

TRAINING COURSE OUTLINE (TCO)

for

an FAA-Approved

FLIGHT INSTRUCTOR REFRESHER CLINIC (FIRC)

Submitted by

Idaho Transportation Department
Division of Aeronautics
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I. REVISION SUMMARY

In accordance with (IAW) AC 61-83F, paragraph 6(a), the following table will be used to summarize approved revisions, amendments, or deletions to this TCO.

Proposed changes will be submitted to FAA AFS-800 at least 21 days prior to their planned use IAW AC 61-83F, paragraph 9. Revisions may not be included in this TCO until approval has from AFS-800 has been received.

REVISION NUMBER	EFFECTIVE DATE	ACTION TO BE TAKEN	POSTED BY (initials)

II. TRAINING COURSE OUTLINE

A. ADMINISTRATION

Classroom Facilities

Flight Instructor Refresher Clinics conducted by the Idaho Transportation Department (ITD), Division of Aeronautics (Aeronautics), will be held in established hotel meeting facilities, conference centers, or other institutional settings such as college classrooms. Aeronautics will ensure that all local and state regulations regarding occupancy and safety are strictly observed and that adequate lighting, seating, climate control, work area, and freedom of distraction is provided.

Audio/Visual Aids

Aeronautics may use a variety of training aids during the FIRC. These audio/visual aids will include, but are not limited to, white boards, chalkboards, overhead projectors, slides, video/CD/DVD recorder/players, movies, audio tape recorders, mockups, and aircraft components. Extra projector bulbs, chalk writing implements, and other support/back-up items will be on hand as necessary to preclude unscheduled interruptions due to equipment failure.

Any training aid that assists the course facilitator in achieving the lesson objective and adheres to the guidelines as described in AC 61-83F, paragraph 10, will be considered appropriate. Per paragraph 16(g), no more than 50% of the clinic hours of this FAA-approved FIRC may be solely by audio/video presentation. These presentations must be related to the subject area and monitored by a course instructor/presenter.

Chief Instructor Qualifications

The Chief Instructor for the Idaho Transportation Department, Division of Aeronautics Flight Instructor Refresher Clinic is Mr. Frank Lester. Mr. Lester has 6,400 total hours of flight time experience with 1382 hours as a Certified Flight Instructor (CFI). He holds both CFI and MEI ratings. In 40 years of flying and instructing, he has taught all facets of primary and advanced ground and flight training. During his Air Force career, he served as a Standardization and Evaluation Pilot, Standardization Officer, and Flying Safety Officer. He is currently an adjunct professor in Aviation Safety with Embry-Riddle Aeronautical University.

As Safety/Education Coordinator for the Idaho Division of Aeronautics, Mr. Lester has been Chief Instructor for the last 10 years and has conducted 25 FIRC's throughout the state. He has instituted several significant revisions and is continually updating clinic materials. Mr. Lester travels extensively throughout the state instructing at various mountain flying and density altitude clinics as well as conducting safety seminars with local FAA Safety Program Managers.

Changes in Course Sponsor or Chief Instructor

Per AC 61-83F, paragraph 13, Aeronautics will make every attempt to notify AFS-800 of a change in Chief Instructor at least 45 days prior to the change but in no case later than 10 days after the change. Per paragraph 14, should a change in sponsor occur without a change in personnel, AFS-800 will be notified within 10 days of the change by both old and new sponsors. If there is a change in both sponsor and personnel under this FIRC TCO, authorization to conduct FIRC's is cancelled until the new sponsor has received FAA approval as outlined under paragraph 5.

Additional FIRC Presenters/Instructors

The Chief Instructor shall be the final authority as to the qualifications of additional FIRC presenters, instructors, lecturers, moderators, or panelists. Per AC 61-83F, paragraph 6(e), the names and qualifications of those individuals approved to participate in a FIRC under this TCO are listed on page 8. The Chief Instructor will ensure that each presenter/instructor selected is properly briefed and familiar with the sections of this TCO pertinent to their presentation, and that this training is documented IAW paragraph 6(h).

Each instructor is provided a copy of the lesson they are scheduled to present including lesson objectives and completion standards for their review. They are also briefed on presentation standards including allotted time, importance of staying on schedule and allowing time for questions. A sample Record of Training is found on page 9. Furthermore, this training must be completed within 12 months of their scheduled presentation or following any significant change to this TCO, and prior to their participation in any FIRC scheduled under this TCO.

Course Enrollment Prerequisites

Enrollment in an Aeronautics FIRC will be open to all Flight Instructors and pilots who wish to attend. However, per AC 61-83F, paragraph 6(f), only those Flight Instructors with unexpired certificates will be eligible to receive a Graduation Certificate and renew their flight instructor certificate. Instructors with expired certificates may attend the course but will require a flight with an FAA flight

examiner or Designated Check Airman to be recertified. Pilots and CFIs with expired certificates who choose to attend a FIRC under this TCO will receive a Completion Certificate for those hours of instruction successfully completed. Examples of a Graduation Certificate and a Completion Certificate are found on pages 13 and 14.

Additional Presenters, Instructors, Lecturers, Moderators, and Panelists qualified and approved to participate in any FIRC under this TCO.

NAME	POSITION/QUALIFICATIONS
John Goostrey	Boise FAA Flight Standards District Office, POI
Cliff Smart	FAASTeam Program Manager, Boise FSDO
Mike Pape	Director of Flight Operations, Idaho Division of Aeronautics
Dr. Mike Weiss	MD, AME, CFII
Dr. Paul Collins	MD, AME
Joe Myers	Chief Instructor, Interstate Aviation, DPE
Bruce Fisher	NW Region, Office of Runway Safety
Chet Waite	Boise FAA Flight Standards District Office, POIr
Cammie Patch	Chief Flight Instructor for Glass Cockpit Aviation, CFII
Brent Morrow	FAASTeam Program Manager, Spokane FSDO
Dale Wilson	Associate Professor, Flight Technology Department, Central Washington University
Amy Hoover	Associate Professor, Flight Technology Department, Central Washington University
Teresa Sloan	Associate Professor, Flight Technology Department, Central Washington University
Dick Miller	Corporate Pilot, DPE
Scott Curtis	USDA/Forest Service, DPE
Gary Iverson	DPE, IA
Jim Wolper	CFII
Del Van Orden	DPE
Lori MacNichol	Owner/Operator, McCall Mountain/Canyon Flying Seminars, CFII
Art Lazzarini	CFII
Paul Hazen	Transportation Security Inspector, Transportation Security Administration
Gary Shipley	Director, School of Maintenance Technology, Idaho State University, IA, DME, CFII
Nick Grachanin	CFII

Record of Training (sample)

[illegible]

Remedial Training

Any flight instructor who fails to achieve 70% on any stage test will be allowed an opportunity to complete remedial training. Such remedial training will involve spending one-on-one time with a FIRC instructor, who will review the questions missed by the course attendee. The Chief Instructor will evaluate the attendee on the subject areas missed, ensuring that the attendee has a 100% understanding of the subject matter in question, and correct the stage test back to 100%. If the course attendee refuses such remedial training, they will not have their instructor certificate renewed but may choose to complete the remainder of the course program. They will, however, receive a Letter of Completion for those hours successfully completed with an explanation as to why their certificate was not renewed. An example of a Letter of Completion can be found on page 15.

Testing Procedures

IAW AC 61-83F, paragraph 8, depending on the number of clinic attendees, either an oral or written test may be administered to measure the attendees' knowledge and understanding of the subject matter presented. Should a written test be administered, at least one will be given at the end of each day's activities. The test will contain a minimum of 15 multiple choice questions selected from the current list of approved test questions in the Test Pool found in Section III of this TCO and relating to the material covered that day. A minimum of passing grade of 70% is required on all written or oral examinations to successfully complete any FIRC under this TCO. A sample test will be found on pages 68-71.

Daily Course Schedule

On the following page is a sample Daily Course Schedule. The times are typical of a two-day FIRC as presented under this TCO. It outlines seven hours of FAA-approved curriculum presented on Day 1 and nine hours on day 2. The schedule describes the minimum requirements for a 16-hour FIRC IAW AC 61-83F, paragraph 6(j).

The FIRC sponsor or Chief Instructor may vary the actual start times and order of instruction based on location, logistics, attendee needs, instructor availability, or other special considerations.

DAILY COURSE SCHEDULE (sample)

Day 1

11:00-11:30	Registration Aeronautics Staff
11:30-11:45	Welcome
11:45-12:35	Administrative Requirements
12:45-13:35	Low Altitude Maneuvering-Mountain Flying
13:45-14:35	Sport Pilot
14:45-15:35	Transportation Security Administration
15:45-16:35	Search and Rescue-ELTs
16:45-17:35	Pilot Proficiency Wings Program-FAAStealth
17:35-18:25	Dinner Break
18:25-19:15	Runway Incursions
19:25-20:15	Security Special Use Airspace-TFRs
20:15-20:30	Stage Test #1

Day 2

07:00-07:10	Administrative Requirements
07:10-08:00	IACRA/Practical Test Standards-Trends
08:10-09:00	GPS Navigation
09:10-10:00	Safety Trends in General Aviation
10:10-11:00	FAA/Industry Training Standards (FITS)
11:10-12:00	National Airspace System
12:00-12:50	Lunch
12:50-13:40	Technically Advanced Aircraft
13:50-14:40	Aircraft Operating Limitations
14:50-15:40	Risk Management/Risk Intervention Strategies
15:50-16:40	Teaching Fuel Management
16:40-17:00	Stage Test #2

Course Objective and Completion Standards

The overall objective of this TCO is to effectively present the subject areas as outlined in AC 61-83F, Appendix 1, while stimulating the course attendee to take ultimate responsibility for mastery of the subjects presented.

The course objective will be met when the course attendee obtains a minimum score of 70% on all written or oral examinations administered.

Stage Objective and Completion Standards

Each day of this FAA-approved course shall constitute a “stage” of instruction. The objective of each stage is to provide the attendee with increased insight into the instruction process and associated subjects relating to the training and development of a safe, knowledgeable, and professional pilot.

The stage objective will be met when the course attendee obtains a minimum score of 70% on the stage examination.

Lesson Objective and Completion Standards

Each lesson will contain a statement of the lesson objective, a summary of the contents, and a completion standard. For ease of reference, each lesson is exhibited as a separate unit within this TCO.

Awarding of Course Graduation Certificates

A Graduation Certificate will be awarded to each flight instructor who possesses an unexpired CFI certificate and who successfully completes a FIRC under this TCO. Those CFIs whose certificate has already expired, or an attendee who is NOT a CFI, will be given a Course Completion Certificate for that portion of the FIRC they have successfully completed.

A CFI, whose certificate has not expired but fails to complete the course for any reason, will NOT be issued a Graduation Certificate. Instead, a Letter of Completion will be issued indicating those presentations (by subject area) for which the attendee will be given credit. It is their option to attend another Aeronautics-sponsored FIRC, at no additional charge, in order to complete their 16 hours of required instruction before their flight instructor certificate expires.

Each Graduation Certificate will be issued IAW AC 61-83F, paragraph 11. A sample Graduation Certificate, Completion Certificate, and Letter of Completion are shown on the following pages.

NOT VALID FOR MORE THAN THREE (3) CALENDAR MONTHS FROM THE DATE OF ISSUANCE

GRADUATION CERTIFICATE

IDAHO TRANSPORTATION DEPARTMENT, DIVISION OF AERONAUTICS

3483 Rickenbacker St., Boise, Idaho 83705

Presents this Certificate to

FULL NAME: _____ CFI #: _____

ADDRESS: _____

SAMPLE

IN RECOGNITION OF HAVING SUCCESSFULLY COMPLETED THE FEDERAL AVIATION ADMINISTRATION APPROVED,
IDAHO DIVISION OF AERONAUTICS' 16-HOUR FLIGHT INSTRUCTOR REFRESHER CLINIC

Location: _____

Date of Issuance: _____

Certificate Number: _____

Chief Instructor: _____

FRANK W. LESTER, JR.

The authenticity of this graduation certificate can be verified by telephone to the issuing FIRC Sponsor (Idaho Division of Aeronautics) at 208-334-8775 Monday through Friday from 8:00AM to 5:00PM (Mountain Time).

Completion Certificate

IDAHO TRANSPORTATION DEPARTMENT, DIVISION OF AERONAUTICS
3483 Rickenbacker St., Boise, ID 83705

Presents this Certificate to

FULL NAME: _____ CFI #: _____

ADDRESS: _____

SAMPLE

IN RECOGNITION OF HAVING SUCCESSFULLY COMPLETED _____ HOURS OF AN FAA-APPROVED
AERONAUTICAL INFORMATIONAL AND FLIGHT SAFETY GROUND COURSE.

Location: _____

Date of Issuance: _____

Chief Instructor: _____

FRANK W. LESTER, JR.



IDAHO TRANSPORTATION DEPARTMENT
P.O. Box 7129
Boise ID 83707-1129

(208) 334-8000
itd.idaho.gov

(Student's Name and Address)

(Dates of FIRC)

Dear Mr., Mrs., Ms.,

Thank you for participating in the Idaho Transportation Department, Division of Aeronautics Flight Instructor Refresher Clinic (FIRC). In accordance with the Aeronautics Training Course Outline (TCO) dated XXXX, and approved by the FAA on XXXX, you have been given credit for the following hours and subjects presented during the above referenced FIRC:

(List of hours credited by subject)

However, your instructor certificate was not renewed for the following reasons:

(Reasons for non-renewal listed)

You may complete the renewal process under this TCO if you complete the following actions:

(Required actions stated)

If you are required to attend another FIRC to complete the renewal process, you may attend a scheduled Aeronautics FIRC at no charge. All completion actions must be met prior to the expiration of your current CFI certificate in order for that certificate to be renewed.

Should you have any questions concerning the circumstances leading up to this letter or the required actions to complete the renewal process, please contact me at 800-426-4587 (in Idaho only), 208-334-8775 or at frank.lester@itd.idaho.gov.

Sincerely,

FRANK W. LESTER, JR.
Chief Instructor

Scheduling of Flight Instructor Refresher Clinics (FIRC)

Per AC 61-83F, paragraph 12, Aeronautics will notify AFS-800 of its intent to conduct a FIRC at least 45 days prior to the scheduled date.

B. LESSON PLANS

UNIT 1

LESSON TITLE: TECHNICALLY ADVANCE AIRCRAFT (TAA)

LESSON OBJECTIVE: At the completion of this unit, the attendee will have a fundamental understanding of what defines a TAA, the hazards and trends associated with flying these aircraft.

COMPLETION STANDARD: The course attendee must score a minimum of 70% on any written or oral test given.

PRESENTATION METHOD: Lecture/discussion with or without visual aids.

TIME ALLOWED: Minimum 30 minutes.

UNIT 1: TECHNICALLY ADVANCED AIRCRAFT (TAA)

1. Definition of Technically Advanced Aircraft (TAA)

- a. GPS Navigators
- b. Autopilot
- c. "Glass Panel"

2. Hazards Associated with Flight in TAA

- a. Crew/Cockpit Resource Management
- b. Information Management
- c. Situational Awareness
- d. System/Pilot Limitations
- e. Assessing and Managing Risk

3. Trends in TAA

- a. New Equipment
- b. Accident Trends

4. Discussion

(Instructor Note: This lesson plan may be used in total or in part depending on the emphasis of the lecture. Trends or changes in the industry or equipment may require the presentation to focus on only part of the lesson plan. This subject may be combined with Units 2, 6, 8, 10, and 11 or any approved elective presentation where TAA is essential to the topic.)

UNIT 2

LESSON TITLE: FAA/INDUSTRY TRAINING STANDARDS (FITS)

LESSON OBJECTIVE: At the completion of this unit, the attendee will have a fundamental understanding of the FITS and its use in the training environment.

COMPLETION STANDARD: The course attendee must score a minimum of 70% on any written or oral test given.

PRESENTATION METHOD: Lecture/discussion with or without visual aids.

TIME ALLOWED: Minimum 30 minutes.

UNIT 2: FAA/INDUSTRY TRAINING STANDARDS (FITS)

1. Define FITS
 - a. FITS Concepts
 - b. Application to TAA
 - c. Application to GA, Single-Pilot Operations
2. Define FITS Training Module
 - a. Scenario-Based Training
 - b. Practical Application to Real-World Environment
3. FITS in Relation to Developing Aeronautical Skills
 - a. Decision Making
 - b. Risk Management
 - c. Crew/Cockpit Resource Management
4. Challenges in Adapting FITS to the Non-TAA GA Training Environment
5. FITS Resources
6. Discussion

(Instructor Note: This lesson plan may be used in total or in part depending on the emphasis of the lecture. Trends or changes in the industry or equipment may require the presentation to focus on only part of the lesson plan. This subject may be combined with Units 1, 3, 6, 9, 10, 11, and 13 or any approved elective presentation where training is an essential element.)

UNIT 3

LESSON TITLE: SPORT PILOT

LESSON OBJECTIVE: At the completion of this unit, the attendee will have a fundamental understanding of the Sport Pilot certification and Light Sport Aircraft criteria.

COMPLETION STANDARD: The course attendee must score a minimum of 70% on any written or oral test given.

PRESENTATION METHOD: Lecture/discussion with or without visual aids.

TIME ALLOWED: Minimum 30 minutes.

UNIT 3: SPORT PILOT

1. FAR Part 61
 - a. Training and Certification
 - b. Medical Requirements
2. Sport Pilot Certification
 - a. Privileges
 - b. Limitations
3. Light Sport Aircraft (LSA)
 - a. Manufacturing Specifications and Limitations
 - b. Transition from Ultralight to LSA
 - c. Qualifying Aircraft Manufactured prior to LSA Designation
4. Sources of Information
5. Discussion

(Instructor Note: This lesson plan may be used in total or in part depending on the emphasis of the lecture. Trends or changes in the industry or equipment may require the presentation to focus on only part of the lesson plan. This subject may be combined with Units 1, 2, 8, 10, and 11 or any approved elective presentation where training is essential to the topic.)

UNIT 4

LESSON TITLE: SECURITY-RELATED SPECIAL USE AIRSPACE

OBJECTIVE: At the completion of this unit the attendee will have a fundamental understanding of Security-Related Special Use Airspace including Temporary Flight Restricted (TFR) airspace and the Washington, D.C. Flight Restricted Zones (FRZ) and Air Defense Identification Zones (ADIZ).

COMPLETION STANDARD: The course attendee must score a minimum of 70% on any written or oral test given.

PRESENTATION METHOD: Lecture/discussion with or without visual aids.

TIME ALLOWED: Minimum 30 minutes.

UNIT 4: SECURITY-RELATED SPECIAL USE AIRSPACE

1. Security-Related Airspace

- a. TFR
- b. ADIZ
- c. Prohibited Areas
- d. Restricted Areas
- e. National Security Areas

2. New Regulations and Restrictions in the Post 9/11 Environment

- a. "Floating" TFRs
- b. Power Plants
- c. Stadiums
- d. Expanding Prohibited/Restricted Areas

3. Consequences of Violating Restricted Airspace in Post 9/11 Environment

- a. Intercept Procedures
- b. Sources for Identifying Restricted Airspace
 - i. Duats
 - ii. Internet
 - iii. AFSS
 - iv. Flight Watch
 - v. ARTCC
 - vi. Other

4. Challenges Facing Pilots

5. Discussion

(Instructor Note: This lesson plan may be used in total or in part depending on the emphasis of the lecture. Trends or changes in the industry or equipment may require the presentation to focus on only part of the lesson plan. This subject may be combined with Units 2, 5, 6, 8, 9, 10, 11, and 12 or any approved elective presentation where airspace and the National Airspace System are essential to the topic.)

UNIT 5

LESSON TITLE: TRANSPORTATION SECURITY ADMINISTRATION (TSA)

LESSON OBJECTIVE: At the completion of this unit the attendee will have a fundamental understanding of the structure of the Transportation Security Administration and the role TSA plays in the flight training environment.

COMPLETION STANDARD: The course attendee must score a minimum of 70% on any written or oral test given.

PRESENTATION METHOD: Lecture/discussion with or without visual aids.

TIME ALLOWED: Minimum 30 minutes.

UNIT 5: TRANSPORTATION SECURITY ADMINISTRATION (TSA)

1. TSA and the Terrorist Threat
2. TSA Role in Flight Training
 - a. Airman Certificates of Interest
 - b. Citizenship Documentation
 - c. Record Keeping
 - d. Foreign Student Processing
 - e. Security Awareness
 - i. Flight Instructor Role
 - ii. Flight School Role
3. Following TSA Guidelines
 - a. Importance to Security
 - b. Violating Guidelines

(Instructor Note: This lesson plan may be used in total or in part depending on the emphasis of the lecture. Trends or changes in the industry or threat level may require the presentation to focus on only part of the lesson plan. This subject may be combined with Units 2, 3, 4, 9, and 10 or any approved elective presentation where security is essential to the topic.)

UNIT 6

LESSON TITLE: GPS NAVIGATION

LESSON OBJECTIVE: At the end of this unit the attendee will have a fundamental understanding of GPS, its operation and limitations.

COMPLETION STANDARD: The course attendee must score a minimum of 70% on any written or oral test given.

PRESENTATION METHOD: Lecture/discussion with or without visual aids.

TIME ALLOWED: Minimum 30 minutes.

UNIT 6: GPS NAVIGATION

1. Global Positioning System (GPS)
 - a. Satellite System
 - b. Basic Concepts of Airborne Navigation
 1. Fundamental Principles of Operation
 2. Limitations
 1. IFR vs. VFR
 2. WAAS
 - c. Database Requirements
 - d. Regulatory Requirements
2. Proper Use of Equipment
 - a. Programming Equipment
 - b. Relation to Other Forms of Navigation and Equipment
 1. Pilotage and Dead Reckoning
 2. VOR
 3. VOR/DME
 4. ILS
 5. WAAS
 6. Vertical Guidance
3. Advantages/Disadvantages of GPS
 - a. Ease of Use
 - b. See and Avoid
 - c. Situational Awareness
 - d. Controlled Flight Into Terrain
 - e. Crew/Cockpit Resource Management
4. Sources of Information
5. Discussion

(Instructor Note: This lesson plan may be used in total or in part depending on the emphasis of the lecture. Trends or changes in the industry or equipment may require the presentation to focus on only part of the lesson plan. This subject may be combined with Units 1, 2, 4, 9, 10 11, 12 and 13 or any approved elective presentation where GPS is essential to the topic.)

UNIT 7

LESSON TITLE: INTEGRATED AIRMAN CERTIFICATION AND/OR RATING
APPLICATION (IACRA)

LESSON OBJECTIVE: At the end of this unit the course attendee will have a fundamental understanding of the IACRA process.

COMPLETION STANDARD: The course attendee must score a minimum of 70% on any written or oral test given.

PRESENTATION METHOD: Lecture/discussion with or without visual aids.

TIME ALLOWED: Minimum 30 minutes.

UNIT 7: INTEGRATED AIRMAN CERTIFICATION AND/OR RATING APPLICATION (IACRA)

1. IACRA

- a. Definition
- b. FAA Form 8710-1
- c. Student Procedures/Use
- d. Instructor Procedures/Use
- e. Certifying Officer (DPE) Procedures/Use
- f. Oklahoma City Use
- g. Electronic Signature
- h. Temporary Certificates

2. IACRA Requirements for Flight Instructor Refresher Clinics

(Instructor Note: This lesson plan may be used in total or in part depending on the emphasis of the lecture. Trends or changes in the industry or equipment may require the presentation to focus on only part of the lesson plan. This subject may be combined with Units 1, 2, 3, and 9 or any approved elective presentation where training is essential to the topic.)

UNIT 8

LESSON TITLE: AIRCRAFT OPERATIONAL LIMITATIONS

LESSON OBJECTIVE: At the conclusion of this unit the course attendee will have a fundamental understanding of the general operational limitations effecting small GA aircraft.

COMPLETION STANDARD: The course attendee must score a minimum of 70% on any written or oral test given.

PRESENTATION METHOD: Lecture/discussion with or without visual aids.

TIME ALLOWED: Minimum 30 minutes.

UNIT 8: AIRCRAFT OPERATIONAL LIMITATIONS

1. Aircraft Owner's Manual/Pilot Operating Handbook
 - a. What is the Difference?
 - b. What Does a Placard Mean?
 - c. Basic Format
2. Operating Limitations
 - a. What Do They Mean?
 - b. Where Can They Be Found?
3. Performance Charts
 - a. Design
 - b. Limitations
 - c. How Are They Used?

(Instructor Note: This lesson plan may be used in total or in part depending on the emphasis of the lecture. Trends or changes in the industry or equipment may require the presentation to focus on only part of the lesson plan. This subject may be combined with Units 1, 2, 3, 6, 9, 10, 11, and 12 or any approved elective presentation where performance is essential to the topic.)

UNIT 9

LESSON TITLE: EFFECTIVE TEACHING

LESSON OBJECTIVE: At the completion of this unit the course attendee will have a fundamental understanding of the essential elements of effective teaching and the necessary skills specific to good flight instructing.

COMPLETION STANDARD: The course attendee must score a minimum of 70% on any written or oral test given.

PRESENTATION METHOD: Lecture/discussion with or without visual aids

TIME ALLOWED: Minimum 30 minutes.

UNIT 9: EFFECTIVE TEACHING

Although this unit can be taught as a lecture, it will be best accomplished in an open forum discussion.

1. What Is an Effective Instructor?
2. What Are Good People Skills?
3. How Do You Define Instructor Professionalism?
4. What Are the Essential Elements of Communication?
5. How Do You Know that Your Student is Really Learning?
6. What Are the Pitfalls of Instruction that a Good Instructor Must Recognize and Avoid?

(Instructor Note: This lesson plan may be used in total or in part depending on the emphasis of the lecture. Trends or changes in the industry or equipment may require the presentation to focus on only part of the lesson plan. This subject may be combined with all Units or any approved elective presentation.)

UNIT 10

LESSON TITLE: SAFETY TRENDS IN GA

LESSON OBJECTIVE: At the completion of this unit the course attendee will have a fundamental understanding of accident/incident trends and the instructor's role in influencing change.

COMPLETION STANDARD: The course attendee must score a minimum of 70% on any written or oral test given.

PRESENTATION METHOD: Lecture/discussion with or without visual aids.

TIME ALLOWED: Minimum 30 minutes.

UNIT 10: SAFETY TRENDS IN GA

1. Current Trends in GA Accidents/Incidents
 - a. Leading Factors
 - b. Changes in Trends
 - c. NTSB Reports
2. Flight Instructor Role in Affecting Trends
 - a. Training
 - b. Instruction
 - c. Responsibility
3. Resources for Instructors
 - a. NTSB
 - b. FAASAFETY.GOV
 - c. AOPA Air Safety Foundation
 - d. Other Resources
4. Discussion

(Instructor Note: This lesson plan may be used in total or in part depending on the emphasis of the lecture. Trends or changes in the industry or equipment may require the presentation to focus on only part of the lesson plan. This subject may be combined with Units 1, 2, 3, 6, 8, 9, 11, 12 and 13 or any approved elective presentation where training is essential to the topic.)

UNIT 11

LESSON TITLE: RISK MANAGEMENT/RISK INTERVENTION STRATEGIES

LESSON OBJECTIVE: At the conclusion of this unit the course attendee will have a fundamental understanding of the concept of risk, risk management and mitigation strategies.

COMPLETION STANDARD: The course attendee must score a minimum of 70% on any written or oral test given.

PRESENTATION METHOD: Lecture/discussion with or without visual aids.

TIME ALLOWED: Minimum 30 minutes.

UNIT 11: RISK MANAGEMENT/RISK INTERVENTION STRATEGIES

1. What is Risk?
 - a. Types of Risk
 - b. Risk vs. Safety
2. Hazards
 - a. Hazard Mitigation
 - b. Hazards vs. Risk
3. Six Step Operational Risk Management Process
 - a. Identify
 - b. Assess
 - c. Analysis
 - d. Control
 - e. Implementation
 - f. Monitoring and Review
4. Models and Checklists
 - a. 3P
 - i. PAVE
 - ii. CARE
 - iii. TEAM
 - b. AC 60-22, Aeronautical Decision Making
 - i. I AM SAFE
 - ii. DECIDE
 - c. Other Resources
5. Discussion

(Instructor Note: This lesson plan may be used in total or in part depending on the emphasis of the lecture. Trends or changes in the industry or equipment may require the presentation to focus on only part of the lesson plan. This subject may be combined with Units 1, 2, 3, 6, 8, 9, 10, 12 and 13 or any approved elective presentation where risk is essential to the topic.)

UNIT 12

LESSON TITLE: TAKEOFFS/LANDINGS/LOW ALTITUDE MANEUVERING

LESSON OBJECTIVE: At the conclusion of this unit the course attendee will have a fundamental understanding of the difficulties involved in teaching proper takeoff, landing or low altitude maneuvering techniques; the skills required and the approaches available for teaching these techniques.

COMPLETION STANDARD: The course attendee must score a minimum of 70% on any written or oral test given.

PRESENTATION METHOD: Lecture/discussion with or without visual aids.

TIME ALLOWED: Minimum 30 minutes.

UNIT 12: TAKEOFFS/LANDINGS/LOW ALTITUDE MANEUVERING

1. Current Accident Trends
 - a. Leading Causes
 - b. Emphasis in Training
2. Instructor/Student Interaction
 - a. Challenges to Students
 - b. Challenges to Instructors
 - c. Incorporating Scenario-Based Instruction
3. Developing Necessary Skills
 - a. Factors Affecting Development of Good Instructors
 - b. Techniques for Training Good Instructors
4. Resources for Instructors
 - a. FAA
 - b. Industry
 - c. Other
5. Discussion

(Instructor Note: This lesson plan may be used in total or in part depending on the emphasis of the lecture. Trends or changes in the industry or equipment may require the presentation to focus on only part of the lesson plan. This subject may be combined with Units 1, 2, 3, 4, 6, 8, 9, 10, and 11 or any approved elective presentation where training within this environment is essential to the topic.)

UNIT 13

LESSON TITLE: RUNWAY INCURSIONS

LESSON OBJECTIVE: At the conclusion of this unit the course attendee will have a fundamental understanding of the airport environment, associated hazards and the pilot's role in avoiding Runway Incursions.

COMPLETION STANDARD: The course attendee must score a minimum of 70% on any written or oral test given.

PRESENTATION METHOD: Lecture/discussion with or without visual aids.

TIME ALLOWED: Minimum 30 minutes.

UNIT 13: RUNWAY INCURSIONS

1. Definition of Runway Incursion
 - a. Causes
 - b. Operator
 - c. Controller
 - d. Ground Personnel
2. Airport/Runway Familiarization
 - a. Signs and Markings
 - b. Lighting
 - c. Low Visibility Operations
3. Preflight Planning
 - a. Notices to Airmen (NOTAM)
 - b. Airport/Facility Directory (A/FD)
 - c. Aeronautical Information Manual (AIM)
 - d. Other Resources
4. Making the Aircraft Visible
5. Land and Hold Short (LAHSO) Procedures
6. Airport Security
7. Situational Awareness
 - a. Instructional Techniques
 - b. Environmental "Traps"
 - c. CRM

(Instructor Note: This lesson plan may be used in total or in part depending on the emphasis of the lecture. Trends or changes in the industry or equipment may require the presentation to focus on only part of the lesson plan. This subject may be combined with Units 1, 2, 3, 5, 9, 10, 11 and 12 or any approved elective presentation where training within this environment is essential to the topic.)

UNIT 14

LESSON TITLE: PILOT PROFICIENCY WINGS PROGRAM

LESSON OBJECTIVE: At the completion of this unit the course attendee will have a fundamental understanding of the FAA Wings program.

COMPLETION STANDARD: The course attendee must score a minimum of 70% on any written or oral test given.

PRESENTATION METHOD: Lecture/discussion with or without visual aids.

TIME ALLOWED: Minimum 30 minutes.

UNIT 14: PILOT PROFICIENCY WINGS PROGRAM

1. Program in Transition
2. Structure
 - a. Basic
 - b. Advanced
 - c. Master
 - d. Emphasis
 - e. Standards of Achievement
 - f. Record Keeping and Verification
3. Online Access
 - a. Student
 - b. Instructor
 - c. Faasafety.gov
4. New Wings vs. Old
 - a. No “wings” Awarded
 - b. Biennial Flight Review
 - c. Benefits to Students and Instructors

(Instructor Note: This lesson plan may be used in total or in part depending on the emphasis of the lecture. Trends or changes in the industry or equipment may require the presentation to focus on only part of the lesson plan. This subject may be combined with Units 1, 2, 3, 9, and 10 or any approved elective presentation where training is essential to the topic.)

UNIT 15

LESSON TITLE: FAASTeam

LESSON OBJECTIVE: At the completion of this unit the course attendee will have a fundamental understanding of what the FAASTeam is, its purpose and who their FAASTeam representative is.

PRESENTATION METHOD: Lecture/discussion with or without visual aids.

TIME ALLOWED: Minimum 30 minutes.

UNIT 15: FAASTeam

1. What is the FAA Safety Team (FAASTeam)?
 - a. Regional FAASTeam Office
 - b. FAASTeam Program Managers
 - c. FAASTeam Members
 - d. FAASTeam Representatives
 - e. FAASTeam Industry Members
 - f. FAASTeam Affiliates
2. Purpose of the FAASTeam
 - a. FAA
 - b. Individuals
 - c. Industry
3. Participation
 - a. Why?
 - b. Instructors
 - c. Students
 - d. Pilots
4. Resources
 - a. FAASTeam Safety Offices
 - b. FAASafety.gov

(Instructor Note: This lesson plan may be used in total or in part depending on the emphasis of the lecture. Trends or changes in the industry or equipment may require the presentation to focus on only part of the lesson plan. This subject may be combined with any Unit in this syllabus or any approved elective presentation where training resources are essential to the topic.)

In accordance with Appendix 2, "Recommended FIRC Elective Topics," these lesson plans are approved for use in this Training Course Outline whether presented in conjunction with a core unit or presented in a "stand alone" format. Those topics not listed in Appendix 2 are marked with an asterisk (*).

- Elective 1: PRACTICAL TEST STANDARDS
- Elective 2: NATIONAL AIRSPACE SYSTEM
- Elective 3: TEACHING FUEL MANAGEMENT
- Elective 4: MOUNTAIN FLYING
- Elective 5: SEARCH AND RESCUE - ELTS

ELECTIVE 1: PRACTICAL TEST STANDARDS

LESSON OBJECTIVE: At the completion of this unit, the attendee will have a fundamental understanding of the Practical Test Standards and their use in the training environment.

COMPLETION STANDARD: The course attendee must score a minimum of 70% on any written or oral test given.

PRESENTATION METHOD: Lecture/discussion with or without visual aids.

TIME ALLOWED: Minimum 30 minutes.

ELECTIVE 1: PRACTICAL TEST STANDARDS

1. Practical Test Standards
 - a. Concept
 - b. Amendments
 - c. Changes
2. Areas of Emphasis
 - a. Night Flying (to include cross-country)
 - b. Instrument flying (full and partial panel)
 - c. Abnormal and emergency procedures
 - d. Stall/Spin Awareness
 - e. Spatial Disorientation
 - f. Wake Turbulence Avoidance
 - g. Low Level Wind Shear
 - h. In-flight Collision Avoidance
 - i. Stabilized Approach
 - j. Crew Resource Management
 - k. Runway Incursion Avoidance
 - l. Unusual Attitudes and Recoveries
 - m. Flight Under Abnormal or Emergency Conditions
 - n. Decent
 - o. Approach and Landing
 - p. Systems and Equipment Malfunctions
 - q. Emergency Equipment and Survival Gear
 - r. Checklist Usage
3. Preparation for Practical Test
 - a. Use of Checklist
 - b. 8710-1
 - c. IACRA
 - d. Instructor Responsibilities
 - e. Student Responsibilities
4. Problem Areas and Trends
5. Resources
6. Discussion

(Instructor Note: This lesson plan may be used in total or in part depending on the emphasis of the lecture. Trends or changes in the industry or equipment may require the presentation to focus on only part of the lesson plan. This subject may be combined with any Unit in this syllabus or any approved elective presentation where practical test preparation is essential to the topic.)

ELECTIVE 2: NATIONAL AIRSPACE SYSTEM

LESSON OBJECTIVE: At the completion of this unit the attendee will have a fundamental understanding of the concept and use of the National Airspace System.

COMPLETION STANDARD: The course attendee must score a minimum of 70% on any written or oral test given.

PRESENTATION METHOD: Lecture/discussion with or without visual aids.

TIME ALLOWED: Minimum 30 minutes.

UNIT 5: NATIONAL AIRSPACE SYSTEM

1. Airspace classifications
 - a. Categories of Airspace
 - b. Types of Airspace
 - c. Classes of Airspace
 - d. VFR Corridors, Transition Routes and Flyways
 - e. Special Use Airspace
 - f. Other Airspace
2. "Hot Button" Issues
 - a. Prohibited Areas
 - b. Restricted Areas
 - c. Temporary Flight Restricted Airspace
 - d. Flight Restricted Zones
 - e. National Security Areas
3. Visibility Minimums and Cloud Clearance Requirements
4. Transponder with Mode C Requirements

(Instructor Note: This lesson plan may be used in total or in part depending on the emphasis of the lecture. Trends or changes in the industry or equipment may require the presentation to focus on only part of the lesson plan. This subject may be combined with any Unit in this syllabus or any approved elective presentation where knowledge of the National Airspace System is essential to the topic.)

ELECTIVE 3: TEACHING FUEL MANAGEMENT

LESSON OBJECTIVE: At the completion of this unit the course attendee will have a fundamental understanding of the concept of fuel management, refueling precautions and hazards.

PRESENTATION METHOD: Lecture/discussion with or without visual aids.

TIME ALLOWED: Minimum 30 minutes.

ELECTIVE 3: TEACHING FUEL MANAGEMENT

1. Trends in Fuel-Related Accidents
2. Fuel Awareness – What Do You Need to Know?
3. Background
 - a. AvGas
 - b. Jet Fuel
 - c. Auto Gas
4. Misfueling
 - a. Nozzles
 - b. Results of Using the Wrong Fuel
 - c. How to Avoid Misfueling
5. Obtaining Maximum Performance
6. Estimating Fuel Consumption
7. Extending Your Range
8. Review Recent Accidents
9. Discussion

(Instructor Note: This lesson plan may be used in total or in part depending on the emphasis of the lecture. Trends or changes in the industry or equipment may require the presentation to focus on only part of the lesson plan. This subject may be combined with any Unit in this syllabus or any approved elective presentation where fuel management is essential to the topic.

ELECTIVE 4: MOUNTAIN FLYING

LESSON OBJECTIVE: At the completion of this unit the course attendee will have a fundamental understanding of the nuances and hazards of flying in mountainous terrain and the necessity for a thorough knowledge of the conditions that affect safe flight.

PRESENTATION METHOD: Lecture/discussion with or without visual aids.

TIME ALLOWED: Minimum 30 minutes.

ELECTIVE 4: MOUNTAIN FLYING

1. Why Mountain/Canyon Flying?
2. Why Special Training?
3. Low Altitude Maneuvering
 - a. Know Yourself
 - b. Know Your Aircraft
4. Flying the Stabilized Approach
 - a. Pitch Attitude
 - b. Airspeed
5. Turn Radius vs. Airspeed
 - a. Slow Down
 - b. The “Emergency Turn”
6. Choosing a Time to Fly
7. Discussion

(Instructor Note: This lesson plan may be used in total or in part depending on the emphasis of the lecture. Trends or changes in the industry or equipment may require the presentation to focus on only part of the lesson plan. This subject may be combined with any Unit in this syllabus or any approved elective presentation where mountain flying or similar techniques is essential to the topic.

ELECTIVE 5: SEARCH AND RESCUE - ELTS

LESSON OBJECTIVE: At the completion of this unit the course attendee will have a fundamental understanding of ELTs in relation to the SAR process and the advent of changes scheduled for February 1, 2009.

PRESENTATION METHOD: Lecture/discussion with or without visual aids.

TIME ALLOWED: Minimum 30 minutes.

ELECTIVE 5: SEARCH AND RESCUE - ELTS

1. Search and Rescue Satellite Aided Tracking (SARSAT)
 - a. Cospas-Sarsat
 - b. Mission
 - c. System Overview
2. Emergency Beacons
 - a. 121.5 MHz
 - i. Applications
 - ii. Technology
 - iii. Coverage “Holes”
 - b. 243.0 MHz
 - c. 406 MHz
 - i. Technology
 - ii. Accuracy
3. COSPAS-SARSAT System
 - a. Satellites
 - i. Low Earth Orbiting (LEO)
 - ii. Geostationary Earth Orbiting Search and Rescue (GEOSAR)
 - b. Ground Stations
 - c. Mission Control Centers (MCC)
 - d. Rescue Coordination Centers (RCC)
 - e. In Idaho-Idaho Division of Aeronautics
 - f. 121.5 MHz – 243.0 MHz Phaseout
 - i. Limitations
 - ii. Advantages
 - iii. February 1, 2009

(Instructor Note: This lesson plan may be used in total or in part depending on the emphasis of the lecture. Trends or changes in the industry or equipment may require the presentation to focus on only part of the lesson plan. This subject may be combined with any Unit in this syllabus or any approved elective presentation where Search and Rescue or ELTs is essential to the topic.)

III. TEST POOL	
Question (Answer Highlighted)	Reference
Technically Advanced Aircraft (TAA)	
<p>What are the basic requirements to be considered a Technically Advanced Aircraft (TAA)?</p> <ol style="list-style-type: none"> 1. GPS navigator with a moving map. 2. An autopilot. 3. Deployable parachute. 4. All of the above. 	<p>"FITs Questions and Answers", FITS website</p>
<p>What typically separates "legacy" aircraft from new TAA?</p> <ol style="list-style-type: none"> 1. Composite structure. 2. Retractable landing gear and canards. 3. Speed, range and altitude. 4. They're pretty. 	<p>"FITs Questions and Answers", FITS website</p>
FAA/Industry Training Standards	
<p>FITS is a joint government-stakeholder initiative designed to reduce the total number of general aviation accidents. With this program, it is the FAA's intent to</p> <ol style="list-style-type: none"> 1. rewrite all training directives and standards to reflect the emphasis and documentation now required under FAR Parts 121 and 135. 2. shift responsibility and oversight of training and certification of all General Aviation pilots from the FAA to the aviation industry. 3. improve pilot learning to safely, competently, and efficiently operate a technically advanced piston or light jet aircraft in the modern National Airspace System (NAS). 	<p>FAA FITS Website</p>
<p>Scenario-based training uses a highly structured script of simulated experiences to address flight-evaluation in an operational environment.</p> <ol style="list-style-type: none"> 1. True. 2. False. 	<p>"FITs Questions and Answers", FITS website</p>
Sport Pilot	
<p>A person with a Sport Pilot Certification, using a current and valid U.S. driver's license, must</p> <ol style="list-style-type: none"> 1. comply with each restriction and limitation imposed on their driver's license. 2. not have been denied their most recent application for a medical certificate. 3. not have their most recently issued medical certificate suspended or revoked. 4. all of the above. 	<p>"Sport Pilot and Sport Pilot Flight Instructor Certification" pamphlet, FAA Website</p>

<p>Not more than what maximum takeoff weight must an aircraft, intended for operation on water, other than a helicopter or powered-lift, continue to meet since original certification to be considered a Light Sport Aircraft?</p> <ol style="list-style-type: none"> 1. 660 pounds 2. 1320 pounds 3. 1430 pounds 4. None of the above 	<p>"Sport Pilot and Sport Pilot Flight Instructor Certification" pamphlet, FAA Website</p>
Security Related Special Use Airspace	
<p>The Flight Restricted Zone (FRZ) includes</p> <ol style="list-style-type: none"> 1. all airspace from the surface to FL180, within 15NM of the Washington VOR/DME. 2. all airspace from the surface to 10,000 ft MSL, within 15NM of the Washington VOR/DME. 3. all airspace from the surface to the top of the tallest antenna at CIA headquarters. 	<p>Nov/Dec 2003 Article on "TFR-Airspace Obstacles and TFR Trivia" by Michael W. Brown</p>
<p>Currently, the only non-costal Air Defense Identification Zone (ADIZ) in the contiguous 48 states is located at</p> <ol style="list-style-type: none"> 1. New York. 2. Crawford, Texas. 3. Washington DC. 	<p>Nov/Dec 2003 Article on "TFR-Airspace Obstacles and TFR Trivia" by Michael W. Brown</p>
<p>How many types of TFRs are there?</p> <ol style="list-style-type: none"> 1. 9. 2. 8. 3. Depends on the time of the year. 	<p>USFS Airspace Brief</p>
<p>What is the standard TFR size?</p> <ol style="list-style-type: none"> 1. 5 miles 2. There is no standard size 3. 10 miles 	<p>USFS Airspace Brief</p>
Transportation Security Administration	
<p>Recurrent FSSA training updates should include?</p> <ol style="list-style-type: none"> 1. Any new security measures or procedures implemented by the flight school 2. Any security incidents at the flight school plus any lessons learned. 3. Any new threats posed by or incidents involving GA contained on TSA web site. 4. Any new TSA guidelines or recommendations concerning the security of GA aircraft, airports, or flight schools. 5. All of the above. 	<p>Presentation by Regional TSA Representative</p>

<p>Flight Schools, Training Centers, or Certified Flight Instructor (aka: FTP) must perform a visual inspection of the required U.S. Citizenship or Nationality documents for proof of status prior to conducting training.</p> <ol style="list-style-type: none"> 1. True. 2. False. 	<p>Presentation by Regional TSA Representative</p>
<p>How long must A CFI maintain a copy of the documents provided for the verification of U.S. citizenship?</p> <ol style="list-style-type: none"> 1. 1 year. 2. 2 years. 3. 5 years. 4. 10 years. 	<p>Presentation by Regional TSA Representative</p>
<p>GPS Navigation</p>	
<p>A primary consideration when teaching students to navigate with a VFR GPS is</p> <ol style="list-style-type: none"> 1. CFIT. 2. airspace awareness. 3. RAIM. 	<p>FAA Presentation</p>
<p>A GPS approach with LPV minimums must be flown using</p> <ol style="list-style-type: none"> 1. lateral and vertical deviation indicators 2. lateral deviation indicator only 3. lateral and vertical deviation indicators, but vertical is only for situational awareness 	<p>FAA Presentation</p>
<p>Integrated Airman Certification and/or Rating Application (IACRA)</p>	
<p>Examples of all common endorsements can be found in the current issue of</p> <ol style="list-style-type: none"> 1. AC61-97, Appendix 1. 2. AC91-67, Appendix 1. 3. AC61-65, Appendix 1. 	<p>FAA-H-8083-9, Chapter 8</p>
<p>Once the recommending instructor has signed the IACRA 8710-1, changes to the application may be made by</p> <ol style="list-style-type: none"> 1. the examiner. 2. the applicant prior to the check ride. 3. completing a new 8710-1. 	<p>FAA Presentation</p>
<p>The applicant does not need to know the FAA's weather charts as long as they are familiar with DUATS weather graphics.</p> <ol style="list-style-type: none"> 1. True. 2. False. 	<p>FAA Presentation</p>

Aircraft Operational Limitations	
<p>The center of gravity of an aircraft can be determined by</p> <ol style="list-style-type: none"> 1. dividing total arm by total moment. 2. dividing total moment by total weight. 3. multiplying total arm by total weight. 	FAA-H-8083-1, Chapter 1
<p>An aircraft is loaded with the CG aft of the aft limit. What effect will this have on controllability?</p> <ol style="list-style-type: none"> 1. Stall and spin recovery may be difficult or impossible. 2. A stall will occur at a lower airspeed, but recovery will be easier because of reduced wing loading. 3. A stall will occur at a higher indicated airspeed due to the greater downloading on the elevator. 	AC 61-23C, Chapter 4
<p>If the static pressure tubes are broken inside a pressurized cabin during a high-altitude flight, the altimeter would probably indicate</p> <ol style="list-style-type: none"> 1. sea level. 2. lower than actual flight altitude. 3. higher than actual flight altitude. 	AC 61-23C, Chapter 3
<p>The first indication of carburetor icing in an aircraft equipped with a constant-speed propeller would most likely be a</p> <ol style="list-style-type: none"> 1. decrease in RPM. 2. decrease in manifold pressure. 3. rough running engine followed by loss of RPM. 	AC 61-23C, Chapter 2
<p>Which instrument would be affected by excessively low pressure in the airplane's vacuum system?</p> <ol style="list-style-type: none"> 1. Heading indicator. 2. Airspeed indicator. 3. Pressure altimeter. 	AC 61-23C, Chapter 3
Effective Teaching	
<p>Evaluation of demonstrated ability during flight instruction must be based upon</p> <ol style="list-style-type: none"> 1. the progress of the student. 2. the instructor's opinion concerning the maneuver(s). 3. established standards of performance. 	FAA-H-8083-9 Chapter 8
<p>In evaluating student demonstrations of piloting ability, it is important for the flight instructor to</p> <ol style="list-style-type: none"> 1. remain silent and observe. 2. keep the student informed of progress. 3. explain errors in performance immediately. 	FAA-H-8083-9 Chapter 8

Safety Trends in GA	
<p>When an airworthy aircraft is flown, under the control of a qualified pilot, into terrain (water or obstacles) with <u>inadequate</u> awareness on the part of the pilot of the impending collision, the accident is referred to as</p> <ol style="list-style-type: none"> 1. Controlled Flight into Terrain (CFIT). 2. continued VFR flight into IMC conditions. 3. a failure to communicate. 	AC 61-34, para 5a
<p>One of the leading causes of General Aviation Controlled Flight into Terrain (CFIT) accidents is</p> <ol style="list-style-type: none"> 1. fuel mismanagement. 2. improper operation of flight controls. 3. continued VFR flight into IMC. 	AC 61-34, para 8a
Risk Management/Risk Intervention Strategies	
<p>The second step in the risk management decision path is processing the risk level. This processing includes</p> <ol style="list-style-type: none"> 1. assessing the alternatives that can eliminate hazards 2. reviewing the pilot's experience and currency 3. devising actions that can mitigate risks 	Risk Management Presentation, Central Washington University
<p>Your student is planning a dual VFR cross country flight. Which of the following is an appropriate example of risk management training for the flight?</p> <ol style="list-style-type: none"> 1. Pull the mixture control to idle cut-off, fail the engine, and ask where the student would land. 2. Simulate a navigation receiver failure by turning off the VOR or GPS and have the student navigate by pilotage and dead reckoning 3. Intentionally plan a flight into IMC conditions and have the student fly by reference to the instruments. 	Risk Management Presentation, Central Washington University
Takeoffs/Landings/Low Altitude Maneuvering	
<p>30 degree bank angle is a _____ bank angle.</p> <ol style="list-style-type: none"> 1. Shallow 2. Medium 3. Steep 	Presentation by Chief Instructor, McCall Mountain/Canyon Flying Seminars
<p>A specific angle of bank and true airspeed will always produce the same rate of turn, regardless of aircraft type. If you increase only angle of bank, the _____ of turn will increase. If you increase only the true airspeed, the _____ of turn will increase.</p> <ol style="list-style-type: none"> 1. distance; time. 2. rate; radius. 3. angle; g forces. 4. radius; rate 	Presentation by Chief Instructor, McCall Mountain/Canyon Flying Seminars

Runway Incursions	
<p>The FAA defines a runway incursion as:</p> <ol style="list-style-type: none"> 1. Any occurrence at an airport involving an aircraft, vehicle, person, or object on the ground that creates a collision hazard or results in loss of separation with an aircraft taking off, or intending to take off, landing, or intending to land. 2. Any occurrence during an instrument approach where the landing aircraft descends below the applicable approach minimums without first attaining the required ceiling and visibility. 3. Any occurrence where a taxiing aircraft fails to maintain proper spacing on another aircraft, vehicle or object while maneuvering in a non-movement area. 	DOT/FAA Runway Incursions Brochure
<p>Detailed investigations of runway incursions have identified three major areas where pilots can help: Communications, Airport knowledge and</p> <ol style="list-style-type: none"> 1. proper aircraft lighting. 2. cockpit procedures for maintaining orientation. 3. prompt payment of all landing and ramp fees. 	DOT/FAA Runway Incursions Brochure
Pilot Proficiency Wings Program	
<p>When validating an airmen's flight activities under the new WINGS Pilot Proficiency Program, the CFI is required to</p> <ol style="list-style-type: none"> 1. provide training in accordance with the applicable syllabus. 2. verify the airmen's proficiency with respect to the training syllabus used. 3. complete an appropriate entry in the airmen's pilot log book for the training provided. 4. all of the above. 	FAAsteam WINGS Briefing
<p>There are three phases under the new WINGS Pilot Proficiency Program, Basic, Advanced and Master. Which phase meets the requirements of FAR 61.56 (e) in lieu of completing a flight review?</p> <ol style="list-style-type: none"> 1. Basic. 2. Advanced. 3. Master. 4. All of the above. 	FAAsteam WINGS Briefing
FAAsteam	
<p>The FAAsteam's mission is to improve the Nation's aviation safety record by conveying safety principles and practices through</p> <ol style="list-style-type: none"> 1. training. 2. outreach. 3. education. 4. all of the above. 	FAASafety.gov

<p>Which of the following new FAASafety tools are created specifically for the individual airman?</p> <ol style="list-style-type: none"> 1. Safety techniques. 2. Risk management tools. 3. Safety management system tools. 	FAASafety.gov
Practical Test Standards	
<p>The objective of the Practical Test Standards (PTS) is to ensure the certification of pilots at a high level of performance and proficiency, consistent with</p> <ol style="list-style-type: none"> 1. the time available. 2. safety. 3. their abilities. 	FAA-H-8083-9, Chapter 6
<p>Although the instructor should always train the student to the very highest level possible, the evaluation of the student is only in relation to the standards listed in the PTS. These standards are</p> <ol style="list-style-type: none"> 1. minimum standards. 2. represent the floor of FAA acceptability. 3. the acceptable level that must be met and there are no requirements to exceed them. 	FAA-H-8083-9, Chapter 6
National Airspace System	
<p>Normally the vertical limits of Class D airspace extend up to and including how many feet above the surface?</p> <ol style="list-style-type: none"> 1. 2,500 feet. 2. 3,000 feet. 3. 4,000 feet. 	AIM 3-2-5
<p>When a control tower, located on an airport within Class D airspace ceases operation for the day, what happens to the airspace designation?</p> <ol style="list-style-type: none"> 1. The airspace designation normally will not change. 2. The airspace remains Class D airspace as long as a weather observer or automated weather system is available. 3. The airspace reverts to Class E or a combination of Class E and G airspace during the hours the tower is not in operation. 	AIM 3-2-5
<p>Which equipment is required when operating an aircraft within Class B airspace?</p> <ol style="list-style-type: none"> 1. A VOR or TACAN receiver. 2. Two-way radio communications. 3. Two-way radio communications and transponder with encoding altimeter. 	14 CFR, 91.131(d)

Teaching Fuel Management	
<p>What color coding will be found on a fuel truck or self-service refueling island to identify AvGas?</p> <ol style="list-style-type: none"> 1. Green. 2. Black. 3. Red. 	<p>AOPA Safety Brief #4 "Misfueling"</p>
Mountain Flying	
<p>While holding a constant angle of bank in a coordinated turn, the displacement of the turn needle will</p> <ol style="list-style-type: none"> 1. increase as airspeed decreases. 2. increase as airspeed increases. 3. remain constant regardless of airspeed. 	<p>FAA-H-8083-3, Chapter 4</p>
<p>Which is the best technique for minimizing the wing-load factor when flying in severe turbulence?</p> <ol style="list-style-type: none"> 1. Control airspeed with power, maintain wings level, and accept variations of altitude. 2. Control airspeed as closely as possible with elevator and power, and accept variations of bank and altitude. 3. Set power and trim to obtain an airspeed at or below maneuvering speed, maintain wings level, and accept variations of airspeed and altitude. 	<p>FAA-H-8083-25</p>
<p>Consider the following statements about mountain waves:</p> <ul style="list-style-type: none"> ▪ Mountain waves always develop in a series on the upwind (windward) side of mountain ridges. ▪ In a mountain wave, the air dips sharply downward immediately to the lee side of a ridge, before rising and falling in a wave motion for a considerable distance downstream. ▪ If the air is humid and the wave is of large amplitude, lenticular (lens-shaped) clouds mark the wave's crest. ▪ In a typical wave, the greatest amplitude is seldom more than 1,000 feet above the ridge crest elevation. <p>From the statements above, select those which are true.</p> <ol style="list-style-type: none"> 1. 2 and 3. 2. 1, 2, and 3. 3. 1, 3, and 4. 	<p>AC 00-6A, Chapter 9</p>
<p>What is Power Loading?</p> <ol style="list-style-type: none"> 1. The amount of weight the available horse power will carry. 2. The amount of horse power available after density altitude is computed. 3. The amount of weight you must remove from your aircraft to operate at a given density altitude. 	<p>Presentation by Chief Instructor, McCall Mountain/Canyon Flying Seminars</p>

<p>Many subject areas of aerodynamics and aircraft performance will emphasize _____ and _____ as the most important factors requiring consideration.</p> <ol style="list-style-type: none"> 1. Power and pressure altitude. 2. Density altitude and temperature. 3. Loading and altitude. 	<p>Presentation by Chief Instructor, McCall Mountain/Canyon Flying Seminars</p>
<p>When flying low over hilly terrain, ridges, or mountain ranges, the greatest potential danger from turbulent air currents will usually be encountered on the</p> <ol style="list-style-type: none"> 1. leeward side when flying with the wind. 2. leeward side when flying into the wind. 3. windward side when flying into the wind. 	<p>AC 00-6A, Chapter 9</p>
Search and Rescue - ELTs	
<p>When are emergency locator transmitter batteries required to be replace or recharged?</p> <ol style="list-style-type: none"> 1. Every 24 months. 2. After 1 cumulative hour of use. 3. After 75% of their useful life has expired. 	<p>14 CFR 91.207(c)(1)</p>
<p>When will the COSPAS-SARSAT system no longer detect 121.5 MHz beacons?</p> <ol style="list-style-type: none"> 1. February 1, 2009 2. March 1, 2009 3. After the FAA's next continuing resolution. 	<p>NOAA Website</p>

(sample)
Stage Test 1
FLIGHT INSTRUCTOR REFRESHER CLINIC

1. The objective of the Practical Test Standards (PTS) is to ensure the certification of pilots at a high level of performance and proficiency, consistent with
 - a. the time available.
 - b. safety.
 - c. their abilities.
2. Although the instructor should always train the student to the very highest level possible, the evaluation of the student is only in relation to the standards listed in the PTS. These standards are
 - a. minimum standards.
 - b. represent the floor of FAA acceptability.
 - c. the acceptable level that must be met and there are no requirements to exceed them.
3. When are emergency locator transmitter batteries required to be replaced or recharged?
 - a. Every 24 months.
 - b. After 1 cumulative hour of use.
 - c. After 75 percent of their useful life has expired.
4. The first indication of carburetor icing in an aircraft equipped with a constant-speed propeller would most likely be a
 - a. decrease in RPM.
 - b. decrease in manifold pressure.
 - c. rough running engine followed by loss of RPM.
5. When an airworthy aircraft is flown, under the control of a qualified pilot, into terrain (water or obstacles) with inadequate awareness on the part of the pilot of the impending collision, the accident is referred to as
 - a. Controlled Flight into Terrain (CFIT).
 - b. continued VFR flight into IMC conditions.
 - c. a failure to communicate.

6. What is the correct fuel truck or fuel island color coding that must match the color coding on your Cherokee Six's wing fueling decal?
 - a. Green
 - b. Black
 - c. Red

7. What are the basic requirements to be considered a Technically Advanced Aircraft (TAA)?
 - a. GPS navigator with a moving map.
 - b. An autopilot.
 - c. Deployable parachute.
 - d. All of the above.

8. FITS is a joint government-stakeholder initiative designed to reduce the total number of general aviation accidents. With this program, it is the FAA's intent to
 - a. rewrite all training directives and standards to reflect the emphasis and documentation now required under FAR Parts 121 and 135.
 - b. shift responsibility and oversight of training and certification of all General Aviation pilots from the FAA to the aviation industry.
 - c. improve pilot learning to safely, competently, and efficiently operate a technically advanced piston or light jet aircraft in the modern National Airspace System (NAS).

9. A person with a Sport Pilot Certification, using a current and valid U.S. driver's license, must
 - a. comply with each restriction and limitation imposed on their driver's license.
 - b. not have been denied their most recent application for a medical certificate.
 - c. not have their most recently issued medical certificate suspended or revoked.
 - d. all of the above.

10. Currently, the only non-costal Air Defense Identification Zone (ADIZ) in the contiguous 48 states is located at
 - a. New York.
 - b. Crawford, Texas.
 - c. Washington DC.

11. Flight Schools, Training Centers, or Certified Flight Instructor (aka: FTP) must perform a visual inspection of the required U.S. Citizenship or Nationality documents for proof of status prior to conducting training.
- a. True.
 - b. False.
12. A primary consideration when teaching students to navigate with a VFR GPS is
- a. CFIT.
 - b. airspace awareness.
 - c. RAIM.
13. The center of gravity of an aircraft can be determined by
- a. dividing total arm by total moment.
 - b. dividing total moment by total weight.
 - c. multiplying total arm by total weight.
14. In evaluating student demonstrations of piloting ability, it is important for the flight instructor to
- a. remain silent and observe.
 - b. keep the student informed of progress.
 - c. explain errors in performance immediately.
15. A specific angle of bank and true airspeed will always produce the same rate of turn, regardless of aircraft type. If you increase only angle of bank, the _____ of turn will increase. If you increase only the true airspeed, the _____ of turn will increase.
- a. distance; time.
 - b. rate; radius.
 - c. angle; g forces.
 - d. radius; rate