CADET ORIENTATION FLIGHT PROGRAM GUIDE

CAPP 60-40

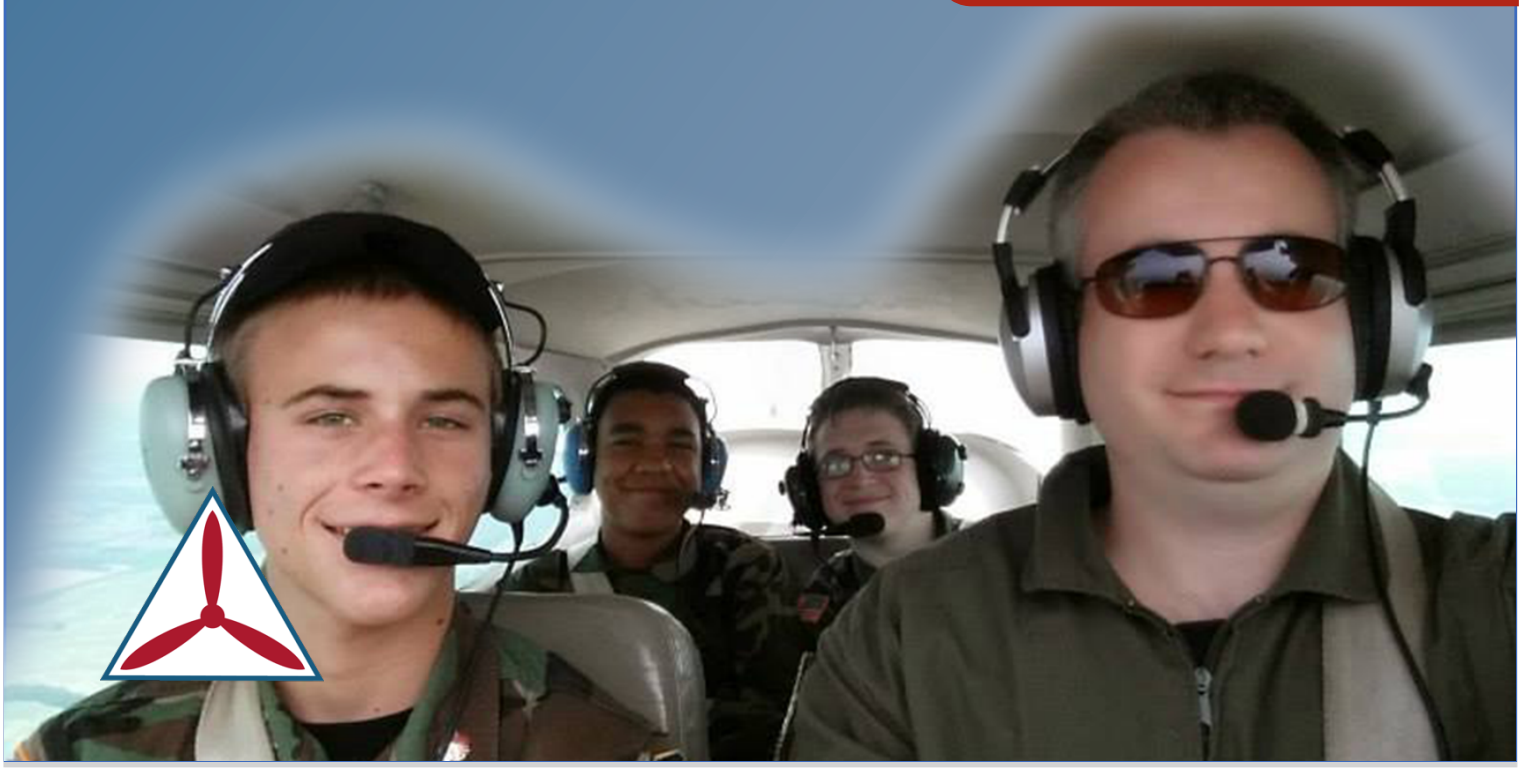
October 2018

"SAFE, FUN, EDUCATIONAL"

PROGRAM BASICS

BEST PRACTICES

FLIGHT SYLLABI



CIVIL AIR PATROL

CADET ORIENTATION FLIGHT PROGRAM GUIDE

Safe, Fun, Educational

SUMMARY OF CHANGES

The powered and glider syllabi content remains unchanged. ● The most significant addition is a syllabus for lighter-than-air flights, for those locations fortunate enough to have access to balloons. ● A bit more specificity has been added to the program's learning objectives. In particular, some attitude items (affective objectives) are now included. ● The section suggesting a division of labor among the key players -- the wing commander, the wing o-flight coordinator, squadron commanders, and squadron staff -- has been expanded. One reason for this is that CAPR 60-1, 8.9.1.2, requires wings to "push" sorties to the squadrons and develop a written plan annually for serving all squadrons in the wing. That requirement did not exist when the previous edition of CAPP 52-7 was published. ● A cadet-passenger briefing is now included, using the FAA's "S.A.F.E.T.Y." mnemonic. ● Includes a brief discussion on context or how o-flights "fit" into cadet life and the AE program as a whole. ● Also includes a reference to the new "Cadet Flight Plan for Aviation Careers" poster, which takes that discussion a step further. ● We've formatted the document in the expectation that many pilots will view it on a tablets or smart phone, versus a paper-based kneeboard. ● Adds a reference to an online parents' FAQ. ● A handful of other minor edits and enhancements were also made.

OPR: CP
Supersedes: CAPP 52-7, April 2009 and Change 1, April 2010

CONTENTS

Part 1
PROGRAM OVERVIEW

1.1 GOAL & MOTTO

The goal of the Cadet Orientation Flight Program is to help America continue its aerospace supremacy by using cadet flight experiences to increase cadets' comprehension of and enthusiasm for STEM topics.

The program's motto describes what cadet flying is all about: "***Safe, Fun, Educational.***"

1.2 HOW THE PROGRAM IS DESIGNED

1.2.1 Flying's Place in Cadet Life. Orientation flights are a capstone event in the cadet's overall aerospace experience. Cadet aerospace includes at least three major components. First, cadets learn about aviation basics by studying the *Aerospace Dimensions* modules and completing achievement tests to advance through the overall CAP Cadet Program. Second, local aerospace education officers enrich this learning through experiential activities where cadets use CAP Stem Kits and AEX activity guides. And finally, orientation flights place cadets in the cockpit, where the aviation fundamentals they learned about through their textbooks and classroom activities come to life in an exciting way.

1.2.2 Learning Objectives. As cadets participate in the orientation flight program, they will fulfill the learning objectives listed below, to the extent they are afforded opportunities to fly in gliders, powered aircraft, or lighter-than-air aircraft. Cadets who receive only one or two flights will fulfill only the first objectives, although the experience should nevertheless be meaningful. Cadets who are able to participate more actively will learn all the more.

A. Academic (Cognitive) Goals & Objectives

Goal: Increase cadets' knowledge of aviation fundamentals

Objectives:

1. Science. Describe basic principles of physical science as they relate to aviation, including:
   - Properties of air
   - Four forces of flight
   - Lift and Bernoulli's principle
   - Newton's laws of motion

2. Aircraft. Describe the major parts of an aircraft, including:
   - Control surfaces (ailerons, rudder, elevators)
   - Airfoil (leading edge, trailing edge, chord, and camber)

- Fuselage, empennage, horizontal stabilizer, vertical stabilizer
- Flaps, strut, spinner, propeller
- Yoke, rudder pedals, throttle

3. Instruments. Identify by sight and describe the function of major flight instruments, including:
   - Airspeed Indicator
   - Attitude Indicator
   - Altimeter
   - Vertical speed indicator
   - Compass
   - Tachometer
   - Turn-and-Slip Indicator

3. Flight Maneuvers
   - Explain how pilots perform basic flight maneuvers to include roll, pitch, and yaw.
   - Explain the manner in which control surfaces are manipulated during roll, pitch, and yaw.
   - Summarize basic procedures used during take-offs and landings.

4. Weather
   - Discuss characteristics of VFR weather.
   - Identify basic cloud types.
   - Discuss how gliders soar using thermals, ridge and slope soaring, sea breeze soaring, and mountain wave soaring.
   - Discuss how air currents affect lighter-than-air aircraft.

B. Attitudinal (Affective) Goals & Objectives

Goal: Inspire a love of aviation and begin to inculcate positive attitudes and habits in young airmen*

Objectives:

1. Pro-Safety Attitude
   Defend the need for airmen to take a sober, calculated approach to risks

2. Disciplined Airmanship
   Defend the principle that airmen ought to habitually comply with FAA regulations and standard procedures

3 Fitness
   Defend the principle that a habit of exercise is a necessary part of airman's life

4. Drug-Free Ethic
   Defend the principle that airmen ought to choose a drug-free lifestyle

5. Joy
   Finally, joy itself is an objective. CAP wants to show cadets that flying is fun. When cadets experience the thrill of flying, CAP helps America attain what Brig Gen Billy Mitchell, father of our independent air force, called "an air-minded citizenry."

★ What does "airman" mean? This guide uses the proud, traditional term "airman" as a generic for people who fly, to include cadets participating in orientation flights. Similarly, the FAA uses "airman" as a generic term for pilots and nonpilots whose work in aviation is guided by a spirit of professionalism. The Air Force considers cadets as "airmen" and members of the Total Force when they participate in orientation flights.

1.2.3 Program Activities. The orientation flight program allows for flights in gliders, powered aircraft, and lighter-than-air aircraft.

Syllabus. Each orientation flight is governed by a syllabus, with each flight having a theme such as basic maneuvers, aircraft instruments, or weather. There are five syllabi for each aircraft type: gliders, powered aircraft, and balloons. The learning content is progressive in nature, so cadets should proceed through the syllabi in sequence, whenever it is reasonably possible to do so.

Front Seat & Back Seat Flights. With powered aircraft, multiple cadets could be served during a single sortie, if aircraft weight and balance permits. The suggested best practice is to place a pair of cadets in the aircraft, one starting out in the front right seat, the other seated in the rear, and flying per the syllabus for approximately 1 hour. The cadet positioned in the front is the primary learner. Upon landing, the pair switch seats and fly per the syllabus for another hour. In this way, cadets essentially double their opportunity for fun and learning.

Relationship to Flight Training. Orientation flights are educational but not conducted as formal flight training. Still, for those cadets who choose to enter formal flight training, their positive experiences with orientation flights should make them that much more prepared for success. For information on follow-on aviation opportunities available to cadets, see CAPVA 60-106, *Cadet Flight Plan for Aviation Careers*, or GoCivilAirPatrol.com > Programs > Cadets > Activities > Flying.

1.3 ROLE of WING & LOCAL LEADERS

Wings are responsible for managing the cadet orientation flight program and "pushing" sortie opportunities to the squadrons, per CAPR 60-1, *Cadet Program Management*, chapter 8. Squadrons slot cadets into the sorties that the wing generates. What follows is a suggested arrangement for dividing the labor so that cadet flying is a smooth-running operation:

1.3.1 Wing Commander

- Ensures the wing develops a written plan, annually, for maximizing cadet orientation flight opportunities
- Promotes cooperation between Wing/DO, Wing/CP, and squadrons
- Ensures the orientation flight program is monitored for regulatory compliance (including finances, pilot credentials, aircraft maintenance standards, and flight safety)

1.3.2 Wing Orientation Flight Program Officer (Suggested: Staff officer assigned to Wing/DO)

- Drafts an annual, written plan for orientation flights, and coordinates it with Wing/DO, Wing/CP, and other stakeholders before presenting it to Wing/CC for approval; ensures that needed ferry flights comply with the wing's own cost/benefit guidelines (see §1.9)

- Schedules orientation flight days at various locations around the wing, or at a single, centralized location, depending on what is deemed most practical and effective; schedules aircraft to support the pre-approved cadet flying days
- Administers a sign-up roster that qualified pilots use to indicate their interest and availability
- Publishes the flying schedule for orientation flight days, indicating aircraft used, ferry arrangements, and pilot assignments, distributing to all stakeholders; ensures each flying day is adequately staffed by qualified pilots, or adjusts the sortie schedule accordingly
- Assigns sorties to squadrons, and/or designates certain orientation flight days to particular squadrons
- Coordinates with squadrons to ensure that they will use all scheduled sorties or make vacant slots available to other squadrons
- Monitors the budget, striving for 100% budget execution and, If needed, requests additional funds from the region, via the wing commander; likewise, informs the region, through the wing commander, if the wing is unlikely to execute its budget and can surrender some funds that the region could reallocate to other wings

1.3.3 Squadron Commander

- Ensures that the squadron is ready to execute the wing's orientation flight plan on dates when the squadron is scheduled for flying
- Monitors the squadron's performance in the orientation flight program; attempts to slot each new cadet for an orientation flight within 60 days of their joining CAP
- Appoints a squadron orientation flight coordinator or ensures that the respective tasks are otherwise accomplished

1.3.4 Squadron Orientation Flight Coordinators (Suggested: Squadron/AEO)

- Coordinates with wing headquarters to implement the wing-designed plan that provides aircraft and pilots in service to the cadets, beginning about 4 weeks prior to a scheduled flying opportunity
- Coordinates with other staff officers who support cadet flying, such as public affairs and aerospace education officers
- Administers cadet sign-up rosters
- Double-checks cadet eligibility for flying (i.e.: current membership, under age 18, has completed fewer than 5 front-seat flights)
- Builds upon the wing-developed schedule by assigning individual cadets and syllabus numbers to sortie slots; (e.g., Cadet Curry, sortie #3, 1100-1200 hrs., glider syllabus #2)

- Enters flight data into WMIRS
- Manages the cycle of throughput on the ground, ensuring that each cadet is ready and waiting for his or her sortie, thereby minimizing downtime for the aircraft
- Ensures cadet protection guidelines are followed on the ground, as cadets await their turn to fly

1.4 HALLMARKS of SUCCESSFUL FLIGHTS

All flights must be conducted in accordance with CAPR 70-1, *CAP Flight Management*. Some hallmarks of a successful orientation flight include:

- Focusing on safety. Every flight will conform to the syllabus and be consistent with CAP safety practices. Flights will only be conducted in daylight and in visual meteorological conditions (VMC).
- Flying single-engine aircraft, gliders, or hot air balloon. CAP cadet orientation flights will be accomplished only in single engine aircraft, in gliders, or in hot air balloons. Flights in other aircraft are sometimes permitted for CAP cadets but are not conducted using this syllabus.
- A thrilling experience. Cadets should be allowed to handle the flight controls, under the pilot's supervision, during the non-critical phases of flight (e.g.: not during take-off, landing, or an emergency).
- Fulfilling at least 80% of the flight syllabus's goals. Each flight has an educational purpose, as discussed in the various syllabi. The goal is to complete the syllabus objectives, or at least 80% of them, in one sortie.
- Lasting 0.7 – 1.2 hours in duration. Actual flight time will depend on local conditions. All flights can safely be accomplished in 0.7 to 1.0 flight hours. National Headquarters may limit the reimbursements if flights are longer than 1.2 hours.
- Properly seating the participants. The pilot of powered aircraft will occupy the left front seat. The pilot of glider aircraft will occupy the rear seat, proficiency permitting (or the left seat of gliders that have side-by-side seating).
- Maximizing the use of the aircraft. The cadet seated in the front seat is the primary "student" during an orientation flight. However, in powered aircraft or balloon flight, a second or third cadet should fly in the back seat, if weight and balance allows. Cadets may have as many backseat flights as possible. Backseat flights are observation flights only and are not reimbursable. (Pilots must have a cadet in the front seat if backseat rides are flown under this program.)
- Avoiding extreme maneuvers. Pilots will not perform extreme maneuvers, aerobatics, spins or emergency procedures (unless, of course, there's an emergency).
- Ending early, if necessary. In cases of airsickness or lack of interest, the flight should be ended.

1.5 PILOT REQUIREMENTS

Cadet orientation flight pilots will be qualified and selected in accordance with CAPR 70-1, *CAP Flight Management*. Moreover, cadet orientation pilots are required to:

- Pre-flight and operate the aircraft in a safe manner, consistent with CAP and FAA regulations.
- Brief cadets on how to operate around the aircraft.
- Adhere to the learning objectives or topics outlined on the flight syllabus.
- Ensure that the flight information is recorded online through WMIRS (see §1.8).

Pilots are asked to familiarize themselves with the cadet *Aerospace Dimensions* modules, available in the "cadet library" on the CAP website. The flight syllabi work hand-in-hand with the modules. By being familiar with the subject matter the cadets are studying, pilots can make the orientation flights that much more educational.

1.6 CADETS' REQUIREMENTS

Cadets must be under age 18 to participate in orientation flights due to limitations of the Federal Tort Claims Act (FTCA). Cadets over age 18 may participate in aircrew training in CAP's emergency services missions.

This is an expensive program involving a great deal of volunteer labor, event planning, and coordination. Therefore, it is important for cadets to arrive on time and be ready to fly as scheduled, or to decline their slot at least one week beforehand. Commanders should ask cadets to bring the following with them:

- The uniform of the day
- Sunglasses
- Chewing gum
- Snacks and water
- Camera (optional)

1.7 FINANCIAL REIMBURSEMENTS

Each wing is allotted funds for cadet orientation flights. Wings must manage the financial aspects of the program in accordance with CAPR 173-3, *Payment for Civil Air Patrol Support*. That same regulation also specifies the reimbursement rates for aircraft used to support cadet flying.

Sometimes, pilots or squadrons want to fly cadet orientation flights but not seek reimbursement. Since National Headquarters is tracking all of the cadet orientation flights flown, please enter the code "75" in the Syllabus Number field for orientation flights not seeking reimbursement.

1.8 ONLINE REPORTING USING WMIRS

Before National Headquarters reimburses orientation flight expenses, the flight data must be entered into WMIRS, the Web Mission Information Reporting System, available via eServices.

The rules and procedures for entering cadet orientation flight information are the same as those used for reporting other CAP flight activities (see the WMIRS website for details).

Squadron commanders, or their designees, are responsible for entering the orientation flight data into WMIRS. For technical support, please see the contact information on the WMIRS web site.

Wing commanders are responsible for managing the cadet orientation flight program in their wings to include expending funds, allocating resources and determining reasonable ferrying conditions. They are responsible for auditing the flight information for accuracy and timeliness and for avoiding fraud, waste or abuse.

1.9 FERRY FLIGHTS

Sometimes CAP aircraft, pilots, and cadets reside in separate communities. In developing their annual orientation flight plans, wings decide if it makes sense to bring the aircraft and pilots to the cadets' hometown, or vice versa.

Before relocating aircraft to support cadet flying, the wing should develop and publish a matrix indicating the number of orientation flights needed to justify ferrying an aircraft from one location to another. A sample matrix is shown below:

	Ferry aircraft from:	ABC	DEF	GHI	JKL
Ferry aircraft to:	ABC (Gotham)	na	4	6	8
	DEF (Tatooine)	4	na	4	6
	GHI (Mordor)	6	4	na	4
	JKL (Maxwell AFB)	8	6	4	na

Cadet sorties needed to justify the ferry

1.10 AWARD CERTIFICATE

Commanders may present CAPC 77, *Certificate of First Flight*, to cadets upon completing their first CAP orientation flight. It may be downloaded from GoCivilAirPatrol.com > Programs > Cadets > Activities > Flying.

Part 2
SUGGESTED BEST PRACTICES

2.1 RECIPE FOR A SUCCESSFUL O-FLIGHT DAY

- ***Wing.*** Coordinate for aircraft and pilots about 6 weeks in advance.
- ***Wing or Squadron.*** As a courtesy, coordinate with the airport manager before scheduling a flying day, particularly if operating several aircraft. Ask if a conference room or other space could be made available to CAP for the day as a base of operations.
- ***Wing or Squadron.*** Coordinate with an FBO to take care of your fuel and other service needs.
- ***Squadron.*** Have all cadets sign-up in advance to participate. Ensure each knows what time they need to report to the airport. Ensure parents are aware of their cadet's commitment to participate.
- ***Squadron.*** Ensure parents are comfortable with the orientation flight program. Use the Parents' FAQ (§2.3) to answer their questions and show that CAP is committed to safety.
- ***Squadron.*** Prepare a detailed schedule / sortie plan, as illustrated below.
- ***Squadron or Wing.*** Have at least one senior member or cadet sponsor member stationed on the ground to prepare cadets for their sorties, to limit the aircraft's downtime.
- ***Squadron or Wing.*** Have meaningful activities to occupy cadets as they wait their turn to fly; make the event a full day of activities with cadets cycling out of ground-based activities (color guard training, fitness activities, rocket building, etc.) to fly, then returning to the ground-based activity after landing

SAMPLE SORTIE PLAN *for* CADET O-FLIGHT DAY

Sortie	ETD	Aircraft	Pilot	Syllabus	Cadet – Front	Cadet – Rear
1	0800	N99100	Capt Earhart	Ferry	NA	NA
2A	0900	N99100	Capt Earhart	1	C/Amn Curry	C/Amn Arnold
2B	1015	N99100	Capt Earhart	1	C/Amn Arnold	C/Amn Curry
3A	1130	N99100	Col Feik	3	C/SrA Feik	C/TSgt Doolittle
3B	1245	N99100	Col Feik	4	C/TSgt Doolittle	C/SrA Feik
4	1400	N99100	Capt Earhart	5	C/Capt Mitchell	C/TSgt Doolittle
5	1515	N99100	Capt Earhart	Ferry	NA	NA

- ***Squadron.*** Take lots of pictures and send a press release to local media.
- ***Squadron.*** Working with the pilots, discuss plans for inclement weather.
- ***Squadron.*** Have a supply of First Flight Certificates ready.
- ***Squadron.*** Ensure all participating cadets are current members under age 18.

2.2 CADET STAFF

To provide cadets with leadership opportunities, the squadron may appoint Cadet Briefing Officers. These individuals should be cadet officers or NCOs who are particularly knowledgeable about aviation. Cadet Briefing Officers assist the pilots in preparing cadets for their orientation flights. Suggested duties include:

- Leading the Pre-Flight Activity (see §2.5)
- Reviewing the flight syllabus with cadets, before take-off
- Discussing how the flight syllabus relates to the topics studied in *Aerospace Dimensions*
- Helping cadets find the departure airport on a sectional chart and examining the route or landmarks in the general area where the flights will be located
- Ensuring cadets have the following (optional) equipment: sunglasses, a digital camera, snacks, chewing gum, water
- Discussing safety precautions to observe when on the tarmac (no headgear, stand clear of propellers, no running)
- Advising cadets to visit the restroom before take-off
- Introducing the pilots and cadets to one another
- Answering general questions about the flight
- Following-up with cadets after landing to discuss the success of their flight, look for ways to improve the program, and check their morale

2.3 PARENTS' FAQ

CAPP 60-12, *Parents' Guide to the CAP Cadet Program,* explains the basics of the cadet orientation flight program, but some parents may want more information. An online FAQ is available in the parents' section at GoCivilAirPatrol.com > Programs > Cadets > Parents.

2.4 SUGGESTED PLANNING TIMELINE

	6 weeks prior	5 weeks prior	4 weeks prior	3 weeks prior	2 weeks prior	1 week prior	1 day prior	Flying Day
Squadron Orientation Flight Coordinator	Coordinate with Wing to implement the wing's plan to provide pilots and aircraft		Announce activity: - Primary date - Rain date - Location - Sign-up process	Begin planning schedule & sortie plan Select & prepare cadet briefing officer (optional)	Finalize schedule & sortie plan Verify sufficient resources (pilots, aircraft, adults)	Confirm schedule with pilots Verify that all cadets are under age 18 and current CAP members	Discuss weather forecast with pilots; decide to fly, delay, or postpone flights	Supervise ground operations; execute the schedule & sortie plan Ensure flight data is entered into WMIRS
Assistant Project Officer			Plan ground-based cadet activities of any topic to run concurrently with sorties Coordinate with cadet staff / cadet instructors		Continue mentoring and supervising cadet staff's preparations	Invite local media to event	Follow up with local media	Help with two-deep supervision Conduct ground-based cadet activities concurrent with sorties Take pictures, interview cadets and pilots Prepare social media posting(s); prepare hometown news release
Pilots		Volunteer to fly; discuss schedule availability				Confirm schedule with squadron	Discuss weather forecast with squadron; decide to fly, delay, or postpone flights	Continue monitoring weather & safety Fly!
Cadet Briefing Officer				Begin planning the Pre-Flight Activity	Continue planning the Pre-Flight Activity	Brief cadets on schedule & what to bring	Review flight syllabus Prepare uniform & gear	Brief cadets Fly!
Cadets			Begin signing-up	Deadline to sign-up		Receive briefing on schedule & what to bring	Review flight syllabus Prepare uniform & gear	Fly!

2.5 PRE-FLIGHT ACTIVITY

A. Overview

Many cadets are not only new to flying, they will be visiting a general aviation airport for the first time. During this activity, cadets learn about the airport's anatomy. This optional activity is a good way to occupy cadets as they wait their turn to fly. Further, it provides cadet officers and NCOs with a leadership opportunity.

Suggested Instructor(s)

A pilot, aerospace officer, or similar individual should draw upon his or her knowledge to conduct the ground activities listed below.

Cadet Officers and NCOs could assist in leading the ground activities below, if they are knowledgeable about flying.

Duration of Preflight Activities

Approximately 45 minutes, but can be adjusted to fit the time available

Objectives

- Identify key features of a general aviation airport and describe their function
- Identify key features of an aeronautical sectional chart
- Assist the instructor in observing the weather conditions and obtaining a forecast
- Defend the idea that aviators need to be healthy, drug-free, and alert
- Actively observe an aircraft preflight

Suggested Method

Start the day by having the first group of cadets complete this Preflight Activity, which should take about an hour. Then send them off to fly. Shortly after the first group launches, the second group should arrive and begin this Preflight Activity. Repeat the cycle as many times as needed.

B. Lesson Outline

1. Examine the Airport's Anatomy (10 min)

This might be the cadets' first trip to a small airfield. Find a safe location with a good view of the field to point out and explain the function of the following features (where applicable):

- Windsock
- Active runways
- Taxiways
- Beacon
- Runway markers
- FBOs (fixed base operators)
- Tower
- ILS (instrument landing system)
- Review the Aeronautical Chart (10 min)

Have the cadets locate their airport on a sectional chart. Point out important features in the area, such as mountains, restricted airspace, VORs, etc. If flying to another airport, have the cadets locate it on the chart and determine the heading they'll be flying each way.

2. Observe the Weather (10 min)

Have the cadets assist the pilot in command (PIC) or ground instructor in checking the weather conditions, winds aloft, radar, etc.

3. Drug Free Ethic (2 min)

The PIC should pause to mention the importance of following a drug-free ethic. Drugs and alcohol don't mix with flying. On a similar note, crew rest is important, too. Pilots need to be healthy and fully alert.

4. Restroom Break (10 min)

Last chance for the fliers to use the facilities.

5. Preflight (20 min)

The Pilot-in-Command (or anyone knowledgeable about flying) should lead the cadets through a basic preflight and safety briefing. Explain what is being checked and why. Conduct the standard passenger briefing. Encourage the cadets to ask questions.

Of course, the PIC maintains responsibility for pre-flighting the aircraft. But to save time, each group of 2-4 cadets might "preflight" one aircraft on the ground, while another aircraft, pre-flighted once by the PIC, is used for the actual flying.

2.6 SAMPLE PRESS RELEASE

Change details to fit your situation and make this story your own.

CIVIL AIR PATROL
Hometown Cadet Squadron
United States Air Force Auxiliary

POINT OF CONTACT: Major Carl Spaatz, CAP
(123) 555.1212 cell
carl@spaatz.com

Local Youth Take to the Skies With the Civil Air Patrol

Hometown USA, 1 December 2019 -- Ten area teens experienced the thrill of aviation, through orientation flights with the Civil Air Patrol at Hometown Municipal Airport today. The cadets flew a combined 10 hours in CAP's sophisticated Cessna 182's.

"It was awesome!" reports Cadet John Curry, age 14, of Hometown. "I've always wanted to fly, and today, for the first time, I got to handle the controls and see what flying is all about."

The hour-long flights in single-engine Cessna aircraft introduced the cadets to the science that makes flight possible. They learned about navigation, weather, aircraft instruments, flight maneuvers, and more.

The cadets' day began by helping pre-flight their aircraft. Working with their pilot, they taxied their aircraft to Hometown Airport's runway 99, gave it full throttle and took off, climbing to 3,000 feet. While aloft, it was the cadets who were handling the controls, during the non-critical stages of the flight.

"You really have to pay attention when you're at the controls," explained Cadet Mary Feik, 16, "but once you get past your nervousness, it's fantastic."

Once they reached their assigned altitude, the cadets turned southwest and navigated to Neighboring Airport, where they made a brief stop. Then it was another cadet's turn at the controls for the flight home. CAP pilots repeated this round-trip throughout the day.

"I've been flying cadets for five years, and it's always exciting just to see the look on their faces," said one of the pilots, CAP Major Hap Arnold of Hometown. Major Arnold and two other pilots volunteered their time, while the Civil Air Patrol provided the aircraft and fuel, at no cost to the cadets or the pilots.

The area youth participating were [names of cadets] The pilots included [names of pilots]

CAP's Cadet Program is open to youth aged 12 through 18. Additionally, there are volunteer opportunities for adults, pilots and non-pilots alike. For more information, contact Major Carl Spaatz at 555-1212, or visit GoCivilAirPatrol.com.

-30-

ATTACHMENTS:

Photo-01. Suggested Cutline: Cadets Mary Feik, 14, and Eddie Rickenbacker, 12, assist Major Ira Eaker in pre-flighting their Civil Air Patrol aircraft before enjoying an orientation flight.

Photo-02. Suggested Cutline: Cadet Amelia Earhart, 16, smiles as she prepares for takeoff during the Civil Air Patrol's orientation flight day at Hometown Airport.

2.7 IMPROMPTU, BLUE SKIES FLYING

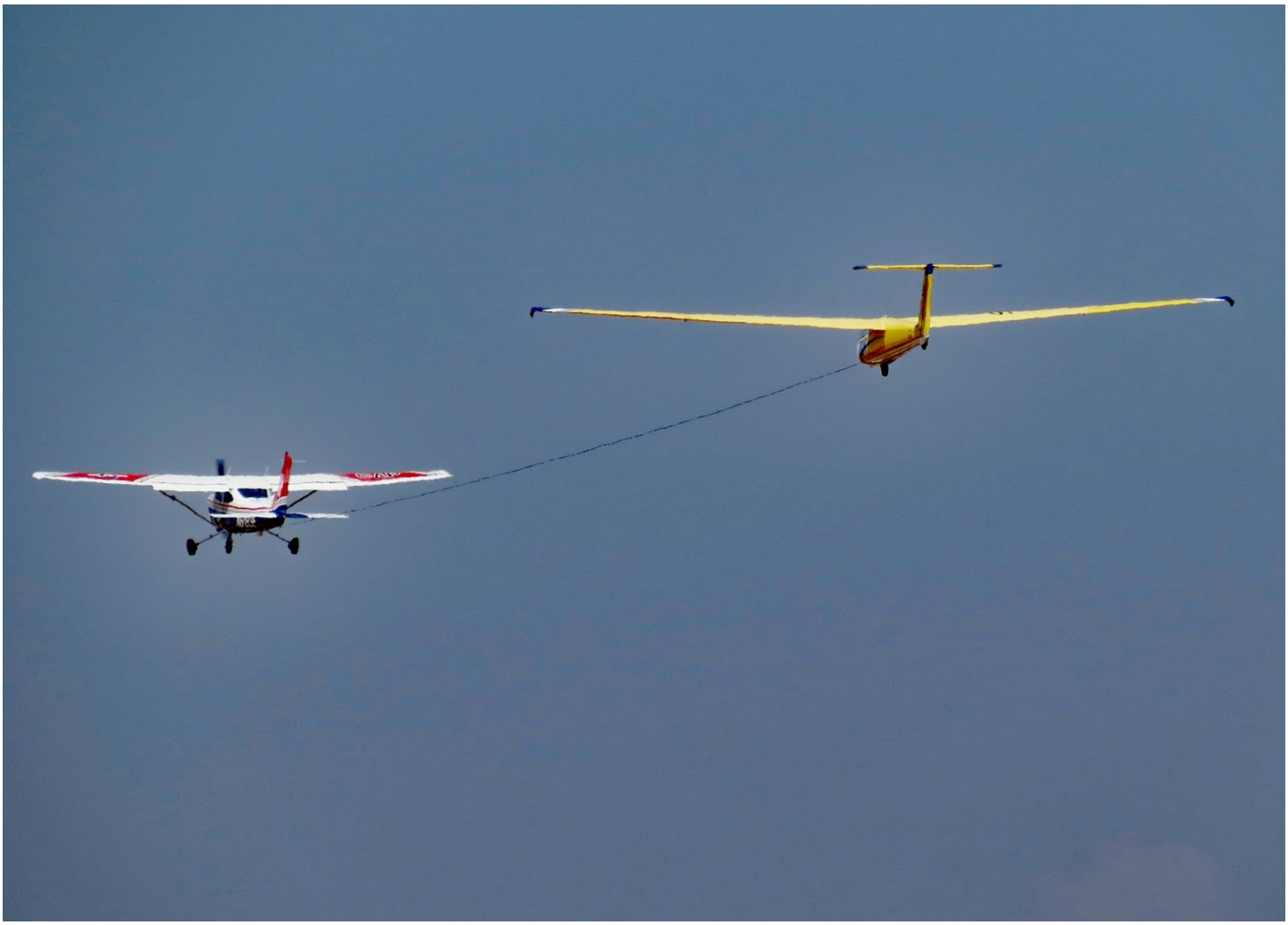
This guide has focused on how to implement a well-organized day of cadet flying. Such a systematic, carefully-orchestrated, wing-centric approach is recommended as the best way to provide a large number of cadets with flights. Because CAP is trying to fly the 25,000 youth enrolled in the Cadet Program, there's a need to manage cadet flying as a program, versus as a series of casually-organized events serving individuals.

Still, in locations where a squadron has an aircraft and qualified pilot assigned, an impromptu approach can work, too. "We've got great weather. Let's go fly!" In this short-notice approach, the pilot schedules flights with local cadets as the weather and personal schedules allow. Such an environment may allow for a slower pace, personalized attention, deeper learning, and more fun.

Nevertheless, the usual flying requirements (CAPR 70-1), cadet protection requirements (CAPR 60-2) and syllabus guidelines (CAPP 60-40) apply.

Cadet Orientation Flight Program Guide

Appendix 1



Glider Syllabus

CAPP 60-40

October 2018

GENERAL SYLLABUS

The Airman's Attitude

Pilots are asked to look for opportunities during their interactions with the cadets to impart the following positive, professional attitudes toward airmanship, as occasions arise:

1. Pro-Safety Attitude

Airmen take a sober, calculated approach to risks.

Airmen think before they act.

Through your actions and words, show that having a pro-safety attitude is important to you.

2. Disciplined Airmanship

Airmen habitually comply with FAA regulations and standard procedures.

Airmen are not "hot dog" fliers but disciplined aviators who know that rules and procedures exist to protect their safety.

Airmen execute their pre-planned mission. For o-flights, they stick to the syllabus's learning objectives.

Through your actions and words, show that you're self-disciplined in your flying.

3. Fitness

Airmen are health- and fitness-conscious. Physical and mental wellness is required to fly.

A habit of regular exercise is a part of the airman's life.

Through your actions and words, show that physical and mental wellness is important.

4. Drug-Free Ethic

Airmen need to choose a drug-free lifestyle.

Even legal drugs (alcohol, cigarettes, prescriptions) can affect an airman's personal airworthiness when those substances are abused.

Illegal drugs (cocaine, ecstasy, heroin, etc.) can affect personal airworthiness and jeopardize FAA licenses. Airmen must pass drug-screening tests.

Through your actions and words, show that flying is a sobering responsibility.

Cadet-Passenger Safety Briefing

from Susan Parson, *FAA Safety Briefing*

S
Seat belts fastened for taxi, takeoff, landing
Shoulder harnesses fastened for takeoff, landing
Seat position adjusted and locked in place

A
Air vents (location and operation)
All environmental controls (discussed)
Action in case of any passenger discomfort

F
Fire extinguisher (location and operation)

E
Exit doors (how to secure, how to open)
Emergency evacuation plan
Emergency / survival kit (location and contents)
Equipment (location and operation)

T
Traffic (scanning, spotting, notifying pilot)
Talking ("sterile cockpit" expectations)

Y
Your questions? Speak up!

Gliders
1
Syllabus 1

Cadets' Reference:
Aerospace Dimensions, Module 1

Estimated Duration: 45 min

Ground Handling, Preflight, Takeoff & Landing

1. Ground Handling

a. Show how to ground handle the glider.
b. Emphasize surface areas not to be touched.

2. Preflight Inspection

a. Show how to preflight launch equipment & glider.
b. Show & explain the towrope's or cable's function.
c. Mention documents required to be aboard (AROW).
d. Show main parts of glider & explain their function.

3. Launch Procedures

Cadets are never to handle the controls during take-off, landing, or when below 1000 ft AGL.

Aero Tow:

a. Explain the duties & purpose of ground launch personnel.
b. Discuss aero tow launch signals.

Ground Launch:

a. Explain the duties & purpose of the ground launch personnel.
b. Discuss ground launch signals.

4. Before Takeoff

a. Show & tell about the routine cockpit checks.
b. Explain the sequence of events prior to takeoff .
(Example: Tow hook connection & checks, taking up tow line slack, etc.)

5. Takeoff

a. Show & tell about the glider's position behind the tow plane at takeoff & when airborne.
b. Describe the glider's position during takeoff roll & initial climb.
c. Describe emergency actions to be taken at different altitudes .

6. Climb Out

Discuss glider's position in relation to tow plane or launch vehicle:

a. Describe the high tow position during aero tow.
b. Discuss glider pitch attitude and position during ground launch.

7. Release

Show & tell about the release to include clearing, release confirmation, & release procedures.

8. In-Flight

a. Show & tell about the use of flight controls in gliding flight, to include drag devices.
b. Point out the glider's attitude in relation to the horizon & at different airspeeds.
c. Show & tell about performance airspeeds: lift-over drag & minimum sink airspeeds.
d. Identify familiar landmarks, ground features, and the position of the airport with respect to glider altitude and position.

9. Approach to Landing

Cadets are never to handle the controls during take-off, landing, or when below 1000 ft AGL.

a. Show & tell about the traffic pattern. Discuss the reasons for a standardized entry procedure.
b. Show & tell about the pre-landing checklist.
c. Explain the use of a crab to maintain position (if needed).
d. Identify the base turn and leg of the pattern.
e. Show & tell about the final approach; discuss aim point, touchdown point, & stop point, and discuss use of drag devices.

10. Landing & Rollout

a. Show & tell about the landing attitude.
b. Point out the correct procedure for landing rollout.

11. Post Flight: Questions & Answers

Gliders
2
Syllabus 2

Cadets' Reference:
Aerospace Dimensions, Module 1

Estimated Duration: 45 min

Normal Glider Flight Maneuvers

1. Preflight

a. Discuss previously completed flights, as appropriate.

b. Discuss principles for staying safe during this flight.

2. In Flight (minimum altitude of 1500′ AGL)

Cadets are never to handle the controls during take-off, landing, or when below 1000 ft AGL.

a. Trim for level flight; show & tell how the glider remains stable in hands-off flight.

b. Emphasize attitude flying.

c. Emphasize the importance of clearing.

d. Discuss the effects of lift, drag, and gravity, and how gravity propels the glider.

e. Discuss the relationship of lift, angle of attack, and relative wind.

f. Show & tell straight and turning glides at various speeds (minimum sink, best lift over drag, and pattern speed).

g. Show & tell shallow banked turn; discuss the horizontal component of lift, adverse yaw, turn coordination, slipping and skidding.

h. Explain load factor during turns.

3. Post Flight: Questions & Answers

Gliders
3
Syllabus 3

Cadets' Reference:
Aerospace Dimensions, Module 1

Estimated Duration: 45 min

Advanced Glider Flight Maneuvers

1. Preflight

a. Discuss previously completed flights, as appropriate.

b. Discuss principles for staying safe during this flight.

2. In Flight (minimum altitude of 1500′ AGL)

Cadets are never to handle the controls during take-off, landing, or when below 1000 ft AGL.

a. Perform clearing turns emphasizing collision avoidance.

b. Demonstrate slow flight during straight & turning descents.

c. Demonstrate straight ahead and turning stalls as appropriate, emphasizing stall recognition and recovery.

d. Demonstrate medium and steep bank turns as appropriate.
   (1) Discuss over-banking tendency.
   (2) Discuss proper rudder coordination.
   (3) Discuss aft control stick requirements to keep the nose up.

e. Explain load factor during turns.

f. Discuss steep spirals and spins; emphasize the difference and the dangers of excessive load factors in steep spirals.

g. Demonstrate forward and side slips and discuss their purpose.

3. Post Flight: Questions & Answers

Gliders
4
Syllabus 4

Cadets' Reference:
Aerospace Dimensions, Module 2

Estimated Duration: 45 min

Use of Instruments in Soaring Flight

1. Preflight

a. Discuss previously completed flights, as appropriate.

b. Discuss principles for staying safe during this flight.

c. Explain the pitot/static system and its relationship to the airspeed indicator, altimeter, and variometer.

d. Explain the magnetic compass and its inherent errors.

2. In Flight

Cadets are never to handle the controls during take-off, landing, or when below 1000 ft AGL.

a. Explain the difference between absolute altitude (AGL), true altitude (MSL), and pressure altitude (PA).

b. Demonstrate how to read the altimeter.

c. Demonstrate how to read the airspeed indicator and discuss the difference between indicated airspeed, true airspeed, and ground speed.

d. Identify how altitude and airspeed are related.

e. Demonstrate how to read the variometer and discuss the indications of rising and/or falling thermal activity (air currents).

f. Demonstrate turns using the magnetic compass; discuss compass turning errors (variation, deviation, magnetic dip, and oscillation error).

3. Post Flight: Questions & Answers

Gliders
5
Syllabus 5

Cadets' Reference:
Aerospace Dimensions, Module 3

Estimated Duration: 45 min

Weather

1. Preflight

a. Discuss previously completed flights, as appropriate.

b. Discuss principles for staying safe during this flight.

c. Discuss thermal soaring: the effect of heating, thermal structure, locating thermals (cumulus clouds, dust devils, surface dust & smoke, soaring birds, other sailplanes, etc.).

d. Discuss methods of soaring, as appropriate:
(1) Ridge and slope soaring
(2) Wind effects and requirements, soaring in upslope lift, leeside turbulence, slope and ridge requirements
(3) Sea breeze soaring
(4) Mountain wave soaring; formation, visual indications, associated turbulence

2. In Flight (cover those topics appropriate to local conditions)

Cadets are never to handle the controls during take-off, landing, or when below 1000 ft AGL.

a. Demonstrate thermal soaring; discuss thermal entry and when & how to turn into the thermal; discuss thermalling with other sailplanes, best airspeed, and flying between thermals.

b. Demonstrate sea breeze or shear line soaring.

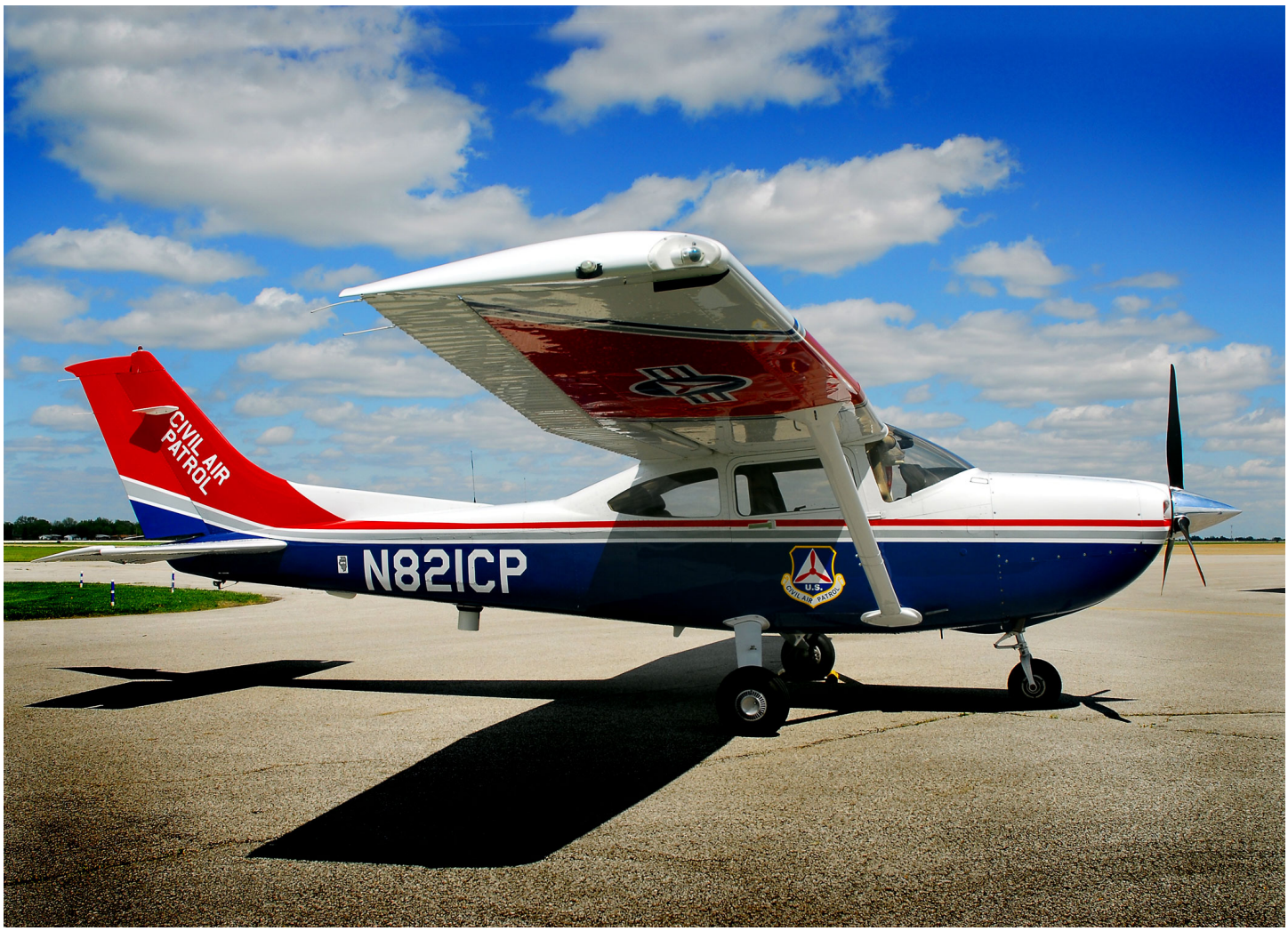
c. Demonstrate ridge or slope soaring; emphasize best speed to fly, general rules for turning on the ridge, approaching other sailplanes, and other "rules of the road."

d. Demonstrate wave soaring; explain wave structure, wave crests, and rotor; identify lenticular clouds, if present.

3. Post Flight: Questions & Answers

Cadet Orientation Flight Program Guide

Appendix 2



Powered Syllabus

CAPP 60-40

October 2018

GENERAL SYLLABUS

The Airman's Attitude

Pilots are asked to look for opportunities during their interactions with the cadets to impart the following positive, professional attitudes toward airmanship, as occasions arise:

1. Pro-Safety Attitude

Airmen take a sober, calculated approach to risks.

Airmen think before they act.

Through your actions and words, show that having a pro-safety attitude is important to you.

2. Disciplined Airmanship

Airmen habitually comply with FAA regulations and standard procedures.

Airmen are not "hot dog" fliers but disciplined aviators who know that rules and procedures exist to protect their safety.

Airmen execute their pre-planned mission. For o-flights, they stick to the syllabus's learning objectives.

Through your actions and words, show that you're self-disciplined in your flying.

3. Fitness

Airmen are health- and fitness-conscious. Physical and mental wellness is required to fly.

A habit of regular exercise is a part of the airman's life.

Through your actions and words, show that physical and mental wellness is important.

4. Drug-Free Ethic

Airmen need to choose a drug-free lifestyle.

Even legal drugs (alcohol, cigarettes, prescriptions) can affect an airman's personal airworthiness when those substances are abused.

Illegal drugs (cocaine, ecstasy, heroin, etc.) can affect personal airworthiness and jeopardize FAA licenses. Airmen must pass drug-screening tests.

Through your actions and words, show that flying is a sobering responsibility.

Cadet-Passenger Safety Briefing

from Susan Parson, *FAA Safety Briefing*

S
Seat belts fastened for taxi, takeoff, landing
Shoulder harnesses fastened for takeoff, landing
Seat position adjusted and locked in place

A
Air vents (location and operation)
All environmental controls (discussed)
Action in case of any passenger discomfort

F
Fire extinguisher (location and operation)

E
Exit doors (how to secure, how to open)
Emergency evacuation plan
Emergency / survival kit (location and contents)
Equipment (location and operation)

T
Traffic (scanning, spotting, notifying pilot)
Talking ("sterile cockpit" expectations)

Y
Your questions? Speak up!

Powered
1
Syllabus 6

Cadets' Reference:
Aerospace Dimensions, Module 1

Estimated Duration: 45 min

Ground Handling, Preflight, Takeoff & Landing

1. Ground Handling

Demonstrate proper ground handling; identify those surface areas that are not to be touched.

2. Preflight Inspection

a. Show and tell while performing a routine pre-flight inspection.

b. Identify the required documents that must be kept on board.

c. Show and tell about the airplane's basic anatomy.

d. Discuss principles for staying safe during this flight.

3. Before Take-Off:

a. Using the checklist, show and tell about routine cockpit checks.

b. Explain the sequence of events prior to take-off.

4. Take-Off

Cadets are never to handle the controls during take-off, landing, or when below 1000 ft AGL.

a. Discuss airplane position during takeoff roll and initial climb; demonstrate rudder controls.

b. Describe emergency actions to be taken at different altitudes, as discussed during the "before take-off" checklist.

5. In-Flight (minimum altitude of 2500′ AGL)

a. Show and tell about the use of flight controls.

b. Point out the airplane's attitude in relation to the horizon and different airspeeds.

c. Identify familiar landmarks, ground features, and the position of the airport with respect to the airplane's altitude and position.

6. Approach to Landing

Cadets are never to handle the controls during take-off, landing, or when below 1000 ft AGL.

a. Explain the approach to the traffic pattern; explain the reasons for a standardized entry procedure and perform the before landing check.

b. Discuss the elements of the traffic pattern.

c. Discuss the final approach and the importance of maintaining the correct airspeed.

7. Landing & Roll-Out

a. Explain the landing attitude.

b. Point out the correct procedure for landing roll-out.

8. Post Flight: Questions & Answers

Powered
2
Syllabus 7

Cadets' Reference:
Aerospace Dimensions, Module 1

Estimated Duration: 45 min

Normal Flight Maneuvers

1. Preflight

a. Discuss previously completed flights, as appropriate.

b. Discuss principles for staying safe during this flight.

2. In Flight (minimum altitude of 1500′ AGL)

Cadets are never to handle the controls during take-off, landing, or when below 1000 ft AGL.

a. Trim for level flight; point out the stability of the aircraft in hands-off flight.

b. Emphasize attitude flying.

c. Show and tell about the trim controls and straight flying to a checkpoint using visual references.

d. Discuss the effects of lift, drag, and gravity on the airplane.

e. Discuss the relationship of lift, angle of attack, and relative wind.

f. Demonstrate a shallow banked turn and point out how the airplane will maintain the turn with controls neutral.

g. Explain load factor during turns.

3. Post Flight: Questions & Answers

Powered
3
Syllabus 8

Cadets' Reference:
Aerospace Dimensions, Module 1

Estimated Duration: 45 min

Advanced Flight Maneuvers

1. Preflight

a. Discuss previously completed flights, as appropriate.

b. Discuss principles for staying safe during this flight.

2. In Flight (minimum altitude of 1500′ AGL)

Cadets are never to handle the controls during take-off, landing, or when below 1000 ft AGL.

a. Perform climbing turns, emphasizing collision avoidance.

b. Demonstrate slow flight (minimum controllable airspeed - MCA).

c. Demonstrate straight ahead and turning stalls, as appropriate.
All stalls are to be imminent stalls (first aerodynamic indication of an oncoming stall, which is usually the stall warning alarm); back seat passengers are not allowed when demonstrating stalls.

d. Demonstrate medium and steep bank turns; discuss proper rudder coordination and control stick requirements to keep the nose up.

e. Explain load factor during turns.

f. Discuss steep spirals and spins; emphasize the difference and dangers of excessive load factors in steep spirals.

g. Demonstrate ground reference maneuvers used in search activities (parallel track, S-turns, expanding square).

3. Post Flight: Questions & Answers

Powered
4
Syllabus 9

Cadets' Reference:
Aerospace Dimensions, Module 2

Estimated Duration: 45 min

Use of Instruments in Flight

1. Preflight

a. Discuss previously completed flights, as appropriate.

b. Discuss principles for staying safe during this flight.

c. Explain the use of basic navigation instruments (clock, altimeter, airspeed indicator, and magnetic compass).

d. Explain the pitot/static system and its relationship to the airspeed indicator, altimeter, and vertical velocity indicator.

2. In Flight

Cadets are never to handle the controls during take-off, landing, or when below 1000 ft AGL.

a. Explain the difference between absolute altitude (AGL), true altitude (MSL) and pressure altitude (PA).

b. Demonstrate how to read the altimeter.

c. Demonstrate how to read the airspeed indicator; discuss indicated airspeed, true airspeed, and ground speed.

d. Point out how attitude and airspeed are related.

e. Demonstrate how shallow climbs and descents affect the vertical velocity and airspeed indicators.

f. Demonstrate turns using the magnetic compass; discuss compass turning errors – variation, deviation, magnetic dip, and oscillation error.

3. Post Flight: Questions & Answers

Powered
5
Syllabus 10

Cadets' Reference:
Aerospace Dimensions, Module 3

Estimated Duration: 45 min

Weather

1. Preflight

a. Discuss previously completed flights, as appropriate.

b. Discuss principles for staying safe during this flight.

c. Discuss cloud types and their effect upon flight.

d. Discuss how terrain affects air stability.

e. Demonstrate preflight weather briefing and discuss its importance.

2. In Flight (cover those topics appropriate to local conditions)

Cadets are never to handle the controls during take-off, landing, or when below 1000 ft AGL.

a. Demonstrate effects that weather has upon flying.

b. Demonstrate the crab method (forward slip) to compensate for wind.

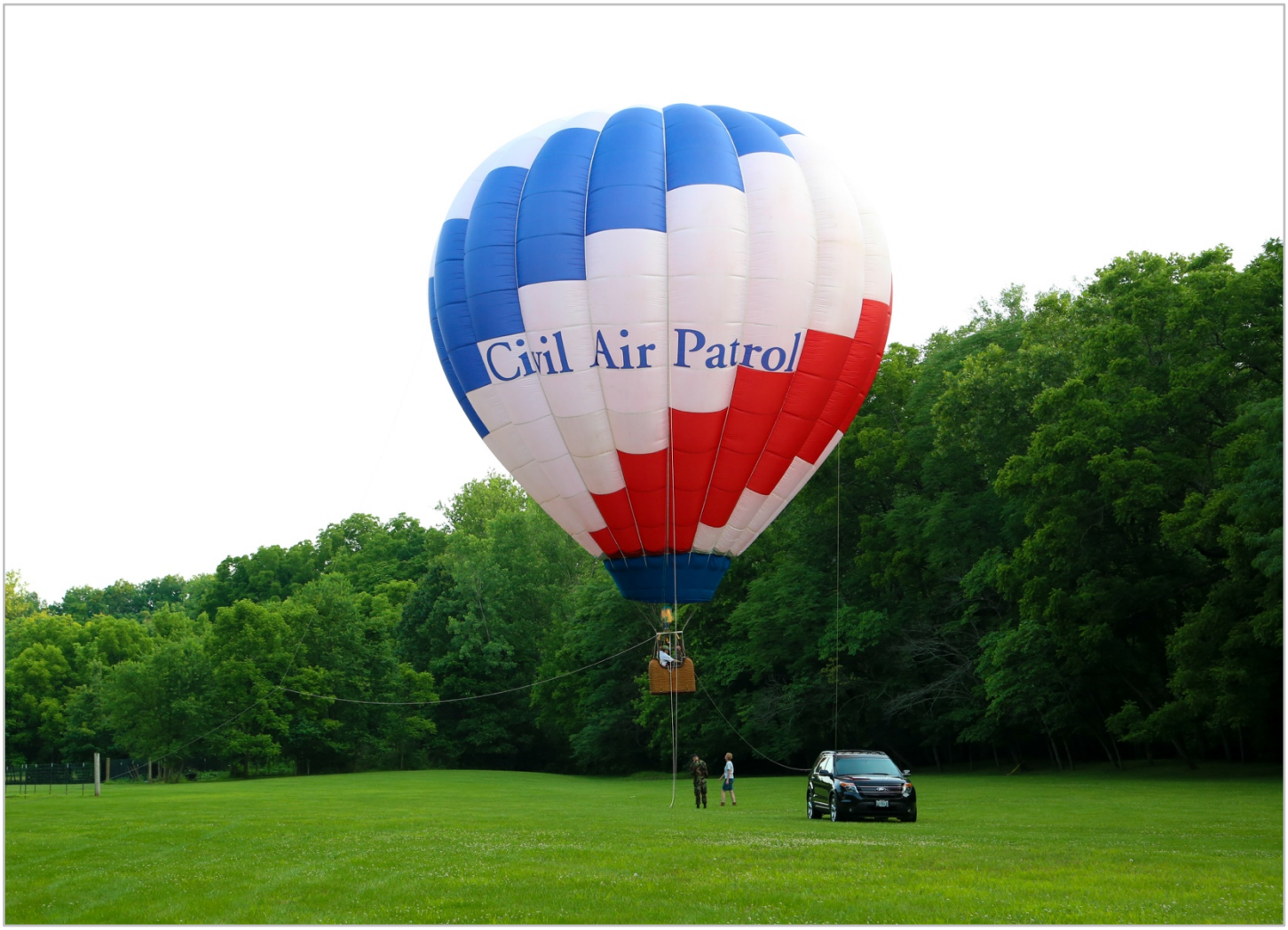
c. Discuss wake turbulence avoidance.

d. Demonstrate temperature differences at a few altitudes and discuss how altitude affects rate of climb.

3. Post Flight: Questions & Answers

Cadet Orientation Flight Program Guide

Appendix 3



Balloon Syllabus

CAPP 60-40

October 2018

GENERAL SYLLABUS

The Airman's Attitude

Pilots are asked to look for opportunities during their interactions with the cadets to impart the following positive, professional attitudes toward airmanship, as occasions arise:

1. Pro-Safety Attitude

Airmen take a sober, calculated approach to risks.

Airmen think before they act.

Through your actions and words, show that having a pro-safety attitude is important to you.

2. Disciplined Airmanship

Airmen habitually comply with FAA regulations and standard procedures.

Airmen are not "hot dog" fliers but disciplined aviators who know that rules and procedures exist to protect their safety.

Airmen execute their pre-planned mission. For o-flights, they stick to the syllabus's learning objectives.

Through your actions and words, show that you're self-disciplined in your flying.

3. Fitness

Airmen are health- and fitness-conscious. Physical and mental wellness is required to fly.

A habit of regular exercise is a part of the airman's life.

Through your actions and words, show that physical and mental wellness is important.

4. Drug-Free Ethic

Airmen need to choose a drug-free lifestyle.

Even legal drugs (alcohol, cigarettes, prescriptions) can affect an airman's personal airworthiness when those substances are abused.

Illegal drugs (cocaine, ecstasy, heroin, etc.) can affect personal airworthiness and jeopardize FAA licenses. Airmen must pass drug-screening tests.

Through your actions and words, show that flying is a sobering responsibility.

Cadet-Passenger Safety Briefing

from Susan Parson, *FAA Safety Briefing*

S
Seat belts fastened for taxi, takeoff, landing
Shoulder harnesses fastened for takeoff, landing
Seat position adjusted and locked in place

A
Air vents (location and operation)
All environmental controls (discussed)
Action in case of any passenger discomfort

F
Fire extinguisher (location and operation)

E
Exit doors (how to secure, how to open)
Emergency evacuation plan
Emergency / survival kit (location and contents)
Equipment (location and operation)

T
Traffic (scanning, spotting, notifying pilot)
Talking ("sterile cockpit" expectations)

Y
Your questions? Speak up!

Balloon
1
Syllabus 11

Cadets' Reference:
Aerospace Dimensions,
Module 1

Estimated Duration: 45 min

Basic Balloon Flight Concepts

1. **Layout to Launch / Ground Handling**
   a. Discuss/demonstrate proper handling of equipment.
   b. Discuss/demonstrate proper equipment setup.
   c. Discuss proper Personal Protection Equipment (PPE) and use.
2. **Preflight Inspection.** Emphasize inspection criteria and requirements as appropriate.
3. **Launch.** Discuss/demonstrate launch procedures / safety requirements.
4. **In Flight.** Discuss/demonstrate basic flight concepts.
5. **Approach to Landing**
   a. Discuss landing requirements.
   b. Discuss hazard avoidance & emergency procedures.
6. **Landing.** Discuss as appropriate.
7. **Post Flight / Pack Up.** Discuss/demonstrate post flight pack up.
8. **Post Flight: Questions & Answers**

Balloon
2
Syllabus 12

Cadets' Reference:
Aerospace Dimensions, Module 1

Estimated Duration: 45 min

Level Balloon Flight Maneuvers

1. **Layout to Launch / Ground Handling**

   a. Discuss/demonstrate proper handling of equipment.

   b. Discuss/demonstrate proper equipment setup.

   c. Discuss proper Personal Protection Equipment (PPE) and use.

2. **Preflight Inspection.** Emphasize inspection criteria and requirements as appropriate.

3. **Launch.** Discuss/demonstrate launch procedures / safety requirements.

3. **In-Flight.**

   a. Discuss/demonstrate level burner techniques.

   b. Discuss / demonstrate staying ahead of the aircraft.

   c. Discuss / demonstrate point of reference.

5. **Approach to Landing.** Discuss as appropriate.

6. **Landing.** Discuss as appropriate.

7. **Post Flight / Pack Up.** Discuss/demonstrate post flight pack up.

8. **Post Flight: Questions & Answers**

Balloon
3
Syllabus 13

Cadets' Reference:
Aerospace Dimensions, Module 1

Estimated Duration: 45 min

Use of Balloon Flight Controls

1. **Layout to Launch / Ground Handling**
   Discuss/demonstrate proper handling as appropriate.

2. **Preflight Inspection.** Emphasize inspection criteria and requirements as appropriate.

3. **Launch.** Discuss/demonstrate launch procedures as appropriate.

4. **In-Flight.**

   a. Discuss/demonstrate burner techniques.

   b. Discuss / demonstrate redline operation.

   c. Discuss / demonstrate emergency procedures.

5. **Approach to Landing.** Discuss as appropriate.

6. **Landing.** Discuss as appropriate.

7. **Post Flight / Pack Up.** Discuss/demonstrate post flight pack up.

8. **Post Flight: Questions & Answers**

Balloon
4
Syllabus 14

Cadets' Reference:
Aerospace Dimensions, Module 2

Estimated Duration: 45 min

Balloon Flight Navigation

1. **Layout to Launch / Ground Handling**.
   Discuss/demonstrate proper handling as appropriate.

2. **Preflight Inspection.** Emphasize inspection criteria and requirements as appropriate.

3. **Launch.** Discuss/demonstrate launch procedures as appropriate.

4. **In-Flight.**

   a. Discuss/demonstrate air current layers.

   b. Discuss / demonstrate balloon flight navigation.

   c. Discuss / demonstrate controlled ascension / dissension.

5. **Approach to Landing.** Discuss as appropriate.

6. **Landing.** Discuss as appropriate.

7. **Post Flight / Pack Up.** Discuss/demonstrate post flight pack up.

8. **Post Flight: Questions & Answers**

Balloon
5
Syllabus 15

Cadets' Reference:
Aerospace Dimensions, Module 2

Estimated Duration: 45 min

Take-Offs and Landing Techniques

1. **Layout to Launch / Ground Handling**.
   Discuss/demonstrate proper handling as appropriate.

2. **Preflight Inspection.** Emphasize inspection criteria and requirements as appropriate.

3. **Launch**

   a. Discuss/demonstrate launch procedures as appropriate.

   b. Emphasize clearance requirements and emergency procedures.

4. **In-Flight**

   a. Discuss/demonstrate landing and emergency procedures.

   b. Discuss / demonstrate landing sites and location.

5. **Approach to Landing.** Discuss as appropriate.

6. **Landing**

   a. Discuss / demonstrate types of landings.

   b. Discuss / demonstrate high wind landings and emergency procedures.

7. **Post Flight / Pack Up.** Discuss/demonstrate post flight pack up.

8. **Post Flight: Questions & Answers**