

COMMANDANT'S MESSAGE

It is my pleasure to present the Inter-American Air Forces Academy (IAAFA) course catalog. This catalog will assist partner nations and U.S. Security Cooperation Offices in selecting and preparing students to attend training at IAAFA.

As part of the United States Air Force's Air Education and Training Command, IAAFA focuses on providing education and training in the subjects detailed in this catalog.

Revisions to this catalog can be found at <u>http://www.37trw.af.mil/units/inter-americanairforcesacademy/index.asp</u>. This catalog supersedes the 2018 catalog and all previous course catalogs. Proposed changes or inquiries may be sent to:

IAAFA.IMSO@us.af.mil or Mailing Address: IAAFA/CCI 2431 Carswell Ave JBSA-Lackland, TX 78236-5609

It is my desire to ensure the students attending IAAFA courses have pleasant and productive stays. The exchange of cultures and experiences will further strengthen the bonds of friendships, cooperation among participants, building robust and inter-operable militaries to answer global challenges.

ISAAC DAVIDSON, Colonel, USAF Commandant

TABLE OF CONTENTS

Cover Page	Ι
Commandant's Message	III
Table of Contents	V
Course Listing by Title and Page	VI
General Information	1
IAAFA History	1
Student Selection Requirements and Prerequisites	1
Academy Calendar	2
General IAAFA Clothing Requirements	3
Physical Fitness Training (PT)	4
Grading System	4
Awards	4
Field Studies Program (FSP)	5
Grievance Procedures	5
Accompanied Students	5
Base Exchange (BX) Privileges	5
Civilian Clothing	6
Meals	6
Open-Bay-Dormitories	6
Funds	6
Baggage	6
Firearms Policy	7
Smoking Policy	7
Mail	7
Leave and Absence	7
Medical Care	7
Insurance Policy	7
Dental Care	8
Driver's License	8
Applicable Directives and Manuals	8

Courses

9

5						. 9
uirements				•••••	••••••••••••••••	. 9
	······	·····	·····	·····	·····	irements

COURSE LISTING

PROFESSIONAL MILITARY EDUCATION

MASL Name

AETC

MASL D171032, Inter-American Squadron Officer School (ISOS)13MASL D309054, (MTT) Inter-American Squadron Officer School (ISOS)17MASL D171055, International Airman Leadership School (IALS)21MASL D309109, (MTT) International Airman Leadership School (IALS)23

Name

OPERATIONS AND SUPPORT TRAINING COURSES

MASL

Page

25

L3OZR1210640SRB (MASL D121064), Pilot Instrument Procedures	27
L3OZR1210650SRB (MASL D121065), Instructor Pilot Instrument Procedures	29
L3OZR1210660SRB (MASL D121066), Search and Rescue Planning (SARP)	31
L3AQR1260860SRA (MASL D126086), Dynamics of Terrorism	33
L3AZR1520540SRC (MASL D152054), International Logistics	35
L3AZR1520550SRC (MASL D152055), Materiel Management	37
L3AJR1620300SRB (MASL D162030), On-The-Job Training (OJT) Administration	39
L3AZR1660410SRC (MASL D166041), Basic Instructor Course (BIC)	41
L3AQR1720230SRB (MASL D172023), Intelligence, Surveillance and Reconnaissance (ISR)	
Fundamentals	43
L3AZR1730560SRB (MASL D173056), Ground Defense Leadership Course	45
L3AAR1730980SRA (MASL D173098), Advanced Ground Defense Operators Course	49
L3AZR1730670SRB (MASL D173067), Special Reaction Team	50
L3AZR1760060SRA (MASL D176006), Rule of Law and Disciplined Military Operations	51
L3AZR1791080SRA (MASL D179108), Cyber Security	53
L3AZR1791130SRA (MASL D179113), Cyber Network	55

AIRCRAFT AND SYSTEMS TRAINING COURSES

MASL

AETC

Name

Page

57

L3AQR1330600SRC (MASL D133060), Avionics Communication/Navigation Equipment	
Technician	59
L3OZR1412430SRC (MASL D141243), Aircraft Maintenance Officer	61
L3AZR1412470SRC (MASL D141247), Aircraft Hydraulic Systems Technician	63
L3AAR1412490SRA (MASL D141249), Aircraft Maintenance Superintendent	65
L3AQR1412510SRB (MASL D141251), Aircraft Technician	67
L3AQR1412530SRC (MASL D141253), Avionics Instrument Technician	69
L3AQR1412540SRC (MASL D141254), Aircraft Electrical Fundamentals Technician	71
L3AZR1412570SRB (MASL D141257), Helicopter Crew Chief	73
L3AAR1410900SRA (MASL D141090), Turboprop Technician	75

11

Page

<u>AETC</u>	MASL	Name	Page
L3AZR1412820SRC	C (MASL D141282)), Corrosion Control Technician	78
L3AAR1410890SRA	A (MASL D141089)	, Advanced Helicopter Crew Chief	80
L3AZR1413960SRC	C (MASL D141396)), Aircraft Structural Maintenance Technician	82
L3AQR1412590SRH	B (MASL D141259)	, Cargo/Transport Aircraft Technician	84
COURSES IN DEV	ELOPMENT		86

COURSES IN DEVELOPMENT

DISTRIBUTION RESTRICTION:

Approved for public release; distribution is unlimited.

GENERAL INFORMATION

IAAFA History

The Inter-American Air Forces Academy (IAAFA) was founded on 15 March 1943, at the request of Peru's Minister of Aeronautics, General Fernando Melgar. The academy trained 11 Peruvian students at Albrook Field, Panama Canal Zone, marking the first US aeronautics training in Latin America.

In the 1940s and 50s, the academy expanded and changed in response to potential conflicts in the Western Hemisphere and the world at large. The student load increased to 400 students per year. In 1952, the commandant established the format for today's IAAFA, emphasizing "hands-on" training, adding officer courses, and creating a "Student Support" section responsible for military and athletic instruction and US cultural awareness. In response to US emphasis in Latin America, the academy changed its name from "Central and South American Air School" to "United States Air Force School for Latin America," to finally "Inter-American Air Forces Academy" in 1966.

On 30 September 1989, IAAFA closed its doors at Albrook AFS, Panama, and moved to Homestead AFB, Florida, reopening 100 days later on 9 January 1990. On 23 September 1992, following almost complete destruction by Hurricane Andrew, IAAFA relocated to Lackland AFB, Texas, once again opening its doors in just under 100 days, on 11 January 1993. Today, IAAFA graduates an average of 800 students a year--quite a step up from the 11 students of 60 years ago.

Student Selection Requirements and Prerequisites

The United States Security Cooperation Office (SCO) in the US Military Groups and host governments screen students selected to attend the academy's courses. Unless otherwise stated all courses are available for male and female students. In particular, for the Company Grade Officer Professional Development (MASL 171032) and Noncommissioned Officer Professional Development (MASL 171033), a minimum of two female students is desired. SCO training officers <u>must ensure each student meets all course prerequisites as stated in the course description of this catalog</u>. Deviations from the minimums requirements established in this catalog must be approved on an individual basis by the IAAFA Commandant or representative. Waivers or deviations to course requirement requested must be submitted in writing through AFSAT/TO, (2021 First Dr. West, Randolph AFB TX 78150-4302) and approved by IAAFA/CC.

The SCO training officer must:

a. Obtain the findings of an official and current physical examination from a designated medical authority for all prospective students certifying the individual is free of infectious diseases or other medical conditions, which would disqualify him/her from general military duty. The prospective trainee should receive all immunizations prescribed by the US Public Health Service as approved by the World Health Organization and must be free of active tuberculosis.

b. Brief each selected student in accordance with AFI 16-105, *Joint Security Cooperation Education and Training (JSCET).*

c. Due to high security, brief the student that the academy is on a US military installation and the importance of abiding by the base rules and regulations.

d. Accomplish security screening in accordance with AFI 16-105.

e. Arrange transportation in accordance with AFI 16-105.

f. Ensure students read the student guide (Guía Estudiantil) prior to departure.

g. Provide IAAFA/CCI (<u>IAAFA.CCI.StudentAffairs@us.af.mil</u>) with students' arrival information (rank, name, sex, arrival date and time) no later than one week prior to the anticipated arrival dates to plan billeting and transportation requirements.

<u>NOTE</u>: Students should arrive in San Antonio no later than three days prior to the class start date, but no earlier.

h. Students will arrive directly to building 7460 (Student Affairs Flight) for in-processing.

i. The academy's 24-hour point of contact numbers are listed below. Callers may dial the academy toll free line from overseas, but may still be assessed a calling charge by their in-country telephone service.

	From US	From overseas
Toll free	1-800-577-5926	*010-1 (800) 577-5926
Commercial phone	(210) 671-4406	010-1 (210) 671-4406
DSN	473-4406	(312) 473-4406
Commercial Fax	(210) 671-4799	010-1 (210) 671-4799
DSN Fax	473-4799	(312) 473-4799

Academic Calendar

The academic calendar is divided into three classes. Below is the schedule of classes:

Class A – January - April Class B – May - July Class C – September - December

General IAAFA Clothing Requirements

General clothing requirements are based on the need of each course. The following table identifies the general requirements for students attending courses at IAAFA. Review the course descriptions and specific requirements to find out what type of uniforms the students need to bring and if their courses provide equipment/additional uniforms. See Table 1.

COURSE LENGTH							
Officer and Enlisted	12 Weeks	Less than 12 weeks: Graduate at end of class	Less than 12 weeks: Do not graduate at end of class				
Light blue short-sleeve shirt w/trousers or equivalent	Students must bring	Students must bring	Students must bring				
Service dress (coat & tie) or equivalent	Students must bring	Students must bring	Students must bring				
Mess (formal) dress (if not available, then most formal uniform)	Students must bring	Students must bring	Not Required				
Battle Dress Utilities (BDU) (See Note *)	Students must bring	Students must bring	Students must bring				
Flight Suit	Not Required	Students must bring (See note ***)	Students must bring (See note ***)				
Combat Boots (See Note **)	Students must bring	Students must bring	Students must bring				
Athletic Attire	Issued by IAAFA	Issued by IAAFA	Issued by IAAFA				
Specialized Gear	Issued by IAAFA (If required)	Issued by IAAFA (If required)	Issued by IAAFA (If required)				

Table 1, General IAAFA Clothing Requirements

*The three courses receiving BDUs are: Ground Defense Leadership (MASL 173056), Special Reaction Team (MASL 173067), and Advanced Ground Leadership Operator Course (MASL 173098).

******Some students attending the "Aircraft and Systems Training Courses" may use steel toe boots depending on what course they attend.

***Pilots attending Pilot Instrument Procedures Course (PIPC, MASL 121064) and Instructor Pilot Instrument Procedures Course (IPIPC, MASL 121065) may bring BDUs if they do not have flight suits. All other students are required to bring BDUs, fatigues, or equivalent work uniforms.

Physical Fitness Training (PT)

IAAFA promotes physical fitness training to support the Air Force mission. The goal of the fitness program is to motivate all students to participate in a physical conditioning program that emphasizes fitness. *Physical fitness training is mandatory for all students*.

Grading System

Grades for courses shall be recorded by the following grades:

Blocks with Knowledge Tests	Blocks with Performance Tests				
70 – 100 Pass	S = Satisfactory				
0 – 69 Fail	U = Unsatisfactory				

Awards

<u>NOTE</u>: To be eligible for the following class awards, students must attend/complete a 5-week course or longer.

Commandant's Award. This is presented to one officer and one enlisted student for overall academic achievement, leadership, military bearing, and behavior, as well as individual contributions to the academy and sports.

Academic Achievement Award. This is presented to one officer and one enlisted student who maintain the highest overall academic average among all eligible attendees.

Sports Awards. Team and individual (officer, enlisted and/or civilians) awards are presented to members of winning teams participating in the academy's organized sports program.

Outstanding Athlete Award. This is presented to the outstanding athlete, officer, enlisted, and/or civilian on the basis of physical fitness using the Air Force Physical fitness assessment criteria.

Diploma Recognition. The Distinguished Graduate Program – The Distinguished Graduate (98% grade point average or higher) Program will recognize outstanding achievement in all graduating courses throughout the year. The Distinguished Graduate Program may recognize up to, but not to exceed, 10 percent of a graduating course. Each selection is based on the whole-person concept rather than on academics or performance skills alone. All others not receiving the Distinguished Graduate award who score 95%-100% overall will graduate as Honor Graduates.

NOTE: PME courses will follow the USAF Air University's award guidelines.

Field Studies Program (FSP)

The FSP is a DoD program designed to provide a balanced understanding of the US culture, society, and way of life to all foreign military trainees attending courses in the US. The academy has a very active FSP. Students will have the opportunity to participate in cultural and educational events and visits to several local and state government institutions. As part of the FSP, IAAFA has an "Amistad Program." This program involves the sponsorship of students by base and local volunteer families and allows students to become familiar with US family and cultural values. Though it is a goal of the program, not all students may be able to obtain "sponsors."

Grievance Procedures

The academy's student grievance procedures are very clear. If any student has a grievance while at IAAFA, they can contact the Student Affairs Flight (SAF) Leadership to make a grievance at the address below. The IMSO will investigate the circumstances and report them to the Commandant. The student will be notified of the resolved matter.

IAAFA/CCI 2431 Carswell Ave JBSA-Lackland TX 78236-5609

DSN: 473-4406 Commercial: (210) 671-4406

Accompanied Students by Dependents

Dependents are not authorized to accompany students at the academy. If the student chooses to bring his/her dependents, the student is responsible for finding lodging accommodations off base. All academy students live on base and lodge in single quarters which are not designed for families. Long academic days and study requirements leave little available time for family matters. IAAFA cannot alter training programs to meet the specific requirements of students with dependents. If the student still desires to bring a spouse/dependent, he/she should consider the many logistical problems they will encounter (i.e., ineligibility for family to use on-base facilities, very long distances and lack of transportation, dependent's inability to conduct daily business due to language differences, isolation/boredom, etc.).

Base Exchange (BX) Privileges

All students are authorized full privileges in the Base Exchange system.

Civilian Clothing

Students may purchase civilian clothing at the local Base Exchange facilities. Temperatures in San Antonio fluctuate depending on the time of year. Light to medium weight clothing is appropriate year-round. A sweater or light jacket is also recommended for spring and autumn months since the temperature can drop from the mid-80s (27° C) to the mid-40s (4° C) in a matter of hours. Heavier clothing is recommended for the winter months; though again, the temperature may reach well above 60° F (16° C) during the day, low norms for winter range between 30° and 60° F (0° C and 16° C). Additionally, heavy rain may be expected during spring and fall months.

Meals

Meals are provided for students at a base dining facility. All enlisted students that do not receive Temporary Living Allowance (TLA) through IAAFA must pay for their meals. All officer students, regardless of funding status, pay for their meals. All other students sign a cashier's log for daily meals and charges, which are reimbursed through the respective FMS, IMET, INL, or 10-04 channels. Students attending courses taught by security forces will need to make a one-time payment of approximately \$135-\$185 for SRT course and \$100-\$150 USD for the Ground Defense Leadership Course (GDLC) course to cover the cost of Meals-Ready-To-Eat (MRE) during their field training phases. Due to the requirement in advance for MREs, this amount will be collected at the beginning of the class. Students must be prepared for the cash outlay shortly after arrival. This is in addition to the funds referenced in the following paragraph.

Open-Bay-Dormitories

IAAFA provides "Free" dormitory space for students (Males and Females) E-4 and below. In order for a country to take advantage of the use of this dormitory space, a Country Liaison Officer (CLO) is required to accompany, reside, and supervise their students 24/7. Furthermore, the assigned CLO must be of the same gender as the students since they will live in the same quarters (open-bay dorms). NOTE: Before scheduling students, please check with the IAAFA IMSO office for availability of dormitory space.

Funds

Officers and enlisted personnel under IMET sponsorship will receive a living allowance to cover meals and incidental expenses as per DOD 5105.38M, Chapter 10, *unless otherwise indicated by the International Travel Orders (ITO)*. SCO training officers must ensure all students know their pay, allowances, and obligations to the US government are due prior to their departure. IAW AFI 16-105, International Military Students (IMS) should have sufficient funds to cover 30 days' minimum expenses, in their possession, upon entry into the US. First payment after arrival may take up to 4 weeks (holidays not included).

Baggage

Students are authorized a baggage allowance per DOD 5105.38M, Chapter 10, when travel is paid by IMET. Baggage must accompany the student. For portions of the travel funded by the host country, the baggage allowance is determined by the host country or current airline limits. *IAAFA WILL NOT BE RESPONSIBLE FOR EXCESS BAGGAGE. In addition, IAAFA cannot store or mail any excess baggage left behind due to overweight violations.*

Firearms Policy

No students will be permitted to import firearms into the US while on an ITO from the USAF.

Smoking Policy

All work centers, billeting/lodging rooms, and most recreational facilities at JBSA-Lackland are smoke-free. Smoking is allowed in designated areas only.

Mail

Student mail should be addressed as follows: Rank/Name of Student PCS #2/IAAFA/Country 2220 Andrews Ave, Unit 362800 JBSA-Lackland TX 78236-3628

Leave and Absence

Students desiring to take leave or drive back to their home countries upon completion of training must have authorization included in their ITOs.

Medical Care

Students will receive medical care IAW AFI 16-105, reimbursable through respective IMET, FMS, INL, or 10-04 channels. **Eyeglasses are not provided**. If student wears prescription, they should bring a second set, in case they lose/break them. **IMPORTANT:** Please refer to "General" section, Student Selection Requirements and Prerequisites, paragraph "a," concerning medical screening of students prior to attendance at IAAFA.

Insurance Policy

Students with a medical insurance policy will provide a copy to the ISM upon arrival at the academy. A copy of the policy is placed in their academy records to ensure prompt medical care is provided and billing is charged to their insurance provider.

Dental Care

Students will only receive **<u>EMERGENCY treatment</u>** dealing with extraction and the relief of pain in accordance with AFI 16-105.

Driver's License

Students should consult with the Students Affair Flight upon arrival at IAAFA for inquiries regarding a driver's license.

Applicable Directives and Manuals

DoDM 5105.38, Security Assistance Management Manual (SAMM) AFI 16-103, Managing the Defense English Language Program AFI 16-105, Joint Security Cooperation Education and Training (JSCET) Education and Training Course Announcements, https://etca.randolph.af.mil/ AETCI 36-2215, Training Administration IAAFA OI 36-2, IAAFA Curriculum Development IAAFA OI 36-5, Student Conduct and Disciplinary Standards

COURSES

Background

Courses offered are based on historical needs (i.e., courses are kept from year to year), US strategic objectives as described in the US Southern Command Theater Engagement Plan, and customer country requirements. Customer countries can request new courses directly from IAAFA by two means: as honorary directors of the academy, air forces commanders can contact the academy directly, or requests can be made through the System of Cooperation Among the American Air Forces' (SICOFAA) Human Resources, A3 Operational Committee. Final decision on development and implementation of new courses occurs during the IAAFA Curriculum Review Advisory.

Human Rights Training

All students receive Human Rights training during their attendance at IAAFA.

Course Design

a. **First Level Courses.** Courses are designed for entry-level training in the respective career field and are designed to complement in-country training programs. They cover the fundamental skills and knowledge to enable the student to perform on the job under the supervision of an experienced individual. Graduates are semi-skilled and can progress to the fully-skilled level by undergoing on-the-job training.

b. Advanced Courses. These courses are designed to train individuals in specific systems primarily at the specialist or supervisor level. *Note:* Students scheduled to attend these courses must have completed, as a minimum, a basic course in the related field or have at least two years of practical experience in the specialty, in addition to meeting all other prerequisites.

Course Numbers

IAAFA uses the AETC course numbering system which includes a 15-digit course number (example is L3AZR1234560SRA). This numbering system will be used throughout the catalog and to identify each course, except PME courses. The last letter in the course number identifies the revision of the course. The MASL number will be used in the course number (ex. L3AZR<u>123456</u>0SRA). Use the MASL numbers in all communications between IAAFA and AFSAT.

Graduation Requirements

Students achieving a cumulative grade of 70% or above (80% for pilot courses) will have completed their respective courses successfully and will receive a diploma at a graduation ceremony. Those who do not achieve the minimum of 70% may be returned to their country with a letter of attendance and a letter explaining the failure, with recommendations for additional training. Students must attend the graduation banquet to receive a diploma.

PROFESSIONAL MILITARY EDUCATION

COURSE NUMBER	COURSE NAME	LENGTH
MASL D171032 (E-IMET)	Inter-American Squadron	8 Weeks
STUDENT LOAD, MIN. 19	Officer School (ISOS)	
STUDENT LOAD: MIN: 18	MAX: 23	1

1. Course Description: The Inter-American Squadron Officer School (ISOS) in-residence program is an 8-week educational experience for USAF captains and International Officers in the grade of O-3. The curriculum is developed by the Squadron Officer College under USAF Air University guidelines. The purpose of the program is to help develop solution-minded, bold, and courageous Airmen ready to overcome today and tomorrow's challenges. In order to accomplish this task, the course is structured around four primary areas (1) leadership, (2) building highly effective teams, (3) logical and ethical reasoning in decision making, and (4) multi-domain joint warfare areas. Students engage in classroom and hands-on application events that will challenge their individual leadership awareness, foster innovative thinking, provide effective methods for conflict resolution, and collaboratively solve problems.

BLOCK I - EXTRACURRICULAR ACTIVITIES: Gives officers the opportunity to execute combined exercises with students from the Inter-American Noncommissioned Officers Course to reemphasize the importance of trust between both parties, in order to effectively complete a mission. Also, as part of IAAFA's Field Studies Program (FSP), officers have an opportunity to have a profound cultural impact on partner nations and, in particular, the United States.

BLOCK II - PROFESSION OF ARMS STUDIES: Reinforces the officers' understanding of moral and ethical development by applying key concepts of accountability and professionalism to the challenges and opportunities inherent in leadership. Officers analyze case studies to grasp the unique but vital relationship that binds the military in obedience to its civilian leadership and in defense of the civilian public. They also integrate personal and professional values consistent with the highest standards of conduct expected of military officers.

BLOCK III - WARFARE STUDIES: Focuses on the application of the military as a national instrument of power (IOP). Officers should understand their service's roles, missions, distinctive capabilities, core competencies, and structures, both in the context of history and the joint operations that they may be called on to support. Officers gain a working knowledge of the capabilities of sister-services in order to better support the joint warfighting team.

BLOCK IV - LEADERSHIP AND MANAGEMENT: Focuses on the tactical level to provide tools officers need to build and lead small teams and serve as dynamic followers. The focus at the primary level is on the dynamics of the interaction between individual leadership skills and group interaction in building successful teams. Instruction is focused on concept philosophies officers can use to improve individual leadership skills, adjust leadership styles to the situation, accomplish assigned tasks, and employ followers' abilities effectively. Opportunities are provided for officers to apply the leadership skills and techniques they have learned.

BLOCK V - COMMUNICATION STUDIES: Provides opportunities to apply the principles of effective communication and receive feedback. Special attention is given to listening, speaking, writing, and the interpersonal communication instrumental in team building. Interpersonal communications emphasize maximizing the potential of the individual as a part of a team. Officers

learn to create and deliver organized, well-reasoned, and well-supported arguments via the spoken and written word.

BLOCK VI - INTERNATIONAL SECURITY STUDIES: Focuses on aspects of national and international security affairs that provide the broad context within which junior officers and their superiors must operate. Special attention is paid to those national and international security topics that most affect an officer's ability to lead and follow, to communicate, and to understand what it really means to be an Airman in today's globalized environment.

2. Course Requirements:

2.1. Eligibility: This course is designed for officers in the grade of O-3 or equivalent, as well as civilians equivalent to the Department of Defense grade of GS-9 and above (consult MILGROUP for grade equivalency). Graduates of in-residence Squadron Officer School, Maxwell AFB, AL (MASL D171003) are not eligible to attend. Students must have basic computer knowledge in order to accomplish writing and briefing assignments, as well as electronic readings related to curriculum.

2.2. Physical/Medical:

2.2.1. Vision: Normal (20/20 with or without glasses).

2.2.2. Hearing/Speech: Normal hearing and speech.

2.2.3. Physical/Other: Normal dexterity is required for field team building and leadership activities. Students will be expected to be in good physical condition and able to perform 3-mile runs, sit-ups, and pushups. ISOS standards are provided below for reference. Run times below are for the 3 mile distance. Sit-up and push-up standards are based on "good" performance in the 1-minute Air Force physical fitness test events.

ISOS Fitness Standards								
MALE								
Age	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59
Run	28:00 29:30 3				31:1	1	4:00	
Sit-Ups	48	46	44	42	39	37	35	32
Push-Ups	49	45	40	35	31	27	25	24
FEMALE								
Age	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59
Run	Run 32:30 34:00 38:00 39:00							9:00
Sit-Ups	44	40	35	33	30	28	26	23
Push-Ups	31	28	26	21	15	13	12	11

2.2.3.1. U.S. Students MUST have a current and passing PT Test WITH NO EXEMPTIONS on file in AF Fitness Management System (AFFMSII) that lasts through your graduation date. Under no circumstances will ANY students be under a medical profile or medical condition that prevents

them from participating in daily physical activities. Failure to do so will result in disenrollment of ISOS and the student will be sent back to home station or country of origin.

2.3. Uniform/Equipment: See General Clothing Requirements. Students bring their own running shoes. USAF officers must bring their Service and Mess dress. All students must bring at least two sets of their respective camouflage uniform and students with a flight uniform must bring at least one set.

3. Other Information: Knowledge of programs like Microsoft Word, PowerPoint, and Internet Explorer is required. Students are required to write a country presentation; therefore, it is a requirement to bring a notebook/laptop and support material preferably in electronic form (i.e. maps, history, tourism, current events). It is MANDATORY to bring a laptop.

4. Intermediate Military Objectives: This course supports the following USSOUTHCOM/TCP objectives: 1.1, 1.2, 1.3, 1.4, 2.1, 3.1, 3.3, 3.5, 4.1, 4.3, 5.4 and USNORTHCOM/TCP objectives: 1.4, 1.6, 2.5, 3.1, 3.2, 3.3, 4.1, 4.5, 4.6.

<u>NOTE</u>: This course was previously called Inter-American Officer's School.

COURSE NUMBER	COURSE NAME	LENGTH
Mobile Course MASL: D309054	Inter-American Squadron	6 Weeks (MTT)
	Officer School (ISOS)	
STUDENT LOAD: MIN: 18	MAX: 28	

1. Course Description: The Inter-American Squadron Officer School (ISOS) in-residence program is an 6-week educational experience for USAF captains and International Officers in the grade of O-3. The curriculum is developed by the Squadron Officer College under USAF Air University guidelines. The purpose of the program is to help develop solution-minded, bold, and courageous Airmen ready to overcome today and tomorrow's challenges. In order to accomplish this task, the course is structured around four primary areas (1) leadership, (2) building highly effective teams, (3) logical and ethical reasoning in decision making, and (4) multi-domain joint warfare areas. Students engage in classroom and hands-on application events that will challenge their individual leadership awareness, foster innovative thinking, provide effective methods for conflict resolution, and collaboratively solve problems.

BLOCK I - EXTRACURRICULAR ACTIVITIES: Gives officers the opportunity to execute combined exercises with students from the Inter-American Noncommissioned Officers Course to reemphasize the importance of trust between both parties in order to effectively complete a mission. Also, as part of IAAFA's Field Studies Program (FSP), officers have an opportunity to have a profound cultural impact on partner nations and, in particular, the United States.

BLOCK II - PROFESSION OF ARMS STUDIES: Reinforces the officers' understanding of moral and ethical development by applying key concepts of accountability and professionalism to the challenges and opportunities inherent in leadership. Officers analyze case studies to grasp the unique but vital relationship that binds the military in obedience to its civilian leadership and in defense of the civilian public. They also integrate personal and professional values consistent with the highest standards of conduct expected of military officers.

BLOCK III - WARFARE STUDIES: Focuses on the application of the military as a national instrument of power (IOP). Officers should understand their service's roles, missions, distinctive capabilities, core competencies, and structures, both in the context of history and the joint operations that they may be called on to support. Officers gain a working knowledge of the capabilities of sister-services in order to better support the joint warfighting team.

BLOCK IV - LEADERSHIP AND MANAGEMENT: Focuses on the tactical level to provide tools officers need to build and lead small teams and serve as dynamic followers. The focus at the primary level is on the dynamics of the interaction between individual leadership skills and group interaction in building successful teams. Instruction is focused on concepts and philosophies officers can use to improve individual leadership skills, adjust leadership styles to the situation, accomplish assigned tasks, and employ followers' abilities effectively. Opportunities are provided for officers to apply the leadership skills and techniques they have learned.

BLOCK V - COMMUNICATION STUDIES: Provides opportunities to apply the principles of effective communication and receive feedback. Special attention is given to listening, speaking, writing, and the interpersonal communication instrumental in team building. Interpersonal

communications emphasize maximizing the potential of the individual as a part of a team. Officers learn to create and deliver organized, well-reasoned, and well-supported arguments via the spoken and written word.

BLOCK VI - INTERNATIONAL SECURITY STUDIES: Focuses on aspects of national and international security affairs that provide the broad context within which junior officers and their superiors must operate. Special attention is paid to those national and international security topics that most affect an officer's ability to lead and follow, to communicate, and to understand what it really means to be an Airman in today's globalized environment.

2. Course Requirements:

2.1. Eligibility: This course is designed for officers in the grade of O-3 or equivalent, as well as civilians equivalent to the Department of Defense grade of GS-9 and above (consult MILGROUP for grade equivalency). Graduates of in-residence Squadron Officer School, Maxwell AFB, AL (MASL D171003) are not eligible to attend. Students must have basic computer knowledge in order to accomplish writing and briefing assignments, as well as electronic readings related to curriculum.

- 2.2. Physical/Medical:
- 2.2.1. Vision: Normal (20/20 with or without glasses).

2.2.2. Hearing/Speech: Normal hearing and speech.

2.2.3. Physical/Other: Normal dexterity is required for field team building and leadership activities. Student will be expected to be in good physical condition and able to perform 3-mile runs, sit-ups, and pushups. ISOS standards are provided below for reference. Run times below are for the 3-mile distance. Sit-up and push-up standards are based on "good" performance in the 1-minute Air Force physical fitness test events.

ISOS Fitness Standards								
MALE								
Age	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59
Run	Run 28:00 29:30 31:11 34:00					4:00		
Sit-Ups	48	46	44	42	39	37	35	32
Push-Ups	49	45	40	35	31	27	25	24
FEMALE								
Age	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59
Run	Run 32:30 34:00 38:00 39:00						9:00	
Sit-Ups	44	40	35	33	30	28	26	23
Push-Ups	31	28	26	21	15	13	12	11

2.2.3.1. U.S. Students MUST have a current and passing PT Test WITH NO EXEMPTIONS on file in AF Fitness Management System (AFFMSII) that lasts through your graduation date. Under

no circumstances will ANY students be under a medical profile or medical condition that prevents them from participating in daily physical activities. Failure to do so will result in disenrollment of ISOS and the student will be sent back to home station or country of origin.

2.3. Uniform/Equipment: See General Clothing Requirements. Students bring their own running shoes. USAF officers must bring their Service and Mess dress. All students must bring at least two sets of their respective camouflage uniform and students with a flight uniform must bring at least one set.

3. Other Information: Knowledge of programs like Microsoft Word, PowerPoint, and Internet Explorer is required. Students are required to write a country presentation; therefore, it is a requirement to bring a notebook/laptop and support material preferably in electronic form (i.e. maps, history, tourism, current events). It is MANDATORY to bring a laptop.

4. Intermediate Military Objectives: This course supports the following USSOUTHCOM/TCP objectives: 1.1, 1.2, 1.3, 1.4, 2.1, 3.1, 3.3, 3.5, 4.1, 4.3, 5.4 and USNORTHCOM/TCP objectives: 1.4, 1.6, 2.5, 3.1, 3.2, 3.3, 4.1, 4.5, 4.6.

<u>NOTE</u>: This course was previously called Inter-American Officer's School.

COURSE NUMBER	COURSE NAME	LENGTH
MASL D171055 (E-IMET)	International Airman Leadership School (IALS)	8 Weeks
STUDENT LOAD: MIN: 12	MAX: 28	

1. Course Description: The curriculum of the International Airman Leadership School (IALS), reflects the course that is dictated in the Airman Leadership School of the USAF and is designed so that Airmen can assume supervisory positions with complex leadership and administration responsibilities. In addition, Airmen will be able to adapt quickly to the transformations of the USAF and to the continuous changes in the environment. It is the most important course in Enlisted Military Professional Training, since it is designed to provide sufficient supervisory and guidance tools to perform positions that require efficient leadership. The study plan is prepared by the Barnes' Center for Enlisted Education (BCEE). The students learn skills in: critical thinking, problem solving, training and teamwork, feedback sessions, time management, stress management, how to make presentations in public, implement quality concepts in the area of work and apply the concepts of human behavior to positively influence the personnel with whom it relates to achieve the mission in a more efficient and effective way. This course includes the following units of instruction: Professional Airman, Expeditionary Airman, Supervisory Airman, and Supervisory Communication.

BLOCK I - PROFESSIONAL AIRMAN- Emphasizes the high expectations, commitment, and heritage required with membership in the profession of arms.

BLOCK II - EXPEDITIONARY AIRMAN - Teaches military strategies, joint military structures, military missions, and doctrines.

BLOCK III - SUPERVISORY AIRMAN – Includes the application and comprehension of leadership and management concepts to train and develop their people.

BLOCK IV - SUPERVISORY COMMUNICATION – Promotes the development and display effective written, spoken and interpersonal communication skills that influence and direct people in order to facilitate mission accomplishment.

2. Course Requirements:

2.1. Eligibility: This course is designed for airmen in the ranks of Senior Airman (E-4) through Staff Sergeant (E-5) for US and E-3 through E-7 for non-USAF students with less than 17 years time-in-Service (TIS). Graduates of USAF ALS (MASL ZZ41007) are not eligible to attend. Civilian equivalents may attend with prior coordination.

2.2. Physical/Medical:

2.2.1. Vision: Normal (20/20 with or without glasses).

2.2.2. Hearing/Speech: Normal hearing and speech.

2.2.3. Physical/Other: Students must meet the minimum requirements to develop physical conditioning activities according to the standards of their country. The general requirements are: the normal skill required for the formation of field teams and leadership activities. The student is expected to be in good physical condition, which includes 3-mile (~5 km) runs, sit-ups, and push-ups. The IALS physical standards are provided below as a reference. The times defined below are for the distance of 1.5 miles (2.43 km). Sit-ups and push-ups are based on the "correct" performance in the USAF 1-minute physical fitness exam events.

MALE

Age	1-Minute Push-Ups	1-Minute Sit-Ups	1.5-Mile Run Time	Waist Measurement
30 and under	33	42	13:36	<39 inches/99.06 cm
30-39	27	39	14:00	<39 inches/99.06 cm
40-49	21	34	14:52	<39 inches/99.06 cm
50-59	15	28	16:22	<39 inches/99.06 cm

FEMALE

Age	1-Minute Push-Ups	1-Minute Sit-Ups	1.5-Mile Run Time	Waist Measurement
30 and under	18	38	16:22	<35.5 inches/90.17cm
30-39	14	29	16:57	<35.5 inches/90.17cm
40-49	11	24	18:14	<35.5 inches/90.17cm
50-59	9	20	19:43	<35.5 inches/90.17cm

2.3. Uniform/Equipment: See General Clothing Requirements in General Information section. USAF NCOs must bring their Service dress. Mess dress is optional but highly encouraged. All students must bring at least two sets of their respective camouflage uniform and students with a flight uniform must bring at least one set.

3. Other Information: Knowledge of programs like Microsoft Word, PowerPoint, and Internet Explorer is required. Students are required to write a country presentation; therefore, it is a requirement to bring a notebook/laptop and support material preferably in electronic form (i.e. maps, history, tourism, current events).

4. Intermediate Military Objectives: This course supports the following USSOUTHCOM/TCP objectives: 1.1, 1.2, 1.3, 1.4, 2.1, 3.1, 3.3, 3.5, 4.1, 4.3, 5.4 and USNORTHCOM/TCP objectives: 1.4, 1.6, 2.5, 3.1, 3.2, 3.3, 4.1, 4.5, 4.6.

COURSE NUMBER	COURSE NAME	LENGTH
Mobile Course MASL: D309109	International Airman Leadership School (IALS)	6 Weeks (MTT)
STUDENT LOAD: MIN: 12	MAX: 28	

1. Course Description: The curriculum of the International Airman Leadership School (IALS), reflects the course that is dictated in the Airman Leadership School of the USAF and is designed so that Airmen can assume supervisory positions with complex leadership and administration responsibilities. In addition, Airmen will be able to adapt quickly to the transformations of the USAF and to the continuous changes in the environment. It is the most important course in Enlisted Military Professional Training, since it is designed to provide sufficient supervisory and guidance tools to perform positions that require efficient leadership. The study plan is prepared by the Barnes' Center for Enlisted Education (BCEE). The students learn skills in: critical thinking, problem solving, training and teamwork, feedback sessions, time management, stress management, how to make presentations in public, implement quality concepts in the area of work and apply the concepts of human behavior to positively influence the personnel with whom it relates to achieve the mission in a more efficient and effective way. This course includes the following units of instruction: Professional Airman, Expeditionary Airman, Supervisory Airman, and Supervisory Communication.

BLOCK I - PROFESSIONAL AIRMAN- Emphasizes the high expectations, commitment, and heritage required with membership in the profession of arms.

BLOCK II - EXPEDITIONARY AIRMAN - Teaches military strategies, joint military structures, military missions, and doctrines.

BLOCK III - SUPERVISORY AIRMAN – Includes the application and comprehension of leadership and management concepts to train and develop their people.

BLOCK IV - SUPERVISORY COMMUNICATION – Promotes the development and display effective written, spoken and interpersonal communication skills that influence and direct people in order to facilitate mission accomplishment.

2. Course Requirements:

2.1. Eligibility: This course is designed for airmen in the ranks of Senior Airman (E-4) through Staff Sergeant (E-5) for US and E-3 through E-7 for non-USAF students with less than 17 years time-in-Service (TIS). Graduates of USAF ALS (MASL ZZ41007) are not eligible to attend. Civilian equivalents may attend with prior coordination.

2.2. Physical/Medical:

2.2.1. Vision: Normal (20/20 with or without glasses).

2.2.2. Hearing/Speech: Normal hearing and speech.

2.2.3. Physical/Other: Students must meet the minimum requirements to develop physical conditioning activities according to the standards of their country. The general requirements are: the normal skill required for the formation of field teams and leadership activities. The student is expected to be in good physical condition, which includes 3-mile (~5 km) runs, sit-ups, and push-ups. The IALS physical standards are provided below as a reference. The times defined below are for the distance of 1.5 miles (2.43 km). Sit-ups and push-ups are based on the "correct" performance in the USAF 1-minute physical fitness exam events.

MALE

Age	1-Minute Push-Ups	1-Minute Sit-Ups	1.5-Mile Run Time	Waist Measurement
30 and under	33	42	13:36	<39 inches/99.06 cm
30-39	27	39	14:00	<39 inches/99.06 cm
40-49	21	34	14:52	<39 inches/99.06 cm
50-59	15	28	16:22	<39 inches/99.06 cm

FEMALE

Age	1-Minute Push-Ups	1-Minute Sit-Ups	1.5-Mile Run Time	Waist Measurement
30 and under	18	38	16:22	<35.5 inches/90.17cm
30-39	14	29	16:57	<35.5 inches/90.17cm
40-49	11	24	18:14	<35.5 inches/90.17cm
50-59	9	20	19:43	<35.5 inches/90.17cm

2.3. Uniform/Equipment: See General Clothing Requirements in General Information section. USAF NCOs must bring their Service dress. Mess dress is optional but highly encouraged. All students must bring at least two sets of their respective camouflage uniform and students with a flight uniform must bring at least one set.

3. Other Information: Knowledge of programs like Microsoft Word, PowerPoint, and Internet Explorer is required. Students are required to write a country presentation; therefore, it is a requirement to bring a notebook/laptop and support material preferably in electronic form (i.e. maps, history, tourism, current events).

4. Intermediate Military Objectives: This course supports the following USSOUTHCOM/TCP objectives: 1.1, 1.2, 1.3, 1.4, 2.1, 3.1, 3.3, 3.5, 4.1, 4.3, 5.4 and USNORTHCOM/TCP objectives: 1.4, 1.6, 2.5, 3.1, 3.2, 3.3, 4.1, 4.5, 4.6.

OPERATIONS AND SUPPORT TRAINING COURSES

COURSE NUMBER	COURSE NAME	LENGTH
(MASL D121064)	Pilot Instrument Procedures	12 Weeks
L3OZR1210640SRB		
STUDENT LOAD: MIN: 6	MAX: 10	

1. Course Description: This course prepares pilots for flying missions under Instrument Meteorological Conditions (IMC) and in accordance with Instrument Flight Rules (IFR) using rules and procedures from both the Federal Aviation Administration (FAA) and the International Civil Aviation Organization (ICAO). Students learn instrument flying fundamentals and advanced instrument techniques and procedures. Advanced instrument techniques include instrument flight planning, precision handling and maneuvering of the aircraft, instrument flight using aircraft navigational instruments and systems (e.g., radio directing and position finding systems). These are taught in conjunction with air navigational aids (e.g., omnidirectional radio ranges), area navigation (RNAV), air traffic control operations and procedures, and pilot interface with those activities. Students learn instrument approach and departure procedures, holding procedures, and use of instrument landing systems. Students also learn emergency procedures such as missed approaches and radio failure operations. The students plan, schedule, and conduct cross-country training flights, which require reliance on precision instrument flight techniques that involve flying along the Federal airways. No actual in-flight training is involved; therefore, application is taught using an Advanced Aviation Training Device (AATD), or flight simulator. Additionally, students are required to apply these procedures in their respective weapon systems with an experienced instructor or evaluator in order to be fully qualified for instrument operations.

BLOCK I – FUNDAMENTALS OF INSTRUMENT FLIGHT: Includes course orientation and teaches radio navigational aids, flight instruments, instrument flight maneuvers, confidence maneuvers, course intercepts, position finding, fix-to-fix navigation, holding procedures, arc intercepts and maintenance, and 60-to-1 rule calculations.

BLOCK II – **INTERMEDIATE INSTRUMENT FLIGHT:** Teaches students to plan a comprehensive instrument flight, incorporating Flight Information Publications (FLIP), airspace requirements, Standard Instrument Departure (SID) and Standard Terminal Arrivals (STAR) procedures, low altitude precision and non-precision instrument approach procedures, and emergency radio failure and missed approach procedures.

BLOCK III – ADVANCED INSTRUMENT FLIGHT: Incorporates all phases of instrument flight. The most demanding and rewarding portion of the course is successfully maintaining Instrument Flight Rules (IFR) in Instrument Meteorological Conditions (IMC) for the entire mission. Students successfully employ Area Navigation (RNAV) and Global Navigation Satellite System (GNSS) navigation procedures, incorporating autopilot and flight management system procedures to execute all phases of instrument flight, including the use of instrument landing systems and precision GNSS and RNAV instrument approach procedures.

MISCELLANEOUS: Incorporates lessons on human rights, meteorology, spatial disorientation, crew resource management, and aviation English throughout the 12-week period.

2. Course Requirements:

2.1. Eligibility: This course is designed for grades of O-1 through O-6, police or civilian equivalent. Students must be current and qualified pilots in their primary aircraft, have flown within the 6 months preceding attendance, and have a minimum of 200 hours of fixed or rotary wing experience after their formal flying course. The candidate must have a minimum of 20 hours of flight under instrument flight rules.

2.2. Physical/Medical:

2.2.1. Vision: Normal (20/20 with or without glasses).

2.2.2. Hearing/Speech: No hearing or speech impediments.

2.3. Uniform/Equipment: In addition to the uniform requirements listed in the General Clothing Requirements, students are encouraged to bring flight suits and flight boots.

3. Other Information: Only electronic manuals are used in the course; therefore, students are encouraged to bring a laptop computer, if available. Students are also encouraged to bring examples of home field instrument approach charts and maps to share with the class.

4. Intermediate Military Objectives: This course supports the following USSOUTHCOM/TCP objectives: 4.2, 4.3, 5.4 and USNORTHCOM/TCP objectives: 2.1, 2.2, 2.3, 3.1, 3.3, 4.2, 4.3, 4.4, 4.5, 4.6, 5.1, 5.3.
COURSE NUMBER	COURSE NAME	LENGTH
(MASL D121065)	Instructor Pilot Instrument	12 Weeks
L3OZR1210650SRB	Procedures	
STUDENT LOAD: MIN: 6	MAX: 10	

1. Course Description: This course reinforces the concepts introduced in the Pilot Instrument Procedures Course (MASL D121064), which contains Fundamentals of Instrument Flight, Instrument Flight Planning, Instrument Approach Procedures, and Principles of Instruction. This course prepares pilots for flying missions under Instrument Meteorological Conditions (IMC) and in accordance with Instrument Flight Rules (IFR) using rules and procedures from both the Federal Aviation Administration (FAA) and the International Civil Aviation Organization (ICAO). Students learn instrument flying fundamentals and advanced instrument techniques and procedures. Advanced instrument techniques include instrument flight planning, precision handling and maneuvering of the aircraft, instrument flight using aircraft navigational instruments and systems (e.g., radio directing and position finding systems) in conjunction with air navigational aids (e.g., omnidirectional radio ranges). Students learn area navigation (RNAV), air traffic control operations and procedures and pilot interface with those activities, instrument approach and departure procedures, holding procedures, and use of instrument landing systems. Students also learn emergency procedures such as missed approaches and radio failure operations. The students plan, schedule, and conduct cross-country training flights, which require reliance on precision instrument flight techniques that involve flying along the Federal airways. In addition, the course includes training and evaluating rated pilots in methods of instruction, in-flight evaluation, monitoring classroom instruction of other instructors' techniques and procedures, and correct grade book procedures. Instruction also includes formulating lesson plans and instructional material used in classrooms, and revising methods of instruction and other training procedures in use. No actual in-flight training is involved; therefore, application is taught using an Advanced Aviation Training Device (AATD), or flight simulator. Additionally, students are required to apply these procedures in their respective weapon systems with an experienced instructor or evaluator in order to be fully qualified for instrument operations.

BLOCK I – FUNDAMENTALS OF INSTRUMENT FLIGHT: Includes course orientation and teaches radio navigational aids, flight instruments, instrument flight maneuvers, confidence maneuvers, course intercepts, position finding, fix-to-fix navigation, holding procedures, arc intercepts and maintenance, and 60-to-1 rule calculations.

BLOCK II – INTERMEDIATE INSTRUMENT FLIGHT: Teaches students to plan a comprehensive instrument flight, incorporating Flight Information Publications (FLIP), airspace requirements, Standard Instrument Departure (SID) and Standard Terminal Arrivals (STAR) procedures, low altitude precision and non-precision instrument approach procedures, and emergency radio failure and missed approach procedures.

BLOCK III – ADVANCED INSTRUMENT FLIGHT: Incorporates all phases of instrument flight. The most demanding and rewarding portion of the course is successfully maintains Instrument Flight Rules (IFR) in Instrument Meteorological Conditions (IMC) for the entire mission. Students successfully employ Area Navigation (RNAV) and Global Navigation Satellite System (GNSS) navigation procedures, incorporating autopilot and flight management system

procedures to execute all phases of instrument flight, including the use of instrument landing systems and precision GNSS and RNAV instrument approach procedures.

BLOCK IV – PRINCIPLES OF INSTRUCTION: Teaches various elements of how to be a successful instrument flight instructor. Areas covered include theory of learning, instructional techniques, principles of instruction, and instructor responsibilities with emphasis on the unique requirement differences between academic classroom instruction and one-on-one in-flight instruction.

MISCELLANEOUS: Incorporates lessons on human rights, meteorology, spatial disorientation, crew resource management, and aviation English throughout the 12-week period.

2. Course Requirements:

2.1. Eligibility: This course is designed for grades of O-1 through O-6, police or civilian equivalent. Students must be current and qualified pilots in their primary aircraft, have flown within the 6 months preceding attendance, and have a minimum of 500 hours as an aircraft commander/pilot in command of fixed or rotary wing. The candidate must have a minimum of 200 hours of flight under instrument flight rules. The candidate must have completed instructor qualification training prior to attendance.

2.2. Training: Students should have already completed an introductory course to instruments and have experience flying under Instrument Flight Rules (IFR).

2.3. Physical/Medical:

2.3.1. Vision: Normal (20/20 with or without glasses).

2.3.2. Hearing/Speech: No hearing or speech impediments.

2.4. Uniform/Equipment: In addition to the uniform requirements listed in the General Clothing Requirements, students are encouraged to bring flight suits and flight boots.

3. Other Information: Only electronic manuals are used in the course; therefore, students are encouraged to bring a laptop computer, if available. Students are also encouraged to bring examples of home field instrument approach charts and maps to share with the class.

4. Intermediate Military Objectives: This course supports the following

USSOUTHCOM/TCP objectives: 4.2, 4.3, 5.4 and USNORTHCOM/TCP objectives: 2.1, 2.2, 2.3, 3.1, 3.3, 4.2, 4.3, 4.4, 4.5, 4.6, 5.1, 5.3.

COURSE NUMBER	COURSE NAME	LENGTH
(MASL D121066)	Search and Rescue Planning	4 Weeks
L30ZR1210660SRB	(SARP)	
STUDENT LOAD: MIN: 6	MAX: 11	

1. Course Description: The instructional design for this course is grouped paced. This course is an introduction to Search and Rescue Planning (SARP) procedures and Rescue Coordination Center (RCC) operations and is designed for enlisted members or officers who perform in the capacity of SARP coordination and operations or related duties. This course gives students a working knowledge in concepts on how to organize and plan SAR center operations and mission planning. Class sessions include scenario executions that give the student practical experience in a simulated SAR environment. The course instruction includes Introduction, Mission Process, and Search and Rescue Operations.

BLOCK I - INTRODUCTION: Includes course orientation, the SAR system, SAR organizations, agencies and resources, communications, awareness and initial actions, documentation, and SAR satellite systems.

BLOCK II – MISSION PROCESS: Prepares students for the factors involved in a SAR incident and includes the facilities that are available to the search planner and the mathematical process involved in calculating a marine SAR operation. It also lays the foundation in planning and preparing for the next block of SAR applications.

BLOCK III – SEARCH AND RESCUE OPERATIONS (SAROPS): Applies the SAR studies and theory learned in the first two blocks. It also prepares the students for SAR planning and operations using the new technology "SAROPS." Multiple exercises are run to give the students diverse scenarios and practice in running and controlling a SAR operation.

2. Course Requirements:

2.1. Eligibility: This course is designed for all officers, enlisted, and/or civilians that perform or plan to perform SAR planning related duties.

2.2. Physical/Medical:

2.2.1. Vision: Normal (20/20 with or without glasses).

- 2.2.2. Hearing/Speech: No hearing or speech impediments.
- 2.2.3. Physical: Normal dexterity.

2.3. Uniform/Equipment: See General Clothing Requirements.

3. Intermediate Military Objectives: This course supports the following USSOUTHCOM/TCP objectives: 1.2, 1.4, 1.5, 3.1, 3.2, 3.4, 3.6, 4.3, 5.1, 5.2, 5.4 and USNORTHCOM/TCP objectives: 1.3, 1.4, 1.5, 1.6, 2.1, 2.2, 2.3, 2.4, 2.5, 3.1, 3.2, 3.3, 4.1, 4.3, 4.4, 4.5, 4.6.

BLANK PAGE

COURSE NUMBER	COURSE NAME	LENGTH
(MASL D126086)	Dynamics of Terrorism	2 Weeks
L3AQR1260860SRA		
STUDENT LOAD: MIN: 10	MAX: 40	

1. Course Description: This course is designed for all members of the armed forces and their civilian counterparts, regardless of specialty and/or grade. Students learn the basic concepts of anti-terrorism. They receive training in Human Rights, Introduction to Terrorism, Terrorist Operations, Detecting Terrorist Surveillance, Assessing Terrorist Threats, Individual Protective Measures, Hostage Survival, and Vulnerability Assessment. Students also learn the purpose of Vulnerability Assessment, the functions of the assessment, the process one must go through in order to conduct an assessment, and how to advise installation commanders on antiterrorism matters.

BLOCK I - FUNDAMENTALS OF TERRORISM: Includes an orientation and training on the following subjects: Human Rights, Introduction to Terrorism, Terrorist Operations, Detecting Terrorist Surveillance, Assessing the Threat, Individual Protective Measures, Security While Traveling, Vehicle Security, Residential Security, Active Shooter/Workplace Violence, Hostage Survival, Escape/Rescue/Release, and Vulnerability Assessments.

2. Course Requirements:

2.1 Eligibility: This course is designed for any specialty, military, police, or civilian no higher than the grade of O-6 or equivalent.

2.2. Physical/Medical:

- 2.2.1. Vision: Normal (20/20 with or without glasses).
- 2.2.2. Hearing/Speech: No speech or hearing impediments.

2.2.3. Physical: Normal dexterity.

2.3. Uniform/Equipment: See General Clothing Requirements. All required specialized gear will be provided.

3. Intermediate Military Objectives: This course supports the following USSOUTHCOM/TCP objectives: 1.1, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 3.4, 3.6, 4.2, 4.3, 4.4, 5.1, 5.4 and USNORTHCOM/TCP objectives: 1.5, 1.6, 1.7, 2.5, 3.2, 3.3, 4.1, 4.2, 4.5, 4.6.

BLANK PAGE

COURSE NUMBER	COURSE NAME	LENGTH
(MASL D152054)	International Logistics	6 Weeks
L3AZR1520540SRC		
STUDENT LOAD: MIN: 10	MAX: 19	

1. Course Description: The International Logistics course prepares students to provide logistical support to their units. This course is designed for officers, NCOs and/or civilian personnel assigned to, or projected for assignment to logistic management leadership positions. Also, this course provides the foundation to understand the Foreign Military Sales (FMS) process and how it works parallel to the US government and DoD structure. The course includes the following blocks of instruction: Introduction to Logistics, Materiel Management Publications, Security Assistance and Security Cooperation, and Foreign Military Sales (FMS)

BLOCK I – INTRODUCTION TO LOGISTICS: Provides the principles and concepts for successful logistics management and general information on several support organizations that contribute to the overall logistics structure of an operating base. It also covers the role of supply chain management and its importance on mission accomplishment. This block covers, in detail, some materiel management concepts such as the processes for determining requirements, establishing appropriate stock levels, focusing on aspects of inventory management, and logistic planning.

BLOCK II - MATERIEL MANAGEMENT PUBLICATIONS: Provides an introduction to materiel management publications used to research data before requisitioning assets. Students learn to cross-reference part numbers to national stock numbers and search information used in materiel management operations within and between the United States military services, other DOD activities, federal and civil agencies, and foreign governments. The curriculum includes a number of practical exercises to reinforce the lectures and reading material. This block also explains the purpose of Military Standard Requisition Issue Procedures (MILSTRIP) and how the Uniform Materiel Movement and Issue Priority System (UMMIPS) applies between the US military branches and foreign nations. It also discusses the repair cycle process and the selection criteria for the repair cycle assets. Lastly, students delve into the purpose and use of technical orders (TOs) and culminate the block with TO practical exercises.

BLOCK III - SECURITY ASSISTANCE AND SECURITY COOPERATION: Increases the students' understanding of the management of US security cooperation and security assistance resources and enhance communications between purchaser/recipient country security assistance agencies and US supporting agencies, thereby enhancing the overall efficiency of security assistance management. This block also displays the role of security assistance within the context of a civilian controlled military. Also, this block explains how the US legislation is welded into a coherent operational foreign policy program and the roles and responsibilities of the Security Cooperation Organization (SCO) and its contribution to the Security Cooperation (SC) and Security Assistance (SA) mission.

BLOCK IV - FOREIGN MILITARY SALES: Presents major aspects of the FMS program and the management concerns of purchaser and recipient countries. This block explains aspects relating to the FMS process, to include the Security Cooperation Information Portal (SCIP). It

explains the different categories of materials and/or services which can be purchased from the US. This block covers the different reports of discrepancies (ROD) and the requisites to prepare the report. Students learn how to prepare a letter of request (LOR) and understand the MILSTRIP for FMS codes related to the FMS process. Lastly, it outlines the purpose and management of the SCIP system and covers many aspects of its use in managing the purchase of FMS materiel. Students utilize the SCIP training system in order to gain hands-on experience.

2. Course Requirements:

2.1. Eligibility: This course is designed for officers in the grades of O-1 through O-6, enlisted personnel in the grades of E-6 through E-9, police, or civilian equivalent.

- 2.2. Physical/Medical:
- 2.2.1. Vision: Normal (20/20 with or without glasses).
- 2.2.2. Hearing/Speech: Normal hearing and speech.
- 2.2.3. Physical/Other: Normal manual dexterity.
- 2.3. Uniform/Equipment: See General Clothing Requirements.

3. Intermediate Military Objectives: This course supports the following USSOUTHCOM/TCP objectives: 1.3, 1.5, 3.3, 3.4, 3.6, 4.1, 4.3, 5.1, 5.4, 5.7 and USNORTHCOM/TCP objectives: 1.4, 2.1, 3.1, 3.2, 4.2, 4.3, 4.6.

COURSE NUMBER	COURSE NAME	LENGTH
(MASL D152055)	Materiel Management	6 Weeks
L3AZR1520550SRC		
STUDENT LOAD: MIN: 6	MAX: 16	

1. Course Description: This course is designed for officers, NCOs, Airmen, and/or civilian personnel working in base supply or supply-related functions to prepare supply specialist and first line supervisors to assume entry-level supply responsibilities. Students learn how to set up a warehouse and how to operate materiel handling equipment, to include training on forklift safety. The course instruction includes Fundamentals, Materiel Management, Warehouse Operations, and Inventory Management.

BLOCK I - FUNDAMENTALS: Introduces Materiel Management, which covers the duties expected to be performed in the Materiel Management position. This is followed by organizational logistics structure, which focuses on the national level, intermediate level and base level. Next is property accountability, which explains basic guidance and responsibilities for managing government property under their control. Supply Publications provides an introduction to publications used to research data in PUBLOG FLIS before requisitioning assets. Students learn to cross-reference part numbers with national stock numbers and search information pertaining to commercial/vendor addresses and codes related to commercial entities. Technical Orders (TO) will provide instructions for operating, maintaining, inspecting, modifying, and managing equipment and systems. Students learn to use these TOs to research replacement parts and higher assemblies in support of these equipment and systems.

BLOCK II - MATERIEL MANAGEMENT: Covers all aspects of the logistics system, to include the order process from customer to base supply and from base supply to depots. Stock control provides an introduction to stock levels and economic order quantity principals. Students learn the process of inventorying materiel, analyzing the USAF Repair Cycle Process, receiving/turn-ins, inspection principals, and document control fundamentals.

BLOCK III – WAREHOUSE OPERATIONS: Focuses on the processes and elements of a supply organization that physically deals with property from the time it enters the supply system until it is issued to another organization. This block also covers processes, which ensure that the property is maintained in serviceable condition while in stock and readily available for issue to the correct user, at the right time and place. The areas of instruction covered are Storage Principles, Surveillance Program, Property Storage, Location System, Hazardous Material, and Materiel Handling equipment (to include forklift familiarization).

BLOCK IV - INVENTORY MANAGEMENT: Provides students the opportunity to implement all subjects learned throughout the previous blocks of instruction. Students create a layout of a storage facility and apply all warehousing principles learned to determine the appropriate warehouse location, assign, and establish a locator system. Students also establish an automated inventory management database.

2. Course Requirements:

2.1. Eligibility: This course is designed for newly commissioned officers in the grade of O-1 through O-4, enlisted personnel in the grade of E-1 through E-6, police, or civilian equivalent who perform, or will perform, inventory management and warehouse functions.

2.2. Physical/Medical:

2.2.1. Vision: Normal (20/20 with or without glasses).

2.2.2. Speech: No hearing or speech impediments.

2.2.3. Physical/Other: Normal dexterity.

2.3. Uniform/Equipment: See General Clothing Requirements. All specialized equipment will be provided.

3. Intermediate Military Objectives: This course supports the following USSOUTHCOM/TCP objectives: 1.3, 1.5, 4.3, 5.1, 5.4, 5.7 and USNORTHCOM/TCP objectives: 1.4, 3.1, 4.6.

<u>NOTE</u>: This course was previously called Supply Administration.

COURSE NUMBER	COURSE NAME	LENGTH
(MASL D162030)	On-the-Job Training (OJT)	4 Weeks
L3AJR1620300SRB	Administration	
STUDENT LOAD: MIN: 8	MAX: 14	

1. Course Description: This course is designed for middle to upper-level training managers and supervisors, NCOs, officers, and civilians, who are directly involved with training program management activities and functions. The concepts taught in this course are easily adaptable to the training program administration of any professional specialty. Students learn how to effectively develop, manage, and evaluate On-the-Job Training (OJT) programs. Students also learn fundamental OJT program standardization concepts and documentation procedures. This course includes the following blocks of instruction: OJT Organization and Training Plan Development and Conducting, Evaluating, and Documenting Training.

BLOCK I - OJT ORGANIZATION AND TRAINING PLAN DEVELOPMENT: Covers the OJT program organizational structure and training plan development. Lessons include: OJT program structure, program responsibilities of the training manager, supervisor, trainer, and trainee, specialty training plan development, work center master training plan development, and training record documentation procedures. Instruction also includes familiarization of electronic training systems.

BLOCK II - CONDUCTING, EVALUATING, AND DOCUMENTING TRAINING: Focuses on the execution of OJT program processes and responsibilities. Lessons include: training process initiation, training needs determination, capability and resource determination, and the development and presentation of the Air Force Training Course. Instruction also includes a familiarization of training program evaluation procedures and statistical data reporting.

2. Course Requirements:

2.1. Eligibility: This course is designed for military members with the grade of E-4 and above, but no higher than the grade of O-4, and police or civilians equivalent whom execute, administer, and/or manage OJT training program activities and functions. Students should have at least two years of experience.

2.2. Physical/Medical:

2.2.1. Vision: Normal (20/20 with or without glasses).

- 2.2.2. Hearing/Speech: Normal hearing and speech.
- 2.2.3. Physical/Other: Normal dexterity.

2.3. Uniform/Equipment: See General Clothing Requirements.

3. Other Information: Basic computer knowledge is critical to the success of AET students. Students must possess a basic familiarization with Microsoft Word, Excel, and PowerPoint programs in order to complete the practical exercises required for successful course completion.

Students are encouraged to bring examples of existing training program processes and products to share with the class.

4. Intermediate Military Objectives: This course supports the following USSOUTHCOM/TCP objectives: 1.1, 1.3, 1.4, 1.5, 3.5, 3.6, 4.1, 4.3, 4.4, 5.4, 5.6, 5.7 and USNORTHCOM/TCP objectives: 2.1, 2.2, 2.3, 2.5, 3.1, 3.2, 3.3, 4.1, 4.2, 4.3, 4.5, 4.6.

COURSE NUMBER	COURSE NAME	LENGTH
(MASL D166041)	Basic Instructor Course (BIC)	6 Weeks
L3AZR1660410SRC		
STUDENT LOAD: MIN: 6	MAX: 14	

1. Course Description: This course is designed for officers, NCOs, and civilians supporting technical training missions. Students learn US Air Force technical training concepts and techniques to deliver quality instruction. They receive training on how to conduct classroom instruction, perform student counseling, as well as how to develop course curriculum. This course also includes extensive practical exercises to improve the student's presentation skills. The course consists of the following blocks of instruction: Fundamentals of Instruction, Instructional Development, and Presentations.

BLOCK I - FUNDAMENTALS OF INSTRUCTION: Sets the foundation for technical instruction. Lessons include: roles of an instructor, qualities of an instructor, the communicative process, group dynamics, counseling theory, multimedia use, and instructional methods. Students learn and practice effective questioning techniques. Classroom scenarios enhance instructor counseling techniques and lesson plan outlining procedures will be reviewed and discussed. The students prepare their first presentation to practice the concepts covered in this block of instruction.

BLOCK II – INSTRUCTIONAL SYSTEM DEVELOPMENT: Focuses on the responsibilities of key personnel in a technical training organization and the instructional system development (ISD) process. Lessons include: test administration, ISD process, and lesson plan development. Students learn how to develop and maintain a quality course using the ISD process. Lesson plan development is thoroughly discussed and practiced. Test administration, control, and security procedures are covered in detail. Students prepare and present a lesson plan in preparation for the lectures performed in block three.

BLOCK III – PRESENTATIONS: Applies the concepts learned during previous blocks of instruction in a classroom setting. Students execute instructor roles, responsibilities and instructional methods unassisted. Students prepare and present three presentations using two delivery methods: two lectures and one demonstration/performance. The presentations are essential in proving a student's future success as instructor.

2. Course Requirements:

2.1. Eligibility: This course is designed for military members between the grades of E-4 and O-5, police, or civilian equivalent with at least one year of advanced technical area knowledge or experience within their respective specialty or field.

- 2.2. Physical/Medical:
- 2.2.1. Vision: Normal (20/20 with or without glasses).
- 2.2.2. Hearing/Speech: Normal hearing and speech.

2.2.3. Physical/Other: Normal dexterity.

2.3. Uniform/Equipment: See General Clothing Requirements.

3. Other Information: Familiarization with Microsoft Word, Excel, and PowerPoint is required in order to complete the practical exercises successfully. Students are encouraged to bring examples of existing lesson plans to share in class.

4. Intermediate Military Objectives: This course supports the following USSOUTHCOM/TCP objectives: 1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 3.1, 3.2, 3.3, 3.6, 4.1, 4.2, 4.3, 4.4, 5.1, 5.4, 5.6, 5.7 and USNORTHCOM/TCP objectives: 2.1, 2.2, 2.5, 3.1, 3.2, 3.3, 4.2, 4.3, 4.5, 4.6.

<u>NOTE</u>: This course was previously called Technical Training Instructor.

COURSE NUMBER	COURSE NAME	LENGTH
(MASL D172023)	Intelligence, Surveillance, and	5 Weeks
L3AQR1720230SRB	Reconnaissance (ISR) Fundamentals	
STUDENT LOAD: MIN: 6	MAX: 12	

1. Course Description: This course is designed for Officers, Enlisted, National Police, and Civilian equivalent performing intelligence-related activities. This course provides students with an understanding of the intelligence community, doctrine, disciplines, requirements, and targeting fundamentals. It includes Introduction to Intelligence; Global Integrated Intelligence, Surveillance, and Reconnaissance (ISR); and Operational Environment. Through dynamic classroom instruction, practical exercises, the application of the Intelligence Cycle, and a two-day CAPSTONE exercise, students will develop an understanding of intelligence analysis to be able to create intelligence products.

BLOCK I – INTRODUCTION TO INTELLIGENCE: Teaches student orientation on academy policies, academic expectations, medical procedures, and human rights. The course introduces the importance of critical thinking in the intelligence community and the factors that can negatively influence the reasoning process. It familiarizes students with the Intelligence Community, its structure, and the role and responsibility of each organization. The course explains the difference between policy, strategy, and doctrine. Students discuss the different levels and types of doctrine, tenets of airpower, and joint intelligence principles. Students also learn the three levels of war and how they link national objectives with tactical actions. The importance of security is also addressed to include safeguarding classified information and programs and policies, such as Operations Security (OPSEC).

BLOCK II – GLOBAL INTEGRATED INTELLIGENCE, SURVEILLANCE, AND RECONNAISSANCE (ISR) PROCESS: Teaches different types of intelligence disciplines (the –INTs), the roles of intelligence personnel in the –INT world, the functions of National Agencies and Department of Defense related to the –INTs, and Intelligence as a whole. This block familiarizes students with the role and responsibility of each intelligence Air Force Specialty Code (AFSC) and how they perform specialized duties to fulfill the overall intelligence mission. Introduces students to cyberspace, space-based, and traditional airborne ISR assets. Students discuss intelligence requirements that drive the planning and employment of ISR operations. It presents the five phases of the ISR process: planning and direction, collection, processing and exploitation, analysis and production, and dissemination (PCPAD). Students also learn about the Air Operations Center (AOC) structure and the role of intelligence personnel. Lastly, students learn the Distributed Common Ground System (DCGS) architecture and how it enables the integration of ISR capabilities.

BLOCK III – OPERATIONAL ENVIRONMENT: Emphasizes the ISR process phase of dissemination, students build and present current intelligence briefings to help them gain an analytical perspective of current world issues and to employ briefing techniques specified in classroom instruction. Students also discuss the importance of marginal data and learn to use geospatial mapping tools to plot different coordinate systems on maps. Students discuss targeting fundamentals concepts, to include deliberate and dynamic targeting. Students study the considerations of legal implications in war through discussion of the Law of Armed Conflict (LOAC) and Rules Of

Engagement (ROE). Lastly, students learn the four steps of the Intelligence Preparation of the Operational Environment (IPOE) process and how it is applied to efficiently counter an adversary's denial and deception strategy and anticipate surprise.

BLOCK IV – CAPSTONE EXERCISE: Stimulates a joint deployed environment. Students analyze a real-world and/or simulated terrorist organization. The practice validates all objectives, principles, and techniques from the previous blocks.

2. Course Requirements:

2.1. Eligibility: This course is designed for military members no higher than the grade of O-6, police, or civilian equivalent. Attendees should be assigned to an intelligence unit position or have an additional duty of Intelligence Officer NCO, or equivalent. Basic computer skills, particularly Microsoft PowerPoint, are highly desirable.

2.2. Physical/Medical:

2.2.1. Vision: Normal (20/20 with or without glasses).

2.2.2. Hearing/Speech: Normal hearing and speech.

2.2.3. Physical/Other: Normal dexterity.

2.3. Uniform/Equipment: See General Clothing Requirements.

3. Other Information: Students are encouraged to be prepared to discuss intelligence related situations from their countries with the class.

4. Intermediate Military Objectives: This course supports the following USSOUTHCOM/TCP objectives: 1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 3.3, 4.1, 4.3, 4.4, 4.5, 5.1, 5.4, 5.6 and USNORTHCOM/TCP objectives: 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 2.1, 2.2, 2.5, 3.1, 3.2, 3.3, 4.1, 4.2, 4.3, 4.5, 4.6.

<u>NOTE</u>: This course was previously called Introductory Air Intelligence.

COURSE NUMBER	COURSE NAME	LENGTH
(MASL D173056)	Ground Defense Leadership Course	6 Weeks
L3AZR1730560SRB		
STUDENT LOAD: MIN: 26	MAX: 44	

1. Course Description: This course is designed for security forces personnel of any branch charged with protecting key resources to sustain air operations during peacetime or contingencies. Students learn effective means of operating in any environment to extend defense beyond the boundaries of their installations. Topics include troop leading procedures, warning/operations orders, defense command and control, weapons training, land navigation, tactical movement under direct fire, patrolling, and tactical vehicle deployment. They also participate in field training exercises, which will simulate patrol and urban defense. The course instruction includes Defender Leadership and Defender Skills operations.

BLOCK I – DEFENDER LEADERSHIP: Includes Troop Leading Procedures, Defense Command and Control, and Field Considerations.

BLOCK II – DEFENDER SKILLS: Includes Weapons Fundamentals, Land Navigation, Tactical Movement, Patrolling, Convoy Operations, and Built-Up Area Search and Clear Operations (BUASC).

2. Course Requirements:

2.1. Eligibility: This course is designed for military members no higher than the grade of O-3, police, or civilian equivalent. Personnel not in a security forces or police specialty code may attend with prior coordination.

2.2. Physical/Medical: Top physical condition, NO injuries that could prevent member from training. Specific minimum physical ability standards are shown below in paragraph 2.2.3.

2.2.1. Vision: Normal (20/20 with or without glasses).

2.2.2. Hearing/Speech: Normal hearing and speech.

2.2.3. Physical/Other: Normal dexterity. The following is a table of minimum physical standards required to be met on the first day of training:

Age	1-Minute Push-Ups	1-Minute Sit-Ups	1.5-Mile Run Time
30 and under	33	42	13:36
30-39	27	39	14:00
40-49	21	34	14:52

MALE

FEMALE

Age	1-Minute Push-Ups	1-Minute Sit-Ups	1.5-Mile Run Time
30 and under	18	38	16:22
30-39	14	29	16:57
40-49	11	24	18:14

<u>NOTE</u>: It is imperative to consider the student's ability to meet minimum physical fitness standards as it represents their ability to safely and effectively complete the course. Country managers must ensure selected attendees are evaluated on their physical condition and meet listed standards prior to course attendance.

2.3. Uniform/Equipment: See General Clothing Requirements. All required specialized gear will be provided.

3. Intermediate Military Objectives: This course supports the following USSOUTHCOM/TCP objectives: 1.1, 1.2, 1.3, 1.4, 1.5, 2.2, 3.3, 3.4, 4.1, 4.2, 4.3, 4.5, 5.1, 5.4, 5.7 and USNORTHCOM/TCP objectives: 1.1, 1.4, 1.5, 1.6, 1.7, 2.1, 2.2, 2.4, 2.5, 3.1, 3.2, 3.3, 4.1, 4.2, 4.3, 4.5, 4.6.

COURSE NUMBER	COURSE NAME	LENGTH
(MASL D173098)	Advanced Ground Defense Operator	8 Weeks
L3AAR1730980SRA	Course	
STUDENT LOAD: MIN: 11	MAX: 26	

1. Course Description: This course is designed for military members with an officer grade of O-2 and higher, enlisted grade of E-3 and higher, police, or civilian equivalents with advanced security forces experience serving in a ground defense force capacity charged with protecting key air operations resources during peacetime or contingencies. Students learn application of advanced ground defense operations and leadership skills. This course arms tactical level leaders with functional knowledge to implement and extend defense tactics beyond the boundaries of assigned installations. Topics include mission planning, warning/operations orders, ground defense command and control, weapons training, tactical trauma care, small unit tactics under direct fire, patrolling, combatives, structure clearing, and vehicle deployment under direct fire. Students also participate in field training exercises, which will simulate patrol and urban ground defense tactics. The course is comprised of four blocks of instruction: Advanced Defender Leadership, Small Unit Leadership Skills, Urban Operations, and Capstone Skills.

BLOCK I – ADVANCED DEFENDER LEADERSHIP: Includes Mission Planning, Ground Defense Operations, Physical Condition, Tactical Leader Concepts, and Tactical Trauma Care.

BLOCK II – SMALL UNIT LEADERSHIP SKILLS: Includes Leadership Reaction Drills, Weapons Handling, and Small Unit Tactics Operations.

BLOCK III – URBAN OPERATIONS: Includes Combatives, Close Quarter Combat and Vehicle Close Quarter Combat.

BLOCK IV – CAPSTONE: Includes Field Training Exercises performing patrol and urban ground defense.

2. Course Requirements:

2.1. Eligibility: This course is designed for military members with an officer grade of O-2 and higher, enlisted grade of E-3 and higher, police, or civilian equivalents. Attendees should be assigned to a security force unit position or fulfill a ground defense force capacity. At a minimum, attendees must have 2 years of operational experience and education in the following: land navigation, map reading, squad patrolling, troop leading procedures, urban operations, and close quarter combat. Recommended, they must have completed the Ground Defense Leadership Course, MASL D173056.

- 2.2. Physical/Medical:
- 2.2.1. Vision: Normal (20/20 with or without prescription eyeglasses).
- 2.2.2. Hearing/Speech: Normal hearing and speech.

2.2.3. Physical/Other: Normal dexterity. Top physical condition, NO injuries that could prevent member from training. The table below outlines the minimum physical standards required on the first day of training. Participants who are unable to complete this assessment will be removed from the course immediately. The exercises will be conducted in physical training uniform (t-shirt, shorts, and tennis shoes).

MALE and FEMALE

Component	Criteria	Time Limit
Pull-Ups	7	1 Minute
Push-Ups	50	2 Minutes
Sit-Ups	45	2 Minutes
1.5 Mile Run	Non-Stop	<u>≤</u> 11:48 Minutes
2 Mile Loaded March	With 35lb Ruck Sack	<u><</u> 30:00 Minutes

NOTE: It is imperative to consider the student's ability to meet minimum physical fitness standards as it represents their ability to safely and effectively complete the course. Country managers must ensure selected attendees are evaluated on their physical condition and meet listed standards prior to course attendance.

2.3 Uniform/Equipment: See General Clothing Requirements. All required specialized gear will be provided.

3. Intermediate Military Objectives: This course supports the following

USSOUTHCOM/TCP objectives: 1.1, 1.2, 1.3, 1.4, 1.5, 2.2, 3.3, 3.4, 4.1, 4.2, 4.3, 4.5, 5.1, 5.4, 5.7 and USNORTHCOM/TCP objectives: 1.1, 1.4, 1.5, 1.6, 1.7, 2.1, 2.2, 2.4, 2.5, 3.1, 3.2, 3.3, 4.1, 4.2, 4.3, 4.5, 4.6.

COURSE NUMBER	COURSE NAME	LENGTH
(MASL D173067)	Special Reaction Team (SRT)	6 Weeks
L3AZR1730670SRB		
STUDENT LOAD: MIN: 12	MAX: 25	

1. Course Description: This course is designed for mid-level security forces members of any branch charged with managing high-risk situations. Students will learn SRT tactics to include how to respond to high risk incidents and familiarization with two different weapons systems while focusing on safety and proper weapon handling techniques. They also learn basic window entry techniques, vehicle and aircraft assault interdiction techniques, and "active-shooter" response procedures. This training enables members to support the war against terror as well as counternarcotics operation, peacekeeping efforts, and natural disaster response. The course instruction includes SRT Fundamentals and SRT Tactics.

BLOCK I – SRT FUNDAMENTALS: Includes training in the following areas: Human Rights, Physical Fitness, SRT Concepts of Operations, Introduction to Terrorism, SRT Use of Force Training, Pre-Planning and Tactical Considerations, and Intelligence Gathering.

BLOCK II – SRT TACTICS: Includes training in the following areas: Physical Apprehension and Restraint (PART)/Weapons Retention Techniques, Combatives, Handgun, Rifle, Vehicle Assault, Cylindrical Vehicle Assault, Exterior Movement, Containment & Entry, Building Clearing & Close Quarter Combat, Active Shooter, and a Final Training Exercise.

2. Course Requirements:

2.1. Eligibility: This course is designed for military members no higher than the grade of O-3, police, or civilian equivalent. Personnel not in a security forces or police specialty code may attend with prior coordination.

- 2.2. Physical/Medical:
- 2.2.1. Vision: Normal (20/20 with or without glasses).

2.2.2. Hearing/Speech: Normal hearing and speech.

2.2.3. Physical/Other: Normal dexterity. Top physical condition, NO injuries that could prevent member from training. The following is a table of minimum physical standards required to be met on the first day of training:

MALE

Age	1-Minute Push-Ups	1-Minute Sit-Ups	1.5-Mile Run Time
30 and under	33	42	13:36
30-39	27	39	14:00
40-49	21	34	14:52

FEMALE

Age	1-Minute Push-Ups	1-Minute Sit-Ups	1.5-Mile Run Time
30 and under	18	38	16:22
30-39	14	29	16:57
40-49	11	24	18:14

<u>NOTE</u>: It is imperative to consider the student's ability to meet minimum physical fitness standards as it represents their ability to safely and effectively complete the course. Country managers must ensure selected attendees are evaluated on their physical condition and meet listed standards prior to course attendance.

2.3. Uniform/Equipment: See General Clothing Requirements. All required specialized gear will be provided.

3. Intermediate Military Objectives: This course supports the following USSOUTHCOM/TCP objectives: 1.1, 1.2, 1.3, 1.4, 1.5, 2.2, 3.3, 3.4, 4.1, 4.2, 4.3, 4.5, 5.1, 5.4, 5.7 and USNORTHCOM/TCP objectives: 1.1, 1.4, 1.5, 1.6, 1.7, 2.1, 2.2, 2.4, 2.5, 3.1, 3.2, 3.3, 4.1, 4.2, 4.3, 4.5, 4.6.

<u>NOTE</u>: To get the most out of the Special Reaction Team (SRT) course (MASL 173067) and have a student that can better meet the challenging demands of the career field, we <u>highly encourage</u> attending the Dynamics of Terrorism course (MASL 126086) offered just before the SRT course. Elements of Dynamics of Terrorism are used and applied during the SRT course. Guest countries save funds and also get two courses during one visit to IAAFA.

COURSE NUMBER	COURSE NAME	LENGTH
(MASL D176006) (E-IMET)	Rule of Law and Disciplined	1 Week
L3AZR1760060SRA	Military Operations	
STUDENT LOAD: MIN: 8	MAX: 20	

1. Course Description: This course is designed for international officers and NCOs of any military force. Students learn the basics of the international rules of law and their impact on human rights, including how these international standards fit into the planning of military operations. This information is vital to any country that may participate in international peacekeeping missions sponsored by the United Nations.

2. Course Requirements:

2.1. Eligibility: This course is designed for military members no higher than the grade of O-6, police, or civilian equivalent.

2.2. Physical/Medical:

- 2.2.1. Vision: Normal (20/20 with or without glasses).
- 2.2.2. Hearing/Speech: Normal hearing and speech.

2.2.3. Physical/Other: Normal manual dexterity.

2.3. Uniform/Equipment: See General Clothing Requirements. Normally, this class does not require Mess dress since it is held after end-of-training cycle (no graduation banquet).

3. Intermediate Military Objectives: This course supports the following USSOUTHCOM/TCP objectives: 3.6, 4.2, 4.3, 5.4 and USNORTHCOM/TCP objectives: 3.1, 4.6.

BLANK PAGE

COURSE NUMBER	COURSE NAME	LENGTH
(MASL D179108)	Cyber Security	3 Weeks
L3AZR1791080SRA		
STUDENT LOAD: MIN: 4	MAX: 10	

1. Course Description: This course is designed for students to develop cyber security skills and knowledge. Students learn to identify user problems, such as data access needs, security violations, and changes in programming. They receive training in strengthening digital documents' security, network security, emergency measures, and establishing policy, procedures, and necessary system tests or trials. Additional areas of training focus on how to create training programs for users and foster security consciousness to ensure system integrity and improve server/net efficiency. Finally, students learn to supervise data use and regulate its access in order to safeguard file information. The course instruction includes Calculating the Risk, Infrastructure and Connectivity, Network Protection, Threats and Vulnerabilities, Identity and Access Control, Educating and Protecting the User, Operating System and Application of Security, Cryptography Fundamentals, Cryptography Implementation, Physical Security and Hardware-based, Network Vulnerability and Security, Wireless Security, and Security-related Directives and Procedures.

BLOCK I – CYBER SECURITY: Focuses on cyber security issues, network security, and the policies and procedures for implementing a cyber security program.

2. Course Requirements:

2.1. Eligibility: This course is designed for military members no higher than the grade of O-5, police, or civilian equivalent who work with information technology systems. Basic personal computer knowledge is highly desirable, but not required.

2.2. Physical/Medical:

- 2.2.1. Vision: Normal (20/20 with or without glasses).
- 2.2.2. Hearing/Speech: Normal hearing and speech.
- 2.2.3. Physical/Other: Normal dexterity.

2.3. Uniform/Equipment: See General Clothing Requirements.

3. Other Information: Students are encouraged to support course objectives with their previous experience.

4. Intermediate Military Objectives: This course supports the following USSOUTHCOM/TCP objectives: 1.1, 1.2, 1.3, 1.4, 1.5, 4.1, 4.3, 4.4, 4.5, 5.2, 5.4, 5.5 and USNORTHCOM/TCP objectives: 1.4, 1.5, 1.7, 2.1, 2.2, 2.3, 2.4, 2.5, 3.1, 3.2, 3.3, 3.4, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6.

BLANK PAGE

COURSE NUMBER	COURSE NAME	LENGTH
(MASL D179113)	Cyber Networks	3 Weeks
L3AZR1791130SRA		
STUDENT LOAD: MIN: 4	MAX: 10	

1. Course Description: This course is design to teach students to develop cyber network skills and knowledge. Course topics include, but are not limited to, network topologies and protocols, local and wide area networking, layering model, wireless networking, and logical and physical network addressing. Students learn to identify network components and how they interact with each other. Additionally, the course contains various hands-on networking projects.

BLOCK I – CYBER NETWORKS: Introduces students to network fundamentals, network operation and configuration, wireless and wide area networks, and network server infrastructure.

2. Course Requirements:

2.1. Eligibility: This course is designed for military members no higher than the grade of O-5, police, or civilian equivalent who work with information technology systems. Basic personal computer knowledge is highly desirable, but not required.

- 2.2. Physical/Medical:
- 2.2.1. Vision: Normal (20/20 with or without glasses).
- 2.2.2. Hearing/Speech: Normal hearing and speech.
- 2.2.3. Physical/Other: Normal dexterity.
- 2.3. Uniform/Equipment: See General Clothing Requirements.

3. Other Information: Students are encouraged to support course objectives with their previous experience.

4. Intermediate Military Objectives: This course supports the following USSOUTHCOM/TCP objectives: 1.1, 1.2, 1.3, 1.4, 1.5, 4.1, 4.3, 4.4, 4.5, 5.2, 5.4, 5.5 and USNORTHCOM/TCP objectives: 1.4, 1.5, 1.7, 2.1, 2.2, 2.3, 2.4, 2.5, 3.1, 3.2, 3.3, 3.4, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6.

BLANK PAGE

AIRCRAFT AND SYSTEMS TRAINING COURSES

BLANK PAGE

COURSE NUMBER	COURSE NAME	LENGTH
(MASL D133060)	Avionics Communication/Navigation	12 Weeks
L3AQR1330600SRC	Technician	
STUDENT LOAD: MIN: 4	MAX: 12	

1. Course Description: This specialized course provides training on inspection and replacement of Avionics Communications/Navigation equipment, focusing on flight line operations. Students learn a basic familiarization of common Communication/Navigation systems. They receive hands-on training on replacement of major system components and operational checkouts on the aircraft. The course instruction includes General Maintenance Practices, Soldering, Interphone Systems, Radio Frequency Fundamentals, Communication Radios, Automatic Direction Finder (ADF) System, VHF Omni-Range/Instrument Landing System/Marker Beacon (VOR/ILS/MB) system, Global Positioning System (GPS), and Combined Altitude Radar Altimeter (CARA) System.

BLOCK I – GENERAL COM/NAV MAINTENANCE PRACTICES: Instructs in safety, Technical Orders (T.O.), the consolidated tool kit, aircraft maintenance form AFTO 781, and technician training documentation.

BLOCK II – **SOLDERING:** Familiarizes students with soldering processes. They also learn to make a connector and communication cable.

BLOCK III – INTERPHONE SYSTEMS: Teaches students the operation, characteristics and functions of all the main components. During troubleshooting scenarios fail students gain a basic knowledge of the concepts of troubleshooting failures with regards to an intercom system. In addition, students gain hands-on experience in replacing major components followed by checking the performance of the system. Upon completion of this block, the student will know the modes of operation and be able to carry out performance tests and analyze faults in the system on board the aircraft.

BLOCK IV – RADIO FREQUENCY (RF) FUNDAMENTALS: Teaches the basic data and RF terms. In addition, students gain a basic understanding of the RF transmission and reception process.

BLOCK V – **COMMUNICATION RADIOS:** Provides the basis for the understanding of common aircraft radios. Students receive practice in troubleshooting failures, component replacement and performance tests. Upon completion of this block, students know the modes of operation and are able to carry out performance tests and analyze faults in the equipment on board the aircraft.

BLOCK VI – AUTOMATIC DIRECTION FINDER (ADF) SYSTEM: Teaches a basic understanding of ADF systems. Students receive practice in component replacement and performance testing. Upon completion of this block, the students know the modes of operation, are able to replace main components, and are able to carry out operational tests on board the aircraft.

BLOCK VII – VERY HIGH FREQUENCY OMNI-RANGE/INSTRUMENT LANDING SYSTEM MARKER BEACON (VOR/ILS/MB) SYSTEM: Teaches basic data, terms and functions of the main components of a VOR/ILS/MB system. In addition, students are provided practical training on the replacement of common components of a VOR/ILS /MB system and the test system.

BLOCK VIII – **GLOBAL POSITIONING SYSTEM (GPS):** Provides the basis for understanding GPS concepts. Students receive practice on the procedures of troubleshooting failures and replacement of components in the GPS. The students gain a basic knowledge of GPS and practical experience of replacing GPS components on board the aircraft.

BLOCK IX – COMBINED ALTITUDE RADAR ALTIMETER SYSTEM: Provides the basis for the understanding of CARA systems. Students receive practice in troubleshooting failures and component replacement procedures in a CARA system. Students gain a basic understanding of radar and CARA systems. Additionally, students gain practical experience of replacing CARA components on board the aircraft.

2. Course Requirements:

2.1. Eligibility: This course is designed for military members no higher than the grade of O-4, police, or civilian equivalent.

2.2. Physical/Medical:

2.2.1. Vision: Normal (20/20 with or without glasses).

2.2.2. Hearing/Speech: Normal hearing and speech.

2.2.3. Physical/Other: Normal dexterity.

2.3. Uniform/Equipment: See General Clothing Requirements. Non-conductive plastic frames for eyeglasses are mandatory for students who wear glasses. All specialized gear is provided.

3. Intermediate Military Objectives: This course supports the following USSOUTHCOM/TCP objectives: 1.1, 1.2, 1.3, 1.5, 2.1, 2.2, 2.3, 3.4, 4.3, 5.4 and USNORTHCOM/TCP objectives: 1.2, 1.3, 2.1, 2.5, 4.2, 4.3, 4.4, 4.5, 4.6.

COURSE NUMBER	COURSE NAME	LENGTH
(MASL D141243)	Aircraft Maintenance Officer	10 Weeks
L3OZR1412430SRC		
STUDENT LOAD: MIN: 4	MAX: 12	

1. Course Description: This course provides training for selected officers, or civilian equivalent, on managerial knowledge and skills needed to perform Aircraft Maintenance Officer duties at the operational level. Students obtain maintenance management skills to help them develop, prepare, execute, and sustain maintenance activities in support of the flying mission. The curriculum provides a comprehensive organizational structure overview, responsibilities and management techniques used in planning, and executing and measuring performance of a maintenance organization. This course includes Air Force Safety Programs; Air Force Occupational Safety and Health Standards; Human Factors; Risk Management (RM), Quality Assurance (QA), Continuous Process Improvement (CPI): Organizational Maintenance Structure and Responsibilities: Fundamentals of Leading a Maintenance Organization; Maintenance Functions; Flying and Maintenance Scheduling; Application and interpretation of Maintenance Performance Indicators and, Aircraft Generation Planning and Execution. The curriculum culminates with a maintenance operations simulator. This allows the students in training to apply the knowledge and skills they gained in a highly detailed and adaptive virtual environment. The simulator helps identify strengths and weaknesses in each student, affording them the opportunity to improve without affecting real world maintenance operations.

BLOCK I – Organizational Fundamentals: Familiarizes students with the Academy's policies, programs, and academic objective requirements. A virtual maintenance operations simulation initiates the course objective, where the student receives basic knowledge of a maintenance operating organization that establishes the experiential foundation for the remainder of the course. The block also identifies the structure, terms, and programs within an Air Force maintenance organization.

BLOCK II – Operational Safety: Provides the student with the fundamentals of the Air Force Safety Culture, as well as the management of specific programs and agencies that ultimately increase mission effectiveness. Covered subjects include AF safety program, human factors, accident prevention, Environmental Protection Agency (EPA), Hazardous Materials (HAZMAT), Hazardous Communications (HAZCOM), Risk Management (RM), and Quality Assurance (QA).

BLOCK III – Continuous Improvement: Demonstrates the Continuous Process Improvement concept, intended to ensure the understanding of team dynamics, fundamentals, methodologies, tools, and techniques that improve maintenance process improvement.

BLOCK IV – **Mission Generation:** This block teaches students the fundamentals in leading a maintenance organization where students identify challenges associated with balancing operational capabilities, resources, and personnel. Mission requirements necessary to complete operational commitment, and Maintenance and flying planning and execution, are concepts put into practice during a planning and execution exercise on the virtual maintenance operations simulator.

BLOCK V – **Maintenance Analysis:** The objective of this block is to introduce students to documentation procedures and responsibilities, reporting procedures, and Maintenance Performance Indicators. Maintenance Performance Indicators teaches the student general maintenance analysis with emphasis given to maintenance trend analysis, statistical techniques for analysis studies, and probability applications.

BLOCK VI – **Mission Generation Execution:** This block is the capstone of the ten-week course. Students must utilize knowledge gained from previous blocks to develop a flying scheduled requirement that incorporates maintenance and flying activities. Students achieve this by managing a given amount of aircraft, resources, and personnel while effectively sustaining operational mission requirements. The seven day simulation gives students a variety of simulated conflicting maintenance and scheduling situations that identify strengths and weaknesses in the decision making process. Students must develop a report containing daily maintenance statistical indicators, process indicators, and quantified data. Students present the data to the MXG/CC at the daily Maintenance meeting detailing the success or failure of achieving mission requirements.

2. Course Requirements:

2.1. Eligibility: This course is designed for officers in the grades of O-1 through O-6, police, or civilian equivalent. Basic maintenance knowledge is highly desirable.

2.2. Physical/Medical:

2.2.1. Vision: Normal (20/20 with or without glasses).

2.2.2. Hearing/Speech: Normal hearing and speech.

2.2.3. Physical/Other: Normal dexterity.

2.3. Uniform/Equipment: See General Clothing Requirements.

3. Other Information: Students are encouraged to bring material referencing a process problem within their organization to share in class during a presentation.

4. Intermediate Military Objectives: This course supports the following USSOUTHCOM/TCP objectives: 1.1, 1.2, 1.4, 1.5, 3.1, 3.2, 3.4, 3.5, 3.6, 4.1, 4.3, 5.1, 5.2, 5.4 and USNORTHCOM/TCP objectives: 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 2.1, 2.2, 2.5, 3.1, 3.2, 3.3, 3.4, 4.3, 4.4, 4.5, 4.6.

COURSE NUMBER	COURSE NAME	LENGTH
(MASL D141247)	Aircraft Hydraulic Systems	12 Weeks
L3AZR1412470SRC	Technician	
STUDENT LOAD: MIN: 4	MAX: 12	

1. Course Description: This course is designed to train Aircraft Hydraulic Systems Technicians on the fundamentals of aircraft hydraulic systems at the apprentice and journeyman level. Students learn hydraulic and pneumatic principles, system theory, hydraulic system and subsystem operation, on-aircraft troubleshooting techniques, and related system support equipment. The course instruction includes Fundamentals, Units and Systems, Aircraft Management, Back Shop Maintenance, and Inspection and Maintenance.

BLOCK I – FUNDAMENTALS: Orients students on the academy's policies, programs, and academic objective requirements. Instruction is provided on ground, back-shop, and flight line safety. Students learn the principles of flight, hydraulics, and pneumatics. They also learn basic pneudraulics, electrical principals and fundamentals, and the operation of the multimeter.

BLOCK II – **UNITS AND SYSTEMS:** Familiarizes students with Aircraft Hydraulics fundamentals, components, and systems. Utilizing schematics, students learn the theory of operation of fighter aircraft and cargo aircraft hydraulic system and subsystems. They perform maintenance and operational checks on hydraulic system and subsystems such as power, cargo doors and ramp, landing gear, wheel brake, and flight controls. Students also learn structured troubleshooting methods and servicing.

BLOCK III – AIRCRAFT MANAGEMENT: Provides students instruction on aircraft, support equipment maintenance, and service documentation. Students learn aircraft and support equipment forms utilization. Also, students learn how to identify and utilize technical order publications.

BLOCK IV – BACK SHOP MAINTENANCE: Concentrates on Hydraulics Back shop maintenance. Students learn the operation and maintenance of in-shop equipment. They also learn the overhaul process of hydraulic components such as brake assemblies. Lastly, students hand/machine build and test hydraulic and pneumatic flexible hoses.

BLOCK V – INSPECTION AND MAINTENANCE: Focuses on aircraft and support equipment inspections and maintenance. Students learn the concepts and principles of preventive maintenance and inspections. They also learn how to operate support equipment such as power units, hydraulic stands, and hydraulic/nitrogen servicing carts.

2. Course Requirements:

2.1. Eligibility: This course is designed for military members no higher than the grade of O-4, police, or civilian equivalent.

2.2. Physical/Medical:

2.2.1. Vision: Normal (20/20 with or without glasses).

2.2.2. Hearing/Speech: Normal hearing.

2.2.3. Other: Normal manual dexterity.

2.3. Uniform/Equipment: See General Clothing Requirements. Non-conductive plastic frames for eyeglasses are mandatory for students who wear glasses. All specialized gear is provided.

3. Intermediate Military Objectives: This course supports the following USSOUTHCOM/TCP objectives: 1.1, 1.2, 1.3, 1.5, 2.1, 2.2, 2.3, 3.4, 4.3, 5.4 and USNORTHCOM/TCP objectives: 1.2, 1.3, 2.1, 2.5, 4.2, 4.3, 4.4, 4.5, 4.6.
COURSE NUMBER	COURSE NAME	LENGTH
(MASL D141249)	Aircraft Maintenance	10 weeks
L3AAR1412490SRA	Superintendent	
STUDENT LOAD: MIN: 4	MAX: 12	

1. Course Description: This course is designed for experienced senior Noncommissioned Officers or civilian equivalents that perform supervisory and/or superintendent duties and assume a greater leadership role within a maintenance complex. Students increase their knowledge and understanding of maintenance operations while honing his/her military professionalism and increasing their ability to function as a senior maintenance supervisor and/or Maintenance Superintendent. The course instruction includes General Subjects, Operational Programs, USAF Technical Order, Aircraft Forms And Logistics Systems, On-The-Job Training (OJT), Personnel Management, Maintenance Organization Structure and Responsibilities, and Aircraft Generation.

BLOCK I – GENERAL SUBJECTS: Familiarizes students with the Academy's policies, programs, and academic objective requirements. It also provides the student with an introduction to Human Rights. This block provides detailed lectures and discussions on the maintenance safety doctrine, Supervisory Safety responsibilities, Safety practices, and the Air Force Occupational Safety and Mishap Prevention Program.

BLOCK II – OPERATIONAL PROGRAMS: Provides the student with the fundamentals of the Risk Management (RM) program, Job Safety Analysis, and the Quality Assurance (QA) functions. Covered subjects include: the role and responsibilities of QA in evaluating and assessing personnel proficiency (including the quality and effectiveness of training programs), equipment, and aircraft condition, as well as the management of specific programs that ultimately increase mission effectiveness.

BLOCK III – USAF TECHNICAL ORDER, AIRCRAFT FORMS AND LOGISTICS SYSTEMS: Introduces students to the AF publication system, followed by a familiarization with the Technical Order (TO) system, the TO Index system, and the TO numbering system. Students learn the purpose, authority, and use of the USAF TO system, and illustrated parts breakdowns. They also learn to research and select the proper Technical Order and determine the status of Technical Orders.

BLOCK IV – **ON-THE-JOB TRAINING (OJT):** Introduces students to the On-the-Job-Training Program. Students learn the structure of the program and responsibilities of key personnel within training program. It also teaches supervisors how to plan, conduct, evaluate and document training.

BLOCK V – PERSONNEL MANAGEMENT: Teaches students a working knowledge of the principles and techniques of effective personnel management to include: supervisory job and responsibilities, the management process, effective leadership, human relations, effective communication, and counseling. These principles and techniques further hone the military professionalism and leadership trait of students.

BLOCK VI – MAINTENANCE ORGANIZATION STRUCTURE AND RESPONSIBILITIES: Demonstrates weight and balance principles in aircraft maintenance operations. Students learn and perform mathematical formulas used to calculate aircraft weight changes, aircraft Center of Gravity (CG) changes, and proper forms documentation related to weight and balance.

BLOCK VII – AIRCRAFT GENERATION: Teaches the requirements for aircraft reports, statistics, maintenance indicators, and maintenance focused on reliability.

2. Course Requirements:

2.1. Eligibility: This course is designed for military members between the grades of E-5 through E-9, police or civilians equivalent, who are performing aircraft maintenance superintendent duties or that will perform aircraft maintenance superintendent duties immediately after attending this course.

2.2. Medical requirements:

- 2.2.1. Vision: Normal (20/20 with or without glasses).
- 2.2.2. Speech: Normal hearing and speech.
- 2.2.3. Physical: Normal dexterity.
- 2.3. Uniform/Equipment: See General Clothing Requirements.

3. Intermediate Military Objectives: This course supports the following USSOUTHCOM/TCP objectives: 1.1, 1.2, 1.4, 1.5, 3.1, 3.2, 3.4, 3.5, 3.6, 4.1, 4.3, 5.1, 5.2, 5.4 and USNORTHCOM/TCP objectives: 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 2.1, 2.2, 2.5, 3.1, 3.2, 3.3, 3.4, 4.3, 4.4, 4.5, 4.6.

COURSE NUMBER	COURSE NAME	LENGTH
(MASL D141251)	Aircraft Technician	12 Weeks
L3AQR1412510SRA		
STUDENT LOAD: MIN: 4	MAX: 12	

1. Course Description: This course is designed to train aircraft maintenance technician apprentices on operational principles and theory of ground safety, aircraft systems and subsystems, component description and operation, aircraft ground handling, inspection, servicing procedures, and operation of aerospace ground equipment. Students learn aircraft familiarization of light aircraft (fighters, trainers, and attack). They are required to pass a written and or performance test at the end of certain blocks prior to advancement to the next block of instruction. The course instruction includes Familiarization, Aircraft General, Electrical System, Utility Systems, Pneudraulics System, Flight Control System, Fuel Systems, and Jet Engine and Subsystems.

BLOCK I – FUNDAMENTALS: Consists of course orientation, academy's policies, programs, and academic objective requirements. Students learn safety principles, accident prevention, aircraft ground safety, and flight line procedures. They also learn about Technical Orders (T.O.), aircraft records, inspection systems, hand tools, and aircraft hardware.

BLOCK II – **AIRCRAFT GENERAL:** Teaches students the variety of airframe structures, reference datum numbering, and aircraft markings. Students learn aircraft ground handling, marshalling procedures, parking, towing, mooring, and jacking. Students also learn the principles and use of non-powered ground support equipment, operation of powered ground support equipment, corrosion control, and aircraft safe for maintenance.

BLOCK III - ELECTRICAL SYSTEM: Teaches students the operational concepts and theory of electricity, circuits, and components. They learn identification and inspection procedures of the direct and alternating current systems, aircraft lighting systems, and operation of aircraft fire and overheat warning systems.

BLOCK IV - UTILITY SYSTEMS: Teaches the fundamental principles, components, theory of operation, and inspection procedures of the bleed air system, air-conditioning and pressurization systems, fire extinguisher, and anti-icing and de-icing systems. Additionally, it discusses the operation of the liquid and gaseous oxygen system, servicing procedures, and the inspection procedures of the utility systems.

BLOCK V - **PNEUDRAULIC SYSTEM:** Teaches students aircraft pneudraulics systems, components, and operation. Students learn the aircraft's landing gear, inspection, components, and operational checks of the system. Students also learn removal and installation of wheel/tire and brake assembly.

BLOCK VI - FLIGHT CONTROL SYSTEM: Teaches theory and principles of flight. Students identify and state the purpose of the primary and secondary flight control surfaces and components. Students also perform procedures of inspection, rigging, removal and installation of flight control surfaces.

BLOCK VII - FUEL SYSTEMS: Teaches the fundamentals of the fuel system, inspection procedures and safety precautions, components and operation of the internal and external fuel system, and inspection and servicing procedures.

BLOCK VIII – JET ENGINE AND SUBSYSTEMS: Teaches the technical terminology, major sections, and component on several types of jet engines. They also learn principles of operation, inspection and component location, and subsystems. Finally, students learn to remove, inspect, and install an engine.

2. Course Requirements:

2.1. Eligibility: This course is designed for military members no higher than the grade of O-4, police, or civilian equivalent.

- 2.2. Physical/Medical:
- 2.2.1. Vision: Normal (20/20 with or without glasses).
- 2.2.2. Hearing/Speech: Normal hearing and speech.
- 2.2.3. Physical/Other: Normal dexterity.

2.3. Uniform/Equipment: See General Clothing Requirements. All specialized uniforms will be provided.

3. Intermediate Military Objectives: This course supports the following USSOUTHCOM/TCP objectives: 1.1, 1.2, 1.4, 1.5, 2.1, 2.2, 2.3, 3.4, 4.3, 5.1, 5.2, 5.4 and USNORTHCOM/TCP objectives: 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 2.1, 2.2, 2.3, 2.4, 2.5, 3.1, 3.2, 3.3, 4.3, 4.4, 4.5, 4.6.

COURSE NUMBER	COURSE NAME	LENGTH
(MASL D141253)	Avionics Instrument Technician	12 Weeks
L3AQR1412530SRB		
STUDENT LOAD: MIN: 4	MAX: 12	

1. Course Description: This course is designed to take students through all phases of various avionics instrument and flight control systems. Students learn identification and relationship of associated systems. They are able to state principles and facts for all systems and associated systems, and have in-depth understanding needed to work these systems throughout their careers. They are required to pass a written and/or performance test at the end of certain blocks prior to advancement to the next block of instruction. The course instruction includes Maintenance Concepts, General Wire Maintenance, Quantity Indicating Systems, Barometric Flight Instruments, Engine Instrument Systems, Integrated Flight Instruments Systems, Compass Systems, and Advanced Systems.

BLOCK I – MAINTENANCE CONCEPTS: Consists of academy's policies and procedures, hazards, and ground safety. Students are familiarized with maintenance and electrical fundamentals, as well as aircraft and flight theory needed for subsequent blocks of instruction. Finally, the theory of basic electromechanical devices is covered to establish the background for more complex systems. Students learn the principles of operation, terminology, and characteristics of transformers, relays, motors and generators, as well as remote position indicating systems (Synchros, Magnesyn and Selsyn).

BLOCK II – GENERAL WIRE MAINTENANCE: Introduces general wire basics and inspection procedures. The principles of wire repair are also covered through wire splices and safety devices. Students also learn how to solder and safety wire.

BLOCK III – QUANTITY INDICATING SYSTEMS: Introduces students to aircraft quantity indication systems and direct pressure indication systems. The principles of operation, terminology, and characteristics are explained, to include: resistive type quantity indicating systems, capacitance type fuel quantity indicating systems, and direct pressure indicating systems. Students learn to use test equipment such as the capacitive fuel quantity tester.

BLOCK IV – BAROMETRIC FLIGHT INSTRUMENTS: Introduces aircraft pitot-static systems. It covers the theory of barometric altimeters, vertical velocity indicators, and airspeed indicators. It concludes with training on the Traffic Collision Avoidance System (TCAS). Students perform a complete checkout of a pitot-static system and all associated instruments using the TTU-205F test set.

BLOCK V – ENGINE INSTRUMENT SYSTEMS: Teaches the principles of operation and terminology of engine instrument indication systems. Students are familiarized with the characteristics of synchronous pressure indicating systems, fuel flow indicating systems, tachometer indicating systems, temperature indicating systems, and torque indicating systems. Students learn to use test equipment such as TTU-23 for synchronous systems, TTU-27 for testing instruments and transmitters in a tachometer system, and the Jet-Cal tester for thermocouple testing.

BLOCK VI – INTEGRATED FLIGHT INSTRUMENTS SYSTEMS: Covers the principles of operation, terminology, and characteristics of the G-meter, Gyroscopic Principles, Turn and Bank Indicator, Self-Contained Attitude Indicators such as the J-8, Remote Attitude Indicating Systems, and Flight Director Systems. Students get hands-on training and interaction with working mockups of these systems.

BLOCK VII – **COMPASS SYSTEMS:** Teaches the principles of operation, terminology, and characteristics of the standby compass and electronic gyro compass systems such as C-12. A working mockup of the electronic compass is provided for interaction and hands on training, as well as an Attitude Hearing and Reference System (AHRS) mockup.

BLOCK VIII – **ADVANCED SYSTEMS:** Teaches the principles of operation, terminology, and characteristics of the Stall Warning System and Autopilot System, and students complete a functional analysis of the autopilot system. They gain valuable knowledge applicable to all autopilot systems in general. Mockup and desktop simulations are provided in order to perform hands on training.

2. Course Requirements:

2.1. Eligibility: This course is designed for military members of all branches, law enforcement agencies no higher than the grade of O-4, police, or civilian equivalent.

2.2. Physical/Medical:

2.2.1. Vision: Normal (20/20 with or without glasses with non-conductive material).

2.2.2. Hearing/Speech: Normal hearing and speech.

2.2.3. Physical/Other: Normal dexterity.

2.3. Uniform/Equipment: See General Clothing Requirements. Non-conductive plastic frames for eyeglasses are mandatory for students who wear glasses. All specialized gear is provided.

3. Intermediate Military Objectives: This course supports the following USSOUTHCOM/TCP objectives: 1.1, 1.2, 1.3, 1.5, 2.1, 2.2, 2.3, 3.4, 4.3, 5.4 and USNORTHCOM/TCP objectives: 1.2, 1.3, 2.1, 2.5, 4.2, 4.3, 4.4, 4.5, 4.6.

COURSE NUMBER	COURSE NAME	LENGTH
(MASL D141254)	Aircraft Electrical Fundamentals	12 Weeks
L3AQR1412540SRC	Technician	
STUDENT LOAD: MIN: 4	MAX: 12	

1. Course Description: This course is designed to provide aircraft electrical fundamentals for the apprentice level student and serves as the foundation for aircraft electrical system maintainers. Students learn to confidently repair aircraft electrical systems. They receive training in aircraft safety, electrical theory and principles, equipment and maintenance, and operational procedures. Instruments, communication, navigation, and armament systems are excluded from this course. The course instruction includes Maintenance Basics, Direct Current (DC) Principles, Alternating Current (AC) Electronics, Diagrams and Troubleshooting, Wire Maintenance I, Aircraft Systems Operational Checks and Troubleshooting, and Wire Maintenance II.

BLOCK I – **MAINTENANCE BASICS:** Includes an introduction to the Aircraft Electrical Fundamentals Course. Students will see the course outline and content. Topics discussed in this block are safety; maintenance publications and documentation, aircraft familiarization; hand tools, hardware and safety devices.

BLOCK II – DIRECT CURRENT (DC) PRINCIPLES: Covers DC electrical fundamentals, magnetism, DC generators, DC motors, electrical and electronic symbols, battery fundamentals, series circuits, parallel circuits, series-parallel circuits and multi meter operation fundamentals.

BLOCK III – ALTERNATING CURRENT (AC) ELECTRONICS: Teaches AC fundamentals, inductors, transformers, capacitors, AC generator, semiconductors, solid state devices, electronic voltage regulators, and logic gates and data buses.

BLOCK IV -- DIAGRAMS AND TROUBLESHOOTING: Includes introduction to electrical wire diagrams and fundamentals of troubleshooting techniques, three-phase generators, single AC generator system, and diagram tracing.

BLOCK V – WIRE MAINTENANCE I: Teaches about electrical wire types, wire inspections, wire maintenances techniques cannon plugs/pins and are introduced to the fundamentals of soldering electrical components. All knowledge acquired is later applied in a laboratory environment.

BLOCK VI – AIRCRAFT SYSTEMS OPERATIONAL CHECKS AND TROUBLESHOOTING: Teaches about specific aircraft electrical systems that include internal/external lighting, indication, and power generation, all while learning how to accomplish systems checks. They will have the opportunity to practice how to troubleshoot these specific systems in a laboratory environment using test stands with real aircraft parts.

BLOCK VII – WIRE MAINTENANCE I: Includes an opportunity for students to showcase all the material they have learned throughout the class by building an operational aircraft electrical system using real aircraft electrical systems parts. They will also perform trouble shooting and will repair the system using the techniques discussed in class.

2. Course Requirements:

2.1 Eligibility: Open to military members no higher than the grade of O-4, police, or civilian equivalent.

2.2. Physical/Medical:

2.2.1. Vision: Normal (20/20 with or without glasses), plastic or non-conductive frame glasses (if worn).

2.2.2. Hearing/Speech: Normal hearing and speech.

2.2.3. Physical/Other: Normal dexterity.

2.3. Uniform/Equipment: In addition to the uniform requirements listed in the General Clothing Requirements in General Information section, students in this course are required to bring the following utility or work uniform: BDUs, fatigues, coveralls.

3. Intermediate Military Objectives: This course supports the following USSOUTHCOM/TCP objectives: 1.1, 1.2, 1.3, 1.5, 2.1, 2.2, 2.3, 3.4, 4.3, 5.4 and USNORTHCOM/TCP objectives: 1.2, 1.3, 2.1, 2.5, 4.2, 4.3, 4.4, 4.5, 4.6.

COURSE NUMBER	COURSE NAME	LENGTH
(MASL D141257)	Helicopter Crew Chief	12 weeks
L3AZR1412570SRB		
STUDENT LOAD: MIN: 5	MAX: 10	

1. Course Description: This course is designed for personnel working as a helicopter maintenance technician. Students learn ground safety, publications, airframe familiarization, landing gear maintenance, special and common tools, hydraulic, electrical, instruments and avionics system familiarization, rotary wing aerodynamics, major component removal and installation, flight control system rigging, T-53 engine and related systems inspections, drive train systems maintenance, familiarization of vibration equipment (as applicable to helicopters). The course instruction includes General Subjects, Helicopter General, Helicopter Systems, Helicopter Power plant, Rotor Systems, Power Train and Flight Control Systems.

BLOCK I – GENERAL SUBJECTS: Includes a course orientation, where students learn about the academy's policies, programs, and academic objective requirements. Students are given an introduction to safety doctrine and practices. They learn the importance of ground safety and its effects on the maintenance activity, with emphasis on awareness and compliance. The students also learn how to identify and properly use maintenance manuals and other reference materials. In addition, students learn about the responsibilities of the helicopter maintenance organization and the different levels of supervision. Students are also instructed on how to perform different types of preventive maintenance procedures, required inspections, and documentation.

BLOCK II - HELICOPTER GENERAL: Teaches students how to properly identify and use common and special tools. Students learn to identify different types of aircraft hardware and aircraft tubing and hoses, according to their color-coded decals. Students also learn to correctly select and install safety devices. The purpose, operation, and safety for different types of powered and non-powered ground support equipment are taught during this block. Students learn to recognize and treat different types of corrosion and the procedures for corrosion control. Helicopter ground handling is also included in this block. Students learn hand signals and proper towing procedures. Students will also remove, inspect, and install the helicopter main landing gear. Students are familiarized with the theory and construction of H-1 helicopter variants.

BLOCK III – HELICOPTER SYSTEMS: Teaches students the fundamental theory of operation, purpose, and component location of helicopter systems to include hydraulic, electrical, instruments, utility, and fuel systems. Through schematics students are able to visualize the entire flow of these systems and learn the functions of various valves and pumps located within them. They also learn the identification of different instruments and the meaning of range markings.

BLOCK IV – HELICOPTER POWERPLANT: Teaches the theory of operation for each T-53 engine system. This block also teaches the proper removal and installation procedure for the T-53 engine.

BLOCK V – ROTOR SYSTEMS: Familiarizes students with different types of main rotors and their major components. Students remove the stabilizer bar, main rotor, and blades from H-1 helicopter variants. They learn the procedures for the stabilizer bar damper check. Familiarization with the tail rotor system is also taught within this block. Students remove and install the tail rotor, and the pitch change mechanism is discussed. Students also learn about helicopter vibrations and its affects in flight.

BLOCK VI – POWER TRAIN SYSTEM: Familiarizes students with information about the helicopter power train system. Students remove and install the main transmission. The removal and installation of the tail rotor drive shafts, hanger bearing assemblies, and 42 degree and 90 degree gearboxes are also accomplished during this block. In this block, students install the stabilizer bar, main rotor, and blades as these components were removed prior to removing the main transmission.

BLOCK VII – **FLIGHT CONTROL SYSTEM:** Familiarizes students with the purpose and functions of helicopter flight controls. Students perform rigging procedures on flight controls to include the collective, cyclic, tail rotor, and synchronized elevator systems.

2. Course Requirements:

2.1. Eligibility: This course is designed for military members no higher than the grade of O-4, police, or civilian equivalent.

- 2.2. Physical/Medical:
- 2.2.1. Vision: Normal (20/20 with or without glasses).
- 2.2.2. Hearing/Speech: Normal hearing and speech.
- 2.2.3. Physical/Other: Normal dexterity

2.3. Uniform/Equipment: See General Clothing Requirements. All specialized uniforms will be provided.

3. Intermediate Military Objectives: This course supports the following USSOUTHCOM/TCP objectives: 1.1, 1.2, 1.5, 2.1, 2.2, 2.3, 3.2, 3.4, 4.3, 5.1, 5.2, 5.4 and USNORTHCOM/TCP objectives: 1.1, 1.3, 1.4, 1.5, 1.6, 2.1, 2.5, 3.1, 3.3, 4.3, 4.4, 4.6.

COURSE NUMBER	COURSE NAME	LENGTH
(MASL D141090)	Turboprop Technician	11 Weeks
L3AAR1410900SRA		
STUDENT LOAD: MIN: 4	MAX: 10	

1. Course Description: This course is designed to provide turboprop engine and propeller technicians with advanced operational theory and hands-on maintenance training in order to establish a solid craftsman foundation. Students learn to evaluate conditions and make proper repair decisions of turboprop engine and propeller operating systems and subsystems using the T-56 engine and Hamilton Standard propeller as a platform. They are required to pass a written and or performance test at the end of certain blocks prior to advancement to the next block of instruction. The course instruction includes Engine familiarization, Engine System Operation, Engine Maintenance, Propeller Familiarization, Propeller Operation and Systems, and Propeller Maintenance.

BLOCK I – **ENGINE FAMILIARIZATION:** Consists of an in-depth description and familiarization about the turboprop engine to include a detailed description of all engine components.

BLOCK II – ENGINE SYSTEMS OPERATION: Includes engine principles and operational theory on all gearbox accessories and engine components. Students learn troubleshooting principles and apply their newly acquired system's knowledge to troubleshoot common system faults.

BLOCK III – ENGINE MAINTENANCE: Uses practical application to demonstrate new student knowledge. Students remove and install critical engine components and perform a complete turbine teardown and build-up. Students also learn important trouble shooting procedures and in-shop maintenance practices.

BLOCK IV – PROPELLER FAMILIARIZATION: Gives a comprehensive description and familiarization about the Hamilton Standard propeller and its major components.

BLOCK V – PROPELLER OPERATION AND SYSTEMS: Teaches information about operational theory and trouble-shooting techniques on the propeller's systems and sub-systems.

BLOCK VI – PROPELLER MAINTENANCE: Applies all items learned during the course and students completely rebuild the engine's propeller and sub-assembly using special tools.

2. Course Requirements.

2.1. Eligibility: This course is designed for military members no higher than the grade of O-4, police, or civilian equivalent who have completed an apprentice-level propeller technician course or have one of propeller maintenance experience.

2.2. Physical/Medical:

2.2.1. Vision: Normal (20/20 with or without glasses).

- 2.2.2. Hearing/Speech: Normal hearing and speech.
- 2.2.3. Physical/Other: Normal dexterity.
- 2.3. Uniform/Equipment: See General Clothing Requirements.

3. Intermediate Military Objectives: This course supports the following USSOUTHCOM/TCP objectives: 1.1, 1.2, 1.4, 1.5, 2.1, 2.2, 2.3, 3.1, 3.2, 3.4, 4.3, 5.1, 5.2, 5.4 and USNORTHCOM/TCP objectives: 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 2.1, 2.2, 2.3, 2.4, 2.5, 3.1, 3.2, 3.3, 4.3, 4.4, 4.5, 4.6.

BLANK PAGE

COURSE NUMBER	COURSE NAME	LENGTH
(MASL D141282)	Corrosion Control Technician	6 Weeks
L3AZR1412820SRC		
STUDENT LOAD: MIN: 4	MAX: 8	

1. Course Description: This course is designed to train maintenance personnel in the fundamentals of corrosion control. Students learn procedural requirements for the detection, prevention, and treatment of corrosion on aircraft and equipment. They receive training in cleaning and inspecting aerospace equipment for corrosion, removal of corrosion by mechanical and chemical treatment, manufacture and application of aerospace markings, mixture and application of organic coatings, and cleaning and storage of spray equipment. The course instruction includes Fundamentals, Corrosion Control, and Application of Coatings.

BLOCK I – FUNDAMENTALS: Includes course orientation, where students learn about the academy's policies, programs, and academic objective requirements. They learn the fundamentals of ground safety, personal protection, fire prevention, use and storage of chemicals. Students are taught how to identify and use technical orders. Students also learn of the environmental impact of improper corrosion control practices. They discuss the characteristics of metals. Additionally, students learn the factors, types of corrosion, and the effects of corrosion on all aircraft structural surfaces.

BLOCK II – CORROSION CONTROL: Teaches the corrosion control program and cleaning methods, in accordance with technical orders. Students learn corrosion removal, treatment, and inspection techniques, using the mechanical methods. They discuss the procedures and methods of chemical treatment and surface preparation to prevent corrosion.

BLOCK III - APPLICATION OF COATINGS: Teaches students about the composition of coatings, the care and use of equipment, the application of aerospace markings, and polyurethane coatings.

2. Course Requirements:

2.1. Eligibility: This course is designed for military members no higher than the grade of O-4, police, or civilian equivalent.

2.2. Physical/Medical:

2.2.1. Vision: Normal (20/20 with or without glasses).

2.2.2. Hearing/Speech: Normal hearing and speech.

2.2.3. Physical/Other: Normal manual dexterity. Students must not have any physical or medical condition that would prevent the wearing of a full-face respirator.

2.3. Uniform/Equipment: See General Clothing Requirements. All specialized gear will be issued.

3. Intermediate Military Objectives: This course supports the following USSOUTHCOM/TCP objectives: 1.1, 1.2, 1.5, 2.1, 2.2, 2.3, 3.4, 3.5, 4.3, 5.4 and USNORTHCOM/TCP objectives: 1.2, 1.3, 2.1, 2.5, 4.2, 4.3, 4.4, 4.5, 4.6.

COURSE NUMBER	COURSE NAME	LENGTH
(MASL D141089)	Advanced Helicopter Crew Chief	8 weeks
L3AAR1410890SRA		
STUDENT LOAD: MIN: 4	MAX: 8	

1. Course Description: This course is designed for personnel working as an advanced Helicopter maintenance technician on UH-1/Bell 205 and UH-1N Bell 212 helicopters. Students learn ground safety familiarization, landing gear maintenance, hydraulic systems maintenance, T-53 Engine alignment and throttle rigging, flight idle rigging, PT-4/T-400 Engine Twin Pack Power Plant rigging, and UH-1 Fuel System troubleshooting. They also learn rotary wing aerodynamic principles, rotors and drive train system maintenance, major component removal and installation, flight control system inspection, troubleshooting, rigging, and the installation and operation of Vibration Analysis equipment to include vibration analysis and Weight & Balance procedures. The course instruction includes General Subject, Landing Gear and Hydraulic Systems, T-53-L-13B Engine, PT-4/T-400 Engine Twin Pack Power Plant and UH-1 Fuel Systems, Rotors and Drive Train System, Flight Controls, Vibrations, and Weight & Balance.

BLOCK I - GENERAL SUBJECTS, LANDING GEAR, AND HYDRAULIC SYSTEMS: Includes flight line safety responsibilities at the supervisory level. Students are familiarized with tasks related to airframe and landing gear inspections, deflection checks, and weighing the helicopter using load cells. Rigging procedures are performed on the collective, cyclic, and tail rotor flight control systems.

BLOCK II - T –53-L-13B ENGINE MAINTENANCE: Concentrates on adjustment and troubleshooting of the T-53 turbo shaft engine and its components. Students perform engine throttle and power control rigging. They also perform engine to transmission alignment and starting engine procedures using the UH-1 systems trainer.

BLOCK III - TWIN PACK POWER PLANT AND UH-1 FUEL SYSTEMS: Contains PT-6/T-400 Engine components and systems operations, droop compensator Nf rigging, power lever control Ng rigging, beep actuator control rigging, and UH-1 Fuel System.

BLOCK IV - ROTORS AND DRIVE TRAIN SYSTEM: Contains instruction on main and tail rotor hub assembly inspection procedures. The main rotor hub is disassembled and reassembled. Wear limitations are identified and discussed. Students learn the operating characteristics of the drive train system. They also become skilled on how to disassemble and reassemble the drive shaft hanger bearings and inspect the main drive shaft. Students gain knowledge of operating principals of all gearboxes. They learn to remove, inspect, and install the 42 degree and 90 degree gearboxes.

BLOCK V - FLIGHT CONTROLS AND SPECIALIZED PROCEDURES: Teaches students vibration characteristics and their effects on the helicopter airframe and rotating components. They learn to install and use vibration analysis equipment and apply troubleshooting techniques to solve vibration problems. Students install actual equipment on aircraft and apply troubleshooting procedure with a whirly-gig simulator to reduce vibrations. An introduction to use and function of the 8500 spectrum analyzer is given. They also learn the weight and balance procedures. Students receive a

thorough understanding of flight controls and rigging procedures. Flight control inspections are performed and troubleshooting procedures discussed.

2. Course Requirements:

2.1. Eligibility: This course is designed for military members no higher than the grade of O-4, police, or civilian equivalent who have completed the helicopter crew chief course (MASL 141257) or equivalent or have one year of practical experience on any rotary wing aircraft.

- 2.2. Physical/Medical:
- 2.2.1. Vision: Normal (20/20 with or without glasses).

2.2.2. Hearing/Speech: Normal hearing and speech.

2.2.3. Physical/Other: Normal dexterity.

2.3. Uniform/Equipment: See General Clothing Requirements. All specialized uniforms will be provided.

3. Intermediate Military Objectives: This course supports the following USSOUTHCOM/TCP objectives: 1.1, 1.2, 1.5, 2.1, 2.2, 2.3, 3.2, 3.4, 4.3, 5.1, 5.2, 5.4 and USNORTHCOM/TCP objectives: 1.1, 1.3, 1.4, 1.5, 1.6, 2.1, 2.5, 3.1, 3.3, 4.3, 4.4, 4.6.

COURSE NUMBER	COURSE NAME	LENGTH
(MASL D141396)	Aircraft Structural Maintenance	12 Weeks
L3AZR1413960SRB	Technician	
STUDENT LOAD: MIN: 4	MAX: 12	

1. Course Description: This course is designed for international commissioned and Noncommissioned officers that perform duties as an aircraft structural maintenance technician. The students learn the fundamentals of aircraft parts fabrication, damage identification, structural repairs, hydraulic tube assembly fabrication, common and special fastener installation and removal. The fundamental objectives covered include in-shop and flight-line hazards, composite tool kit inventory (CTK) and lost tool procedures, metal identification, shop mathematics, setback and bend allowance. Furthermore, practical examinations are administered on flat pattern layout, metal layout, cutting, bending, hand and machine forming, structural damage identification, non-flush and combination repairs. Additionally, areas of training focus on advanced composite, vacuum bagging, hot bonder programming and repairs. The course instruction includes Fundamentals, Fabrication of Aircraft Parts, Preparation of Aircraft Structural Assembly, Aircraft Structural Repairs and Composite Repair Theory.

BLOCK I – FUNDAMENTALS OF AIRCRAFT STRUCTURAL MAINTENANCE:

Contains a course orientation, where students learn about the policies of the academy, programs, and the requirements of the academic objectives. Students receive an introduction to doctrine and safety practices. They learn the characteristics and identification of the common metals of aircraft. Students learn workshop mathematics, how to interpret technical drawings, and control tools. At the beginning, students learn to use simple tools, such as rulers, grinders, and dividers to develop metal designs and cut them with manual equipment and motorized machines. Finally, students use the same metal designs to learn how to make different types of sharp bends.

BLOCK II – FABRICATION OF AIRCRAFT PARTS: Teaches the receding and bending margins using tables and graphs to calculate the minimum and maximum radius bends that can be achieved. In addition, they manufacture a simulated aircraft structure (SAS) using their knowledge. Afterwards, they learn to form a piece of metal by hand and then by machine.

BLOCK III – PREPARATION FOR STRUCTURAL ASSEMBLY: Begins to use pneumatic equipment. Students learn to use the motorized shears and the band saw to cut metal sheets. They learn about rivet principles, rivet patterns, and rivet design, followed by pneumatic perforation, countersunk, and formation of countersunk using their SAS parts. Also, teaches the assembly of his SAS by means of the pneumatic rivet and micro-shaving.

BLOCK IV - **AIRCRAFT STRUCTURAL REPAIRS:** Teaches the classification of the damage, perform a crack-limiting stop drill and the elimination of damage by a chain drilling. They also perform a non-flush skin repair and a permanently combined repair on their SAS. Students also learn about the common aircraft hardware and perform the installation and removal of special fasteners that are used in aviation. The block concludes with the manufacture of sets of aircraft tubes.

BLOCK V - **COMPOSITE REPAIRS:** Introduces students to advanced composite materials. Unlike metal structures defined earlier in the course, students start with basic composite materials such as fiberglass and progress to more advanced composite material structures of Kevlar and graphite. The lecture topics covered are the advantages and disadvantages of advanced compounds, handling, storage, construction, damage classification, and types of repairs.as fiberglass and progress to more advanced composite material structures of Kevlar and graphite. The topics reviewed are the advantages and disadvantages of advanced compounds, handling, storage, construction, damage classification for advanced compounds, handling, storage, construction, damage classification and repair of this type of structure.

2. Course Requirements:

2.1. Eligibility: This course is designed for military members no higher than the grade of O-4, police, or civilian equivalent.

2.2. Physical/Medical:

- 2.2.1. Vision: Normal (20/20 with or without glasses).
- 2.2.2. Hearing/Speech: Normal hearing.

2.2.3. Physical/Other: Normal manual dexterity.

2.3. Uniform/Equipment: See General Clothing Requirements. All specialized gear will be provided.

3. Intermediate Military Objectives: This course supports the following USSOUTHCOM/TCP objectives: 1.1, 1.2, 1.5, 2.1, 2.2, 2.3, 3.4, 3.5, 4.3, 5.4 and USNORTHCOM/TCP objectives: 1.2, 1.3, 2.1, 2.5, 4.2, 4.3, 4.4, 4.5, 4.6.

COURSE NUMBER	COURSE NAME	LENGTH
(MASL D141259)	Cargo/Transport Aircraft	8 Weeks
L3AZR1412590SRB	Technician	
STUDENT LOAD: MIN: 4	MAX: 10	

1. Course Description: This is an essential course designed to provide aircraft apprentices and journeymen the guidance to develop fundamental knowledge on cargo-type aircraft maintenance through Simulated Based Training Aid (SBTA) and hands on training. SBTA's are real-time simulations that accurately reproduce the normal and abnormal behaviors of any system or subsystem of the aircraft. This method of training builds student confidence as it provides a safe training environment. The concepts of this course are presented in a context that enhances an understanding of fundamental theories and methods of aircraft maintenance. This fast-paced training is composed of six blocks of instruction covering the cargo aircraft systems in their entirety. This course includes Aircraft General, Electrical Systems, Fuel System, Utility Systems, Hydraulic Systems, and Propulsion Systems.

BLOCK I- AIRCRAFT GENERAL: Introduces the principles of safety, accident prevention, and aircraft ground safety during aircraft jacking and towing procedures. Students also learn how to select and interpret technical data and are introduced to aircraft form documentation.

BLOCK II- ELECTRICAL SYSTEMS: Teaches the theory of operation of a cargo aircraft's electrical systems. Discussions focus on the main electrical system and miscellaneous subsystems, such as AC/DC power, lighting, fire and overheat detection, and operational checks.

BLOCK III- FUEL SYSTEMS: Prepares students for a cargo aircraft's fuel system. They use technical publications and SimGraph software as they have hands-on training on servicing fuel systems. They also learn different safety configurations, dump in case of an emergency, quantity indication, refuel, defuel, and vent system operations.

BLOCK IV- UTILITY SYSTEMS: Teaches students how to understand cargo aircraft utility systems. They learn specifics of the operational procedures of the bleed air system, anti-ice system, air conditioning system, and the pressurization system. Students operate various utility systems to tie all concepts learned.

BLOCK V- HYDRAULIC SYSTEMS: Includes the characteristics and interaction of specific components on cargo aircraft hydraulic systems. Students also learn about the theory and operation of hydraulically powered components such as the ramp and aft cargo door, flight controls, brakes, and landing gear systems.

BLOCK VI- PROPULSION SYSTEMS: Teaches students the principles of different types of cargo aircraft engines. Students also cover propellers, oil system, fuel system, and ignition. Finally, they learn system components and their related inspection principles.

2. Course Requirements:

2.1. Eligibility: This course is designed for military members no higher than the grade of O-4 or E-4, police, or civilian equivalent.

<u>NOTE</u>: This course is tailored to students who will work cargo/transport type aircraft during their aviation careers.

2.2. Physical/Medical:

2.2.1. Vision: Normal (20/20 with or without glasses).

2.2.2. Hearing/Speech: Normal hearing and speech.

2.2.3. Physical/Other: Normal dexterity.

2.3. Uniform/Equipment: See General Clothing Requirements. All specialized gear will be provided.

3. Intermediate Military Objectives: This course supports the following USSOUTHCOM/TCP objectives: 1.1, 1.2, 1.4, 1.5, 2.1, 2.2, 2.3, 3.1, 3.2, 3.4, 4.3, 5.1, 5.2, 5.4 and USNORTHCOM/TCP objectives: 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 2.1, 2.2, 2.3, 2.4, 2.5, 3.1, 3.2, 3.3, 4.3, 4.4, 4.5, 4.6.

COURSES IN DEVELOPMENT

The courses below are scheduled for development in 2019; therefore, updated information will be added to the 2021 catalog once curriculum and instruction dates have been approved.

(MASL D179108), Cyber Security (MASL D179113), Cyber Network (MASL TBD), Basic Propulsion (MASL TBD), Advanced Propulsion (MASL TBD), Basic Crew Chief (MASL TBD), Advanced Crew Chief



The IAAFA Mission:

Provide military education and training to military personnel of the Americas and other eligible Partner Nations.

http://www.37trw.af.mil/Units/Inter-AmericanAirForcesAcademy.aspx