



D. R. NAVIGATION

CERTIFICATE

HEADQUARTERS EIGHTH AIR FORCE
AAF STATION 101
APO 634

C E R T I F I C A T E

DATE 21 June 1944

1. This is to certify that Lt. L. R. Johnson, Bombardier, having satisfactorily completed a course of instruction in accordance with Eighth Air Force Memorandum 50-7, is qualified to act as NAVIGATOR on flights involving the use of dead reckoning navigation, pilotage, and the use of radio aids.

2. The course of instruction has included the following:

a. Ground Instruction

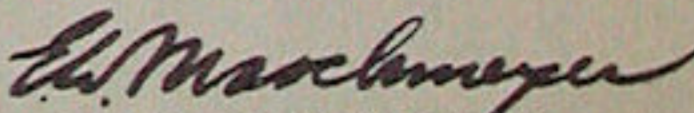
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|-----|---|---------|
| (1) | Map reading | 2 hours |
| (2) | Dead reckoning navigation; plotting and measuring courses | 4 hours |
| (3) | Log-book procedure; the flight plan | 2 hours |
| (4) | Radio Aids to Navigation | 4 hours |
| (5) | Code (A standard of six words per minute) | |
| (6) | Use of the radio compass and plotting fixes | 3 hours |
| (7) | Identification and emergency procedures | 1 hour |
| (8) | Compasses and Magnetism | 2 hours |
| (9) | Theory of Gee and its operation | 5 hours |

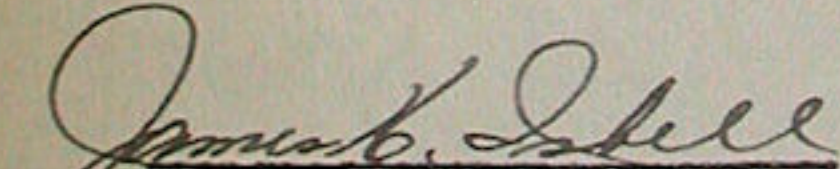
b. Flying Training. A minimum of 15 hours flying as navigator on which the following has been accomplished:

- (1) One radio fix taken and plotted every 30 minutes.
- (2) Drift readings taken every 10 minutes and winds determined on all legs of flight.
- (3) Complete log-book kept with all navigational data entered.
- (4) Demonstrated ability to pin-point by map-reading.
- (5) Demonstrated ability to take and plot fixes, using Gee.

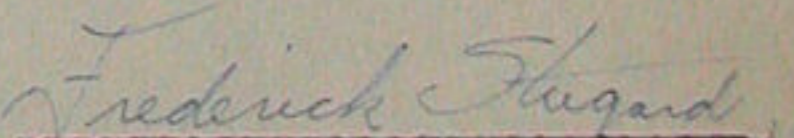
c. Examination. Satisfactory grade (80 per cent) on Sections 1, 2, 3 and 5 of Examination given in Section 2, Group Navigator's Handbook, issued by this Headquarters.

By command of Lieutenant General DOOLITTLE:


E. W. MASCHMEYER
Colonel, A.C.
Executive, A-3


Commanding Officer
458th Bombardment Group.

C. M. Mottern, Capt. A.C.
Group Navigator.


Frederick Steward
Eighth Air Force Navigator.
Captain A.C.