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AFSC 2A9X2X

BOMBER/SPECIAL (B/S) INTEGRATED INSTRUMENT AND FLIGHT CONTROL SYSTEMS

CAREER FIELD EDUCATION

AND TRAINING PLAN

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CAREER FIELD EDUCATION AND TRAINING PLAN
B/S INTEGRATED INSTRUMENT AND FLIGHT CONTROL SYSTEMS
AFSC 2A9X2X

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B/S INTEGRATED INSTRUMENT AND FLIGHT CONTROL SYSTEMS
CAREER FIELD EDUCATION AND TRAINING PLAN
AFSC 2A9X2X

PREFACE

1. This Career Field Education and Training Plan (CFETP) is a comprehensive education and training document that identifies life-cycle education/training requirements, training support resources, and minimum core task requirements for 2A9X2X, B/S Integrated Instruments and Flight Control Systems specialty. The CFETP will provide personnel a clear career path to success and instills rigor in all aspects of career field training.
NOTE: Civilians occupying associated positions will use Part II to support duty position qualification training.

2. The CFETP consists of two parts. Supervisors will use both parts to plan, manage, and control training.

2.1. Part I provides information necessary for overall management of the specialty. Section A explains how everyone will use the plan. Section B identifies career field progression information, duties and responsibilities, training strategies, and career field path. Section C associates each level with specialty qualifications (knowledge, education, experience, training, and other). Section D indicates resource constraints to accomplishing this plan, such as funds, manpower, equipment, and facilities. Section E identifies transition training plans for the career field.

2.2. Part II includes the following: Section A identifies the Specialty Training Standard (STS) and includes duties, tasks, and technical references to support training. Air Education and Training Command (AETC) conducted training, core task and correspondence course requirements. Section B provides an explanation of AETC 3-Level Course Training. Section C identifies available proficiency training support materials. Section D identifies the Specialty Training Standard (STS) and includes duties, tasks, technical references to support training, Air Education and Training Command (AETC) conducted training, wartime course/core task, and Career Development Course (CDC) requirements. Section E identifies MAJCOM unique training requirements supervisors can use to determine additional training required for the associated qualification needs. At unit level, supervisors and trainers will use Part II to identify, plan, and conduct training commensurate with the overall goals of this plan.

ABBREVIATIONS/TERMS EXPLAINED

Advanced Training: Formal course, which provides individuals who are qualified in their Air Force Specialty (AFS) with additional skills/knowledge to enhance their expertise in the career field. Training is for selected career airmen at the advanced level of an AFS.

Air Force Job Qualification Standard (AFJQS): A comprehensive task list that describes a particular job type or duty position. Supervisors use the AFJQS to document task qualifications. The tasks of AFJQS are common to all persons serving in the described duty position.

Bridge Course: A formal or informal course, which allows the individual to expand their knowledge in another area of expertise.

Career Development Course (CDC): Self-study correspondence course to provide Airmen with fundamental knowledge of their AFS.

Career Field Education and Training Plan (CFETP): A CFETP is a comprehensive, multipurpose document covering the entire spectrum of education and training for a career field. It outlines a logical growth plan that includes training resources and is designed to make career field training identifiable, to eliminate duplication, and to ensure this training is budget defensible.

Certification: A formal indication of an individual's ability to perform a task to required standards.

Certification Official: A person authorized by appropriate commander to determine an individual's ability to perform a task to required standards.

Continuation Training: This is additional training that exceeds minimum upgrade requirements and has an emphasis on present or future duty assignments.

Core Task: Tasks the AFCFM identify as minimum qualification requirements for everyone within an AFSC, regardless of duty position.

Course Training Standard (CTS): A formal course document that identifies in board terms the training members will receive in a specific course.

Enlisted Specialty Training (EST): A mix of formal training (technical school) and informal training (on-the-job) to qualify and upgrade Airmen in each skill level of a specialty.

Exportable Training: Additional training via computer assisted, paper text, interactive video, or other necessary means to supplement training.

Go/No Go Level: In OJT, the stage at which an individual has gained enough skill, knowledge and experience to either be qualified to perform an identified task without assistance, or not.

Field Technical Training (Type 4): Special or regular on-site training conducted by a training detachment (TD) or by a mobile training team (MTT).

Initial Skills Training: A formal school course that results in the award of a 3-skill level AFSC.

Instructional System Development (ISD): A deliberate and orderly process for developing, validating, and reviewing instructional programs that ensures personnel are taught the knowledge and skills essential for successful job performance.

Maintenance Information System (MIS): Systems and applications that support and enable maintenance business processes. Used to document maintenance actions. Provides maintenance supervisors with products to evaluate organizational effectiveness and to aid in decision-making processes at all levels.

Maintenance Supply Liaison (MSL): Monitors overall maintenance and supply interface, resolves supply support problems, and coordinates supply-related training needs.

Master Task Listing (MTL): Document maintained within the workcenter that identifies all tasks performed in a workcenter. This includes core, critical position qualification and wartime tasks. This document can be automated.

Master Training Plan (MTP): A comprehensive workcenter training plan that may include MTLs QTPs, AFJQS, CFETP, task breakdowns, commercial publications and any other document that supports training.

Mobile Training Team (MTT): Instructors, trainers, training aids and operational equipment that formal schools send to bases or operating locations used to perform formal training.

Occupational Analysis Report (OAR): A detailed report showing the results of an occupational analysis of tasks performed within a particular AFSC.

On-the-Job Training (OJT): Hands-on, over-the-shoulder training at the duty location used to certify personnel for both skill level upgrade and duty position qualification.

Position Qualification Training: Training designed to qualify an airman in a specific position and is accomplished after upgrade training.

Proficiency Training: Additional training either in residence or exportable advanced training courses, or on-the-job training, provided to personnel to increase their skills and knowledge beyond the minimum required for upgrade.

Qualification Training (QT): Actual hands-on task performance training designed to qualify an airman in a specific duty position. This training program occurs both during and after the upgrade training process. It is designed to provide the performance skill/knowledge training required to do the job.

Resource Constraints: Resource deficiencies, such as money, facilities, time, manpower, or equipment that preclude desired training from being accomplished.

Specialty Training Standard (STS): An Air Force publication that describes an Air Force Specialty in terms of tasks and knowledge an airman may be expected to perform or to know on the job. It serves as a contract between AETC and the functional user to show which of the overall training requirements for an AFSC are taught in formal schools, Career Development Courses, and exportable courses.

Standard: An exact value, a physical entity, or abstract concept, established and defined by authority, custom, or common consent, to serve as a reference, model, or rule in measuring quantities or qualities. Standards are used to establish practices or procedures and to evaluate results.

Supplemental Training: Formal, standardized training within an AFSC that is in addition to required initial skills training and skill level upgrade training. It may support new/newly assigned equipment, methods, and/or technology.

Task Certifier: See Certification Official

Training Detachment (TD): An AETC detachment that provides maintenance oriented technical training, at an operational location, on specific systems and their aerospace ground equipment. A TD aims to qualify personnel on new equipment or in new techniques and procedures, maintain proficiency and increase skill and knowledge, acquaint personnel with specific systems, and keep personnel aware of changing concepts and requirements.

Training Setting: The type of forum in which training is provided (formal resident school, on-the-job, field training, mobile training team, self-study, etc.)

Upgrade Training (UGT): A mixture of mandatory courses, task qualification, QTPs, and CDCs required for award of the 3-, 5-, 7-, or 9-skill levels.

Utilization and Training Workshop (U&TW): A forum, co-chaired by the AF Career Field Manager and Training Pipeline Manager consisting of MAJCOM Air Force Specialty Code (AFSC) functional managers, Subject Matter Experts (SMEs), and AETC training personnel that determine career ladder training requirements.

PART I

Section A - GENERAL INFORMATION

1. Purpose of the CFETP. This CFETP provides the information necessary for the AFCFM, MFMs, commanders, training managers, supervisors, and trainers to plan, develop, manage, and conduct an effective and efficient career field training program. The plan outlines the training that individuals in this AFSC should receive in order to develop and progress throughout their career. This plan identifies initial skills, upgrade, qualification, advanced and proficiency training. The CFETP also:

1.1. Lists training courses available in the specialty, identifies sources of training and the training delivery method.

1.2. Identifies major resource constraints that impact full implementation of the desired career field training process.

2. Use of the CFETP. This plan will be used by MFMs and supervisors at all levels to ensure comprehensive and cohesive training programs are available for each individual in the specialty.

2.1. AETC training personnel will develop or revise formal resident, non-resident, field, and exportable training based upon requirements established by the users and documented in Part II of the CFETP. They will also work with the AFCFM to develop acquisition strategies for obtaining resources needed to provide the identified training.

2.2. MFMs will ensure their training programs complement the CFETP mandatory initial, upgrade, and proficiency requirements. Identified requirements can be satisfied by OJT, resident training, contract training, or exportable courseware/courses. MAJCOM developed training to support this AFSC must be identified for inclusion in this plan and must not duplicate other available training resources.

2.3. Each individual will complete the mandatory training requirements specified in this plan. The list of courses in Part II will be used as a reference to support training.

3. Coordination and Approval of the CFETP. The AFCFM is the approval authority. Also, the AFCFM will initiate an annual review of this document to ensure currency and accuracy. MFMs and AETC training personnel will identify and coordinate career field training requirements.

Section B - CAREER FIELD PROGRESSION AND INFORMATION

4. Specialty Descriptions.

4.1. Specialty Shreds:
Suffix Portion of AFSC to Which Related
A……..E-3
B……..E-4/VC-25**
C……..E-8
D……..RC-135
E…….. B-1
F……...B-2
G……..B-52

*Shreds drop at CAFSC 7-level

**Avionics maintainers for the VC-25 may be directly hired from all heavy avionics AFSCs (2A2XX, 2A8XX and 2A9XX). There is no 3-level pipeline for this aircraft shred. When hired into the position their DAFSC will become the 2A9X2B shred. Upon release from VC-25 duty they can stay in the E-4 community or revert back to their original PAFSC.

4.2. Specialty Summary. Analyzes malfunctions, inspects, removes, maintains, and installs integrated avionics systems. Performs and supervises avionics maintenance and general aircraft servicing and handling. Related DoD Occupational Subgroup: 119800.

4.2.1. Duties and Responsibilities.

4.2.1.1. B/S Integrated Instrument and Flight Control Systems Apprentice and Journeyman. Operates and maintains instrument and flight control systems on E-3, E-4, VC-25, E-8, RC-135, B-1, B-2, and B-52 aircraft. Analyzes equipment operating characteristics to isolate malfunctions in avionics systems, integrated test systems built-in-test (BIT), multiplexed data bus systems, recording systems, video display systems, flight instruments, mission computer systems, inertial navigation systems (INS), global positioning system, primary and secondary flight controls, automatic flight control, engine instrumentation , fuel management systems , central air data systems, warning systems, navigation systems, and aircraft indicating systems. Removes, installs, checks, and repairs avionics systems and line replaceable units (LRU). Diagnoses malfunctions using technical orders, schematics, wiring diagrams, integrated test systems and other test equipment. Removes, replaces, and repairs faulty system wiring, electrical connectors, and multiconductor cables. Modifies avionics systems according to technical publications. Updates operational logs, inspection records, aircraft forms, and automated maintenance systems. Performs and supervises alignment, calibration, and boresight of avionics systems. Uploads ground maintenance and operational software. Performs off-equipment maintenance on selected avionics LRUs and maintains peculiar support equipment (SE). Inspects and evaluates aircraft maintenance activities. Inspects and verifies operational status and configuration of avionics systems and software. Records and ensures validity of entries into maintenance data collection and inspection systems. Resolves and assists units in solving maintenance and supply problems. Interprets and recommends corrective action to inspection findings. Plans, organizes and directs aircraft maintenance activities. Establishes methods

and performance standards. Analyzes reports and maintenance plans. Directs operation and modification of standard operating procedures. Establishes priorities. Evaluates activities for compliance with directives. Supervises and assists in aircraft ground servicing, and launch/recovery operations. Reviews maintenance data collection summaries to determine trends and production effectiveness.

5. Career Skill Progression. Adequate training and timely progression from the apprentice to the superintendent skill level play an important role in the Air Force's ability to accomplish its mission. It is essential that everyone involved in training do their part to plan, develop, manage and conduct an effective training program. The guidance provided in this part of the CFETP will ensure each individual receives viable training at appropriate points in their career. Use table 8.1 **Enlisted Career Path** in conjunction with information below to manage career skill progression.

5.1. Apprentice (3-level). Upon completion of initial skills training, a trainee will work with a trainer to enhance their knowledge and skills. The apprentice will enter UGT using the CDC, and QT to progress in the career field. Minimum training times will be a total of 12 months for normal UGT and 9 months for retrainees. Once task certified, a trainee may perform the task unsupervised. Apprentices can be considered for appointment as unit trainers after completion of a formal trainer course.

5.2. Journeyman (5-level). Once upgraded to the 5-level, the journeyman will enter into continuation training to broaden their experience base by increasing their knowledge and skill in troubleshooting and solving more complex problems. Five-levels may be assigned job positions such as quality assurance and various staff positions. After having 48 months in the Air Force, 5-levels will attend Airman Leadership School (ALS) to enhance their Professional Military Education (PME). Five-levels will be considered for appointment as unit trainers. Individuals will use their CDCs to prepare for Weighted Airman Promotion testing. They should also consider continuing their education toward a Community College of the Air Force (CCAF) degree.

5.3. Craftsman (7-level). A craftsman can expect to fill various supervisory and management positions such as shift leader, element NCOIC, flight/section chief, and task certifier. They are the primary trainers of those trainees working toward advancement to the 5- and 7-skill levels. They can also be assigned to work in staff positions. Craftsmen should take courses to obtain added knowledge on management of resources and personnel. Minimum training times for UGT to the craftsman 7-skill level will be a total of 12 months for normal UGT and 6 months for retrainees. Continued academic education through CCAF and higher degree programs is encouraged. In addition, when promoted to TSgt, individuals will complete the Noncommissioned Officer Academy and MSgt selects are highly encouraged to complete the Senior NCO Academy by correspondence.

5.4. Superintendent (9-level). Before attaining the 9-skill level, individuals must be SMSgt. A 9-skill level is expected to fill positions such as flight chief, production supervisor, and various staff NCOIC jobs. Additional training in the areas of budget, manpower, resources, and personnel management should be pursued through continuing education. Additional higher education and completion of courses outside their career AFSC are also recommended.

6. Training Decisions. The CFETP uses a building block approach (simple to complex) to encompass the entire spectrum of training requirements for the B/S Integrated Instrument and Flight Control Systems Career Field. The spectrum includes a strategy for when, where, and how to meet these training requirements. The strategy must be apparent and affordable to reduce duplication of training and eliminate a disjointed approach to training. Refer to paragraph 10 of this document for a complete list of specialty qualification requirements.

7. Higher Education and Advanced Certification Opportunities. Higher education and advanced certification is a personal choice that is encouraged for the professional development of the entire Enlisted Force. Listed below are some current opportunities:

7.1. Community College of the Air Force (CCAF) Academic Programs. Enrollment in CCAF occurs upon completion of basic military training (BMT). CCAF provides the opportunity to obtain an Associate in Applied Sciences Degree. In addition to its associate degree program, CCAF offers the following:

7.1.1. CCAF Instructor Certification. CCAF offers the CCAF Instructor Certification (CIC) Program for qualified instructors who teach CCAF collegiate-level credit awarding courses at a CCAF affiliated school. The CIC is a professional credential that recognizes the instructor's extensive faculty development training, education and qualification required to teach a CCAF course, and formally acknowledges the instructor's practical teaching experience. Qualified officer, enlisted, civilian and other service instructors are eligible for this certification. The CIC Program replaced the CCAF Occupational Instructor Certification (OIC) Program, which officially closed on 1 January 2011.

7.1.2. Professional Manager Certification (PMC) Program. CCAF offers the PMC for qualified senior Air Force enlisted personnel who have demonstrated an advanced level of professional accomplishment. The purpose of the certification is to recognize the individual's outstanding education and training required to lead and manage Air Force personnel and critical national defense assets. The certification also formally acknowledges the individuals management qualifications and experience. Qualified Air Force enlisted personnel are eligible for this certification. To learn more and enroll in the program, visit CCAF's website at http://www.au.af.mil/au/ccaf/certifications.asp.

7.1.3. FAA Airframe and Power Plant (A&P) Certification. CCAF offers the Air Force A&P Certification Program for active duty, guard and reserve aircraft maintenance technicians in specific AFSCs. The program is designed to bridge gaps between Air Force education, training and experience and FAA eligibility requirements per Title 14, Code of Federal Regulations (CFR), Part 65.77. The program benefits the Air Force by broadening the skill sets and professional development of our technicians, producing a more skilled and diverse aircraft maintenance professional. The program directly supports the mission of CCAF in that FAA certification of our aircraft maintenance technicians enhances combat readiness, contributes to recruiting and retention and supports career transition of highly skilled technicians. To learn more and enroll in the program, visit CCAF's website at http://www.au.af.mil/au/ccaf/certifications.asp.

7.1.4. Other Certification Programs. CCAF is actively pursuing other licensure and certification opportunities related to specific career fields. To learn more about other

certification opportunities visit CCAF's website at http://www.au.af.mil/au/ccaf/certifications.asp.

7.2. Degree Requirements: All airmen are automatically entered into the CCAF program. Prior to completing an associate degree, the 5-level must be awarded and the following requirements must be met:

	Semester Hours
Technical Education	24
Leadership, Management, and Military Studies	6
Physical Education	4
General Education	15
Program Elective Technical Education; Leadership, Management, and Military Studies; or General Education	15
Total	64

7.2.1. Technical Education (24 Semester Hours): Credits earned through technical courses taken from AETC, including technical training and Field Training Detachment (FTD) classes.

7.2.2. Leadership, Management, and Military Studies (6 Semester Hours): Professional military education and/or civilian management courses.

7.2.3. Physical Education (4 Semester Hours): This requirement is satisfied by completion of Basic Military Training.

7.2.4. General Education (15 Semester Hours): Applicable courses must meet the criteria for application of courses to the General Education Requirements (GER) and be in agreement with the definitions of applicable General Education subjects/courses as provided in the *CCAF General Catalog.*

7.2.5. Program Elective (15 Semester Hours): Satisfied with applicable Technical Education; Leadership, Management, and Military Studies; or General Education subjects and courses, including natural science courses meeting GER application criteria. Six semester hours of CCAF degree-applicable technical credit otherwise not applicable to this program may be applied. See the *CCAF General Catalog* for details regarding the Associates of Applied Science for this specialty.

7.3. AETC Instructor. Additional off-duty education is a personal choice that is encouraged for all. Individuals desiring to become an AETC Instructor must possess as a minimum an associate degree or should be actively pursuing an associate degree. Special Duty Assignment (SDA) requires an AETC instructor candidate to have a CCAF degree or be within one year of completion (45 semester hours). A degreed faculty is necessary to maintain accreditation through the Southern Association of Colleges and Schools.

8. Career Field Path.

8.1. Enlisted Career Path. Table 8.1 identifies career milestones for the 2AXXX Air Force Specialty.

Table 8.1 Enlisted Career Path				
	Grade Requirements			
Education and Training Requirements	Rank	Average Sew-On	Earliest Sew-On	High Year Of Tenure (HYT)
Basic Military Training School				
Apprentice Technical School (3-Skill Level)	Amn A1C	6 months 16 months		
Upgrade To Journeyman (5-Skill Level) - Minimum 12 months on-the-job training. - Minimum 9 months on-the-job training for retrainees. - Complete all 5-level core tasks on one MDS. - Complete appropriate CDC if/when available.	Amn A1C SrA	6 months 16 months 3 years	28 months	8 Years
Airman Leadership School (ALS) - Must be a SrA with 48 months time in service or be a SSgt Selectee. - Resident graduation is a prerequisite for SSgt sew-on (Active Duty Only).				
Trainer - Qualified and certified to perform the task to be trained. - Must attend formal OJT Trainer Course	**Certifier** - Be at least a 5-skill level SSgt; and qualified and certified to perform the task being certified - Attend formal OJT Trainer Course - Be a person other than the trainer except for AFSCs, duty positions, units and/or work centers with specialized training standardization and certification requirements.			
Upgrade To Craftsman (7-Skill Level) - Minimum rank of SSgt. - Minimum 12 months on-the-job training. - Minimum 6 months on-the-job training for retrainees. - Complete all 5- and 7-level core tasks on one mission design aircraft. - Complete appropriate CDC if/when available. - Attend Craftsman course, if applicable.	SSgt	5.1 years	3 years	15 Years
Noncommissioned Officer Academy (NCOA) - Must be a TSgt or TSgt Selectee. - Resident graduation is a prerequisite for MSgt sew-on (Active Duty Only).	TSgt MSgt	11.1 years 16.8 years	5 years 8 years	20 Years 24 Years
USAF Senior NCO Academy (SNCOA) - Must be a MSgt or SMSgt Selectee. - Resident graduation is a prerequisite for SMSgt sew-on (Active Duty Only).				
Upgrade To Superintendent (9-Skill Level) - Minimum rank of SMSgt.	SMSgt	21 years	11 years	26 Years
Chief Leadership Course - CMSgt or CMSgt selectee	CMSgt	24 years	14 years	30 Years

Section C - SKILL LEVEL TRAINING REQUIREMENTS

9. Purpose. Skill level training requirements in this specialty are defined in terms of tasks and knowledge requirements. This section outlines the specialty qualification requirements for each skill level in broad, general terms and establishes the mandatory requirements for entry, award, and retention of each skill level. The specific tasks and knowledge training requirements are identified in the STS, Part II, Section A and B of this CFETP.

10. Specialty qualifications for B/S Integrated Instrument and Flight Control Systems apprentice, journeyman, craftsman, and superintendent (ref. AFECD found on the AFPC website).

10.1. Knowledge. Knowledge is mandatory of: interpreting and applying mechanical, wiring, and electronic circuit diagrams; electronic, micro-processor, data bus, and mechanical principles theory and application; theory of flight; gyros, synchros, indicators, memory storage devices, servomechanisms, electromechanical, electro-optical devices; dependent navigation aids, inertial navigation, automatic flight controls, instruments, multiplexing, video display, and digital computer systems working principles; subsystem tie-in between integrated avionics systems; using and interpreting testing and measuring devices; principles of motion and power transmission by mechanical and electrical means; and concepts and application of maintenance directives.

10.2. Education. For entry into this specialty, completion of high school with courses in physics, computers, and mathematics is desirable.

10.3. Training. The following training is mandatory for award of the AFSC indicated:

10.3.1. 2A932. Completion of the applicable basic avionic systems courses is mandatory.

10.3.2. 2A952. Requirements for the Journeyman level require completion of the 5-level CDC and qualification on the core tasks specified in the STS.

10.3.3. 2A972. Requirements for the Craftsman level require completion of the 7-level CDC (2AX7X), completion of Advanced Wiring Maintenance Course J4AMP3000 A48A, PDS ZIZ (per MMCL as it becomes available at the local FTD) and qualification on the core tasks specified in the STS.

10.3.4. 2A590. No formal training requirements established.

10.4. Experience. The following experience is mandatory for award of the AFSC indicated:

10.4.1. 2A952: Qualification in and possession of AFSC 2A932. Also, experience isolating malfunctions, removing and installing LRUs, and use of test and ground SE.

10.4.2. 2A972: Qualification in and possession of AFSC 2A952, experience performing or supervising functions such as analyzing and isolating integrated avionics systems malfunctions and using test equipment.

10.4.3. 2A590: Qualification in and possession of AFSC 2A972 is mandatory. Also, experience is mandatory managing or directing functions such as inspecting or maintaining aircraft, helicopters, or avionics systems

10.5. Other.

10.5.1. Normal color vision as defined in AFI 48-123, *Medical Examination and Standards.* Specialty requires routine access to Secret material or similar environment.

10.5.2. For award and retention of AFSCs 2A9X2X, requires completion of a current National Agency Check, Local Agency Checks and Credit (NACLC) according to AFI 31-501, *Personnel Security Program Management*.
NOTE: Award of the 3-skill level without a completed NACLC is authorized provided an interim NACLC has been granted according to AFI 31-501

10.5.3. Must maintain an Air Force Network License according to AFI 33-115, Vol 2, *Licensing Network Users and Certifying Network Professionals.*

10.6. Training Sources and Resources. The 5-level CDC provides the career knowledge training required. The CDC is written to build from the trainee's current knowledge base, and provides more in-depth knowledge to support OJT requirements. OJT will be used to provide training and qualification on the core tasks identified in one MDS aircraft STS.

10.7. Implementation. The 3 level is awarded upon graduation from the applicable apprentice course. 5 and 7 Upgrade training will be completed using the core tasks and the formal CDCs. The 9-skill level is awarded upon promotion to SMSgt.

Section D - RESOURCE CONSTRAINTS

11. Purpose. This section of the CFETP identifies known resource constraints, which preclude optimum and desired training from being developed or conducted, including information such as cost and manpower. Narrative explanations of each resource constraint and an impact statement describing what effect each constraint has on training are included. Also included in this section are actions required, office of primary responsibility, and target completion dates. Resource constraints will be, as a minimum, reviewed and updated annually.

12. Apprentice Level Training. No resource constraints identified.

13. Journeyman Level Training. No resource constraints identified.

14. Craftsman Level Training. No resource constraints identified.

***Section E – TRANSITIONAL TRAINING GUIDE*- There are no transitional requirements. This area is reserved.**

PART II

Section A –SPECIALTY TRAINING STANDARD

1. Implementation. This STS will be used for technical training provided by Air Education and Training Command (AETC) once all training resources are funded.

2. Purpose. As prescribed in AFI 36-2201 and AFI 36-2232 this STS:

2.1. Lists in the column 1 (Task, Knowledge, and Technical Reference) the most common tasks, knowledge, and technical references (TR) necessary for airmen to perform duties in the 3-, 5-, and 7-skill level.

2.2. Specialty-wide training requirements are identified in column 2 (Core Tasks) by asterisk (*). For upgrade training only those tasks designated as core requirements by the AFCFM (by an asterisk in column 2) need to be trained and certified. MAJCOM Functional Managers, commanders, and supervisors may designate additional critical tasks for duty position qualification, as necessary. When designated, certify the duty position critical tasks using normal task certification procedures. Exemptions:

2.2.1. Core tasks that are not applicable to base assigned aircraft or equipment are not required for upgrade (units are not required to send personnel TDY for core task training)

2.2.2. For units with more than one mission design aircraft, upgrade trainees need only complete core tasks on a single mission design. MFMs, unit commanders, and/or supervisors may require trainees to complete core task training on additional mission design aircraft, if desired. If some of these core tasks involve training in another unit on base, trainees must still complete all core tasks relevant to at least one mission design aircraft. All units are bound by the requirements in this CFETP and will accommodate core task trainees from other units.

2.2.3. Units that use the G081 maintenance data collection system do not need to complete Core Automated Maintenance System (CAMS) or Integrated Maintenance Data System (IMDS) Computer Based Training (CBT) core tasks. Units that use CAMS/IMDS do not need to complete G081 CBT core tasks.

2.3. Provides certification for OJT. Column 3 is used to record completion of tasks and knowledge training requirements. Use CAMS/IMDS/G081 to document technician qualifications, if available. Task certification must show a certification or completed date.

2.4. Shows formal training and correspondence course requirements. Column 4 shows the proficiency to be demonstrated on the job by the graduate as result of training on the task/knowledge and the career knowledge provided by the correspondence course.

2.5. Qualitative Requirements. Attachment 1 contains the proficiency code key used to indicate the level of training and knowledge provided by resident training and career development courses.

2.6. Job Qualification Standard. The STS becomes a job qualification standard (JQS) for on-the-job training when placed in AF Form 623, **On-The-Job Training Record**, and used according to AFI 36-2201. For OJT, the tasks in column 1 are trained and qualified to the go/no go level. "Go" means the individual can perform the task without assistance and meets local requirements for accuracy, timeliness, and correct procedures. When used as a JQS, the following requirements apply:

2.6.1. Documentation. Document and certify completion of training IAW AFI 36-2201. Use of Part II, attachments one, two, three, and at least one of attachments four through twenty-one is required in individual training records.

2.6.1.1. Transcribing from Old CFETP to New CFETP. All AFJQSs and previous CFETPs are replaced by this CFETP; therefore, transcribing of all training records to this CFETP STS is mandatory. Use this CFETP STS (or automated STS) to identify and certify all past and current qualifications. Document and certify all previous and current training IAW AFI 36-2201.

2.7. STS. A guide for development of promotion tests used in the Weighted Airman Promotion System (WAPS). Specialty Knowledge Tests (SKTs) are developed at the USAF Occupational Measurement Squadron, by Senior NCOs with extensive practical experience in their career fields. The tests sample knowledge of STS subject matter areas judged by test development team members as most appropriate for promotion to higher grades. Questions are based upon study references listed in the WAPS catalog. Individual responsibilities are in AFI 36-2502, *Airman Promotion Program*. WAPS is not applicable to the Air National Guard or Air Force Reserve.

3. Recommendations. Comments and recommendations are invited concerning the quality of training AETC graduates received. A 782 TRG Customer Service Information Line (CSIL) is available for supervisors to identify a graduate's training concerns on tasks/knowledge items listed in this STS. Please reference specific STS line items and address your comments to: 782CSIL@us.af.mil or call the CSIL at DSN 736-2574 anytime.

Section B – 3-LEVEL COURSE OBJECTIVES

4. Introduction. Each proficiency coded STS task or knowledge item taught at the technical school is measured through the use of an objective. An objective is a written instruction for the student so he or she knows what is expected of them to successfully complete training on each task. Each objective is comprised of a condition, behavior, and standard that states what is expected of the student for each task. The condition is the setting in which the training takes place (i.e. TOs, type of equipment, etc). The behavior is the observable portion of the objective (i.e. perform an operational check). The standard is the level of performance that is measured to ensure the STS proficiency code level is attained (i.e. "with no more than two instructor assists")

5. Objective Measurement. Each objective uses letter codes(s) to identify how it is measured. All objectives using the **PC** code indicate a progress check is used to measure subject or task knowledge. **W** indicates a comprehensive written test and is used to measure the subject or task knowledge at the end of a block of instruction. **PC/W** indicates a subject

or task knowledge progress check and a separate measurement of both knowledge and performance elements using a written test.

6. Objective Standard. The standard for written examinations is 70% to 72%. Standards for performance objectives are indicated in the objective and are also indicated on the individual progress check checklist. The checklist is used by the instructor to document each student's progress, on each task. Instructor assistance is provided as needed during the progress check, and students may be required to repeat all or part of the behavior until satisfactory performance is attained. Students must satisfactorily complete all PCs prior to taking the written test.

7. Proficiency Level. Review column 4A of the STS to determine the proficiency level of a particular task or knowledge item. Review the proficiency code key in Part II, Section A of this CFETP for an explanation of the proficiency codes. Most task performance is taught to the '2b' proficiency level which means the students can do most parts of the task, but does need assistance on the hardest parts of the task (partially proficient). The student can also determine step-by-step procedures for doing the task.

Section C – SUPPORT MATERIAL

8. There are currently no support material requirements. This area is reserved

Section D – TRAINING COURSE INDEX

9. Purpose. This section of the CFETP identifies training courses available for the 2A9X2X Specialty and shows how the courses are used by each MAJCOM in their career field training programs. For further information on the following courses, contact the OPR at:

365 TRS/TRR
609 9th Ave, Rm 135
Sheppard AFB, TX 76311-2335
DSN 736-7908

10. Air Force In-Resident Courses. The following courses are required for 3-level training, and are identified per airframe. Students are required to first attend Avionics Fundamentals, located at Keesler AFB, followed by their specific avionics training course, located at Sheppard AFB. For further course information go to the ETCA website at: https://etca.randolph.af.mil/.

AIRFRAME	COURSE NUMBER	COURSE TITLE
E-3	E3AQR2A932A022A	Avionic Fundamentals
	J3ABR2A932A022A	B/S Avionics Integrated Inst/Flt Ctrl Sys Apprentice
E-4/VC-25	E3AQR2A932B048A	Avionic Fundamentals
	J3ABR2A932B048A	B/S Avionics Integrated Inst/Flt Ctrl Sys Apprentice
E-8	E3AQR2A932C024A	Avionic Fundamentals
	J3ABR2A932C024A	B/S Avionics Integrated Inst/Flt Ctrl Sys Apprentice
RC-135	E3AQR2A932D018A	Avionic Fundamentals
	J3ABR2A932D018A	B/S Avionics Integrated Inst/Flt Ctrl Sys Apprentice
B-1	E3AQR2A932E001A	Avionic Fundamentals
	J3ABR2A932E001A	B/S Avionics Integrated Inst/Flt Ctrl Sys Apprentice
B-2	E3AQR2A932F002A	Avionic Fundamentals
	J3ABR2A932F002A	B/S Avionics Integrated Inst/Flt Ctrl Sys Apprentice
B-52	E3AQR2A932G003A	Avionic Fundamentals
	J3ABR2A932G003A	B/S Avionics Integrated Inst/Flt Ctrl Sys Apprentice

11. AFIADL. http://www.au.af.mil/au/afiadl/.

COURSE NO.	COURSE TITLE	USER
CDC 2A952X	Integrated Instrument and Flight Control Systems Journeyman	AF
CDC 2AX7X	Aerospace Maintenance Systems Craftsman	AF

12. Exportable Courses. None.

For further information on exportable courses, contact the OPRs at:

367 TRSS
6058 Aspen Ave
Hill AFB, UT 84056-5805
DSN 777-7830/8741

Interactive Courseware (ICW) courses are available from or are under development by 367 TRS/TRSS at Hill AFB, Utah and 982 MXS/TSU at Sheppard AFB, Texas.

For further information contact the OPRs at:

367 TRSS
6058 Aspen Ave
Hill AFB, UT 84056-5805
DSN 777-7830/8741

982 MXS/LGMS
Instructional Technology Unit
912 I Ave, Ste 4
Sheppard AFB, TX 76311-2334
DSN 736-3834

13. Field Training Detachment (FTD) Courses. For further information on FTD courses, you can go to the ETCA website at https://etca.randolph.af.mil/ or contact the OPRs at:

373 TRS
912 I Ave, Suite 4
Sheppard AFB, TX 76311-2362
DSN 736-4745

Section E - MAJCOM UNIQUE REQUIREMENTS. There are no mandatory MAJCOM unique requirements for 2A9X2X.

14. (USE IF APPLICABLE) For MAJCOM unique requirements, refer to the MAJCOM mandatory course lists:

HQ ACC/A4Q DET 3
6058 Aspen
Hill AFB, UT 84056-5805
DSN 777-5108
CAF MCL:
https://afkm.wpafb.af.mil/community/views/home.aspx?Filter=OO-TE-AC-42

BY ORDER OF THE SECRETARY OF THE AIR FORCE

OFFICIAL

JUDITH A. FEDDER, Lt General, USAF
DCS/Logistics, Installations & Mission Support

11 Attachments:

1. Proficiency Code Key
2. General 2A9X2X Training Requirements (Mandatory)
3. E-3 Training Requirements (Mandatory for E-3 personnel)
4. E-4, VC-25 Training Requirements (Mandatory for E-4, VC-25 personnel)
5. E-8 Training Requirements (Mandatory for E-8 personnel)
6. RC-135 Training Requirements (Mandatory for RC-135 personnel)
7. B-1 Training Requirements (Mandatory for B-1 personnel)
8. B-2 Training Requirements (Mandatory B-2 personnel)
9. B-52 Training Requirements (Mandatory B-52 personnel)
10. Avionics Fundamentals Training Requirements (Mandatory)
11. 2AX7X CDC Training Requirements (Mandatory for 7-level upgrade)

Note: Use of at least one of the attachments three through nine is required.

Attachment 1

This Block Is For Identification Purposes Only		
Name Of Trainee:		
Printed Name (*Last, First, Middle Initial*)	**Initials** (Written)	**SSAN** (last 4 only)

Printed Name Of Training/Certifying Official And Written Initials	
N/I	***N/I***
N/I	***N/I***
N/I	***N/I***
N/I	***N/I***
N/I	***N/I***
N/I	***N/I***
N/I	***N/I***

QUALITATIVE REQUIREMENTS

Proficiency Code Key		
	Scale Value	**Definition: The individual**
Task Performance Levels	1	**IS EXTREMELY LIMITED** (Can do simple parts of the task. Needs to be told or shown how to do most of the task.)
	2	**IS PARTIALLY PROFICIENT** (Can do most parts of the task. Needs only help on hardest parts.)
	3	**IS COMPETENT** (Can do all parts of the task. Needs only a spot check of completed work.)
	4	**IS HIGHLY PROFICIENT** (Can do the complete task quickly and accurately. Can tell or show others how to do the task.)
*Task Knowledge Levels	a	**KNOWS NOMENCLATURE** (Can name parts, tools, and simple facts about the task.)
	b	**KNOWS PROCEDURES** (Can determine step by step procedures for doing the task.)
	c	**KNOWS OPERATING PRINCIPLES** (Can identify why and when the task must be done and why each step is needed.)
	d	**KNOWS ADVANCED THEORY** (Can predict, isolate, and resolve problems about the task.)
**Subject Knowledge Levels	A	**KNOWS FACTS** (Can identify basic facts and terms about the subject.)
	B	**KNOWS PRINCIPLES** (Can identify relationship of basic facts and state general principles about the subject.)
	C	**KNOWS ANALYSIS** (Can analyze facts and principles and draw conclusions about the subject.)
	D	**KNOWS EVALUATION** (Can evaluate conditions and make proper decisions about the subject.)

Explanations

* A task knowledge scale value may be used alone or with a task performance scale value to define a level of knowledge for a specific task. (Example: b and 1b)

**A subject knowledge scale value is used alone to define a level of knowledge for a subject not directly related to any specific task, or for a subject common to several tasks.

- This mark is used alone instead of a scale value to show that no proficiency training is provided in the course or CDC.

/ This mark is used in course columns to show that training is required but not given/reduced due to limitations in resources. (3c/b, 2/b/b, 3c/-, etc.)

X This mark is used alone in course columns to show that training is required but not given due to limitations in resources.

NOTE: All tasks and knowledge items shown with a proficiency or knowledge code are trained during wartime.

GENERAL TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training / Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC

Attachment 2 – General Training Requirements

This general training requirements section is used to show necessary changes to the individual CFETP STS line items, for all the 2A9X2 shreds, in order to have the same level requirements across the shreds.

NOTE 1: The apprentice course, J3ABR2A9X2XXXXX, B/S Integrated Instrument and Flight Control Systems Apprentice, will use representative aircraft/trainers to accomplish the system specific training requirements as identified by the specific STS. The general training requirements section of the CFETP is used to code core competencies of the career field that will be taught in the apprentice course. The MDS specific attachments are to be used in conjunction with the general and common sections to identify work center requirements and annotate qualifications.

NOTE 2: All course requirements are trained in the 3-level resident course during wartime.

NOTE 3: Users are responsible for annotating training references to identify current references pending STS revision.

NOTE 4: Items marked in Column 4A with both a proficiency code and a dash will be taught if equipment is available (Ex: 2b/-).

NOTE 5: Items coded in Column 2A or 2B of the General Attachment are core tasks. If the STS line item identified with an "*" does not apply to a procedure, aircraft MDS, or equipment at a given base, the completion of the core task in the General Attachment is waived.

NOTE 6: Address comments or recommend changes through the MAJCOM Functional Manager to the AETC Training Manager at DSN 736-7908

2 CFETP 2A9X2A – B/S INSTRUMENT and FLIGHT CONTROL SYSTEMS										
2.1 CAREER LADDER PROGRESSION (COMMON)										
2.1.1 Progression in Career Ladder 2A9X2A TR: AFI 36-2108 / AFVA 39-1								-	-	-
2.1.2 Duties and Responsibilities of 2A9X2A Personnel TR: AFMAN 36-2108								A	-	-
2.2 SECURITY (COMMON)										
2.2.1 Information Security TR: AFI-31-401 / AFI 31-501 / AFPD 31- 4 / AFPD 31-5, Applicable Directives										
2.2.1.1 Classification of Information								-	-	-
2.2.1.2 Prevention of Security Violations								-	-	-
2.2.1.3 Access to Classified Information								-	-	-
2.2.1.4 Use Security Classification Guide								a	B	-
2.2.2 Physical Security TR: AFPD 31-1, Army Regulation 190- 16										
2.2.2.1 Control of Restricted Areas								-	-	-
2.2.2.2 Security Alert Reporting								-	-	-
2.2.2.3 Cabinet, Safe, and Room Security Forms								A	-	-
2.2.2.4 Proper Handling of Classified Materials / Controlled Cryptographic Item (CCI)								-	-	-
2.2.3 Communications Security (COMSEC) TR: AFI 31-401/ DOD 5200.1-4/ AFPD 33-2										
2.2.3.1 COMSEC Education Program								-	-	-
2.2.4 Operations Security (OPSEC) TR: AFI 10-1101, AFPD 10-11, and applicable directives										
2.2.4.1 Goals of OPSEC Program								-	-	-
2.2.4.2 Function of CILs (Critical Information Lists)								-	-	-

GENERAL TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training / Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
2.3 AF OCCUPATIONAL SAFETY and HEALTH (AFOSH) Safety Practices										
2.3.1 RF Energy								A	B	-
2.3.2 Noise								A	B	-
2.3.3 Compressed Gases								A	B	-
2.3.4 Electrical Power								A	B	-
2.3.5 Hydraulic Power								A	B	-
2.3.6 Hazardous Liquids								A	B	-
2.3.7 Radioactive Parts and Materials								A	-	-
2.3.8 Aircraft								A	B	-
2.3.9 AGE								-	-	-
2.3.10 Electrical Equipment								A	B	-
2.3.11 Beryllium / Copper Alloys								-	-	-
2.3.12 Lasers								A	-	-
2.3.13 Composites								A	-	-
2.3.14 CRTs								A	-	-
2.3.15 Lifting Devices								A	-	-
2.3.16 Munitions Laden Aircraft								-	-	-
2.3.17 FOD Prevention								-	-	-
2.3.18 Fall Protection/ Restraints								A	-	-
2.3.19 AF Nuclear Surety Program								-	-	-
2.4 HAZARDOUS MATERIALS/ WASTE HANDLING ACCORDING TO ENVIRONMENTAL STANDARDS (COMMON) TR: AFI-23-504, AFI 32-7042, AFPAM 32-7043, Applicable Federal Codes, EPA State Regulations										
2.4.1 Types of Hazardous Material/ Fluids								A	-	-
2.4.2 Handling Procedures								A	-	-
2.4.3 Storage and Labeling								A	-	-
2.4.4 Proper Disposal								A	-	-
2.4.5 Material Safety Data Sheet (MSDS)								B	-	-
2.4.6 Report Hazardous Material Spills								-	-	-
2.5 MAINTENANCE MANAGEMENT (COMMON) TR: AFI-21-101										
2.5.1 Basic Functions and Responsibilities of the Maintenance Complex TR: AFI 21-101								-	B	-
2.5.2 Maintenance Data Collection								A	B	-
2.5.3 Maintenance Information System								A	B	-
2.5.4 Maintenance Resource Management								A	-	-
2.5.5 Logistics / Resource Maintenance Management										
2.5.5.1 Logistics Management								-	-	-
2.5.5.2 Resource Management								-	-	-

GENERAL TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training / Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
2.5.5.3 Standard Publication Use								-	A	-
2.5.5.4 Aircraft Maintenance Management Information Systems (CEMS, RAMPOD, PAMS, etc)								-	-	-
2.5.5.5 SMR Codes								-	-	-
2.5.5.6 Modification Proposals (AF Form 1067)								-	-	-
2.5.5.7 Aircraft / Equipment Status Monitoring								-	-	-
2.5.5.8 Compliance and Standardization Requirements Listing								-	-	-
2.5.5.9 Maintenance Performance Indicators (MPI) Relationships (repeat / recur, fix, break, cannibalization rates, etc.)								-	-	-
2.5.5.10 Maintenance Incident Investigation and Prevention								-	-	-
2.5.5.11 Minimum Essential Systems Lists (MESL)								-	-	-
2.5.5.12 Warranty Program								-	-	-
2.5.5.13 TMDE Program								-	-	-
2.5.5.14 Workcenter Responsibilities								-	-	-
2.5.5.15 IDEA Program								-	-	-
2.5.5.16 Repair Cycle Asset Program								A	-	-
2.5.5.17 Resource Protection								-	-	-
2.5.5.18 Status of Resources and Training (SORTS)								-	-	-
2.5.6 Personnel Duties/ Responsibilities										
2.5.6.1 Expediter								-	-	-
2.5.6.2 Production Supervisor								-	-	-
2.5.6.3 Flight Chief								-	-	-
2.6 MAINTENANCE, INSPECTION SYSTEMS & FORMS (COMMON) TR: AFI-21-101, OO-20 series technical orders										
2.6.1 Maintenance Systems								-	-	-
2.6.2 Aircraft Inspection Systems								-	A	-
2.6.3 Maintenance Data Collection Forms								B	-	-
2.6.4 Historical Records								-	-	-
2.6.5 Status Reports								-	-	-
2.6.6 Configuration Management (aircraft /equipment records)								-	-	-
2.6.7 Operate MIS (IMDS, GO81, ECSS) TR: 00-20-2										
2.6.7.1 Create Discrepancy								2b	-	-
2.6.7.2 Schedule Discrepancy								2b	-	-
2.6.7.3 Defer Discrepancy								2b	-	-
2.6.7.4 Transfer Discrepancy								2b	-	-
2.6.7.5 Sign-Off Discrepancy								2b	-	-
2.6.7.6 In-Progress Inspection (IPI)								-	-	-

GENERAL TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training / Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
2.6.7.7 Supply Transactions								2b	-	-
2.6.7.8 Maintenance / Supervision Transactions								-	-	-
2.6.7.9 Use Work Center Discrepancy Screen								-	-	-
2.6.7.10 Run Aircraft History										
2.6.7.11 Complete IMDS Course J6ANU00066-046 or J6ANU00066-047								-	-	-
2.6.7.12 Complete IMDS for Supervisors Course J6ANU00066-048								-	-	-
2.6.8 Material Deficiency Reporting System TR: 00-35D-54										
2.6.8.1 Deficiency Reporting System								-	B	-
2.6.8.2 Product Quality Deficiency Report								-	A	-
2.6.9 Use Aircraft / Equipment Maintenance Forms TR: 00-20-1										
2.6.9.1 781A	*							2b	A	-
2.6.9.2 781B								-	-	-
2.6.9.3 781C								2b	A	-
2.6.9.4 781D								-	-	-
2.6.9.5 781F								-	-	-
2.6.9.6 781H								2b	A	-
2.6.9.7 781J								-	A	-
2.6.9.8 781K	*							2b	A	-
2.6.9.9 781M								-	-	-
2.6.9.10 AFTO Form 244 / 245	*							2b	A	-
2.6.9.11 AF Form 1492 - Warning Tags	*							2b	A	-
2.7 SUPERVISION (COMMON) TR: AFI 36-2108/ AFI 36-2201										
2.7.1 Orient New Personnel								-	-	-
2.7.2 Assign Personnel to Work Assignments								-	-	-
2.7.3 Plan Work Assignments and Priorities								-	-	-
2.7.4 Schedule Work Assignments and Priorities								-	-	-
2.7.5 Coordinate Work Assignments TR: AFI 36-2123/ AFR 21-101/ AFR 21-144/ applicable Command Directives								-	-	-
2.7.6 Establish TR: AFI 21-101/ AFI 21-114 and applicable command directives										
2.7.6.1 Work Methods								-	-	-
2.7.6.2 Controls								-	-	-
2.7.6.3 Performance Standards								-	-	-
2.7.7 Evaluate Work Performance of Subordinate Personnel								-	-	-
2.7.8 Help Resolve Technical Problems for Subordinate Personnel								-	-	-
2.7.9 Initiate Actions to Correct Substandard Performance								-	-	-

GENERAL TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training / Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
TR: Applicable AFI 36-Series Instructions										
2.7.10 Supervise TR: Applicable AFI 36-Series Instructions										
2.7.10.1 Maintenance Actions								-	-	-
2.7.10.2 Inspection Actions								-	-	-
2.7.11 Justify TR: AFI 21-101, 21-114										
2.7.11.1 Personnel Manning Requirements								-	-	-
2.7.11.2 Equipment Authorizations								-	-	-
2.7.12 Statement of Charges TR: AFMAN 23-220/ AFMAN 177-11/ DOD 7200.10M								-	-	-
2.7.13 Perform Reports Of Survey TR: AFMAN 23-220/ DOD 7200.10M								-	-	-
2.7.14 Aircraft Scheduling TR: AFI 21-103										
2.7.14.1 Utilize Flow Charts								-	-	-
2.7.14.2 Status Reporting								-	-	-
2.7.14.3 Flying / Maintenance Plan								-	-	-
2.8 TRAINING (COMMON) TR: AFI 36-2201										
2.8.1 Plan Training								-	-	-
2.8.2 Conduct Training										
2.8.3 Evaluate Training								-	-	-
2.8.4 Maintain Training Records								-	-	-
2.8.5 Prepare JQS (AF Form 797s)								-	-	-
2.9 TECHNICAL PUBLICATIONS (COMMON) TR: Applicable 00-series technical orders										
2.9.1 Scope and Application of Technical Order System								A	B	-
2.9.2 Use Technical Orders								2b	-	-
2.9.3 Use Technical Order Indexes								-	-	-
2.9.4 Electronic Technical Orders								A	-	-
2.9.5 Technical Order Improvement / Deficiency Report (AFTO Form 22)								A	A	-
2.9.6 Scope and Application of Computer Program Identification Number (CPIN)								A	A	-
2.9.7 Use CPIN Compendium								-	-	-
2.9.8 Time Compliance Technical Orders								-	A	-
2.9.9 Maintain Technical Order Files								-	-	-
2.10 SUPPLY DISCIPLINE (COMMON) TR: AFI 21-101/ AFMAN 23-110/ ACCI 21-101										
2.10.1 Property Accountability and Responsibility								A	B	-
2.10.2 Principles of Equipment Authorization								-	-	-

GENERAL TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training / Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
and Management										
2.10.3 Special Requisitions								-	-	-
2.10.4 Back Order Verification								-	-	-
2.10.5 Equipment Condition Tags								2b	-	-
2.10.6 Issue / Turn-In Requests								-	-	-
2.10.7 Maintenance Supply Concept								-	-	-
2.10.8 Supply Documents Management								-	-	-
2.10.9 Equipment Account Management								-	-	-
2.10.10 Priority System								-	-	-
2.10.11 Repair Cycle Assets								-	-	-
2.10.12 Standard Base Supply System (SBSS)								A	-	-
2.10.13 FEDLOG / WEBFLIS								A	-	-
2.10.14 Land Mobile Radios, Pagers and Cell Phones								-	-	-
2.10.15 Depot Level Repairable								-	-	-
2.10.16 Classified Asset Handling								A	A	-
2.10.17 Use Supply Products										
2.10.17.1 D04 (Daily Document Register)								-	-	-
2.10.17.2 D18 (Priority Monitor List)								-	-	-
2.10.17.3 M30 (Due-Out Validation Listing)								-	-	-
2.10.17.4 D23 (Due in From Maintenance Listing)								-	-	-
2.11 FUNDAMENTALS OF ON-EQUIPMENT MAINTENANCE (COMMON) TR: Applicable aircraft -1 and -2 series technical orders										
2.11.1 Use Common Tools TR: AFI 91-408 TO 00-25-234 / TO 32-1-1 / TO 32-1-2 / TO 32-1-101 / TO 32-1-211								2b	-	-
2.11.2 Use Torque Indicating Devices	*							2b	B	-
2.11.3 Use Tension Indicating Devices	*							1a	B	-
2.11.4 Protect Exposed Electrical Connectors and Pressure Lines								a	-	-
2.11.5 Apply Range/ Slippage Marks								2b	-	-
2.11.6 Protection Procedures when Handling Electrostatic Sensitive Devices								B	-	-
2.11.7 Use of Panel Sealants/ Gaskets	*							-	A	-
2.11.8 Identify and Perform Corrosion Control								a	-	-
2.11.9 Inventory and Inspect CTKs	*							2b	-	-
2.11.10 Use Safetying Devices TR: 1-1-8										
2.11.10.1 Safety Wire	*							2b	-	-
2.11.10.2 Shear Wire								b	-	-
2.11.10.3 DMC Safe-T Cable								-	-	-
2.11.11 Remove and Install										

GENERAL TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training / Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
TR: Applicable -2 technical orders NOTE: Qualification on line items 2.11.11.1 through 2.11.11.10 qualifies the individual on all similar system components throughout this training record unless identified separately in the specific system or in writing by the supervisor.										
2.11.11.1 Shock Mounted	*							2b	-	-
2.11.11.2 Tray Mounted	*							2b	-	-
2.11.11.3 Rack Mounted	*							2b	-	-
2.11.11.4 Console Mounted	*							2b	-	-
2.11.11.5 Aircraft Surface Mounted	*							2b	-	-
2.11.11.6 Bezel Mounted								2b	-	-
2.11.11.7 Clamp Mounted								2b	-	-
2.11.11.8 Bulkhead Mounted								a	-	-
2.11.11.9 Equipment Mounted	*							a	-	-
2.11.11.10 Minor Parts and Hardware (i.e. relay, switches, bulbs)	*							a	-	-
2.12 AIRCRAFT FAMILIARIZATION (COMMON) TR: Applicable aircraft technical orders										
2.12.1 Major Structural Areas								A	A	-
2.12.2 Major Systems								A	A	-
2.12.3 Danger Areas								B	B	-
2.12.4 Egress								A	-	-
2.12.5 Practice Safe Entry Procedures on Aircraft with Open Fuel Cells								-	-	-
2.12.6 Purpose of Radar Absorption Material (RAM)								A	-	-
2.12.7 Inspect Aircraft Systems for Safe and Secure Installation								-	-	-
2.12.8 Perform Aircraft Phase/ Isochronal Inspection								-	-	-
2.12.9 Maintain Tool Crib								-	-	-
2.12.10 Debrief								-	-	-
2.12.11 Dispatch Maintenance Crews								-	-	-
2.12.12 Ensure Aircraft is Safe for Simulated Airborne Conditions								-	-	-
2.12.13 Perform Proximity Switch Control Covering/ Uncovering								-	-	-
2.12.14 Use Powered AGE										
2.12.14.1 Bleed Air Cart								-	-	-
2.12.14.2 Heater								-	-	-
2.12.14.3 Air Conditioner								-	-	-
2.12.14.4 Light Cart								-	-	-
2.12.14.5 Air Compressor (MC-1A / MC-2A)								-	-	-
2.12.14.6 Nitrogen Cart								-	-	-
2.12.14.7 Ground Power Unit								-	-	-

GENERAL TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training / Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
2.12.14.8 Hydraulic Test Stand (Mule)								-	-	-
2.12.14.9 Powered Man- Lift(s)								-	-	-
2.12.14.10 Motorized Maintenance Stand								-	-	-
2.12.15 Use Non-Powered AGE TR: AFI 91-408/ applicable aircraft -4 technical orders										
2.12.15.1 Maintenance Platform (B-1)								2b	-	-
2.12.15.2 Maintenance Platform (B-2)								2b	-	-
2.12.15.3 Maintenance Platform (B-4 / B-5)								2b	-	-
2.12.15.4 Maintenance Platform (B-7)								-	-	-
2.12.15.5 Maintenance Platform (C-1)								-	-	-
2.13 FUNDAMENTALS OF AVIONICS SYSTEMS MAINTENANCE (COMMON) TR: Applicable aircraft -1 and -2 series technical orders										
2.13.1 Fundamentals of Flight								B	B	-
2.13.2 Nuclear Hardness Maintenance and Inspections TR: TO JG-00-1, 1A-14								A	-	-
2.13.3 Source Of EMI										
2.13.3.1 Identify								A	A	-
2.13.3.2 Locate								-	-	-
2.13.3.3 Eliminate								-	-	-
2.14 MULTIPLEX BUS (COMMON)										
2.14.1 Theory of Operation								B	-	-
2.14.2 Data Bus Principles / Maintenance Practices TR: Applicable aircraft technical orders										
2.14.2.1 Local Area Networks								A	B	-
2.14.3 MIL-STD-1553B								B	B	-
2.14.4 Fiber Optics								A	A	-
2.14.5 Troubleshoot Data Bus								-	-	-
2.15 GENERAL FLIGHT CONTROL SYSTEMS (COMMON)										
2.15.1 Manual Flight Controls										
2.15.1.1 Primary Flight Control										
2.15.1.1.1 Theory of Operation										
2.15.1.1.1.1 Fixed Wing								B	B	-
2.15.1.1.1.2 Rotary Wing								B	-	-
2.15.1.2 Secondary Flight Controls										
2.15.1.2.1 Purpose and Characteristics								-	-	-
2.15.1.2.2 Theory of Operation								B	B	-
2.15.1.2.3 System Tie-In / Integration								-	-	-
2.15.1.2.4 Perform Inspection								-	-	-
2.15.1.2.5 Perform Operational Check								-	-	-
2.15.1.2.6 Troubleshoot								-	-	-

GENERAL TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training / Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
2.15.2 Flight Control Systems Tie-In/ Integration										
2.15.2.1 Mechanical								B	B	-
2.15.2.2 Electro-Mechanical								B	B	-
2.15.2.3 Hydro-Mechanical								B	B	-
2.15.2.4 Electro-Hydraulic								B	B	-
2.16 POSTION INDICATING/ MEASUREMENT SYSTEMS (COMMON)										
2.16.1 Purpose and Characteristics								-	-	-
2.16.2 Theory of Operation								A	A	-
2.16.3 System Tie-In / Integration								-	-	-
2.16.4 Perform Inspection								-	-	-
2.16.5 Perform Operational Check								-	-	-
2.16.6 Troubleshoot								-	-	-
2.17 AUTOMATIC FLIGHT CONTROL SYSTEMS (COMMON)										
2.17.1 Purpose and Characteristics								-	-	-
2.17.2 Theory of Operation								B	B	-
2.17.3 System Tie-In / Integration								B	B	-
2.17.4 Perform Inspection								2b	-	-
2.17.5 Perform Operational Check								2b	-	-
2.17.6 Troubleshoot								2b	-	-
2.18 STABILITY AUGMENTATION (COMMON)										
2.18.1 Purpose and Characteristics								-	-	-
2.18.2 Theory of Operation								B	B	-
2.18.3 System Tie-In / Integration								B	B	-
2.18.4 Perform Inspection								-	-	-
2.18.5 Perform Operational Check								-	-	-
2.18.6 Troubleshoot								-	-	-
2.19 FLIGHT CONTROL TRIM (COMMON)										
2.19.1 Purpose and Characteristics								-	-	-
2.19.2 Theory of Operation								B	B	-
2.19.3 System Tie-in / Integration								A	-	-
2.19.4 Perform Inspection								-	-	-
2.19.5 Perform Operational Check								-	-	-
2.19.6 Troubleshoot								-	-	-
2.20 GENERAL COMPUTER COMPLEX (COMMON)										
2.20.1 Principles										
2.20.1.1 Central Processing Unit								-	-	-
2.20.1.2 Memory Storage Devices								-	-	-
2.20.2 On-Board Diagnostic Systems										
2.20.2.1 Purpose and Characteristics								-	-	-
2.20.2.2 Theory of Operation								A	B	-

GENERAL TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training / Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
2.20.2.3 System Tie-In/ Integration								A	B	-
2.20.2.4 Perform Inspection								-	-	-
2.20.2.5 Perform Operational Check								-	-	-
2.20.2.6 Troubleshoot								-	-	-
2.20.3 Controls and Displays										
2.20.3.1 Purpose and Characteristics								-	-	-
2.20.3.2 Theory of Operation								B	B	-
2.20.3.3 System Tie-In/ Integration								A	-	-
2.20.3.4 Perform Inspection								-	-	-
2.20.3.5 Perform Operational Check								2b	-	-
2.20.3.6 Troubleshoot								-	-	-
2.20.4 Data Transfer System										
2.20.4.1 Purpose and Characteristics								-	-	-
2.20.4.2 Theory of Operation								B	B	-
2.20.4.3 System Tie-In/ Integration								A	-	-
2.20.4.4 Perform Inspection								-	-	-
2.20.4.5 Perform Operational Check								-	-	-
2.20.4.6 Troubleshoot								-	-	-
2.20.5 Mission Computer/ Flight Management Systems										
2.20.5.1 Purpose and Characteristics								-	-	-
2.20.5.2 Theory of Operation								B	B	-
2.20.5.3 System Tie-In/ Integration								B	B	-
2.20.5.4 Perform Inspection								-	-	-
2.20.5.5 Perform Operational Check								-	-	-
2.20.5.6 Troubleshoot								-	-	-
2.20.6 Fuel Management Systems										
2.20.6.1 Purpose and Characteristics								-	-	-
2.20.6.2 Theory of Operation								B	B	-
2.20.6.3 System of Tie-In/ Integration								B	B	-
2.20.6.4 Perform Inspection								-	-	-
2.20.6.5 Perform Operational Check								-	-	-
2.20.6.6 Troubleshoot								-	-	-
2.21 GENERAL NAVIGATION SYSTEMS (COMMON)										
2.21.1 Flight Director System										
2.21.1.1 Purpose and Characteristics								-	-	-
2.21.1.2 Theory of Operation								B	B	-
2.21.1.3 System Tie-In/ Integration								B	B	-
2.21.1.4 Perform Inspection								2b	-	-
2.21.1.5 Perform Operational Check								2b	-	-
2.21.1.6 Troubleshoot								2b	-	-
2.21.2 Compass/ Attitude Heading Reference System										
2.21.2.1 Purpose and Characteristics								-	-	-
2.21.2.2 Theory of Operation								B	B	-

GENERAL TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training / Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
2.21.2.3 System Tie-In/ Integration								B	B	-
2.21.2.4 Perform Inspection								2b	-	-
2.21.2.5 Perform Operational Check								2b	-	-
2.21.2.6 Troubleshoot								2b	-	-
2.21.3 Calibration/ Boresight System										
2.21.3.1 Purpose and Characteristics								-	-	-
2.21.3.2 Theory of Operation								B	B	-
2.21.3.3 System Tie-In / Integration								-	-	-
2.21.3.4 Perform Inspection								-	-	-
2.21.3.5 Perform Operational Check								-	-	-
2.21.3.6 Troubleshoot								-	-	-
2.21.4 Inertial Navigation System										
2.21.4.1 Purpose and Characteristics								-	-	-
2.21.4.2 Theory of Operation								B	B	-
2.21.4.3 System Tie-In / Integration								B	B	-
2.21.4.4 Perform Inspection								-	-	-
2.21.4.5 Perform Operational Check								2b	-	-
2.21.4.6 Troubleshoot								-	-	-
2.21.4.7 Perform Alignment								2b	-	-
2.21.5 Global Positioning System										
2.21.5.1 Purpose and Characteristics								-	-	-
2.21.5.2 Theory of Operation								B	B	-
2.21.5.3 System Tie-In / Integration								B	B	-
2.21.5.4 Perform Inspection								-	-	-
2.21.5.5 Perform Operational Check								-	-	-
2.21.5.6 Troubleshoot								-	-	-
2.22 FLIGHT INSTRUMENT SYSTEMS (COMMON)										
2.22.1 Pilot Static System										
2.22.1.1 Purpose and Characteristics								-	-	-
2.22.1.2 Theory of Operation								B	B	-
2.22.1.3 System Tie-In/ Integration								B	B	-
2.22.1.4 Perform Inspection								2b	-	-
2.22.1.5 Perform Operational Check								2b	-	-
2.22.1.6 Troubleshoot								2b	-	-
2.22.2 Altimeter										
2.22.2.1 Purpose and Characteristics								-	-	-
2.22.2.2 Theory of Operation								B	B	-
2.22.2.3 System Tie-In / Integration								-	-	-
2.22.2.4 Perform Inspection								2b	-	-
2.22.2.5 Perform Operational Check								2b	-	-
2.22.2.6 Troubleshoot								2b	-	-
2.22.3 Vertical Velocity										
2.22.3.1 Purpose and Characteristics								-	-	-
2.22.3.2 Theory of Operation								B	B	-

GENERAL TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training / Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
2.22.3.3 System Tie-In / Integration								-	-	-
2.22.3.4 Perform Inspection								2b	-	-
2.22.3.5 Perform Operational Check								2b	-	-
2.22.3.6 Troubleshoot								2b	-	-
2.22.4 Airspeed										
2.22.4.1 Purpose and Characteristics								-	-	-
2.22.4.2 Theory of Operation								B	B	-
2.22.4.3 System Tie-In / Integration								-	-	-
2.22.4.4 Perform Inspection								2b	-	-
2.22.4.5 Perform Operational Check								2b	-	-
2.22.4.6 Troubleshoot								2b	-	-
2.22.5 True Airspeed										
2.22.5.1 Purpose and Characteristics								-	-	-
2.22.5.2 Theory of Operation								B	B	-
2.22.5.3 System Tie-In / Integration								-	-	-
2.22.5.4 Perform Inspection								-	-	-
2.22.5.5 Perform Operational Check								-	-	-
2.22.5.6 Troubleshoot								-	-	-
2.22.6 Mach										
2.22.6.1 Purpose and Characteristics								-	-	-
2.22.6.2 Theory of Operation								B	B	-
2.22.6.3 System Tie-In / Integration								-	-	-
2.22.6.4 Perform Inspection								-	-	-
2.22.6.5 Perform Operational Check								-	-	-
2.22.6.6 Troubleshoot								-	-	-
2.22.7 Accelerometer (G-meter)										
2.22.7.1 Purpose and Characteristics								-	-	-
2.22.7.2 Theory of Operation								B	-	-
2.22.7.3 System Tie-In / Integration								-	-	-
2.22.7.4 Perform Inspection								-	-	-
2.22.7.5 Perform Operational Check								-	-	-
2.22.7.6 Troubleshoot								-	-	-
2.22.8 Temperature Systems										
2.22.8.1 Purpose and Characteristics								-	-	-
2.22.8.2 Theory of Operation								A	A	-
2.22.8.3 System Tie-In/ Integration								A	-	-
2.22.8.4 Perform Inspection								-	-	-
2.22.8.5 Perform Operational Check								-	-	-
2.22.8.6 Troubleshoot								-	-	-
2.22.9 Heads-Up Display (HUD)										
2.22.9.1 Purpose and Characteristics								-	-	-
2.22.9.2 Theory of Operation								B	B	-
2.22.9.3 System Tie-In/ Integration								B	B	-
2.22.9.4 Perform Inspection								-	-	-
2.22.9.5 Perform Operational Check								-	-	-

GENERAL TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training / Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
2.22.9.6 Troubleshoot								-	-	-
2.22.10 Angle of Attack										
2.22.10.1 Purpose and Characteristics								-	-	-
2.22.10.2 Theory of Operation								B	B	-
2.22.10.3 System Tie-In/ Integration								B	-	-
2.22.10.4 Perform Inspection								-	-	-
2.22.10.5 Perform Operational Check								-	-	-
2.22.10.6 Troubleshoot								-	-	-
2.22.11 Air Data										
2.22.11.1 Purpose and Characteristics								-	-	-
2.22.11.2 Theory of Operation								B	B	-
2.22.11.3 System Tie-In/ Integration								B	B	-
2.22.11.4 Perform Inspection								2b	-	-
2.22.11.5 Perform Operational Check								2b	-	-
2.22.11.6 Troubleshoot								2b	-	-
2.23 FLIGHT DATA RECORDERS (COMMON)										
2.23.1 Flight Data Recording Systems										
2.23.1.1 Purpose and Characteristics								-	-	-
2.23.1.2 Theory of Operation								B	B	-
2.23.1.3 System Tie-In/ Integration								B	B	-
2.23.1.4 Perform Inspection								-	-	-
2.23.1.5 Perform Operational Check								-	-	-
2.23.1.6 Troubleshoot								-	-	-
2.24 WARNING SYSTEMS (COMMON)										
2.24.1 Terrain Alert Warning Systems (TAWS/ GCAS/GPWX)										
2.24.1.1 Purpose and Characteristics								-	-	-
2.24.1.2 Theory of Operation								B	B	-
2.24.1.3 System Tie-In/ Integration								B	B	-
2.24.1.4 Perform Inspection								-	-	-
2.24.1.5 Perform Operational Check								-	-	-
2.24.1.6 Troubleshoot								-	-	-
2.24.2 Traffic Alert and Collision Avoidance System (TCAS)										
2.24.2.1 Purpose and Characteristics								-	-	-
2.24.2.2 Theory of Operation								A	-	-
2.24.2.3 System Tie-In/ Integration								A	-	-
2.24.2.4 Perform Inspection								-	-	-
2.24.2.5 Perform Operational Check								-	-	-
2.24.2.6 Troubleshoot								-	-	-
2.24.3 Altitude Alerter										
2.24.3.1 Purpose and Characteristics								-	-	-
2.24.3.2 Theory of Operation								B	-	-
2.24.3.3 System Tie-In / Integration								-	-	-
2.24.3.4 Perform Inspection								-	-	-

GENERAL TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training / Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
2.24.3.5 Perform Operational Check								-	-	-
2.24.3.6 Troubleshoot								-	-	-
2.24.4 Caution Advisory/ Warning Systems										
2.24.4.1 Purpose and Characteristics								-	-	-
2.24.4.2 Theory of Operation								B	B	-
2.24.4.3 System Tie-In/ Integration								B	B	-
2.24.4.4 Perform Inspection								-	-	-
2.24.4.5 Perform Operational Check								-	-	-
2.24.4.6 Troubleshoot								-	-	-
2.25 ENGINE INDICATING SYSTEMS (COMMON)										
2.25.1 Exhaust Gas Temperature (EGT) Indicating System										
2.25.1.1 Purpose and Characteristics								-	-	-
2.25.1.2 Theory of Operation								B	B	-
2.25.1.3 System Tie-In/ Integration								A	-	-
2.25.1.4 Perform Inspection								-	-	-
2.25.1.5 Perform Operational Check								2b	-	-
2.25.1.6 Troubleshoot								2b	-	-
2.25.2 Tachometers										
2.25.2.1 Purpose and Characteristics								-	-	-
2.25.2.2 Theory of Operation								B	B	-
2.25.2.3 System Tie-In/ Integration								A	-	-
2.25.2.4 Perform Inspection								2b	-	-
2.25.2.5 Perform Operational Check								2b	-	-
2.25.2.6 Troubleshoot								2b	-	-
2.25.3 Engine Pressure Ratio										
2.25.3.1 Purpose and Characteristics								-	-	-
2.25.3.2 Theory of Operation								B	B	-
2.25.3.3 System Tie-In/ Integration								A	-	-
2.25.3.4 Perform Inspection								2b	-	-
2.25.3.5 Perform Operational Check								2b	-	-
2.25.3.6 Troubleshoot								2b	-	-
2.25.4 Oil Pressure										
2.25.4.1 Purpose and Characteristics								-	-	-
2.25.4.2 Theory of Operation								B	B	-
2.25.4.3 System Tie-In/ Integration								A	-	-
2.25.4.4 Perform Inspection								2b	-	-
2.25.4.5 Perform Operational Check								2b	-	-
2.25.4.6 Troubleshoot								2b	-	-
2.25.5 Fuel Flow										
2.25.5.1 Purpose and Characteristics								-	-	-
2.25.5.2 Theory of Operation								B	B	-
2.25.5.3 System Tie-In/ Integration								A	-	-
2.25.5.4 Perform Inspection								2b	-	-

GENERAL TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training / Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
2.25.5.5 Perform Operational Check								2b	-	-
2.25.5.6 Troubleshoot								2b	-	-
2.25.6 Torque/ Horsepower										
2.25.6.1 Purpose and Characteristics								-	-	-
2.25.6.2 Theory of Operation								B	B	-
2.25.6.3 System Tie-In/ Integration								A	-	-
2.25.6.4 Perform Inspection								-	-	-
2.25.6.5 Perform Operational Check								-	-	-
2.25.6.6 Troubleshoot								-	-	-
2.26 LIQUID QUANTITY INDICATING SYSTEM (COMMON)										
2.26.1 Capacitance										
2.26.1.1 Purpose and Characteristics								-	-	-
2.26.1.2 Theory of Operation								B	B	-
2.26.1.3 System Tie-In/ Integration								B	-	-
2.26.1.4 Perform Inspection								2b	-	-
2.26.1.5 Perform Operational Check								2b	-	-
2.26.1.6 Perform Calibration								2b	-	-
2.26.1.7 Troubleshoot								2b	B	-
2.26.2 Resistance										
2.26.2.1 Purpose and Characteristics								-	-	-
2.26.2.2 Theory of Operation								B	A	-
2.26.2.3 System Tie-In / Integration								-	-	-
2.26.2.4 Perform Inspection								-	-	-
2.26.2.5 Perform Operational Check								-	-	-
2.26.2.6 Troubleshoot								-	-	-
2.27 AIRCRAFT WIRING (COMMON)										
2.27.1 Kapton								A	A	-
2.27.2 Multiconductor								A	-	-
2.27.3 Coaxial								A	B	-
2.27.4 Triaxial								A	B	-
2.27.5 Fiber Optics								A	A	-
2.27.6 Perform Wire Maintenance										
2.27.6.1 Stripping								2b	B	-
2.27.6.2 Environmental Splicing								2b	B	-
2.27.6.3 Bundling								2b	B	-
2.27.6.4 Strain Relief								2b	B	-
2.27.6.5 Nuclear Hardened								a	A	-
2.27.6.6 Twisted Pair								a	-	-
2.27.6.7 Single Conductor								a	-	-
2.27.6.8 Thermocouple Wiring								a	B	-
2.27.7 Continuity Checks								2b	-	-
2.27.8 Wire Repair	*							-	B	-
2.27.9 Solder / Desolder										
2.27.9.1 Terminal Connections								-	-	-

GENERAL TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training / Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
2.27.9.2 Circuit (PC) Boards								-	-	-
2.27.9.3 Multipin Connectors								2b/b	-	-
2.27.9.4 Pot Connectors								-	-	-
2.27.10 Assemble / Disassemble Solderless Connectors										
2.27.10.1 Crimp Connectors	*							-	-	-
2.27.10.2 Coaxial Connectors								-	-	-
2.27.10.3 Multipin Connectors								2b/b	-	-
2.28 REMOVE/ INSTALL COMMON ELECTRICAL COMPONENTS (COMMON)										
2.28.1 Switches								-	-	-
2.28.2 Relays								-	-	-
2.28.3 Circuit Breakers/ Fuses								-	-	-
2.28.4 Remote Control Circuit Breakers								-	-	-
2.28.5 Terminal/ Modular Blocks								-	-	-
2.28.6 Capacitors/ Resistors/ Diodes								-	-	-
2.28.7 Lights/ Light Bulbs								-	-	-
2.28.8 Fans/ Blowers								-	-	-
2.28.9 Transformers								-	-	-
2.29 USE TEST EQUIPMENT / SPECIAL TOOLS (COMMON)										
2.29.1 Bus Analyzer								-	-	-
2.29.2 Wire Maintenance Heat Gun								2b	-	-
2.29.3 Fuel Quantity Test Set								2b	A	-
2.29.4 Engine Indicating Test Set								-	-	-
2.29.5 TTU-205 Test Set								2b	A	-
2.29.6 Jet Calibrator/ Analyzer								2b	-	-
2.29.7 Tachometer Tester								2b	-	-
2.29.8 Variable Reluctance Test Set								-	-	-
2.29.9 Deadweight Tester								2b	-	-
2.29.10 Fuel Flow Test Set								2b	-	-
2.29.11 IFF Test Set								-	-	-
2.29.12 VOR / ILS Test Set								2b	-	-
2.29.13 MC-1M/ 2000 Compass Calibrator								-	-	-
2.29.14 Flight Data Recording Test Set								-	-	-
2.29.15 Laptop / Hand-Held Computer								-	-	-
2.29.16 TACAN Test Set								-	-	-
2.29.17 Bonding Meter								2b	A	-

E-3 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A	B	C
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	3 Skill Level Course	5 Skill Level CDC	7 Skill Level CDC

Attachment 3 E-3 Training Requirements

NOTE 1: The apprentice course, J3ABR2A9X2XXXXX, B/S Integrated Instrument and Flight Control Systems Apprentice, will use representative aircraft/trainers to accomplish the system specific training requirements as identified by the specific STS. The general training requirements section of the CFETP is used to code core competencies of the career field that will be taught in the apprentice course. The MDS specific attachments are to be used in conjunction with the general and common sections to identify work center requirements and annotate qualifications.

NOTE 2: All course requirements are trained in the 3-level resident course during wartime.

NOTE 3: Users are responsible for annotating training references to identify current references pending STS revision.

NOTE 4: Items marked in Column 4A with both a proficiency code and a dash will be taught if equipment is available (Ex: 2b/-).

NOTE 5: Items coded in Column 2A or 2B of the General Attachment are core tasks. If the STS line item identified with an "*" does not apply to a procedure, aircraft MDS, or equipment at a given base, the completion of the core task in the General Attachment is waived.

NOTE 6: Address comments or recommend changes through the MAJCOM Functional Manager to the AETC Training Manager at DSN 736-7908

3.1 GENERAL ORGANIZATIONAL MAINTENANCE (E-3) TR: TO 1E-3A-2-7 / TO 1E-3A-2-1-1										
3.1.1 Aircraft Familiarization										
3.1.1.1 Major Structural Areas								-	-	-
3.1.1.2 Major Aircraft Systems								-	-	-
3.1.1.3 Aircraft Danger Areas								-	-	-
3.1.1.4 Aircraft Egress Procedures								-	-	-
3.1.1.5 Technical Order Familiarization								-	-	-
3.2 GENERAL MAINTENANCE TASKS (E-3) TR: TO 1E-3A-2 / TO 1E-3A-2-1-1 / TO 1E-3A-2-7 / TO 1E-3A-2-7-5CL-1 / TO 1E-3A-2-71-1 / TO 1-3A-6WC-1										
3.2.1 Ensure Aircraft Safe for Maintenance	*							-	-	-
3.2.2 Apply Electrical Power										
3.2.2.1 APU								-	-	-
3.2.2.2 Ground Power	*							-	-	-
3.2.3 Operate Hydraulics	*							-	-	-
3.2.4 Remove / Install Aircraft Panels								-	-	-
3.2.5 Open / Close Engine Cowlings								-	-	-
3.2.6 Tow Aircraft										
3.2.6.1 Wing / Tail Walker								-	-	-
3.2.6.2 Brake Operator								-	-	-
3.2.6.3 Tow Supervisor								-	-	-
3.2.6.4 Tow Vehicle Operator								-	-	-
3.2.7 Refuel / Defuel Supervisor								-	-	-
3.2.8 Refuel / Defuel Panel Operator								-	-	-
3.2.9 Fireguard								-	-	-
3.2.10 Defuel Truck Position Member								-	-	-
3.2.11 Aircraft Wash Team Member								-	-	-
3.2.12 Launch / Recover Aircraft								-	-	-
3.2.13 Marshall Aircraft								-	-	-
3.2.14 Aircraft Jacking Team Member								-	-	-
3.2.15 Aircraft De-Icing Team Member								-	-	-
3.2.16 Use Aircraft Interphone System								-	-	-

E-3 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A	B	C
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	3 Skill Level Course	5 Skill Level CDC	7 Skill Level CDC
3.2.17 Connect External Cooling Air								-	-	-
3.3 GENERAL FLIGHT CONTROLS (E-3)										
3.3.1 Operate Aircraft Flight Controls TR: 1E-3A-2-27-1								-	-	-
3.3.2 Flap Position Indication System TR: 1E-3A-2-31-1										
3.3.2.1 Theory of Operation								-	-	-
3.3.2.2 Perform Operational Checks	*							-	-	-
3.3.2.3 Perform Adjustments	*							-	-	-
3.3.2.4 Isolate Malfunctions	*							-	-	-
3.3.2.5 Perform Advanced Troubleshooting		*						-	-	-
3.3.3 Digital Auto-Pilot TR: 1E-3A-2-22-1										
3.3.3.1 Theory of Operation								-	-	-
3.3.3.2 Perform Operational Checks	*							-	-	-
3.3.3.3 Isolate Malfunctions	*							-	-	-
3.3.3.4 Perform Advanced Troubleshooting		*						-	-	-
3.3.4 Series Yaw Damper TR: 1E-3A-2-22-1										
3.3.4.1 Theory of Operation								-	-	-
3.3.4.2 Perform Operational Checks	*							-	-	-
3.3.4.3 Isolate Malfunctions	*							-	-	-
3.3.4.4 Perform Advanced Troubleshooting		*						-	-	-
3.3.5 Parallel Yaw Damper TR: 1E-3A-2-22-1										
3.3.5.1 Theory of Operation								-	-	-
3.3.5.2 Perform Operational Checks	*							-	-	-
3.3.5.3 Isolate Malfunctions	*							-	-	-
3.3.5.4 Perform Advanced Troubleshooting		*						-	-	-
3.3.6 Rudder Differential Pressure System TR: 1E-3A-2-31-1										
3.3.6.1 Theory of Operation								-	-	-
3.3.6.2 Perform Operational Checks	*							-	-	-
3.3.6.3 Perform Adjustments	*							-	-	-
3.3.6.4 Isolate Malfunctions	*							-	-	-
3.3.6.5 Perform Advanced Troubleshooting		*						-	-	-
3.4 GENERAL NAVIGATION SYSTEMS (E-3)										
3.4.1 Attitude / Heading Reference System TR: 1E-3A-2-31-1										
3.4.1.1 Theory of Operation								-	-	-
3.4.1.2 Perform Operational Checks	*							-	-	-
3.4.1.3 Perform Adjustments	*							-	-	-
3.4.1.4 Isolate Malfunctions	*							-	-	-
3.4.1.5 Perform Advanced Troubleshooting		*						-	-	-
3.4.2 Flight Director TR: 1E-3A-2-31-1										

E-3 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A	B	C
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	3 Skill Level Course	5 Skill Level CDC	7 Skill Level CDC
3.4.2.1 Theory of Operation								-	-	-
3.4.2.2 Perform Operational Checks	*							-	-	-
3.4.2.3 Isolate Malfunctions	*							-	-	-
3.4.2.3 Perform Advanced Troubleshooting		*						-	-	-
3.4.3 Standby Compass System TR: 1E-3A-2-31-1										
3.4.3.1 Theory of Operation								-	-	-
3.4.3.2 Perform Operational Checks	*							-	-	-
3.4.3.3 Isolate Malfunctions	*							-	-	-
3.4.3.4 Perform Advanced Troubleshooting		*						-	-	-
3.4.4 Global Positioning / Inertial Navigation System (GINS) TR: 1E-3A-2-34-4										
3.4.4.1 Theory of Operation								-	-	-
3.4.4.2 Perform Operational Checks	*							-	-	-
3.5 FLIGHT INSTRUMENTS (E-3)										
3.5.1 Pitot / Static TR: 1E-3A-2-31-1										
3.5.1.1 Theory of Operation								-	-	-
3.5.1.2 Perform Operational Checks	*							-	-	-
3.5.1.3 Isolate Malfunctions	*							-	-	-
3.5.1.4 Perform Advanced Troubleshooting		*						-	-	-
3.5.2 Barometric / Encoding Altimeter TR: 1E-3A-2-31-1										
3.5.2.1 Theory of Operation								-	-	-
3.5.2.2 Perform Operational Checks	*							-	-	-
3.5.2.3 Perform Adjustments	*							-	-	-
3.5.2.4 Isolate Malfunctions	*							-	-	-
3.5.2.5 Perform Advanced Troubleshooting		*						-	-	-
3.5.3 Vertical Speed Indicator TR: 1E-3A-2-31-1										
3.5.3.1 Theory of Operation								-	-	-
3.5.3.2 Perform Operational Checks	*							-	-	-
3.5.3.3 Isolate Malfunctions	*							-	-	-
3.5.3.4 Perform Advanced Troubleshooting		*						-	-	-
3.5.4 AirSpeed TR: 1E-3A-2-31-1										
3.5.4.1 Theory of Operation								-	-	-
3.5.4.2 Perform Operational Checks	*							-	-	-
3.5.4.3 Isolate Malfunctions	*							-	-	-
3.5.5 Accelerometer TR: 1E-3A-2-31-1										
3.5.5.1 Theory of Operation								-	-	-
3.5.5.2 Perform Operational Checks	*							-	-	-
3.5.5.3 Isolate Malfunctions	*							-	-	-
3.5.6 Standby Attitude Indicator System TR: 1E-3A-2-31-1										

E-3 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A	B	C
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	3 Skill Level Course	5 Skill Level CDC	7 Skill Level CDC
3.5.6.1 Theory of Operation								-	-	-
3.5.6.2 Perform Operational Checks	*							-	-	-
3.5.6.3 Isolate Malfunctions	*							-	-	-
3.6 AIR DATA SYSTEMS (E-3)										
3.6.1 Air Data Computer TR: 1E-3A-2-31-1										
3.6.1.1 Theory of Operation								-	-	-
3.6.1.2 Perform Operational Checks	*							-	-	-
3.6.1.3 Isolate Malfunctions	*							-	-	-
3.6.1.4 Perform Advanced Troubleshooting		*						-	-	-
3.6.2 Altitude Alerter/ RVSM										
3.6.2.1 Theory of Operation								-	-	-
3.6.2.2 Perform Operational Checks	*							-	-	-
3.6.2.3 Isolate Malfunctions	*							-	-	-
3.6.2.4 Perform Advanced Troubleshooting		*						-	-	-
3.7 DATA RECORDERS (E-3)										
3.7.1 Life History Recorder TR: 1E-3A-2-31-1										
3.7.1.1 Theory of Operation								-	-	-
3.7.1.2 Perform Operational Checks								-	-	-
3.7.1.3 Isolate Malfunctions								-	-	-
3.7.1.4 Perform Advanced Troubleshooting								-	-	-
3.7.2 Digital Flight Data Recorder TR: 1E-3A-2-23-2										
3.7.2.1 Theory of Operation								-	-	-
3.7.2.2 Perform Operational Checks	*							-	-	-
3.7.2.3 Isolate Malfunctions	*							-	-	-
3.7.2.4 Perform Advanced Troubleshooting		*						-	-	-
3.8 WARNING SYSTEMS (E-3)										
3.8.1 Fuel Low Level Warning System TR: 1E-3A-2-31-1										
3.8.1.1 Theory of Operation								-	-	-
3.8.1.2 Perform Operational Checks	*							-	-	-
3.8.1.3 Isolate Malfunctions	*							-	-	-
3.8.1.4 Perform Advanced Troubleshooting		*						-	-	-
3.8.2 Attitude Warning System TR: 1E-3A-2-31-1										
3.8.2.1 Theory of Operation								-	-	-
3.8.2.2 Perform Operational Checks	*							-	-	-
3.8.2.3 Isolate Malfunctions	*							-	-	-
3.8.2.4 Perform Advanced Troubleshooting		*						-	-	-
3.8.3 Mach Warning System TR: 1E-3A-2-31-1										
3.8.3.1 Theory of Operation								-	-	-
3.8.3.2 Perform Operational Checks	*							-	-	-
3.8.3.3 Isolate Malfunctions	*							-	-	-

E-3 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
3.8.4 Angle Of Attack / Stall Warning TR: 1E-3A-2-31-1										
3.8.4.1 Theory of Operation								-	-	-
3.8.4.2 Perform Operational Checks	*							-	-	-
3.8.4.3 Isolate Malfunctions	*							-	-	-
3.8.4.4 Perform Advanced Troubleshooting		*						-	-	-
3.9 ENGINE INSTRUMENTATION (E-3)										
3.9.1 Engine Exhaust Gas Temperature TR: 1E-3A-2-31-1										
3.9.1.1 Theory of Operation								-	-	-
3.9.1.2 Perform Operational Checks	*							-	-	-
3.9.1.3 Isolate Malfunctions	*							-	-	-
3.9.2 APU Exhaust Gas Temperature TR: 1E-3A-2-31-1										
3.9.2.1 Theory of Operation								-	-	-
3.9.2.2 Perform Operational Checks	*							-	-	-
3.9.2.3 Isolate Malfunctions	*							-	-	-
3.9.3 Tachometer TR: 1E-3A-2-31-1										
3.9.3.1 Theory of Operation								-	-	-
3.9.3.2 Perform Operational Checks	*							-	-	-
3.9.3.3 Isolate Malfunctions	*							-	-	-
3.9.4 Engine Pressure Ratio TR: 1E-3A-2-31-1										
3.9.4.1 Theory of Operation								-	-	-
3.9.4.2 Perform Operational Checks	*							-	-	-
3.9.4.3 Isolate Malfunctions	*							-	-	-
3.9.4.4 Perform Advanced Troubleshooting		*						-	-	-
3.9.5 Engine Oil Pressure TR: 1E-3A-2-31-1										
3.9.5.1 Theory of Operation								-	-	-
3.9.5.2 Perform Operational Checks	*							-	-	-
3.9.5.3 Isolate Malfunctions	*							-	-	-
3.9.6 APU Accumulator Pressure Indicating System TR: 1E-3A-2-31-1										
3.9.6.1 Theory of Operation								-	-	-
3.9.6.2 Perform Operational Checks	*							-	-	-
3.9.6.3 Isolate Malfunctions	*							-	-	-
3.9.7 Fuel Flow TR: 1E-3A-2-31-1										
3.9.7.1 Theory of Operation								-	-	-
3.9.7.2 Perform Operational Checks	*							-	-	-
3.9.7.3 Isolate Malfunctions	*							-	-	-
3.9.7.4 Perform Advanced Troubleshooting		*						-	-	-
3.9.8 Engine Oil Temperature TR: 1E-3A-2-31-1										

E-3 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
3.9.8.1 Theory of Operation								-	-	-
3.9.8.2 Perform Operational Checks	*							-	-	-
3.9.8.3 Isolate Malfunctions	*							-	-	-
3.9.9 Engine Oil Quantity TR: 1E-3A-2-31-1										
3.9.9.1 Theory of Operation								-	-	-
3.9.9.2 Perform Operational Checks	*							-	-	-
3.9.9.3 Isolate Malfunctions	*							-	-	-
3.9.9.4 Perform Advanced Troubleshooting		*						-	-	-
3.10. FUEL QUANTITY INDICATING SYSTEM (E-3)										
3.10.1 Capacitance TR: 1E-3A-2-31-1										
3.10.1.1 Theory of Operation								-	-	-
3.10.1.2 Perform Operational Checks	*							-	-	-
3.10.1.3 Perform Adjustments	*							-	-	-
3.10.1.4 Isolate Malfunctions	*							-	-	-
3.10.1.5 Perform Advanced Troubleshooting		*						-	-	-
3.11 HYDRAULIC INDICATING SYSTEMS (E-3)										
3.11.1 Hydraulic Quantity Indicating System TR: 1E-3A-2-31-1										
3.11.1.1 Theory of Operation								-	-	-
3.11.1.2 Perform Operational Checks	*							-	-	-
3.11.1.3 Isolate Malfunctions	*							-	-	-
3.11.2 Auxiliary / Utility Hydraulic Pressure Indicating System TR: 1E-3A-2-29-1										
3.11.2.1 Theory of Operation								-	-	-
3.11.2.2 Perform Operational Checks	*							-	-	-
3.11.2.3 Isolate Malfunctions	*							-	-	-
3.11.2.4 Perform Advanced Troubleshooting		*						-	-	-
3.12 MISCELLANEOUS SYSTEMS (E-3)										
3.12.1 Fuel Temperature Indicating System TR: 1E-3A-2-31-1										
3.12.1.1 Theory of Operation								-	-	-
3.12.1.2 Perform Operational Checks	*							-	-	-
3.12.1.3 Isolate Malfunctions	*							-	-	-
3.12.1.4 Perform Advanced Troubleshooting		*						-	-	-

E-4 and VC-25 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A	B	C
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	3 Skill Level Course	5 Skill Level CDC	7 Skill Level CDC

Attachment 4 E-4 and VC-25 Training Requirements

NOTE 1: The apprentice course, J3ABR2A9X2XXXXX, B/S Integrated Instrument and Flight Control Systems Apprentice, will use representative aircraft/trainers to accomplish the system specific training requirements as identified by the specific STS. The general training requirements section of the CFETP is used to code core competencies of the career field that will be taught in the apprentice course. The MDS specific attachments are to be used in conjunction with the general and common sections to identify work center requirements and annotate qualifications.

NOTE 2: All course requirements are trained in the 3-level resident course during wartime.

NOTE 3: Users are responsible for annotating training references to identify current references pending STS revision.

NOTE 4: Items marked in Column 4A with both a proficiency code and a dash will be taught if equipment is available (Ex: 2b/-).

NOTE 5: Items coded in Column 2A or 2B of the General Attachment are core tasks. If the STS line item identified with an "*" does not apply to a procedure, aircraft MDS, or equipment at a given base, the completion of the core task in the General Attachment is waived.

NOTE 6: Address comments or recommend changes through the MAJCOM Functional Manager to the AETC Training Manager at DSN 736-7908

4.1 GENERAL ORGANIZATIONAL MAINTENANCE (E-4)										
4.1.1 Aircraft Familiarization								-	-	-
4.1.2 Technical Order Familiarization								-	-	-
4.1.3 Introduction to Aircraft / Airframe Familiarization								-	-	-
4.1.4 Inspection / Operation Portable External Electrical Power Unit								-	-	-
4.1.5 Use Ground Maintenance Stands								-	-	-
4.1.6 Defensive Systems (DS) Familiarization								-	-	-
4.2 GENERAL MAINTENANCE TASKS (E-4) TR: TO 1E-4B-2-20										
4.2.1 Ensure Aircraft Safe for Maintenance	*							-	-	-
4.2.2 Apply / Disconnect External Electrical Power Unit	*							-	-	-
4.2.3 Perform Aircraft Wash								-	-	-
4.2.4 Jack Aircraft										
4.2.4.1 Jacking Team Member								-	-	-
4.2.4.2 Jacking Team Supervisor								-	-	-
4.2.5 Tow Aircraft										
4.2.5.1 Perform Wing / Tail Walker Duties								-	-	-
4.2.5.2 Brake Operator								-	-	-
4.2.5.3 Aircraft Practice TR: 1E-4B-2-20								-	-	-
4.2.6 Remove / Install Maintenance Panels								-	-	-
4.2.7 Aircraft Egress								-	-	-
4.2.8 Refuel / Defuel										
4.2.8.1 Fuel Panel Operator								-	-	-
4.2.8.2 Wing Operator								-	-	-
4.2.8.3 Fire Guard								-	-	-
4.2.9 Operate APU TR: 1E-4B-2-49								-	-	-
4.2.10 Apply Bleed Air								-	-	-
4.2.11 Apply Hydraulics								-	-	-
4.3 GENERAL FLIGHT CONTROLS (E-4) TR: TO 1E-4B-2-27										

E-4 and VC-25 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A	B	C
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	3 Skill Level Course	5 Skill Level CDC	7 Skill Level CDC
4.3.1 Manual Flight Controls										
4.3.1.1 Rudder Ratio TR: 1E-4B-2-27										
4.3.1.1.1 Theory of Operation								-	-	-
4.3.1.1.2 Perform Operational Test	*							-	-	-
4.3.1.1.3 Isolate Malfunctions	*							-	-	-
4.3.1.1.4 Perform Advanced Troubleshooting		*						-	-	-
4.3.1.2 Elevator Feel System TR: 1E-4B-2-27										
4.3.1.2.1 Theory of Operation								-	-	-
4.3.1.2.2 Perform Operational Test	*							-	-	-
4.3.1.2.3 Isolate Malfunctions	*							-	-	-
4.3.1.2.4 Perform Advanced Troubleshooting		*						-	-	-
4.3.2 Position Indicating System										
4.3.2.1 Stab Trim Indication TR: 1E-4B-2-27-48										
4.3.2.1.1 Theory of Operation								-	-	-
4.3.2.1.2 Perform Operational Test	*							-	-	-
4.3.2.1.3 Adjustments / Calibrations	*							-	-	-
4.3.2.1.4 Isolate Malfunctions	*							-	-	-
4.3.2.1.5 Perform Advanced Troubleshooting		*						-	-	-
4.3.2.2 Rudder Position Indication										
4.3.2.2.1 Theory of Operation								-	-	-
4.3.2.2.2 Perform Operational Test	*							-	-	-
4.3.2.2.3 Adjustments / Calibrations	*							-	-	-
4.3.2.2.4 Isolate Malfunctions	*							-	-	-
4.3.2.2.5 Perform Advanced Troubleshooting		*						-	-	-
4.3.2.3 Elevator Position Indication TR: 1E-4B-2-27-38										
4.3.2.3.1 Theory of Operation								-	-	-
4.3.2.3.2 Perform Operational Test	*							-	-	-
4.3.2.3.3 Adjustments / Calibrations	*							-	-	-
4.3.2.3.4 Isolate Malfunctions	*							-	-	-
4.3.2.3.5 Perform Advanced Troubleshooting		*						-	-	-
4.3.2.4 Aileron Position Indication TR: 1E-4B-2-27-18										
4.3.2.4.1 Theory of Operation								-	-	-
4.3.2.4.2 Perform Operational Test	*							-	-	-
4.3.2.4.3 Adjustments / Calibrations	*							-	-	-
4.3.2.4.4 Isolate Malfunctions	*							-	-	-
4.3.2.4.5 Perform Advanced Troubleshooting		*						-	-	-
4.3.2.5 Flap Position Indication TR: 1E-4B-2-27-58										
4.3.2.5.1 Theory of Operation								-	-	-
4.3.2.5.2 Perform Operational Test	*							-	-	-
4.3.2.5.3 Adjustments / Calibrations	*							-	-	-

E-4 and VC-25 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
4.3.2.5.4 Isolate Malfunctions	*							-	-	-
4.3.2.5.5 Perform Advanced Troubleshooting		*						-	-	-
4.3.2.6 Spoiler Position Indication TR: 1E-4B-2-27-68										
4.3.2.6.1 Theory of Operation								-	-	-
4.3.2.6.2 Perform Operational Test	*							-	-	-
4.3.2.6.3 Adjustments / Calibrations	*							-	-	-
4.3.2.6.4 Isolate Malfunctions	*							-	-	-
4.3.2.6.5 Perform Advanced Troubleshooting		*						-	-	-
4.3.3 Automatic Flight Controls TR: 1E-4B-2-22										
4.3.3.1 AutoPilot System										
4.3.3.1.1 Theory of Operation								-	-	-
4.3.3.1.2 Perform Operational Test	*							-	-	-
4.3.3.1.3 Isolate Malfunctions	*							-	-	-
4.3.3.1.4 Perform Advanced Troubleshooting		*						-	-	-
4.3.3.2 AutoStab Trim System TR: 1E-4B-2-22										
4.3.3.2.1 Theory of Operation								-	-	-
4.3.3.2.2 Perform Operational Test	*							-	-	-
4.3.3.2.3 Isolate Malfunctions	*							-	-	-
4.3.3.2.4 Perform Advanced Troubleshooting		*						-	-	-
4.3.3.3 AutoThrottle System TR: 1E-4B-2-22-31										
4.3.3.3.1 Theory of Operation								-	-	-
4.3.3.3.2 Perform Operational Test	*							-	-	-
4.3.3.3.3 Remove / Install Auto Throttle Clutch Pack								-	-	-
4.3.3.3.4 Isolate Malfunctions	*							-	-	-
4.3.3.3.5 Perform Advanced Troubleshooting		*						-	-	-
4.3.4 Stabilization Augmentation										
4.3.4.1 Yaw Damper System TR: 1E-4B-2-22										
4.3.4.1.1 Theory of Operation								-	-	-
4.3.4.1.2 Perform Operational Test	*							-	-	-
4.3.4.1.3 Isolate Malfunctions	*							-	-	-
4.3.4.1.4 Perform Advanced Troubleshooting		*						-	-	-
4.4 GENERAL COMPUTER COMPLEX (E-4)										
4.4.1 Controls and Displays										
4.4.1.1 Electronic Flight Instrument System TR: 1E-4B-2-34-23										
4.4.1.1.1 Theory of Operation								-	-	-
4.4.1.1.2 Perform Operational Test	*							-	-	-
4.4.1.1.3 Isolate Malfunctions	*							-	-	-
4.4.1.1.4 Perform Advanced Troubleshooting		*						-	-	-
4.4.2 Mission Computers / FMS										

E-4 and VC-25 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
4.4.2.1 Flight Management System TR: 1E-4B-2-34-61										
4.4.2.1.1 Theory of Operation								-	-	-
4.4.2.1.2 Perform Operational Test	*							-	-	-
4.4.2.1.3 Isolate Malfunctions	*							-	-	-
4.4.2.1.4 Perform Advanced Troubleshooting		*						-	-	-
4.5 GENERAL NAVIGATION (E-4)										
4.5.1 Flight Director System TR: 1E-4B-2-22										
4.5.1.1 Theory of Operation								-	-	-
4.5.1.2 Perform Operational Test	*							-	-	-
4.5.1.3 Isolate Malfunctions	*							-	-	-
4.5.1.4 Perform Advanced Troubleshooting		*						-	-	-
4.5.2 Magnetic Heading Reference System TR: 1E-4B-2-34-21										
4.5.2.1 Theory of Operation								-	-	-
4.5.2.2 Perform Operational Test	*							-	-	-
4.5.2.3 Remove / Install LRUs	*							-	-	-
4.5.2.4 Isolate Malfunctions	*							-	-	-
4.5.2.5 Perform Advanced Troubleshooting		*						-	-	-
4.5.3 Inertial Navigation System (INS) TR: 1E-4B-2-34-41										
4.5.3.1 Theory of Operation								-	-	-
4.5.3.2 Perform Operational Test	*							-	-	-
4.5.3.3 Isolate Malfunctions	*							-	-	-
4.5.3.4 Perform Advanced Troubleshooting		*						-	-	-
4.5.4 Global Positioning System (GPS) TR: 1E-4B-2-34-58										
4.5.4.1 Theory of Operation								-	-	-
4.5.4.2 Perform Operational Test	*							-	-	-
4.5.5 Sextant TR: 5N10-3-2-21, 1E-4B-2-34										
4.5.5.1 Theory of Operation								-	-	-
4.5.5.2 Perform Operational Test	*							-	-	-
4.5.5.3 Isolate Malfunctions	*							-	-	-
4.5.5.4 Perform Advanced Troubleshooting		*						-	-	-
4.6 FLIGHT INSTRUMENTS (E-4)										
4.6.1 Pitot / Static System TR: 1B-4B-2-34-11										
4.6.1.1 Theory of Operation								-	-	-
4.6.1.2 Perform Operational Test	*							-	-	-
4.6.1.3 Isolate Malfunctions	*							-	-	-
4.6.1.4 Perform Advanced Troubleshooting		*						-	-	-
4.6.2 Altimeter (Barometric) TR: 1E-4B-2-34										
4.6.2.1 Theory of Operation								-	-	-

E-4 and VC-25 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
4.6.2.2 Perform Operational Test	*							-	-	-
4.6.2.3 Isolate Malfunctions	*							-	-	-
4.6.2.4 Perform Advanced Troubleshooting		*						-	-	-
4.6.3 Vertical Velocity TR: 1E-4B-2-34										
4.6.3.1 Theory of Operation								-	-	-
4.6.3.2 Perform Operational Test	*							-	-	-
4.6.3.3 Isolate Malfunctions	*							-	-	-
4.6.3.4 Perform Advanced Troubleshooting		*						-	-	-
4.6.4 AirSpeed TR: 1E-4B-2-34										
4.6.4.1 Theory of Operation								-	-	-
4.6.4.2 Perform Operational Test	*							-	-	-
4.6.4.3 Isolate Malfunctions	*							-	-	-
4.6.4.4 Perform Advanced Troubleshooting		*						-	-	-
4.6.5 True AirSpeed TR: 1E-4B-2-34										
4.6.5.1 Theory of Operation								-	-	-
4.6.5.2 Perform Operational Test	*							-	-	-
4.6.5.3 Isolate Malfunctions	*							-	-	-
4.6.5.4 Perform Advanced Troubleshooting		*						-	-	-
4.6.6 Mach AirSpeed TR: 1E-4B-2-34										
4.6.6.1 Theory of Operation								-	-	-
4.6.6.2 Perform Operational Test	*							-	-	-
4.6.6.3 Isolate Malfunctions	*							-	-	-
4.6.6.4 Perform Advanced Troubleshooting		*						-	-	-
4.6.7 Standby Indicators										
4.6.7.1 Standby Attitude Reference System TR: 1E-4B-2-34-24										
4.6.7.1.1 Theory of Operation								-	-	-
4.6.7.1.2 Perform Operational Test	*							-	-	-
4.6.7.1.3 Isolate Malfunctions	*							-	-	-
4.6.7.1.4 Perform Advanced Troubleshooting		*						-	-	-
4.6.7.2 Standby Magnetic Compass TR: 1E-4B-2-34-22										
4.6.7.2.1 Theory of Operation								-	-	-
4.6.7.2.2 Perform Operational Test	*							-	-	-
4.6.7.2.3 Isolate Malfunctions	*							-	-	-
4.6.7.2.4 Perform Advanced Troubleshooting		*						-	-	-
4.6.8 Air Temperature										
4.6.8.1 Total Air Temperature TR: 1E-4B-4-34										
4.6.8.1.1 Theory of Operation								-	-	-
4.6.8.1.2 Perform Operational Test	*							-	-	-
4.6.8.1.3 Isolate Malfunctions	*							-	-	-

E-4 and VC-25 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A	B	C
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	3 Skill Level Course	5 Skill Level CDC	7 Skill Level CDC
4.6.8.1.4 Perform Advanced Troubleshooting		*						-	-	-
4.6.8.2 Static Air Temp TR: 1E-4B-2-34										
4.6.8.2.1 Theory of Operation								-	-	-
4.6.8.2.2 Perform Operational Test	*							-	-	-
4.6.8.2.3 Isolate Malfunctions	*							-	-	-
4.6.8.2.4 Perform Advanced Troubleshooting		*						-	-	-
4.6.9 TAT / N-1 Limit System TR: 1E-4B-2-34-15										
4.6.9.1 Theory of Operation								-	-	-
4.6.9.2 Perform Operational Test	*							-	-	-
4.6.9.3 Isolate Malfunctions	*							-	-	-
4.6.9.4 Perform Advanced Troubleshooting		*						-	-	-
4.6.10 Angle Of Attack										
4.6.10.1 Theory of Operation								-	-	-
4.6.10.2 Perform Operational Test	*							-	-	-
4.6.10.3 Isolate Malfunctions	*							-	-	-
4.6.10.4 Perform Advanced Troubleshooting		*						-	-	-
4.6.11 Warning TR: 1E-4B-2										
4.6.11.1 Theory of Operation								-	-	-
4.6.11.2 Perform Operational Test	*							-	-	-
4.6.11.3 Isolate Malfunctions	*							-	-	-
4.6.11.4 Perform Advanced Troubleshooting		*						-	-	-
4.7 AIR DATA SYSTEMS (E-4)										
4.7.1 Central Air Data Computer TR: 1E-4B-2-34										
4.7.1.1 Theory of Operation								-	-	-
4.7.1.2 Perform Operational Test	*							-	-	-
4.7.1.3 Isolate Malfunctions	*							-	-	-
4.7.1.4 Perform Advanced Troubleshooting		*						-	-	-
4.8 DATA RECORDERS (E-4)										
4.8.1 Flight Data Recorder TR: 2E-4B-2-31-31										
4.8.1.1 Theory of Operation								-	-	-
4.8.1.2 Perform Operational Test	*							-	-	-
4.8.1.3 Isolate Malfunctions	*							-	-	-
4.8.1.4 Perform Advanced Troubleshooting		*						-	-	-
4.9 WARNING SYSTEMS (E-4)										
4.9.1 GPWS / TAWS TR: 1E-4B-2-34-58										
4.9.1.1 Theory of Operation								-	-	-
4.9.1.2 Perform Operational Test	*							-	-	-
4.9.1.3 Isolate Malfunctions	*							-	-	-
4.9.1.4 Perform Advanced Troubleshooting		*						-	-	-
4.9.2 Traffic Alert and Collision Avoidance										

E-4 and VC-25 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A	B	C
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	3 Skill Level Course	5 Skill Level CDC	7 Skill Level CDC
System TR: 1E-4B-2-34-45										
4.9.2.1 Theory of Operation								-	-	-
4.9.2.2 Perform Operational Test	*							-	-	-
4.9.2.3 Isolate Malfunctions	*							-	-	-
4.9.2.4 Perform Advanced Troubleshooting		*						-	-	-
4.9.3 Aural Warning System TR: 1E-4B-2-31										
4.9.3.1 Theory of Operation								-	-	-
4.9.3.2 Perform Operational Test	*							-	-	-
4.9.3.3 Isolate Malfunctions	*							-	-	-
4.9.3.4 Perform Advanced Troubleshooting		*						-	-	-
4.9.4 Mach AirSpeed Warning System TR: 1E-4B-2-34-14										
4.9.4.1 Theory of Operation								-	-	-
4.9.4.2 Perform Operational Test	*							-	-	-
4.9.4.3 Isolate Malfunctions	*							-	-	-
4.9.4.4 Perform Advanced Troubleshooting		*						-	-	-
4.9.5 Altitude Alert System TR: 2E-4B-2-34-16										
4.9.5.1 Theory of Operation								-	-	-
4.9.5.2 Perform Operational Test	*							-	-	-
4.9.5.3 Isolate Malfunctions	*							-	-	-
4.9.5.4 Perform Advanced Troubleshooting		*						-	-	-
4.10 ENGINE INDICATING SYSTEMS (E-4)										
4.10.1 Engine EGT System TR: 1E-4B-2-77-21										
4.10.1.1 Theory of Operation								-	-	-
4.10.1.2 Perform Operational Test	*							-	-	-
4.10.1.3 Isolate Malfunctions	*							-	-	-
4.10.1.4 Perform Advanced Troubleshooting		*						-	-	-
4.10.2 APU EGT TR: 1E-4B-2-49-71										
4.10.2.1 Theory of Operation								-	-	-
4.10.2.2 Perform Operational Test	*							-	-	-
4.10.2.3 Isolate Malfunctions	*							-	-	-
4.10.2.4 Perform Advanced Troubleshooting		*						-	-	-
4.10.3 Oil Temperature System TR: 1E-4B-2-79-34										
4.10.3.1 Theory of Operation								-	-	-
4.10.3.2 Perform Operational Test	*							-	-	-
4.10.3.3 Isolate Malfunctions	*							-	-	-
4.10.3.4 Perform Advanced Troubleshooting		*						-	-	-
4.10.4 Fuel Temperature System TR: 1E-4B-2-73-32										
4.10.4.1 Theory of Operation								-	-	-

E-4 and VC-25 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
4.10.4.2 Perform Operational Test	*							-	-	-
4.10.4.3 Isolate Malfunctions	*							-	-	-
4.10.4.4 Perform Advanced Troubleshooting		*						-	-	-
4.10.5 Fuel Over Temp System (LSC) TR: 1B-4B-2-21-57										
4.10.5.1 Theory of Operation								-	-	-
4.10.5.2 Perform Operational Test	*							-	-	-
4.10.5.3 Isolate Malfunctions	*							-	-	-
4.10.5.4 Perform Advanced Troubleshooting		*						-	-	-
4.10.6 N-1 Indication TR: 1E-4B-2-77-12										
4.10.6.1 Theory of Operation								-	-	-
4.10.6.2 Perform Operational Test	*							-	-	-
4.10.6.3 Isolate Malfunctions	*							-	-	-
4.10.6.4 Perform Advanced Troubleshooting		*						-	-	-
4.10.7 N-2 Indication TR: 1E-4B-2-77-12										
4.10.7.1 Theory of Operation								-	-	-
4.10.7.2 Perform Operational Test	*							-	-	-
4.10.7.3 Isolate Malfunctions	*							-	-	-
4.10.7.4 Perform Advanced Troubleshooting		*						-	-	-
4.10.8 APU Tachometer TR: 1E-4B-2-49-73										
4.10.8.1 Theory of Operation								-	-	-
4.10.8.2 Perform Operational Test	*							-	-	-
4.10.8.3 Isolate Malfunctions	*							-	-	-
4.10.8.4 Perform Advanced Troubleshooting		*						-	-	-
4.10.9 Pressure Indicating System										
4.10.9.1 Engine Oil Pressure System TR: 1E-4B-2-79-32										
4.10.9.1.1 Theory of Operation								-	-	-
4.10.9.1.2 Perform Operational Test	*							-	-	-
4.10.9.1.3 Isolate Malfunctions	*							-	-	-
4.10.9.1.4 Perform Advanced Troubleshooting		*						-	-	-
4.10.10 Fuel Flow / Fuel Used Indication TR: 1E-4B-2-73-31										
4.10.10.1 Theory of Operation								-	-	-
4.10.10.2 Perform Operational Test	*							-	-	-
4.10.10.3 Isolate Malfunctions	*							-	-	-
4.10.10.4 Perform Advanced Troubleshooting		*						-	-	-
4.10.11 Airborne Vibration Monitor System TR: 1E-4B-2-77-31										
4.10.11.1 Theory of Operation								-	-	-
4.10.11.2 Perform Operational Test	*							-	-	-
4.10.11.3 Isolate Malfunctions	*							-	-	-
4.10.11.4 Perform Advanced Troubleshooting		*						-	-	-

E-4 and VC-25 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
4.11 LIQUID QUANTITY INDICATIONS (E-4)										
4.11.1 Hydraulic Fluid Quantity Indicating System TR: 1E-4B-2-29-33										
4.11.1.1 Theory of Operation								-	-	-
4.11.1.2 Perform Operational Test	*							-	-	-
4.11.1.3 Isolate Malfunctions	*							-	-	-
4.11.1.4 Perform Advanced Troubleshooting		*						-	-	-
4.11.2 Volumetric Shut-Off Control System TR: 1E-4B-2-28-21										
4.11.2.1 Theory of Operation								-	-	-
4.11.2.2 Perform Operational Test	*							-	-	-
4.11.2.3 Adjustments	*							-	-	-
4.11.2.4 Isolate Malfunctions	*							-	-	-
4.11.2.5 Perform Advanced Troubleshooting		*						-	-	-
4.11.3 Fuel Quantity System TR: 1E-4B-2-28-41										
4.11.3.1 Theory of Operation								-	-	-
4.11.3.2 Perform Operational Test	*							-	-	-
4.11.3.3 Adjustments	*							-	-	-
4.11.3.4 Isolate Malfunctions	*							-	-	-
4.11.3.5 Perform Advanced Troubleshooting		*						-	-	-
4.11.4 Engine Oil Quantity System TR: 1E-4B-2-79-31										
4.11.4.1 Theory of Operation								-	-	-
4.11.4.2 Perform Operational Test	*							-	-	-
4.11.4.3 Isolate Malfunctions	*							-	-	-
4.11.4.4 Perform Advanced Troubleshooting		*						-	-	-
4.11.5 APU Oil Quantity System TR: 1E-4B-2-79-31										
4.11.5.1 Theory of Operation								-	-	-
4.11.5.2 Perform Operational Test	*							-	-	-
4.11.5.3 Isolate Malfunctions	*							-	-	-
4.11.5.4 Perform Advanced Troubleshooting		*						-	-	-
4.11.6 Hydraulic Pressure Indicating System TR: 1E-4B-2-29-31										
4.11.6.1 Theory of Operation								-	-	-
4.11.6.2 Perform Operational Test	*							-	-	-
4.11.6.3 Isolate Malfunctions	*							-	-	-
4.11.6.4 Perform Advanced Troubleshooting		*						-	-	-
4.12 MISCELLANEOUS (E-4)										
4.12.1 GMT Clocks TR: 1E-4B-2-38										
4.12.1.1 Theory of Operation								-	-	-
4.12.1.2 Perform Operational Test	*							-	-	-
4.12.1.3 Isolate Malfunctions	*							-	-	-

E-4 and VC-25 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A	B	C
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	3 Skill Level Course	5 Skill Level CDC	7 Skill Level CDC
4.12.2 Potable Water Indicating System TR: 1E-4B-2-38										
4.12.2.1 Theory of Operation								-	-	-
4.12.2.2 Perform Operational Test	*							-	-	-
4.12.2.3 Isolate Malfunctions	*							-	-	-
4.12.3 Nuclear Hardness Components TR: 1E-4B-2-44										
4.12.3.1 Theory of Operation								-	-	-
4.12.3.2 Perform Operational Test	*							-	-	-
4.12.3.3 Isolate Malfunctions	*							-	-	-
4.12.3.4 Perform Advanced Troubleshooting		*						-	-	-

E-8 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training / Information Provided		
	A	B	A	B	C	D	E	A	B	C
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	3 Skill Level Course	5 Skill Level CDC	7 Skill Level CDC

Attachment 5 E-8 Training Requirements

NOTE 1: The apprentice course, J3ABR2A9X2XXXXX, B/S Integrated Instrument and Flight Control Systems Apprentice, will use representative aircraft/trainers to accomplish the system specific training requirements as identified by the specific STS. The general training requirements section of the CFETP is used to code core competencies of the career field that will be taught in the apprentice course. The MDS specific attachments are to be used in conjunction with the general and common sections to identify work center requirements and annotate qualifications.

NOTE 2: All course requirements are trained in the 3-level resident course during wartime.

NOTE 3: Users are responsible for annotating training references to identify current references pending STS revision.

NOTE 4: Items marked in Column 4A with both a proficiency code and a dash will be taught if equipment is available (Ex: 2b/-).

NOTE 5: Items coded in Column 2A or 2B of the General Attachment are core tasks. If the STS line item identified with an "*" does not apply to a procedure, aircraft MDS, or equipment at a given base, the completion of the core task in the General Attachment is waived.

NOTE 6: Address comments or recommend changes through the MAJCOM Functional Manager to the AETC Training Manager at DSN 736-7908

5.1 GENERAL ORGANIZATIONAL MAINTENANCE (E-8)										
5.1.1 Aircraft Familiarization TR: 1E-8C-1 and -2 Series, 1E-8C- 12										
5.1.1.1 Major Structural Areas								-	-	-
5.1.1.2 Major Aircraft Systems								-	-	-
5.1.1.3 Danger Areas								-	-	-
5.1.1.4 Aircraft Egress								-	-	-
5.1.1.5 Technical Order Familiarization								-	-	-
5.1.1.6 Flightline Safety Precautions								-	-	-
5.2 GENERAL MAINTENANCE TASKS (E-8) TR: TO 1E-8C-12 / TO 05 Series / TO 12 Series										
5.2.1 Perform Aircraft Safe for Maintenance	*							-	-	-
5.2.2 Apply External Power	*							-	-	-
5.2.3 Apply Cooling Air	*							-	-	-
5.2.4 Apply Hydraulic Power	*							-	-	-
5.2.5 Operate Auxiliary Power Unit (APU)								-	-	-
5.2.6 Use Ground Inter-Communications	*							-	-	-
5.2.7 Remove / Install Aircraft Panels								-	-	-
5.2.8 Open / Close Engine Cowling								-	-	-
5.2.9 Service Engine Oil								-	-	-
5.2.10 Service Hydraulic System								-	-	-
5.2.11 Refuel / Defuel Aircraft										
5.2.11.1 Fuel Team Fireguard								-	-	-
5.2.11.2 Fuel Team Truck Position								-	-	-
5.2.11.3 Fuel Team Panel Operator								-	-	-
5.2.11.4 Fuel Team Supervisor								-	-	-
5.2.12 Jack Team Member								-	-	-
5.2.13 Wash Team Member								-	-	-
5.2.14 Perform Phase / Isochronal Inspection								-	-	-
5.2.15 Launch / Recover Aircraft								-	-	-
5.2.16 Remove / Install										
5.2.16.1 Applicable Pins								-	-	-
5.2.16.2 Applicable Locks								-	-	-

E-8 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training / Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
5.2.16.3 Chocks								-	-	-
5.2.16.4 Plugs and Covers								-	-	-
5.2.17 Attach / Detach Ground Cable								-	-	-
5.2.18 Marshall Aircraft								-	-	-
5.2.19 Tow Aircraft										
5.2.19.1 Wing / Tail Walker								-	-	-
5.2.19.2 Brake Operator								-	-	-
5.2.19.3 Tow Supervisor								-	-	-
5.2.19.4 Tow Vehicle Operator								-	-	-
5.2.20 De-Icing Aircraft										
5.2.20.1 Vehicle Operator								-	-	-
5.2.20.2 Bucket Operator								-	-	-
5.2.20.3 Ground Observer								-	-	-
5.3 GENERAL FLIGHT CONTROLS (E-8)										
5.3.1 Manual Flight Control Systems										
5.3.1.1 Flap Position Indicating TR: 1E-8C-2-12, 27 Series										
5.3.1.1.1 Theory of Operation								-	-	-
5.3.1.1.2 Perform Adjustments	*							-	-	-
5.3.1.1.3 Perform Operational Checks	*							-	-	-
5.3.1.1.4 Isolate Malfunctions	*							-	-	-
5.3.1.1.5 Perform Advanced Troubleshooting		*						-	-	-
5.3.1.2 Spoiler Position Indicating TR: 1E-8C-2-12, 22 Series										
5.3.1.2.1 Theory of Operation								-	-	-
5.3.1.2.2 Perform Operational Checks	*							-	-	-
5.3.1.2.3 Perform Adjustments	*							-	-	-
5.3.1.2.4 Isolate Malfunctions	*							-	-	-
5.3.1.2.5 Perform Advanced Troubleshooting		*						-	-	-
5.3.2 Automatic Flight Control Systems										
5.3.2.1 Digital AutoPilot System TR: 1E-8C-2-12, 22 Series										
5.3.2.1.1 Theory Of Operation								-	-	-
5.3.2.1.2 Perform Operational Checks	*							-	-	-
5.3.2.1.3 Isolate Malfunctions	*							-	-	-
5.3.2.1.4 Perform Advanced Troubleshooting		*						-	-	-
5.3.2.2 Mach Trim TR: 1E-8C-2-12, 22 Series										
5.3.2.2.1 Theory of Operation								-	-	-
5.3.2.2.2 Perform Operational Checks	*							-	-	-
5.3.2.2.3 Perform Adjustments	*							-	-	-
5.3.2.2.4 Isolate Malfunctions	*							-	-	-
5.3.2.2.5 Perform Advanced Troubleshooting		*						-	-	-
5.3.2.3 Yaw Damper System Series / Parallel TR: 1E-8C-2-27GS/JG										
5.3.2.3.1 Theory of Operation								-	-	-

E-8 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training / Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
5.3.2.3.2 Perform Operational Checks	*							-	-	-
5.3.2.3.3 Isolate Malfunctions	*							-	-	-
5.3.2.3.4 Perform Advanced Troubleshooting		*						-	-	-
5.4 GENERAL COMPUTER COMPLEX (E-8)										
5.4.1 1553 Data Bus TR: 1E-8C-2-12, 34 Series										
5.4.1.1 Theory of Operation								-	-	-
5.4.1.2 Perform Operational Checks	*							-	-	-
5.4.1.3 Isolate Malfunctions	*							-	-	-
5.4.1.4 Perform Advanced Troubleshooting		*						-	-	-
5.4.2 Flight Management System (FMS-800) TR: 1E-8C-2-12, 34 Series, 43 Series, 99 Series										
5.4.2.1 Theory of Operation								-	-	-
5.4.2.2 De-Classify Navigation BSIU	*							-	-	-
5.4.2.3 De-Classify CDU	*							-	-	-
5.4.2.4 Perform Operational Checks	*							-	-	-
5.4.2.5 Isolate Malfunctions	*							-	-	-
5.4.2.6 Perform Advanced Troubleshooting		*						-	-	-
5.5 GENERAL NAVIGATION SYSTEMS (E-8)										
5.5.1 Attitude Heading Reference TR: 1E-8C-2-12, 34 Series										
5.5.1.1 Theory Of Operation								-	-	-
5.5.1.2 Perform Flux Valve Inspection	*							-	-	-
5.5.1.3 Perform Operational Checks	*							-	-	-
5.5.1.4 Isolate Malfunctions	*							-	-	-
5.5.1.5 Perform Advanced Troubleshooting		*						-	-	-
5.5.2 Standby ADI / Navigator ADI TR: 1E-8C-2-12, 34 Series										
5.5.2.1 Theory of Operation								-	-	-
5.5.2.2 Perform Operational Checks	*							-	-	-
5.5.2.3 Isolate Malfunctions	*							-	-	-
5.5.2.4 Perform Advanced Troubleshooting		*						-	-	-
5.5.3 Standby Compass TR: 1E-8C-2-12, 34 Series										
5.5.3.1 Theory of Operation								-	-	-
5.5.3.2 Perform Operational Checks	*							-	-	-
5.5.3.3 Isolate Malfunctions	*							-	-	-
5.5.3.4 Perform Advanced Troubleshooting		*						-	-	-
5.5.4 Flight Director TR: 1E-8C-2-12, 34 Series										
5.5.4.1 Theory of Operation								-	-	-
5.5.4.2 Perform Operational Checks	*							-	-	-
5.5.4.3 Isolate Malfunctions	*							-	-	-
5.5.4.4 Perform Advanced Troubleshooting		*						-	-	-

E-8 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training / Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
5.5.5 Inertial Navigation System (INS) Series TR: 1E-8C-2-12, 34 Series										
5.5.5.1 Theory of Operation								-	-	-
5.5.5.2 Perform INU Filter Inspection	*							-	-	-
5.5.5.3 Perform Operational Checks	*							-	-	-
5.5.5.4 Isolate Malfunctions	*							-	-	-
5.5.5.5 Perform Advanced Troubleshooting		*						-	-	-
5.6 FLIGHT INSTRUMENT SYSTEMS (E-8)										
5.6.1 Pitot / Static System TR: 1E-8C-2-12, 34 Series										
5.6.1.1 Theory of Operation								-	-	-
5.6.1.2 Perform Operational Checks	*							-	-	-
5.6.1.3 Central Air Data System	*							-	-	-
5.6.1.4 Perform Advanced Troubleshooting		*						-	-	-
5.6.2 Barometric Altimeter TR: 1E-8C-2-12, 34 Series										
5.6.2.1 Theory of Operation								-	-	-
5.6.2.2 Perform Operational Checks	*							-	-	-
5.6.2.3 Central Air Data System	*							-	-	-
5.6.2.4 Perform Advanced Troubleshooting		*						-	-	-
5.6.3 Instantaneous Vertical Speed Indicator (IVSI) TR: 1E-8C-2-12, 34 Series										
5.6.3.1 Theory of Operation								-	-	-
5.6.3.2 Perform Operational Checks	*							-	-	-
5.6.3.3 Central Air Data System	*							-	-	-
5.6.3.4 Perform Advanced Troubleshooting		*						-	-	-
5.6.4 AirSpeed / Machmeter TR: 1E-8C-2-12, 34 Series										
5.6.4.1 Theory of Operation								-	-	-
5.6.4.2 Perform Operational Checks	*							-	-	-
5.6.4.3 Central Air Data System	*							-	-	-
5.6.4.4 Perform Advanced Troubleshooting		*						-	-	-
5.7 AIR DATA SYSTEMS (E-8)										
5.7.1 Central Air Data System TR: 1E-8C-2-12, 34 Series										
5.7.1.1 Theory of Operation								-	-	-
5.7.1.2 Perform Operational Checks	*							-	-	-
5.7.1.3 Isolate Malfunctions	*							-	-	-
5.7.1.4 Perform Advanced Troubleshooting		*						-	-	-
5.7.2 Altitude Alerter/ RVSM										
5.7.2.1 Theory of Operation								-	-	-
5.7.2.2 Perform Operational Checks	*							-	-	-
5.7.2.3 Isolate Malfunctions	*							-	-	-
5.7.2.4 Perform Advanced Troubleshooting		*						-	-	-
5.8 WARNING SYSTEMS (E-8)										

E-8 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training / Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
5.8.1 Ground Proximity Warning System TR: 1E-8C-2-12, 34 Series										
5.8.1.1 Theory of Operation								-	-	-
5.8.1.2 Perform Operational Checks	*							-	-	-
5.8.1.3 Isolate Malfunctions	*							-	-	-
5.8.1.4 Perform Advanced Troubleshooting		*						-	-	-
5.8.2 Stall Warning System TR: 1E-8C-2-12, 34 Series										
5.8.2.1 Theory of Operation								-	-	-
5.8.2.2 Perform Operational Checks	*							-	-	-
5.8.2.3 Isolate Malfunctions	*							-	-	-
5.8.2.4 Perform Advanced Troubleshooting		*						-	-	-
5.8.3 Mach Warning System TR: 1C-8C-2-12, 31 Series										
5.8.3.1 Theory of Operation								-	-	-
5.8.3.2 Perform Operational Checks	*							-	-	-
5.8.3.3 Isolate Malfunctions	*							-	-	-
5.8.3.4 Perform Advanced Troubleshooting		*						-	-	-
5.9 RECORDING SYSTEMS (E-8)										
5.9.1 Digital Flight Data Recorder TR: 1E-8C-12, 31 Series										
5.9.1.1 Theory of Operation								-	-	-
5.9.1.2 Perform Operational Checks	*							-	-	-
5.9.1.3 Isolate Malfunctions	*							-	-	-
5.9.1.4 Perform Advanced Troubleshooting		*						-	-	-
5.10 ENGINE INDICATING SYSTEMS (E-8)										
5.10.1 Exhaust Gas Temperature (EGT) TR: 1E-8C-2-12, 77 Series										
5.10.1.1 Theory of Operation								-	-	-
5.10.1.2 Perform Operational Checks	*							-	-	-
5.10.1.3 Perform Indicator Adjustments	*							-	-	-
5.10.1.4 Isolate Malfunctions	*							-	-	-
5.10.1.5 Perform Advanced Troubleshooting		*						-	-	-
5.10.2 Tachometer N-1 / N-2 TR: 1E-8C-2-12, 77 Series										
5.10.2.1 Theory of Operation								-	-	-
5.10.2.2 Perform Operational Checks	*							-	-	-
5.10.2.3 Isolate Malfunctions	*							-	-	-
5.10.2.4 Perform Advanced Troubleshooting		*						-	-	-
5.10.3 Oil Pressure TR: 1E-8C-2-12, 79 Series										
5.10.3.1 Theory of Operation								-	-	-
5.10.3.2 Perform Operational Checks	*							-	-	-
5.10.3.3 Isolate Malfunctions	*							-	-	-
5.10.3.4 Perform Advanced Troubleshooting		*						-	-	-
5.10.4 Oil Temperature										

E-8 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training / Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
TR: 1E-8C-2-12, 79 Series										
5.10.4.1 Theory of Operation								-	-	-
5.10.4.2 Perform Operational Checks	*							-	-	-
5.10.4.3 Isolate Malfunctions	*							-	-	-
5.10.4.4 Perform Advanced Troubleshooting		*						-	-	-
5.10.5 Engine Pressure Ratio TR: 1E-8C-2-12, 77 Series										
5.10.5.1 Theory of Operation								-	-	-
5.10.5.2 Perform Operational Checks	*							-	-	-
5.10.5.3 Isolate Malfunctions	*							-	-	-
5.10.5.4 Perform Advanced Troubleshooting		*						-	-	-
5.10.6 Fuel Flow TR: 1E-8C-2-12, 73 Series										
5.10.6.1 Theory of Operation								-	-	-
5.10.6.2 Perform Operational Checks	*							-	-	-
5.10.6.3 Isolate Malfunctions	*							-	-	-
5.10.6.4 Perform Advanced Troubleshooting		*						-	-	-
5.10.7 Auxiliary Power Unit EGT TR: 1E-8C-2-12, 49 Series										
5.10.7.1 Theory of Operation								-	-	-
5.10.7.2 Perform Operational Checks	*							-	-	-
5.10.7.3 Isolate Malfunctions	*							-	-	-
5.10.7.4 Perform Advanced Troubleshooting		*						-	-	-
5.10.8 Auxiliary Power Unit Tachometer										
5.10.8.1 Theory of Operation								-	-	-
5.10.8.2 Perform Operational Checks	*							-	-	-
5.10.8.3 Isolate Malfunctions	*							-	-	-
5.10.8.4 Perform Advanced Troubleshooting		*						-	-	-
5.11 LIQUID QUANTITY INDICATING SYSTEM (E-8)										
5.11.1 Capacitance Fuel Systems TR: 1E-8C-2-12, 28 Series										
5.11.1.1 Theory of Operation								-	-	-
5.11.1.2 Perform Operational Checks	*							-	-	-
5.11.1.3 Perform Adjustment / Calibration	*							-	-	-
5.11.1.4 Isolate Malfunctions	*							-	-	-
5.11.1.5 Perform Advanced Troubleshooting		*						-	-	-
5.11.2 Capacitance Oil Systems TR: 1E-8C-2-12, 79 Series										
5.11.2.1 Theory of Operation								-	-	-
5.11.2.2 Perform Operational Checks	*							-	-	-
5.11.2.3 Perform Adjustment / Calibration	*							-	-	-
5.11.2.4 Isolate Malfunctions	*							-	-	-
5.11.2.5 Perform Advanced Troubleshooting		*						-	-	-
5.11.3 LOX Quantity Indicating TR: 1E-8C-2-12, 35 Series										

E-8 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training / Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
5.11.3.1 Theory of Operation								-	-	-
5.11.3.2 Perform Operational Checks	*							-	-	-
5.11.3.3 Perform Adjustment / Calibration	*							-	-	-
5.11.3.4 Isolate Malfunctions	*							-	-	-
5.11.3.5 Perform Advanced Troubleshooting		*						-	-	-
5.12 HYDRAULIC INDICATING SYSTEMS (E-8)										
5.12.1 Hydraulic Pressure TR: 1E-8C-2-12, 29 Series										
5.12.1.1 Theory Of Operation										
5.12.1.2 Perform Operational Checks	*							-	-	-
5.12.1.3 Isolate Malfunctions	*							-	-	-
5.12.1.4 Perform Advanced Troubleshooting		*						-	-	-
5.12.2 Hydraulic Quantity TR: 1E-8C-2-12, 29 Series										
5.12.2.1 Theory of Operation								-	-	-
5.12.2.2 Perform Operational Checks	*							-	-	-
5.12.2.3 Perform Adjustment / Calibration	*							-	-	-
5.12.2.4 Isolate Malfunctions	*							-	-	-
5.12.2.5 Perform Advanced Troubleshooting		*						-	-	-
5.13 MISCELLANEOUS SYSTEMS (E-8)										
5.13.1 Annunciator Lighting TR: 1E-8C-12, 29 Series										
5.13.1.1 Theory Of Operation										
5.13.1.2 Perform Operational Checks	*							-	-	-
5.13.1.3 Isolate Malfunctions	*							-	-	-
5.13.1.4 Perform Advanced Troubleshooting		*						-	-	-
5.13.2 Fuel Temperature TR: 1E-8C-2-12, 73 Series										
5.13.2.1 Theory Of Operation										
5.13.2.2 Perform Operational Checks	*							-	-	-
5.13.2.3 Isolate Malfunctions	*							-	-	-
5.13.2.4 Perform Advanced Troubleshooting		*						-	-	-
5.14 SUPPORT EQUIPMENT / ITEMS (E-8)										
5.14.1 JSTARS Integrated Maintenance Information System (JIMIS) TR: 1E-8C-12										
5.14.1.1 Methods and Procedures								-	-	-
5.14.1.2 Technical Manuals								-	-	-
5.14.1.3 Abbreviated Technical Orders								-	-	-
5.14.1.4 Wiring Diagrams								-	-	-
5.14.1.5 Illustrated Parts Breakdown (IPB)								-	-	-
5.14.1.6 Perform Validations of E-8C Tech Data								-	-	-
5.14.1.7 Perform Verifications of E-8C Tech Data								-	-	-

RC-135 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A	B	C
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	3 Skill Level Course	5 Skill Level CDC	7 Skill Level CDC

Attachment 6 RC-135 Training Requirements

NOTE 1: The apprentice course, J3ABR2A9X2XXXXX, B/S Integrated Instrument and Flight Control Systems Apprentice, will use representative aircraft/trainers to accomplish the system specific training requirements as identified by the specific STS. The general training requirements section of the CFETP is used to code core competencies of the career field that will be taught in the apprentice course. The MDS specific attachments are to be used in conjunction with the general and common sections to identify work center requirements and annotate qualifications.

NOTE 2: All course requirements are trained in the 3-level resident course during wartime.

NOTE 3: Users are responsible for annotating training references to identify current references pending STS revision.

NOTE 4: Items marked in Column 4A with both a proficiency code and a dash will be taught if equipment is available (Ex: 2b/-).

NOTE 5: Items coded in Column 2A or 2B of the General Attachment are core tasks. If the STS line item identified with an "*" does not apply to a procedure, aircraft MDS, or equipment at a given base, the completion of the core task in the General Attachment is waived.

NOTE 6: Address comments or recommend changes through the MAJCOM Functional Manager to the AETC Training Manager at DSN 736-7908

6.1 GENERAL ORGANIZATIONAL MAINTENANCE Applicable 135 TOs										
6.1.1 Technical Order Familiarization								-	-	-
6.1.2 Aircraft Familiarization / Egress								-	-	-
6.1.3 Flightline Safety / Precautions / Security								-	-	-
6.1.4 Dropped Object Prevention Program (DOPP)								-	-	-
6.2 GENERAL MAINTENANCE TASKS Applicable 135 TOs										
6.2.1 Aircraft Safe for Maintenance	*							-	-	-
6.2.3 Operate Hydraulics								-	-	-
6.2.4 Open / Close Engine Cowling (TF-33)								-	-	-
6.2.5 Open / Close Engine Cowling (F-108)								-	-	-
6.2.6 Open / Close Engine Fan Ducts								-	-	-
6.2.7 Operate Cargo Doors	*							-	-	-
6.2.8 Remove / Install										
6.2.8.1 Maintenance Panels	*							-	-	-
6.2.9 Tow Aircraft										
6.2.9.1 Wing / Tail Walking								-	-	-
6.2.9.2 Brake Operator								-	-	-
6.2.10 Refuel / Defuel Aircraft										
6.2.10.1 Fireguard								-	-	-
6.2.10.2 Refuel Panel Operator								-	-	-
6.2.10.3 Defuel Panel Operator								-	-	-
6.2.11 Jack Team Member								-	-	-
6.2.12 Apply Power										
6.2.12.1 Ground Power Unit	*							-	-	-
6.2.13 Launch / Recover Aircraft										
6.2.13.1 Use Aircraft Inter-Phone								-	-	-
6.2.13.2 Marshall								-	-	-
6.2.14 Remove / Install										
6.2.14.1 Pins	*							-	-	-
6.2.14.2 Locks	*							-	-	-
6.2.14.3 Chocks	*							-	-	-
6.2.15 Attach / Detach Ground Cable	*							-	-	-

RC-135 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
6.3 GENERAL FLIGHT CONTROLS										
6.3.1 Flap Position Indicating System TR: 1C-135-2-8GS-1/-2-8JG-1 Technical Orders										
6.3.1.1 Theory of Operation								-	-	-
6.3.1.2 Perform Operational Check	*							-	-	-
6.3.1.3 Remove / Install										
6.3.1.3.1 Flap Position Transmitter	*							-	-	-
6.3.1.4 Adjust Flap Position Transmitter								-	-	-
6.3.1.5 Isolate Malfunctions	*							-	-	-
6.3.1.6 Perform Advanced Troubleshooting		*						-	-	-
6.3.2 Automatic Flight Control Systems										
6.3.2.1 Flight Control Set TR: Applicable -11 series Technical Orders										
6.3.2.1.1 Theory of Operation								-	-	-
6.3.2.1.2 Perform Operational Check	*							-	-	-
6.3.2.1.3 Horizontal Position Sensor Slack Test	*							-	-	-
6.3.2.1.4 Adjust Auto-Pilot Flight Control Cables		*						-	-	-
6.3.2.1.5 Isolate Malfunctions	*							-	-	-
6.3.2.1.6 Perform Advanced Troubleshooting		*						-	-	-
6.3.3 Stabilization Augmentation										
6.3.3.1 Flight Control Augmentation / Engine Fail Assist (RC, TC-135) TR: Applicable -11 series Technical Orders										
6.3.3.1.1 Theory of Operation								-	-	-
6.3.3.1.2 Perform Operational Check	*							-	-	-
6.3.3.1.3 Perform Advanced Troubleshooting		*						-	-	-
6.4 RC, TC, WC-135 RIVET GLASS MODIFICATION Global Air Traffic Management (GATM)										
6.4.1 Navigation Data Converter (NDC) TR: TO ETM-RC135-2-11										
6.4.1.1 Theory of Operation								-	-	-
6.4.1.2 Perform Operational Check	*							-	-	-
6.4.1.3 Perform Advanced Troubleshooting		*						-	-	-
6.4.2 Maintenance Panel (GATM) TR: TO ETM-RC135-2-11										
6.4.2.1 Operate	*							-	-	-
6.4.2.2 Perform Advanced Troubleshooting		*						-	-	-
6.4.3 Aircraft Performance Computer (APC) TR: TO ETM-RC135-2-11										
6.4.3.1 Theory of Operation								-	-	-
6.4.3.2 Perform Operational Check	*							-	-	-
6.4.3.3 Isolate Malfunctions	*							-	-	-

RC-135 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
6.4.3.4 Remove / Install Auto-Throttle Clutch-pack		*						-	-	-
6.4.3.5 Perform Advanced Troubleshooting		*						-	-	-
6.4.4 Angle-of-Attack (AOA) TR: TO ETM-RC135-2-11										
6.4.4.1 Theory of Operation								-	-	-
6.4.4.2 Perform Operational Check	*							-	-	-
6.4.4.3 Isolate Malfunctions	*							-	-	-
6.4.4.4 Perform Advanced Troubleshooting		*						-	-	-
6.4.5 Flight Management System (Universal UNS-1F) TR: TO ETM-RC135-2-11										
6.4.5.1 Theory of Operation								-	-	-
6.4.5.2 Perform Operational Checks	*							-	-	-
6.4.5.3 Load Software Updates/Database								-	-	-
6.4.5.4 Isolate Malfunctions								-	-	-
6.4.5.5 Perform Advanced Troubleshooting								-	-	-
6.4.6 Electronic Standby Instrument System (ESIS) TR: TO ETM-RC135-2-11										
6.4.6.1 Theory of Operation								-	-	-
6.4.6.2 Perform Operational Check	*							-	-	-
6.4.6.3 Remove / Install Magnetometer (MAG-3000)		*						-	-	-
6.4.6.4 Remove / Install Detachable Configuration Module (DCM)		*						-	-	-
6.4.6.5 Isolate Malfunctions	*							-	-	-
6.4.6.6 Perform Advanced Troubleshooting		*						-	-	-
6.4.7 Electronic Flight Instrument System (EFIS) TR: TO ETM-RC135-2-11										
6.4.7.1 Theory of Operation								-	-	-
6.4.7.2 Perform Operational Check	*							-	-	-
6.4.7.3 Isolate Malfunctions	*							-	-	-
6.4.7.4 Perform Advanced Troubleshooting		*						-	-	-
6.5 GENERAL COMPUTER COMPLEX (OC-135)										
6.5.1 Information Management System / Flight Management System (IMS / FMS) TR: 1C-135-2-11-40-6										
6.5.1.1 Theory of Operation								-	-	-
6.5.1.2 Perform Operational Checks								-	-	-
6.5.1.3 Load Software and Navigation Database								-	-	-
6.5.1.4 Isolate Malfunctions								-	-	-
6.5.1.5 Perform Advanced Troubleshooting								-	-	-
6.5.2 Flight Display System (FDS-255) TR: 1C-135-2-11-40-4										
6.5.2.1 Theory of Operation								-	-	-

RC-135 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
6.5.2.2 Perform Operational Check								-	-	-
6.5.2.3 Isolate Malfunctions								-	-	-
6.5.2.4 Perform Advanced Troubleshooting								-	-	-
6.6 GENERAL NAVIGATIONS SYSTEMS										
6.6.1 FD-109 Flight Director / Rotation Go Around TR: Applicable -11 series Technical Orders										
6.6.1.1 Theory of Operation								-	-	-
6.6.1.2 Perform Complete Operational Check								-	-	-
6.6.1.3 Perform Fast Operational Check								-	-	-
6.6.1.4 Calibrate AOA Transmitter								-	-	-
6.6.1.5 Isolate Malfunctions								-	-	-
6.6.1.6 Perform Advanced Troubleshooting								-	-	-
6.6.2 Standby Compass System TR: Applicable -11 series Technical Orders										
6.6.2.1 Theory of Operation								-	-	-
6.6.2.2 Perform Compass Swing								-	-	-
6.6.2.3 Degauss Skull Plate								-	-	-
6.6.2.4 Remove / Install Standby Compass	*							-	-	-
6.6.2.5 Isolate Malfunction								-	-	-
6.6.3 AN/ASN-121 Stellar Inertial Doppler System TR: ETM-AN/ASN-121, ETM-RC135-2-11										
6.6.3.1 Theory of Operation								-	-	-
6.6.3.2 Perform Operational Check	*							-	-	-
6.6.3.3 Remove / Install SIRU								-	-	-
6.6.3.4 Isolate Malfunctions								-	-	-
6.6.3.5 Perform Advanced Troubleshooting								-	-	-
6.6.4 LN-100 Inertial Navigation System TR: ETM RC-135-2-11										
6.6.4.1 Theory of Operation								-	-	-
6.6.4.2 Perform Operational Check	*							-	-	-
6.6.4.3 Isolate Malfunctions								-	-	-
6.6.4.4 Perform Advanced Troubleshooting								-	-	-
6.6.5 Embedded GPS / INS (EGI) (OC-135) TR: Applicable -11 series Technical Orders										
6.6.5.1 Theory of Operation								-	-	-
6.6.5.2 Perform Operational Check								-	-	-
6.6.5.3 Perform Advanced Troubleshooting								-	-	-
6.6.6 Periscopic Sextant System TR: Applicable -11 series Technical Orders										
6.6.6.1 Perform Sextant Mount inspection								-	-	-
6.6.7 N-1 Compass System TR: ETM-RC135-2-11										
6.6.7.1 Theory of Operation								-	-	-
6.6.7.2 Perform Operational Check								-	-	-

RC-135 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
6.6.7.3 Isolate Malfunctions								-	-	-
6.6.7.4 Perform Advanced Troubleshooting								-	-	-
6.7 FLIGHT INSTRUMENTS										
6.7.1 Pitot / Static System TR: Applicable -11 series Technical Orders										
6.7.1.1 Theory of Operation								-	-	-
6.7.1.2 Perform Leak Check / Operational Checks	*							-	-	-
6.7.1.3 Purge System	*							-	-	-
6.7.1.4 Manufacture Rubber Hose Assemblies								-	-	-
6.7.1.5 Remove / Install Components								-	-	-
6.7.1.6 Isolate Malfunctions	*							-	-	-
6.7.1.7 Perform Advanced Troubleshooting		*						-	-	-
6.7.2 Digital Altimeter TR: Applicable -11 series Technical Orders										
6.7.2.1 Theory of Operation								-	-	-
6.7.2.2 Perform Operational Check	*							-	-	-
6.7.2.3 Isolate Malfunctions	*							-	-	-
6.7.2.4 Perform Advanced Troubleshooting		*						-	-	-
6.7.3 Altimeter (AAU-8 / A) TR: Applicable -11 series Technical Orders										
6.7.3.1 Theory of Operation								-	-	-
6.7.3.2 Perform Operational Checks	*							-	-	-
6.7.3.3 Adjust Altimeter								-	-	-
6.7.3.4 Isolate Malfunctions	*							-	-	-
6.7.3.5 Perform Advanced Troubleshooting		*						-	-	-
6.7.4 Vertical Speed Indicator (OC-135) TR: Applicable -11 series Technical Orders										
6.7.4.1 Theory of Operation								-	-	-
6.7.4.2 Perform Operational Checks								-	-	-
6.7.4.3 Isolate Malfunctions	*							-	-	-
6.7.4.4 Perform Advanced Troubleshooting								-	-	-
6.7.5 Digital Air-Speed Indicator TR: Applicable -11 series Technical Orders										
6.7.5.1 Theory of Operation								-	-	-
6.7.5.2 Perform Operational Checks	*							-	-	-
6.7.5.3 Isolate Malfunctions	*							-	-	-
6.7.5.4 Perform Advanced Troubleshooting		*						-	-	-
6.7.6 Free Air Temperature Indicating System TR: Applicable -11 series Technical Orders										
6.7.6.1 Theory of Operation								-	-	-
6.7.6.2 Perform Operational Check								-	-	-
6.7.6.3 Isolate Malfunction								-	-	-
6.7.7 Standby Attitude Director Indicator (OC-135) TR: 1C-135-2-11-40-5										
6.7.7.1 Theory of Operation								-	-	-

RC-135 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
6.7.7.2 Perform Operational Checks								-	-	-
6.7.7.3 Isolate Malfunctions								-	-	-
6.8 AIR DATA SYSTEM (OC-135)										
6.8.1 Digital Air Data Computer System TR: Applicable -11 series Technical Orders										
6.8.1.1 Theory of Operation								-	-	-
6.8.1.2 Perform Inspections								-	-	-
6.8.1.3 Perform Operational Checks								-	-	-
6.8.1.4 Perform Advanced Troubleshooting								-	-	-
6.9 AIR DATA SYSTEM (RC, TC, WC-135)										
6.9.1 Air Data Computer System ETM-RC135-2-11										
6.9.1.1 Theory of Operation								-	-	-
6.9.1.2 Perform Operational Checks	*							-	-	-
6.9.1.3 Isolate Malfunctions	*							-	-	-
6.9.1.4 Perform Advanced Troubleshooting		*						-	-	-
6.1 DATA RECORDER										
6.10.1 Flight Data Recorder / Cockpit Voice Recorder TR: Applicable -11 series Technical Orders										
6.10.1.1 Theory of Operation								-	-	-
6.10.1.2 Perform FDR / CVR Checkout Operational Check	*							-	-	-
6.10.1.3 Perform Data Download	*							-	-	-
6.10.1.4 Isolate Malfunctions	*							-	-	-
6.10.1.5 Perform Advanced Troubleshooting		*						-	-	-
6.11 WARNING SYSTEMS										
6.11.1 Ground Proximity Warning System (OC-135) TR: Applicable -11 series Technical Orders										
6.11.1.1 Theory of Operation								-	-	-
6.11.1.2 Perform Operational Checks								-	-	-
6.11.1.3 Perform Software Load								-	-	-
6.11.1.4 Isolate Malfunctions								-	-	-
6.11.1.5 Perform Advanced Troubleshooting								-	-	-
6.11.2 Terrain Avoidance Warning System TR: ETM RC-135-2-11										
6.11.2.1 Theory of Operation								-	-	-
6.11.2.2 Perform Operational Checks	*							-	-	-
6.11.2.3 Load Software Updates/Database	*							-	-	-
6.11.2.4 Isolate Malfunctions	*							-	-	-
6.11.2.5 Perform Advanced Troubleshooting		*						-	-	-
6.11.3 Altitude Alerter TR: Applicable -11 series Technical Orders										
6.11.3.1 Theory of Operation								-	-	-
6.11.3.2 Perform Operational Checks	*							-	-	-

RC-135 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
6.11.3.3 Isolate Malfunction								-	-	-
6.11.3.4 Perform Advanced Troubleshooting		*						-	-	-
6.12 ENGINE INDICATING SYSTEMS (F-108)										
6.12.1 Exhaust Gas Temperature System TR: 2-4JG-1/2-4JG-8 Technical Orders										
6.12.1.1 Theory of Operation								-	-	-
6.12.1.2 Perform Operation Check	*							-	-	-
6.12.1.3 Isolate Malfunctions	*							-	-	-
6.12.1.4 Perform Advanced Troubleshooting		*						-	-	-
6.12.2 Engine Oil Temperature Indicating System TR: 2-4JG-1/2-4JG-8 Technical Orders										
6.12.2.1 Theory of Operation								-	-	-
6.12.2.2 Perform Operational Checks	*							-	-	-
6.12.2.3 Isolate Malfunctions	*							-	-	-
6.12.2.4 Perform Advanced Troubleshooting		*						-	-	-
6.12.3 Engine RPM Indicating Systems TR: 2-4JG-1/2-4JG-8 Technical Orders										
6.12.3.1 Theory of Operation								-	-	-
6.12.3.2 Perform Operational Checks	*							-	-	-
6.12.3.3 Isolate Malfunctions	*							-	-	-
6.12.3.4 Perform Advanced Troubleshooting		*						-	-	-
6.12.4 N1-Performance Computer TR: TO ETM-RC135-2-11										
6.12.4.1 Theory of Operation								-	-	-
6.12.4.2 Perform Operational Checks	*							-	-	-
6.12.4.3 Isolate Malfunctions	*							-	-	-
6.12.4.4 Perform Advanced Troubleshooting		*						-	-	-
6.12.5 Engine Oil Pressure Indicating System TR: 2-4JG-1/2-4JG-8 Technical Orders										
6.12.5.1 Theory of Operation								-	-	-
6.12.5.2 Perform Operational Check	*							-	-	-
6.12.5.3 Isolate Malfunctions	*							-	-	-
6.12.5.4 Perform Advanced Troubleshooting		*						-	-	-
6.12.6 Fuel Flow Indicating System TR: 2-4JG-1/2-4JG-8 Technical Orders										
6.12.6.1 Theory of Operation								-	-	-
6.12.6.2 Perform Operational Checks	*							-	-	-
6.12.6.3 Isolate Malfunctions	*							-	-	-
6.12.6.4 Perform Advanced Troubleshooting		*						-	-	-
6.13 ENGINE INDICATING SYSTEMS (TF-33)										
6.13.1 Exhaust Gas Temperature System TR: 1C-135-2-4										
6.13.1.1 Theory of Operation								-	-	-
6.13.1.2 Perform Operational Check								-	-	-
6.13.1.3 Perform Advanced Troubleshooting								-	-	-

RC-135 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
6.13.2 Engine Oil Temperature Indicating System TR: 1C-135-2-4										
6.13.2.1 Theory of Operation								-	-	-
6.13.2.2 Perform Operational Check								-	-	-
6.13.2.3 Remove / Install temp bulb								-	-	-
6.13.2.4 Perform Advanced Troubleshooting								-	-	-
6.13.3 Engine RPM Indicating Systems TR: 1C-135-2-4										
6.13.3.1 Theory of Operation								-	-	-
6.13.3.2 Perform Operational Check								-	-	-
6.13.3.3 Perform Advanced Troubleshooting								-	-	-
6.13.4 Engine Oil Pressure Indicating System TR: 1C-135-2-4										
6.13.4.1 Theory of Operation								-	-	-
6.13.4.2 Perform Operational Check								-	-	-
6.13.4.3 Remove / Install transmitter								-	-	-
6.13.4.4 Perform Advanced Troubleshooting								-	-	-
6.13.5 Engine Pressure Ratio (EPR) TR: 1C-135-2-4										
6.13.5.1 Theory of Operation								-	-	-
6.13.5.2 Perform Operational Checks								-	-	-
6.13.5.3 Remove / Install transducer								-	-	-
6.13.5.4 Remove / Install Pt 2 probe								-	-	-
6.13.5.5 Remove / Install Pt 7 probe								-	-	-
6.13.5.6 Perform Advanced Troubleshooting								-	-	-
6.13.6 Fuel Flow Indicating System TR: 1C-135-2-5-1										
6.13.6.1 Theory of Operation								-	-	-
6.13.6.2 Perform Operational Check								-	-	-
6.13.6.3 Remove / Install Fuel Flow Transmitter								-	-	-
6.13.6.4 Perform Advanced Troubleshooting								-	-	-
6.13.7 Fuel Temperature Indicating System TR: 1C-135-2-4										
6.13.7.1 Theory of Operation								-	-	-
6.13.7.2 Perform Operational Check								-	-	-
6.13.7.3 Remove / Install temp bulb								-	-	-
6.13.7.4 Perform Advanced Troubleshooting								-	-	-
6.14 Fuel Management										
6.14.1 Fuel Savings Advisory System (OC-135) TR: Applicable -11 series Technical Orders										
6.14.1.1 Theory of Operation								-	-	-
6.14.1.2 Perform Operational Checks								-	-	-
6.14.1.3 Load FMAC Software								-	-	-
6.14.1.4 Perform Advanced Troubleshooting								-	-	-
6.15 LIQUID QUANTITY INDICATING SYSTEM (OC-135)										

RC-135 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
6.15.1 Fuel Quantity Indicating System TR: Applicable -11 series Technical Orders										
6.15.1.1 Theory of Operation								-	-	-
6.15.1.2 Perform Operational Checks								-	-	-
6.15.1.3 Remove / Install Tank Interface Unit (TIU)								-	-	-
6.15.1.4 Calibrate Tank Interface Unit								-	-	-
6.15.1.5 Perform Advanced Troubleshooting								-	-	-
6.16 LIQUID QUANTITY INDICATING SYSTEM (RC, TC, WC 135)										
6.16.1 Fuel Quantity Indicating System TR: ETM RC-135-2-11										
6.16.1.1 Theory of Operation								-	-	-
6.16.1.2 Perform Operational Checks	*							-	-	-
6.16.1.3 Perform Empty / Full Tank Calibration	*							-	-	-
6.16.1.4 Isolate Malfunctions	*							-	-	-
6.16.1.5 Perform Advanced Troubleshooting		*						-	-	-
6.16.2 Fuel Temperature Indicating System TR: 1C-135-2-5GS-1/2-5JG-1										
6.16.2.1 Theory of Operation								-	-	-
6.16.2.2 Perform Operational Check	*							-	-	-
6.16.2.3 Isolate Malfunctions	*							-	-	-
6.16.2.4 Perform Advanced Troubleshooting		*						-	-	-
6.17 HYDRAULIC INDICATING SYSTEMS										
6.17.1 Rudder Hydraulic Pressure Indicating System TR: 1C-135-2-13GA/2-13JG Technical Orders										
6.17.1.1 Theory of Operation								-	-	-
6.17.1.2 Perform Operational Checks	*							-	-	-
6.17.1.3 Remove / Install Indicator								-	-	-
6.17.1.4 Isolate Malfunctions	*							-	-	-
6.17.1.5 Perform Advanced Troubleshooting		*						-	-	-
6.17.2 Hydraulic Fluid Quantity Indication System TR: 1C-135-2-13										
6.17.2.1 Theory of Operation								-	-	-
6.17.2.2 Perform Operational Checks	*							-	-	-
6.17.2.3 Remove / Install transmitter								-	-	-
6.17.2.4 Isolate Malfunctions	*							-	-	-
6.17.2.5 Perform Advanced Troubleshooting		*						-	-	-
6.18 USE TEST EQUIPMENT										
6.18.1 FCAS Breakout Box								-	-	-
6.18.2 AOA In-Flight Calibration Test Set								-	-	-
6.18.3 Pitot / Static Manifold Breakout Box								-	-	-
6.18.4 Rudder PCU Tester								-	-	-

B-1 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A	B	C
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	3 Skill Level Course	5 Skill Level CDC	7 Skill Level CDC

Attachment 7--B-1 Training Requirements

NOTE 1: The apprentice course, J3ABR2A9X2XXXXX, B/S Integrated Instrument and Flight Control Systems Apprentice, will use representative aircraft/trainers to accomplish the system specific training requirements as identified by the specific STS. The general training requirements section of the CFETP is used to code core competencies of the career field that will be taught in the apprentice course. The MDS specific attachments are to be used in conjunction with the general and common sections to identify work center requirements and annotate qualifications.

NOTE 2: All course requirements are trained in the 3-level resident course during wartime.

NOTE 3: Users are responsible for annotating training references to identify current references pending STS revision.

NOTE 4: Items marked in Column 4A with both a proficiency code and a dash will be taught if equipment is available (Ex: 2b/-).

NOTE 5: Items coded in Column 2A or 2B of the General Attachment are core tasks. If the STS line item identified with an "*" does not apply to a procedure, aircraft MDS, or equipment at a given base, the completion of the core task in the General Attachment is waived.

NOTE 6: Address comments or recommend changes through the MAJCOM Functional Manager to the AETC Training Manager at DSN 736-7908

7.1 GENERAL ORGANIZATIONAL MAINTENANCE (B-1)										
7.1.1 Aircraft Familiarization										
7.1.1.1 Major Structural Areas								-	-	-
7.1.1.2 Major Systems								-	-	-
7.1.1.3 Danger Areas								-	-	-
7.1.2 Technical Order Familiarization								-	-	-
7.1.3 Debrief Aircrews								-	-	-
7.2 GENERAL MAINTENANCE TASKS (B-1)										
7.2.1 Ground Handling										
7.2.1.1 Perform Aircraft Safe for Maintenance	*							-	-	-
7.2.1.2 Apply External Air Conditioning	*							-	-	-
7.2.1.3 Apply External Power	*							-	-	-
7.2.1.4 Apply Hydraulic Power								-	-	-
7.2.1.5 Central Aircraft Support System (CASS)								-	-	-
7.2.1.6 Launch and Recover Aircraft								-	-	-
7.2.1.7 Perform Aircraft Marshaling Procedures								-	-	-
7.2.1.8 Operate A / C Auxiliary Power Units (APU)								-	-	-
7.2.1.9 Service APU TR: Task 12-32-02								-	-	-
7.2.1.10 Service Integrated Drive Gearbox TR: Task 12-32-03								-	-	-
7.2.1.11 Service Accessory Drive Gearbox TR: Task 12-32-04								-	-	-
7.2.1.12 Fire Guard								-	-	-
7.2.2 Refuel / Defuel										
7.2.2.1 Refuel Panel Operator TR: Task 12-11-01								-	-	-
7.2.2.2 Refuel Team Member TR: Task 12-11-01								-	-	-
7.2.2.3 Defuel Panel Operator								-	-	-
7.2.2.4 Defuel Team Member								-	-	-
7.2.3 Tow Team Operator										
7.2.3.1 Brake Operator								-	-	-

B-1 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
7.2.3.2 Wing Walker								-	-	-
7.2.3.3 Tail Walker								-	-	-
7.2.4 Aircraft Wash TR: 1-1-1								-	-	-
7.2.5 Jack Team Member TR: Task 05-81-01								-	-	-
7.2.6 Weapons Bay Door Operation										
7.2.6.1 Weapons Bay Door Operation (Power-On) TR: Task 05-53-01								-	-	-
7.2.6.2 Weapons Bay Door Operation (Power-Off) TR: Task 05-53-01								-	-	-
7.2.7 Stair Ladder Exterior										
7.2.7.1 Stair Ladder-Exterior Electric Extension / Retraction								-	-	-
7.2.7.2 Stair Ladder-Exterior Manual Extension / Retraction								-	-	-
7.2.8 Use Ground Intercommunications								-	-	-
7.2.9 Main Landing Gear Doors, Opening / Closing								-	-	-
7.2.10 Open / Close Panels								-	-	-
7.2.11 Open / Close Engine Cowlings								-	-	-
7.2.12 Forward Crew Station Rig Pins Installation / Removal								-	-	-
7.3 FLIGHT CONTROL SYSTEMS (B-1)										
7.3.1 General Flight Controls										
7.3.1.1 Theory of Operation Primary Flight Controls TR: TO 1B-1B-2-27GS-00-1								-	-	-
7.3.1.2 Theory of Operation Secondary Flight Controls TR: TO 1B-1B-2027GS-00-1								-	-	-
7.3.1.3 Perform Ground Readiness Tests (GRTs)										
7.3.1.3.1 SCAS Control TR: 1B-1B-2-40JG-27-1, 40GRT-27-50	*							-	-	-
7.3.1.3.2 Pitch SCAS TR: 1B-1B-2-40JG-27-1, 40GRT-27-05	*							-	-	-
7.3.1.3.3 Roll SCAS TR: 1B-1B-2-40JG-27-1, 40GRT-27-10	*							-	-	-
7.3.1.3.4 Yaw SCAS TR: 1B-1B-2-40JG-27-1, 40GRT-27	*							-	-	-
7.3.1.3.5 Wing Sweep TR: 1B-1B-2-40JG-27-1, 40GRT-27	*							-	-	-
7.3.1.3.6 Flap / Slat TR: 1B-1B-2-40JG-27-1, 40GRT-27-	*							-	-	-

B-1 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
25										
7.3.1.3.7 Spoiler TR: 1B-1B-2-40JG-27-1, 40GRT-27-30	*							-	-	-
7.3.1.3.8 Overwing Fairing TR: 1B-1B-2-40JG-27-1, 40GRT-27-35	*							-	-	-
7.3.1.3.9 SEF TR: 1B-1B-2-40JG-27-1, 40GRT-27-40	*							-	-	-
7.3.1.4 Perform Operational Checks										
7.3.1.4.1 Roll Control TR: 1B-1B-2-27JG-10-1, 27-10-01	*							-	-	-
7.3.1.4.2 Yaw Control TR: 1B-1B-2-27JG-20-1, 27-20-01	*							-	-	-
7.3.1.4.3 Pitch Control TR: 1B-1B-2-27JG-30-1, 27-30-1	*							-	-	-
7.3.1.4.4 Linkage Shaker Motor Operational Check TR: TO 1B-1B-2-27JG-30-3, TO 27-34-11-1	*							-	-	-
7.3.1.4.5 Control Stick Grip TR: 1B-1B-2-27JG-30-03, 27-36-11-1	*							-	-	-
7.3.1.4.6 Hinge Movement Limiting TR: 1B-1B-2-27JG-40-1, 27-42-01	*							-	-	-
7.3.1.4.7 Wing Sweep TR: 1B-1B-2-27JG-80-1, 27-81-01								-	-	-
7.3.1.4.8 Alternate Wing Sweep TR: 1B-1B-2-27JG-80-1, 40GRT-27-20	*							-	-	-
7.3.1.4.9 Flap / Slat TR: 1B-1B-2-27JG-80-4, 27-82-01	*							-	-	-
7.3.1.4.10 Pitch Trim Actuator TR: 1B-1B-2-27JG-30-3, 27-36-10	*							-	-	-
7.3.1.4.11 Horizontal Stabilizer Roll Trim Actuator TR: 1B-1B-2-27JG-10-4, 27-18-10-1	*							-	-	-
7.3.1.4.12 Speed Brake / Spoiler Roll Trim Actuator TR: 1B-1B-2-27JG-10-4, 27-18-11	*							-	-	-
7.3.1.4.13 Yaw Trim TR: 1B-1B-2-27JG-20-3, 27- 25-10	*							-	-	-
7.3.1.5 Perform Component Checks										
7.3.1.5.1 Flight Control Trim Panel TR: 1B-1B-2-27JG-20-3, 27-25- 11-1								-	-	-
7.3.1.5.2 Speed Brake Command TR: 1B-1B-2-76JG-10-1, 76-11- 02								-	-	-
7.3.1.5.3 Alternate Throttle / Flight Control Auxiliary Panel								-	-	-

B-1 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A	B	C
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	3 Skill Level Course	5 Skill Level CDC	7 Skill Level CDC
TR: 1B-1B-2-27JG-20-3, 27-25- 12-1										
7.3.1.5.4 Flight Control Power Panel TR: 1B-1B-2-27JG-20-3, 27-25- 13-1								-	-	-
7.3.1.5.5 Horizontal Stabilizer Rate Transducer TR: 1B-1B-2-27JG-40-2, 27-42- 16-5								-	-	-
7.3.1.6 Remove / Install										
7.3.1.6.1 Spoiler Electromechanical Actuator TR: 1B-1B-2-27JG-10-3, 27-14- 10-2, -3	*							-	-	-
7.3.1.6.2 Spoiler Controller TR: 1B-1B-2-27JG-10-3, 27-14- 11-2, -3								-	-	-
7.3.1.6.3 Flight Control Trim Panel TR: 1B-1B-2-27JG-20-3, 27-25- 11-2, -3								-	-	-
7.3.1.6.4 Alternate Throttle / Flight Control Auxiliary Panel TR: 1B-1B-2-27JG-20-3, 27- 25-12-2, -3								-	-	-
7.3.1.6.5 Flight Control Power Panel TR: 1B-1B-2-27JG-30-3, 27-25- 13-2, -3	*							-	-	-
7.3.1.6.6 Yaw Trim Proximity Switch TR: 1B-1B-2-27Jg-20-3, 27-25- 14-2, -3								-	-	-
7.3.1.6.7 Control Stick Grip TR: 1B-1B-2-27JG-30-3, 27-36- 11-2	*							-	-	-
7.3.1.6.8 Pitch / Roll / Yaw SCAS Controller TR: 1B-1B-2-27JG-40-1, 27-4- 1-10-2, -3	*							-	-	-
7.3.1.6.9 Hinge Movement Limiter / Overwing Fairing Controller TR: 1B-1B-2-27JG-40-2, 27-42- 10-2, -3								-	-	-
7.3.1.6.10 Roll Rate Gyro TR: 1B-1B-2-27JG-40-2, 27- 42-11-2, -3								-	-	-
7.3.1.6.11 Roll SCAS Stick Transducer TR: 1B-1B-2-27JG-40-2, 27- 42-15-2, -3	*							-	-	-
7.3.1.6.12 Horizontal Stabilizer Rate Transducer TR: 1B-1B-2-27JG-40-2, 27- 42-16-2, -3	*							-	-	-
7.3.1.6.13 Flap / Slat PDU Synchro TR: 1B-1B-2-27JG-80-7, 27- 83-10-2, -3	*							-	-	-
7.3.1.6.14 Yaw Sensor TR: 1B-1B-2-27JG-40-2, 27- 41-20-2, -3								-	-	-
7.3.1.6.15 Yaw SCAS Pedal Transducer	*							-	-	-

B-1 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
TR: 1B-1B-2-27JG-40-4, 27- 42-14-2, -3										
7.3.1.6.16 Yaw SCAS Common Feedback Transducer TR: 1B-1B-2-27JG-40-4, 27- 42-15-2, -3	*							-	-	-
7.3.1.6.17 Pitch Rate Gyro TR: 1B-1B-2-27JG-40-4, 27- 44-10-2, -3								-	-	-
7.3.1.6.18 Pitch Accelerometer TR: 1B-1B-2-27JG-40-4, 27- 44-12-2, -3								-	-	-
7.3.1.6.19 Pitch SCAS Stick Transducer TR: 1B-1B-2-27JG-40-4, 27- 44-13-2, -3	*							-	-	-
7.3.1.6.20 Slat Switch TR: 1B-1B-2-27JG-40-4, 27- 44-14-2, -3	*							-	-	-
7.3.1.6.21 Proximity Switch Electronic Package TR: 1B-1B-2-27JG-60-1, 27- 61-10-2, -3								-	-	-
7.3.1.6.22 Over Wing Fairing Ground Maintenance Switch Panel TR: 1B-1B-2-27JG-60-1, 27- 61-11-2, -3								-	-	-
7.3.1.6.23 Over Wing Fairing Double Rotary Transducer TR: 1B-1B-2-27JG-60-1, 27- 61-15-2, -3	*							-	-	-
7.3.1.6.24 Proximity Sensor TR: 1B-1B-2-27JG-60-1, 27- 61-16-2, -3	*							-	-	-
7.3.1.6.25 Flap / Slat Controller TR: 1B-1B-2-27JG-80-7, 27- 83-10-2, -3								-	-	-
7.3.1.7 Adjust / Align										
7.3.1.7.1 SCAS Controller TR: 1B-1B-2-27JG-40-1, 27-41- 10-5	*							-	-	-
7.3.1.7.2 Spoiler Controller TR: 1B-1B-2-27JG-10-3, 2-14- 11-5	*							-	-	-
7.3.1.7.3 Flap / Slat Controller TR: 1B-1B-2-27JG-40-2, 27-42- 10-5	*							-	-	-
7.3.1.7.4 Hinge Moment Limiting / Overwing Fairing Controller TR: 1B-1B-2-27JG-40-2, 27- 42-10-5	*							-	-	-
7.3.1.7.5 Pitch / Roll / Yaw SCAS Surface Positioning TR: 1B-1B-2-27JG-40-1, 27- 40-02	*							-	-	-
7.3.1.7.6 Slat Switches TR: 1B-1B-2-27JG-40-4, 27-44- 14-5	*							-	-	-

B-1 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
7.3.1.7.7 SCAS Stick / Pedal Position Transducers TR: 1B-1B-2-27JG-40-2, 27- 42-15-5, 1B-1B-2-27JG-40-4, 27-44-13-5	*							-	-	-
7.3.1.7.8 Yaw Common Feedback Transducer TR: 1B-1B-2-27JG-40-4, 27- 43-15-5	*							-	-	-
7.3.1.7.9 Yaw Limiter Actuator TR: 1B-1B-2-27JG-20-3, 27- 24-10-5	*							-	-	-
7.3.1.7.10 Yaw Trim Proximity Switch TR: 1B-1B-2-27JG-20-3, 27- 25-14-5	*							-	-	-
7.3.1.7.11 Flap / Slat Asymmetry TR: Task 27-83-16	*							-	-	-
7.3.1.8 Isolate Malfunction TR: 1B-1B-2-27GS-00-1, 27WD- 00-1										
7.3.1.8.1 Roll Control-Outboard Spoilers (SSN 27-14-00)	*							-	-	-
7.3.1.8.2 Roll Trim (SSN 27-18-00)	*							-	-	-
7.3.1.8.3 Yaw Limiter (SSN 27-24-00)	*							-	-	-
7.3.1.8.4 Yaw Trim (SSN 27-25-00)	*							-	-	-
7.3.1.8.5 Linkage Shakers (SSN 27-34-00)	*							-	-	-
7.3.1.8.6 Pitch Trim (SSN 27-36-00)	*							-	-	-
7.3.1.8.7 Augmented Flight Control (SCAS) (SSNs 27-41, 42, 43, 44-00)	*							-	-	-
7.3.1.8.8 Over Wing Fairing (SSN 27-61-00)	*							-	-	-
7.3.1.8.9 Speed Brakes (SSN 27-62-00)	*							-	-	-
7.3.1.8.10 Wing Sweep (SSN 27-81-00)	*							-	-	-
7.3.1.8.11 Flap / Slat Mechanical and Control (SSN 27-82, 83-00)	*							-	-	-
7.3.1.9 Perform Advanced Troubleshooting TR: 1B-1B-2-27GS-00-1, 27WD- 00-1										
7.3.1.9.1 Roll Control-Outboard Spoilers (SSN 27-14-00)		*						-	-	-
7.3.1.9.2 Roll Trim (SSN 27-18-00)		*						-	-	-
7.3.1.9.3 Yaw Limiter (SSN 27-24-00)		*						-	-	-
7.3.1.9.4 Yaw Trim (SSN 27-25-00)		*						-	-	-
7.3.1.9.5 Linkage Shakers (SSN 27-34-00)		*						-	-	-
7.3.1.9.6 Pitch Trim (SSN 27-36-00)		*						-	-	-
7.3.1.9.7 Augmented Flight Control (SCAS) (SSNs 27-41, 42, 43, 44-00)		*						-	-	-
7.3.1.9.8 Over Wing Fairing (SSN 27-61-00)		*						-	-	-
7.3.1.9.9 Speed Brakes (SSN 27-62-00)		*						-	-	-
7.3.1.9.10 Wing Sweep (SSN 27-81-00)		*						-	-	-
7.3.1.9.11 Flap / Slat Mechanical and Control (SSN 27-82, 83-00)		*						-	-	-
7.3.2 Surface Position Measuring System										
7.3.2.1 Theory of Operation TR: 1B-1B-2-27GS-00-1								-	-	-
7.3.2.2 Perform Operational Checks										

B-1 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A	B	C
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	3 Skill Level Course	5 Skill Level CDC	7 Skill Level CDC
TR: 1B-1B-2-27JG-90-1, -2										
7.3.2.2.1 Wing Sweep Command Position Sensor Components TR: Task 27-91-10-1								-	-	-
7.3.2.2.2 Left Wing Sweep Position Sensor Components TR: Task 27-91-11-1	*							-	-	-
7.3.2.2.3 Upper Rudder Position Sensor TR: Task 27-91-13-1								-	-	-
7.3.2.2.4 Wing Sweep Transformer TR: Task 27-91-15-1								-	-	-
7.3.2.2.5 Spoiler Position Switch TR: Task 27-91-16-1	*							-	-	-
7.3.2.2.6 Spoiler Position Sensor TR: Task 27-95-10-1, 27-96-11- 1	*							-	-	-
7.3.2.2.7 Right Wing Sweep Position Sensor TR: Task 27-96-12-1	*							-	-	-
7.3.2.2.8 Lower Rudder Position Sensor TR: Task 27-96-14-1								-	-	-
7.3.2.2.9 Hydraulic Pressure Transducer Excitation Power Supply Components TR: Task 27-97-10-1								-	-	-
7.3.2.2.10 Horizontal Stabilizer Position Sensor Components TR: Task 27-91-12-1	*							-	-	-
7.3.2.2.11 Surface Position / Command Indicator Components TR: Task 27-91-14-1								-	-	-
7.3.2.2.12 Left Flap / Slat Rotary Variable Differential Transducer Components TR: Task 27-96-13-1	*							-	-	-
7.3.2.2.13 Right Flap / Slat Rotary Variable Differential Transducer Components TR: Tasks 27-96-15-1	*							-	-	-
7.3.2.3 Remove / Install TR: 1B-1B-2-27JG-90-1, -2										
7.3.2.3.1 Surface Position Command Indicator TR: Task 27-91-14-2, -3								-	-	-
7.3.2.3.2 Surface Position Signal Conditioning Unit TR: Tasks 27-95-12-2, -3, 27- 96-10-2, -3								-	-	-
7.3.2.3.3 Wing Sweep Command Position Sensor TR: Tasks 27-91-10-2, -3								-	-	-
7.3.2.3.4 Left Wing Sweep Position Sensor TR: Tasks 27-91-11-2, -3	*							-	-	-
7.3.2.3.5 Horizontal Stabilizer Position Sensor TR: Tasks 27-91-12-2, -3, 27- 95-2, -3	*							-	-	-

B-1 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A	B	C
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	3 Skill Level Course	5 Skill Level CDC	7 Skill Level CDC
7.3.2.3.6 Upper Rudder Position Sensor TR: Tasks 27-91-13-2, -3								-	-	-
7.3.2.3.7 Wing Sweep Transformer TR: Tasks 27-91-15-2, -3								-	-	-
7.3.2.3.8 Spoiler Position Switch TR: Tasks 27-91-16-2, -3	*							-	-	-
7.3.2.3.9 Spoiler Position Sensor TR: Tasks 27-95-10-2, -3, 27- 96-11-2, -3	*							-	-	-
7.3.2.3.10 Right Wing Sweep Position Sensor TR: Tasks 27-96-12-2, -3	*							-	-	-
7.3.2.3.11 Lower Rudder Position Sensor TR: Tasks 27-96-14-2, -3								-	-	-
7.3.2.3.12 Hydraulic Pressure Transducer Excitation Power Supply TR: Tasks 27-97-10-2, -3								-	-	-
7.3.2.3.13 Flap Surface Position Synchro Transmitter TR: Tasks 27-91-17-2, -3	*							-	-	-
7.3.2.3.14 Left Flap / Slat Rotary Variable Differential Transducer TR: Tasks 27-95-13-2, -3	*							-	-	-
7.3.2.3.15 Right Flap / Slat Rotary Variable Differential Transducer TR: Tasks 27-96-15-2, -3	*							-	-	-
7.3.2.4 Adjust TR: 1B-1B-2-27JG-90-1, -2										
7.3.2.4.1 Wing Sweep Command Position Sensor TR: Task 27-91-10-5								-	-	-
7.3.2.4.2 Left Wing Sweep Position Sensor TR: Task 27-91-11-5	*							-	-	-
7.3.2.4.3 Horizontal Stabilizer Position Sensor TR: Tasks 27-91-12-5, 27-95- 11-5	*							-	-	-
7.3.2.4.4 Upper Rudder Position Sensor TR: Task 27-91-13-5								-	-	-
7.3.2.4.5 Spoiler Position Switch TR: Task 27-91-16-5	*							-	-	-
7.3.2.4.6 Spoiler Position Sensor TR: Tasks 27-95-10-5, 27-96- 11-5	*							-	-	-
7.3.2.4.7 Right Wing Sweep Position Sensor TR: Task 27-96-12-5	*							-	-	-
7.3.2.4.8 Lower Rudder Position Sensor TR: Task 27-96-14-5								-	-	-
7.3.2.4.9 Flap Surface Position Synchro Transmitter TR: Task 27-91-17-5	*							-	-	-
7.3.2.4.10 Left Flap / Slat Rotary Variable Differential Transducer	*							-	-	-

B-1 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A	B	C
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	3 Skill Level Course	5 Skill Level CDC	7 Skill Level CDC
TR: Task 27-95-13-5										
7.3.2.4.11 Right Flap / Slat Rotary Variable Differential Transducer TR: Task 27-96-15-5	*							-	-	-
7.3.2.5 Isolate Malfunctions TR: 1B-1B-2-27GS-00-1, 1B-1B- 2-27WD-00-1	*							-	-	-
7.3.2.6 Perform Advanced Troubleshooting TR: 1B-1B-2-27GS-00-1, 1B-1B- 2-27WD-00-1		*						-	-	-
7.3.3 Auto Flight System										
7.3.3.1 Theory Of Operation TR: 1B-1B-2-22GS-00-1										
7.3.3.1.1 SEF DC Power Source TR: 1B-1B-2-24GS-00-2								-	-	-
7.3.3.1.2 SEF AC Power Source TR: 1B-1B-2-24GS-00-2								-	-	-
7.3.3.2 Perform Ground Readiness Tests (GRT)										
7.3.3.2.1 AFCS GRT TR: 1B-1B-2-40JG-22-1, - 40GRT-22-11	*							-	-	-
7.3.3.2.2 AFCS TF GRT TR: 1B-1B-2-40JG-1, -40GRT- 22-13	*							-	-	-
7.3.3.2.3 SMCS GRT TR: 1B-1B-2-40JG-22-1, - 40GRT-22-21	*							-	-	-
7.3.3.2.4 Proximity Logic GRT TR: 1B-1B-2-40JG-39-1, - 40GRT-30-05								-	-	-
7.3.3.3 Perform Operational Check										
7.3.3.3.1 AFCS Operational Check TR: TO 1B-1B-2-22JG-10-1, TO 22-10- 02-3	*							-	-	-
7.3.3.3.2 Manual TF Operational Check TR: TO 1B-1B-2-22JG-10-1, TO 22-10- 02-4	*							-	-	-
7.3.3.3.3 SIS/SEF Ground Check TR: TO 1B-1B-2-27JG-30-1, TO 27-30- 05	*							-	-	-
7.3.3.3.4 Autothrottle Disconnect Switch Component Check TR: TO 1B-1B-2-76JG-10-1 / TO 76-11- 03								-	-	-
7.3.3.4 Remove / Install										
7.3.3.4.1 AFCS Trim Controller TR: 1B-1B-2-22JG-10-1, 2-11- 10-2, -3								-	-	-
7.3.3.4.2 AFCS Logic / SMCS Controller TR: 1B-1B-2-22JG-10-1, 22-12- 10-2,								-	-	-

B-1 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A	B	C
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	3 Skill Level Course	5 Skill Level CDC	7 Skill Level CDC
-3										
7.3.3.4.3 AFCS Panel TR: 1B-1B-2-22JG-10-1, 22-12- 11-2, -3								-	-	-
7.3.3.4.4 Terrain Following Adapters TR: 1B-1B-2-22JG-10-1, 22-13- 10-2, -3								-	-	-
7.3.3.4.5 Proximity Switch Electronics Package TR: 1B-1B-2-22JG-20-1, 22-21- 10-2, -3								-	-	-
7.3.3.4.6 Manual Terrain Following Feedback Accelerometers TR: 1B-1B-2-22JG-10-1, 22-13- 11-2, -3								-	-	-
7.3.3.4.7 SMCS Accelerometers TR: 1B-1B-2-22JG-20-1, 22-21- 12-2, -3								-	-	-
7.3.3.5 Adjust / Align AFCS Logic / SMCS Controller TR: 1B-1B-2-22JG-10-1, 22-12-10-5	*							-	-	-
7.3.3.6 Isolate Autoflight Malfunctions TR: 1B-1B-2-22GS-00-1, 22WD- 00-1, 24GS-00-2										
7.3.3.6.1 AFCS	*							-	-	-
7.3.3.6.2 Automatic TF	*							-	-	-
7.3.3.6.3 SIS / SEF	*							-	-	-
7.3.3.6.4 SMCS	*							-	-	-
7.3.3.6.5 SEF DC Power Source								-	-	-
7.3.3.6.6 SEF AC Power Source								-	-	-
7.3.3.7 Perform Advanced Autoflight Troubleshooting TR: 1B-1B-2-22GS-00-1, 22WD- 00-1, 24GS-00-2										
7.3.3.7.1 AFCS		*						-	-	-
7.3.3.7.2 Automatic TF		*						-	-	-
7.3.3.7.3 SIS / SEF		*						-	-	-
7.3.3.7.4 SMCS		*						-	-	-
7.3.3.7.5 SEF DC Power Source								-	-	-
7.3.3.7.6 SEF AC Power Source								-	-	-
7.4 GENERAL COMPUTER COMPLEX (B-1)										
7.4.1 Central Integrated Test Set (CITS)										
7.4.1.1 Purpose and Interface TR: TO 1B-1B-2-46GS-00-1								-	-	-
7.4.1.2 Perform Computer Memory Load TR: TO 1B-1B-2-46JG-30-1	*							-	-	-
7.4.1.3 CITS Computer Check TR: TO 1B-1B-2-46JG-30-1 / TO 46-31-10-1								-	-	-

B-1 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A	B	C
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	3 Skill Level Course	5 Skill Level CDC	7 Skill Level CDC
7.4.1.4 CITS GRT TR: 1B-1B-2-40JG-46-1, 40GRT-46-05								-	-	-
7.4.2 Remove / Install TR: 1B-1B-2-46JG-10, -20, -30, -40										
7.4.2.1 CITS Control and Display Panel (CCD) TR: Task 46-11-10								-	-	-
7.4.2.2 Data Acquisition Unit (DAU) TR: Task 46-21-10								-	-	-
7.4.2.3 Data Conversion Unit (DCU) TR: Task 46-27-10								-	-	-
7.4.2.4 Data Link Terminal (DLT) TR: Task 46-26-10								-	-	-
7.4.2.5 CITS Transformer TR: Task 46-31-11								-	-	-
7.4.2.6 CITS Digital Computer TR: Task 46-31-10								-	-	-
7.4.2.7 CITS Maintenance Recorder (CMR)										
7.4.2.7.1 CITS Data Transfer Interface Unit TR: Task 46-41-11								-	-	-
7.4.2.7.2 CITS Data Cartridge A and B Task 46-41-12								-	-	-
7.4.2.7.3 Recorder Transformer TR: Task 46-41-13								-	-	-
7.4.2.8 Isolate Malfunctions	*							-	-	-
7.4.2.9 Perform Advanced Troubleshooting TR: 1B-1B-2-40JG-46-1, 46-GS- 00-1		*						-	-	-
7.4.3 Avionics Control Unit Complex (ACUC)										
7.4.3.1 System Tie-In / Integration TR: TO 1B-1B-2-34GS-00-2								-	-	-
7.4.3.2 Operate ACUC TR: 1B-1B-2-34JG-60-2	*							-	-	-
7.5 GENERAL NAVIGATION SYSTEMS (B-1)										
7.5.1 Attitude and Heading Systems										
7.5.1.1 Theory Of Operation										
7.5.1.1.1 Gyro Stabilization System TR: 1B-1B-2-34GS-00-1, -2								-	-	-
7.5.1.2 Perform GSS Ground Readiness Test TR: TO 1B-1B-2-40JG-34-1 / TO 40GRT-34, -27								-	-	-
7.5.1.3 Perform Gyro Stabilization Operational Check TR: TO 1B-1B-2-34JG-20-3, 34-27- 02	*							-	-	-
7.5.1.4 Remove / Install										
7.5.1.4.1 Electronic Control Amplifier / Compensator TR: 1B-1B-2-34JG-20-3, 34-27- 10-2, -3								-	-	-
7.5.1.4.2 Compass Control Unit								-	-	-

B-1 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
TR: 1B-1B-2-34JG-20-3, 34- 27-11-2, -3										
7.5.1.4.3 Magnetic Azimuth Detector TR: 1B-1B-2-34JG-20-3, 34-27- 12-2, -3								-	-	-
7.5.1.4.4 Gyro Reference Unit TR: 1B-1B-2-34JG-20-3								-	-	-
7.5.1.5 Adjust / Align										
7.5.1.5.1 Gyro Stabilization Compass Calibration TR: 1B-1B-2-34JG-20-3, 34- 27-01	*							-	-	-
7.5.1.5.2 Magnetic Azimuth Detector Mount TR: 1B-1B-2-34JG-20-X								-	-	-
7.5.1.5.3 Gyro Reference Unit Mount TR: 1B-1B-2-34JG-20-3, 34-27- 13-5								-	-	-
7.5.1.5.4 Inertial Navigation TR: 1B-1B-2-34JG-40-1, 34-41- 01								-	-	-
7.5.1.6 Isolate Malfunctions	*							-	-	-
7.5.1.7 Perform Advanced Troubleshooting TR: 1B-1B-2-34GS-00-1, -2, - 34WD-00-1		*						-	-	-
7.6 FLIGHT DIRECTOR COMPUTER / MONITOR SYSTEM (B-1)										
7.6.1 Theory of Operation TR: TO 1B-1B-2-34GS-00-1, -2								-	-	-
7.6.2 Perform Ground Readiness Test (GRT) TR: 1B-1B-2-40JG-34-1, -3										
7.6.2.1 Flight Director Computer TR: Task 40GRT-34-21	*							-	-	-
7.6.2.2 Flight Instrument Interface TR: Task 40GRT-34-69	*							-	-	-
7.6.2.3 Flight Instrument Signal Converter (FISC) Flight Director Panel Interface TR: Task 40GRT-34-70, -71								-	-	-
7.6.2.4 Flight Instrument Signal Converter (FISC) AFSC Mode interface TR: Task 40GRT-34-72, -73								-	-	-
7.6.3 Perform Operational Check TR: 1B-1B-2-34JG-10-1, -20-1, - 20-2										
7.6.3.1 Flight Director Computer TR: Tasks 34-21-10-1, 34-22-10-1	*							-	-	-
7.6.3.2 Horizontal Situation Indicator Transformer TR: Task 34-23-11-1								-	-	-
7.6.3.3 Attitude Director Indicator TR: Task 34-24-01	*							-	-	-
7.6.3.4 Rate of Turn Gyro TR: Task 34-24-10	*							-	-	-
7.6.3.5 AFT Attitude Indicator	*							-	-	-

B-1 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A	B	C
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	3 Skill Level Course	5 Skill Level CDC	7 Skill Level CDC
TR: Task 34-26-10-01										
7.6.3.6 28-volt DC Transformer Rectifier TR: Task 34-26-13-1								-	-	-
7.6.3.7 AFT Instruments Transformer TR: Task 34-26-14-1								-	-	-
7.6.4 Remove / Install TR: 1B-1B-2-34JG-20-1, -20-3, -60-2										
7.6.4.1 Horizontal Situation Indicator TR: Tasks 34-23-10-2, -3, 34-26- 12-2, -3								-	-	-
7.6.4.2 Flight Director Computer (FDC) TR: Tasks 34-21-10-2, -3, 34-22- 10-2, -3								-	-	-
7.6.4.3 Flight Instrument Signal Converter (FISC) TR: Tasks 34-66-10-2, -3, 34-68- 1-2, -3								-	-	-
7.6.4.4 Flight Director System Transformers TR: Tasks 34-23-10-2, -3, 34-23- 11-2, -3, 34-26-13-2, -3, 34-26- 14-2-3								-	-	-
7.6.4.5 Attitude Indicators TR: Tasks 34-24-11-2, -3, 34-26- 10-2, -3								-	-	-
7.6.4.6 Rate of Turn Gyro TR: Tasks 34-24-10-2, -3								-	-	-
7.6.4.7 Flight Director Computer Control Panel TR: Tasks 34-25-10-2, -3								-	-	-
7.6.5 Isolate Malfunctions	*							-	-	-
7.6.6 Perform Advanced Troubleshooting TR: 1B-1B-2-34GS-00-1, -2, 1B- 1B-2-34WD-00-1		*						-	-	-
7.7 FLIGHT INSTRUMENTS (B-1)										
7.7.1 Standby Instruments										
7.7.1.1 Theory of Operation TR: TO 1B-1B-2-34GS-00-2								-	-	-
7.7.2 Perform Check TR: 1B-1B-2-34JG Series										
7.7.2.1 Standby Airspeed Indicator and Standby Altimeter TR: 1B-1B-2-34JG-10-3	*							-	-	-
7.7.2.2 Standby Attitude Indicator TR: Task 34-24-11-1	*							-	-	-
7.7.3 Remove / Install										
7.7.3.1 Standby Airspeed Indicator TR: 1B-1B-2-34JG-10-3								-	-	-
7.7.3.2 Standby Attitude Indicator TR: Tasks 34-24-11-2, -3								-	-	-
7.7.3.3 Standby Altimeter TR: 1B-1B-2-34JG-10-3								-	-	-
7.7.3.4 Magnetic Compass								-	-	-

B-1 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A	B	C
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	3 Skill Level Course	5 Skill Level CDC	7 Skill Level CDC
TR: 1B-1B-2-34JG-10-3										
7.7.4 Adjust / Calibrate TR: 1B-1B-2-34JG-10-3										
7.7.4.1 Magnetic Compass TR: Task 34-17-11-5								-	-	-
7.7.4.2 Standby Altimeter TR: Task 34-17-10-5	*							-	-	-
7.7.5 Isolate Malfunctions TR: 1B-1B-2-34GS-00-1, 34WD- 00-1	*							-	-	-
7.8 AIR DATA SYSTEMS (B-1)										
7.8.1 Theory of Operation TR: TO 1B-1B-2-34GS-00-1, -2								-	-	-
7.8.2 Inspect TR: 1B-1B-2-34JG-10-2										
7.8.2.1 Total Air Temperature Probe TR: Task 34-13-11								-	-	-
7.8.2.2 Pneumatic Pressure Lines TR: 1B-1B-34JG-00-1								-	-	-
7.8.2.3 Drain Bottles TR: Task 34-14-13								-	-	-
7.8.2.4 Pitot Static Probes TR: Task 34-14-6	*							-	-	-
7.8.3 Perform Central Air Data Ground Readiness Test (GRT) TR: 1B-1B-2-40JG-34-1	*							-	-	-
7.8.4 Perform Operational Check TR: 1B-1B-2-34JG-00-1										
7.8.4.1 Pitot Heat System TR: 1B-1B-34JG-30-1 Task 30-30-01								-	-	-
7.8.4.2 Central Air Data Computer (CADC) Self-Test TR: Task 34-14-11-1, 34-15-13-1								-	-	-
7.8.4.3 Central Air Data Computer System Test TR: Task 34-14-01, 34-15-01	*							-	-	-
7.8.4.4 Central Air Data Computer Program Load TR: Task 34-14-00								-	-	-
7.8.4.5 Vertical Scale Indicator TR: Task 34-11-01								-	-	-
7.8.4.6 Flight Parameter Indicator TR: Task 34-16-11-11-1								-	-	-
7.8.4.7 Flight Instrument Test and Modes Panel TR: Task 34-61-01								-	-	-
7.8.5 Remove / Install										
7.8.5.1 Total Temperature Indicator TR: Task 34-13-10-2, -3								-	-	-
7.8.5.2 Airspeed Mach Indicator TR: Tasks 34-11-13-2, -3, 34-12- 12-2, -3								-	-	-

B-1 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A	B	C
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	3 Skill Level Course	5 Skill Level CDC	7 Skill Level CDC
7.8.5.3 Altitude Vertical Velocity Indicator TR: Tasks 34-11-12-2, -3, 34-12- 11-2, -3								-	-	-
7.8.5.4 Flight Parameter Indicator TR: Tasks 34-16-1-2, -3								-	-	-
7.8.5.5 Ground Speed / True Airspeed Indicator TR: Tasks 34-11-11-2, -3								-	-	-
7.8.5.6 Central Air Data Computer (CADC) TR: Tasks 34-14-11-2, -3, 34-15- 13-2, -3								-	-	-
7.8.5.7 Total Air Temperature Probe TR: Tasks 34-13-11-2, -3								-	-	-
7.8.5.8 Air Data Transducers TR: Tasks 34-14-12-2, -3, 34-15- 12-2, -3								-	-	-
7.8.5.9 Angle of Attack Indexers TR: Tasks 34-14-10-2, -3, 34-15- 11-2, -3								-	-	-
7.8.5.10 Flight Instrument Test / Mode Panel TR: Tasks 34-61-10-2, 03								-	-	-
7.8.5.11 Remote Accelerometer TR: Tasks 34-11-10-2, -3, 34-12- 10-2, -3								-	-	-
7.8.5.12 Pitot Static System Drain TR: Tasks 34-14-13-2, -3, 34-15- 10-2, -3								-	-	-
7.8.5.13 Pitot Static Angle of Attack Probe TR: Tasks 34-14-14-2, -3, 34-14- 15-2, -3, 34-15-14-2, -3, 34-15- 15-2, -3	*							-	-	-
7.8.6 Adjust Pitot Static Angle of Attack Probe Mount TR: 1B-1B-2-34JG-10-2 Task 34-14-14-5	*							-	-	-
7.8.7 Isolate Malfunctions	*							-	-	-
7.8.8 Perform Advanced Troubleshooting TR: 1B-1B-2-34GS-00-1, -2, -34WD- 00-1		*						-	-	-
7.9 DATA RECORDERS (B-1)										
7.9.1 Theory of Operation TR: TO 1B-1B-2-31GS-00-1								-	-	-
7.9.2 Perform Indicating / Recording System Operational Check TR: TO 1B-1B-2-31JG-30-1	*							-	-	-
7.9.3 Strain Gauge Operational Check TR: Task 31-30-06								-	-	-
7.9.4 Accelerometer Component check TR: Task 31-32-10-1								-	-	-
7.9.5 Remove / Install TR: 1B-1B-2-31JG-30-1										
7.9.5.1 Vertical, Lateral and Longitudinal Accelerometer								-	-	-

B-1 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
TR: Tasks 31-32-10-2, -3										
7.9.5.2 Structural Data Collector Integrated Data Acquisition Recorder TR: Tasks 31-32-11-2, -3								-	-	-
7.9.5.3 Strain Gage Exchange TR: Tasks 31-30-03, -04, -05								-	-	-
7.9.6 Isolate Malfunctions TR: 1B-1B-2-31GS-00-1, 1B-1B- 2-31WD-00-1	*							-	-	-
7.10 WARNING SYSTEMS (B-1)										
7.10.1 Caution Panels										
7.10.1.1 Theory of Operation TR: TO 1B-1B-2-33GS-00-1								-	-	-
7.10.1.2 Perform Annunciator Lighting checkout TR: 1B-1B-2-33JG-10-2	*							-	-	-
7.10.2 Remove / Install TR: 1B-1B-2-33JG-10-2, -20-1, - 20-2										
7.10.2.1 Pilot and Co-Pilot Annunciator Panels TR: Task 33-13-12								-	-	-
7.10.2.2 Auxiliary Caution Panel TR: Task 33-13-11								-	-	-
7.10.2.3 Main Caution Panel TR: Task 33-13-10	*							-	-	-
7.10.2.4 OSO and DSO Annunciator Panels TR: Task 33-23-11								-	-	-
7.10.3 Isolate Malfunctions TR: 1B-1B-2-33GS-00-1, 1B-1B-2-31-WD-00-1	*							-	-	-
7.11 ENGINE INDICATING SYSTEMS (B-1)										
7.11.1 Theory of Operation TR: TO 1B-1B-2-77GS-00-1								-	-	-
7.11.2 Perform Engine Indicating Ground Readiness Test (GRT) TR: 1B-1B-2-40JG-77-1 Task 40GRT-77-05	*							-	-	-
7.11.3 Perform Operational Check										
7.11.3.1 Engine Indicating System TR: 1B-1B-2-77JG-00-1, 77-00-01	*							-	-	-
7.11.7.2 Annunciator Light Operational Check TR: TO 1B-1B-2-77JG-00-1, 77-00-2	*							-	-	-
7.11.4 Remove / Install										
7.11.4.1 Power Level Indicator TR: 1B-1B-2-77JG-10-1, 77-11- 10-2, -3								-	-	-
7.11.4.2 Fan RPM Indicator TR: 1B-1B-2-77JG-10-1, 77-12- 10-2, -3								-	-	-
7.11.4.3 Nozzle Position / Core RPM Indicator TR: 1B-1B-2-77JG-10-1, 7-12-10 -2, -3								-	-	-

B-1 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
7.11.4.4 Engine Temperature Indicator TR: 1B-1B-2-77JG-20-1, 77-21- 10-2, -3								-	-	-
7.11.4.5 Signal Conditioning and Distribution Unit TR: 1B-1B-2-77JG-30-1, 77-31- 11-2, -3								-	-	-
7.11.4.6 Engine Fuel Flow Indicator TR: 1B-1B-1-77JG-40-1, 77-41- 10-2, -3								-	-	-
7.11.4.7 Oil Pressure / Oil Quantity Indicator TR: 1B-1B-2-77JG-60-1, 77-61- 10-2, -3								-	-	-
7.11.4.8 Total Rate of Fuel Flow Indicator TR: Tasks 77-41-19-2, -3								-	-	-
7.11.4.9 Annunciator Driver Assembly TR: Task 77-31-10-2, -3								-	-	-
7.11.5 Isolate Malfunctions	*							-	-	-
7.11.6 Perform Advanced Troubleshooting TR: 1B-1B-2-77GS-00-1, -77WD- 00-1		*						-	-	-
7.12 LIQUID QUANTITY SYSTEMS (B-1)										
7.12.1 Fuel Center Of Gravity Management System (FCGMS)										
7.12.1.1 Theory of Operation TR: 1B-1B-2-28GS-00-1								-	-	-
7.12.1.2 Perform Ground Readiness Tests (GRTs)										
7.12.1.2.1 Fuel Center of Gravity Management System GRT TR: 1B-1B-2-40JG-28-1, 40GRT-28-50	*							-	-	-
7.12.1.3 Perform Operational Check										
7.12.1.3.1 Fuel Quantity Sensing Check TR: TO 1B-1B-2-28JG-50-1, 28- 51-01	*							-	-	-
7.12.1.3.2 FCGMS High-Low TR: 1B-1B-2-28JG-50-1, 28- 51-02	*							-	-	-
7.12.1.3.3 FCGMS Target CG TR: 1B-1B-2-28JG-50-1, 28- 51-03	*							-	-	-
7.12.1.3.4 FCGMS Safety-of-Flight operational Check TR: TO 1B-1B-2-28JG-50-1, 28- 51-04	*							-	-	-
7.12.1.3.5 FCGMS Download TR: TO 1B-1B-2-28JG-550-1, 28- 51-05								-	-	-
7.12.1.3.6 Fuel Transfer TR: 1B-1B-2-28JG-20-1, 28- 21-01	*							-	-	-
7.12.1.3.7 Fuel Transfer Status Indicator	*							-	-	-

B-1 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A	B	C
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	3 Skill Level Course	5 Skill Level CDC	7 Skill Level CDC
TR: 1B-1B-2-28JG-20-7, 28- 26-11										
7.12.1.4 Remove / Install										
7.12.1.4.1 Discrete Fuel Flow Sensor Power Supply TR: 1B-1B-2-28JG-20-7, 28- 01-08								-	-	-
7.12.1.4.2 Attitude Sensor TR: 1B-1B-2-28JG-50-2, 28- 51-12								-	-	-
7.12.1.4.3 Wing Tank Fuel Quantity Gauge Bulkhead Connector TR: 1B-1B-2-28JG-50-2, 28- 51-13								-	-	-
7.12.1.4.4 Intermediate Device TR: 1B-1B-2-28JG-50-2, 28- 51-14	*							-	-	-
7.12.1.4.5 Fuel Management Panel TR: 1B-1B-2-28JG-50-2, 28- 51-15								-	-	-
7.12.1.4.6 Fuel Center-of-Gravity Management Panel TR: 1B-1B-2-28JG-50-2, 28- 51-16								-	-	-
7.12.1.4.7 Individual Fuel Tank Quantity Indicator TR: 1B-1B-2-28JG-50-2, 28- 51-19								-	-	-
7.12.1.4.8 Select Tank Fuel Quantity Indicator TR: 1B-1B-2-28JG-50-2, 28- 51-20								-	-	-
7.12.1.4.9 Percent MAC / Gross Weight / Total Fuel Quantity Indicator TR: 1B-1B-2-28JG-50-2, 28- 51-21								-	-	-
7.12.1.4.10 Ground Refuel / Defuel Indicator TR: 1B-1B-2-28JG-50-2, 28- 51-22								-	-	-
7.12.1.4.11 Ground Refuel / Defuel Control Panel TR: 1B-1B-2-28JG-22-2, -3								-	-	-
7.12.1.4.12 FCGMS Fuel Quantity Probe Adapter Cable Installation TR: 1B-1B-2-28JG-001, 28- 01-08	*							-	-	-
7.12.1.5 Isolate Malfunctions	*							-	-	-
7.12.1.6 Perform Advanced Troubleshooting TR: 1B-1B-2-28GS-00-1		*						-	-	-
7.12.2 Hydraulic Indicating Systems										
7.12.2.1 Theory of Operation TR: TO 1B-1B-2-29JG-30-1								-	-	-
7.12.2.2 Perform Hydraulic Power GRT TR: 1B-1B-2-40JG-29-1, 40- GRT-29-05	*							-	-	-
7.12.2.3 Perform Hydraulic Power Indicating Operational Check TR: TO 1B-1B-2-29JG-30-1, 29-30-01	*							-	-	-
7.12.2.4 Remove / Install										
7.12.2.4.1 Hydraulic Pressure Signal Conditioning and Distribution Unit TR: 1B-1B-2-29JG-30-1, 29- 31-14-2,								-	-	-

B-1 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A	B	C
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	3 Skill Level Course	5 Skill Level CDC	7 Skill Level CDC
-3										
7.12.2.4.2 Hydraulic Fluid Quantity Signal TR: 1B-1B-2-29JG-30-1, 29- 31-13-2, -3								-	-	-
7.12.2.4.3 Hydraulic Fluid Temperature Signal Conditioning and Distribution Unit TR: 1B-1B-2-29JG-30-1, 29- 34-13-2, -3								-	-	-
7.12.2.4.4 Hydraulic Power Main Pressure / Quantity Indicating Panel Assembly TR: 1B-1B-2-29JG-30-1, 29- 32-12-2, -3	*							-	-	-
7.12.2.5 Isolate Malfunctions TR: 1B-1B-2-29GS-00-1, - 29WD-00-1										
7.12.2.5.1 Pressure	*							-	-	-
7.12.2.5.2 Quantity	*							-	-	-
7.12.2.5.3 Temperature	*							-	-	-
7.12.2.6 Perform Advanced Troubleshooting TR: 1B-1B-2-29GS-00-1, - 29WD-00-1										
7.12.2.6.1 Pressure		*						-	-	-
7.12.2.6.2 Quantity		*						-	-	-
7.12.2.6.3 Temperature		*						-	-	-
7.13 ELECTRICAL MULTIPLEX SYSTEM (EMUX) (B-1) TR: TO 1B-1B-2-92GS-00-1										
7.13.1 Theory of Operation								-	-	-
7.13.2 System Integration										
7.13.2.1 Parameter Monitor Codes for Systems Fault Isolation TR: Applicable System GS-00-1	*							-	-	-
7.13.2.2 Use CITS Data Snapshots TR: 1B-2-40GS Technical Orders	*							-	-	-
7.13.2.3 Use CITS Expert Parameter System (CEPS / CITS) Deployable Diagnostic System (CDDS) TR: 31S5-4-3593-1	*							-	-	-
7.13.3 Operate / Maintain Peculiar (Special Purpose) Test Equipment To Perform Maintenance Functions										
7.13.3.1 CITS EMUX Maintenance Unit (CEMU) TR: 33D7-75-35-1										
7.13.3.1.1 Purpose and Interface								-	-	-
7.13.3.1.2 Use Aircraft Monitor Modes		*						-	-	-
7.13.3.1.3 Use Aircraft STIM Codes		*						-	-	-

B-2 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC

Attachment 8 B-2 Training Requirements

NOTE 1: The apprentice course, J3ABR2A9X2XXXXX, B/S Integrated Instrument and Flight Control Systems Apprentice, will use representative aircraft/trainers to accomplish the system specific training requirements as identified by the specific STS. The general training requirements section of the CFETP is used to code core competencies of the career field that will be taught in the apprentice course. The MDS specific attachments are to be used in conjunction with the general and common sections to identify work center requirements and annotate qualifications.

NOTE 2: All course requirements are trained in the 3-level resident course during wartime.

NOTE 3: Users are responsible for annotating training references to identify current references pending STS revision.

NOTE 4: Items marked in Column 4A with both a proficiency code and a dash will be taught if equipment is available (Ex: 2b/-).

NOTE 5: Items coded in Column 2A or 2B of the General Attachment are core tasks. If the STS line item identified with an "*" does not apply to a procedure, aircraft MDS, or equipment at a given base, the completion of the core task in the General Attachment is waived.

NOTE 6: Address comments or recommend changes through the MAJCOM Functional Manager to the AETC Training Manager at DSN 736-7908

8.1 GENERAL ORGANIZATIONAL MAINTENANCE (B-2) Applicable -1 / -2 TOs										
8.1.1 Aircraft Familiarization TR: 1B-2A-2-00GB-00-1										
8.1.1.1 Major Structural Areas								-	-	-
8.1.1.2 Major Systems								-	-	-
8.1.1.3 Danger Areas								-	-	-
8.1.1.4 Low Observable Fundamentals	*							-	-	-
8.1.2 Technical Order Familiarization	*							-	-	-
8.1.3 Observable Critical Procedures (OCP) Awareness TR: 1B-2A-2-00JG-00-1	*							-	-	-
8.2 GENERAL MAINTENANCE TASKS (B-2)										
8.2.1 Aircraft Ground Handling										
8.2.1.1 Flightline Safety / Precautions / Security								-	-	-
8.2.1.2 Inspection / Operation Portable External Electrical Power Unit								-	-	-
8.2.1.3 Inspect / Use Ground Maintenance Stands								-	-	-
8.2.2 Perform Aircraft Wash								-	-	-
8.2.3 Jack Aircraft										
8.2.3.1 Jacking Supervisor								-	-	-
8.2.3.2 Jacking Team Member								-	-	-
8.2.4 Refuel / Defuel										
8.2.4.1 Perform Refuel Team Member Duties								-	-	-
8.2.4.2 Perform Defuel Team Member Duties								-	-	-
8.2.5 Remove / Install Aircraft Maintenance Access Panels								-	-	-
8.2.6 Use Aircraft Interphone System								-	-	-
8.2.7 Perform Aircraft Marshaling Procedures								-	-	-
8.2.8 Tow Aircraft										
8.2.8.1 Perform Wing Walker Duties								-	-	-
8.2.8.2 Perform Tail Walker Duties								-	-	-
8.2.8.3 Brake Operator								-	-	-
8.2.9 Perform Aircraft Safe for Maintenance	*							-	-	-

B-2 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
TR: TO 1B-2A-2-05JG- series T.O.s										
8.2.10 Apply / Remove External Air Conditioning TR: TO 1B-2A-2-05JG- series T.O.s	*							-	-	-
8.2.11 Apply / Remove External Power TR: TO 1B-2A-2-05JG- series T.O.s	*							-	-	-
8.2.12 Perform Selected Classified Data Erase TR: TO 1B-2A-2-40JG- series T.O.s								-	-	-
8.2.13 Operate external bleed air cart	*							-	-	-
8.2.14 Pilot Seat Positioning TR: TO 1B-2A-2-90JG- series T.O.s								-	-	-
8.2.15 ECS Power Up / Down TR: 1B-2A-2-21JG- series T.O.s								-	-	-
8.2.16 Operate AFT Avionics Bay Door TR: 1B-2A-2-01JG- series T.O.s								-	-	-
8.2.17 Open / Close Engine AMAD Bay Doors TR: 1B-2A-2-01JG- series T.O.s								-	-	-
8.2.18 Operate Weapons Bay Doors TR: 1B-2A-2-01JG- series T.O.s								-	-	-
8.2.19 Open / Close ECS Bay Doors TR: 1B-2A-2-01JG- series T.O.s								-	-	-
8.2.20 Open / Close Hydraulic Access Doors TR: 1B-2A-2-01JG- series T.O.s								-	-	-
8.2.21 Central Aircraft Support System (CASS)										
8.2.21.1 CASS Electrical Power								-	-	-
8.2.21.2 CASS Air	*							-	-	-
8.2.22 Dock Procedures										
8.2.22.1 Aqueous Film Forming Foam	*							-	-	-
8.2.22.2 Fall Arrestor System								-	-	-
8.3 GENERAL FLIGHT CONTROLS (B-2)										
8.3.1 Electronic Flight Controls										
8.3.1.1 Theory of Operation TR: TO 1B-2A-2-27GS- series T.O.s	*							-	-	-
8.3.1.2 System Integration TR: TO 1B-2A-2-40GS- series T.O.s								-	-	-
8.3.1.3 Perform Built-In Tests										
8.3.1.3.1 Flight Controls S-BIT TR: 1B-2A-2-40JG- series T.O.s	*							-	-	-
8.3.1.3.2 Flight Control Computer S-BIT TR: 1B-2A-2-40JG- series T.O.s	*							-	-	-
8.3.1.3.3 Flight Control Actuation System S-BIT TR: 1B-2A-2-40JG- series T.O.s	*							-	-	-
8.3.1.3.4 Flight Control Computer DG-BIT TR: 1B-2A-2-40JG- series T.O.s	*							-	-	-
8.3.1.3.5 Flight Control Actuation System DG-BIT TR: 1B-2A-2-40JG- series T.O.s	*							-	-	-
8.3.1.3.6 Flight Controls Memory Read	*							-	-	-

B-2 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
TR: 1B-2A-2-40JG- series T.O.s										
8.3.1.3.7 Speed Brake Switch Operational Check TR: TO 1B-2A-2-76JG- series T.O.s	*							-	-	-
8.3.1.4 Remove / Install										
8.3.1.4.1 Flight Control Computer TR: 1B-2A-2-27JG- series T.O.s	*							-	-	-
8.3.1.4.2 Attitude Motion Sensor Set TR: 1B-2A-2-27JG- series T.O.s								-	-	-
8.3.1.4.3 Actuator Remote Terminal TR: 1B-2A-2-27JG- series T.O.s	*							-	-	-
8.3.1.4.4 Alternate Trim Panel TR: 1B-2A-2-27JG- series T.O.s								-	-	-
8.3.1.4.5 Flight Data Control Panel TR: 1B-2A-2-31JG- series T.O.s								-	-	-
8.3.1.4.6 Flight Control Maintenance Panel TR: 1B-2A-2-27JG- series T.O.s								-	-	-
8.3.1.4.7 Master Mode Switch TR: 1B-2A-2-27JG- series T.O.s								-	-	-
8.3.1.4.8 Control Stick Grip TR: 1B-2A-2-27JG- series T.O.s	*							-	-	-
8.3.1.4.9 Stick Shaker Assembly TR: 1B-2A-2-27JG- series T.O.s								-	-	-
8.3.1.4.10 Pitch Position Sensor Assembly TR: 1B-2A-2-27JG- series T.O.s								-	-	-
8.3.1.4.11 Roll Position Sensor Assembly TR: 1B-2A-2-27JG- series T.O.s								-	-	-
8.3.1.4.12 Yaw Position Sensor Assembly TR: 1B-2A-2-27JG- series T.O.s								-	-	-
8.3.1.4.13 Weapons Bay Door LVDT TR: 1B-2A-2-94JG- series T.O.s								-	-	-
8.3.1.4.14 Control Stick Assembly TR: 1B-2A-2-27JG- series T.O.s								-	-	-
8.3.1.4.15 Control Feel Augmentation Cartridge Assembly TR: 1B-2A-2-27JG- series T.O.s								-	-	-
8.3.1.4.16 Yaw Feel Cartridge TR: 1B-2A-2-27JG- series T.O.s								-	-	-
8.3.1.4.17 Roll Sensor Drive Crank TR: 1B-2A-2-27JG- series T.O.s								-	-	-
8.3.1.4.18 Pitch Interconnect Pushrod TR: 1B-2A-2-27JG- series T.O.s								-	-	-
8.3.1.4.19 Aileron Sensor Drive Pushrod TR: 1B-2A-2-27JG- series T.O.s								-	-	-
8.3.1.4.20 Spring TR: 1B-2A-2-27JG- series T.O.s								-	-	-
8.3.1.4.21 #4 Throttle Grip Quadrant Assembly TR: 1B-2A-2-76JG- series T.O.s								-	-	-
8.3.1.4.22 Roll Dampers TR: 1B-2A-2-27JG- series T.O.s								-	-	-

B-2 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
8.3.1.4.23 Pitch Torque Tube Assembly TR: 1B-2A-2-27JG- series T.O.s								-	-	-
8.3.1.4.24 Rudder Pedal TR: 1B-2A-2-27JG- series T.O.s								-	-	-
8.3.1.4.25 Interconnect Link TR: 1B-2A-2-27JG- series T.O.s								-	-	-
8.3.1.5 Perform Adjustments, Alignments and Rigging										
8.3.1.5.1 Minor Rig TR: 1B-2A-2-27JG- series T.O.s	*							-	-	-
8.3.1.5.2 Major Rig TR: 1B-2A-2-27JG- series T.O.s		*						-	-	-
8.3.1.5.3 Yaw Control Rigging TR: 1B-2A-2-27JG- series T.O.s								-	-	-
8.3.1.5.4 Roll Control Rigging TR: 1B-2A-2-27JG- series T.O.s								-	-	-
8.3.1.5.5 Pitch Control Rigging TR: 1B-2A-2-27JG- series T.O.s								-	-	-
8.3.1.5.6 AMSS Alignment										
8.3.1.5.6.1 Transfer Align TR: 1B-2A-2-27JG- series T.O.s	*							-	-	-
8.3.1.5.6.2 Mag Var Load TR: 1B-2A-2-27JG- series T.O.s	*							-	-	-
8.3.1.5.6.3 Extended Align TR: 1B-2A-2-27JG- series T.O.s								-	-	-
8.3.1.5.7 Weapons Bay Door LVDT Adjustment TO 1B-2A-2-94JG- series T.O.s								-	-	-
8.3.1.5.8 Isolate Malfunctions TR: TO 1B-2A-2-27GS- series T.O.s & applicable WDs	*							-	-	-
8.3.1.5.9 Perform Advanced Troubleshooting TR: TO 1B-2A-2-27GS- series T.O.s & applicable WDs		*						-	-	-
8.3.2 Auto Flight System										
8.3.2.1 Theory of Operation TR: TO 1B-2A-2-22GS- series T.O.s								-	-	-
8.3.2.2 Auto Flight Operational Check TR: TO 1B-2A-2-40JG- series T.O.s	*							-	-	-
8.3.3 Isolate Malfunctions TR: TO 1B-2A-2-22GS- series T.O.s & applicable WDs	*							-	-	-
8.4 GENERAL COMPUTER COMPLEX (B-2)										
8.4.1 Onboard Test System (OBTS)										
8.4.1.1 Theory of Operation TR: TO 1B-2A-2-31GS series T.O.s/ 40GS-series T.O.s								-	-	-
8.4.1.2 Use Manually Initiated Procedures and OBMP Printout for System Fault Isolation	*							-	-	-

B-2 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
TR: TO 1B-2A-2-40JG series T.O.s / TO 40GS-00 / TO 27GS-00										
8.4.1.3 Perform Operational Check										
8.4.1.3.1 On-Board Maintenance Printer (OBMP) TR: 1B-2A-2-31JG- series T.O.s	*							-	-	-
8.4.1.3.2 DDU Disk Cartridge TR: 1B-2A-2-31JG- series T.O.s	*							-	-	-
8.4.1.3.3 Status Monitoring Remote Terminal (SMRT) TR: 1B-2A-2-31JG- series T.O.s	*							-	-	-
8.4.1.4 Remove / install										
8.4.1.4.1 On-Board Maintenance Printer (OBMP) TR: 1B-2A-2-31JG- series T.O.s								-	-	-
8.4.1.4.2 DDU Disk Cartridge TR: 1B-2A-2-31JG- series T.O.s								-	-	-
8.4.1.4.3 OBMP Paper Tape TR: 1B-2A-2-31JG- series T.O.s								-	-	-
8.4.1.4.4 SMRT TR: 1B-2A-2-31JG- series T.O.s	*							-	-	-
8.4.1.5 Isolate Malfunctions TR: TO 1B-2A-2-31GS series T.O.s & applicable WDs	*							-	-	-
8.4.1.6 Perform Advanced Troubleshooting TR: TO 1B-2A-2-31GS series T.O.s & applicable WDs		*						-	-	-
8.4.2 OBTS Ground Processor (OGP II)										
8.4.2.1 Theory of Operation TR: TO 1B-2A-2-31GS-00-1 / TO 40GS-00-1								-	-	-
8.4.2.2 Login / Logout OGPII TR: Software User's Manual		*						-	-	-
8.4.2.3 Produce / Re-Create Debrief Reports TR: 31S5-4-2340-1								-	-	-
8.4.2.4 Run Pre-Defined Text and Graphics Reports TR: 31S5-4-2340-1								-	-	-
8.4.2.5 Produce Ad-Hoc Reports TR: 31S5-4-2340-1								-	-	-
8.4.2.6 Utilize OGP Data to perform advanced troubleshooting TR: TO 1B-2A-2-31GS-00-1 / TO 40GS-00-1		*						-	-	-
8.5 MULTIPLEX BUS SYSTEM (B-2)										
8.5.1 Theory of Operation TR: TO 1B-2A-2-40GS- series T.O.s								-	-	-
8.5.2 Remove / Install										
8.5.2.1 Bus Connectors								-	-	-

B-2 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
TR: TO 1B-2A-2-40GS-00-1 / TO 40WD-00-1										
8.5.2.2 Bus Terminators TR:TO 1B-2A-2-40GS-00-1 / TO 40WD-00-1								-	-	-
8.5.2.3 Bus Couplers TR: TO 1B-2A-2-40GS-00-1 / TO 40WD-00-1	*							-	-	-
8.5.3 Isolate Malfunctions TR: TO 1B-2A-2-40GS-00-1 / TO 40WD-00-1	*							-	-	-
8.5.4 Perform Advanced Troubleshooting TR: TO 1B-2A-2-40GS-00-1 / TO 40WD-00-2		*						-	-	-
8.6 FLIGHT INSTRUMENTS (B-2)										
8.6.1 Standby Flight Instruments										
8.6.1.1 Theory of Operation TR: TO 1B-2A-2-31GS-00-1								-	-	-
8.6.1.2 Perform Operational Check										
8.6.1.2.1 STBY Instruments S-BIT TR: 1B-2A-2-40JG- series T.O.s	*							-	-	-
8.6.1.2.2 STBY ADI Component Check TR: TO 1B-2A-2-31JG- series T.O.s	*							-	-	-
8.6.1.2.3 Instrument Lighting Check TR: TO 1B-2A-2-33JG- series T.O.s	*							-	-	-
8.6.1.3 Remove / Install										
8.6.1.3.1 Airspeed Mach Indicator TR: TO 1B-2A-2-31JG- series T.O.s								-	-	-
8.6.1.3.2 Altimeter TR: TO 1B-2A-2-31JG- series T.O.s								-	-	-
8.6.1.3.3 Magnetic Compass TR: TO 1B-2A-2-31JG- series T.O.s								-	-	-
8.6.1.3.4 Attitude Indicator TR: TO 1B-2A-2-31JG- series T.O.s								-	-	-
8.6.1.3.5 Vertical Velocity Indicator TR: TO 1B-2A-2-31JG- series T.O.s								-	-	-
8.6.1.3.6 AOA Indexer TR: TO 1B-2A-2-31JG- series T.O.s	*							-	-	-
8.6.1.3.7 Standby Flight Instrument Unit (SFIU) TR: TO 1B-2A-2-31JG- series T.O.s								-	-	-
8.6.1.4 Perform Magnetic Compass Calibration TR: TO 1B-2A-2-31JG- series T.O.s								-	-	-
8.6.1.5 Isolate Malfunctions TR: 1B-2A-2-31GS-00-1 & applicable WDs	*							-	-	-
8.6.1.6 Perform Advanced Troubleshooting TR: 1B-2A-2-31GS-00-1 & applicable WDs		*						-	-	-
8.7 AIR DATA SYSTEMS (B-2)										

B-2 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
8.7.1 Theory of Operation TR: TO 1B-2A-2-27GS-00-2								-	-	-
8.7.2 Perform Operational Check										
8.7.2.1 Surge Heater Operational Check TR: TO 1B-2A-2-27JG- series T.O.s	*							-	-	-
8.7.2.2 Pressure Transducer S-Bit TR: 1B-2A-2-40JG- series T.O.s	*							-	-	-
8.7.2.3 Pressure Transducer Heat Check TR: TO 1B-2A-2-27JG- series T.O.s	*							-	-	-
8.7.2.4 Perform PTU preflight check TR: TO 1B-2A-2-40JG- series T.O.s	*							-	-	-
8.7.3 Remove / Install										
8.7.3.1 Alpha Pressure Transducer Unit (PTU) TR: TO 1B-2A-2-27JG- series T.O.s	*							-	-	-
8.7.3.2 Beta PTU TR: TO 1B-2A-2-27JG- series T.O.s	*							-	-	-
8.7.3.3 GLA PTU TR: TO 1B-2A-2-27JG- series T.O.s	*							-	-	-
8.7.3.4 Perform AD Calibration TR: TO 1B-2A-2-27JG- series T.O.s	*							-	-	-
8.7.4 Isolate Malfunctions TR: TO 1B-2A-2-27GS-00-1 & applicable WDs	*							-	-	-
8.7.5 Perform Advanced Troubleshooting TR: TO 1B-2A-2-27GS-00-1 & applicable WDs		*						-	-	-
8.8 DATA RECORDERS (B-2)										
8.8.1 Flight Data Recorder System										
8.8.1.1 Theory of Operation TR: TO 1B-2A-31GS-00-1 / TO 40-10-31-04								-	-	-
8.8.1.2 Perform Flight Data Recorder Check TR: TO 1B-2A-2-40JG- series T.O.s								-	-	-
8.8.1.3 Remove / Install										
8.8.1.3.1 Flight Data Recorder TR: 1B-2A-31JG- series T.O.s								-	-	-
8.8.1.3.2 Crash Survivable Memory Unit TR: 1B-2A-31JG- series T.O.s								-	-	-
8.8.1.4 FDR Forced Data Extract TR: 1B-2A-2-40JG- series T.O.s								-	-	-
8.8.1.5 FDR Classified Data Erase TR: 1B-2A-2-40JG- series T.O.s		*						-	-	-
8.8.1.6 Isolate Malfunctions TR: TO 1B-2A-2-31GS-00-1 & applicable WDs	*							-	-	-
8.8.1.7 Perform Advanced Troubleshooting TR: TO 1B-2A-2-31GS-00-1 & applicable WDs		*						-	-	-
8.9 ENGINE INDICATING SYSTEMS (B-2)										

B-2 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
8.9.1 Central Instrument Display System (CIDS)										
8.9.1.1 Theory of Operation TR: TO 1B-2A-2-31GS- series T.O.s								-	-	-
8.9.1.2 Perform CIDS Operational Check TR: TO 1B-2A-2-40JG- series T.O.s	*							-	-	-
8.9.1.3 Remove / Install										
8.9.1.3.1 CIDS Display Head Unit (DHA) TR: TO 1B-2A-2-31JG- series T.O.s								-	-	-
8.9.1.3.2 CIDS Processor TR: TO 1B-2A-2-31JG- series T.O.s								-	-	-
8.9.1.3.3 CIDS Cooling fan TR: TO 1B-2A-2-31JG- series T.O.s								-	-	-
8.9.1.3.4 CIDS Cooling fan sensor TR: TO 1B-2A-2-31JG- series T.O.s								-	-	-
8.9.1.3.5 CIDS Cooling Check Valve TR: TO 1B-2A-2-31JG- series T.O.s								-	-	-
8.9.1.3.6 Isolate Malfunctions TR: TO 1B-2A-2-31GS-00-1 & applicable WDs	*							-	-	-
8.9.1.3.7 Perform Advanced Troubleshooting TR: TO 1B-2A-2-31GS-00-1 & applicable WDs		*						-	-	-
8.10 LIQUID QUANTITY INDICATIORS										
8.10.1 Fuel Management Systems										
8.10.1.1 Theory of Operation TR: TO 1B-2A-2-28GS-00-1								-	-	-
8.10.1.2 Perform Built-In Tests										
8.10.1.2.1 Fuel Measurement Management System I-BIT TR: 1B-2A-2-40JG- series T.O.s	*							-	-	-
8.10.1.2.2 Manuel Fuel Control Panel SBIT TR: 1B-2A-2-40JG- series T.O.s	*							-	-	-
8.10.1.3 Perform Checkout Procedures										
8.10.1.3.1 Fuel Measurement / Management System Operational Check TR: TO 1B-2A-2-28JG- series T.O.s	*							-	-	-
8.10.1.3.2 Manuel Fuel Control Panel Component Check TR: TO 1B-2A-2-28JG- series T.O.s	*							-	-	-
8.10.1.3.3 Load Select Indicator / Control Unit Component Check TR: TO 1B-2A-2-29JG- series T.O.s / TO 28JG- series T.O.s								-	-	-
8.10.1.4 Remove / Install										
8.10.1.4.1 Fuel Measurement / Management Computer TR: TO 1B-2A-2-28JG- series T.O.s								-	-	-
8.10.1.4.2 Manual Fuel Control Panel TR: TO 1B-2A-2-28JG- series T.O.s								-	-	-

B-2 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
8.10.1.4.3 Tank Temperature Sensor TR: TO 1B-2A-2-28JG- series T.O.s								-	-	-
8.10.1.4.4 Bulkhead Electronic Device TR: TO 1B-2A-2-28JG- series T.O.s								-	-	-
8.10.1.4.5 Load Select Indicator / Control Unit TR: TO 1B-2A-2-28JG- series T.O.s								-	-	-
8.10.1.4.6 Ground Refuel / Defuel Control Panel TR: TO 1B-2A-2-28JG- series T.O.s								-	-	-
8.10.1.4.7 Fuel Control Relay Panel TR: TO 1B-2A-2-28JG- series T.O.s								-	-	-
8.10.1.5 Isolate Malfunctions TR: TO 1B-2A-2-28GS-00-1 & applicable WDs	*							-	-	-
8.10.1.6 Perform Advanced Troubleshooting TR: TO 1B-2A-2-28GS-00-1 & applicable WDs		*						-	-	-
8.11 NOSE WHEEL STEERING (B-2)										
8.11.1 Theory of Nose Wheel Steering TR: 1B-2A-2-27GS-00-1, 27GS- 00-2, 32GS-00-1								-	-	-
8.11.2 Perform Operational Check TR: TO 1B-2A-2-32JG- series T.O.s	*							-	-	-
8.11.3 Remove / Install Quad Linear Transducer TR: TO 1B-2A-2-32JG- series T.O.s								-	-	-
8.11.4 NWS Rigging TR: TO 1B-2A-2-32JG- series T.O.s	*							-	-	-
8.11.5 Isolate Malfunctions TR: TO 1B-2A-27GS-00-1 / TO 27GS-00-2 / TO 32GS-00-1 & applicable WDs	*							-	-	-
8.11.6 Perform Advanced Troubleshooting TR: TO 1B-2A-27GS-00-1 / TO 27GS-00-2 / TO 32GS-00-1 & applicable WDs		*						-	-	-
8.12 SPECIAL MAINTENANCE PROCEDURES (B-2)										
8.12.1 Operate / Maintain Peculiar (special purpose) Test Equipment								-	-	-
8.12.2 Hexadecimal/Binary Conversions	*							-	-	-

B-52 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A	B	C
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	3 Skill Level Course	5 Skill Level CDC	7 Skill Level CDC

Attachment 9 B-52 Training Requirements

NOTE 1: The apprentice course, J3ABR2A9X2XXXXX, B/S Integrated Instrument and Flight Control Systems Apprentice, will use representative aircraft/trainers to accomplish the system specific training requirements as identified by the specific STS. The general training requirements section of the CFETP is used to code core competencies of the career field that will be taught in the apprentice course. The MDS specific attachments are to be used in conjunction with the general and common sections to identify work center requirements and annotate qualifications.

NOTE 2: All course requirements are trained in the 3-level resident course during wartime.

NOTE 3: Users are responsible for annotating training references to identify current references pending STS revision.

NOTE 4: Items marked in Column 4A with both a proficiency code and a dash will be taught if equipment is available (Ex: 2b/-).

NOTE 5: Items coded in Column 2A or 2B of the General Attachment are core tasks. If the STS line item identified with an "*" does not apply to a procedure, aircraft MDS, or equipment at a given base, the completion of the core task in the General Attachment is waived.

NOTE 6: Address comments or recommend changes through the MAJCOM Functional Manager to the AETC Training Manager at DSN 736-7908

9.1 GENERAL ORGANIZATIONAL MAINTENANCE (B-52) TR: Applicable Aircraft -1 / -2 TOs										
9.1.1 Aircraft / Airframe Familiarization										
9.1.1.1 Major Structural Areas								-	-	-
9.1.1.2 Major Aircraft Systems								-	-	-
9.1.2 Technical Order Familiarization								-	-	-
9.1.3 Flightline Safety / Precautions / Security								-	-	-
9.1.4 Dropped Object Prevention Program (DOPP)								-	-	-
9.2 GENERAL MAINTENANCE TASKS (B-52)										
9.2.1 Ensure Aircraft Safe for Maintenance	*							-	-	-
9.2.2 Statically Ground Aircraft								-	-	-
9.2.3 Apply / Disconnect External Electrical Power	*							-	-	-
9.2.4 Apply External Air Conditioning								-	-	-
9.2.5 Use Aircraft Interphone System								-	-	-
9.2.6 Apply Hydraulic Power								-	-	-
9.2.7 Remove / Install Lower Body Cowling	*							-	-	-
9.2.8 Open / Close Upper Body Cowling	*							-	-	-
9.2.9 Open / Close Lower Wrap Cowling								-	-	-
9.2.10 Remove / Install Trailing Edge Fairing								-	-	-
9.2.11 Remove / Install Aircraft Maintenance Access Panels								-	-	-
9.2.12 Apply Instrument Range Markings TR: 1B-52H-2-11JG series/ 1B-52H-1								-	-	-
9.3 GENERAL FLIGHT CONTROLS (B-52)										
9.3.1 Flap Position Indicating System TR: 1B-52H-2-4GA/JG series										
9.3.1.1 Theory of Operation								-	-	-
9.3.1.2 Perform Operational Check	*							-	-	-
9.3.1.3 Remove / Install										
9.3.1.3.1 Indicator								-	-	-
9.3.1.3.2 Transmitter	*							-	-	-
9.3.1.4 Isolate Malfunctions	*							-	-	-
9.3.2 Lateral Trim Position Indicating System										
9.3.2.1 Theory of Operation								-	-	-
9.3.2.2 Perform Operational Check	*							-	-	-

B-52 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A	B	C
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	3 Skill Level Course	5 Skill Level CDC	7 Skill Level CDC
9.3.2.3 Remove / Install Indicator								-	-	-
9.3.2.4 Isolate Malfunctions	*							-	-	-
9.3.3 Automatic Flight Control System TR: 1B-52H-2-27GA/JG series										
9.3.3.1 Theory of Operation								-	-	-
9.3.3.2 Perform Operational Check	*							-	-	-
9.3.3.3 Maintenance BIT Check	*							-	-	-
9.3.3.4 Stabilizer Trim Servo Motor Check								-	-	-
9.3.3.5 Remove / Install										
9.3.3.5.1 FSC Processor	*							-	-	-
9.3.3.5.2 FSC Control Panel								-	-	-
9.3.3.5.3 Air Control Unit Sensor								-	-	-
9.3.3.5.4 Status Test Panel								-	-	-
9.3.3.5.5 Flight Controller	*							-	-	-
9.3.3.5.6 Turn Control Selector (Pilot / Bomb)								-	-	-
9.3.3.5.7 Lateral Control Servo Motor and Drive Assembly	*							-	-	-
9.3.3.5.8 Elevator Servo Motor and Drive Assembly	*							-	-	-
9.3.3.5.9 Stabilizer Trim Servo Motor								-	-	-
9.3.3.6 Isolate Malfunctions	*							-	-	-
9.3.3.7 Perform Advanced Troubleshooting		*						-	-	-
9.3.4 Stability Augmentation System TR: 1B-52H-2-40GA/JG series										
9.3.4.1 Theory of Operation								-	-	-
9.3.4.2 Perform Operational Check	*							-	-	-
9.3.4.3 SAS Pitot Tube Heater Check TR: TO 1B-52H-2-11JG-5								-	-	-
9.3.4.4 Reset YECU and PECU Indicators								-	-	-
9.3.4.5 Perform Electro Magnetic Compatibility Check								-	-	-
9.3.4.6 Remove / Install										
9.3.4.6.1 SAS Engage Switch								-	-	-
9.3.4.6.2 Yaw Electronic Control Unit								-	-	-
9.3.4.6.3 Parameter Scheduling Unit								-	-	-
9.3.4.6.4 YAW Rate Sensor Unit	*							-	-	-
9.3.4.6.5 Accelerometer Unit								-	-	-
9.3.4.6.6 Pitch Electronic Control Unit								-	-	-
9.3.4.6.7 Pitch Rate Sensor Unit								-	-	-
9.3.4.6.8 SAS Pitot Tube TR: 1B-52H-2-11JG-6	*							-	-	-
9.3.4.7 Adjust / Calibrate										
9.3.4.7.1 Analog PECU Elevator Actuator Matching								-	-	-
9.3.4.7.2 Analog YECU Rudder Actuator Matching								-	-	-
9.3.4.8 Isolate Malfunctions	*							-	-	-
9.3.4.9 Perform Advanced Troubleshooting		*						-	-	-
9.3.4.10 Inspect SAS Pitot Tube TR: TO 1B-52H-2-11JG-6	*							-	-	-
9.4 GENERAL NAVIGATION SYSTEMS										

B-52 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
(B-52)										
9.4.1 Attitude Heading Reference System TR: 1B-52H-2-11GA/JG series										
9.4.1.1 Theory of Operation								-	-	-
9.4.1.2 Fast Operational Check	*							-	-	-
9.4.1.3 Ground Maintenance Computer Program	*							-	-	-
9.4.1.4 Flight Computer Program	*							-	-	-
9.4.1.5 Remove / Install										
9.4.1.5.1 Control Panel								-	-	-
9.4.1.5.2 Electronic Control Amplifier	*							-	-	-
9.4.1.5.3 Gyro Reference Unit								-	-	-
9.4.1.5.4 Compass Compensation Unit								-	-	-
9.4.1.5.5 Attitude Switching Relay Box								-	-	-
9.4.1.5.6 Magnetic Azimuth Detector								-	-	-
9.4.1.6 Isolate Malfunctions	*							-	-	-
9.4.1.7 Perform Advanced Troubleshooting		*						-	-	-
9.4.2 Flight Director System TR: 1B-52H-2-11GA/JG series										
9.4.2.1 Theory Of Operation								-	-	-
9.4.2.2 Perform Operational Check	*							-	-	-
9.4.2.3 Perform Attitude Director Indicator Check	*							-	-	-
9.4.2.4 Perform Horizontal Situation Indicator Check	*							-	-	-
9.4.2.5 Remove / Install										
9.4.2.5.1 Flight Director Computer								-	-	-
9.4.2.5.2 Attitude Director Indicator								-	-	-
9.4.2.5.3 Horizontal Situation Indicator								-	-	-
9.4.2.5.4 MD-1 Displacement Gyro								-	-	-
9.4.2.5.5 MC-1 Switching Rate Gyro								-	-	-
9.4.2.5.6 Flight Gyro Transformer								-	-	-
9.4.2.5.7 Emergency Power Inverter								-	-	-
9.4.2.5.8 Rate of Turn Gyro								-	-	-
9.4.2.6 Isolate Malfunctions	*							-	-	-
9.4.2.7 Perform Advanced Troubleshooting		*						-	-	-
9.4.2.8 Standby Attitude Indicator TR: 1B-52H-2-11GA/JG series										
9.4.2.8.1 Theory of Operation								-	-	-
9.4.2.8.2 Perform Operational Check	*							-	-	-
9.4.2.8.3 Remove / Install Standby Attitude Indicator								-	-	-
9.4.2.8.4 Isolate Malfunctions	*							-	-	-
9.4.2.9 Heading Indicator (Directional Gyro Indicator) TR: 1B-52H-2-11GA/JG series										
9.4.2.9.1 Theory of Operation								-	-	-
9.4.2.9.2 Perform Operational Check	*							-	-	-
9.4.2.9.3 Remove / Install										
9.4.2.9.3.1 Directional Gyro Indicator (DGI)								-	-	-
9.4.2.9.3.2 DGI Power Adapter								-	-	-

B-52 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
9.4.2.9.4 Isolate Malfunctions	*							-	-	-
9.4.2.10 Standby Compass TR: 1B-52H-2-11GA/JG series										
9.4.2.10.1 Theory of Operation								-	-	-
9.4.2.10.2 Remove / Install Standby Compass								-	-	-
9.4.2.10.3 Perform Standby Compass Adjustment								-	-	-
9.4.2.10.4 Isolate Malfunctions	*							-	-	-
9.4.2.11 Periscope Sextant and Mount TR: 1B-52H-2-11GA/JG series										
9.4.2.11.1 Remove / Install										
9.4.2.11.1.1 Sextant Mount Receptacle								-	-	-
9.4.2.11.1.2 Sextant Shutter Assembly								-	-	-
9.5 FLIGHT INSTRUMENTS (B-52) TR: 1B-52H-2-11GA/JG series										
9.5.1 Pitot Static Systems										
9.5.1.1 Theory Of Operation										
9.5.1.1.1 OAS True Airspeed and BARO Altitude TR: 1B-52H-2-41								-	-	-
9.5.1.1.2 EVS Indicated Airspeed TR: 1B-52H-2-41								-	-	-
9.5.1.2 Inspect										
9.5.1.2.1 AIMS Pitot / Static Tube	*							-	-	-
9.5.1.2.2 Airspeed Pitot Tube	*							-	-	-
9.5.1.2.3 Static Port	*							-	-	-
9.5.1.3 Perform Operational Check										
9.5.1.3.1 Pitot Static System	*							-	-	-
9.5.1.3.2 AIMS Computer	*							-	-	-
9.5.1.3.3 AIMS Altimeter	*							-	-	-
9.5.1.3.4 Navigator Altimeter	*							-	-	-
9.5.1.3.5 Vertical Velocity Indicator	*							-	-	-
9.5.1.3.6 Airspeed Indicator	*							-	-	-
9.5.1.3.7 True Airspeed Computer	*							-	-	-
9.5.1.3.8 True Airspeed Indicator	*							-	-	-
9.5.1.3.9 Machmeter	*							-	-	-
9.5.1.3.10 OAS True Airspeed and BARO Altitude TR: 1B-52H-2-34JG-3	*							-	-	-
9.5.1.3.11 EVS Indicated Airspeed TR: 1B-52H-2-41	*							-	-	-
9.5.1.3.12 Pitot / Static Tube Heater Checks	*							-	-	-
9.5.1.4 Adjust / Calibrate										
9.5.1.4.1 AIMS Altimeters	*							-	-	-
9.5.1.4.2 Navigator Altimeter	*							-	-	-
9.5.1.5 Remove / Install										
9.5.1.5.1 AIMS Computer	*							-	-	-
9.5.1.5.2 AIMS Altimeter	*							-	-	-
9.5.1.5.3 Navigator Altimeter	*							-	-	-
9.5.1.5.4 Vertical Velocity Indicator	*							-	-	-
9.5.1.5.5 Airspeed Indicator	*							-	-	-

B-52 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A	B	C
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	3 Skill Level Course	5 Skill Level CDC	7 Skill Level CDC
9.5.1.5.6 True Airspeed Computer	*							-	-	-
9.5.1.5.7 True Airspeed Indicator	*							-	-	-
9.5.1.5.8 Machmeter								-	-	-
9.5.1.5.9 Temperature Bulb								-	-	-
9.5.1.5.10 OAS Static Pressure Transducer TR: 1B-52H-2-34JG-3	*							-	-	-
9.5.1.5.11 OAS Differential Pressure Transducer TR: 1B-52H-2-34JG-3	*							-	-	-
9.5.1.5.12 EVS Indicated Airspeed (IAS) Transducer TR: 1B-52H-2-41	*							-	-	-
9.5.1.5.13 AIMS Pitot / Static Tube	*							-	-	-
9.5.1.5.14 Airspeed Pitot Tube	*							-	-	-
9.5.1.6 Isolate Malfunctions	*							-	-	-
9.5.1.7 Perform Advanced Troubleshooting		*						-	-	-
9.5.2 Accelerometer										
9.5.2.1 Theory of Operation								-	-	-
9.5.2.2 Perform Operational Check	*							-	-	-
9.5.2.3 Remove / Install Accelerometer								-	-	-
9.5.3 Free Air Temperature Indicating System										
9.5.3.1 Theory of Operation								-	-	-
9.5.3.2 Perform Operational Check	*							-	-	-
9.5.3.3 Remove / Install										
9.5.3.3.1 Free Air Temperature Bulb								-	-	-
9.5.3.3.2 Free Air Temperature Indicator								-	-	-
9.5.3.4 Isolate Malfunctions	*							-	-	-
9.6 ENGINE INDICATING SYSTEMS (B-52) TR: 1B-52H-2-7GA/JG series										
9.6.1 Engine Speed Indication System										
9.6.1.1 Theory of Operation								-	-	-
9.6.1.2 Perform Operational Checks	*							-	-	-
9.6.1.3 Remove / Install										
9.6.1.3.1 Tachometer Indicator								-	-	-
9.6.1.3.2 Tachometer Generator								-	-	-
9.6.1.4 Isolate Malfunctions	*							-	-	-
9.6.1.5 Perform Advanced Troubleshooting		*						-	-	-
9.6.2 Engine Pressure Ratio Indicating System										
9.6.2.1 Theory of Operation								-	-	-
9.6.2.2 Perform Operational Check	*							-	-	-
9.6.2.3 Remove / Install										
9.6.2.3.1 Engine Pressure Ratio Indicator								-	-	-
9.6.2.3.2 Engine Pressure Ratio Transducer	*							-	-	-
9.6.2.4 Isolate Malfunctions	*							-	-	-
9.6.2.5 Perform Advanced Troubleshooting		*						-	-	-
9.6.3 Engine Oil Pressure Indicating System										
9.6.3.1 Theory of Operation								-	-	-
9.6.3.2 Perform Operational Check	*							-	-	-
9.6.3.3 Remove / Install										
9.6.3.3.1 Oil Pressure Indicator								-	-	-
9.6.3.3.2 Oil Pressure Transmitter	*							-	-	-

B-52 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
9.6.3.4 Isolate Malfunctions	*							-	-	-
9.6.3.5 Perform Advanced Troubleshooting		*						-	-	-
9.6.4 Oil Temperature Indicating System										
9.6.4.1 Theory of Operation								-	-	-
9.6.4.2 Perform Operational Check	*							-	-	-
9.6.4.3 Remove / Install										
9.6.4.3.1 Oil Temperature Indicator								-	-	-
9.6.4.3.2 Engine Oil Temperature Selector Switch								-	-	-
9.6.4.3.3 Oil Temperature Sensor								-	-	-
9.6.4.4 Isolate Malfunctions	*							-	-	-
9.6.4.5 Perform Advanced Troubleshooting		*						-	-	-
9.6.5 Exhaust Gas Temperature (EGT) Indicating System										
9.6.5.1 Theory of Operation								-	-	-
9.6.5.2 Perform Operational Check										
9.6.5.2.1 Perform EGT Resistance Check	*							-	-	-
9.6.5.2.2 Perform Accuracy and Adjustment Procedures	*							-	-	-
9.6.5.3 Remove / Install EGT Indicator	*							-	-	-
9.6.5.4 Isolate Malfunctions	*							-	-	-
9.6.5.5 Perform Advanced Troubleshooting		*						-	-	-
9.7 FUEL FLOW INDICATING SYSTEM (B-52)										
9.7.1 Theory of Operation								-	-	-
9.7.2 Perform Operational Check	*							-	-	-
9.7.3 Remove / Install										
9.7.3.1 Fuel Flow Indicator								-	-	-
9.7.3.2 Total Fuel Flow Indicator								-	-	-
9.7.3.3 Fuel Flow Power Supply								-	-	-
9.7.4 Isolate Malfunctions	*							-	-	-
9.7.5 Perform Advanced Troubleshooting		*						-	-	-
9.8 LIQUID QUANTITY INDICATING SYSTEM (B-52) TR: 1B-52H-2-11GA/JG series										
9.8.1 Fuel Quantity Indicating System										
9.8.1.1 Theory of Operation								-	-	-
9.8.1.2 Perform Operational Check										
9.8.1.2.1 Perform Operational Check	*							-	-	-
9.8.1.2.2 System Capacitance Checks	*							-	-	-
9.8.1.3 Remove / Install										
9.8.1.3.1 Fuel Quantity Indicator								-	-	-
9.8.1.3.2 Total Fuel Quantity Indicator								-	-	-
9.8.1.4 Isolate Malfunctions	*							-	-	-
9.8.1.5 Perform Advanced Troubleshooting		*						-	-	-
9.8.2 Center Of Gravity Fuel Level Advisory System										
9.8.2.1 Theory of Operation								-	-	-
9.8.2.2 Perform Operational Check	*							-	-	-
9.8.2.3 Remove / Install										
9.8.2.3.1 Control Panel Processor Unit								-	-	-

B-52 TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Indicate Training/Information Provided		
	A	B	A	B	C	D	E	A	B	C
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	3 Skill Level Course	5 Skill Level CDC	7 Skill Level CDC
9.8.2.3.2 Center of Gravity Display Unit								-	-	-
9.8.2.3.3 Center of Gravity Display Unit Display Module								-	-	-
9.8.2.4 Isolate Malfunctions	*							-	-	-
9.9 HYDRAULIC PRESSURE INDICATING SYSTEMS (B-52) TR: 1B-52H-2-6GA/JG series										
9.9.1 Theory of Operation								-	-	-
9.9.2 Perform Operational Check	*							-	-	-
9.9.3 Remove / Install Indicator								-	-	-
9.9.4 Isolate Malfunctions	*							-	-	-
9.10 MISCELLANEOUS SYSTEMS (B-52)										
9.10.1 Crosswind Crab Position Indicating System TR: TO 1B-52H-2-10GA/JG series										
9.10.1.1 Theory of Operation								-	-	-
9.10.1.2 Perform Operational Check	*							-	-	-
9.10.1.3 Remove / Install										
9.10.1.3.1 Crosswind Crab Position Transmitter	*							-	-	-
9.10.1.3.2 Crosswind Crab Position Indicator								-	-	-
9.10.1.4 Adjust Transmitter	*							-	-	-
9.10.1.5 Isolate Malfunctions	*							-	-	-
9.10.1.6 Perform Advanced Troubleshooting		*						-	-	-

AVIONICS FUNDAMENTAL TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification for OJT					4. Proficiency Codes Indicate Training / Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
Attachment 10 – AVIONICS FUNDAMENTALS TRAINING REQUIREMENTS NOTE 1: This attachment identifies the STS elements taught in the standardized Avionics Fundamentals course. NOTE 2: Only proficiency level coded items in Column 4A are trained in the pre-requisite Avionics Fundamentals course. NOTE 3: Users may annotate unique AFSC-specific devices or circuits not identified by this attachment IAW AFI 31-2221. NOTE 4: All course requirements are trained in the 3-level resident course during wartime.										
10.1 AVIONICS SUPPORT SUBJECTS										
10.1.1 Safety								B	-	-
10.1.2 First Aid								A	-	-
10.1.3 Electrostatic Discharge (ESD) Control								B	-	-
10.1.4 Electromagnetic Effects (EMP/EMI)								B	-	-
10.1.5 Metric Notation										
10.1.5.1 Powers of Ten								B	-	-
10.1.5.2 Electrical Prefixes								B	-	-
10.1.6 Digital Numbering systems								A	-	-
10.1.7 Common Tools								A	-	-
10.1.8 Technical Publications								A	-	-
10.1.9 Documentation								A	-	-
10.2 TEST EQUIPMENT										
10.2.1 Use Digital Multimeter								2b	-	-
10.2.2 Use Oscilloscope								2b	-	-
10.2.3 Wave Generators								A	-	-
10.3 BASIC ELECTRICITY										
10.3.1 Direct Current (DC)								B	-	-
10.3.2 Alternating Current (AC)								B	-	-
10.3.3 Resistance Theory								B	-	-
10.3.3.1 Measure Resistance								2b	-	-
10.3.4 Capacitance Theory								B	-	-
10.3.5 Inductance Theory								B	-	-
10.4 Electromagnetic Devices										
10.4.1 Transformers								B	-	-
10.4.2 Relays and Solenoids										
10.4.2.1 Theory								B	-	-
10.4.2.2 Troubleshoot Relay								2b	-	-
10.4.3 Motor Theory										
10.4.3.1 DC								A	-	-
10.4.3.2 AC								A	-	-
10.4.4 Generator Theory										
10.4.4.1 DC								A	-	-
10.4.4.2 AC								A	-	-
10.4.5 Synchro/Servo								B	-	-
10.4.6 Transducer								B	-	-
10.5 Solid State Devices										
10.5.1 Theory								A	-	-
10.5.2 Diodes (LED, Zener, etc)								A	-	-
10.5.3 Integrated Circuits								A	-	-
10.5.4 Operational Amplifiers								A	-	-
10.6 Power Supply Circuits										

AVIONICS FUNDAMENTAL TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification for OJT					4. Proficiency Codes Indicate Training / Information Provided		
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
	5 Level	7 Level	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	CDC
10.6.1 Theory								B	-	-
10.7 Wave Generating Circuits										
10.7.1 Theory								A	-	-
10.8 Digital Logic Circuits										
10.8.1 Theory								A	-	-
10.8.2 Gates								A	-	-
10.8.3 Flip Flops								A	-	-
10.8.4 Digital to Analog and Analog to Digital Converters								A	-	-
10.9 Basic Computer & Network Fundamentals										
10.9.1 Theory								A	-	-
10.9.2 Network Components								A	-	-
10.9.3 Protocols								A	-	-
10.9.4 Topologies (Architecture)								A	-	-
10.10 Basic Communications										
10.10.1 Radio Frequency Theory								A	-	-
10.10.2 Frequency Spectrum								A	-	-
10.10.3 Modulation (AM/FM)								A	-	-
10.10.4 Demodulation (AM/FM)								A	-	-
10.10.5 Receivers/Transmitters								A	-	-
10.10.6 Transmission Mediums Theory								A	-	-
10.10.7 Waveguides								A	-	-
10.10.8 Data Buses								A	-	-
10.10.9 Fiber Optics								A	-	-
10.10.10 Coaxial Cables								A	-	-
10.10.11 Antennas								A	-	-
10.11 Assemble Solder Type Connections										
10.11.1 Terminal Connection								1b	-	-
10.11.2 Multipin Connector								1b	-	-
10.11.3 Coaxial Connector								1b	-	-
10.11.4 Desolder Procedures								1b	-	-
10.12 Assemble Solderless Type Connections										
10.12.1 Coaxial Connector								1b	-	-
10.12.2 Multipin Connector								1b	-	-
10.12.3 Twin-axial Connector (Data Bus)								1b	-	-
10.12.4 Crimped Connection										
10.12.4.1 Terminal Lugs								1b	-	-
10.12.4.2 Wire Splice								1b	-	-
10.12.5 Shield Termination								1b	-	-
10.13 General Maintenance Practices										
10.13.1 Assemble Multipin Connector Harness								1b	-	-
10.13.2 Secure Cable Harness								1b	-	-
10.13.3 Use Safety Wire								1b	-	-
10.13.4 Troubleshooting Procedures										
10.13.4.1 Isolate Wire Open								1b	-	-

AVIONICS FUNDAMENTAL TRAINING REQUIREMENTS										
1. Tasks, Knowledge And Technical References	**2. Core Tasks**		**3. Certification for OJT**					**4. Proficiency Codes Indicate Training / Information Provided**		
	A	**B**	**A**	**B**	**C**	**D**	**E**	**A** 3 Skill Level	**B** 5 Skill Level	**C** 7 Skill Level
	5 Level	**7 Level**	**Training Start**	**Training Complete**	**Trainee Initials**	**Trainer Initials**	**Certifier Initials**	**Course**	**CDC**	**CDC**
10.13.4.2 Isolate Wire Short								1b	-	-
10.13.4.3 Isolate Voltage Fault on Multipin Connector Harness								1b	-	-
10.13.4.4 Isolate Crossed Connection on Multipin Connector Harness								1b	-	-

	4. Proficiency Codes Used To Indicate Training/Information Provided			
1. Tasks Knowledge And Technical References	**A** 3-Skill Level	**B** 5-Skill Level	**C** 7-Skill Level	
	Course	**CDC**	**Course**	**CDC**
Attachment 11 – AEROSPACE MAINTENANCE CRAFTSMAN TRAINING REQUIREMENTS NOTE 1: Columns 2 and 3 are deleted from this STS because all items are SUBJECT KNOWLEDGE LEVEL only and require no certification. NOTE 2: Users are responsible for annotating training references to identify current references pending STS revision. NOTE 3: This attachment is to be used in conjunction with other attachments in applicable CFETPs. NOTE 4: Personnel must complete CDC requirements on all MDSs/attachments. NOTE 5: This attachment is to be used as a correlation document for the 2AX7X 7-level Aerospace Maintenance Craftsman CDCs.				
11.1 MAINTENANCE PHILOSOPHY AND POLICY				
11.1.1 Aircraft and Equipment Readiness TR: AFI 21-101				A
11.1.2 Maintenance Concept TR: AFI 21-101 and AFI 21-129				A
11.1.3 Reliability and Maintainability (R&M) TR: AFI 21-101, AFI 21-118 and TO 00-35D-54				A
11.1.4 Operating Instructions (OI) TR: AFI 21-101 and AFI 33-360				A
11.1.5 Maintenance Information Systems (MIS) TR: AFCSM 21-556 Volume 2, AFI 21-101, AFI 21-116, and TO 00-20-2				B
11.1.6 Maintenance Metrics TR: AFI 21-103 and AFTTP 3-3				A
11.1.7 Maintenance Repair Priorities TR: AFI 21-101				A
11.1.8 Historical Aircraft and Equipment Records TR: AFI 21-101 and TO 00-20-1				A
11.2 MAINTENANCE ORGANIZATION KEY LEADER RESPONSIBILITIES				
11.2.1 Wing Commander (WG/CC) TR: AFI 21-101 and AFI 38-101				A
11.2.2 Wing Vice Commander (WG/CV) TR: AFI 21-101 and AFI 38-101				A
11.2.3 Maintenance Group Commander (MXG/CC) TR: AFI 21-101 and AFI 38-101				A
11.2.4 Maintenance Group Deputy Commander (MXG/CD) TR: AFI 21-101				A
11.2.5 MXG Superintendent (SUPT) TR: AFI 21-101				A
11.2.6 Squadron Commander (SQ/CC) TR: AFI 21-101				A
11.2.7 Maintenance Operations Officer (MOO)/Maintenance Superintendent (MX SUPT) TR: AFI 21-101				A
11.2.8 Flight Commander/Flight Chief TR: AFI 21-101				A
11.2.9 AMU OIC/Superintendent (SUPT) TR: AFI 21-101				A
11.2.10 Section NCOIC/Chief TR: AFI 21-101				B
11.2.11 Production Superintendent (Pro Super) TR: AFI 21-101				A
11.3 FUNCTIONS OF MAINTENANCE OPERATIONS SQUADRON (MOS)				
11.3.1 Maintenance Operations Flight (MOF) TR: AFI 21-101				A

	4. Proficiency Codes Used To Indicate Training/Information Provided			
1. Tasks Knowledge And Technical References	**A** 3-Skill Level	**B** 5-Skill Level	**C** 7-Skill Level	
	Course	**CDC**	**Course**	**CDC**
11.3.2 Maintenance Training Flight (MTF) TR: AFI 21-101 and AFI 36-2232				A
11.3.3 Programs and Resources Flight TR: AFI 21-101				A
11.4 FUNCTIONS OF AIRCRAFT/HELICOPTER MAINTENANCE SQUADRON (AMXS/HMXS)				
11.4.1 Aircraft Maintenance Unit (AMU) TR: AFI 21-101				A
11.4.2 Flightline Expediter TR: AFI 21-101				A
11.4.3 Aircrew and Maintenance Debrief Section TR: AFI 21-101				A
11.4.4 Aircraft Section TR: AFI 21-101				A
11.4.5 Specialist Section TR: AFI 21-101				A
11.4.6 Weapons Section TR: AFI 21-101				A
11.4.7 Support Section TR: AFI 21-101				A
11.5 FUNCTIONS OF MAINTENANCE SQUADRON (MXS)				
11.5.1 Accessories Flight TR: AFI 21-101				A
11.5.2 Aerospace Ground Equipment (AGE) Flight TR: AFI 21-101				A
11.5.3 Armament Flight TR: AFI 21-101				A
11.5.4 Avionics Flight TR: AFI 21-101				A
11.5.5 Fabrication Flight TR: AFI 21-101				A
11.5.6 Maintenance Flight TR: AFI 21-101				A
11.5.7 Munitions Flight TR: AFI 21-101				A
11.5.8 Propulsion Flight TR: AFI 21-101				A
11.5.9 Test, Measurement, and Diagnostic Equipment (TMDE) Flight TR: AFI 21-101				A
11.6 MAINTENANCE TRAINING				
11.6.1 Types of Training TR: AFI 36-2232 and the ETCA site located at: https://etca.randolph.af.mil/				A
11.6.2 Training Documentation TR: AFI 21-101, AFI 36-2201 and AFI 36-2232				A
11.6.3 Training Business Area (TBA) TR: https://www.my.af.mil/imdsltpa/IMDSTWeb/ActionServlet				B
11.6.4 Special Certification Rosters TR: AFI 21-101				A
11.6.5 Maintenance Qualification Program (MQP) TR: AFI 21-101, AFI 36-2232 and AFPD 10-9				A
11.6.6 Training Management TR: AFI 36-2201, AFI 36-2232, AFI 21-101 and AETCI 36-2601				
11.6.6.1 Training Forecast				A

	4. Proficiency Codes Used To Indicate Training/Information Provided			
1. Tasks Knowledge And Technical References	**A** 3-Skill Level	**B** 5-Skill Level	**C** 7-Skill Level	
	Course	**CDC**	**Course**	**CDC**
11.6.6.2 Training Request				A
11.6.6.3 Master Training Plan				A
11.7 PERSONNEL RESOURCE MANAGEMENT				
11.7.1 Unit Manpower Document (UMD) and Unit Personnel Manpower Roster (UPMR) TR: AFI 36-2110, AFI 38-201 and AFTTP 3-3				A
11.7.2 Personnel Utilization TR: AFI 21-101				A
11.8 MAINTENANCE SUPPLY				
11.8.1 Logistics Readiness Squadron (LRS) Supply Support TR: AFI 21-101, AFMAN 23-110 (Vol. 1) and AFTTP 3-3				A
11.8.2 Readiness Spares Packages TR: AFI 21-101, AFMAN 23-110 and AFTTP 3-3				A
11.8.3 Consumables Management TR: AFI 21-101, AFMAN 23-110 and AFTTP 3-3				A
11.8.4 Equipment Items TR: AFI 21-101, AFMAN 23-110 and AFMAN 23-220				A
11.8.5 Supply Assets Requiring Functional Check, Calibration, or Operational Flight Programming TR: AFI 21-101, AFMAN 23-110 and TO 00-20-3				A
11.8.6 Precious Metals Recovery Program TR: AFI 21-101 and AFMAN 23-110				A
11.8.7 Supply Points TR: AFI 21-101 and AFMAN 23-110				A
11.8.8 Local Manufacture TR: AFI 21-101				A
11.8.9 Repair Cycle Assets TR: AFI 21-101 and AFMAN 23-110				A
11.8.10 Supply Management Products TR: AFI 21-101 and AFMAN 23-110				A
11.8.11 Tail Number Bins (TNB) TR: AFI 21-101 and AFMAN 23-110				A
11.8.12 Maintenance Repair/Supply Delivery Priorities TR: AFI 21-101 and AFMAN 23-110				A
11.8.13 Classified Assets TR: AFI 21-101, AFJI 31-102, TO 00-5-1 and TO 00-20-1				A
11.8.14 Hazardous Materials TR: AFI 21-101, AFI 32-7086 and AFI 90-821				A
11.8.15 Supply Deficiency and Discrepancy Reporting TR: AFI 21-101, AFMAN 23-110 and TO 00-35D-54				B
11.8.16 Special Handling of Supply Assets Containing Hazardous Materials TR: AFI 24-203, AFI 32-7086, AFMAN 23-110, TO 42B2-1-3, and TO 6J3-1-1				A
AA8.17 Maintenance Supply Liaison TR: AFI 21-101 and AFMAN 23-110				A
11.9 TECHNICAL ORDER MANAGEMENT				
11.9.1 Technical Orders Distribution Process TR: AFI 21-101, AFI 63-101, AFTTP 3-3 and TO 00-5-1				A
11.9.2 Time Compliance Technical Orders (TCTO) TR: TO 00-5-15				A
11.9.3 Technical Order Change Process TR: AFI 21-303				A
11.9.4 Technical Order Waivers TR: AFI 21-101 and AFI 21-303				A

	4. Proficiency Codes Used To Indicate Training/Information Provided			
1. Tasks Knowledge And Technical References	**A** 3-Skill Level	**B** 5-Skill Level	**C** 7-Skill Level	
	Course	**CDC**	**Course**	**CDC**
11.10 MAINTENANCE REQUIREMENTS AND PROGRAMS				
11.10.1 Cannibalization Program TR: AFI 21-101 and AFTTP 3-3				A
11.10.2 Restricted Maintenance Areas TR: AFI 21-101				A
11.10.3 Red Ball Maintenance TR: AFI 21-101				A
11.10.4 Aircraft/Equipment Impoundment Program TR: AFI 21-101				A
11.10.5 Foreign Object Damage (FOD) Program TR: AFI 21-101, AFI 36-2232 and AFTTP 3-3				A
11.10.6 Dropped Object Prevention (DOP) Program TR: AFI 21-101				A
11.10.7 Tool Management TR: AFI 21-101				A
11.10.8 Tool Accountability TR: AFI 21-101				A
11.10.8.1 Marking and Tool Identification TR: AFI 21-101				A
11.10.8.2 Locally Manufactured, Developed, or Modified Tools and Equipment TR: AFI 21-101				A
11.10.8.3 Lost Item/Tool Procedures TR: AFI 21-101				A
11.10.9 Maintenance Recovery Team TR: AFI 21-101				A
11.11 QUALITY ASSURANCE (QA) PROGRAM				
11.11.1 Maintenance Standardization and Evaluation Program (MSEP) TR: AFI 21-101 and AFTTP 3-3				A
11.11.2 QA Product Improvement Program TR: AFI 21-101				A
11.11.3 Configuration Management (CM) and Modification Management TR: AFI 21-101				A