



# Arapahoe Flight Club

Colorado Springs, CO

## Garmin G1000 Course Syllabus

Last revised 09/03/2020

## Course Description:

This training syllabus is designed to meet the curriculum requirements for a pilot to safely and comfortably fly a G1000 equipped aircraft. The ground lessons are designed to cover six hours of instruction and one end-of-course test in a one-day course.

## Our Approach:

This course is to be used as a glass cockpit transition for private pilots, instrument rated pilots, and instructor pilots. Completion of the Arapahoe Flight Club (AFC) G1000 transition course will lead to a ground evaluation and a completion certificate/ endorsement.

- Requirement completion paperwork is to be documented in AFC's member folder as well as their logbook.
- Instructor led course content supporting this syllabus is provided both in the G1000 Transition ground, and flight training.
- Instrument and instructor pilots will require additional in aircraft training to be checked out.
- Use of additional self-paced content and references is optional.
- Independent completion of self-study ground training content will not satisfy the requirement for ground and flight instruction provided by AFC.
- Attendance of instructor-led training is required.

## G1000 Course Hour Summary

<b><i>Lesson</i></b>	<b><i>Time (Hours)</i></b>	<b><i>Description</i></b>
G1	2.0	
G2	2.0	
G EOC	TBD	End of Course Test
<b>Ground Total</b>	<b>4.0</b>	

# **G1000 VFR**

## Ground instruction – VFR Part One

### Objective:

Through ground instruction, to build the AFC member's knowledge to facilitate correct and safe use of the G1000. Furthermore, to ensure correct and safe use of G1000 avionics to aviate, navigate, and communicate under visual flight rules.

### Resources:

- Max Trescott's G1000 and Perspective Glass Cockpit Handbook (Fifth Edition)
- G1000 Integrated Flight Deck: Cockpit Reference Guide

### Content:

- System overview of PFD and MFD differences
  - What is the PFD?
  - What is the MFD?
- Primary Flight Display (PFD) introduction and operations
  - PFD
- Identify and explain instruments and components necessary for VFR flight
  - Screen colors
  - Status bars
  - Trend vectors
  - Inset map
  - Transponder
  - Nearest airports
  - Screen backlighting

- Setting and interpreting flight instruments on PFD
  - Airspeed
    - Reference speed bugs and timer
  - Attitude
  - Altimeter
  - VSI
  - HSI
    - HSI navigation
- Audio Panel
  - Setting and using radios
    - Displays
    - Controls
- Systems awareness
  - Abnormalities
    - Annunciators and alerts
- Review and questions

## Ground Instruction – VFR Part Two (Scenario based)

### Objective:

- Through scenario-based ground instruction, identify specifics for accessing and utilizing the features of the MFD under visual flight rules.

### Resources:

- Max Trescott's G1000 and Perspective Glass Cockpit Handbook (Fifth Edition)
- G1000 Integrated Flight Deck: Cockpit Reference Guide

### Content:

- Flight planning
  - Creating, storing, retrieving, and activating a flight plan
- Navigation using Nav1 and Nav2
- MFD functions
  - Weather
  - Traffic
  - Terrain
  - Destination information
- Navigating through a diversion
- Demonstrated use and understanding of
  - Map group pages
  - Waypoint group pages
  - Auxiliary group pages
  - Nearest group pages
- Engine indication systems
  - Troubleshooting
  - Use of abnormal procedures and emergency checklists
- EOC Test

## Ground Course Completion:

The AFC member must complete the ground training with 100% attendance and successfully pass the end of course test with an 80% or higher grade. If needed, all retraining to complete the questions missed, must be completed prior to issuance of the G1000 ground school graduation certificate. Once a pilot finishes ground training, a copy of the ground training graduation certificate must be put in the AFC member folder to document successful completion. Logbook endorsements\* will be completed by the assigned CFI following successful completion of the aircraft checkout.

\*Endorsements are not an FAA requirement; however, they are required by AFC to operate G1000 equipped aircraft

