

L. 2.

M^r Baker. (for information - if any?)

REL 43

→ hi Wong
hi Wamban

R.D.E.1.(a)

Res. Eng/4696/RDE1(a)/PLS.
5070/5/04.

September, 1944.

The Resident Technical Officer,
Air Service Training Ltd.,
Hamble.

Packard V-1650 Engine Performance Data.

With reference to your letter of the 23rd inst. the information you requested is as follows:-

V-1650-3 engine.

Combat Rating.

This type engine is not officially cleared for a use of +25 lbs/sq.in. (80.8" Hg. abs.) boost pressure, and C.T.A/D.E.D. has ruled it may only be used under conditions of extreme emergency, after which a report should be made to the Engineer Officer. No performance data is available under this condition.

3000 r.p.m. +61" Hg. boost pressure. B.H.P. at S.L. = 1400.

Max. power in "M.S" gear = 1,540 B.H.P. at an altitude of 13,000 ft.

Max. " " "F.S" gear = 1,380 B.H.P. " " " " 24,500 ft.

Supercharger change height = 17,000 ft.

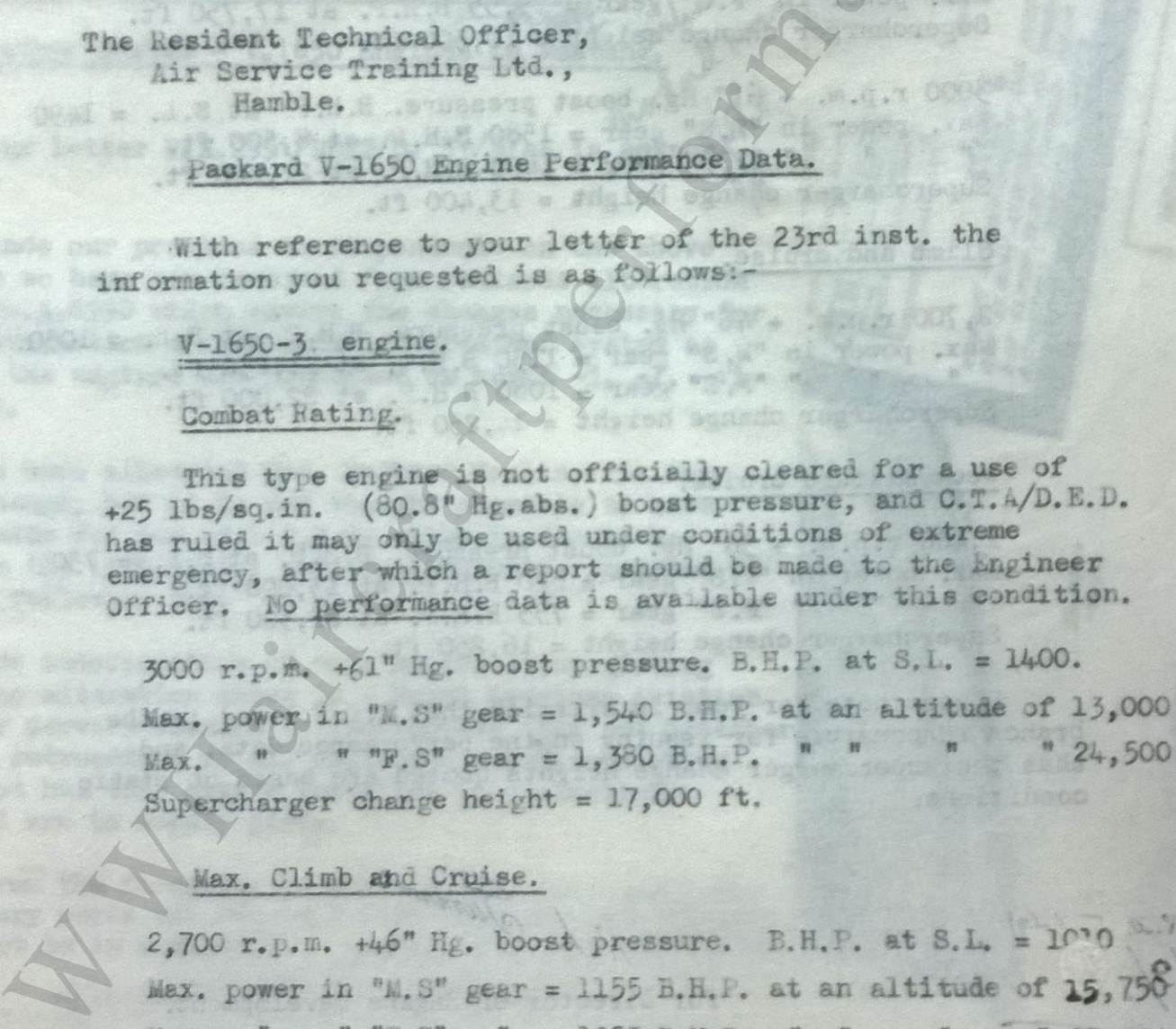
Max. Climb and Cruise.

2,700 r.p.m. +46" Hg. boost pressure. B.H.P. at S.L. = 1020

Max. power in "M.S" gear = 1155 B.H.P. at an altitude of 15,750 ft.

Max. " " "F.S" " = 1055 B.H.P. " " " " 27,000 ft.

Supercharger change height = 19,200 ft.



Modification No.

17

Combat Conditions

3000 r.p.m. + 25 lbs/sq.in. B.H.P. at S.L. = 1940.
Max. power in "M.S" gear = 1940 B.H.P. at S.L.
" " " "F.S" gear = 1810 B.H.P. at 12,000 ft.
Supercharger change height = 5,000 ft.

3000 r.p.m. + 67" Hg. boost pressure. B.H.P. at S.L. = 1630.
Max. power in "M.S" gear = 1,700 B.H.P. at 5,750 ft.
Max. power in "F.S" gear = 15,55 B.H.P. at 17,750 ft.
Supercharger change height = 10,500 ft.

3000 r.p.m. + 61" Hg. boost pressure. B.H.P. at S.L. = 1490
Max. power in "M.S" gear = 1580 B.H.P. at 8,500 ft.
" " " "F.S" gear = 1400 B.H.P. at 21,000 ft.
Supercharger change height = 13,400 ft.

Climb and cruise.

2,700 r.p.m. + 46" Hg. boost pressure. B.H.P. at S.L. = 1050.
Max. power in "M.S" gear = 1150 B.H.P. at 11,250 ft.
" " " "F.S" gear = 1080 B.H.P. at 22,000 ft.
Supercharger change height = 14,250 ft.

Week mixture cruise.

2,400 r.p.m. + 36" Hg. boost pressure. B.H.P. at S.L. = 730
Max. power in "M.S" gear = 820 B.H.P. at 13,000 ft.
" " " "F.S" gear = 755 B.H.P. at 22,500 ft.
Supercharger change height = 16,250 ft.

Please note for your information that R.D.E.1.(a) is the branch responsible for issuing engine performance data, and that the supercharger change heights quoted are based on static conditions.

R.D.E.1.(a)

1/9/44

P. L. Summer

for Director of Engine Development.

B.3.

The Secretary
Ministry
Millbank
LONDON

CONTROLLED