

SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ON

COURSE OUTLINE

COURSE TITLE: BLUEPRINT READING I & II

CODE NO: ASR101 SEMESTER: I

PROGRAM: AIRCRAFT STRUCTURAL REPAIR TECHNICIAN

AUTHOR: STEVE LACHOWSKY

DATE: FALL 1993

PREVIOUS OUTLINE DATED: FALL 1992

APPROVED: SP Crozutt
Dean, School of Engineering Tech.

94-02-02
Date

COURSE NAME: BLUEPRINT READING I & II

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TOTAL CREDIT HOURS: 60 hours (4 credits)

PREREQUISITE(S):

I. PHILOSOPHY/GOALS:

Students will be assigned blueprint reading assignments. Using textbook and in-class instruction, students will develop the skills to read aircraft blueprint drawings. Aircraft blueprints will be examined and assignments will be submitted by students in the form of in-class presentation and discussion.

II. STUDENT PERFORMANCE OBJECTIVES:

Upon successful completion of this course the student will:

Identify aircraft blueprints and determine repair procedures for the various damage classifications. Discuss and identify structural components. Define basic blueprint lines and symbols. Discuss blueprints location on aircraft structures using specific numbering systems.

III. TOPICS TO BE COVERED:

1. Blueprint identification and terminology.
2. Blueprint structural component identifications.
3. Blueprint types and requirements.

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LEARNING ACTIVITIES

1.0 Blueprint Identification and Terminology

Upon successful completion of this unit the student will be able to:

- 1.1 Define the various terms used in blueprint reading.
- 1.2 Identify the various types of lines and symbols used in blueprints.
- 1.3 Discuss the importance of Title Blocks, Bill of Materials, and Revision Blocks.
- 1.4 Discuss terms such as tolerance, station numbers, and zone numbers.
- 1.5 Discuss the various types of tolerances such as minus, positive and total tolerance.
- 1.6 Discuss the importance of proper care of blueprints and correct filing of blueprints after being used.

2.0 Blueprint Structural Component Identification

Upon successful completion of this unit the student will be able to:

- 2.1 Identify components found on aircraft blueprints.
- 2.2 Identify using the title block the number of components used to assemble the antenna.
- 2.3 Identify part numbers associated with the installation.
- 2.3 Describe the location of the antenna installation.
- 2.4 Discuss any revisions associated with this blueprint.

REQUIRED RESOURCES

Textbook: AC65-9A.
Chapter II

Basic Blueprint Reading and Sketching
- Fifth Edition

Section I, Pg. 1 to 120.

Blueprints DW6 NO 700 847
Polar Bear Tracking Antenna
Installation

As per blueprint supplied by
instructor.

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LEARNING ACTIVITIES

2.5 Identify using the Title Block, the personnel responsible for this blueprint.

2.6 Identify the type of blueprint.

2.6 Identify which aircraft this blueprint is associated and approved for.

3.0 Blueprint Types and Requirements

Upon successful completion of this unit the student will be able to:

3.1 Identify the three most commonly used blueprints found in aircraft structural repair.

3.2 Describe the information a blueprint must have to be understandable.

3.3 Discuss orthographic projection drawings.

3.4 Describe the various views associated with orthographic projection.

3.5 Identify material symbols.

3.6 Discuss various abbreviations used in blueprint reading.

3.7 Discuss blueprint "scales" and Baseline Dimensioning.

3.8 Describe internal and external thread dimensioning associated with blueprint reading.

3.9 Complete Assignments No. 1 to 25 found in the student textbook titled, "Basic Blueprint Reading and Sketching."

RESOURCES REQUIRED

AC 65-9A
Chapter II, pg. 35-50.

Basic Blueprint Reading and Sketching, pg. 18 to 38.

Basic Blueprint Reading and Sketching, pg. 1 to 119

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V. EVALUATION METHODS: (INCLUDES ASSIGNMENTS, ATTENDANCE REQUIREMENTS ETC.)

One student assignment worth 10% of final mark.
One written test worth 90% of final mark.

Grading will be as follows:

A	90% - 100%
B	80% - 90%
C	70% - 79%
I	Incomplete

VI. REQUIRED STUDENT RESOURCES

Basic Blueprint Reading and Sketching, Fifth Edition by C. Thomas Olivo

A & P General Handbook - A/C 65-9A

Aircraft blueprints - DW6 NO 700847

VII. ADDITIONAL RESOURCE MATERIALS AVAILABLE IN THE COLLEGE LIBRARY:

Book Section (title, publisher, edition, date, library call number if applicable - see attached example)

Periodical Section (Magazines, Articles)

Audiovisual Section (Videotape, Filmstrips, Transparencies)

Asper Textbook AC 65-9A Chapter II

VIII. SPECIAL NOTES

Students with special needs (eg. physical limitation, visual impairments, hearing impairments, learning disabilities) are encouraged to discuss required accommodations confidentially with the instructor.

Your instructor reserves the right to modify the course as he/she deems necessary to meet the needs of the students.