MULTI-ENGINE INSTRUCTOR (MEI)
TRAINING SYLLABUS

14 CFR Part 141 — Appendix F

FAA Part 141 Certificate Number

Version 1.0 — March 2026

DRAFT: REDACTED

TABLE OF CONTENTS

To populate this table of contents: In Microsoft Word, right-click anywhere in the space below and select "Update Field," then choose "Update entire table."

1. COURSE OVERVIEW

This syllabus defines the training curriculum for a FAR PART 141 flight school Multi-Engine Instructor (MEI) course, conducted under the authority of 14 CFR Part 141, Appendix F — Flight Instructor Certification Course.

The course prepares candidates to earn a Flight Instructor Certificate with an Airplane Category, Multiengine Class Rating. It serves two distinct candidate pathways:

- **Initial Instructor Qualification (IIQ):** Candidates earning their first Flight Instructor Certificate via the multiengine pathway. These candidates complete 40 hours of ground training (including Fundamentals of Instructing) and 25 hours of flight training.
- **Follow-On Instructor Qualification (FOIQ):** Candidates adding the MEI rating to an existing Flight Instructor Certificate. These candidates complete 20 hours of ground training (FOI waived) and 25 hours of flight training.

Both pathways share the same 12-hop flight training structure, the same graded maneuvers, and the same stage checks. IIQ-only requirements are clearly marked throughout this syllabus and workbook so that a single unified system serves all candidates.

1.1 Regulatory Authority

This course is approved under the following regulatory framework:

- **14 CFR Part 141, Appendix F** — Flight Instructor Certification Course (minimum curriculum standards)
- **14 CFR Part 61, Subpart H** — Flight Instructors (eligibility, privileges, limitations)
- **FAA-S-ACS-25** — Flight Instructor for Airplane Category Airman Certification Standards

1.2 Course Objectives

Upon successful completion of this course, the candidate will:

1. Demonstrate instructional knowledge of all multiengine aerodynamic principles, systems, and procedures to ACS standards.
2. Demonstrate instructional proficiency in all flight maneuvers required for the Flight Instructor — Airplane Multiengine practical test.
3. Demonstrate competence in lesson planning, risk management, and scenario-based teaching for multiengine flight training.
4. Successfully complete the end-of-course stage check administered by the Chief or Assistant Chief Flight Instructor, qualifying the candidate for the FAA practical test.

2. PREREQUISITES

The following prerequisites must be verified and documented on the Hop 0 (Course Enrollment) tab of the training workbook before flight training begins. Prerequisites are derived from 14 CFR §61.183 and Part 141, Appendix F, Section 2.

2.1 All Candidates

1. **Pilot Certificate:** Commercial Pilot Certificate or Airline Transport Pilot (ATP) Certificate with Airplane Category and Multiengine Class rating (§61.183(c)(1)).
2. **Instrument Rating:** Instrument rating appropriate to the airplane category (§61.183(c)(2)(ii)).
3. **PIC Time:** 15 hours as Pilot-in-Command in multiengine airplanes (§61.183(j)). Must be logged prior to the practical test; need not be complete before enrollment.
4. **Age:** At least 18 years of age (§61.183(a)).
5. **English Proficiency:** Ability to read, speak, write, and understand English (§61.183(b)).
6. **Medical Certificate:** Valid FAA medical certificate appropriate to the privileges exercised. At minimum, a Third-Class medical or BasicMed is required to act as PIC during training.
7. **TSA Verification:** Citizenship verification or TSA approval, as applicable.

2.2 Additional Requirements — IIQ Candidates Only

- **FOI Knowledge Test:** The Fundamentals of Instructing (FOI) knowledge test must be passed. The FOI ground training may be completed via self-study (Aviation Instructor's Handbook) or through the Aviation Adventures CFI BootCamp program. [PENDING BOB: Confirm whether BootCamp graduates receive 20-hour or 40-hour ground credit for IIQ.]
- **FIA Knowledge Test:** The Flight Instructor — Airplane (FIA) knowledge test must be passed.
- **Spin Endorsement:** A logbook endorsement per §61.183(i) certifying instructional proficiency in stall awareness, spin entry, spins, and spin recovery procedures. This endorsement must be accomplished in a single-engine airplane and is verified upon enrollment — it is not part of this multiengine course. [PENDING BOB: Confirm verify-only approach for spin endorsement.]

2.3 Additional Requirements — FOIQ Candidates Only

- **AFA Knowledge Test:** The Aircraft Flight Instructor — Added Rating (AFA) knowledge test must be passed. The FOI knowledge test is waived for add-on candidates.

Note: The FOIQ auto-detection in the training workbook is triggered when the candidate's existing Flight Instructor Certificate number or BootCamp graduation date is entered on the Hop 0 tab. IIQ-only items are automatically greyed out for FOIQ candidates.

3. INITIAL VS. ADD-ON PATHWAYS

This syllabus uses a unified design that serves both Initial Instructor Qualification (IIQ) and Follow-On Instructor Qualification (FOIQ) candidates. The following table summarizes the key differences:

Requirement	IIQ (Initial CFI)	FOIQ (Add-On MEI)
Ground Training	40 hours	20 hours
Flight Training	25 hours	25 hours
FOI Knowledge Test	Required	Waived
Technical Knowledge Test	FIA	AFA
Spin Endorsement	Required (§61.183(i))	Already completed
Hop 0 IIQ Ground School	16 items (FOI + ACS Area II)	Greyed out / skipped
Instructor Qualification (§61.195(h))	Training instructor must meet §61.195(h)	Does not apply

★ **Symbol:** Throughout this syllabus and workbook, the star symbol (★) denotes items that apply only to IIQ candidates. For FOIQ candidates, these items are greyed out via conditional formatting in the electronic workbook and should be skipped.

4. GRADING SCALE AND COMPLETION STANDARDS

4.1 Flight Maneuver Grading

All flight maneuvers are graded on every appearance using the Exceeds / Meets / Needs Work (E/M/NW) scale, anchored to the standards defined in FAA-S-ACS-25:

Grade	Abbreviation	Standard
Exceeds	E	Candidate demonstrates and simultaneously explains the maneuver above ACS standards. Instructor intervention is not required.
Meets	M	Candidate demonstrates and simultaneously explains the maneuver to ACS standards with minimal instructor intervention. This is the minimum standard for course completion.
Needs Work	NW	Candidate does not yet meet ACS standards for this maneuver. Additional training is required.

Course Completion Standard: All 30 flight maneuvers must achieve a grade of Meets (M) or Exceeds (E) at least once during the course. The Maneuver Status summary tab in the training workbook automatically tracks the highest grade achieved for each maneuver.

4.2 Ground Briefing Item Tracking

Ground Briefing Items (GBIs) are completion-tracked only. When a GBI is covered during a ground briefing session, the MEI enters the date in the corresponding field. There is no grade assigned to GBIs — a date stamp means the item has been covered. The GBI Status summary tab automatically tallies completion counts.

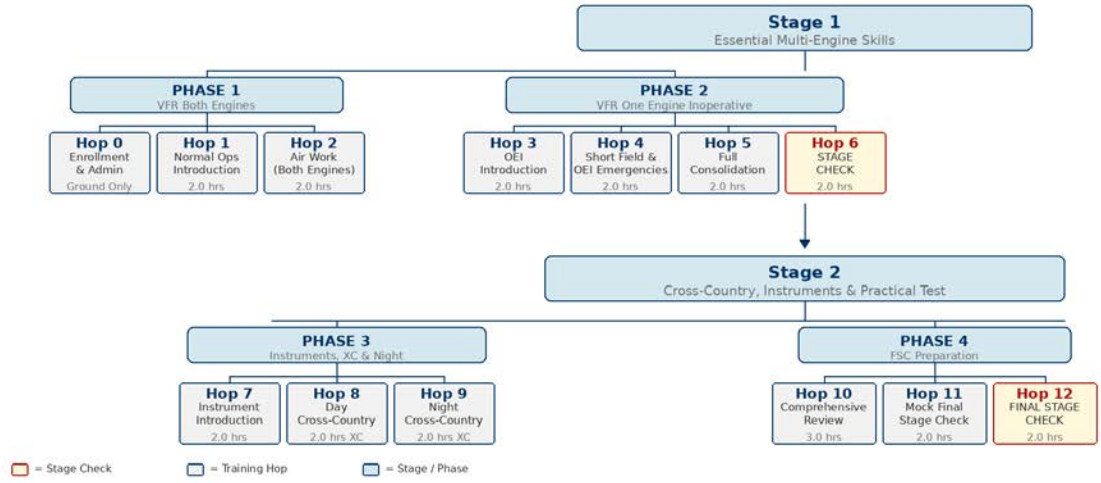
4.3 Stage Check Standards

Two stage checks are required:

- **Hop 6 — Mid-Course Stage Check:** Administered by an MEI Check Instructor. Evaluates all VFR and OEI maneuvers from Hops 1–5. No instrument content. Successful completion is required before advancing to the instrument/cross-country block (Hops 7–9).
- **Hop 12 — Final Stage Check (End-of-Course Test):** Administered by the Chief or Assistant Chief Flight Instructor. Covers the full ACS profile. Successful completion authorizes the graduation endorsement for the MEI practical test.

6. COURSE FLOW

The MEI course follows a 12-hop structure organized into two stages and four phases. Hop 0 is a ground-only enrollment session. All other hops include both ground briefing and flight training.



6.1 Stage and Phase Summary

Stage	Phase	Focus	Hops	Gate
1	Phase 1	VFR Both Engines	0, 1, 2	—
1	Phase 2	VFR One Engine Inoperative	3, 4, 5, 6	Hop 6 Stage Check (MEI Check Instructor)
2	Phase 3	Instruments, XC & Night	7, 8, 9	—
2	Phase 4	FSC Preparation	10, 11, 12	Hop 12 Final Stage Check (Chief/Asst Chief)

6.2 Course Time Summary

Category	Minimum
Flight Training (Dual)	25.0 hours
Ground Training (IIQ)	40.0 hours
Ground Training (FOIQ)	20.0 hours
Cross-Country (school requirement)	4.0 hours (2 flights)
Night (school requirement)	2.0 hours

Note: Cross-country, night, and landing minimums are school syllabus decisions, not Part 141 Appendix F mandates. Appendix F prescribes only the 25-hour flight and 40/20-hour ground minimums.

10. AATD USAGE

If the FAR PART 141 flight school operates an Advanced Aviation Training Device (AATD) configured as a multiengine airplane. The AATD is used as a supplemental training tool within this MEI course under the following policy:

10.1 Regulatory Status

An AATD is not a Full Flight Simulator (FFS) or Flight Training Device (FTD) as defined in Part 141. Therefore, no flight training time credit under Appendix F, §4(b) is available for AATD sessions. This is by design — by removing regulatory credit from the equation, the AATD functions purely as a training effectiveness tool without adding compliance complexity.

10.2 Authorized Maneuvers

The following five maneuvers are authorized for AATD training in this course [PENDING BOB: Confirm authorized maneuver list with MEI team]:

1. Engine Failure Before Vr / Abort
2. Engine Failure After Takeoff
3. OEI Instrument Approach
4. OEI Missed Approach / Go-Around
5. Vmc Demonstration

10.3 Usage Policy

The MEI has full discretion over when and whether to schedule AATD sessions. Sessions may be conducted before, between, or after any flight hop. A maximum of three AATD sessions are tracked in the workbook.

10.4 Grading and Completion

AATD grades are recorded on the dedicated AATD tab using the same E/M/NW scale. However, AATD grades are supplemental only. All five authorized maneuvers must achieve Meets or Exceeds in the airplane before the Flight Maneuvers Complete sign-off is issued. Airplane grades are the gate for course completion.

10.5 Time Tracking

- **Ground time** logged during AATD sessions counts toward total ground training hours.
- **Dual time** logged in the AATD is tracked on the AATD tab only and does not count toward the 25-hour Part 141 flight training minimum.

11. HOW TO USE THIS SYLLABUS

The MEI course uses two documents:

11.1 The Printed Syllabus (This Document)

You are reading it. The printed syllabus is the curriculum reference for the MEI course. It contains everything a candidate, MEI, DPE, or FSDO inspector needs to understand the course structure, completion standards, and regulatory basis. It includes blank gradesheet pages for each hop so you can see exactly what will be covered and how it will be evaluated.

One master copy exists per syllabus version. It does not change from student to student.

11.2 The Training Workbook (.xlsx)

The training workbook is a Microsoft Excel file — one copy per student. It is the living training record where grades, dates, flight times, and completion data are entered throughout the course. The workbook contains 23 tabs:

- **Flight Metrics:** Running totals for all flight and ground time categories. Auto-populated from hop tabs — no double entry.
- **Course Completion:** The sole printed and signed record. Contains all FAR-required metrics, stage check results, endorsement dates, and signature blocks. Retained for 5 years per §141.101.
- **GBI Status:** Master checklist of all 218 ground briefing items with auto-populating completion checkmarks.
- **Maneuver Status:** Tracks the highest grade achieved, times flown, and last date for all 30 maneuvers.
- **Hop 0:** Course enrollment, candidate qualification verification, and IIQ ground school.
- **Hops 1–12:** Individual lesson gradesheets with ground briefing items, flight maneuvers, and metrics.
- **AATD:** Supplemental simulator session tracking (up to 3 sessions).
- **Spare 1–5:** Overflow/proficiency hop tabs for additional training beyond the base 12 hops.

11.3 Lesson Workflow

For each lesson:

1. **Before the flight:** Review the GBIs listed on the hop tab. Conduct the ground briefing and enter dates for items covered.
2. **During the flight:** Evaluate each maneuver listed. The candidate demonstrates and simultaneously explains each maneuver.
3. **After the flight:** Enter grades (E/M/NW) for each maneuver, fill in the metrics box, and add any remarks. The summary tabs update automatically.
4. **Periodically:** Review the Flight Metrics, GBI Status, and Maneuver Status tabs to assess progress toward completion.

Note: The workbook is protected (no password) to prevent accidental formula overwrites. Only designated entry cells are unlocked for data input.

GRADESHEETS

Blank gradesheet pages for Hops 0–12, AATD, and Spare tabs follow.

In the printed syllabus, insert gradesheet pages here.

HOP 0 — COURSE ENROLLMENT & ADMINISTRATION

Date Enrolled: _____

Primary Instructor: _____

Secondary Instructor: _____

Objective: This lesson completes course enrollment, administrative briefing, and candidate qualification verification. All candidates complete Section B (Course Introduction and Administrative Briefing). Candidates pursuing an Initial Instructor Qualification (IIQ) — that is, earning a Flight Instructor Certificate for the first time via the Multi-Engine Instructor (MEI) pathway — must also complete Section A, which covers the Fundamentals of Instructing (FOI) and Technical Subject Areas (TSA) required by Federal Aviation Regulations (FAR) Part 141, Appendix F. Candidates pursuing a Follow-On Instructor Qualification (FOIQ) — adding an MEI rating to an existing Flight Instructor Certificate — have the FOI and TSA requirements waived; Section A will be greyed out when FOIQ qualification data is entered below.

CANDIDATE QUALIFICATION & COURSE CHECK-IN			
Candidate Name:			
Commercial Pilot Certificate #:			
Flight Instructor Certificate #:		**Exp. Date:**	
Medical Certificate Class:		**Date:**	
AvAdv CFI BootCamp Graduate?		**Date:**	
Fundamentals of Instructing (FOI) Knowledge Test Score:		**Date:**	
FAA Flight Instructor Airplane (FIA) Knowledge Test Score:		**Date:**	
Verified By (Instructor Name):		**Date:**	

SECTION A — INITIAL INSTRUCTOR QUALIFICATION (IIQ) GROUND SCHOOL (★)

Note: This section is required only for Initial Instructor Qualification (IIQ) candidates. If candidate is a Follow-On Instructor Qualification (FOIQ), this section will be greyed out automatically.

Item	GBI #	ACS Code	Date
Fundamentals of Instructing (FOI)			
★ The learning process	1	FI.I.A	
★ Elements of effective teaching	2	FI.I.B	
★ Student evaluation and testing	3	FI.I.C	
★ Course development	4	FI.I.D	
★ Lesson planning	5	FI.I.E	
★ Classroom training techniques	6	FI.I.F	
Aeronautical Knowledge Standards (ACS) Area II — Technical Subject Areas (Candidate Teach-Back)			
★ Task B: Visual Scanning and Collision Avoidance	36–39	AI.II.B	
★ Task D: Principles of Flight	47–52	AI.II.D	
★ Task E: Aircraft Flight Controls & Operation of Systems	53–65	AI.II.E	
★ Task F: Performance and Limitations	66–71	AI.II.F	
★ Task G: National Airspace System (NAS)	72–76	AI.II.G	
★ Task H: Navigation Systems and Radar Services	77–80	AI.II.H	
★ Task I: Navigation and Cross-Country Flight Planning	81–97	AI.II.I	
★ Task J: 14 Code of Federal Regulations (CFR) and Publications	98–103	AI.II.J	
★ Task N: High Altitude Operations — Supplemental Oxygen	114–117	AI.II.N	
★ Task O: High Altitude Operations — Pressurization	118–119	AI.II.O	

SECTION B — COURSE INTRODUCTION & ADMINISTRATIVE BRIEFING (All Candidates)			
Item	**GBI #**	**ACS Code**	**Date**
Administrative Briefing			
Course overview and expectations	A-1	—	
Flight MNVRS Grade Scale: E/M/NW Ground Briefing Items: Date	A-2	—	
Gradesheet philosophy briefing	A-3	—	
Symbol legend (★ = IIQ only, ▶ = candidate teach-back, ↻ = candidate re-brief)	A-4	—	
Workbook orientation — progress tracking system	A-5	—	
Suggested study materials	A-6	—	
Course flow overview	A-7	—	
Pre-Course Ground Training (14 CFR Part 141, Appendix F, §3(b)(2))			
Applicable FAR	G-1	AI.II.J	
Basic aerodynamics and principles of flight	G-2	AI.II.D	
Safe and efficient operation of aircraft	G-3	—	
Weight and balance computations	G-4	AI.II.F	
Use of performance charts	G-5	AI.II.F	
Significance of exceeding performance limitations	G-6	AI.II.F	
Principles and functions of aircraft systems	G-7	AI.II.E	

GROUND TIME METRICS			
Date	**Ground Time (hrs)**	**Instructor**	**Remarks**
Total Ground Time:	**0**		

HOP 1 — NORMAL OPS INTRODUCTION

Date: **Instructor:**

Objective: First flight in the PA-30. The Multi-Engine Instructor (MEI) demonstrates most maneuvers; the candidate gets hands on controls as comfort allows. Ground briefing covers preflight procedures, airport operations, normal takeoff and landing procedures, and multi-engine (ME) performance concepts. Planned flight time: 2.0 hours dual.

SECTION A — FLIGHT / GROUND METRICS

Aircraft:	Side Number	Aircraft Type	Departure	Stop(s)	Destination
Times:	Ground	Dual	PIC	Night	XCTY
Instrument Time & Landings:	Actual	Simulated	Day	Night	
Approaches:	ILS	LOC	VOR	LPV	LNAV
Others:	Circ2Land	OEI Go Around	Hold		

SECTION B — GROUND BRIEFING ITEMS

Item	GBI #	ACS Code	Notes	Date
Preflight Preparation (Airworthiness Certification Standards Area III, Tasks A–B: pilot qualifications, airworthiness, documents)	18	AI.III.A–B		
Preflight Procedures (Area V: preflight inspection, cockpit management, engine start, taxi)	20	AI.V.A–F		
Airport Operations (Area VI: communications, lighting, traffic patterns in multi-engine context)	21	AI.VI.A–B		
Takeoffs, Landings, and Go-Arounds overview (Area VII)	22	AI.VII		
Postflight Procedures (Area XIV: after landing, parking, and securing)	30	AI.XIV.A		
Task C: Runway Incursion Avoidance [MERGED] (includes Land and Hold Short Operations)	40–46, 151	AI.II.C		
Positive exchange of flight controls ("My controls / Your controls")	150	—		

SECTION C — FLIGHT MANEUVERS

Maneuver	ACS Code	Needs Work	Meets	Exceeds
Preflight / Engine Start / Taxi / Before Takeoff	AI.V.A–F			
Normal Takeoff & Climb	AI.VII.A			
Visual Approach & Landing	AI.VII.B			
Slow Flight	AI.X.A			
Steep Turns	AI.IX.A			
Power Off Stall (Turning)	AI.X.B			
Power On Stall (Straight)	AI.X.C			
Go-Around	AI.VII.N			
After Landing Flow	AI.XIV.A			

REMARKS

HOP 2 — AIR WORK (Both Engines)

Date: **Instructor:**

Objective: Candidate takes over maneuvers introduced on Hop 1. Accelerated Stall and Emergency Descent introduced. Ground briefing covers how to structure and deliver a lesson on a maneuver to be performed in flight. Planned flight time: 2.0 hours dual.

SECTION A — FLIGHT / GROUND METRICS

Aircraft:	Side Number	Aircraft Type	Departure	Stop(s)	Destination
Times:	Ground	Dual	PIC	Night	XCTY
Instrument Time & Landings:	Actual	Simulated	Day	Night	
Approaches:	ILS	LOC	VOR	LPV	LNAV
Others:	Circ2Land	OEI Go Around	Hold		

SECTION B — GROUND BRIEFING ITEMS

Item	GBI #	ACS Code	Notes	Date
Preflight Lesson on a Maneuver to be Performed in Flight (Area IV)	19	AI.IV.A		
V-speeds for the training aircraft (Vmc, Vsse, Vyse, Vxse, etc.)	138	—		
Accelerate-stop distance	140	—		
Accelerate-go distance	141	—		
Propeller synchronization	142	—		

SECTION C — FLIGHT MANEUVERS

Maneuver	ACS Code	Needs Work	Meets	Exceeds
Preflight / Engine Start / Taxi / Before Takeoff	AI.V.A–F			
Normal Takeoff & Climb	AI.VII.A			
Visual Approach & Landing	AI.VII.B			
Slow Flight	AI.X.A			
Steep Turns	AI.IX.A			
Power Off Stall (Turning)	AI.X.B			
Power On Stall (Straight)	AI.X.C			
Accelerated Stall	AI.X.D			
Emergency Descent	AI.XII.A			
Go-Around	AI.VII.N			
After Landing Flow	AI.XIV.A			

REMARKS

HOP 3 — OEI INTRODUCTION

Date: **Instructor:**

Objective: Major ground session: OEI aerodynamics and performance foundation. First OEI work in the airplane plus continued air work. The MEI prioritizes the new OEI material. GBIs may be covered across multiple ground sessions leading up to and including this hop. Planned flight time: 2.0 hours dual.

SECTION A — FLIGHT / GROUND METRICS

Aircraft:	Side Number	Aircraft Type	Departure	Stop(s)	Destination
Times:	Ground	Dual	PIC	Night	XCTY
Instrument Time & Landings:	Actual	Simulated	Day	Night	
Approaches:	ILS	LOC	VOR	LPV	LNAV
Others:	Circ2Land	OEI Go Around	Hold		

SECTION B — GROUND BRIEFING ITEMS

Note: GBIs marked "↻" will be briefed by the candidate to the MEI during preparation for FSC (Hops 10–11).

Item	GBI #	ACS Code	Notes	Date
Emergency Operations overview (Area XII)	28	AI.XII		
OEI performance charts/tables ↻	120	AI.II.P		
Effects of exceeding limitations (OEI) ↻	121	AI.II.P		
Effects of atmospheric conditions on OEI performance ↻	122	AI.II.P		
Factors: required performance within SE/ME capabilities ↻	123	AI.II.P		
Aerodynamics of OEI: Critical engine ↻	124	AI.II.P		
Aerodynamics of OEI: Bank angle effect on VMC ↻	125	AI.II.P		
Aerodynamics of OEI: Zero sideslip ↻	126	AI.II.P		
Aerodynamics of OEI: Reasons for loss of directional control ↻	127	AI.II.P		
VMC/stall speed relationship; density altitude effects ↻	128	AI.II.P		
Best course of action after engine failure ↻	129	AI.II.P		
Risk: Exceeding critical AOA ↻	130	AI.II.P		
Risk: Loss of directional control ↻	131	AI.II.P		
Risk: Terrain exceeding SE service ceiling ↻	132	AI.II.P		
Risk: Fuel management ↻	133	AI.II.P		
Skill: Compute expected SE climb performance ↻	134	AI.II.P		
Being prepared for abnormalities every takeoff	143	—		
Single-engine performance of light twins	144	—		

Recognizing engine failure	145	—
Maintaining aircraft control after engine failure	146	—
Maximizing performance after engine failure	147	—
Minimizing drag after engine failure	148	—
Troubleshooting and feathering	149	—
Spin awareness in ME context	153	—
VMC — keeping it going straight on one engine	154	—
What happens when you get too slow on one engine ⟳	155	—
How VMC is defined (test conditions) ⟳	156	—
Demonstrating VMC (procedure)	157	—
Engine failure on takeoff roll ⟳	158	—
Engine failure just after liftoff ⟳	159	—
Training aircraft limitations and SE procedures	180	—
Emergency equipment and survival gear	181	AI.XII.D

SECTION C — FLIGHT MANEUVERS

Maneuver	ACS Code	Needs Work	Meets	Exceeds
Normal Takeoff & Climb	AI.VII.A			
Visual Approach & Landing	AI.VII.B			
Slow Flight	AI.X.A			
Steep Turns	AI.IX.A			
Power Off Stall (Turning)	AI.X.B			
Power On Stall (Straight)	AI.X.C			
Accelerated Stall	AI.X.D			
Emergency Descent	AI.XII.A			
Engine Restart/Shutdown	AI.XIII.A			
Maneuvering with OEI	AI.XIII.A			
Vmc Demonstration	AI.XIII.B			
Systems & Equipment Malfunction	AI.XII.C			
Go-Around	AI.VII.N			

REMARKS

APPENDIX A: ACS CROSS-REFERENCE

This appendix maps every flight maneuver and ACS Area of Operation in this syllabus to the corresponding FAA-S-ACS-25 reference codes, ensuring complete coverage of the Flight Instructor — Airplane Multiengine ACS.

A.1 Flight Maneuver → ACS Map

Each graded flight maneuver and its ACS traceability:

Flight Maneuver	ACS	ACS Code	Hops Graded	Count	Req'd?
Preflight / Start / Taxi / Before TO	V	AI.V.A–F	1–2	2	Yes
Normal Takeoff & Climb	VII	AI.VII.A	1–9	9	Yes
Visual Approach & Landing	VII	AI.VII.B	1–9	9	Yes
Short Field Takeoff	VII	AI.VII.E	4–12	8	Yes
Short Field Landing	VII	AI.VII.F	4–12	8	Yes
Go-Around	VII	AI.VII.N	1–12	12	Yes
Go-Around OEI	VII+XII	VII.N+XII.G	4–12	7	Yes
Slow Flight	X	AI.X.A	1–3, 5–6, 10–12	8	Yes
Steep Turns	IX	AI.IX.A	1–3, 5–6, 10–12	8	Yes
Power Off Stall (Turning)	X	AI.X.B	1–3, 5–6, 10–12	8	Yes
Power On Stall (Straight)	X	AI.X.C	1–3, 5–6, 10–12	8	Yes
Accelerated Stall	X	AI.X.D	2–3, 5–6, 10–12	7	Yes
Emergency Descent	XII	AI.XII.A	2–3, 5–6, 10–12	7	Yes
Engine Restart/Shutdown	XIII	AI.XIII.A	3, 6, 10–12	5	Yes
Maneuvering with OEI	XIII	AI.XIII.A	3, 6, 10–12	5	Yes
Vmc Demonstration	XIII	AI.XIII.B	3–6, 10–12	7	Yes
Systems & Equip Malfunction	XII	AI.XII.C	3–6, 10–12	7	Yes
Engine Failure Before Vmc	XII	AI.XII.E	4–5, 7, 10–12	6	Yes
Engine Failure After Liftoff	XII	AI.XII.F	4–5, 7, 10–12	6	Yes
Approach & Landing with OEI	XII	AI.XII.G	4–5, 7–12	8	Yes
Drag Demonstration	XIII	AI.XIII.C	5–7, 10–12	6	Yes
XC Flight Planning	II	AI.II.I	8	1	Integration
Pilotage / Dead Reckoning	II	AI.II.I	8–9	2	Integration
Tracking Nav Courses	XI	AI.XI	7–9	3	Integration
Instrument Approach (both eng)	XII	AI.XII	7–9	3	Integration
Instrument Approach OEI	XII	AI.XII.G	8–10	3	Yes
Circle to Land	XII	AI.XII	7–9	3	Integration

Missed Approach	XII	AI.XII	7–8	2	Integration
Missed Approach OEI	XII	AI.XII.G	8–10	3	Yes
After Landing Flow	XIV	AI.XIV.A	1–2	2	Taught

30 unique maneuvers × 177 total graded appearances across 12 hops.

Req'd? column: *Yes* = required for the FOIQ practical test per ACS. *Integration* = not a standalone checkride task; woven into other graded maneuvers (e.g., XC planning supports the XC hops). *Taught* = covered in the course but not separately tested on the FOIQ checkride.

A.2 ACS Coverage Summary by Area of Operation

Verification that all 14 ACS Areas of Operation are addressed:

ACS	Area of Operation	FOIQ Required?	Coverage	✓
I	Fundamentals of Instructing	None (IIQ only)	6 FOI tasks in ★ ground school	✓
II	Technical Subject Areas	C, K, P + taught A, M	GBIs + teach-backs Hops 1–11	✓
III	Preflight Preparation	None (taught A, B)	GBI #135–136, teach-backs Hops 10–11	✓
IV	Preflight Lesson on Maneuver	None (practiced)	GBI #19 + every teach-back	✓
V	Preflight Procedures	Yes (per Note)	GBI #20 + graded Hops 1–2	✓
VI	Airport/Seaplane Ops	None (taught)	GBI #21 + every flight	✓
VII	Takeoffs, Landings, Go-Arounds	Yes (per Note)	GBI #22 + graded Hops 1–12	✓
VIII	Fundamentals of Flight	None (IIQ only)	★ ground school; implicit every flight	✓
IX	Performance Maneuvers	Yes	Steep Turns graded Hops 1–12	✓
X	Slow Flight and Stalls	Yes (per Note)	4 stall maneuvers graded	✓
XI	Basic Instrument Maneuvers	None (IIQ only)	ME instrument ops Hops 7–9	✓
XII	Emergency Operations	Yes (E or F + G + 1)	5 of 7 tasks covered; exceeds min	✓
XIII	Multiengine Operations	Yes (all 3 Tasks)	A + B + C all graded + GBI support	✓
XIV	Postflight Procedures	None (taught)	After Landing Flow + GBI #30	✓

Result: All required ACS Areas and Tasks for both the IIQ and FOIQ pathways are fully covered. No gaps identified.

A.3 IIQ-Only Additions (★ Items on Hop 0)

The following 16 items appear only for IIQ candidates (greyed out for FOIQ):

ACS Code	Task / Topic	GBI #s	Format
FI.I.A–F	FOI Tasks A–F (6 items)	#1–6	Self-study + endorsement
AI.II.B	★ ▶️ Visual Scanning & Collision Avoidance	#36–39	Merged teach-back

AI.II.D	★ ▶️ Principles of Flight	#47–52	Merged teach-back
AI.II.E	★ ▶️ Aircraft Flight Controls & Systems	#53–65	Merged teach-back
AI.II.F	★ ▶️ Performance and Limitations	#66–71	Merged teach-back
AI.II.G	★ ▶️ National Airspace System	#72–76	Merged teach-back
AI.II.H	★ ▶️ Navigation Systems & Radar	#77–80	Merged teach-back
AI.II.I	★ ▶️ Navigation & XC Flight Planning	#81–97	Merged teach-back
AI.II.J	★ ▶️ 14 CFR and Publications	#98–103	Merged teach-back
AI.II.N	★ ▶️ High Altitude Ops — Supp. O_2	#114–117	Merged teach-back
AI.II.O	★ ▶️ High Altitude Ops — Pressurization	#118–119	Merged teach-back

Total: 6 FOI items + 10 merged ACS Area II tasks = 16 IIQ-only syllabus line items.

APPENDIX C: PART 141 APPENDIX F — KEY PROVISIONS

The following summarizes the key provisions of 14 CFR Part 141, Appendix F (Flight Instructor Certification Course) that govern this syllabus. Refer to the current edition of 14 CFR for the complete regulatory text.

C.1 Applicability (§1)

Appendix F prescribes the minimum curriculum for a flight instructor certification course for airplane single-engine, airplane multiengine, rotorcraft helicopter, rotorcraft gyroplane, powered-lift, and glider category ratings.

C.2 Eligibility for Enrollment (§2)

A person must hold a commercial pilot certificate or ATP certificate with the appropriate aircraft category and class rating, and an instrument rating appropriate to the aircraft category and class rating for which the course applies (for airplane and powered-lift courses).

C.3 Aeronautical Knowledge Training (§3)

Initial flight instructor certificate: 40 hours minimum. Additional flight instructor rating: 20 hours minimum. Ground training must include the Fundamentals of Instructing and the aeronautical knowledge areas required for recreational, private, and commercial pilot certificates appropriate to the rating sought. A candidate who has completed 2 years of study on principles of education at a college or university may receive credit for up to 20 hours of the 40-hour initial requirement.

C.4 Flight Training (§4)

Airplane multiengine course: 25 hours minimum flight training (both initial and add-on). FSTD credit: FFS up to 10% (2.5 hrs), FTD up to 5% (1.25 hrs), combined maximum 10%. Note: AATD is neither an FFS nor FTD — no Appendix F credit applies.

C.5 Stage Checks and End-of-Course Tests (§5)

Each student must satisfactorily accomplish stage checks and an end-of-course test on the appropriate areas of operation. For airplane multiengine courses, the spin endorsement requirement in §5(b) applies only to single-engine and glider courses; however, an initial MEI applicant must still satisfy the spin endorsement of §61.183(i) outside the multiengine curriculum.

APPENDIX D: GLOSSARY & ABBREVIATIONS

Abbreviation	Definition
AATD	Advanced Aviation Training Device
AC	Advisory Circular
ACS	Airman Certification Standards
ADM	Aeronautical Decision Making
AFA	Aircraft Flight Instructor — Added Rating (knowledge test code)
AFH	Airplane Flying Handbook (FAA-H-8083-3)
AIH	Aviation Instructor's Handbook (FAA-H-8083-9)
AGL	Above Ground Level
ATP	Airline Transport Pilot
CFI	Certificated Flight Instructor
CFII	Certificated Flight Instructor — Instrument
DPE	Designated Pilot Examiner
E	Exceeds (grade)
EFVS	Enhanced Flight Vision System
FFS	Full Flight Simulator
FIA	Flight Instructor Airplane (knowledge test code)
FIRC	Flight Instructor Refresher Course
FOI	Fundamentals of Instructing
FOIQ	Follow-On Instructor Qualification (add-on MEI)
FSC	Final Stage Check
FSDO	Flight Standards District Office
FTD	Flight Training Device
GBI	Ground Briefing Item
IIQ	Initial Instructor Qualification (first CFI certificate via MEI)
ILS	Instrument Landing System
M	Meets (grade)
ME	Multi-Engine
MEI	Multi-Engine Instructor (the instructor running this syllabus)
MEL	Multi-Engine Land
NW	Needs Work (grade)
OEI	One Engine Inoperative
PHAK	Pilot's Handbook of Aeronautical Knowledge (FAA-H-8083-25)
PIC	Pilot in Command
POH	Pilot's Operating Handbook

NOTES