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Benjamin O. Davis Jr. Collection - Flight Checks - Davis, Benjamin O. 1206-A. (1)

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^[[GEN DAVIS]]

WEIGHT AND BALANCE QUESTIONNAIRE

I - Given the following facts complete a form DD 365F for a C-47 flight in aircraft 43-48503 to Berlin (2 hrs 30 min duration). Prepare the Form F as you would if you were going to attach it to your AF 175.

1. Basic aircraft - 17076 lb.
2. Basic index - 32.2
3. 58 gallons of oil (wt 7.5 lb/gal.)
4. Crew of four (2 in A compartment, 2 in C compartment).
5. 804 gallons of fuel (wt. 6 lb/gal.)
6. Ballast in H compartment - 125 lbs.
7. Cargo - 3500 lbs of 100 lb cement bags.
8. Passengers - 2 at 200 lbs per person.

Arrange the load so as to have the center of gravity located between 19% and 21% of the MAC.

Estimate your landing condition.

II - Mark the appropriate answer to the following questions.

1. Where can the most current figures for the basic weight and index be found?

- a. Annual weighing form
- b. Old Form F's found in the weight and balance record
- c. ☒ Chart C

2. If you are required to complete a 365F on a cargo without the use of the load adjuster you could:

- a. Use the load adjuster from a different type aircraft.
- b. Arrange the load as best you can by trial and error.
- c. ☒ Complete the form by use of a moment computation.

3. Aircraft are required to be weighted:

- a. Once a year.
- b. After a major modification or change in basic weight.
- c. Flight characteristics are such that the pilot reports unsatisfactory balance conditions.
- d. The basic data are suspected to be in error.
- e. ☒ All of the above.

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1. Basic aircraft - 17076 lb.
2. Basic Index - 32.2
3. 58 gallons of oil (wt 7.5 lb/gal.)
4. Crew of four (2 in A compartment, 2 in C compartment).
5. 804 gallons of fuel (wt. 6 lb/gal.)
6. Ballast in H compartment - 125 lbs.
7. Cargo - 3500 lbs of 100 lb cement bags.
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