



Images of the mid-air collision between the P-63F and the B-17G were taken by several photographers from different angles. Foreshortening of the subjects by the use of telephoto lenses "compacts" the images. In this shot, the Liberator is not as close to the accident aircraft as the image makes it seem. The pilots of the B-17G would not have been able to see the P-63F rapidly overtaking them from the left three-quarter rear position. Also, the bank angle and canopy structure of the Kingcobra would have blocked that pilot from seeing the Flying Fortress until the last possible instant. Due to the rapidity of the event, the crew of the Liberator would not have had time to radio a warning.

AVOIDABLE DISASTER

THE NATIONAL TRANSPORTATION AND SAFETY BOARD HAS RELEASED ITS REPORT ON THE TRAGIC MID-AIR COLLISION BETWEEN THE COMMEMORATIVE AIR FORCE'S FLYING FORTRESSS AND KINGCOBRA
REPORT AND PHOTOGRAPHY VIA THE NTSB

EDITOR'S NOTE: During December 2024, the NTSB released its report on the deadly collision between the CAF's B-17G and P-63F — an accident that claimed the lives of five fine men and the destruction of two historically significant aircraft. To many of us that are long-time airshow attendees, the causes of the accident were pretty obvious from the beginning but we wanted to wait on the results of the final report before making any comments. In fact, we are not going to make any comments but will let the report stand by itself. There is a certain element that will accuse *Air Classics* of being sensationalist or insensitive by printing the report and photographs. However, and as we have stated numerous times in the past, to learn by our mistakes we must view our mistakes. The NTSB report leaves a lot to think about and its conclusions will hopefully change the airshow world for the better. As usual, we welcome reader comments at moleary2challenge@gmail.com.

On 12 November 2022, at about 1322 Central Standard Time, Boeing B-17G N7227C and Bell P-63F N6763 collided in flight during a performance at the Commemorative Air Force's (CAF) Wings Over Dallas airshow at Dallas Executive Airport (KRBD). The pilot, copilot, flight engineer, and two scanners on board the B-17G and the pilot of the P-63F were fatally injured and both aircraft were destroyed. No injuries to persons on the ground were reported. Both accident airplanes (and six other historic, former military airplanes were airborne as part of the same performance) were operated by the CAF under the provisions of Title 14 Code of Federal Regulations (CFR) Part 91 and a certificate of waiver for the show.

The B-17G was in the first position of five historic bombers flying as solo aircraft in trail, and the P-63F was in the last position of three historic fighter airplanes flying in formation. The takeoffs, repositioning turns, and passes over the eight airplanes in the accident performance were directed in real

time via radio by the air boss, who had primary responsibility for the control of airshow operations.

Just before the accident, the bomber group and the fighter formation completed a pass in front of the spectators from show right to left (that is, right to left from the crowd's perspective). The airplanes were setting up for the next pass when the accident occurred. This pass was intended to be from show left to right in front of the crowd, and the air boss issued directives for the fighter formation to pass off the left side of the bomber group airplanes and then cross in front of them. The position data showed that the flight path for the fighter lead and position 2 fighter airplanes passed the bombers off the bombers' left side before crossing in front of the B-17G but the P-63F's flight path converged with that of the B-17G. Video and photographic evidence captured by witnesses on the ground showed that the P-63F was in a descending, left-banked turn when it struck the left side of the B-17G near the trailing edge of the left wing, then both airplanes broke apart in flight.

WHAT WE FOUND

We (the NTSB) found that the accident pilots had limited ability to see and avoid each other's airplane due to flight path geometry, out-the-window view obscuration by aircraft structures, the attention demands associated with the airshow performance, and the limitations of human performance that can make it difficult to see another aircraft.

We also found that the air boss's deconfliction strategy for the accident performance, which relied on the air boss's real time, predictive assessment of airplane locations and the ability of the CAF pilots to see and avoid other airplanes was ineffective because the flight paths of the B-17G and the P-63F converged as each pilot maneuvered to set up for the pass.

We found evidence that the airshow guidance provided by the Federal Aviation Administration (FAA) and the International Council of Air Shows (ICAS) did not adequately address the need to better mitigate the collision

risks associated with air boss-directed performances involving multiple, dissimilar aircraft. We determined that a lack of administrative controls and a documented risk assessment process for ensuring airshow aircraft separation directly contributed to the in-flight collision.

We found that, unlike the FAA regulatory requirements for pilots and air traffic controllers, air bosses are not subject to any recurrent evaluations, and there are no standardized communications terms for air boss-provided directives to ensure the clarity and brevity of radio communications.



This view, taken from the B-17G's right side, makes it seem that the P-63F has passed the Flying Fortress. However, this is once again foreshortening due to the use of a long telephoto lens. The P-63F is actually heading to the left rear fuselage behind the wing's trailing edge and in front of the left horizontal stabilizer. What the photo does show, however, is that the pilot of the P-63F does not have visual contact with the bomber.