

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!

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**

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

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**

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

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**