

## TRAINING NEED ANALYSIS

<b>Course Title</b>	B 1.3 LEONARDO AW 189 (GE CT7) PRACTICAL TRAINING (GE CT7)
<b>Duration of Training</b>	10 Days of Practical Training = 60 hours
<b>Module Category</b>	B 1.3

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### GLOSSARY.

LOC	Location
FOT	Functional/Operational Test
SGH	Service and Ground Handling
R/I	Removal and Installation
MEL	Minimum Equipment List
TS	Troubleshooting

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<b>INTRODUCTION MODULE</b>		
<b>1</b>	<b>Chapter/ATA</b>	<b>0 - Helicopter General</b>
<b>a</b>	Knowledge level/Task	LOC
<b>b</b>	Learning Objectives	To gain the required knowledge of helicopter safety and pre-operation it for maintenance.
<b>c</b>	Category	B 1.3
<b>d</b>	Training Method	This training provides: <ol style="list-style-type: none"> <li>1) Helicopter safety practices and pre-operation, it for maintenance activity as per AMPI 89-A-00-00-00-00A-120A-A.</li> </ol>
<b>2</b>	<b>Chapter/ATA</b>	<b>4- Airworthiness Limitations</b>
<b>a</b>	Knowledge level/Task	LOC
<b>b</b>	Learning Objectives	To gain the required knowledge introduction of airworthiness limitation and general understanding of helicopter and components retirement lives.
<b>c</b>	Category	B 1.3
<b>d</b>	Training Method	This training provides: <ol style="list-style-type: none"> <li>1) Introduction of airworthiness limitation as per AMPI 89-A-04-00-00-00A-018E-P.</li> <li>2) General understanding of helicopter and components retirement lives as per AMPI 89-A-04-00-00-00A-028E-P.</li> </ol>

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<b>3</b>	<b>Chapter/ATA</b>	<b>5 - Scheduled/Unscheduled Maintenance</b>
<b>a</b>	Knowledge level/Task	LOC
<b>b</b>	Learning Objectives	To gain the required knowledge and general understanding of helicopter scheduled/unscheduled maintenance.
<b>c</b>	Category	B 1.3
<b>d</b>	Training Method	<p>This training provides:</p> <ol style="list-style-type: none"> <li>1) General understanding of helicopter scheduled/unscheduled maintenance as per AMPI 89-A-05-21-00-00A-028E-P and 89-A-05-51-00-00A-028E-P.</li> </ol>
<b>4</b>	<b>Chapter/ATA</b>	<b>6 - Time limits/maintenance check</b>
<b>a</b>	Knowledge level/Task	LOC
<b>b</b>	Learning Objectives	To gain the required knowledge of principal dimension, reference lines, zones, area, and access provision sections of the AW 189.
<b>c</b>	Category	
<b>d</b>	Training Method	<p>This training provides:</p> <ol style="list-style-type: none"> <li>1) Understanding general data of principal dimension as per AMPI 89-A-06-10-00-00A-010A-A.</li> <li>2) Understanding general data of reference lines as per AMPI 89-A-06-20-00-00A-010A-A.</li> <li>3) Understanding general data of principal dimension as per AMPI 89-A-06-30-00-00A-010A-A.</li> <li>4) General understanding and location of access provision per AMPI 89-A-06-40-00-00A-010A-A.</li> </ol>

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5	Chapter/ATA	7 – Lifting, Shoring, Recovering and Transporting
a	Knowledge level/Task	LOC
b	Learning Objectives	To gain the required knowledge of lifting helicopters on jacks.
c	Category	
d	Training Method	This training provides: <ol style="list-style-type: none"> <li>1) Demonstrating of lifting the helicopter on jacks as per AMPI 89-A-07-11-00-00A-100A-A.</li> </ol>
6	Chapter/ATA	8 – Levelling and Weighing
a	Knowledge level/Task	LOC
b	Learning Objectives	To gain the required knowledge of levelling and weighing of helicopters.
c	Category	B 1.3
d	Training Method	This training provides: <ol style="list-style-type: none"> <li>1) Demonstrating of helicopter level procedure as per AMPI 89-A-08-21-00-00A-100A-A.</li> <li>2) Demonstrating of helicopter weigh procedure as per AMPI 89-A-08-31-00-00A-100A-A.</li> <li>3) Checking the aircraft against Chart A equipment list in FRM Chapter 6.</li> </ol>
7	Chapter/ATA	9 – Handling and Maneuvering
a	Knowledge level/Task	LOC, SGH
b	Learning Objectives	To gain the required knowledge of handling and maneuvering the helicopters.
c	Category	B 1.3
d	Training Method	This training provides: <ol style="list-style-type: none"> <li>1) Demonstrating of helicopter towing operation as per AMPI 89-A-11-00-00-00A-100A-A.</li> <li>2) Helicopter handling and taxiing for service as per 89-A-09-00-00-00A-028A-A.</li> </ol>

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<b>8</b>	<b>Chapter/ATA</b>	<b>10- Parking/mooring, Storing &amp;Return to Service</b>
<b>a</b>	<b>Knowledge level/Task</b>	<b>GEN &amp; SGH</b>
<b>b</b>	<b>Learning Objectives</b>	To gain the required knowledge of helicopter parking normal condition and mooring operation.
<b>c</b>	<b>Category</b>	<b>B 1.3</b>
<b>d</b>	<b>Training Method</b>	<p>This training provides:</p> <ol style="list-style-type: none"> <li>1) Demonstrating of helicopter parking in normal condition operation as per AMPI 89-A-11-00-00-00A-100A-A.</li> <li>2) Demonstrating mooring operation as per AMPI 89-A-10-20-00-00A-100A-A.</li> <li>3) Identifying location of parking, mooring, storing for service as per AMPI 89-A-10-00-00-00A-028A-A.</li> </ol>
<b>9</b>	<b>Chapter/ATA</b>	<b>11 – Placards and Markings</b>
<b>a</b>	<b>Knowledge level/Task</b>	<b>LOC</b>
<b>b</b>	<b>Learning Objectives</b>	To gain the required knowledge of interior and exterior of placards and markings.
<b>c</b>	<b>Category</b>	<b>B 1.3</b>
<b>d</b>	<b>Training Method</b>	<p>This training provides:</p> <ol style="list-style-type: none"> <li>1) General understanding of exterior placards and markings as per AMPI 89-A-11-20-00-00A-028A-A.</li> <li>2) General understanding of interior placards and markings as per AMPI 89-A-11-30-00-00A-028A-A.</li> </ol>

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10	Chapter/ATA	12 – Servicing
a	Knowledge level/Task	LOC, SGH
b	Learning Objectives	To gain the required knowledge in performing servicing by way of replenishing and depleting, scheduled and unscheduled servicing, and support equipment connect/disconnect procedures.
c	Category	B 1.3
d	Training Method	<p>This training provides:</p> <ol style="list-style-type: none"> <li>1) General understanding and location of servicing section as per AMPI 89-A-12-00-00-00A-028A-A.</li> <li>2) Servicing of main gear box as per AMPI 89-A-12-03-00-00A-212A-A.</li> <li>3) Servicing of tail gear box as per AMPI 89-A-12-11-05-00A-212A-A.</li> <li>4) Servicing of no. 1 engine as per AMPI 89-A-12-11-06-00A-212A-A.</li> <li>5) Servicing of no.1 power control module as per AMPI 89-A-12-11-08-00A-218A-A.</li> <li>6) Servicing of auxiliary power unit as per AMPI 89-A-12-11-11-00A-212A-A.</li> <li>7) Demonstrating the service of Integrated Environment Control System (ECS) as per AMPI 89-A-12-03-00-00A-218A-A.</li> <li>8) Servicing of intermediate gearbox as per AMPI 89-A-12-11-04-00A-212A-A.</li> <li>9) Servicing of nose wheel tires as per AMPI 89-A-12-20-01-00A-214A-A.</li> <li>10) Servicing of main wheel tires as per AMPI 89-A-12-20-02-00A-214A-A.</li> </ol>

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		<p>11) Demonstrating the service of shock strut (nose landing gear) as per AMPI 89-A-12-20-03-00A-214A-A.</p> <p>12) Servicing of intermediate gearbox as per AMPI 89-A-12-11-04-00A-212A-A.</p> <p>13) Demonstrating of servicing shock absorber (Main Landing Gear) as per AMPI 89-A-12-20-04-00A-214A-A.</p> <p>14) Servicing of nose gear as per AMPI 89-A-12-20-05-00A-242A-A.</p> <p>15) Servicing of main gear as per AMPI 89-A-12-20-06-00A-242A-A.</p> <p>16) Servicing of swashplate duplex bearing as per AMPI 89-A-12-20-07-00A-242A-A.</p> <p>17) Servicing of nose and main wheel bearings as per AMPI 89-A-12-20-08-00A-242A-A.</p> <p>18) Servicing of wheel brake parking and emergency module (accumulator) as per AMPI 89-A-12-30-02-00A-214A-A.</p> <p>19) Connecting and disconnecting procedure of external electrical power as per AMPI 89-A-12-41-00-00A-730A-A and 89-A-12-41-00-00A-510A-A.</p> <p>20) Connecting and disconnecting procedure of external electrical power as per AMPI 89-A-12-42-00-00A-730A-A and 89-A-12-42-00-00A-510A-A.</p>
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11	Chapter/ATA	20- Standard Practices
a	Knowledge level/Task	LOC
b	Learning Objectives	To gain the required knowledge of standard practices in airframe system.
c	Category	B 1.3
d	Training Method	This training provides:  1) General understanding and location of airframe system as per AMPI 89-A-20-00-00-00A-028A-A.

<b>HELICOPTERS</b>		
1	Chapter/ATA	18 - Vibration And Noise Analysis And Attenuation
a	Knowledge level/Task	LOC, FOT, TS
B	Learning Objectives	To gain the required knowledge in maintaining, performing functional test and troubleshooting the defect arises during maintenance and restore it to the airworthy condition.
C	Category	B1.3
d	Training Method	This training provides:  1) General understanding and functional check of vibration and nose analysis system as per AMPI 89-A-18-00-00-00A-028A-A and 89-A-18-10-00-00A-028A-A.  2) Troubleshooting the system as per AFIP Chapter 18-30.

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<b>2</b>	<b>Chapter/ATA</b>	<b>60 – Standard Practices Rotor</b>
<b>a</b>	<b>Knowledge level/Task</b>	LOC
<b>b</b>	<b>Learning Objectives</b>	To gain the required knowledge in standard practices of rotor maintaining, performing visual inspection, and servicing the rotors.
<b>c</b>	<b>Category</b>	B 1.3
<b>d</b>	<b>Training Method</b>	This training provides: <ul style="list-style-type: none"> <li>1) General understanding of standard practices in rotor system as per AMPI 89-A-60-00-00-00A-028A-D.</li> </ul>

<b>AIRFRAME STRUCTURES</b>		
<b>1</b>	<b>Chapter/ATA</b>	<b>51 – Standard Practices and Structures</b>
<b>a</b>	<b>Knowledge level/Task</b>	LOC, TS
<b>b</b>	<b>Learning Objectives</b>	To gain the required knowledge in standard practices airframe structures, locations and troubleshooting of damage in airframe structures.
<b>c</b>	<b>Category</b>	B 1.3
<b>d</b>	<b>Training Method</b>	This training provides <ul style="list-style-type: none"> <li>1) General damage assessment as per CSRP-A-51-10-00-00A-028A-D.</li> <li>2) Understanding common structural publication documents as per CSRP-A-51-10-00-00A-018A-D.</li> </ul>

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2	Chapter/ATA	52 - Doors
a	Knowledge level/Task	LOC, TS, MEL, R/I
b	Learning Objectives	To gain the required knowledge in identifying components location, troubleshooting, MEL, removal and installation of Doors.
c	Category	B 1.3
d	Training Method	<p>This training provides:</p> <ol style="list-style-type: none"> <li>1) General understanding and component location of door system as per AMPI 89-A-52-00-00-00A-028A-A.</li> <li>2) Troubleshooting of door faulty system as per AFIP Chapter 52.</li> <li>3) Understanding MEL requirement as per MEL 3.12 (52) Doors.</li> <li>4) Removal and installation procedure of Left cockpit door as per AMPI 89-A-52-11-01-00A-520A-A and 89-A-52-11-01-00A-720A-A.</li> <li>5) Removal and installation procedure of right cockpit door as per AMPI 89-A-52-11-02-00A-520A-A and 89-A-52-11-02-00A-720A-A.</li> </ol>
3	Chapter/ATA	53 - Fuselage
a	Knowledge level/Task	LOC
b	Learning Objectives	To gain the required knowledge in identifying locations of fuselage structure.
c	Category	B 1.3
d	Training Method	<p>This training provides:</p> <ol style="list-style-type: none"> <li>2) General understanding and component location of fuselage as per AMPI 89-A-53-00-00-00A-028A-A.</li> <li>3) Detailed inspection of Tail unit joint at STA 8700 as per AMPI 89-A-53-40-00-00E-311A-A.</li> </ol>

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4	Chapter/ATA	55 - Stabilizers
a	Knowledge level/Task	LOC
b	Learning Objectives	To gain the required knowledge in identifying locations of helicopter stabilizers.
c	Category	B 1.3
d	Training Method	This training provides: <ul style="list-style-type: none"> <li>1) General understanding and component location of stabilizers as per AMPI 89-A-55-00-00-00A-028A-A.</li> </ul>
5	Chapter/ATA	56 - Windows
a	Knowledge level/Task	LOC, TS
b	Learning Objectives	To gain the required knowledge in identifying locations of windows and canopies.
c	Category	B 1.3
d	Training Method	This training provides: <ul style="list-style-type: none"> <li>1) General understanding and component location of windows and canopies as per AMPI 89-A-56-00-00-00A-028A-A.</li> <li>2) Demonstrating details inspection of the flight compartment windows installation as per AMPI 89-A-56-00-00-00A-31AA-A.</li> </ul>

<b>AIRFRAME SYSTEM</b>		
1	Chapter/ATA	21 – Environmental Control
a	Knowledge level/Task	LOC, FOT, MEL, TS
B	Learning Objectives	To gain the required competence in standard practices Environmental Control System (ECS), performing functional and operational test, understanding MEL procedures, and performing troubleshooting.
C	Category	B 1.3
D	Training Method	This training provides; <ul style="list-style-type: none"> <li>1) General standard practices and location subsystem as per AMPI 89-A-21-00-00-00A-028A-A.</li> </ul>

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		<ol style="list-style-type: none"> <li>2) Location of air conditioning distribution system as per AMPI 89-A-21-20-00-00A-040A-A.</li> <li>3) Location of heating system as per AMPI 89-A-21-40-00-00A-028A-A.</li> <li>4) Operational test of forced ventilation system kit as per AMPI 89-A-21-00-00-00A-32A-A.</li> <li>5) Troubleshooting of defect as per AFIP Chapter 21.</li> <li>6) Understanding minimum requirement of chapter 21 to release aircraft and its implication as per MEL 3.2 (21) Air Conditioning</li> </ol>
<b>2</b>	<b>Chapter/ATA</b>	<b>22 - Autoflight</b>
a	Knowledge level/Task	LOC
b	Learning Objectives	To gain the required knowledge regarding the location of Autoflight component in the cockpit.
c	Category	B 1.3
d	Training Method	<p>This training provides;</p> <ol style="list-style-type: none"> <li>1) General location of Autoflight system as AMPI 89-A-22-10-00-00A-028A-A .</li> </ol>
<b>3</b>	<b>Chapter/ATA</b>	<b>23 - Communication</b>
a	Knowledge level/Task	LOC, MEL
b	Learning Objectives	To gain the required knowledge in identifying communications system components.
c	Category	B 1.3
d	Training Method	<p>This training provides:</p> <ol style="list-style-type: none"> <li>1) General location of communication system as AMPI 89-A-23-10-00-00A-028A-A.</li> <li>2) Understanding minimum requirement of chapter 23 to release aircraft and its implication as per MEL 3.3 (23) Communication.</li> </ol>

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4	Chapter/ATA	24 – Electrical Power
a	Knowledge level/Task	LOC, FOT, R/I
b	Learning Objectives	To gain the required knowledge in identifying electrical power components, performing functional and operation checks, servicing, removal and installation of related electrical power system.
c	Category	B 1.3
d	Training Method	<p>This training provides:</p> <ol style="list-style-type: none"> <li>1) general understanding and location of electrical power system components as per AMPI 89-A-24-00-00-00A-028A.</li> <li>2) Provides the knowledge to perform operational test of AC main generation as per AMPI 89-A-24-21-04-00A-320A-A.</li> <li>3) Removal and installation procedures of number 2 AC generator as per AMPI 89-A-24-21-04-00A-520A-A and AMPI 89-A-24-21-04-00A-720A-A.</li> </ol>
5	Chapter/ATA	25 – Equipment and Furnishing
a	Knowledge level/Task	LOC, FOT, R/I, MEL
b	Learning Objectives	To gain the required knowledge in identifying components, performing functional and operation checks, MEL, removal, and installation of chapter 25 system.
c	Category	B 1.3
d	Training Method	<p>This training provides;</p> <ol style="list-style-type: none"> <li>1) Provides the general understanding and location of equipment and furnishing system and subsystem as per AMPI 89-A-25-00-00-00A-028A-A.</li> <li>2) General understanding and location of the emergency equipment as per AMPI 89-A-25-60-00-00A-028A-A.</li> <li>3) Removal and installation of the cabin seat as per AMPI 89-A-25-21-00-00A-520A-A and 89-A-25-21-00-00A-720A-A.</li> </ol>

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		<p>4) Demonstration of operational check of Automatic Deployable ELT (ADELT) kit as per AMPI 89-A-25-62-00-00A-320A-A.</p> <p>5) MEL item in equipment and furnishing system as per MEL 3.4 (25).</p>
6	Chapter/ATA	26 – Fire protection
a	Knowledge level/Task	LOC, FOT, R/I, MEL
b	Learning Objectives	To gain the required knowledge in identifying components, performing functional and operation checks, removal and installation, MEL item of Fire protection system.
c	Category	B 1.3
d	Training Method	<p>This training provides;</p> <ol style="list-style-type: none"> <li>1) General understanding and location of fire and protection subsystem components as per AMPI 89-A-26-00-00-00A-028A.</li> <li>2) Description on how Portable fire extinguisher installation is made as per AMPI 89-A-26-24-00-00A-041A.</li> <li>3) Detailed inspection of portable fire extinguisher installation as per AMPI 89-A-26-24-00-00A-31AA-A.</li> <li>4) Removal and installation of cockpit portable fire extinguisher as per AMPI 89-A-26-21-02-520A-A and AMPI 89-A-26-21-02-720A-A.</li> <li>5) Understanding minimum requirement to release aircraft and its implication as per MEL 3.5 (26) Fire Protection.</li> </ol>

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7	Chapter/ATA	28 - Fuel
a	Knowledge level/Task	LOC, FOT, R/I, T/S
b	Learning Objectives	To gain the required knowledge in identifying components location, performing functional and operation checks, troubleshooting, removal and installation of Fuel system.
c	Category	B 1.3
d	Training Method	<p>This training provides;</p> <ol style="list-style-type: none"> <li>1) Provides the general understanding and location of fuel system and subsystem as per AMPI 89-A-28-00-00-00A-028A-A.</li> <li>2) General understanding of fuel system indication as per AMPI 89-A-28-40-00-00A-028A-A.</li> <li>3) Removal and installation of pump module (No. 2 booster pump) as per AMPI 89A-28-21-05-01A-720A-A and 89A-28-21-05-01A-520A-A.</li> <li>4) Understanding fault code generate by fault system for fuel system troubleshooting as per AFIP Section 28-20 Distribution.</li> </ol>
8	Chapter/ATA	29 - Hydraulic
a	Knowledge level/Task	LOC, FOT, R/I , TS
b	Learning Objectives	To gain the required knowledge in identifying components location, performing functional and operation checks, troubleshooting, removal and installation of Hydraulic system.
c	Category	B 1.3
d	Training Method	<p>This training provides;</p> <ol style="list-style-type: none"> <li>1) General understanding and location of hydraulic system system as per AMPI 89-A-29-10-00-00A-028A-A.</li> <li>2) Troubleshooting faulty message as per AFIP Section 28-10.</li> </ol>



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		<ul style="list-style-type: none"> <li>3) Main hydraulic system operational test as per AMPI 89-A-29-10-00-00A-320A-A.</li> <li>4) Main hydraulic system preliminary test as per AMPI 89-A-29-10-00-00A-32AA-A.</li> <li>5) No 1 Power control module level switches operational test as per AMPI 89-A-29-11-01-00A-320B-A.</li> <li>6) Understanding fault code for hydraulic system troubleshooting as per AFIP Section 28-30.</li> </ul>
<b>9</b>	<b>Chapter/ATA</b>	<b>30 – Ice and Rain Protection</b>
<b>a</b>	<b>Knowledge level/Task</b>	LOC, FOT, MEL, TS
<b>b</b>	<b>Learning Objectives</b>	To gain the required knowledge in identifying components location, performing functional and operation checks, troubleshooting, MEL of Ice and Rain Protection system.
<b>c</b>	<b>Category</b>	B 1.3
<b>d</b>	<b>Training Method</b>	<p>This training provides.</p> <ul style="list-style-type: none"> <li>a) General understanding and location of hydraulic system which are main and auxiliary system as per AMPI 89-A-30-00-00-00A-028A-A.</li> <li>b) Operational test of windshield wiping/washing system kit as per AMPI 89-A-30-42-00-00A-320A-A.</li> <li>c) Understanding minimum requirement for releasing aircraft and its implication as per MEL 3.6 (30) Ice and Rain Protection.</li> <li>d) Understanding fault code generated as per AFIP Chapter 30.</li> </ul>

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10	Chapter/ATA	31 – Indicating /Recording System
a	Knowledge level/Task	LOC, R/I, TS, MEL
b	Learning Objectives	To gain the required knowledge in identifying components location, removal and installation procedures, troubleshoot and MEL chapter of Indicating and Recording System.
c	Category	B 1.3
d	Training Method	<p>This training provides:</p> <ol style="list-style-type: none"> <li>1) General understanding and location of Indicating and Recording System as per AMPI 89-A-31-00-00-00A-028A-A.</li> <li>2) Location of instruments and control panels as per AMPI 89-A-31-10-00-00A-028A-A.</li> <li>3) Removal and installation of outside thermometer as per AMPI 89-A-31-23-00-00A-520A-A and 89-A-31-23-00-00A-720A-A.</li> <li>4) Troubleshooting of faulty system as per AFIP Chapter 31.</li> <li>5) Understanding of MEL requirement as per MEL 3.7 (31) Indicating/Recording System.</li> </ol>
11	Chapter/ATA	32 – Landing Gear
a	Knowledge level/Task	LOC, FOT, TS,R/I,MEL
b	Learning Objectives	To gain the required knowledge in identifying components location, performing functional and operation checks, troubleshooting, MEL, removal and installation of Landing Gear system.
c	Category	B 1.3
d	Training Method	<p>This training provides:</p> <ol style="list-style-type: none"> <li>1) General understanding and component location of landing gear system as per AMPI 89-A-32-00-00-00A-028A-A.</li> <li>2) Component location of position and warning light as per AMPI 89-A-32-60-00-00A-028A-A.</li> </ol>

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		<ol style="list-style-type: none"> <li>3) Demonstration of removal and installation of left main landing gear as per AMPI 89-A-32-11-01-00A-520A-A and 89-A-32-11-01-00A-720A-A.</li> <li>4) Demonstration of removal and installation of right main landing gear as per AMPI 89-A-32-12-00-00A-520A-A and 89-A-32-12-00-00A-720A-A.</li> <li>5) Demonstration of removal and installation of main wheel as per AMPI 89-A-32-41-03-00A-520A-A and 89-A-32-41-03-00A-720A-A.</li> <li>6) Lubrication (greasing) of the LH/RH MLG link pivots between shock absorber lever and lever, and LH/RH MLG link pivots between trailing arm and shock absorber as per AMPI 89-A-12-20-06-00A-242A-A.</li> <li>7) Trouble shooting a faulty system as per AFIP Chapter 32-30, 32-40 and 32-60.</li> <li>8) Understanding of MEL requirement as per MEL 3.8 (32) Landing Gear.</li> </ol>
12	Chapter/ATA	33 - Lights
a	Knowledge level/Task	LOC, FOT, MEL, R/I
b	Learning Objectives	To gain the required knowledge in identifying components location, performing functional and operation checks, MEL, removal and installation of Lighting system.
c	Category	B 1.3
d	Training Method	<p>This training provides:</p> <ol style="list-style-type: none"> <li>6) General understanding and component location of lighting system as per AMPI 89-A-33-00-00-00A-028A-A.</li> <li>7) Operational test of cockpit lighting system as per AMPI 89-A-33-11-00-00A-320A-A.</li> <li>8) Understanding MEL requirement as per MEL 3.9 (33) Lights.</li> </ol>

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		<p>9) Removal and installation procedure of Left steerable landing light as per AMPI 89-A-33-44-01-00A-520A-A and 89-A-33-44-01-00A-720A-A.</p> <p>10) Operational test of Emergency lighting system - Cabin push-button as per AMPI 89-A-33-51-00-00C-320A-A.</p>
<b>13</b>	<b>Chapter/ATA</b>	<b>34 - Navigation</b>
<b>a</b>	<b>Knowledge level/Task</b>	LOC, MEL
<b>b</b>	<b>Learning Objectives</b>	To gain the required knowledge in identifying components location and MEL of Navigation system.
<b>c</b>	<b>Category</b>	B 1.3
<b>d</b>	<b>Training Method</b>	<p>This training provides:</p> <ol style="list-style-type: none"> <li>1) General understanding and component location of navigation system as per AMPI 89-A-34-00-00-00A-028A-A.</li> <li>2) Understanding MEL requirement as per MEL 3.10 (34) Lights.</li> </ol>
<b>14</b>	<b>Chapter/ATA</b>	<b>46 – System Integration and Display</b>
<b>a</b>	<b>Knowledge level/Task</b>	FOT, LOC
<b>b</b>	<b>Learning Objectives</b>	To gain the required knowledge in identifying components location and operational test of Information system.
<b>c</b>	<b>Category</b>	
<b>d</b>	<b>Training Method</b>	<p>This training provides:</p> <ol style="list-style-type: none"> <li>1) General understanding and component location of systems integration and display as per AMPI 89-A-46-00-00-00A-028A-A.</li> <li>2) Performing operational test of aircraft mission management system as per AMPI 89-A-46-21-00-00A-320A-A.</li> </ol>

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<b>15</b>	<b>Chapter/ATA</b>	<b>49 – Auxiliary Power Unit</b>
<b>a</b>	Knowledge level/Task	LOC, FOT
<b>b</b>	Learning Objectives	To gain the required knowledge in identifying components location and troubleshooting of Auxiliary Power Unit.
<b>c</b>	Category	B 1.3
<b>d</b>	Training Method	<p>This training provides:</p> <ol style="list-style-type: none"> <li>1) General understanding and component location of auxiliary power unit as per AMPI 89-A-49-00-00-00A-028A-A.</li> <li>2) Performing troubleshooting of auxiliary power unit system as per AMPI 89-A-49-21-00-00A-412A-A.</li> </ol>

<b>ROTORS AND DRIVE SYSTEM</b>		
<b>1</b>	<b>Chapter/ATA</b>	<b>62 – Main Rotors</b>
<b>a</b>	Knowledge level/Task	LOC
<b>B</b>	Learning Objectives	To gain the required knowledge in identifying components location, removal and installation of Main Rotors.
<b>C</b>	Category	B 1.3
<b>D</b>	Training Method	<p>This training provides:</p> <ol style="list-style-type: none"> <li>1) General understanding and identifying component location of main rotors as per AMPI 89-A-62-00-00-00A-028A-A.</li> </ol>

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		<ol style="list-style-type: none"> <li>2) Performing detailed inspection of main rotor head installation as per AMPI 89-A-62-21-00-01A-31AA-A.</li> <li>3) Performing detailed inspection of elastomeric bearings as per AMPI 89-A-62-22-00-03A-31AA-A.</li> <li>4) Carrying out general visual inspection on swashplate as per AMPI 89-A-62-31-06-00A-310A-A.</li> </ol>
<b>2</b>	<b>Chapter/ATA</b>	<b>63 – Main Rotor Drives</b>
<b>a</b>	<b>Knowledge level/Task</b>	LOC, FOT, SGH
<b>b</b>	<b>Learning Objectives</b>	To gain the required knowledge in identifying components location, removal and installation of Main Rotors.
<b>c</b>	<b>Category</b>	B 1.3
<b>d</b>	<b>Training Method</b>	<p>This training provides:</p> <ol style="list-style-type: none"> <li>1) General understanding and identifying component location of main rotor drive as per AMPI 89-A-63-00-00-00A-028A-A.</li> <li>2) General understanding and identifying component location of main gearbox indicating system as per AMPI 89-A-63-40-00-01A-028A-A.</li> <li>3) Performing operational test of main gearbox indicating sensors per AMPI 89-A-63-41-00-00A-320B-A.</li> <li>4) Carrying out rotor brake system operation test as per AMPI 89-A-63-51-00-00A-320A-A.</li> <li>5) Filling of other liquid to the rotor brake reservoir as per AMPI 89-A-63-51-04-00A-218A-A.</li> </ol>

## TRAINING NEED ANALYSIS

3	Chapter/ATA	64 – Tail Rotor
a	Knowledge level/Task	LOC, FOT
b	Learning Objectives	To gain the required knowledge in identifying components location and functional test of Tail Rotors.
c	Category	B 1.3
d	Training Method	<p>This training provides:</p> <ol style="list-style-type: none"> <li>1) General understanding and identifying component location of tail rotor as per AMPI 89-A-64-00-00-00A-028A-A.</li> <li>2) General visual inspection of tail rotor blade assembly per AMPI 89-A-64-11-00-00A-310A-A.</li> <li>3) Performing functional test of scissors group per AMPI 89-A-64-31-02-00A-340A-A.</li> <li>4) Carrying out detailed inspection of elastomeric bearings during tail rotor blade installation as per AMPI 89-A-64-11-00-00A-311A-A.</li> </ol>
4	Chapter/ATA	65 – Tail Rotor Drive
a	Knowledge level/Task	LOC, T/S, SGH
b	Learning Objectives	To gain the required knowledge in identifying components location, troubleshooting and servicing of Tail Rotor Drive.
c	Category	B 1.3
d	Training Method	<p>This training provides:</p> <ol style="list-style-type: none"> <li>1) General understanding and identifying component location and indication system of tail rotor drive as per AMPI 89-A-65-00-00-00A-028A-A and 89-A-65-40-00-00A-028A-A.</li> <li>2) Detailed inspection on components during tail rotor drive installation per AMPI 89-A-65-11-00-00A-311A-A.</li> <li>3) Detailed inspection on chip detector in tail gearbox indicating system rotor drive installation per AMPI 89-A-65-43-00-00A-311A-A.</li> </ol>

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		<p>4) Troubleshooting on faulty monitoring indicating of tail rotor drive system as per AFIP Section 65-40.</p> <p>5) Detailed inspection on number 1 &amp; 2 bearing support as per AMPI 89-A-65-11-13-00A-31AA-A and 89-A-65-11-14-00A-31AA-A.</p>
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<b>ROTOR FLIGHT CONTROL</b>		
<b>1</b>	<b>Chapter/ATA</b>	<b>67 – Rotors Flight Control</b>
<b>a</b>	<b>Knowledge level/Task</b>	LOC, FOT, TS
<b>b</b>	<b>Learning Objectives</b>	To gain the required knowledge in identifying components location, performing functional test and troubleshooting Rotors Flight Control.
<b>c</b>	<b>Category</b>	B 1.3
<b>d</b>	<b>Training Method</b>	<p>This training provides:</p> <ol style="list-style-type: none"> <li>1) General understanding and identifying component location of rotor flight control as per AMPI 89-A-67-00-00-00A-028A-A.</li> <li>2) Operational test of servoactuators of servo control system per AMPI 89-A-67-30-00-00A-320A-A.</li> <li>3) Leak check of main rotor servoactuators during AMPI 89-A-67-31-00-00A-364A-A.</li> <li>4) Troubleshooting of faulty system of rotor flight control as per AFIP Chapter 67-30.</li> </ol>



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<b>TURBINE ENGINES</b>		
<b>1</b>	<b>Chapter/ATA</b>	<b>71 – Power Plant</b>
a	Knowledge level/Task	LOC
b	Learning Objectives	To gain the required knowledge in general system, identifying components location, performing general visual inspection in power plant.
c	Category	B 1.3
d	Training Method	This training provides: <ol style="list-style-type: none"> <li>1) General understanding in power plant system as per AMPI 89-A-71-00-00-00A-028A-A.</li> <li>2) General visual inspection on engine components during engine installation per AMPI 89-A-71-01-00-02A-310A-A.</li> </ol>
<b>2</b>	<b>Chapter/ATA</b>	<b>72 - Engine</b>
a	Knowledge level/Task	LOC
b	Learning Objectives	To gain the required knowledge in general system of CT7-2E engine.
c	Category	B 1.3
d	Training Method	This training provides: <ol style="list-style-type: none"> <li>1) General understanding in CT7-2E engine as per CT7-2E MM 72-00-00.</li> </ol>
<b>3</b>	<b>Chapter/ATA</b>	<b>73- Engine Fuel Control</b>
a	Knowledge level/Task	LOC
b	Learning Objectives	To gain the required knowledge in component location of engine fuel and control.
c	Category	B 1.3
d	Training Method	This training provides: <ol style="list-style-type: none"> <li>1) General understanding of component location as per AMPI 89-A-71-01-00-02A-310A-A.</li> </ol>

## TRAINING NEED ANALYSIS

4	Chapter/ATA	74 - Ignition
a	Knowledge level/Task	LOC, R/I
b	Learning Objectives	To gain the required knowledge in component location, removal and installation of engine ignition system.
c	Category	B 1.3
d	Training Method	This training provides: <ul style="list-style-type: none"> <li>1) General understanding of component location as per CT7-2E MM 74-00-00-870-801.</li> <li>2) Removal and installation of engine 1 LH igniter as per CT7-2E MM 74-00-00-400-801.</li> <li>3) Inspection of igniter as per CT7-2E MM 74-00-00-200-801.</li> </ul>
5	Chapter/ATA	75 - Air
a	Knowledge level/Task	LOC
b	Learning Objectives	To gain the required knowledge in component location, of engine air system.
c	Category	B 1.3
d	Training Method	This training provides: <ul style="list-style-type: none"> <li>1) General understanding of engine air as per AMPI 89-A-75-00-00-00A-028A-A.</li> <li>2) Inspection of an Anti-Ice Star Bleed Valve as per CT7-2E MM 75-00-00-200-802.</li> </ul>
6	Chapter/ATA	76 – Engine Controls
a	Knowledge level/Task	LOC, TS
b	Learning Objectives	To gain the required knowledge in component location and troubleshoot of engine air system
c	Category	B 1.3
d	Training Method	This training provides: <ul style="list-style-type: none"> <li>1) Troubleshooting of engine controls as per AFIP Chapter 76-10.</li> <li>2) Component location of engine controls as per AMPI 89-A-76-00-00-00A-028A.</li> </ul>

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<b>7</b>	<b>Chapter/ATA</b>	<b>77 – Engine Indicating</b>
a	Knowledge level/Task	LOC
b	Learning Objectives	To gain the required knowledge in component location of engine indicating system.
c	Category	B 1.3
d	Training Method	This training provides:  1) Component location of engine controls as per CT7-2E MM 74-00-00-400-801.
<b>8</b>	<b>Chapter/ATA</b>	<b>78 – Exhaust</b>
a	Knowledge level/Task	LOC
b	Learning Objectives	To gain the required knowledge in component location of exhaust system.
c	Category	B 1.3
d	Training Method	This training provides:  1) Component location of engine exhaust as per CT7-2E MM 74-00-00-400-801.
<b>9</b>	<b>Chapter/ATA</b>	<b>79 – Oil</b>
a	Knowledge level/Task	LOC
b	Learning Objectives	To gain the required knowledge in component location of engine oil system.
c	Category	B 1.3
d	Training Method	This training provides:  2) Component location of engine oil system as per CT7-2E MM 79-00-00-870-802.