

AMERICAN AIR NAVIGATOR

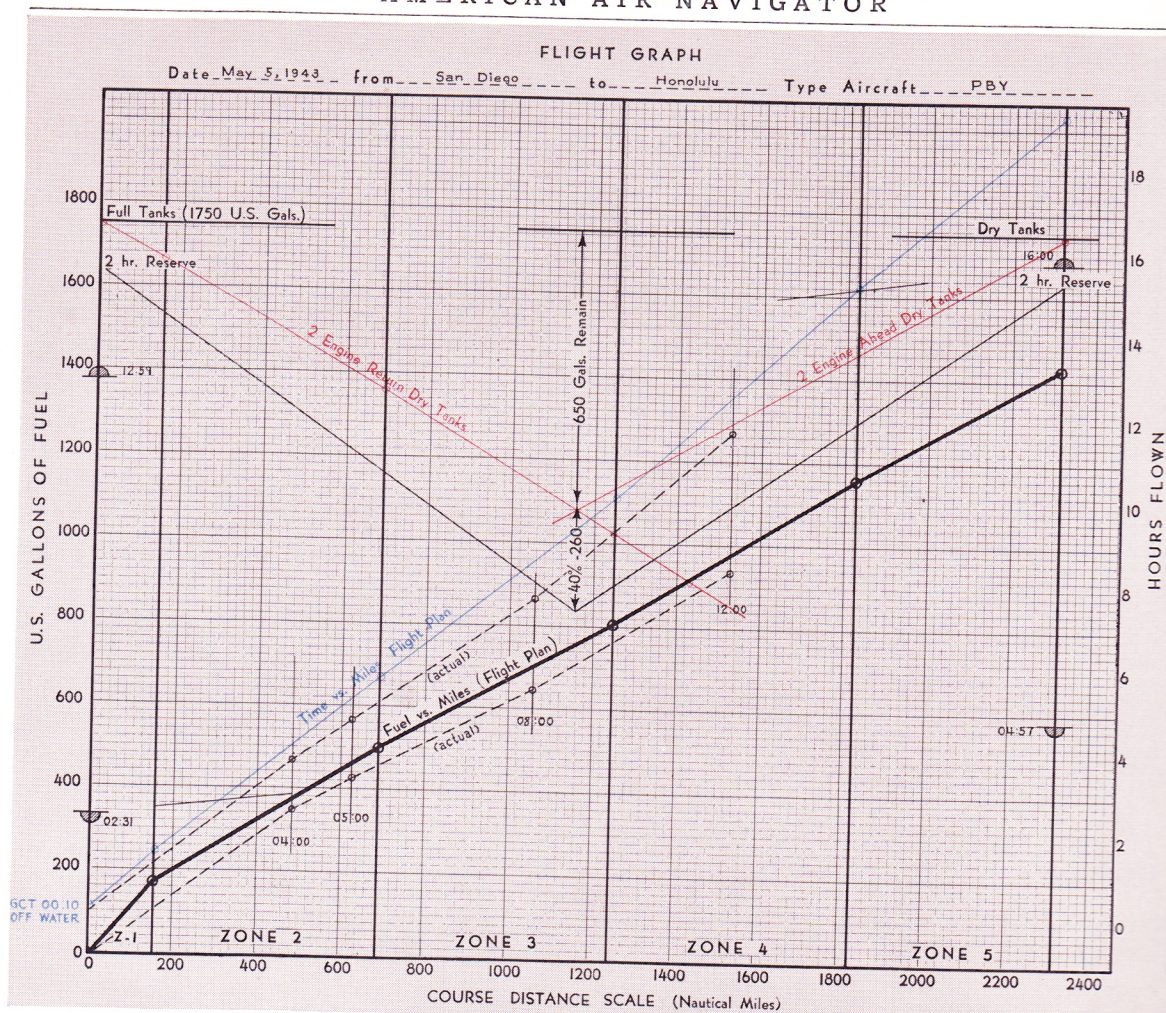


FIG. 163—FLIGHT GRAPH

curve and time curve (to be drawn) separated, thus permitting easier reading.

f. On the zone lines mark the total forecast time to the end of each zone (Flight Plan) and draw in the *time vs. miles* curve.

g. On the zone lines mark the total return fuel used to the end of each return zone (Return Flight Plan), and commencing at point of full tanks, draw in the *two-engine return dry tanks* curve. The intersection of this curve, extended, with the fuel vs. miles curve locates the PN.

h. From the point of dry tanks (at destination), draw a line parallel to the fuel vs. miles curve. This line is the *two engine ahead dry tanks* curve. The point at which the two dry tanks curves intersect represents the absolute maximum amount of fuel the aircraft can consume and still return or go ahead to destination

i. Determine amount of fuel remaining point where dry tanks curves intersect, and from this point, at a distance equal to 40% of the remaining fuel, locate a second point vertically beneath the point of intersection.

j. Obtain from fuel consumption curve (Figure 162) amount of fuel required for first two hours cruising. Mark this amount on Flight Graph below *full tanks* and *empty tanks* points and draw in *40% to 2 hours reserve ahead* and *return* curves. These curves represent safe flying curves, and any position below these curves would be considered safe.

k. In airline operations it is especially important also to plot on the Flight Graph the maximum amount of reserve fuel required on arrival at destination. As an example, for