

IN REPLY PLEASE QUOTE

R.A.A.F. 1055

File No 452.13

257
Brisbane, Qld.

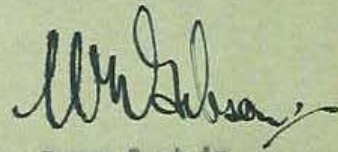
3 - APR 1943

R.A.A.F. Headquarters, (Forward Echelon)
Commonwealth Buildings,
Adelaide Street,
BRISBANE, QLD.

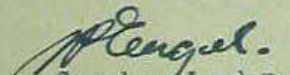
MODIFICATION TO KITTYHAWK AIRCRAFT TO PROVIDE FOR
FITTING OF BOMB RACKS IN PLACE OF OUTBOARD GUNS.

Information received by this Command indicates that bomb racks and adaptors are being manufactured for fitting in place of the two outboard guns of Kittyhawk Aircraft allowing the aircraft to be used as a six gun fighter or four gun Fighter Bomber at forty-five minutes warning, this being the time taken to complete the change over.

2. It is felt that this extension of the role of these aircraft is very desirable and it is recommended that the modification be adapted as standard for all R.A.A.F. Kittyhawks and that the modification be incorporated as early as possible.



Group Captain,
For Air-Vice Marshal,
AIR OFFICER COMMANDING,
R.A.A.F. COMMAND, A.A.F.


Squadron Leader,
Ops. 3
2nd April 1943.

501/20/PRM

27A

RECEIVED IN REGISTRY
R.A.A.F. COMMAND
Date 31 MAR 1943

Headquarters,
No. 9 Operational Group,
R.A.A.F., PAPUA.

Date: 27/3/43

Secretary,
Air Board,
Victoria Barracks,
St. Kilda Road,
MELBOURNE, S.C.I. (Copy to A.O.C. R.A.A.F. Command.)

MODIFICATION TO KITTYHAWK AIRCRAFT TO PROVIDE
FOR FITTING BOMB RACKS IN PLACE OF OUTBOARD
GUNS.

Kittyhawk aircraft of the U.S. Army Air Corps in this theatre have been modified to provide for the fitment of bomb-racks in place of the outboard guns, thus allowing the aircraft to carry two 300 lb bombs when necessary.

2. This modification is considered by this Headquarters to be of great value, since it increases the potential striking power of the aircraft in an emergency, without detracting in any way from the performance in its primary role.

3. The modification has been tried and tested on one aircraft of No. 77 Squadron, and the results of the trial were satisfactory in all respects.

4. It is requested that permission be granted to modify all aircraft of Nos. 75 and 77 Squadrons. It would be appreciated if the matter could be treated as urgent, and the authority to carry out the modification communicated by signal as soon as possible.

5. Technical details of the modification, together with photographs, are forwarded herewith.

452.13
AWC 09/1

J.H.

(J.E. HEWITT)
Air Commodore,
AIR OFFICER COMMANDING.
NO. 9 OPERATIONAL GROUP, R.A.A.F., PAPUA.

Encl:

SASOY

MODIFICATION TO KITTYHAWK AIRCRAFT TO FIT BOMB CARRIERS IN PLACE OF OUTBOARD GUNS.

1. (a) Time required to cut and reinforce gun inspection door slot and fit Carrier adaptor approximately four hours.

(b) Time required to change back to guns after modification - approximately three-quarters of an hour per aircraft.

(c) Time required to change from guns to Bomb carriers once modification has been completed, approximately three-quarters of an hour per aircraft.

(d) The work of modifying requires:-

(a) A slot to be cut in the gun inspection door for access to the release slip, and shackle.

(b) The fitment of an adaptor in place of the gun to carry the American shackle.

3. In carrying out the above 2 (a) each gun inspection door will have to be measured and cut individually as there is a certain amount of tolerance in the fitment of these doors. A piece of the panel to the rear of the ejection opening is removed to conform with the contour of the adaptor. The edges of the panel are then reinforced with a form of the same metal and rivetted.

4. An adaptor already in service in the Fifth Air Force made especially for this purpose and holding the American shackle is then fitted in place of the gun. This adaptor is locally manufactured in Australia. The adaptor is made of $1\frac{1}{2}$ " by $\frac{1}{2}$ " mild steel to represent the gun body having a front mounting bracket which mates into the yoke and is secured with a front mounting belt. The rear mounting bracket of the gun is removed and the rear mounting bracket of the adaptor swung into position and secured in this position by the three bolts which held the rear mounting bracket. In the centre and to the rear of the adaptor side plates, is situated a solenoid which is connected to the gun firing solenoid circuit. This mechanism operates the American release slip by pressure of the firing button with the switches in the "On" position for outboard guns. The American shackle is securely bolted between the side plates of the adaptor, and bomb steadiers are attached to each end of the carrier, and can be lowered on to the bomb body and locked by tightening the clamping nut. The bomb steadiers are hard to adjust and some modification for easier access will eventuate.

5. Attached hereto are photographs showing the modified gun inspection door and the adaptor with shackle in place.

6. Materials necessary to complete this modification:

Per Aircraft. Adaptors American Bomb carrier complete with Solenoids - 2 off.

26a

R.A.A.F. HEADQUARTERS, FORWARD ECHELON
 COMMONWEALTH GOVERNMENT OFFICES
 ANZAC SQUARE, ADELAIDE STREET, BRISBANE.



5th April, 1943.

File: 532/3/ARM.
 From: Commanding Officer, Forward Echelon.
 To: Air Officer Commanding, R.A.A.F. Command,
 (Attention Group Captain Gibson)
 Subject: MODIFICATION TO KITTYHAWK AIRCRAFT TO PROVIDE FOR
 FITTING OF BOMB RACKS IN PLACE OF OUTBOARD GUNS.

1. Reference R.A.A.F. Command letter No.1055, File No.452.13, dated 3rd April, 1943, it is advised that such a modification was brought to the attention of S.S.S.O. Forward Echelon during an inspection of certain units in No.9 (Operational) Group.

2. Supply action has already been initiated and deliveries under R.A.A.F. ident number E11A/3082, "Sets Installation Special for Kittyhawk", are expected from the contractor early this month.

3. It should be noted that Staff Officer Armament R.A.A.F. Command was consulted prior to action being taken with R.A.A.F. Headquarters for supply.

W. L. Macmillan
 Sp
 A Group Captain,
 Commanding Officer,
 Forward Echelon,
 R.A.A.F. HEADQUARTERS.

Retain Copy on file 471.6P. Bomb Carriers

(COPY)

SERIAL NO. 4082.
Out 781.

219

CYPHER MESSAGE.TO : RAAF HQRS (R) RAAF COMMAND
FROM : FORWARD ECHELON

PE/Q395 18 MARCH

URGENT ATTENTION W/CDR ALDER (.) NO. 9 OPERATIONAL GROUP HAVE REQUESTED IMMEDIATE SUPPLY OF 74 REPEAT 74 ADAPTER BOMB RACKS COMPLETE WITH SOLENOID FOR FITMENT TO P40 AIRCRAFT (.) THESE ARE QUICK CHANGE UNITS WHICH REPLACE OUTBOARD GUNS AND ARE CAPABLE OF CARRYING 250 POUND BOMB (.) ENABLE USE OF AIRCRAFT AS FIGHTER-BOMBER AT VERY SHORT NOTICE (.) UNDERSTAND THAT ITEMS ARE BEING MANUFACTURED BY INTERNATIONAL HARVESTER GEELEONG FOR AMERICANS (.) REQUEST ADVISE 9 OPERATIONAL GROUP REPEATING THIS ECHELON SUPPLY POSSIBILITIES (.) WHEN AVAILABLE TO BE FORWARDED TO 10 RSU (.) RAAF COMMAND CONCUR REQUEST

TOO 22 35/17Z

TOR 2341/17Z

THO 0014/18Z

TT 0328/18Z

IMPORTANT

AJR

MINUTE SHEET

Reference

23.

A.O.C.

Please see Enclosure 22A, 22B.

2. I have discussed this with Ops. 3 and he tells me that the adaptor for this bomb rack has, in fact, been sent up in sufficient quantities for 9 Ops. Group purposes. I think the modification has some value as a change over from the 6 gun fighter to a 4 gun fighter, carrying two 300 lb. bombs, only takes 45 minutes, and vice versa.

3. Were it a question of permanently reducing the fire power from six .50 calibre to four .50 calibre guns, I would have been against it, but as the matter stands, it appears a satisfactory means of achieving efficiency in both primary and secondary roles.

31st Mar., 1943.

W/Cdr Ops. 1

24.

S.A.S.O.
OPS. 1
OPS. 3

I agree that this modification is very desirable in Kittyhawk aircraft and understand that, without further modification, Kittyhawks so modified are capable of carrying 2 standard R.A.A.F. 250 lb. G.P. bombs.

2. Will Ops. 3 write to R.A.A.F. Headquarters recommending that the modification be adopted as standard for all Kittyhawks of the R.A.A.F. and that the modification be incorporated as early as possible.

Air Vice-Marshal,
AIR OFFICER COMMANDING.

1. 4.43.

~~25.~~

~~2. 4.43 Signal A.88 to 9 (Ops) Group, re Bomb racks on Kittyhawk aircraft.~~

Signal cancelled - not forwarded.

~~Encl. 25A.~~

~~26.~~

25.

2. 4.43 Letter to R.A.A.F. Hqrs (Forward Echelon) re Modification to Kittyhawk Aircraft to Provide for Fitting of Bomb Racks in Place of outboard guns.

Encl. 25A.

26.

5. 4.43 *Twitck - 53 1/3 / 100m - modification to Kittyhawk*
op to provide for fitting of Bomb Racks in place
of outboard guns

Encl 26A