECT

THRUST REVERSER COWL OPENING ACTUATOR.....

THRUST REVERSER COWL HOLD OPEN ROD.....

THRUST REVERSER DEACTIVATION & LOCKOUT (2)

THRUST REVERSER DEACTIVATION AND LOCKOUT

THRUST REVERSER DEACTIVATION LEVER.....

HYDRAULIC CONTROL UNIT (HCU) CONNECTIONS.....

THRUST REVERSER LOCKOUT BOLTS STORAGE.....

THRUST REVERSER LOCKOUT FAIRING.....



THRUST REVERSER LOCKOUT BOLTS INSTALLATION.....
MANUAL OPERATION OF T/R PIVOTING DOOR (3)
MANUAL OPERATION OF A THRUST REVERSER PIVOTING DOOR.....
THRUST REVERSER DEACTIVATION LEVER.....
HYDRAULIC LATCH MANUAL UNLOCKING
HYDRAULIC ACTUATOR MANUAL UNLOCKING SQUARE
SAFETY SLEEVE INSTALLATION.....
ENGINE REMOVAL AND INSTALLATION OVERVIEW (3)
PRECAUTIONS.....
ENGINE INTERFACES
HOLD OPEN COWL BRACE INSTALLATION
ENGINE REMOVAL AND INSTALLATION SYSTEMS.....
ENGINE CRADLE AND TROLLEY
ENGINE HYDRAULIC POSITIONER
ENGINE PRESERVATION.....
PRESERVATION RENEWAL REQUIREMENTS
ENGINE DEPRESERVATION