

# CFI Bootcamp

*Flight Instructor Training*

Welcome to the  
**Bootcamp+** Network  
*Pilot Training*

# Today's Bootcamp+ Network Programming

## What's on for Today?



Live Show – 1<sup>st</sup> Hour – Wings Credit  
Open Mic – 2<sup>nd</sup> Hour – End  
Monitor the Chat – Links/Info  
Wings Credit - End of the Live Show

# **CFI Bootcamp**

*Flight Instructor Training*

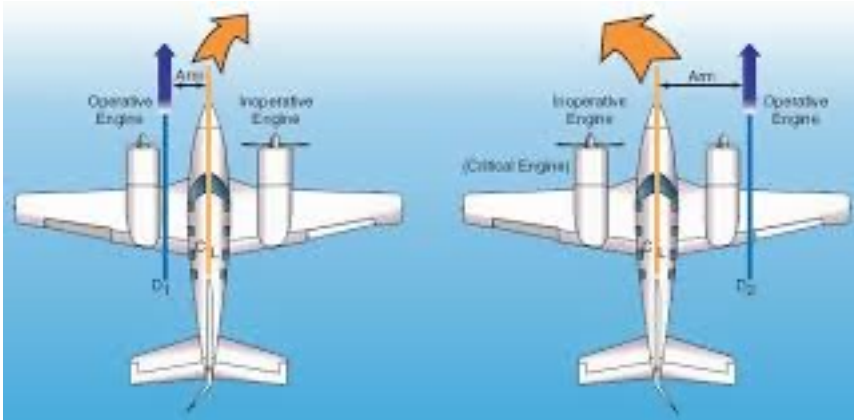
Multi-Engine

# Multi-Engine Systems

Not your everyday Single-Engine

# Multi-Engine Systems

## Engines

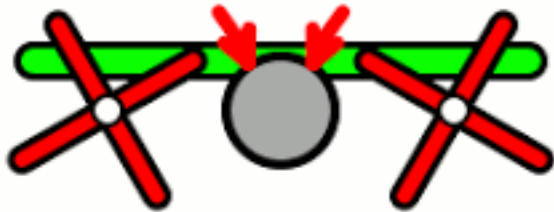


Traditional – Both rotate in the same direction

Counter rotating – One left, one right

## Multi-Engine Systems

### Engines



P-Factor is cancelled in counter rotating engine/propeller systems

No critical engine

## Multi-Engine Systems

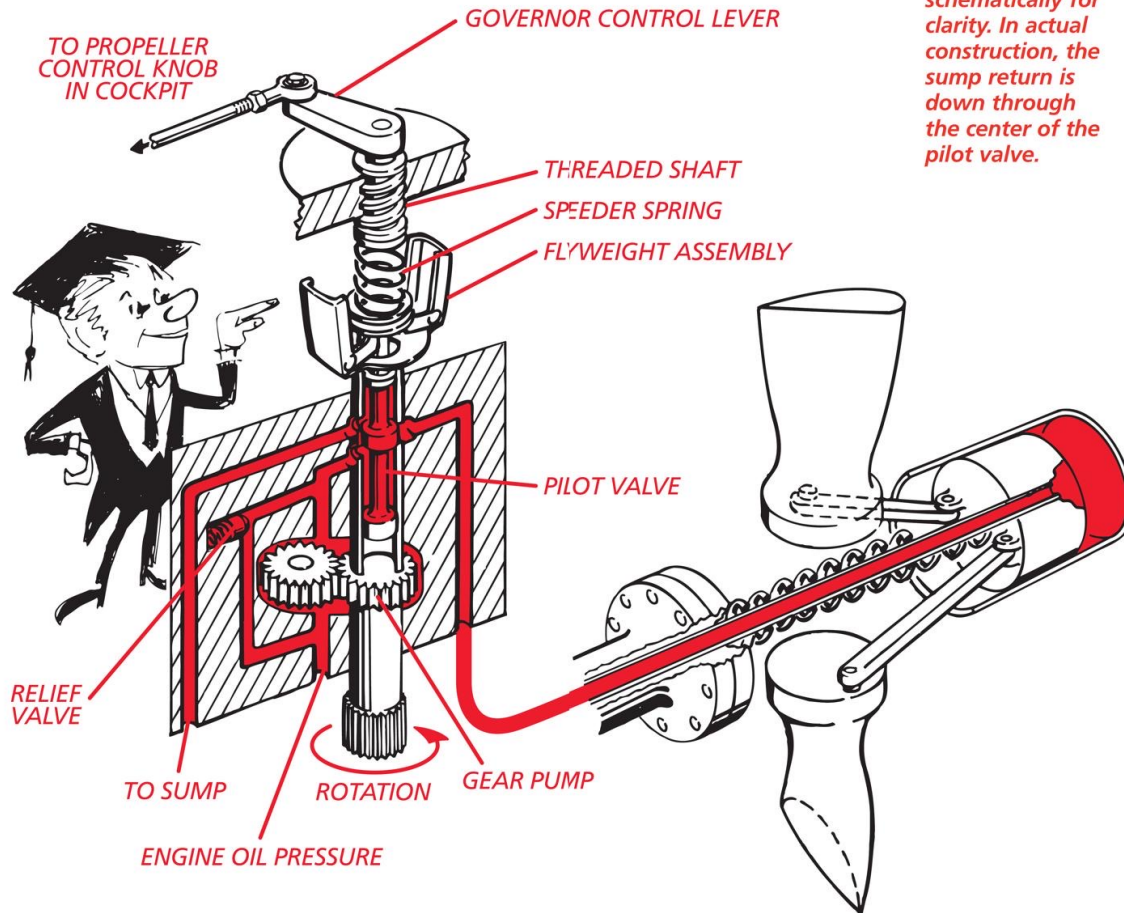
### Propeller Systems



Constant speed systems  
Full Feathering  
Unfeathering accumulators

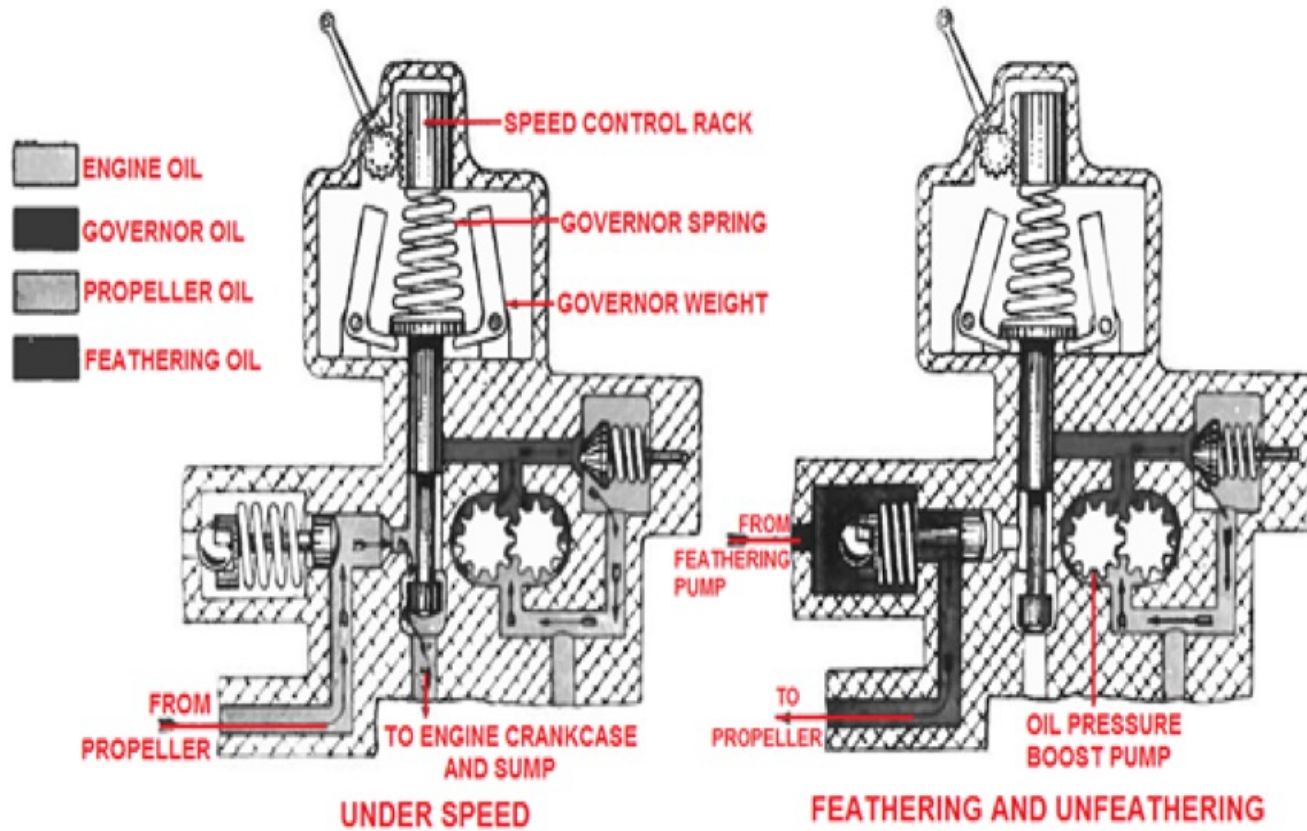
# Multi-Engine Systems

*So you do it with oil.  
How, Professor?*



**NOTE:**  
The Governor is represented schematically for clarity. In actual construction, the sump return is down through the center of the pilot valve.

# Multi-Engine Systems

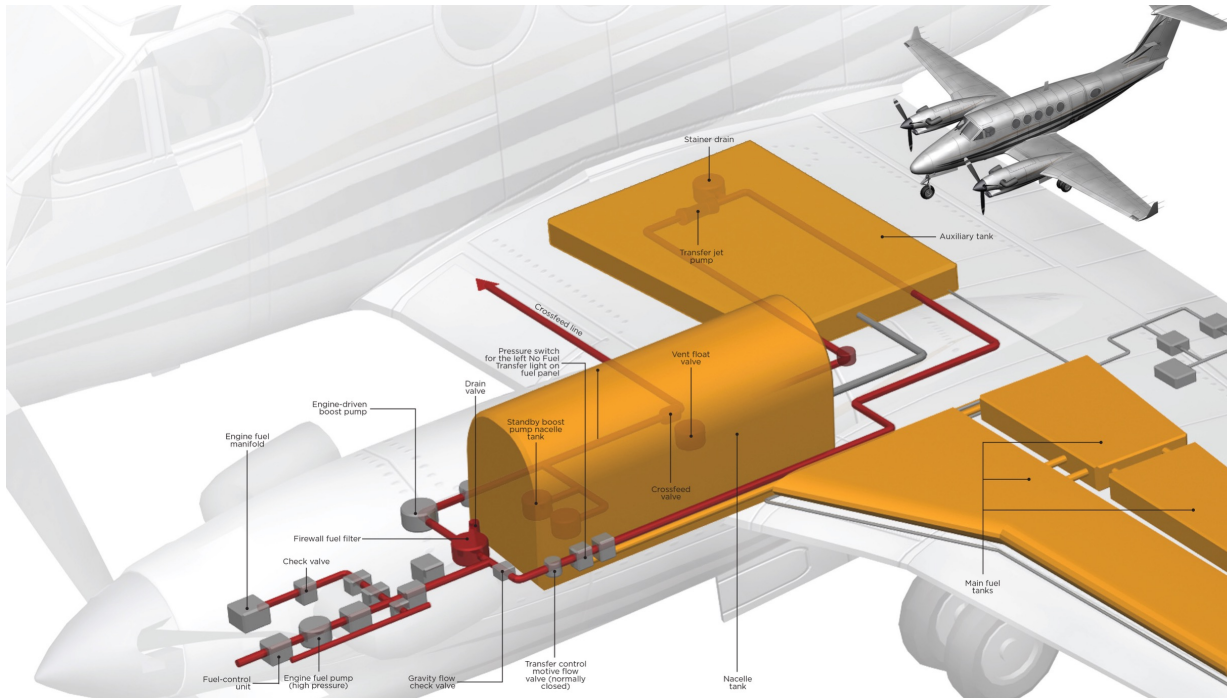


## Multi-Engine Systems

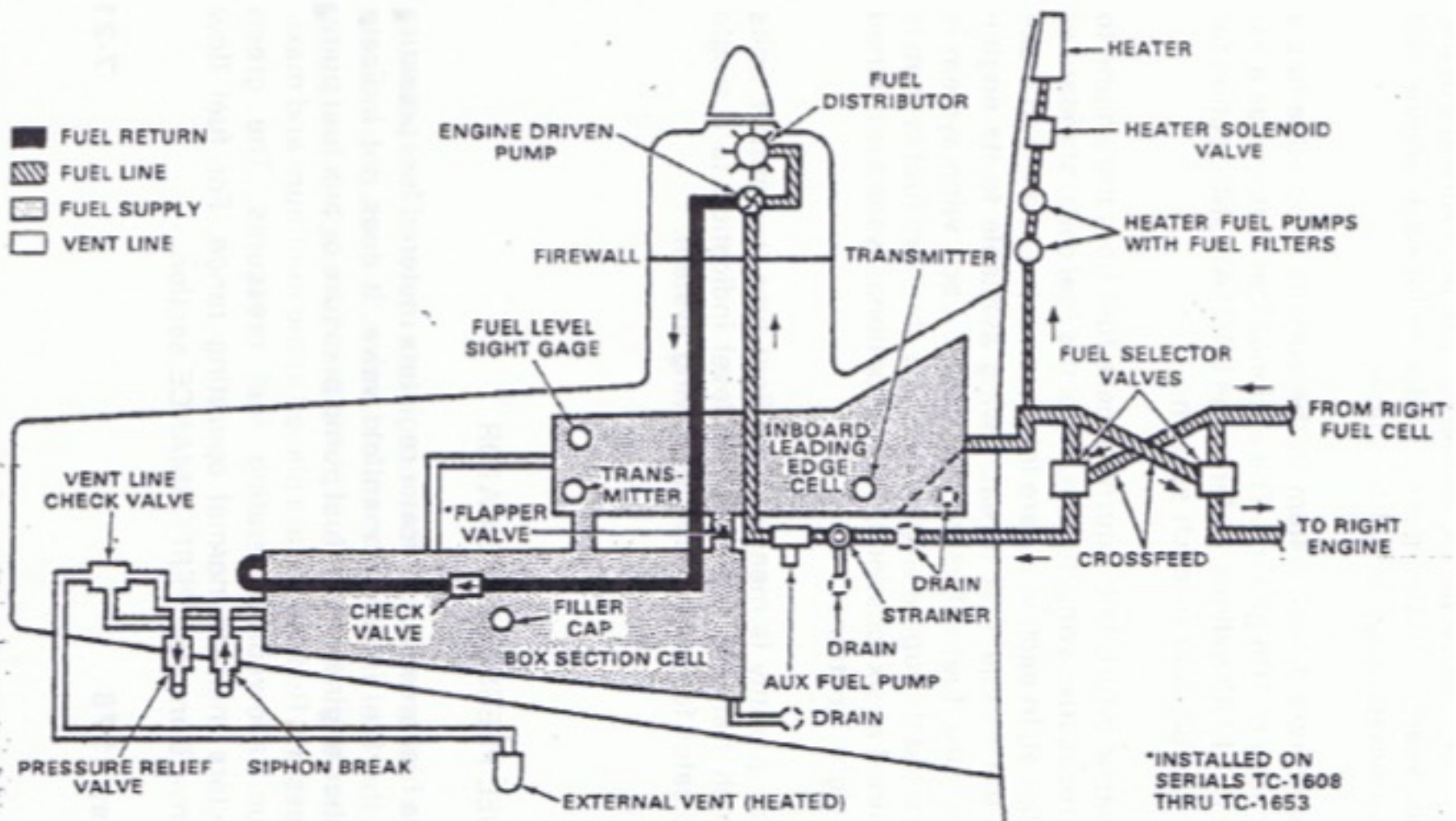


# Multi-Engine Systems

## Fuel Systems



Multi-tank  
Cross Feed  
Transfer pumps  
BE-55 system



FUEL SYSTEM SCHEMATIC

\*INSTALLED ON SERIALS TC-1608 THRU TC-1653

## Multi-Engine Systems

# Electrical Systems



Generator vs Alternator

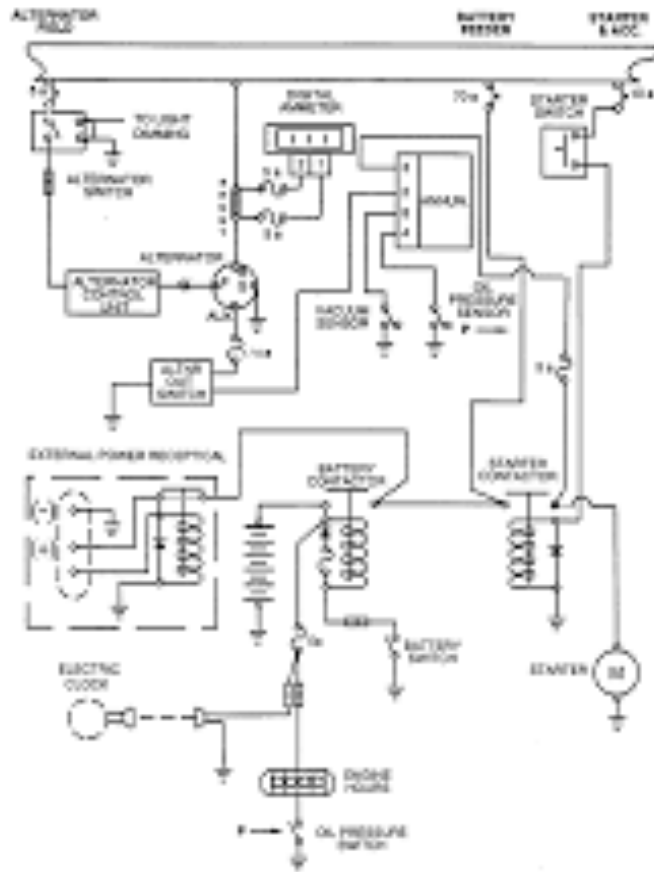
One battery

Alternators usually feed independent buses

Paralleling circuits

# Multi-Engine Systems

SECTION 7  
PA-28-181, ARCHER III DESCRIPTION & OPERATION



ALTERNATOR AND STARTER SCHEMATIC  
Figure 7-11

## Multi-Engine Systems

### Landing Gear Systems



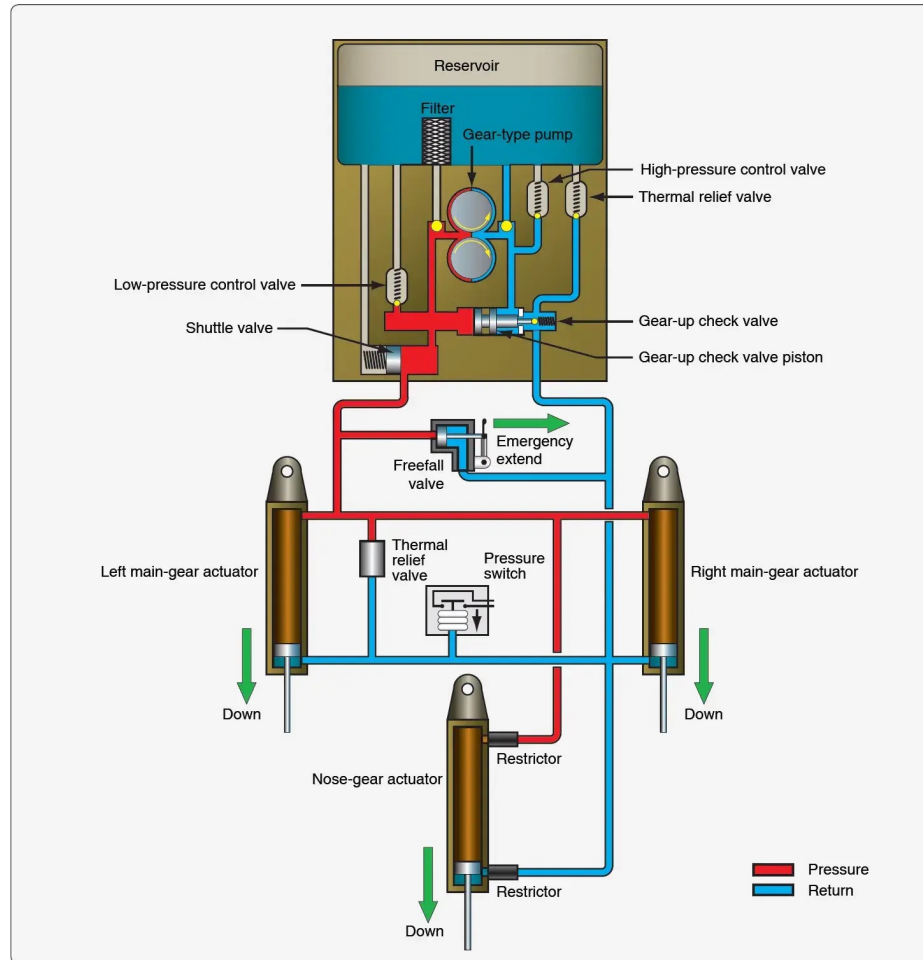
Electric motor  
Electro-hydraulic – Power Pack  
Indications/limitations Vlo/Vle  
Emergency procedures

## Multi-Engine Systems

Electric Gear Motor System Gear Swing

[Gear Swing BE58](#)

# Multi-Engine Systems



# Now you can test yourself on Airspace! Click below

CFI Bootcamp  
Flight Instructor Training



20  
26

**AIRSPACE  
FLASHCARDS**  
FLIGHT INSTRUCTOR TRAINING  
The New Industry Standard

1111 Lincoln Road  
Ste. 500  
Miami Beach, FL 33139

www.cfibootcamp.com

[Click to See More or to Buy](#)

AIRSPACE FLASHCARDS | IDENTIFYING AIRSPACE

CFI Bootcamp  
Flight Instructor Training



What is the airspace at 1,000 AGL?

2026 - FLIGHT INSTRUCTOR TRAINING 5

AIRSPACE FLASHCARDS | IDENTIFYING AIRSPACE

CFI Bootcamp  
Flight Instructor Training

**Answer:**  
Class G

**Explanation:**  
Class E starts at 1200 AGL due to the cyan shading near the US/ Mexico border. Even if there were not cyan shading it would start at 1200 AGL because there isn't any other indication of airspace. See the note in the legend that says "Class E Airspace Exists at 1200 AGL unless otherwise designated as shown above". The cyan shading is there in this case only because there is class G from the surface to but not including 14,500 MSL on the hard side of the cyan shading.

2026 - FLIGHT INSTRUCTOR TRAINING 6

CFI Bootcamp  
Flight Instructor Training

# Now you can test yourself and find your errors! Click below

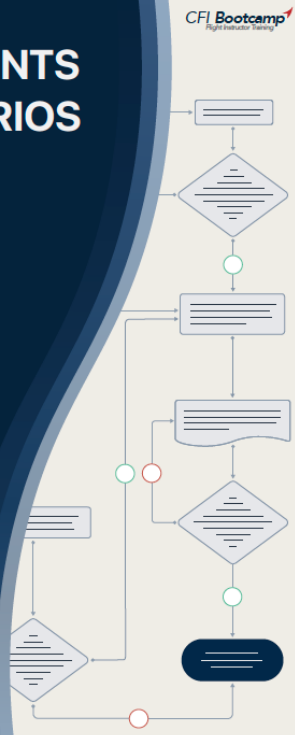
## ENDORSEMENTS AND SCENARIOS

SECOND EDITION 2025

INCLUDING 36 SCENARIOS

The way to get through training requirements and endorsements.

THE INDUSTRY STANDARD





## ADDITIONAL CATEGORY AIRPLANE, GLIDER, ETC. AT SAME LEVEL (EXCEPT SPORT PILOT)

<b>Starting Regulation - 61.63(b)</b> <ul style="list-style-type: none"> <li>Aeronautical experience new category - 61.63(b)(1)</li> <li>Proficient in knowledge and Flight proficient for new category - 61.63(b)(2)</li> <li>Checkride - 61.63(b)(3)</li> <li>No Knowledge test (power to power /no power) - 61.63(b)(4)</li> </ul>
<b>Prerequisites - Checkride - 61.39(a)(6)(i,ii,iii)</b> <ul style="list-style-type: none"> <li>Training within 2 cal mos</li> <li>Prepared for practical test</li> <li>Resolved deficient areas on the knowledge test</li> </ul>
<b>To Solo - (Not a student pilot) - 61.31(d)(2)</b> <ul style="list-style-type: none"> <li>Training per 61.31(d)(2)</li> <li>Student pilot section doesn't apply to this pilot</li> <li>Student pilot limitations don't apply</li> <li>No limitation on 90 days or cross-country</li> </ul>
<b>AC 61-65 - 61.63(b) for checkride</b>
<b>Partial Checkride - ACS Ratings Task Table in the Appendix</b>

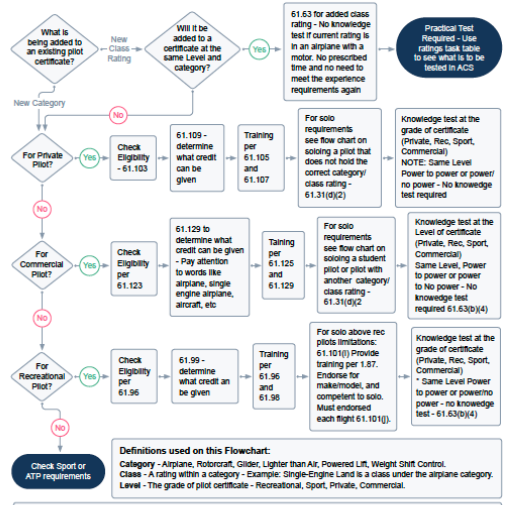
**SCENARIO 11** Table of Contents

Determine the training requirements, endorsements and procedures required for a person who holds a Private Pilot certificate – Airplane Multi Engine Sea to add Airplane Single Engine Land to their current pilot certificate.

Endorsement and FAR Scenario Questions  
Additional Category and Class Ratings CFI Bootcamp  
Flight Instructor Training

---

**ADDITION OF A CATEGORY OR CLASS TO AN EXISTING PILOT CERTIFICATE** Table of Contents



**Check Sport or ATP requirements**

**Definitions used on this Flowchart:**  
 Category - Airplane, Rotorcraft, Glider, Lighter than Air, Powered LM, Weight Shift Control.  
 Class - A rating within a category - Example: Single-Engine Land is a class under the airplane category.  
 Level - The grade of pilot certificate - Recreational, Sport, Private, Commercial.

**Note:**  
 A person who holds a pilot certificate other than Student Pilot is not subject to the Student Pilot Regulations or endorsements. An endorsement for solo is given under 61.31(d)(2) - the A.72 endorsement in AC 61-65. It does not expire and there are no other endorsements required, for example, cross-country.

# Lesson Plans Are Updated!



CFI Bootcamp  
Flight Instructor Training

Ground Reference Maneuvers

CFI LESSON PLANS

CFI Bootcamp  
Flight Instructor Training

### GROUND REFERENCE MANEUVERS

**Objective**

To ensure the flight instructor applicant can teach and perform ground reference maneuvers, manage associated risks, and understand them to an instructional level of knowledge.

**Motivation**

Ground reference maneuvers will provide a new student with knowledge of the aircraft's drift due to the effect of wind and how to prevent it.

**Presentation: 30 Minutes**

Purpose of ground reference maneuvers:

1. To maintain a desired ground track when wind is acting on the airplane.
2. Develops a feel for the control inputs and aerodynamic forces acting on the airplane and improves situational awareness - Division of attention.

No current, no drift. With a current, the boat drifts downstream unless corrected. With proper correction, the boat stays on intended course.

No wind, no drift. With any wind, the airplane drifts downwind unless corrected. With proper correction, the airplane stays on intended course.

The Effect of Wind Drift

© 2026 - CFI Bootcamp - Miami Beach, FL 33139 | 850-600-1021 | cfibootcamp.com

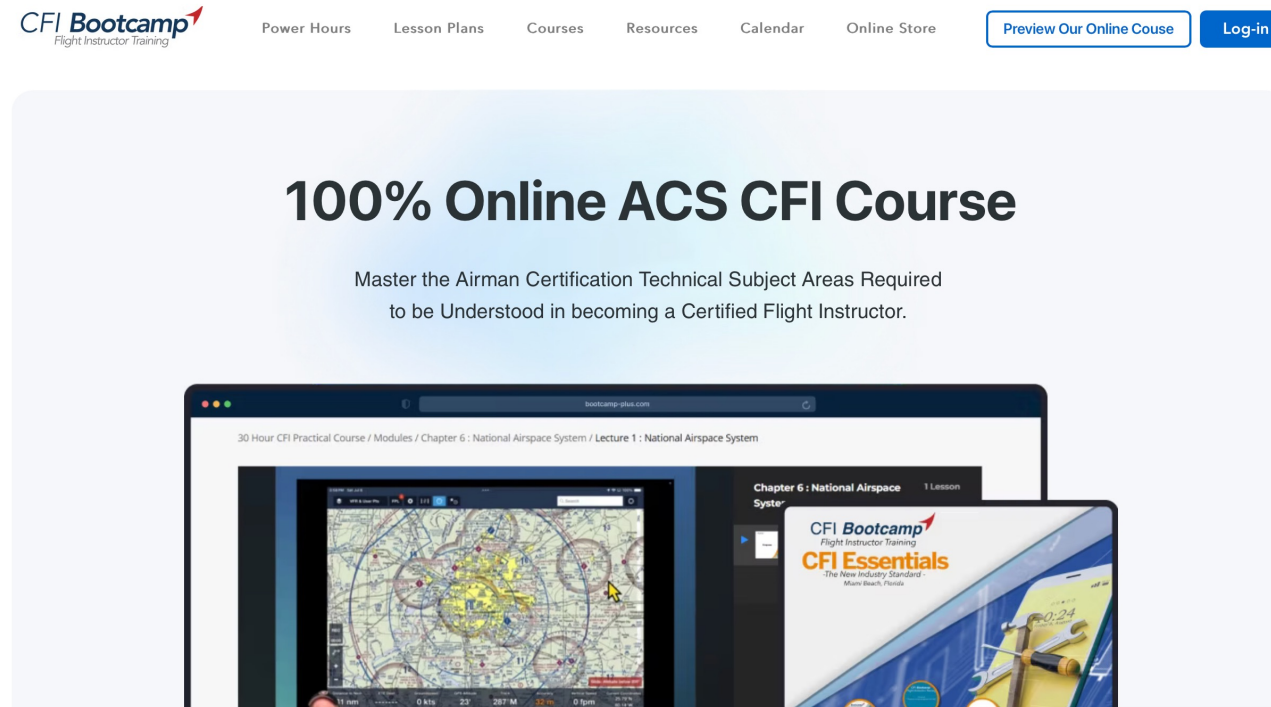
299

[Preview of the Lesson Plans Including TOC](#)

[Buy the Lesson Plans – Instant Download](#)

CFI Bootcamp  
Flight Instructor Training

# How am I ever going to learn this stuff? Click the image below



The image shows a screenshot of the CFI Bootcamp website. At the top left is the logo for CFI Bootcamp Flight Instructor Training. To the right of the logo is a navigation menu with links for Power Hours, Lesson Plans, Courses, Resources, Calendar, and Online Store. Further right are two buttons: 'Preview Our Online Course' and 'Log-in'. The main content area features a large blue banner with the text '100% Online ACS CFI Course' and a sub-headline: 'Master the Airman Certification Technical Subject Areas Required to be Understood in becoming a Certified Flight Instructor.' Below the banner is a stack of three images: a laptop displaying a flight simulator interface with a map, a tablet showing a 'Chapter 6: National Airspace System' slide, and a book titled 'CFI Essentials' by CFI Bootcamp.

**CFI Bootcamp**  
Flight Instructor Training

# Online course – 7-day Immersion Class – Digital Products



Power Hours

Lesson Plans

Courses

Resources

Calendar

Online Store

[Preview Our Online Course](#)

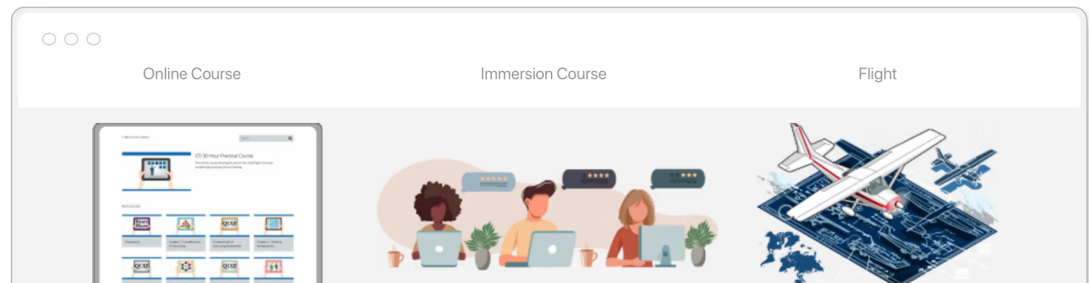
[Log-in](#)

## Your Flight Instructor Training Starts Here.

A Complete Structured Training System,  
Developed by Industry Leaders.

Palo Alto, CA and Miami, FL

[Learn More.](#)



# How am I ever going to learn this stuff? Click the images below



[Power Hours](#) [Lesson Plans](#) [Courses](#) [Resources](#) [Calendar](#) [Online Store](#)

[Preview Our Online Course](#)

[Log-in](#)

## Accelerated CFI Training

A Complete Structured Accelerated CFI Training System, Developed by Industry Leaders.

[Palo Alto](#) | [Miami](#) | [Las Vegas](#)

[Get Started Now](#) ▾

Overview of Accelerated CFI Training

7 Day Immersion Ground School



[Power Hours](#) [Lesson Plans](#) [Courses](#) [Resources](#) [Calendar](#) [Online Store](#)

[Preview Our Online Course](#)

[Log-in](#)

## Accelerated Instrument Flight Instructor Training

Finish your CFII in as little as 2 weeks!

Click an option below to find out more:

[Online Only](#)

[Online + Immersion Course](#)

[Full Program](#)



**CFI Bootcamp**  
Flight Instructor Training

**Special Announcement!**

**Reminders!**



CFI Study Group on FaceBook

***Join SAFE and the Facebook CFI Study Group by Clicking on the Images Above***

**CFI Bootcamp**  
Flight Instructor Training