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A-67-25

DEPARTMENT OF TRANSPORTATION
NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20591

AUG 2 1967

SB-1-96

IN REPLY
REFER TO:

Honorable William F. McKee
Administrator
Federal Aviation Administration
Department of Transportation
Washington, D. C. 20590

Dear General McKee:

During our investigation of the midair collision between Beech Baron, N6127, and TWA DC-9, N1063T, near Urbana, Ohio, a series of photographs were taken for us by your NAFEC facilities from inside the cockpit of a TWA DC-9 and an FAA Beech Baron. In reviewing the photographs of the Beech Baron, it was noted that a considerable portion of the window area can be blanked out by the sun visor.

We realize that there are no minimum standards depicting angular limits applicable to an airplane certificated under the provisions of Part 23 of the Federal Aviation Regulations and that the sun visor positioned in its most adverse position would not have hindered the pilot in detecting the DC-9 in the aforementioned accident. However, due to the ever increasing collision hazard, we believe that so long as collision avoidance is dependent on visual detection even those airplanes which provide excellent visibility should not be equipped with objects that seriously diminish the angles of vision of the pilot. Although it is necessary to provide protection to the pilot from the direct rays of the sun, we believe that a see-through visor should be provided rather than a solid visor which cuts out the vision entirely.

We recommend, therefore, that the Federal Aviation Administration survey the types of general aviation airplanes equipped with solid type visors to determine the extent of the resultant vision impairment. Where it is found that they severely hinder the pilot's vision, the solid visor should be replaced by a see-through type. Additionally, we recommend that, if this survey shows the solid type visors adversely affect the visibility from the aircraft, Part 23 be amended to provide

Honorable William F. McKee (2)

that when a sun visor is installed on future airplanes, it be a see-through type if it can be positioned so that it extends into the area of vision necessary for collision avoidance.

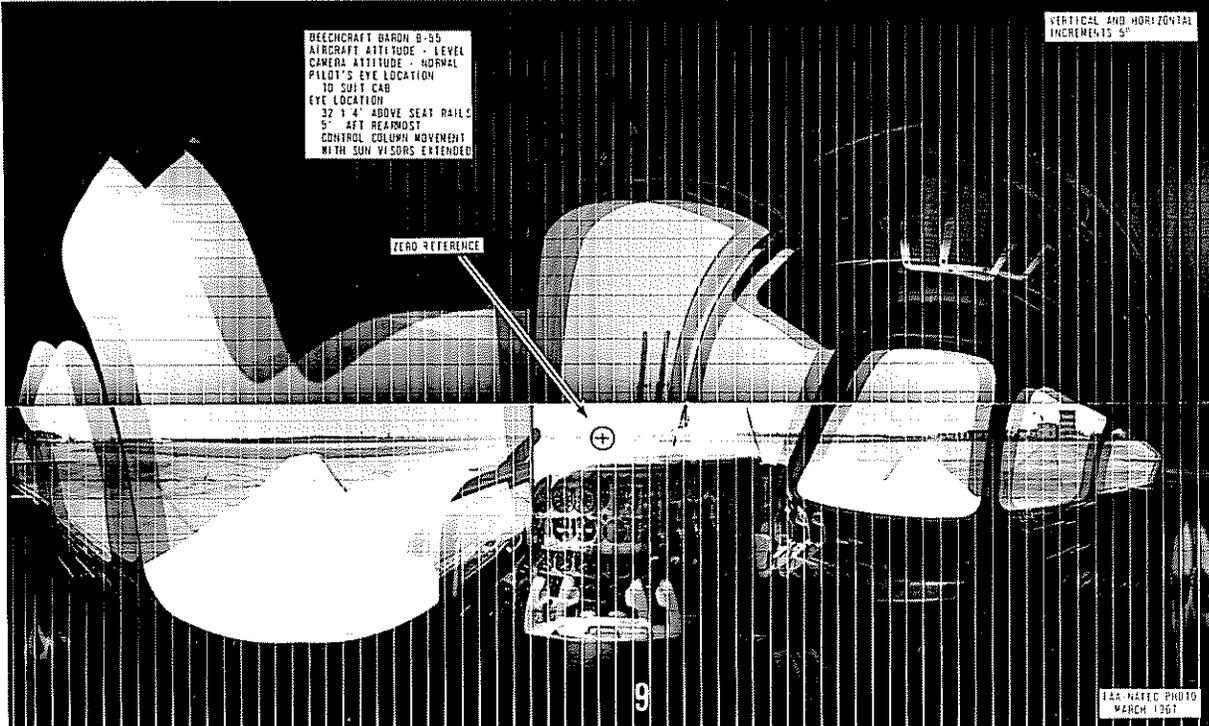
The Board's staff has discussed these recommendations with Mr. Herbert H. Slaughter of your Flight Standards Service. Copies of the Beech Baron photographs are enclosed for your information.

Sincerely yours,

Joseph J. O'Connell, Jr.
Chairman

Enclosures

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VERTICAL AND HORIZONTAL INCREMENTS 5"

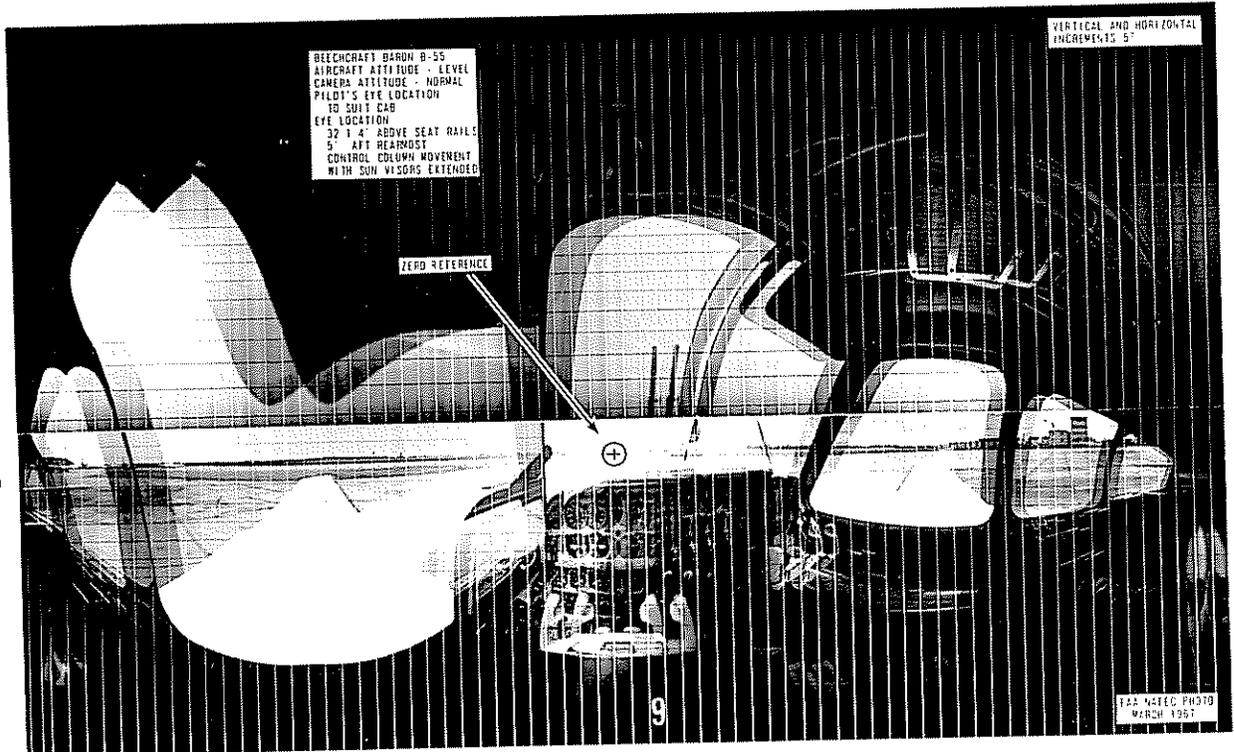
BEECHCRAFT BARON B-55
 AIRCRAFT ATTITUDE - LEVEL
 CAMERA ATTITUDE - NORMAL
 PILOT'S EYE LOCATION TO SUIT CAB
 EYE LOCATION
 32 1/4" ABOVE SEAT RAILS
 5" AFT REARMOST CONTROL COLUMN MOVEMENT WITH SUN VISORS EXTENDED

ZERO REFERENCE

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TAN WSEC PHOTO MARCH 1957

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