Log 1754

NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D.C.

ISSUED:

November 20, 1984

Forwarded to:

Honorable Donald D. Engen Administrator Federal Aviation Administration Washington, D.C. 20591

SAFETY RECOMMENDATION(S)

A-84-125 through -127

On August 24, 1984, Wings West Airlines, Inc., Flight 628, a Beech C99, N6399U, and a Rockwell Aero Commander 112TC, N112SM, collided in midair near San Luis Obispo, California. The two crewmembers and 13 passengers aboard Wings West Flight 628, and the two pilots aboard the Aero Commander were killed in the crash.

Preliminary analysis of the National Transportation Safety Board's ongoing investigation of this accident indicate that Flight 628 was proceeding outbound from the San Luis Obispo County Airport on a "Crepe One" departure, which requires departing traffic to climb to Crepe intersection on the San Luis Obispo localizer course before transitioning to the en route flight plan. The Safety Board's investigation to date also indicates that the Aero Commander with a flight instructor giving an aircraft checkout to another rated pilot was proceeding inbound to San Luis Obispo County Airport on the localizer course to runway 11, and may have been making a practice localizer approach. Consequently, the flight paths of the two airplanes were directly opposed.

Aero Commander N112SM had departed aso Robles Airport and was operating under the provisions of visual flight rules (VFR) without a flight plan, and none was required. The pilot of Aero Commander N112SM was not in communications with the Los Angeles Air Route Traffic Control Center (Los Angeles Center), nor was he required to be.

Flight 628 had departed San Luis Obispo under VFR, and the collision occurred in visual meteorological conditions (VMC) at 3,400 feet M.S.L. shortly after flight 628 had contacted the Los Angeles Center and received and acknowledged an instrument flight rules (IFR) air traffic control clearance for the flight to San Francisco. No traffic advisories were given to Flight 628 by the Los Angeles Center.

When aircraft are operating in VMC it is the responsibility of the pilot to be vigilant in order to see and avoid other aircraft. However, the instrument departure and arrival routes at San Luis Obispo, which frequently are flown concurrently in VMC by two or more aircraft, place the aircraft on directly opposing flight paths. In a head-on closure the ability of the pilots to see and avoid each other is impaired by such factors as: high rate of closure, smaller airplane profile, and the absence of or low relative motion of the opposing traffic.

Because it is located in a mountainous area, little flexibility exists for separating departure and arrival routes at San Luis Obispo County Airport. The Safety Board believes that steps need to be taken to facilitate the detection and recognition of opposing traffic and to facilitate timely initiation of avoidance action by pilots when encountering opposing traffic. Studies 1/ have shown that the target detection rate by persons given a vigilance task can be significantly enhanced when the person has been alerted to the presence of a target. Unquestionably, the ability of pilots to see and avoid other aircraft would be enhanced if they were alerted to the presence of the other aircraft. One means to accomplish this would be for pilots to be provided traffic advisories from the Los Angeles Center. The Airman's Information Manual (AIM) recommends that pilots wishing to make practice instrument approaches at airports without a tower should contact the facility having control jurisdiction as indicated on the instrument approach and departure charts. To supplement this recommended procedure at San Luis Obispo, the Safety Board believes a cautionary note for VFR pilots also should be included on the appropriate instrument approach and departure charts. In addition, commuter pilots flying out of San Luis Obispo should be required to contact Los Angeles Center before departure and obtain either an IFR clearance or a discrete transponder code if departing VFR. Either action would result in increasing the expectancy level of the Los Angeles Center controllers for traffic departing and arriving at the San Luis Obispo airport and thus facilitate their detection of that traffic on the radarscope and their providing appropriate traffic advisories.

Therefore, the National Transportation Safety Board recommends that the Federal Aviation Administration:

Issue an Air Carrier Operations Bulletin directing the Principal Operations Inspectors of Wings West and Imperial Airlines to require that the airlines amend their operating procedures so that their flights contact Los Angeles Center prior to departure from San Luis Obispo County Airport and obtain either an IFR clearance or a discrete transponder code if departing VFR. (Class I, Urgent Action) (A-84-125)

Require that the instrument approach chart for the localizer approach to runway 11 at San Luis Obispo Couny Airport and the Crepe One Departure Chart include a cautionary note with appropriate communication frequencies advising VFR flights on practice instrument approaches and departures to contact Los Angeles Center for traffic advisories. (Class II, Priority Action) (A-84-126)

Disseminate the contents of this safety recommendation letter to fixed-base operators in the general vicinity of the San Luis Obispo County Airport. (Class II, Priority Action) (A-84-127)

BURNETT, Chairman, GOLDMAN, Vice Chairman, and BURSLEY, Member, concurred in these recommendations.

By: Jim Burnett
Chairman

^{1/} Tune, G.S. and Davies D.R., <u>Human Vigilance Performance</u>, The Trinity Press, London, 1970.