

TRAINING AND PROCEDURES MANUAL

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1. INTRODUCTION

The foundation for the stability and safety of the international aviation industry is solely dependent upon highly trained professionals who have the skills, abilities and capabilities necessary to meet the constant challenge of an increasingly complex environment. In order to assure the safety and continual growth of the international aviation industry it is essential that technical training be competency-based. This assures that technical training is always focused on the job requirements ensuring pre-defined competency outcomes are achieved. This provides service providers and clients with predictable results regarding training outcomes and greatly improves their planning activities.

2. BACKGROUND

The Washington Consulting Group, Inc. is a professional services firm offering a wide variety of technical consulting services to air traffic service providers in both domestic and international venues. WCG has established a solid record of providing innovative, cost-effective solutions within stringent time and budget constraints. Our company has established itself as a leader in the international aviation community in the areas of ATC training, operations and air traffic management. We provide consulting services, operational support and training for virtually every element that is critical to the operation of an air traffic system for both domestic and international clients. Our core capability is considered to be technical Air Traffic Management Training. Consequently the WCG organizational construct includes a group specifically assigned the responsibility of training development, revision and delivery. This group includes training professionals with Instructional Systems Design (ISD) credentials and experience in addition to experience in managing. This training includes, but is not limited to the following:

- a. Air Traffic Controller training for
 - i. Ab Initio
 - ii. Aerodrome
 - iii. Approach Control (Procedural and Radar)
 - iv. Area Control Center (Procedural and Radar)
 - v. ICAO Aviation English
- b. ATC Supervisor Training
- c. ATC Specialist Training
 - i. Airspace and Procedures
 - ii. Safety Management Systems
 - iii. Quality Assurance
- d. ATC Systems Integration

WCG designs, develops, and maintains all technical training provided to approximately 600 Lockheed Martin Flight Service personnel. The WCG development staff provides multi-media training products designed to respond specifically to the training needs of the flight services. With a catalog of over 100 training courses, the training products include, but are not limited to:

- a. PowerPoint courses
- b. PowerPoint with voice over
- c. Web-deliverable products
- d. Videos (including a video series for the newly established Pilot Web Portal)

The WCG-Lockheed Martin development staff works with multiple and varied Subject Matter Experts (SMEs) across the country to establish and maintain a high quality training product. This staff has also made a variety of lesson plans available through the Lockheed Martin Flight Services web. This web was also developed and maintained by WCG personnel, for use in a classroom environment. This web site also supports virtual classroom environments, a chat room and discussion forum. All End-of-Lesson critiques and the End-of-Course Evaluations were also made available through this website. WCG training administrators assigned to each Lockheed Martin Flight Service Hub oversee the administration of all flight service specialists and supervisory training as well as maintaining training records, administering the quarterly refresher training, and the Annual Proficiency Exam and the Annual Emergency Service Proficiency Exam.

WCG strives to maintain a constant awareness of new initiatives regarding operations and advances in technical training by an active participation in a variety of aviation-focused industry organizations and associations. This includes, but is not limited to:

- a. The Air Traffic Control Association (ATCA)
- b. The Boeing Airplane Company
- c. The Lockheed-Martin Corporation
- d. The Civil Air Navigation Services Organization (CANSO)

The key to training development and transformation for air traffic service providers is evaluation and a focus on continual improvement. For WCG this process begins with the implementation of our process improvement plan represented in the WCG Quality Manual. Since training is our core capability the foundation of our process improvement resides in the utilization of the Instruction System Design (ISD) Model (See Figure 2.1). By supplementing the ISD Model with industry standard tools such as the *ISO 9001:2008 Standards* and the *ICAO Doc. 9941, Trainair Plus Training Development Guide* the training development and delivery process is continually benchmarked, tracked, reviewed, and assessed.

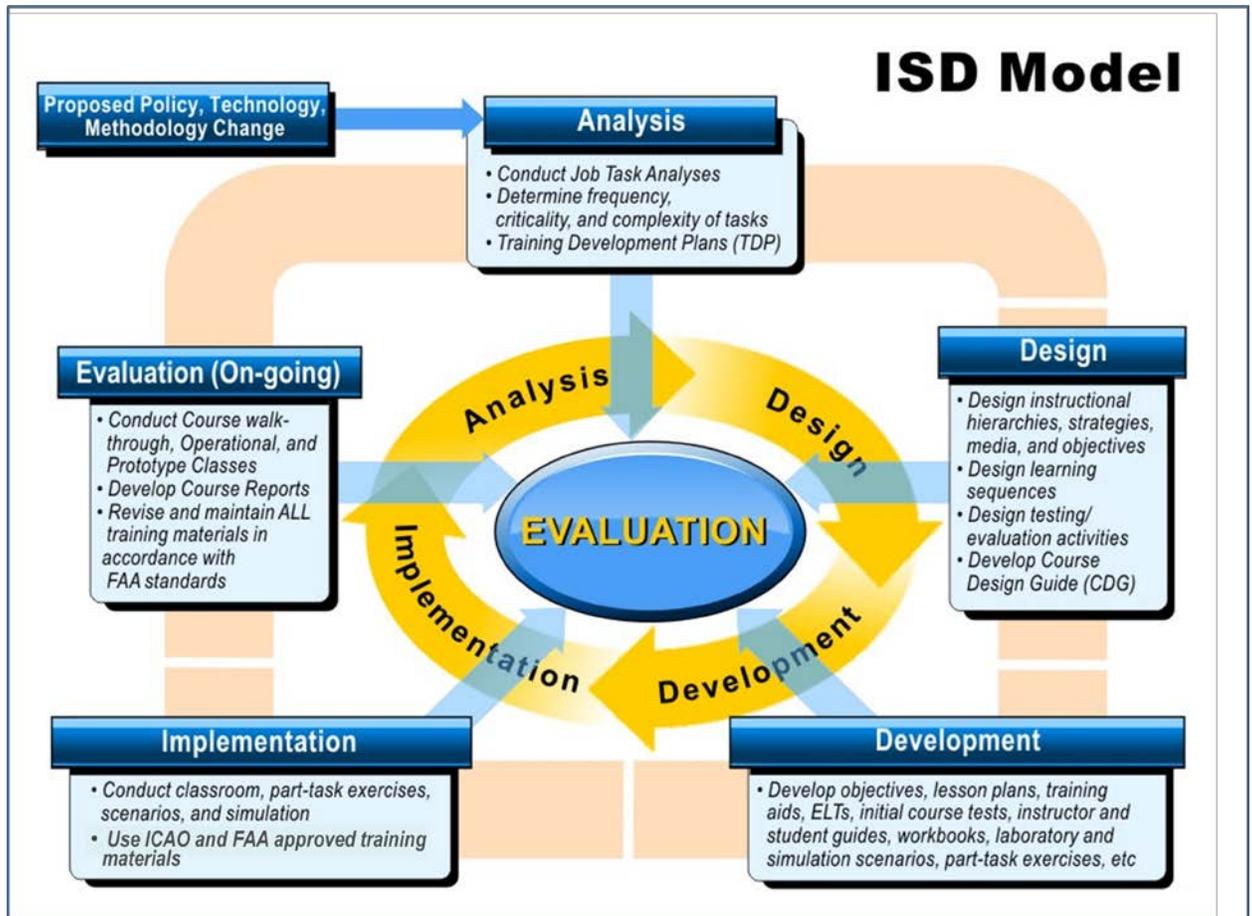


Figure 2.1 Instructional Systems Design Model

3. PURPOSE

The WCG TRAINING and PROCEDURES (TAP) MANUAL establish requirements and responsibilities for the development, revision, delivery, configuration management and evaluation of the WCG Training Program. The objective of this document is to:

- a. Ensure that all development and revision of training is accomplished using the ICAO Training Development Guidelines
- b. Ensure that all WCG training is provided in a consistent manner commensurate with the available training facilities and course materials.
- c. The TAP Manual guidelines and requirements apply to all WCG training whether developed by WCG, purchased from a vendor or acquired from other sources. It does not apply to training material that is provided by a client as part of a contract or work order to deliver training.

4. SCOPE

The WCG TAP Manual applies to all company personnel who are involved in the development, revision and delivery of technical training. This includes personnel that are either permanently

or temporarily assigned training duties and/or responsibilities. It also includes personnel who are involved in the supervision and management of technical training. (See Figure 2.2)

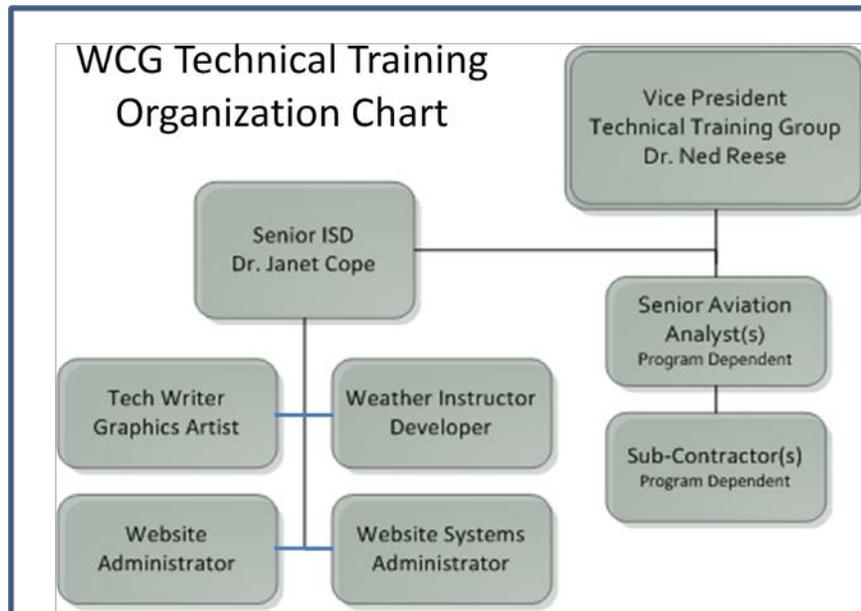


Figure 2.2 WCG Technical Training Organizational Structure

5. COURSE DEVELOPMENT AND REVISION

Overview – All training shall be developed or revised in accordance with this **Training and Procedures Manual** augmented, as appropriate, by the **ICAO Trainair Plus Training Development Guide**.

a. Process

Course development and revision shall utilize the standard ISD process identified in the ICAO Training Development Guide and the ADDIE format described therein (see WCG ISD MANUAL). This ADDIE Model utilizes a five-step process that assures the integrity of the training material and objectives throughout the life-span of the course. The five steps of the ADDIE process are described in Figure 2.1.

b. Personnel

- i. Vice President – Technical Training Group – Responsible to the WCG Executive Vice President for providing and/or arranging for the development and revision of all training for operational requirements. Base responsibilities include:
 1. Informing all relevant WCG management personnel of resource requirement for training programs which include personnel support, space, equipment, and support requirements.

2. Maintaining a management system that ensures training development and revision resources are kept:
 - a. to the minimum required
 - b. efficiently utilized and
 - c. accomplish the program outcomes for which they have been approved.
3. Providing an educational technology capability which will meet the company's objectives.
- ii. Senior ISD – Responsible for technical oversight, technical application and quality control of all course development, revision and delivery. Base responsibilities include:
 1. Providing technical support for the Vice President for Technical Training for all training activities.
 2. Assuring that all technical materials supporting the WCG ISD process are current and up-to-date.
 3. Assuring all instructor personnel are proficient regarding their classroom responsibilities.
 4. On occasion conducts active classroom monitoring of instructor personnel.
- iii. Training Program Managers – Responsible for the execution and implementation of the training as designed for their specific assignment. Base responsibilities are:
 1. Providing oversight for their specific training program(s).
 2. Providing supervision for the program's instructor cadre.
 3. Identifying to the Vice President for Technical Training all resources required to revise/maintain approved training programs.
- iv. Developers and Subject Matter Experts (SMEs) – Responsible for:
 1. Accomplishing instruction assignments in accordance with the most effective instructional concepts and techniques.
 2. Preparing adequately for each instructional assignment
 3. Ensuring the classroom environment is conducive to learning and informing the appropriate Program Manager of those conditions that are not conducive to learning.
 4. Identifying, informally counseling, or referring students who encounter academic difficulties or other problems affecting their ability to learn.
 5. Participating in training and developmental activities designed to improve their job performance.
 6. Reporting all work related illnesses and injuries incurred by a student(s) to the appropriate Program Manager.
- v. Tech Writer/Graphics Artist
 1. Responsible for the revision and development of technical training courses as well as graphical support to the courseware.

- 2. Coordinates with identified SMEs depending upon the course material.
- vi. Weather Instructor – Responsible for the delivery of weather related courses
- vii. Website Administrator
 - 1. Assists in training development projects.
 - 2. Ensure the functionality and accessibility of WCG personnel to the company's website.
- viii. Website Systems Administrator
 - 1. Oversee the administration of the website and ensures all components are maintained and performed as designed.
 - 2. Provides technical support to ensure that computer systems used for training and course development include all necessary components of hardware and software.

c. Instructor Training

All instructors are required to conduct annual proficiency training by accessing and reviewing the WCG BIT/FIT Course Reviews located on the WCG server. The initial review shall be conducted during the month of their initial hiring as WCG employees. Subsequent reviews shall be conducted during their anniversary month. Upon completion of their review they will notify the Vice President – Technical Training Group.

Additional training requirements may occur as situations dictate.

d. Implementation.

All course material must be developed and/or revised in accordance with the five (5) phases of the ISD process. The Senior ISD is responsible for the oversight of development and revision.

- 1. Instructional System Design Process
- 2. Analysis – Determine the most appropriate training solution to meet the client's requirements.
- 3. Design – Develop a training design to meet the client's training objectives/outcomes.
- 4. Development – Execute the design.
- 5. Delivery – Execute the training per the Client's requirements.
 - a. Prior to execution of the training program delivery a designated instructor shall visit the training site to conduct a learning environment assessment. The assessment shall consist of the following guidelines:
 - i. Does the physical appearance of the training location coincide with its descriptions?

- ii. Do the required facilities and equipment meet the training requirements?
 - iii. Are the facilities and equipment current and operational?
 - iv. Are primary classrooms sized properly?
 - v. Is room lighting adequate to support use of multi-media technology?
 - b. Evaluation – Provide quality control assessments for the material throughout the programs development, testing and delivery.
6. The WCG course numbering system shall be used throughout the development/revision process. The Vice President for Technical Training shall assure that course-specific files are maintained containing the following information as a minimum unless stated otherwise in the client’s tasking document:
- a. Tasking document or Needs Assessment, whichever is appropriate?
 - b. Training Development Plan
 - c. Course Design Guide
 - d. All course materials as completed
 - e. All official correspondence related to tasking
 - f. Job Task Analysis, if appropriate
 - g. Student Handouts
 - h. Student Guides
 - i. Visual Aids
 - j. Laboratory Guides and exercises
7. Competency-based Exams/Assessments – All course exams and assessments are developed in accordance with the ISD Process to ensure compliance and relevancy with course objectives. These tests shall be reviewed and approved by the Senior ISD prior to their use.

6. TRAINING ADMINISTRATION AND DELIVERY

- a. Overview
- b. Personnel
 - i. Program Manager – A WCG executive responsible for a larger contract part of which would include a training component.
 - ii. Lead Instructor - Serves as a training instructor in the classroom and simulation laboratory for the assigned ATC facility as well as being the focal point of communication/organization/setup of training pertaining to designated courses. The incumbent projects a positive and cooperative attitude with full support of the national air traffic training instructional program and facility requirements. (See Appendix 1, page iv)
 - iii. Instructor – Serves as a training instructor in the classroom and simulation laboratory for the assigned ATC facility. The incumbent projects a positive and

cooperative attitude with full support of the national air traffic training instructional program and facility requirements. May serve as Lead Instructor if so assigned by the, Senior Instructor or Contract Program Manager (CPM). (See Appendix 2, page v)

1. Basic Hiring Criteria

- a. WCG shall maintain a roster of instructors based upon their current resume.
- b. Instructor experience is evaluated; e.g., has the instructor completed Basic Instructor Training and/or Facility Instructor Training?
- c. The instructor must have instructed the course within the last 18 months, or must complete a refresher on course delivery and evaluation.
- d. Instructor must have instructed the course within the last three years to be lead instructor.
- e. Annual Proficiency Training
- f. BIT/FIT

c. Preparation for Facility Training

WCG training model is considered a distributive type of technical training in that it is projected into regions and/or environments other than traditional training facilities with static assets. This requires either a portability requirement or a dependence upon available training technologies and training environments as required by the subject training program. It is the responsibility of the relevant Program Manager or Lead Instructor to determine that the necessary technologies and environmental requirements are either available for, or acquired to support the program.

The Program Manager is responsible for assuring the following training assets are available and validated:

a. Facilities and Technology Supporting Training – WCG shall include in their initial proposal to a potential client a basic list of learning environment requirements necessary to support an effective and efficient training program. This list shall include, but not necessarily be limited to the following:

- i. Initial description of facility's training assets, facilities and equipment required to meet training outcomes
- ii. Facility assessment of currency and operational state of their training assets
- iii. Primary classrooms must be large enough to accommodate the type of training to be requested
- iv. Lighting and window coverings adjustable so that projected audio-visual aids are easily viewed from all trainee positions
- v. Heating, ventilation and air conditioning system necessary to provide a comfortable environment

- vi. Sufficient electrical capacity/availability to support use of computer and projection equipment
- vii. Walls and floors to provide a comfortable and appropriate environment
- viii. Training facilities are maintained in good condition

In addition to the facility inquiry regarding the availability and adequacy of their training assets, the Lead Instructor shall conduct a site visit prior to execution of the training program to conduct a visual validation of the necessary requirements. The instructor shall use the ***Checklist for Facility Training Initial Planning*** (see Appendix 3, page XX). The Lead Instructor shall also confirm the availability and readiness of any specialized equipment necessary for the subject training program such as radar simulator(s) and tower simulator(s).

- b. Facilities and Technology Supporting Instructors
 - i. Appropriate facilities are provided for instructor(s)
 - ii. Each instructor has their own desk with sufficient space to allow for the preparation of course materials
 - iii. Instructor area is large enough to accommodate instructor workstations, bookcases and files
 - iv. A minimum of 12 square meters is available for each instructor
 - v. Instructor workstation is equipped with a computer and reasonable access to the internet
 - vi. At least one quality printer is available in the instructor area
 - vii. A scanner is available

7. COURSE CONFIGURATION MANAGEMENT

- a. Instructor Records – All instructor records are kept in accordance with the WCG Employee Handbook.
- b. Student Records – All student records shall be kept for three (3) years

8. WCG TRAINING PROGRAM EVALUATION

In order to assure that the best possible training product and experience is provided by WCG it is essential that a variety of evaluation and feedback information is gathered and analyzed. This allows for a critical management review of WCG performance metrics in order to identify both the achievement of performance goals and potential areas for improvement.

- a. Processes and instruments provided to support this evaluation requirement include the following:
 - i. Instructor Evaluation Checklist (See Appendix 4, page v) – This report consists of a performance review for instructors. It shall be accomplished at a minimum of one (1) year and included in the instructor’s personnel file. It shall be conducted

- by either the Lead Instructor or Senior Instructor and a review session with the instructor shall be conducted within 24 hours of the session unless mitigating circumstances exist.
- ii. End-of-Course Evaluation (See Appendix 4, page iii) – This is accomplished by either the Lead Instructor or course instructor during the last session of the class. The subject form shall be made available to each student with enough time allowed for a full and thoughtful response. The forms will be collected and provided to the Lead Instructor for inclusion in the final Course Report.
 - iii. End-of-Course Report (See Appendix 4, page ii) – This report is completed by the Lead Instructor and constitutes the formal closure of a course. It shall include the fully completed subject form along with all of the End-of-Course Evaluations and any other material the instructor deems important or necessary. The Lead Instructor shall provide the End-of-Course Report to the Vice President – Technical Training Group within 30 days of course completion.
 - iv. Client Feed-Back Questionnaire (see Appendix 4, page iv) – This questionnaire is provided to the Client Point of Contact (POC) by the Lead Instructor or Program Manager with an explanation of the form and the importance to WCG of any feedback they may offer.
 - v. Client Interview (See Appendix 4, page vii) – This may be conducted either formally or informally by either the Lead Instructor or Program Manager. All information will be summarized and submitted to the Vice President – Technical Training Group for inclusion in the Formal Summary Course Report.
 - vi. Formal Summary Course Report – This report consists of a summary of all of the end-of-course input. It is prepared by the Vice President – Technical Training Group and provided to the Executive Vice President within 60 days of course completion.
- b. Record Retention. All training-related records and reports shall be maintained for three (3) years. The Vice President – Technical Training Group is responsible for record retention oversight.

APPENDIX 1

WCG Course Inventory

WCG COURSE INVENTORY

| COURSE | WCG NO. |
|---------------------|----------------|
| Ab Initio | WCG 051 |
| Aerodrome | WCG 052 |
| App (Procedural) | WCG 053p |
| APP (Radar) | WCG 053r |
| ACC (Procedural) | WCG 054p |
| ACC (Radar) | WCG 054r |
| WCG TRNG & CERT | WCG 055 |
| OJTI | WCG 056 |
| Airspace Planning | WCG 057 |
| Aviation English | ICAO EA2 |
| Aviation English | ICAO EA3 |
| Aviation English | ICAO EA4 |
| BIT-FIT Course | WCG 058 |
| | |
| WCG PBN I Course | |
| WCG PBR II Course | |
| FAA ATM Orientation | - |
| | |

APPENDIX 2

Position Descriptions – Technical Training Group

Vice President – Technical Training Group

Senior ISD Specialist

Lead Instructor

Instructor

Graphic Artist Sr./Tech Writer

Systems Administrator

Website Administrator

Developer

Vice President Technical Training Group

The Vice President of Technical Training is responsible for creating a technical training environment that supports the quality learning products WCG strives to develop, design, maintain, and deliver. The VP of Technical Training works closely with all Instructional Systems Design elements including the Sr. ISD Specialist, Program Managers, Course Developers, and Course Instructors. The VP also works with Program Managers to ensure all elements of their training environments are identified and accomplished.

Principal Duties and Responsibilities:

- Works with program managers, domestic and international entities to identify skill gaps, training opportunities and develop/deliver training solutions.
- Determines changes and enhancements to current curriculum,
- Develops a programmatic structure and systematic approach to design and deliver training programs in support of the client objectives that emphasize active learning and appropriate instructional technologies.
- Drives ongoing learning needs analysis, design, scripting, development, assessment, implementation and evaluation of training materials to ensure alignment with customer needs
- Designs and delivers, both in house and with clients, solutions that include a blended approach to learning such as coaching, classroom training, experiential learning, distance learning and online learning.
- Manages relationships with all training related clients

Desired Skills and Experience

Demonstrated ability to think strategically and translate business performance gaps into learning and development strategies

Experience

- Exceptional track record developing and delivering learning strategies and initiatives.
- Excellent written, verbal and interpersonal skills with all levels of employees
- Demonstrated ability to build strong relationships with key business leaders.
- Proven ability to manage multiple priorities while delivering high quality results.
- Strong analytical skills, business planning and project management skills.
- Collaborates effectively with others to identify and resolve issues.

Senior ISD Specialist

Assignment/Lockheed Martin Flight Services Training and Certification Director

Qualifications/Experience

Masters and/or Doctorate in Instructional Design and/or five years experience in an instructional design/development technical training environment

Responsibilities and Accountabilities:

- Responsible for the quality control of all development activity
- Direct report for the System Administrator, Website Administrator, Graphic Artist/Technical Writer, and Lockheed Martin Flight Services Academy (LMFSA) Instructors
- Performs and/or coordinates all personnel action for WCG company employees within the Lockheed Martin Flight Services contract
- Oversee the national training course development including initial design, development, programming, validation, and release
- Ensure all course development is based upon the Instructional Systems Design and meets performance requirements
- Coordinate and manage the use of Subject Matter Experts (SMEs) for course development and review
- Maintain oversight of the LMFSA website and Lockheed Martin course catalog
- Manage the LMFSA Stage I training program including schedules, curriculum and evaluation process
- Conduct Facility Instructor Training (FIT) as required
- Submit quarterly summary reports on training and development activities
- Provide backup support to the National Training Program director as needed
- Revise/develop/review curriculum as needed

Direct Report - - As the Senior ISD Specialist for WCG, this position reports directly to the Vice President for Technical Training.

Lead Instructor

The incumbent serves as a training instructor in the classroom and simulation laboratory for the assigned ATC facility as well as being the focal point of communication/organization/setup of training pertaining to designated courses. The incumbent projects a positive and cooperative attitude with full support of the national air traffic training instructional program and facility requirements.

Qualifications/Experience

Experience as a certified controller in the option in which they will be teaching. Must have completed Basic Instructor Training (BIT) and/or Facility Instructor Training (FIT), must have instructed the course within the last 18 months, or must complete a refresher on course delivery and evaluation. Must have instructed in assigned course within last three years.

Principal Duties and Responsibilities: Includes all duties and responsibilities of an instructor and includes the additional duties below

- Using the established checklist, coordinates with the Host country's designated Point of Contact (POC) for all training needs including but not limited to:
 - Classroom space
 - Classroom instructional needs (whiteboards/chalkboards, chart paper, markers, note paper, etc.)
 - Equipment requirements
 - Roster of students
 - Arrival of training materials
- Responsible for the distribution and collection of all course related feedback mechanisms
- Responsible for the documentation of student training scores/certifications
- Responsible for the collection of any and all reports required by the Program Contract Manager

Direct Report -- This position reports to the Program Contract Manager.

Instructor

The incumbent serves as a training instructor in the classroom and simulation laboratory for the assigned ATC facility. The incumbent projects a positive and cooperative attitude with full support of the national air traffic training instructional program and facility requirements. May serve as Lead Instructor if so assigned by the Contract Program Manager (CPM).

Qualifications/Experience

Experience as a certified controller in the option in which they will be teaching. Must have completed Basic Instructor Training (BIT) and/or Facility Instructor Training (FIT), must have instructed the course within the last 18 months, or must complete a refresher on course delivery and evaluation

Principal Duties and Responsibilities:

- Prepares lesson plans on items that have been identified by the facility manager as requiring training solutions and presents the training to students in such a manner as to achieve the desired results identified by quality assurance personnel
- Develops and administers simulated traffic situations, overseeing student solving of the situation, and providing feedback and evaluation of student performance
- Conducts remedial, refresher, and proficiency training, as required, through quality assurance evaluations, other detection measures, or identified as being required by the ICAA
- Participates in facility studies pertaining to proposed changes in policy, training, and airspace alignment and provides input to how these proposed changes will affect the training for the proposed changes
- Assures maintenance of individual training records. Work involves entering required training start, completion, or withdrawal dates and quality assurance checks to ensure completeness of training. Ensure that training files and directive are complete and up-to-date
- Prepares proficiency tests in areas identified through quality assurance evaluations and other means as being critical to the safe control of air traffic. Briefing packages are prepared on new equipment, new procedures, and items that have been determined by air traffic personnel as being necessary to the work force
- Develop tests relating to items critical to the safe control of air traffic that will evaluate the students' knowledge of procedural matters and identifies areas of deficiency. Validates the test questions and answers to assure that they produce the desired goals.
- Conducts crew briefings, as required, on facility matters including, but not limited to, procedural changes relating to air traffic control, procedures relating to administrative matters, training directives, personnel policy, and any other matters pertinent to the mission of the Facility
- Provides outside training to other facilities related to procedural matters that affect the safe control of air traffic, equipment, and official air traffic training courses
- Conducts User Orientation Tours to inform pilots about the ATC system. This includes, but is not limited to, briefings on facility procedures, facility sector responsibilities, unusual requirements with respect to unique control procedures, and items unique to the facility airspace that impact on safety of flight

Direct Report -- This position reports to the designated Lead Instructor of each particular course.

Graphic Artist Sr/Tech Writer

Qualifications/Experience

Certification as a graphics artist and/or tech writer and/or three years experience as a graphics artist and/or technical writer in a technical training environment. Need to be proficient in the writing of technical training manuals as well as proficient using multiple software programs to develop graphics

Responsibilities and Accountabilities:

- Research and develop requested operational training courses for Lockheed Martin Flight Services (LMFS)
- Coordinate with LMFS subject matter experts (SMEs) during all phases of training development and research, write, generate graphics, and develop PowerPoint presentations for new lessons and courses
- Coordinate course type and characteristics prior to development, overall layout and course design
- Use standardized course designs during training development
- Complete updates, edits, and corrections to the Academy curriculum (Lesson Plans, Student Guides, and PowerPoint slide presentations) as presented by the SMEs
- Assist Academy team members with Microsoft Word and PowerPoint issues and proofread developed materials as requested
- Develop technical information manuals or instructions for operational equipment as requested
- Participate on usability and functionality teams as needed for course development

Direct Report – This position reports directly to the Sr. Instructional Systems Design (ISD) Specialist.

Systems Administrator

Qualifications/Experience

Bachelors or Masters degree in Computer Science and/or Instructional Design and/or three years experience in the development, maintenance, and support of an educational/training related website

Responsibilities and Accountabilities:

- Oversee the administration of the Lockheed Martin Flight Services Academy (LMFSA) website and ensure all components are maintained and perform as designed
- Work with Lockheed Martin technical support to ensure that computer systems used for training and course development include all necessary components both hardware and software
- Troubleshoot and resolve problems reported by LMFSA website users and make recommendations for future system upgrades
- Set up and maintain information security measures for LMFSA website as required
- Develop and maintain historical database for training stored and completed on LMFSA website
- Maintain the technical aspects of the LMFSA website such as software languages and tools for applications
- Development computer based equipment training modules as requested
- Provide backup support to the website administrator as needed

Direct Report – This position reports directly to the Sr. Instructional Systems Design (ISD) Specialist.

Website Administrator

Qualifications/Experience

Bachelor's or Masters degree in Computer Science and/or Instructional Design and/or three years experience in the development, maintenance, and support of an educational/training related website

Responsibilities and Accountabilities:

- Ensure functionality and accessibility of the Lockheed Martin Flight Services Academy (LMFSA) website is maintained
- Identify website users, oversee course enrollment and keep current
- Load website training courseware
- Routinely review and revise courseware as needed
- Ensure course development schemes are standardized
- Primary point of contact for the Annual Proficiency Exam and the Annual Emergency Services Proficiency Exam testing process
- Organize website information and ensure visual appearance is maintained
- Collect, analyze, and report data on Website training activity as requested
- Assist in training development projects
- Provide backup support to the website System Administrator as needed

Direct Report – This position reports directly to the Sr. Instructional Systems Design (ISD) Specialist.

Developer

The incumbent serves as a training developer for classroom and simulation training.

Qualifications/Experience

Experience as a certified controller in the area in which they will be developing. Must have completed Facility Instructor Training (FIT)

Principal Duties and Responsibilities:

- Develops and revises technical content of course related training materials
- Develops and administers simulated traffic situations, overseeing student solving of the situation, and providing feedback and evaluation of student performance
- Prepares proficiency tests in areas identified through quality assurance evaluations and other means as being critical to the safe control of air traffic. Briefing packages are prepared on new equipment, new procedures, and items that have been determined by air traffic personnel as being necessary to the work force
- Develop tests relating to items critical to the safe control of air traffic that will evaluate the students' knowledge of procedural matters and identifies areas of deficiency. Validates the test questions and answers to assure that they produce the desired goals.
- Coordinates with ISD personnel (ISD Specialist and/or graphics artist/tech writer) for technical course related items

Direct Report -- This position reports to the designated Lead Instructor of each particular course.

APPENDIX 3

WCG CHECKLISTS

Checklist for Facility Training Initial Planning
Checklist for Lead Instructor in Preparation for Training



Checklist for Facility Training Initial Planning

| | |
|-------------------|---|
| Directions | Put a check in the box that indicates the correct answer. |
|-------------------|---|

| Item to be Reviewed | Yes | No |
|---|--------------------------|--------------------------|
| 1. Is the classroom large enough to accommodate the number of students to be trained? | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Are there enough electrical outlets/converters to meet the needs of the training? | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Are there readily available break out rooms, if required? | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Are easels available if required to hold chart paper? | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Is there a white board and/or chalk board in the training room? | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Are bathrooms nearby? | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Is there a cafeteria/eating establishment nearby for lunch and break purposes? | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. Are arrangements for transportation and/or parking necessary? | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. Is there enough space in the training room to setup in a U shape? | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. Are there supplies/materials provided by the Host facility? If so, what are they? | <input type="checkbox"/> | <input type="checkbox"/> |
| Comments: | <input type="checkbox"/> | <input type="checkbox"/> |



Checklist for Lead Instructor in Preparation for Training

| | |
|-------------------|---|
| Directions | Put a check in the box that indicates the correct answer. |
|-------------------|---|

| Item to be Reviewed | Yes | No |
|---|--------------------------|--------------------------|
| 1. Has checklist from Host country considered been reviewed? | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Have all instructors been notified? | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Do all instructors have necessary training materials for preparation of training? | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Have all relevant materials been gathered/sent? | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Has a roster of the students been prepared? | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Has a schedule of training been prepared? | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Has all the equipment needing to be sent been identified and labeled for shipping? | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. Are all required training materials ready? | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. Are all necessary supplies available? | <input type="checkbox"/> | <input type="checkbox"/> |
| Comments: | | |

APPENDIX 4

WCG EVALUATIONS

End-of-Course Report
End-of-Course Evaluation
Client Feed-Back Questionnaire
Instructor Evaluation Checklist
Instructor Feed-Back Form
Client Interview Form



End-of-Course Report

| Course Data | |
|--|--|
| Course Number and Title | |
| Length of Course (hrs) | |
| Number of students | |
| Class start and end times | |
| Number of students successfully completing course | |
| Explanation for any student not completing course | |
| Necessary Revisions (continue on back of page if necessary) | |

Comments



End of Course Evaluation

INSTRUCTIONS: Identify on the right the numerical score which best represents your response to the question with 1 being the lowest and 5 being the highest.

| Ratings for question #1 | 1 No experience/ knowledge | 2 Little experience/ knowledge | 3 Average experience/ knowledge | 4 More than average experience/ knowledge | 5 Much more than average experience/ knowledge |
|--|-------------------------------------|---|--|---|--|
| 1. Prior to this instruction, my experience in this area was: | | | | | |
| Ratings for questions #2 and #3 | 1 None | 2 Very little | 3 Met expectations | 4 More than met expectations | 5 Much more than met expectations |
| 2. Did your knowledge of this subject increase as a result of the instruction? | | | | | |
| 3. If your knowledge increased as a result of the instruction, to what extent did it increase? | | | | | |
| Ratings for questions #4 through #10 | 1 Poor | 2 Below average | 3 Average | 4 Above Average | 5 Excellent |
| 4. Based on my experience, the level of instruction was: | | | | | |
| 5. The organization of the instruction was: | | | | | |
| 6. The lecture outline (main points of instruction) was: | | | | | |
| 7. Audiovisual aids were: | | | | | |
| 8. Instructional use of the whiteboard, charts, and other aids was: | | | | | |
| 9. Overall, the instruction was: | | | | | |
| 10. Instruments (including tests) to evaluate student performance were: | | | | | |

Comments:



Client Feed-Back Questionnaire

INSTRUCTIONS: Identify on the right the numerical score which best represents your response to the statements below with 1 being the lowest and 5 being the highest.

| Ratings for statements | 1 Poor | 2 Below Average | 3 Average | 4 Above Average | 5 Excellent |
|--|-----------|-----------------------|--------------|-----------------------|----------------|
| 1. Overall, the training presented was: | | | | | |
| 2. Communication/coordination with WCG regarding the training product was: | | | | | |
| 3. WCG personnel were friendly and helpful. | | | | | |
| 4. The training was applicable to the needs of the country. | | | | | |
| 5. Feedback related to the training was readily available upon request. | | | | | |

Comments and/or Suggestions:



Instructor Evaluation Checklist

Annual Review Date

Follow up Review Date

Put a check mark in the box that represents the instructor's behavior using the scale of 1 to 5 with five being the highest and 1 being the lowest.

| | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| 1. Was properly prepared - Had all necessary material - Equipment was checked to ensure working properly | | | | | |
| 2. Subject matter knowledge - Was knowledgeable of subject matter - Maintained good flow of technical data - Responded well to questions - Used lesson plan appropriately - Encouraged student participation | | | | | |
| 3. Was pleasant and personable yet had good classroom management | | | | | |
| 4. Asked questions appropriately - Used varied questioning techniques | | | | | |
| 5. Administered and reviewed the End-of-Lesson test | | | | | |
| 6. Administered Practice Exercise/Lab clearly and concisely - Followed up with appropriate debrief | | | | | |
| 7. Proficient in use of classroom equipment | | | | | |

Comments



Instructor Feedback Form

| | |
|---|--|
| Course Number and Title | |
| Length of Course (hrs) | |
| Number of students | |
| Class start and end times | |
| What worked well with the course | |
| What Aspects of the Course Needs Improvement | |

Comments (Use back of page if necessary)



Client Interview Form

Instructions: This customer satisfaction interview may be done in place of sending a formal survey to customers. This interview should be completed by a company representative over the phone with the customer. The steps to complete this interview are:

1. If possible, make an appointment with the customer for the call.
2. Call the customer and summarize the customer's responses to the questions.
3. Send an e-mail to the customer recapping their response. This e-mail will serve as your record of the interview.
4. Save the e-mail sent.

Name of individual you spoke to: _____

Position: _____

Company: _____

Name of interviewer: _____

Date of interview: _____

1. Questions

(These are examples of questions; you should design your own questions to meet your needs).

1. Overall has **The Washington Consulting Group, Inc.** met your expectations over the last year? If not, explain.

2. Are you having any current problems with any of our services that you have not been able to resolve?

3. Have you recently contacted **The Washington Consulting Group, Inc.**? If so, did you get the help you needed? Was the response you received prompt and satisfactory?

4. Have you had contact with our staff recently? If so, what service/contract was it related to? Was the sales representative knowledgeable about the product? Did you receive the information you needed?

5. Have you visited our website recently? If so, what did you find most helpful/useful?

6. Would you recommend our services to others?

7. Do you have any other comments or suggestions?

2. Follow-up Actions Needed

Record any follow-up actions (including corrective or preventive actions) that need to be taken as a result of the interview: