

FLIGHT TRAINING

CAPSTONE II

EQUIPMENT

FLIGHT TRAINING CAPSTONE II EQUIPMENT

INDEX

The following pages comprise the flight training modules for the Capstone II Equipment. The modules are for Initial, Recurrent, and Requalification training and apply to all aircraft and airmen participating in Capstone. There are additional modules for aircraft flown with more than one flight deck crewmember and they address seat specific duties.

INTRODUCTION	F- 1
FORMAT	F- 2

PART A – VFR/IFR CAPSTONE FLIGHTS

Preflight planning	F-4
Capstone Equipment set up and tests.....	F-5
Pre Takeoff.....	F-6
Airport area operations	F-7
En Route operations.....	F-8
Diversions.....	F-9
Terrain Alerting.....	F-10
Traffic Alerting	F-11
Weather Information	F-12
Arrival (descent and approach).....	F-13
Airport area operations.....	F-14
Capstone reporting.....	F-15

PART B – MEL

Operations with inoperative Capstone components	F-16
---	------

PART C – MULTI CREW OPERATIONS ONLY

Assignment of Capstone duties by crew position.....	F-17
---	------

PART D - IFR MANEUVERS/PROCEDURES

IFR en route procedures	F-18
IFR GPS Approaches	F-19

**Capstone II
121/135 Training Program**

(Air Carrier Name inserted here)

F-1/R-01/2-20-03

INTRODUCTION

The flight training described herein will serve as the bases for standardized instruction and accomplishment of Capstone flight training. They will also serve as guidelines to achieve the highest level of proficiency and provide safe operations of the aircraft using Capstone Equipment. The flight training as outlined can be accomplished in revenue operations with the same limitations as would be imposed for Initial Operating Experience (IOE). Initial, Recurrent and Requalification flight training should be incorporated in the normal training program.

The flight training for Capstone Equipment must reference the Users Manuals for the Capstone Equipment in addition to the references to Commercial and Instrument Practical Test Standards the applicable titles contained in the Airline Transport Pilot Practical Test Standard, FAA-S-8081-5, shall apply to those crewmembers who are required to hold an Airline Transport Pilot Certificate as outlined in FAR Part 121 or 135 and the Company Operations Specifications. The acceptable performance guidelines shall be as contained in FAR Part 121, FAR 135 and company manuals.

FORMAT

The following flight training procedures are designed to provide the highest level of safety and efficiency when operating with the Capstone Equipment. The procedures are designed for flight training, pilot preparation and pilot evaluation. These maneuvers are presented in accordance with the following outline:

1. **TITLE.** A specific name for the individual procedure consistent with Capstone Operations with references to FAR's and Practical Test Standards when
2. **OBJECTIVE.** The procedure objective briefly states the purpose for which the procedure is required.
3. **REFERENCES.** The reference for the procedure states the document in which the procedure appears.
4. **DESCRIPTION.** For each flight procedure utilized, there is a prescribed chronological order of events followed in the execution of the particular procedure. The description may include CAUTIONS and brief NOTES to highlight aspects of the procedure.

In cases where more than one procedure is described, the alternate procedure(s) is included within the description. The alternate procedures will be identified as an ALTERNATE PROCEDURE.

5. **ACCEPTABLE PERFORMANCE GUIDELINES.** The acceptable performance guidelines set forth in these procedures are utilized to evaluate the performance of a pilot and to determine if that pilot has attained the desired proficiency level. Consideration shall also be given to overall judgment, and knowledge.
6. **PROFILE.** For a flight training procedure for which a pictorial depiction is appropriate, one is provided.

**Capstone II
121/135 Training Program**

(Air Carrier Name inserted here)

F-3/R-01/2-20-03

CAPSTONE II EQUIPMENT VFR / IFR OPERATIONS

Title: PREFLIGHT PLANNING

References: AC 61-21, Practical Test Standards: Commercial, ATP

Objective: To determine that the pilot is competent in performing preflight planning on routes where the Capstone Equipment will be utilized.

Description:

The pilot will accomplish normal preflight planning to include weather, nav aids, notams, RAIM and fuel requirements. The preflight planning will also include aircraft maintenance status for any deferred maintenance items or MEL limitations. For initial Capstone qualification "what if" scenarios need to be posed for potential Capstone equipment limitations / failures.

Acceptable Performance Guidelines:

FAA Practical Test Standards for Commercial or ATP as appropriate must have proper airport and weather information.

CAPSTONE II EQUIPMENT VFR / IFR OPERATIONS

Title: CAPSTONE EQUIPMENT SET UP AND TESTS

References: QRH or Checklist

Objective: To determine that the pilot understands the test sequence of the Capstone II Equipment and can identify any faults in the system.
Set up the Capstone II Equipment for the intended flight.

Description: The pilot will start up the Capstone II Equipment and observe all tests functions to ensure proper equipment operation.

Acceptable Performance Guidelines:

Practical Test Standards

- Proper use of cockpit checklists
- Proper start up procedures
- Proper flight plan selection
- Proper procedure selection and loading for DP
- Reduction in workload during flight as a result of proper set up

CAPSTONE II EQUIPMENT VFR / IFR OPERATIONS

Title: Pre Takeoff

References: Practical Test Standards: Commercial, Instrument, ATP

Objective: To determine that the pilot has accomplished all pre takeoff checklists in accordance with the AFM, Company and FAR requirements

Description:

The pilot will demonstrate all checklist items to ensure proper aircraft operations and equipment capabilities. The pilot must properly address how any “what if” scenarios of inoperative equipment would be handled prior to takeoff.

Acceptable Performance Guidelines:

All AFM and company limitations are complied with

CAPSTONE II EQUIPMENT VFR / IFR OPERATIONS

- Title:** Airport area Operations (Departure)
- Objective:** Maintain proper operating practices while using Capstone Equipment
- References:** Practical test standards
- Description:** The pilot needs to operate the aircraft within the airport traffic area using standard practices. Outside watch for traffic is extremely important.

DO NOT HAVE YOUR HEAD DOWN TRYING TO USE THE
CAPSTONE EQUIPMENT IN A BUSY VFR TRAFFIC PATTERN.

Proper preflight planning, equipment set up and tests, and pre takeoff checklists should prevent the need to adjust the equipment at this critical phase of flight. The desired MFD display and GPS functions used for the departure phase of flight should be selected prior to taking the active runway.

Acceptable performance guidelines:

Maintain proper traffic watch and follow all prescribed airport departure procedures.

Compliance with all clearances issued by the tower and/or Check Airman.

Promptly advise Check Airman or tower if unable to comply with a clearance.

When required, establishment and maintenance of 2-way radio communications with ATC using proper phraseology and technique.

**Capstone II
121/135 Training Program**

(Air Carrier Name inserted here)

F-7/R-01/2-20-03

CAPSTONE II EQUIPMENT VFR / IFR OPERATIONS

Title: En Route Operations

Objective: Insure the pilot has proper understanding and use of the Capstone II Equipment for en route operations for navigation and communication.

References: Company manuals, Capstone training material, and Practical Test Standards.

Description: Use of Capstone equipment as supplemental VFR navigation.
Use terrain alerting features with close attention to Altimetry issues especially when operating from a high to a low.

Use of traffic alerting features of Capstone equipment with emphasis on see and avoid as primary means of traffic avoidance.

Acceptable Performance Guidelines: Proper outside the cockpit watch for traffic in conjunction with Capstone equipment use and adequate attention to Barometric pressure settings for terrain alerting features.

Capstone II
121/135 Training Program

Capstone II
121/135 Training Program

(Air Carrier Name inserted here)

F-8/R-01/2-20-03

CAPSTONE II EQUIPMENT VFR / IFR OPERATIONS

Title: Diversions

Objective: Use Capstone II installed avionics to locate and proceed to nearest suitable airport .

References: AFM supplement / checklists

Description: On a route of flight simulate an emergency situation that would require diversion to an off route airport.

Acceptable Performance guidelines: Demonstration that a suitable airport can be selected with a course and distance to that airport using Capstone Equipment

CAPSTONE II EQUIPMENT VFR / IFR OPERATIONS

Title: Terrain Alerting

Objective: Use Capstone MFD to display terrain features and plan avoidance of obstructions .

References: MFD users manual

Description: While en route use MFD to display terrain features and various colors in display for situational awareness. Put special attention on altimetry to ensure proper terrain separation.

Acceptable Performance Guidelines: Proper use of MFD with emphasis on Altimeter setting to ensure proper terrain separation.

CAPSTONE II EQUIPMENT VFR / IFR OPERATIONS

Title: Traffic Alerting

Objective: Use MFD to provide ADS-B traffic information.

References: MFD users manual

Description: Use the MFD to provide traffic alerting information while operating in the Capstone environment . Special emphasis must be placed on the importance of see and avoid as the primary means of traffic separation .

Acceptable Performance Guidelines: Proper use of ADS-B functions of MFD and outside the cockpit traffic watch.

CAPSTONE II EQUIPMENT VFR / IFR OPERATIONS

Title: Weather Information

Objective: Display weather text on MFD

References: MFD users guide

Description: Use the MFD to display weather text in cockpit of Capstone aircraft

Acceptable Performance Guidelines: Be able to display weather and properly interpret weather for safety of flight decisions.

**Capstone II
121/135 Training Program**

(Air Carrier Name inserted here)

F-12/R-01/2-20-03

CAPSTONE II EQUIPMENT VFR / IFR OPERATIONS

Title: Arrival (Descent and Approach)

Objective: Use Capstone avionics for navigation and MFD for traffic alerting

References: MFD users guide and GPS operators manual

Description: Use the capstone equipment in the Descent and Approach phase of flight for terrain and traffic alerting.

Acceptable Performance Guidelines: Be able to recognize any terrain or traffic situations that may pose a hazard to flight and take proper corrective action.

CAPSTONE II EQUIPMENT VFR / IFR OPERATIONS

- Title:** Airport area operations (arrival)
- Objective:** Maintain proper operating practices while using Capstone Equipment
- References:** Practical test standards
- Description:** The pilot needs to operate the aircraft within the airport traffic area using standard practices. Outside watch for traffic is extremely important.

**DO NOT HAVE YOUR HEAD DOWN TRYING TO USE THE
CAPSTONE EQUIPMENT IN A BUSY VFR TRAFFIC PATTERN.**

Acceptable Performance Guidelines: Maintain proper traffic watch and follow all prescribed airport arrival procedures.

Compliance with all clearances issued by the tower and/or
Check/Airman

Promptly advise tower and/or Check Airman if unable to comply
with a clearance.

CAPSTONE EQUIPMENT VFR / IFR OPERATIONS

Title: CAPSTONE REPORTING

Objective: Provide information to Capstone team.

References: Capstone Reporting Form

Description: Completing the Capstone reporting form.

Acceptable Performance Guidelines: A completed form.

**Capstone II
121/135 Training Program**

(Air Carrier Name inserted here)

F-15/R-01/2-20-03

CAPSTONE EQUIPMENT VFR / IFR OPERATIONS

LESSON PLAN: OPERATIONS MANUAL, OP SPECS & MEL

OBJECTIVE: Determine that the pilot operator of the Capstone installed avionics understands the limitations of operating the aircraft with inoperative components.

REFERENCES: Operations Manual and MEL

TESTING/CHECKING: Demonstrated ability to use operations manual and MEL properly.

(Air Carrier Name inserted here)

F-16/R-01/2-20-03

CAPSTONE EQUIPMENT VFR / IFR OPERATIONS

Assignment of Capstone duties by crew position.

Flying Pilot Duties

Non-Flying Pilot Duties

Note: These procedures and the checklist that accompany them need to be developed by each air carrier.

**Capstone II
121/135 Training Program**

(Air Carrier Name inserted here)

F-17/R-01/2-20-03

CAPSTONE EQUIPMENT VFR / IFR OPERATIONS

**This is for specific approach and procedures training as required by
operations specifications.**