

UNITED STATES OF AMERICA
NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

ISSUED: November 9, 1971

Adopted by the NATIONAL TRANSPORTATION SAFETY BOARD
at its office in Washington, D. C.
on the day of OCT 15 1971

FORWARDED TO:

Honorable Melvin R. Laird
Secretary of Defense
Washington, D. C. 20301

SAFETY RECOMMENDATIONS A-71-48 thru 51

The National Transportation Safety Board recently concluded a public hearing to document certain facts surrounding the midair collision between a Hughes Air West DC-9 and a United States Marine Corps (USMC) F-4B jet fighter, which occurred near Duarte, California, on June 6, 1971. Our investigation has not been completed; therefore, no determination has been made as to the probable cause(s) of the accident.

We are pleased to note the cooperative efforts of the Federal Aviation Administration and the military services to place renewed and additional emphasis on the voluntary use of the air traffic control system to the maximum extent practicable by all military aircraft. This should contribute significantly to the prevention of midair collision accidents involving military and civil aircraft. However, the Safety Board believes that additional steps could be taken by the military services to provide more safeguards for the benefit of all users of the Nation's airspace without inordinate jeopardy to the mission of military flights.

At this hearing we examined the USMC and United States Navy (USN) flying regulations, operational procedures, and their interrelationship with the Federal Aviation Regulations (FAR's).

The FAR's prohibit flight at indicated airspeeds above 250 knots (250 KIAS) at all altitudes below 10,000 feet m.s.l. Certain military aircraft, whose flight characteristics preclude safe operation at speeds below this limitation, have been granted relief from this provision. The applicable U. S. Navy regulation reiterates the restriction, the waiver relief, and states that operations at airspeeds in excess of 250 KIAS

below 10,000 feet m.s.l. should be held to a minimum. Testimony at the hearing established that the F-4B, on this point-to-point cross-country flight, was flown at speeds far in excess of 250 KIAS while below 10,000 feet m.s.l. While no violation of the FAR's or U. S. Navy regulations was involved, the intent of the regulations may well have been circumvented. The Safety Board believes that the DOD should consider rephrasing the regulation to delineate explicitly those instances wherein the 10,000 feet/250 KIAS limitation may be exceeded. Specifically, we believe that there should be only two exceptions to this limitation:

1. Climbs and descents to:
 - a. traffic patterns.
 - b. authorized and/or designated training areas.
 - c. low-level navigation routes.
2. Those instances where either the safety of the crew or aircraft require operations outside the parameters of this limitation.

Testimony established, also, that low-level, high-air-speed training was being conducted by the USMC at altitudes below 10,000 feet m.s.l. outside of the designated warning areas and off the low-level navigation routes. The Board believes that the DOD should review the necessity for permitting this training to take place in areas other than those specifically set aside for such flying.

The hearing established, further, that no attempt was made by the pilot of the F-4B to contact the FAA Radar Advisory Service while he was traversing the Los Angeles area. Had this service been used, the F-4B would have been given traffic advisories, and his presence might have been made known to the DC-9.

USMC witnesses testified to the fact that the radar aboard the F-4B has the capability to afford target avoidance as well as intercept information, and that it has been used to provide separation from other aircraft. There is no published procedure for using it to provide such separation, and its use for that purpose is left to the pilot's discretion. The Board believes that the feasibility of using such military intercept radar for traffic separation information should be explored. Its use for this purpose, if feasible, should be encouraged.

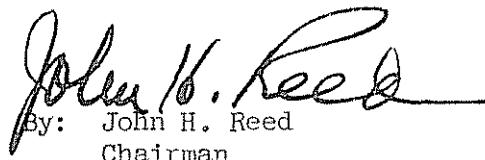
In view of the above facts, the Safety Board recommends that the DOD take the following actions:

1. Review the feasibility of restricting all types of low-level training, which requires airspeeds in excess of the FAR limitations, to designated restricted areas and low-level navigation routes.
2. Rephrase the wording contained in your altitude/airspeed limitations and delineate explicitly those instances wherein airspeeds in excess of the 10,000 feet/250 KIAS limitations are authorized. The Board believes that the exceptions should be limited to the following:
 - a. Climbs and descents to traffic patterns, authorized and/or designated training areas and low-level navigation routes.
 - b. Those instances where safety of either crew or aircraft require operations in excess of the limitation.
3. Explore the feasibility of using the air intercept radar on all military aircraft to provide collision avoidance assistance as an additional aid to the "see and be seen" concept; and should this prove feasible, institute and establish procedures to use the radar for this purpose on all flights where its use is not required for more urgent military mission requirements.
4. Institute a program to provide more publicity to the existence, function, and use of the FAA Radar Advisory Service in those instances where VFR flight is required through high-density traffic areas. Consideration should be given to making the request for such service a mandatory procedure.

Members of our Bureau of Aviation Safety will be available for consultation in this matter if desired.

These recommendations will be released to the public on the issue date shown above. No public dissemination of the contents of this document should be made prior to that date.

Reed, Chairman; Laurel, McAdams, Thayer, and Burgess, Members, concurred in the above recommendations.


By: John H. Reed
Chairman

