

Middle School Initiative

**PART I
COVER SHEET**

CAP 2 SEMESTER 1 WEEK 16

COURSE: Rickenbacker Aerospace Education, Achievement 4

LESSON TITLE: Air Circulation

LENGTH OF LESSON: 50 Minutes

METHOD: Lecture - Performance

REFERENCE(S):

1. *Aerospace Dimensions*, Module 3, Chapter 1, 2000
2. Study Guide, 2000
3. Leader Guide, 2000
4. Resource Guide, 2000

AUDIO/VISUAL AIDS/HANDOUTS/ACTIVITY MATERIAL(S): As Needed

COGNITIVE OBJECTIVE: To learn how air circulation affects our planet.

COGNITIVE SAMPLES OF BEHAVIOR: Upon completion of this chapter, the cadet should be able to:

1. Describe how the Sun heats the Earth.
2. Describe the Earth's rotation and revolution, and its effect on the Earth's seasons.
3. Explain the various theories of circulation.
4. Describe Coriolis Force.
5. Define the jet stream.

AFFECTIVE OBJECTIVE: N/A

AFFECTIVE SAMPLES OF BEHAVIOR: N/A

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PART II TEACHING PLAN

Introduction

ATTENTION: Today, you will continue your Aerospace Education studies in Module 3. We will start with *Aerospace Dimensions*, Module 3, Chapter 1 -- Air Circulation.

MOTIVATION: Without air circulation, our planet would not be a pleasant place to live. How does the air circulation affect us and our planet? This chapter will help us to understand this force of nature.

OVERVIEW: During this period, your aerospace studies will be Air Circulation.

Body

NOTE: The instructor should use the lesson plan in the Leader Guide, Pages 11-13. For today's lesson, the cadets should use the Study Guide, Pages 17-18. A materials list is located in the Resource Guide, Page 47.

Conclusion

SUMMARY: We have studied the material in *Aerospace Dimensions*, Module 3, Chapter 1.

REMOTIVATION: Now you understand the systems that allow air to circulate around the Earth.

CLOSURE: Next week, we will continue our AE studies with Module 3, Chapter 2 - Weather Elements. **Any questions? See you next week!**

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**PART III
LESSON REVIEW**

LESSON OBJECTIVE(S): Today, we learned how to:

1. Describe how the Sun heats the Earth.
2. Describe the Earth's rotation and revolution, and its effect on the Earth's seasons.
3. Explain the various theories of circulation.
4. Describe Coriolis Force.
5. Define the jet stream.

LESSON QUESTIONS: Contained in *Aerospace Dimensions*, Module 3, Chapter 1.