

A PAT ON THE BACK

We reproduce a letter from Dr. James E. Hemphill in order that you may also bask in the sunshine of its praise.

"Dear Tom:

I have moved to Charlotte where I am in practice with Dr. Shull.

I just wanted to express to you and all the members of your organization how much I enjoyed the privilege of flying under their help and your cooperation.

During the past several years, I have been to numerous airports throughout many of the southern and eastern states. I CAN TRUTHFULLY SAY THAT AT NO AIRPORT HAVE I BEEN SHOWN THE COURTESY OR CONSIDERATION THAT WAS SHOWN TO ME DURING THE PAST YEAR IN WINSTON-SALEM. It would give me great pleasure if you would let your organization know how much I appreciated the things they did for me.

Yours very truly,

James E. Hemphill, M.D."

WEIGHT AND BALANCE

By F. H. Ponish

Did you have trouble in working problem 3 in last week's issue? This was no fault of yours, but was due to a misprint. The distance A-B in this problem should have read 125" instead of 100". If you re-work the problem using 125" for the distance A-B, you will receive the correct answer as given.

So far we have dealt with some of the theory leading up to the weight and balance of an aircraft. Let us now apply what we have learned and find the center of gravity location of an aircraft. To accomplish this, proceed as follows:

1. Ascertain the leveling means of the aircraft in question by consulting the Aircraft Operation Record (Form 309) or, if this form is not available you may obtain the information from the pertinent Aircraft Specifications.

2. Drain all fuel and oil tanks and make certain that no baggage or equipment is left in the airplane which should not be included in the aircraft empty weight. Take the aircraft into a hangar and close all doors to prevent draft from disturbing the balance of the aircraft.

3. Place a platform scale of sufficient capacity under each front wheel and under the tailwheel. Raise the tail of the airplane by placing empty boxes or barrels on the platform of the tailwheel scale until the conditions specified by the leveling means are satisfied. Instead of boxes or barrels a specially constructed jack may be used to raise the tail.

4. Measure the horizontal distance between the front wheel axle and tailwheel axle. This is the distance A-B of the previous problems. To find it, you suspend a plumb bob exactly midway between the front wheels and in exact line with the axles of the wheels. Where the plumb bob touches the floor you make a mark. (This mark is point A). Next suspend a plumb bob from the center of the tailwheel axle. Where the plumb bob touches the floor, make another mark. (This mark is point B). The distance between the two marks is the horizontal distance between the front wheel axle and tailwheel axle and it is the same in length as the imaginary line A-B along the horizontal axis of the plane. This measurement should be made to the nearest 1/8 of an inch.