

R.T.P. FILE COPY

2nd Part of Report No. AAEE/783

11 APR 1942

AEROPLANE AND ARMAMENT EXPERIMENTAL ESTABLISHMENT,

BOSCOMBE DOWN.

~~RESTRICTED~~

Kittyhawk A.K. 764

(Allison -1710 F.3.R.)

UNCLASSIFIED

TS 18/2/63

G.45 Camera - Gun Installation.

STOCK

18

A. & A.E.E. Ref:- 4484/1 - A.S.76.

M.A.P. Ref:- R.A.1871/D.A.N.A.1.

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Progress of Issue of Report DATE 5.1.53

This Report deals with the air-craft (or equipment) as tested. Action to remedy defects or decisions to accept items not in strict compliance with the specification are matters for decision and action by the M.A.P.

Report No.	Title.
1st Part of AAEE/783	A.K.572 and A.K.764 - Carbon monoxide contamination tests

1. Installation:

1.1 The camera position is very satisfactory for accessibility and ease of installing, and its location well back from the leading edge of the wing does not entail any cut-off on the picture.

1.2 The position of the indicator unit in the cockpit is such that location on to, or removal from, the wedge-plate necessitates the straining of the tubes housing the radio remote control cables.

1.3 The detachability of the camera fairing and stowage of the 7-pin plug is satisfactory.

2. Air Test:

A number of flight tests were made against ground targets with, and without, the guns firing, and attacking at different angles into sun. The following observations were made:-

2.1 With the sun in front, or at positions round to the starboard beam, a certain amount of flare occurs due to the obliquity of the glass window in front of the camera lens. This flare causes a slight general fogging of the film, producing an effect of increased exposure and flattening of contrast, sometimes occurring on only half of the negative, dependent on the angle of the sun to the glass. Otherwise definition is good.

2.2 When the guns are firing a profound camera vibration occurs, and even with a large target image this is sometimes sufficient for the image to disappear altogether.

3. Conclusions:

3.1 The type 45 indicator or the radio control tubes should be re-positioned to prevent the straining of these tubes.

3.2 A sun-hood is recommended to be built on to the front of the camera fairing around the oblique window.

3.3 The vibration when the guns are firing is probably unavoidable with this camera position since the guns are directly above the camera. If required, it is probable that some improvement could be obtained by strengthening the camera fairing by external ribbing.

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