# COMPUTER TRAINING SYSTEMS

## VFR HELICOPTER INDOCTRINATION TRAINING SYLLABUS

HELICOPTER *TRAINING*

Each Part 135 training program consists of customer-selected subjects from the list below. Each course is a comprehensive learning program covering the listed topics in each area with individual course examinations drawn from all assigned material testing student retention. Subjects include a mixture of interactive tutorials and text-based lessons, culminating in a final exam. Each course also includes administrator access to online record keeping in order to track and monitor individual pilot progress. All subjects are designed to satisfy the initial and recurrent training requirements of 14 CFR 135.293 as well as other aviation-related topics.

**14 CFR PART 1-97 AND 49 CFR, PART 830 - RW VFR**
**Lessons**
   14 CFR Part 91, Subpart A
   14 CFR Part 91, Subpart B
   14 CFR Part 91, Subpart C, D, and E
   14 CFR Parts 1, 39, 43, and 47
   14 CFR Parts 61 and 67
   49 CFR Part 830

**14 CFR PART 110**
**Lessons**
   Definitions

**14 CFR PART 119**
**Lessons**
   Subparts A and B
   Subpart C - 119.33-53
   Subpart C - 119.55-69

**14 CFR PART 135 - RW VFR**
**Lessons**
   Subpart A - General
   Subpart B 135.63-87 - Flight Operations
   Subpart B 135.89-129 - Flight Operations
   Subpart C - Aircraft and Equipment
   Subpart D-H - Operating Limitations and Crewmember
      Requirements
   Subpart L - Helicopter Air Ambulance Requirements

**ADS-B OVERVIEW (VFR Operations)**
**Tutorial - ADS-B**
   Overview and System Description
   ADS-B Operations
   ADS-B Procedures
   ADS-B In Services
   Human Factors in ADS-B
**Lessons**
   Overview and System Description
   ADS-B Operations
   ADS-B Procedures
   ADS-B In Services

**AERONAUTICAL INFORMATION MANUAL - RW VFR**
**Lessons**
   Chapter 1.1 - Navigational Aids
   Chapter 1.2 - Performance Based Navigation
   Chapter 2 - Aeronautical Lighting and Visual Aids
   Chapter 3 - Airspace
   Chapter 4.1 - ATC Services Available to Pilots and Radio
      Phraseology
   Chapter 4.2 - Radio Communications
   Chapter 4.3 - Airport Operations
   Chapter 4.4 - ATC Clearances and Aircraft Separation
   Chapter 5.1-5.2 - Air Traffic Procedures
   Chapter 5.3-5.4 - ATC En route and Arrival Procedures
   Chapter 5.6 - National Security
   Chapter 6 - Emergency Procedures
   Chapter 7.1 - Meteorology
   Chapter 7.3-7.6 - Turbulence and Flight Hazards
   Chapter 8 - Medical Facts for Pilots
   Chapter 10 - Helicopter Operations

**AIRSPACE OVERVIEW (VFR Operations)**
**Tutorial - Airspace**
   Overview
   Class B
   Class C
   Class D
   Class E
   Class G
   Special Use Airspace
   Other Airspace Areas
   Charting
**Lessons**
   Controlled and Uncontrolled Airspace
   Special Use Airspace
   Other Types of Airspace

**AVIATION SAFETY ACTION PROGRAM  (ASAP) OVERVIEW**
**Tutorial - Aviation Safety Action Program**
   ASAP Overview
   ASAP Process
   How to Submit a Report
**Lessons**
   Aviation Safety Action Program  (ASAP) Overview

**AVIATION WEATHER THEORY (VFR Operations)**
**Tutorial - Aviation Weather Theory**
   The Standard Atmosphere
   Moisture
   States of Water
   Cloud Types
   Air Masses
   Fronts
   Turbulence and Windshear
   Adverse Weather
   Aviation Weather Services
**Lessons**
   The Standard Atmosphere
   Moisture
   Cloud Types
   Air Masses and Fronts
   Turbulence and Wind Shear
   Adverse Weather – Thunderstorms
   Adverse Weather – Fog
   Aviation Weather Services

**CLASSES OF FIRE AND PORTABLE FIRE EXTINGUISHERS**
**Tutorial - Portable Fire Extinguishers**
   Overview and Classes of Fire
   Types of Fire Extinguishers
   Location and Use of Fire Extinguishers
   Risks and Hazards of Fire
**Tutorial - Lithium Battery Fires**
   Lithium Battery Fires
**Lessons**
   Classes of Fire and Types of Extinguishers
   Location, Use, Risks, and Hazards
   Lithium Battery Fires

**CONTROLLED FLIGHT INTO TERRAIN AVOIDANCE (CFIT, TAWS, AND ALAR) - (RW)**
**Tutorial - CFIT and ALAR**
   Introduction to CFIT
   Combating CFIT
   Approach and Landing Accident Reduction
      (ALAR)
**Tutorial - TAWS**
   Introduction to TAWS
   TAWS Equipment
   Cautions and Warnings
   Databases
**Tutorial - Case Study**
   Case Study
**Lessons**
   Controlled Flight into Terrain (CFIT)
   Approach and Landing Accident Reduction (ALAR)
   Terrain Awareness and Warning System (TAWS)

**CRM-ADM - Rotor Wing**
**Tutorial - CRM - Rotor Wing**
   Crew Resource Management
   Authority of the Pilot in Command
   CRM Skills
   Communication Processes
   Building and Maintaining a Flight Team
   Workload and Time Management
   Situational Awareness
   Fatigue: Effects and Reduction Strategies
   Stress: Effects and Reduction Strategies
**Tutorial - ADM - RW**
   What is ADM?
   Risk Management
   Operational Pitfalls
   Applying ADM
**Tutorial - Case Study**
   Case Study
**Lessons**
   Authority of the PIC
   Communciation
   Team Building
   Workload and Time Management
   Situational Awareness
   Fatigue - Effects and Reduction
   Stress - Effects and Reduction
   Risks and Operational Pitfalls
   Aeronautical Decision Making

**ELECTRONIC FLIGHT BAG (EFB)**
**Tutorial - Electronic Flight Bag (EFB)**
   Introduction to EFBs
   Operation of the EFB
   Abnormal and Emergency Procedures
**Lessons**
   Electronic Flight Bag (EFB)

**FLAT-LIGHT, WHITEOUT, AND BROWNOUT CONDITIONS**
**Tutorial - Flat-light, Whiteout, and Brownout Conditions**
   Overview
   Avoiding and Responding
**Lessons**
   Overview
   Avoiding and Responding

**FUNDAMENTALS OF INSTRUCTION**
**Tutorial - Duties, Functions, and Responsibilites**
   Duties, Functions, and Responsibilities
   Instruction and Evaluation
   Teaching Risk Management
   Aircraft Procedures and Corrective Actions
**Tutorial - Fundamental Principles of Instruction**
   Human Behavior
   Teaching Methods
   Learning Process
   Assessment and Critique
   Risk Management
**Tutorial - Case Study**
   Case Study
**Lessons**
   Duties, Functions, and Responsibilities
   Fundamental Principles of Instruction

**GPS (RW VFR)**
**Tutorial - GPS Overview**
  GPS System Description
  Availability and Reliability
  GPS Errors
  GPS NOTAMs and Aeronautical
  Information
  GPS Operational Overview
  VFR Overview
  Inadvertent IMC
**Lessons**
  GPS Overview

**HAA OPERATIONS**
**Lessons**
  HAA Operations

**HAZMAT - WILL CARRY OR WILL NOT CARRY**
**Tutorial - Label Identification**
  Introduction
  Class 1
  Class 2
  Class 3
  Class 4
  Class 5
  Class 6
  Class 7
  Class 8
  Class 9
  Miscellaneous Labels, Placards, and
    Markings
**Tutorial - Security Awareness**
  Introduction and Regulatory
    Requirements
  Recognizing Security Threats
  Responding to Security Threats
**Lessons**
  General Philosophy
  Limitations
  List of Hazardous Materials
  Labeling and Marking
  Recognition of Undeclared Hazardous
    Materials
  Storage and Loading Procedures
  Pilot's Notification
  Provisions for Passenger and Crew
  Emergency Procedures
  Security Awareness

**HELICOPTER AERODYNAMICS**
**Lessons**
  Aerodynamics Lessons
  Hazards of Helicopter Flight

**HELICOPTER EXTERNAL LIGHTING**
**Lessons**
  Helicopter External Lighting

**INTRODUCTION TO SAFETY MANAGEMENT SYSTEM (SMS)**
**Tutorial - SMS**
  SMS Fundamentals
  Safety Culture: Theory and Practice
  Safety Policy and Objectives
  Safety Risk Management
  Safety Assurance
  Safety Training and Promotion
**Lessons**
  SMS Fundamentals

**METAR and TAF**
**Tutorial - METAR and TAF**
  What is a METAR?
  METAR Elements
  METAR Remarks
  The TAF - Significant Differences
**Lessons**
  Introduction
  METAR Body Elements
  METAR Remarks
  TAF
  Abbreviations and their Meanings

**MINIMUM EQUIPMENT LIST (MEL)**
**Tutorial - Minimum Equipment List (MEL)**
  MEL Overview
  MEL Contents
  MEL Procedures
**Lessons**
  Minimum Equipment List (MEL)

**PHYSIOLOGY AND FIRST AID - RW**
**Lessons**
  CPR
  AED
  First Aid - Bleeding, Wounds, and Burns
  First Aid - Poison, Bites, and Stings
  First Aid - Serious Illnesses and Injuries
  Hyperventilation
  Spatial Disorientation
  Trapped Gases

**PILOT'S GLOSSARY - RW VFR**
  Pilot's Glossary A-C
  Pilot's Glossary D-N
  Pilot's Glossary O-W
  Helicopter Only

**RUNWAY INCURSION**
**Tutorial - Runway Incursion**
  Introduction
  Flight Planning
  Ground Operation
  Standard Operating Procedures
  Airport Lighting
  Airport Pavement Markings and Signs
  Equipment and Technology
**Lessons**
  Runway Incursion

**SINGLE-PILOT RESOURCE MANAGEMENT**
**Tutorial - Single-Pilot Resource Management**
  What is SRM
  Risk Management for Single-Pilot
  Operations
  Applying SRM
**Lessons**
  Communications
  Aeronautical Decision Making
  Risk Management
  Situational Awareness
  Task Management
  Fatigue - Effects and Reduction
  Stress - Effects and Reduction
  Automation Management
  CFIT Awareness

**SURVIVAL**
**Lessons**
  General
  Food
  Water
  Making Fires
  Signaling
  Desert Survival
  Arctic Survival
  Survival at Sea
  Navigation

**TCAS II**
**Tutorial - TCAS II**
  History and Development
  Basic Concept
  System and Traffic Display
  Types of RAs
  Flight Crew Response
  Problem Encounters
  Operations
  Communication and Reporting
    Requirements
**Lessons**
  Communication and Reporting
  General Information
  Operations
  System and Displays
  TAs and RAs

**TRAFFIC ADVISORY SYSTEM (TAS)**
**Tutorial - Traffic Advisory System**
  Introduction to TAS
  Systems and Equipment Description
  Traffic Advisories
  Recommended Actions
**Lessons**
  TAS Basics
  Multi-Function Display Symbols and
    Use
  Pilot Actions

An *Operations Manual Training Program* can be developed for your specific operations manual and specifications.