

Section 3 - FITS TAA Recurrent Syllabus

The FITS Recurrent Training Program is designed to be a scenario-based academic and flight refresher program for pilots of Mooney aircraft.

Successful completion of the program will satisfy the requirements of 14 CFR 56(e), Flight Review/Pilot Proficiency Award Program.

PREREQUISITES

Attendance in the Flight Training Inc. (FTI) Mooney FITS TAA Recurrent Training Program requires:

- Graduation from the FTI Mooney Initial Transition Training Program, or
- 100 hours Pilot-in-Command in the model of Mooney for which recurrent training is requested
- A valid pilot certificate and current medical certificate
- Photo identification
- A normally licensed and airworthy Mooney aircraft

STRUCTURE

The program consists of two learning modules – the Academic Module and the Flight Module that will be accomplished as a single program. The Academic Module will consist of approximately 8 hours of scenario-based aircraft systems and operation review to be completed with a written exam corrected to 100%.

The scenarios will be presented in a variety of ways:

“Single String” lesson. The pilot is presented with a flight scenario in PowerPoint and asked to make decisions at each point in the scenario. These decisions may involve go/no go issues, weather divert decisions, or simple systems configuration, integration and emergency items. As the recurrent pilot answers each set of questions, they will receive instant feedback on their response. After the decision is evaluated, the scenario will continue in a predetermined pattern. The pilot will be graded on the accuracy of the answers given and corrected to 100%.

“Multiple String” lesson. Similar to the “single string” lesson, each presentation will involve a series of decision points. Each will consist of a narrative followed by a question requiring the pilot to select one of three decisions. Once the decision is made, the pilot will receive detailed feedback on the quality of his or her decision (good, fair or poor). Once the decision is made, it can not be retracted until the scenario is ended. After each decision point, the pilot will be confronted with a new set of

decisions based on the previous decision. It will again consist of three choices and selection of any choice will result in a decision grade (good, fair or poor) and a new set of decisions. Much like an actual flight, each decision is the result of the decisions made before, the pilot's knowledge of the aircraft, and the conditions present at the time of the decision. The scenario will not be considered complete unless the pilot achieves a successful outcome. The pilot will be graded on the accuracy of the answers given and corrected to 100%.

“Hypothetical Case Study” lesson. The pilot is presented with a case study based on a series of incidents/accidents from the NTSB files. All of these occurrences will be sterilized to protect privileged information and customized to bring out seasonal and topical learning objectives. Once the pilot has read the scenario, a series of detailed questions will be presented. The questions will require that pilot to make decisions as if he or she were in the scenario. Additional detailed cognitive questions will be included to ensure knowledge integration. The pilot will be graded on the accuracy of the answers given and corrected to 100%.

The Flight Module consists of approximately 4 hours of flight training with a TAA-recognized Flight Training Inc. instructor pilot. A detailed briefing and post flight discussion will accompany each flight.

Section 4 - FITS TAA Scenario Based Recurrent Training Syllabus Academic Module

ACADEMIC MODULE **FITS MOONEY SYLLABUS - SCENARIO BASED RECURRENT** **TRAINING**

LESSON 1

OBJECTIVE

The pilot in training (PT) will demonstrate an in depth understanding of the Mooney aircraft systems operation, limitations and emergency procedures and will utilize the resources available to resolve aircraft difficulties.

The pilot will demonstrate an understanding of the aircraft operations in the airspace system and will make fact-based decisions in a variety of mission scenarios.

The pilot will practice proper SRM techniques in order to deal with the information and prioritize the variety of tasks required.

“Single String” lesson

In this lesson, the pilot is presented a flight scenario in PowerPoint and asked to make decisions at each point in the scenario. These decisions may involve go/no go issues, weather divert decisions, or simple systems configuration, integration and emergency items. As the recurrent pilot answers each set of questions they will receive instant feedback on their response. After the decision is evaluated, the scenario will continue in a predetermined pattern. The pilot will be graded on the accuracy of the answers given and corrected to 100%.

PREREQUISITES

None

PILOT IN TRAINING PREPARATION

Review the following:

- Normal operating procedures found in the aircraft’s Pilot’s Operating Handbook (POH)
 - Normal and emergency procedures
 - Aircraft and avionics systems displays and procedures
- Applicable aviation regulations and FAA documents

Desired Recurrent Pilot in Training (PT) Scenario Outcomes - The object of scenario-based training is a change in the thought processes, habits, and behaviors of the students during the planning and execution of the scenario. Since the training is student centered, the success of the training is measured in the following desired student outcomes:

- **Describe** – at the completion of the scenario, the PT will be able to describe the physical characteristics and cognitive elements of the scenario activities.
- **Explain** – at the completion of the scenario, the PT will be able to describe the scenario activity and understand the underlying concepts, principles, and procedures that comprise the activity.
- **Practice** – at the completion of the scenario, the student will be able to practice the scenario activity with little input from the CFI. The PT with coaching and/or assistance from the CFI will quickly correct minor deviations and errors identified by the CFI.
- **Perform** - at the completion of the scenario, the PT will be able to perform the activity without assistance from the CFI. Errors and deviations will be quickly identified and corrected by the PT. At

no time will the successful completion of the activity be in doubt. (“Perform” is used to signify that the PT is satisfactorily demonstrating proficiency in traditional piloting and systems operation skills).

- **Manage/Decide** - at the completion of the scenario, the PT will be able to correctly gather the most important data available both within and outside the cockpit, identify possible courses of action, evaluate the risk inherent in each course of action, and make the appropriate decision. (“Manage/Decide” is used to signify that the PT is satisfactorily demonstrating good SRM skills).

ACADEMIC MODULE
FITS MOONEY SYLLABUS - SCENARIO BASED RECURRENT
TRAINING

LESSON 2

OBJECTIVE

The pilot in training (PT) will demonstrate an in depth understanding of the Mooney aircraft systems operation and limitation, the airspace systems and the resources available to resolve aircraft, weather and airspace situations that may occur during the course of normal mission profiles.

The pilot will demonstrate the ability to make accurate, fact-based decisions in a variety of mission scenarios.

The pilot will practice proper SRM techniques in order to deal with the information and prioritize the variety of tasks required.

“Multiple String” lesson

In this lesson, the pilot is presented with a series of decision points. Each will consist of a narrative, followed by a question requiring the pilot to select one of three decisions. Once a decision is made, the pilot will receive detailed feedback on the quality of the decision (good, fair or poor). Once a decision is made, it cannot be retracted until the scenario is ended. After each decision point, the pilot will be confronted with a new set of decisions based on the previous decision. It will again consist of three choices and selection of any choice will result in a decision grade (good, fair or poor) and a new set of decisions. Much like an actual flight, each decision is a result of decisions made before, the pilot’s knowledge

of the aircraft, and the conditions present at the time of the decision. Once the pilot has completed the scenario to a successful landing, or off-airport landing, the pilot will be allowed to restart the scenario. The scenario will not be considered complete until the pilot achieves a successful outcome. The pilot will be graded on the accuracy of the answers given and corrected to 100%.

PREREQUISITES

None

PILOT IN TRAINING PREPARATION

Review the following:

- Normal operating procedures found in the aircraft's Pilot's Operating Handbook (POH)
 - Normal and emergency procedures
 - Aircraft and avionics systems displays and procedures
- Applicable aviation regulations and FAA documents

Desired Recurrent Pilot in Training (PT) Scenario Outcomes - The object of scenario-based training is a change in the thought processes, habits, and behaviors of the students during the planning and execution of the scenario. Since the training is student centered, the success of the training is measured in the following desired student outcomes:

- **Describe** – at the completion of the scenario, the PT will be able to describe the physical characteristics and cognitive elements of the scenario activities.
- **Explain** – at the completion of the scenario, the PT will be able to describe the scenario activity and understand the underlying concepts, principles, and procedures that comprise the activity.
- **Practice** – at the completion of the scenario, the student will be able to practice the scenario activity with little input from the CFI. The PT with coaching and/or assistance from the CFI will quickly correct minor deviations and errors identified by the CFI.
- **Perform** - at the completion of the scenario, the PT will be able to perform the activity without assistance from the CFI. Errors and deviations will be quickly identified and corrected by the PT. At no time will the successful completion of the activity be in doubt. ("Perform" is used to signify that the PT is satisfactorily demonstrating proficiency in traditional piloting and systems operation skills).

- **Manage/Decide** - at the completion of the scenario, the PT will be able to correctly gather the most important data available both within and outside the cockpit, identify possible courses of action, evaluate the risk inherent in each course of action, and make the appropriate decision. (“Manage/Decide” is used to signify that the PT is satisfactorily demonstrating good SRM skills).

FLIGHT MODULE
FITS MOONEY SYLLABUS - SCENARIO BASED RECURRENT
TRAINING

LESSON 1

OBJECTIVE

The PT will demonstrate proficiency in flight maneuvers, systems and regulatory knowledge, Single Pilot Resource Management (SRM) and Aeronautical Decision Making (DM). The PT will demonstrate practical knowledge of Risk Management (RM) and the factors associated with the geographical region, season and type of flight operations.

PREFLIGHT

The PT and the instructor will review the intended flight scenario in detail, identifying areas of higher risk and potential decision making points. The instructor will pose a series of realistic weather, air traffic control and flight maneuvers challenges to the PT while helping them find successful outcomes.

FLIGHT SCENARIO

The PT will plan a flight profile typical of the way that he or she employs the aircraft or in a situation that the PT has little experience but wants to learn more. The profile should be a cross country scenario (VFR or IFR as appropriate) and should involve arrival and departure from two separate airports. The flight should be planned to include the use of Class B and C airspace if possible.

The PT will perform all preflight procedures, engine start, avionics set-up, taxi and before takeoff check procedures.

The PT will perform a normal takeoff and departure to a safe altitude. Aircraft systems, avionics and autopilot functions will all be

demonstrated during the cruise, descent and normal landing phases of flight.

At the destination airport, the IFR PT will accomplish an autopilot coupled ILS approach and a full missed approach to the holding pattern. A second ILS will be flown to a full stop landing.

The VFR PT will accomplish a normal approach to a rejected landing and then re-enter the downwind pattern for a normal landing to a full stop.

A different route should be used for the return trip and an actual or simulated crosswind takeoff should be performed. After the aircraft is established in cruise, the autopilot should be turned off and the flight continued in the manual mode.

The IFR PT will accomplish a manual precision or non-precision approach (as appropriate) at the destination to an actual or simulated crosswind landing.

The VFR PT will accomplish a manual descent to an actual or simulated crosswind landing.

PREREQUISITES

Completion of the Academic Module.

PILOT IN TRAINING PREPARATION

Review the following:

- a. Normal operating procedures found in the aircraft's POH.
- b. Airport information for the departure and destination airports.
- c. Route of flight information for both trips.
- d. Aircraft and avionics systems display and procedures.

BRIEFING ITEMS

A. INTIAL INTRODUCTION:

The PT should have a clear understanding that he or she is expected to conduct the entire flight profile as if alone in the aircraft. This should be an enjoyable opportunity for the PT and the instructor to share techniques, review procedures and learn about both the aircraft and the flight environment.

B. SINGLE PILOT RESOURCE MANAGEMENT (SRM)

1. Task Management
2. Automation Management
3. Risk Management and Aeronautical Decision Making
4. Situation Awareness
5. CFIT (if applicable)