2. (u) TT 11 Dec. 1940
Fr: Exp. Eng. Sect., WF
To: Chief, Exp. Eng. Sect., Wash.
(File: Bomb. Br., Eng. Div.)

Douglas was conducting design studies which Exp. Eng. Sect. (WF) believed would result in an experimental light bomber which would be the 1942 successor to the A-20 airplane.

TAS:aj
10:15 AM

December 11, 1940

F. O. CARROLL, Lt.Colonel, A. C.

Chief, Experimental Engineering Section

EXP-T-277 ..... AS A BACKGROUND THE DOUGLAS COMPANY ARE AT LEAST SERIOUSLY WORKING ON SOME DESIGN STUDIES THAT WE HOPE WILL LEAD UP TO A CONTRACT FOR AN EXPERIMENTAL LIGHT BOMBER THAT MAY BECOME THE 1942 SUCCESSOR TO THE A-20B AIRPLANE. THERE ARE TWO PRELIMINARY INVESTIGATIONS THAT IF ACCOMPLISHED WILL GREATLY AID THIS COMPANY TO DEVELOP THIS NEW LIGHT BOMBER. ONE INVOLVES THE INSTALLATION AND FLIGHT TESTS OF G.E. POWER TURRETS IN AN EXISTING A-20A AIRPLANE, ACTION ON WHICH WAS REQUESTED IN TELETYPE EXP-T-277 DATED DECEMBER 7, 1940.

THE SECOND INVOLVES THE EXPERIMENTAL INVESTIGATION OF A NEW AILERON OR LATERAL CONTROL DEVICE IN CONJUNCTION WITH A SLOTTED FLAP. IF SUCCESSFUL THIS WILL ENABLE THE USE OF A FULL SPAN FLAP WHICH SHOULD INCREASE THE MAXIMUM LIFT COEFFICIENT AND PERMIT LOWER LANDING SPEED WITH SAME WING LOADING. THIS HAS BEEN COORDINATED WITH N.A.C.A. AND IT IS BELIEVED VERY DESIRABLE TO INCORPORATE THIS DEVICE ON AN EXISTING AIRPLANE AND OBTAIN ACTUAL RESULTS ON EFFECTIVENESS OF CONTROL AND A MEASURE OF MAXIMUM LIFT COEFFICIENT IN FLIGHT.

THE DOUGLAS COMPANY NOW PROPOSE TO INSTALL THIS DEVICE ON ONE A-17A AIRPLANE AND CONDUCT THE NECESSARY FLIGHT TESTS AND WOULD LIKE TO HAVE AN A-17A AIRPLANE ASSIGNED

December 11, 1940

TELETYPE EXP-1-277 (concluded)

TO THEM UNDER CONTRACT FOR THIS WORK STARTING DECEMBER 17, 1940 AND LASTING APPROXIMATELY 60 DAYS.

REQUEST YOU OBTAIN ONE A-17A AIRPLANE FOR ASSIGNMENT TO THIS PROJECT AND ADVISE BY TELETYPE.

CC: Aircraft Laboratory
Flight Research Projects

EXPERIMENTAL ENGINEERING SECTION