

ALASKA COASTAL AIRLINES

LOADING
INFORMATION
MANUAL

FOR

GRUMMAN G-44

The approved portion of this manual consists of page I and figs II and III only. Additional information contained herein requires separate approval.

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LOADING INFORMATION
FOR
GRUMMAN G-44

The following information has been prepared to assist in the proper loading of the aircraft so that the resulting gross weight and its center of gravity will be within the limits prescribed by the Civil Aeronautics Administration.

MAXIMUM GROSS WEIGHT	- 4525 Pounds
REFERENCE DATUM	- Wing leading edge at center section.
C.G. RANGE	- (f/14.8 to f/22.5
FUEL CAPACITY	- 108 gallons (648 pounds) total - two tanks in center section 54 gallons each at f/ 21.
OIL CAPACITY	- 7 gallons (52.5 pounds) total - Two tanks in engine nacelles 3.5 gallons each at f/ 10.
BAGGAGE CAPACITY	- Bow Compartment 200 pounds maximum at -50 - Aft Compartment 400 pounds maximum at f/90
CREW	- Pilot (170 pounds) at - 6
BASIC WEIGHT	- The basic weight of the aircraft includes the actual empty weight plus the weights of the crew and full engine oil.
USEFUL LOAD	- The maximum weight available for fuel & payload
INDEX UNIT	- The moment of any item in the aircraft about reference point 100 inches forward of the wing Leading Edge, divided by 1000. $U_I = \frac{W(100 \text{ } f \text{ } D)}{1000}$ where U_I is the index unit W is the weight of a given item and D is the horizontal distance from item to the wing L.E.
BASIC INDEX	- The index unit for the basic weight.

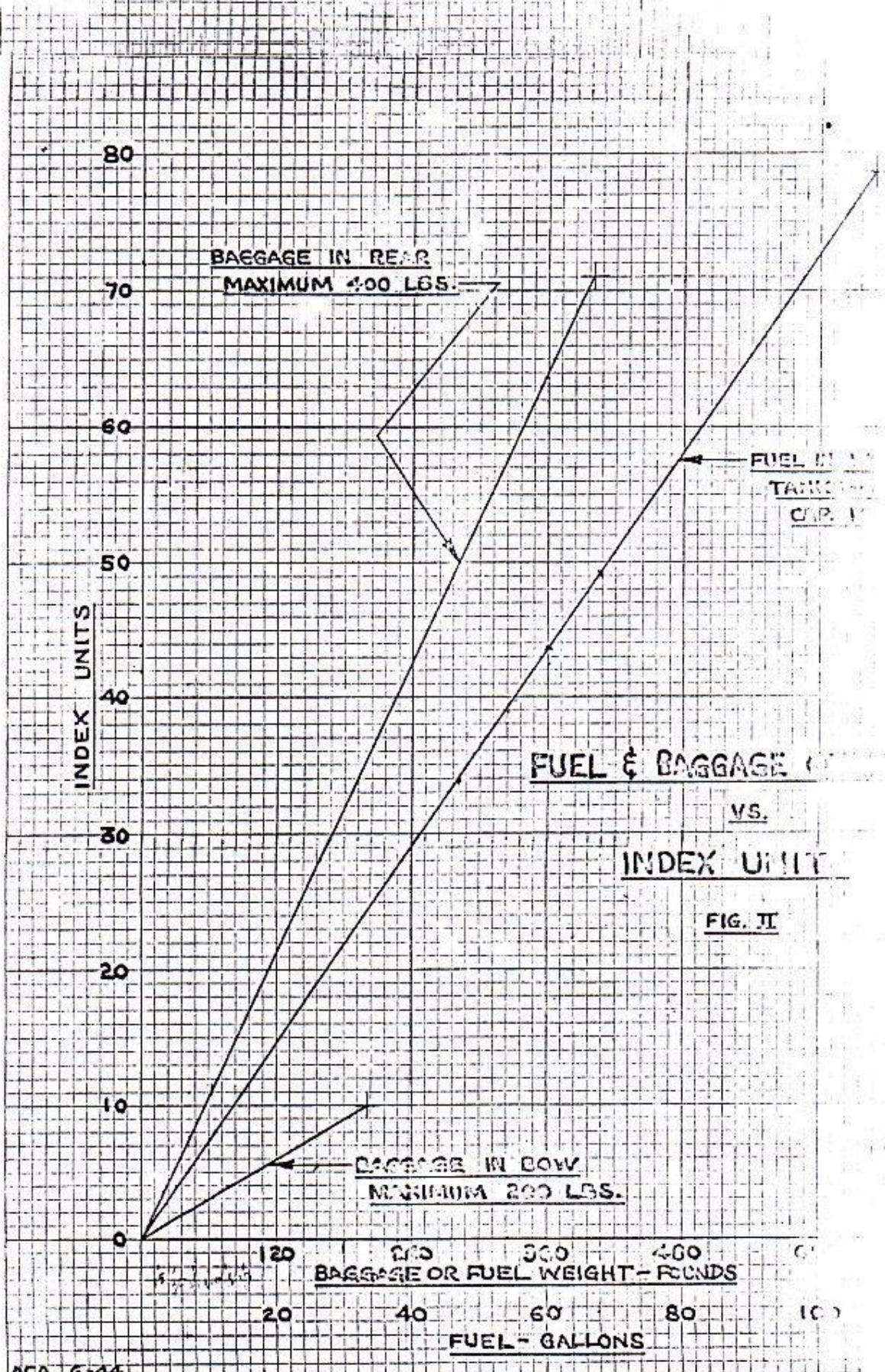
The index units for passengers (170 pounds) at various seat locations, the basic weight, basic index and useful load for the aircraft are given in the "TABLE OF WEIGHTS AND INDEX UNITS", Fig. I.

The index unit for all fuel and baggage (or cargo) may be obtained from the "FUEL AND BAGGAGE QUANTITY vs. INDEX UNITS", graph, Fig. II.

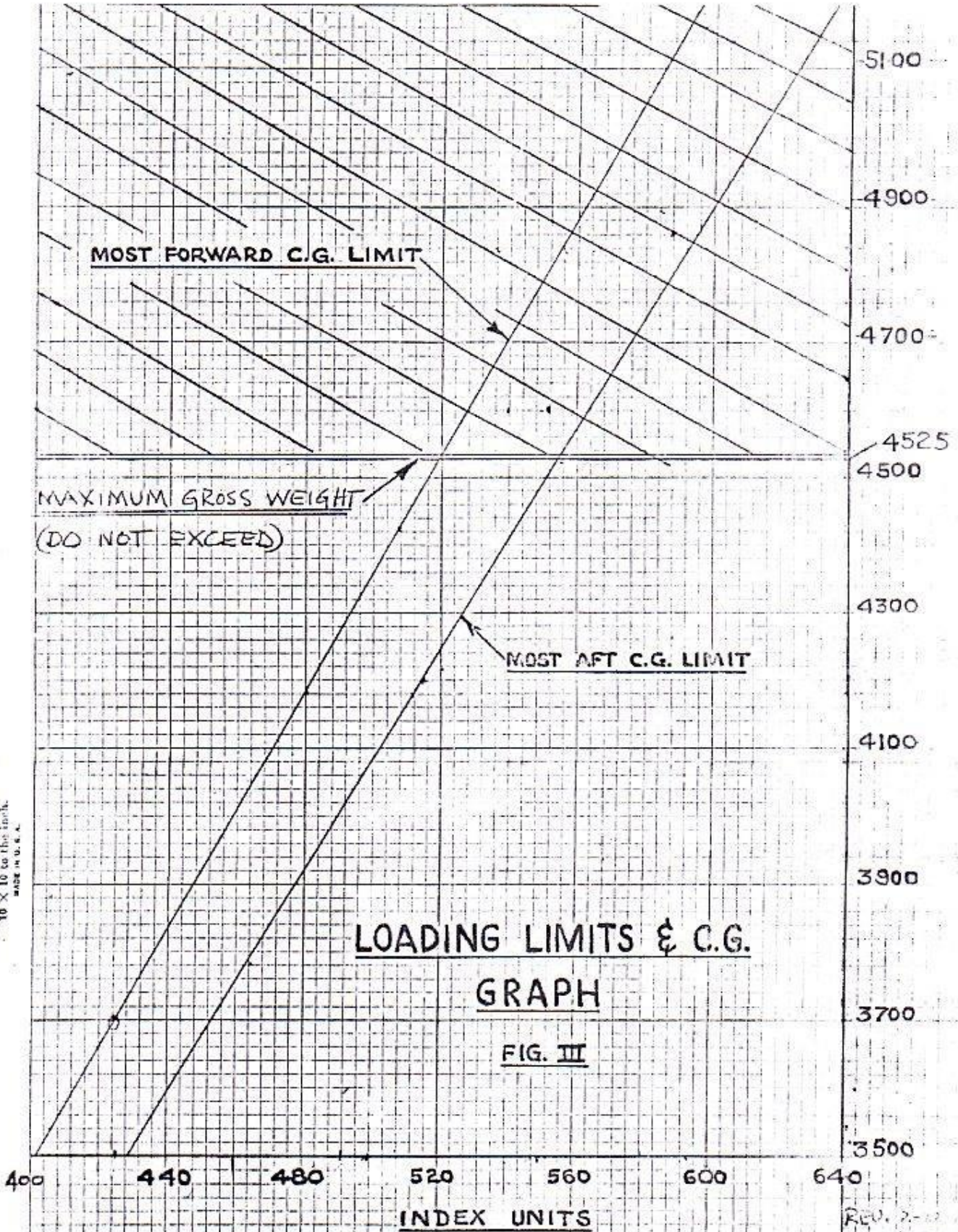
The center of gravity for any loading condition may be determined by plotting the sum of the basic weight plus the weights of ALL load items against the sum of the basic index and the index units for ALL load items on the "LOADING LIMITS AND C.G. GRAPH", Fig III.

The aircraft shall be so loaded that the intersection of these coordinates will fall within the allowable region indicated.

ALTERATIONS TO THE AIRCRAFT WHICH RESULT IN A CHANGE OF WEIGHT, C.G. LOAD OR LOCATION OF LOAD ITEMS WILL REQUIRE REVISION OF THESE VALUES.



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LOADING LIMITS & C.G.
GRAPH

FIG. III

ACA G-44(SR 375)

REV. 2-52
JSE
G-2