UNIVERSAL LINES, INC., DC-7, N 6328C, AND
UNITED STATES AIR FORCE F-100F, 56-3755, COLLISION,
NEAR LAS VEGAS, NEVADA, APRIL 21, 1958

SYNOPSIS

On April 21, 1958, about 0830, an Air Force F-100F and a United Air
Lines DC-7 collided at 21,000 feet over a position about nine miles southwest
of the Las Vegas VOR station. The position was on Victor Airway 8 about
1-3/4 miles to the right (southeast) of the centerline. Both aircraft fell
uncontrollable and crashed, killing the 42 passengers and 5 crew members of
the DC-7 and the 2 Air Force pilots of the F-100F.

The accident occurred in clear weather conditions while the DC-7 flight,
from Los Angeles to New York, was proceeding normally according to an IFR
(Instrument Flight Rules) flight plan and clearance, and while the F-100F was
executing a simulated jet penetration, part of an instrument training flight
which originated at Nellis Air Force Base. The flight was according to a
local VFR (Visual Flight Rules) flight plan.

The accident occurred in VFR conditions which, under the Civil Air
Regulations, placed responsibility on the pilots of both aircraft to avoid
collision through visual separation. This collision was the result of a high
rate of near head-on closure at high altitude together with the human and
cockpit limitations.

The accident occurred during an Air Force instrument training operation
pursuant to Air Force policies which did not take adequate account of human
limitations to avoid collision by visual means although the limitations were
recognized in other training operations and were known to the Air Force.

The Civil Aeronautics Administration did not take sufficient measures
to reduce known collision exposure in visual flight conditions.

Nellis AFB operational personnel, after the accident, took numerous
steps which recognize the limitations of visual separation and which will
reduce the collision exposure on the airway structure in the Las Vegas area.

The CAA has instigated a program of civil-military coordination, including
the review of jet penetrations on a national scale. The goal in this under-
taking is also to reduce collision exposure by segregating more effectively
high-speed aircraft operations.