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WAR DEPARTMENT
AIR CORPS, MATERIEL DIVISION

MEMORANDUM REPORT ON
Pursuit 1-Engine (P-36A) Airplane, A.C.No. 38-180 RLF-BC
Date October 31, 1940

SUBJECT: Propeller Tests

SECTION..... Flying Branch.....

Contract No.

SERIAL No. PHQ-M-19-1152-A

Expenditure Order No. 587-1-84

Purchase Order No.

1. Purpose

- a. Propeller tests on Pursuit 1-engine (P-36A) airplane, equipped with R-1830-17 engine and 3-bladed, constant speed propeller, blade design No. 101330. Flown with full gas and oil load. Wheels up, wing flaps neutral, carburetor cold, mixture automatic. Radio antenna in place. Synchronized gun openings covered.

2. Factual Data

- a. Speeds at altitudes, engine cowl flaps closed:

(1) At 5000 ft.:

True Speed		
MPH	R.P.M.	B.H.P.
276	2550	1045
268	2550	950
258.5	2550	850
247.5	2550	750

(2) At 10,000 ft.:

294.5	2550	1025
287.5	2550	950
278	2550	850
268.5	2550	750

(3) At 15,000 ft.:

291	2550	825
285	2550	750
272.5	2550	650
264	2550	600

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b. Climb data, engine cowl flaps wide open:

Altitude Ft.	Rate of Climb Ft/Min	R.P.M.	B.H.P.	True Speed MPH
10,000	2500	2550	930	150.5
15,000	1875	2550	760	157
20,000	1310	2550	615	163
25,000	795	2550	485	169.5

c. Results of take-off tests will be reported by the Aircraft Laboratory.

WWII Aircraft Performance

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