P-51
Gen.

AAFMC-265-A-WF-2-26-43-500M

A/C 515

INTER-OFFICE MEMORANDUM

ARMY AIR FORCES
MATERIEL CENTER
Office of The Commanding General

JHG:aks:51

Wright Field, Dayton, Ohio

Date 11 DEC 1943

TO: Director, Glider Branch, Aircraft Laboratory, Wright Field.
Attention: Lt. J. H. Zell.

SUBJECT: Power Required and Power Available for the P-51A, P-51B and P-47B Airplanes.

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1. The information, on the subject airplanes, requested verbally by Lt. J. H. Zell of Clinton County Army Air Field on 1 December 1943 is given on the three graphs forwarded herewith.

2. The power required curves were calculated from the drag characteristics of the airplanes shown on the graphs. The power available curves were obtained from chart horsepowers and calculated propeller efficiencies.

FRANK N. MOYERS,
Colonel, Air Corps,
Director, Aerodynamics Branch,
Aircraft Laboratory.

3 Incls.:
Graphs.

Copy to:
Flight Research Lia. Br., W.F.
Evaluations Branch, Tech. Data Lab.

DEC 10 1943

Signature .....

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Archives of M. Williams

WWIIaircraftperformance.org

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P-51B
ENGINE - PACKARD - 1650-3
GROSS WEIGHT - 8600 LBS.

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e = .78
f = 3.55

POWER vs SPEED

——— S.L.
– – – 5000 FT.

POWER AVAILABLE

MILITARY POWER

NORMAL POWER

75% NORMAL POWER

POWER REQ.

THRUST HORSE POWER

1200
1100
1000
900
800
700
600
500
400
300
200
100
0

100 120 140 160 180 200 220

V - MPH - (TRUE)

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P-51A

GROSS WEIGHT 8370

ENGINE-V-1710-81 , e=.78 , f=3.3

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POWER vs SPEED

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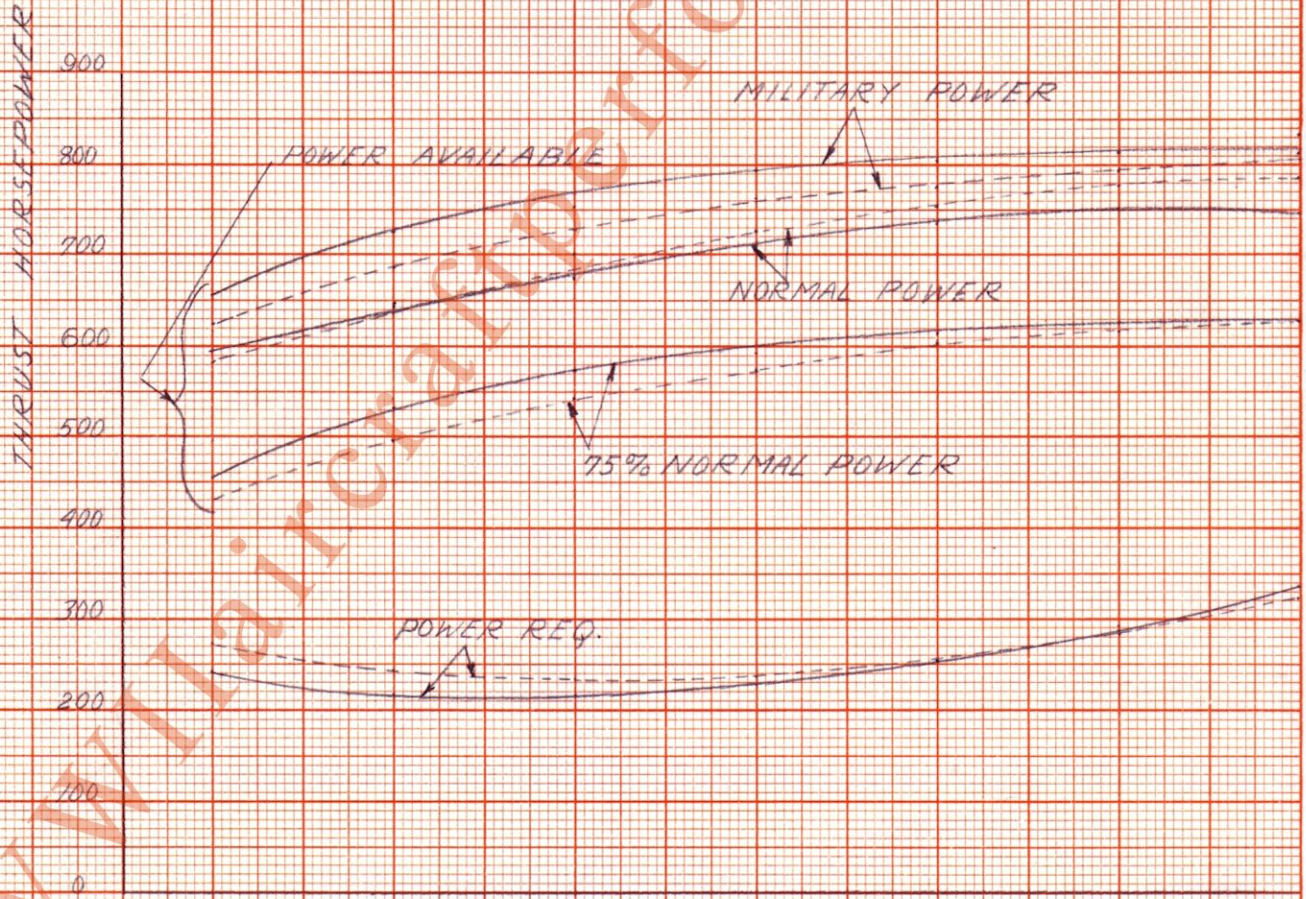
——— SEA LEVEL

- - - - - 5000'



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P-47-B

GROSS WEIGHT 12,565

ENGINE-R-2800-21, e-9.0, f-6.00

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POWER vs SPEED

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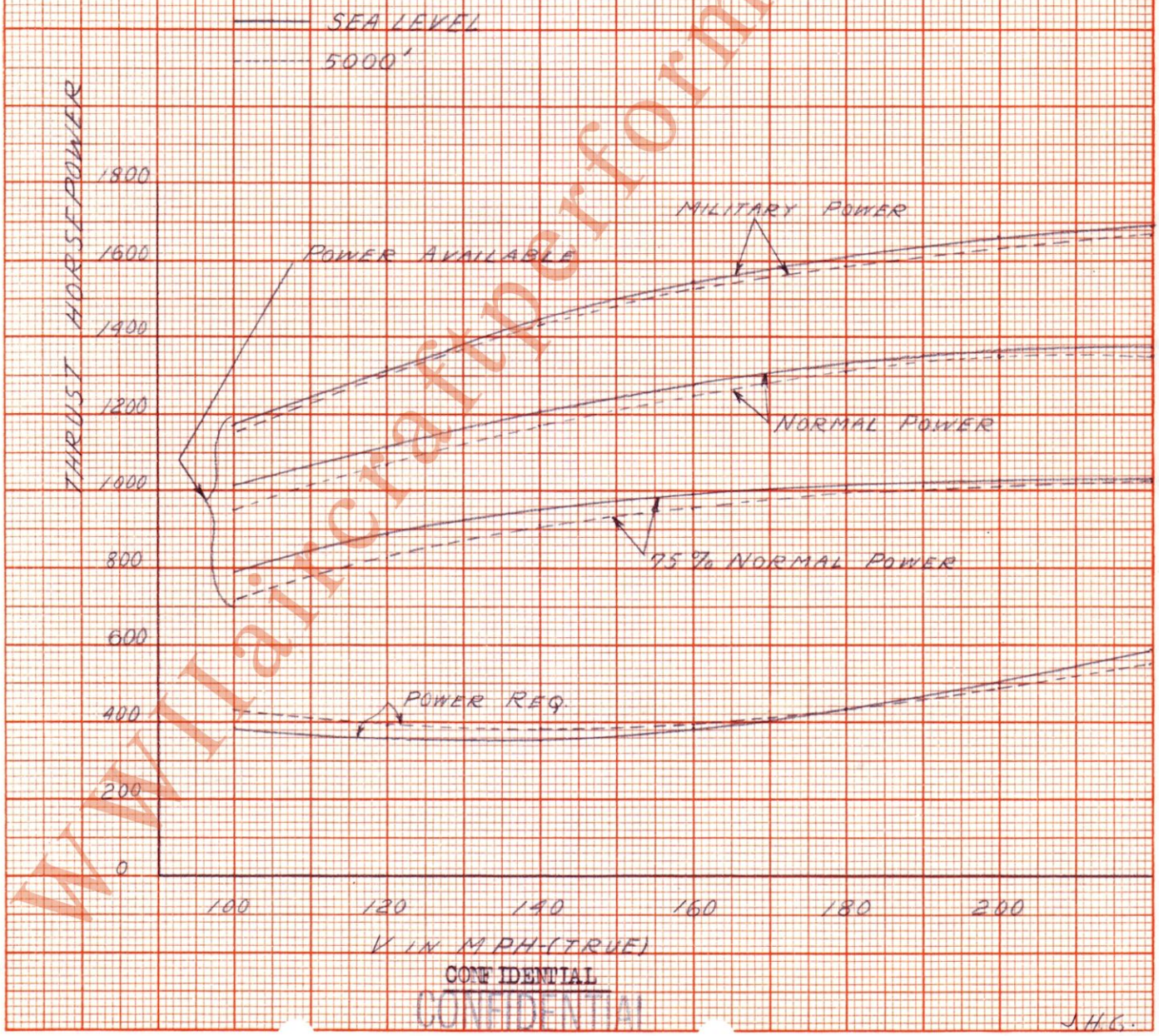

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