Subject Area: <u>AEROSPACE EDUCATION</u>

Topic: <u>AIRFRAME TERMINOLOGY</u> (Presentation time <u>50 minutes</u>

Detail Notes

Objective: In this topic, the cadet will;

apply airframe terminology in the construction of a flying model airplane.

Why does the cadet need to know this?

Cadet need to know aircraft terminology when working around pilots and when on the flight line.

Equipment:

Supply 1 each for every cadet:

Airplane Pattern (copied on heavy card stock)

Scissors

Tape

Instruction:

Draw a schematic of an airplane on the board.

Define and explain:

Fuselage - French (fusel - spindle + age - like)

Aileron - French (diminutive of *aile* - wing)

Empennage - French (en-to put + penne-feathers +

age-like — like putting feathers on an arrow)

Wing - Old Norse (vængr - to blow)

Rudder - Old Norse (*ruthr* - the act of steering)

Flaps - Mid Eng. (*flappe* - hinged flat board)

Elevator - Latin (*elevare* - to raise)

Cowling - Latin (cuculle - monk's hood)

Horizontal Stabilizer

Vertical Stabilizer

Activity:

Pass out airplane construction material.

Instruct cadets to:

Carefully cut out all airplane parts.

Fold back wing structural stiffener to bottom side of main wing and tape into place.

Cut tabs at front & rear of main wing and horizontal stabilizer.

Cut slots for main wing and horizontal stabilizer.

Tape a penny to the inside fuselage nose behind one of the CAP seals.

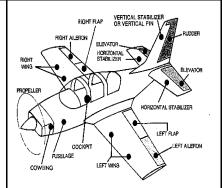
Tape fuselage tabs together.

Form main wing camber.

Insert main wing into fuselage slots.

Insert horizontal stabilizer into tail slots.

Preview next activity and close.



Major Parts of the Airframe

