

# Laurel Oaks/Airborne Express



*An Alliance of  
Business and Education*

## Step 3

# Facility and Mobile Equipment Maintenance

# **Laurel Oaks/Airborne Express Facility and Mobile Equipment Maintenance Project: Student Guide**

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# **Laurel Oaks/Airborne Express**

## **Facility and Mobile Equipment Maintenance Project Overview**

## About this Project

Welcome to the Facility and Mobile Equipment Maintenance project. This project lets you explore career opportunities in Facility and Mobile Equipment Maintenance for all Aircraft vacillates. It also lets you solve some typical problems people face in this career area.

Airborne Express is the sponsor of this project. You will work on a typical problem, reviewing selected C-cards and analyze the non-routine tasks and determine what tasks can be converted to routine c-cards.

You will visit Airborne Express. You also will learn about the many career opportunities in Facility and Mobile Equipment Maintenance at Airborne Express and other similar companies in the transportation, distribution and logistics sector career cluster.

The project also will allow you to practice your academic and workplace skills such as teamwork and learn how to solve problems in the business world.

Good luck!

## Project Goals

The major goals of the project are to:

- Provide students with an orientation to career opportunities in Facility and Mobile Equipment Maintenance within the transportation, distribution and logistics career cluster.
- Provide students with the necessary career exploration experiences to students for them to decide whether they wish to explore these career opportunities further.
- Provide students with an orientation into how these careers relate to all aspects of the transportation, distribution and logistics industry.
- Demonstrate the application and integration of academic subjects as well as problem-solving, teamwork, computer, and learning skills in real-world workplace applications.

More specific learning objectives are presented at the beginning of each learning module.

## Project Outline

The Facility and Mobile Equipment Maintenance Project has six major sections or modules. These modules are:

Module 1	Overview of Facility & Mobile Equipment Maintenance
Module 2	Site Tour
Module 3	C-Card Terminology
Module 4	Routine and Non-routine Checks
Module 5	Writing Business Reports
Module 6	Making Business Presentations

Each module provides you with knowledge and skills you will need to solve the problem. Each module contains the following:

- **Objectives:** Each module begins with a set of student learning objectives. These objectives define what you should know and be able to do after completing the module. Your teacher will work with you to assess your knowledge and skills after completing each module.
- **Readings:** Each module starts with short introductory readings that your teacher will review and discuss with you. These readings are designed to provide the basis for group discussion and problem-solving activities.
- **Activities:** Each module provides group activities that are designed to help you learn and apply concepts and skills in solving problems.

After your team completes the project, company representatives and your teacher will work with you and your fellow students to evaluate your proposed solution.

**Module 1**

**Overview of**

**Facility and Mobile**

**Equipment Maintenance**

## Module 1

# Overview of Facility and Mobile Equipment Maintenance

### Objectives

After completing this activity, you will be able to:

- Be familiar with C-cards to determine aircraft functions and systems associated with the card.
- Identify and interpret the reoccurring non-routine discrepancies.
- Identify the difference between routine and non-routine checks.
- Compare and contrast routine and non-routine checks.
- Be able to refer to necessary manuals for specific aircraft.
- Compile a glossary of terms and acronyms relevant to c-cards.

### Facility and Mobile Equipment Maintenance

What is Facility and Mobile Equipment Maintenance?

Facility and Mobile Equipment Maintenance refers to how large aircraft carriers perform inspections and maintenance. This involves extensive planning and logistics so that the aircraft gets the maximum amount of maintenance for especially safety in the minimal amount of time.

To do this, routine maintenance must occur part of this routine maintenance is called out by the manufacture because of the amount of time and conditions the aircraft are flown in. Thorough inspections show discrepancies that occur frequently and from these records engineers must determine if these discrepancies are recurring so that they become part of the routine maintenance. Also this will save valuable down time.

Through this project the students will learn this process and all the personal involved and their duties.

# Module 2

# Site Tour

## Module 2

### Site Tour

#### Objective

After completing this activity, you will be able to:

- Describe inspections and how they are completed at Airborne Express.
- Identify and describe major job opportunities at Airborne.
- Ask questions and take notes on answers for solving the problem.

#### Preparing for the Site Visit

You need to make sure that you get all or most of your questions answered at the site visit. You also need to make sure you use the site visit to understand how Airborne Express maintains their aircraft. Here are some tips to get the most out of your site visit.

#### Understanding How Airborne Express Maintenance is recorded

- How c-cards are handled
- How inspections are recorded
- What is the flow of paper work
- Take good notes and ask questions

#### Preparing to Ask Your Questions

- Practice asking your questions with other students. Be sure to state your question slowly and clearly and be prepared to restate your question if people do not understand what you are asking?
- Make sure you listen carefully to all questions and answers. If you don't understand the answer, ask people to say it again or repeat what you don't understand.
- Take notes on the answers. Don't try to write down everything that is said. Write down the major concept or idea that you can refer to later.

#### Activity

With your group, do the following:

Ask your questions to your teacher and other students and ask them to tell you whether they understand your question and how you could say it better when you get to the Airborne Express Maintenance Hanger.

**After the Site Visit** After the site visit, you will have more information to solve your problem. But, you will quickly forget this new information if you don't review your notes and write down what you know. Here are some suggested steps to take.

As soon as possible after leaving the Airborne Express hanger, write out your notes in more detail in your Student Log Book or on a separate sheet of paper. Make sure you write clearly so you can read your own notes later!

Step 1: Revise your work sheet or start a new work sheet. Identify what you know and don't know after the tour.

Step 2: Make a list of questions that you need to answer and write down what you need to do to get these questions answered.

Step 3: Meet with your group to compile a list of what you know and what you don't know and write out all of your questions and strategies for finding answers to your questions.

Remember, the longer you wait to write out your notes and revise your work sheet, the more you will forget.

## Activity

With your group, do the following:

1. Revise your work sheet and write down your revised list of what you know and what you don't know.
2. Make a list of questions you need to answer and what you need to do to get your questions answered. Set some priorities and determine what you need to get answered first (See Figure 2.1).

## Figure 2.1 Remaining Questions and Action Plan

<b>Remaining Questions (What I Need to Know)</b>	<b>Action Plan (How Will I Get My Questions Answered)</b>

# Module 3

# C-Card Terminology

## Module 3

### C-Card Terminology

#### Objective

When you finish this activity, you will be able to:

- Describe terms and acronyms relevant to C-cards.
- Be able to check maintenance manuals for a particular aircraft.
- Be able to recognize FAA regulations.

#### C-card acronyms and terms

As discussed in module 1, Facility and Mobile maintenance involves the inspection and maintenance of facility and Mobile equipment.

The acronyms and terms will be spelled out in the maintenance and inspection guides to every aircraft that a large carrier will have in their fleet.

#### Activity

With your group, discuss the following:

1. Make a list of all terms and acronyms for the aircraft that will be used in your activity.
2. Describe each term and acronyms so you can identify them and be able to understand them.

#### FAA Regulations

The Federal Aviation Administration is a Federal Agency that over sees all aircraft operators and operations including flight in the United States.

#### Activity

With your group, discuss the following:

1. How to locate all Federal Aviation Regulations that may apply to the air carrier that you are assigned to.
2. Be able to understand the FAR's and the meaning to each one and how it will effect the aircraft carriers normal daily function.

# **Module 4**

## **Routine & Non-Routine Checks**

## **Module 4**

# **Routine and Non-routine Checks**

### **Objective**

When you finish this activity, you will be able to:

- Identify the difference between routine and non- routine checks.
- Identify and interpret the reoccurring non-routine discrepancies.

### **Routine C-Checks**

Routine c-checks are inspections on particular aircraft parts and systems. From these inspections records it is determined what routine and non-routine discrepancies are.

When Non-routine discrepancies occur on a regular basis they will become part of the routine check inspection to save down time and money.

### **Activity**

With the group, discuss the following:

1. Be able to discuss the difference between the Routine and non-routine check cards.
2. Be able to contrast routine and non-routine checks.