

coming traffic. Both pilot and controller would thus be relieved of communications workload.

The airlines recommend that: FAA explore the possibility of requiring that VFR flight plans, specifying the pilot's intended altitude and route of flight, be transmitted to ATC terminal and en route radar facilities for radar flight following and traffic information service. Also, that pilots submitting such flight plans be required to maintain routine radio contact with ATC and to advise ATC prior to changing the route or altitude specified in the flight plan.

Voluntary IFR operation. For years the scheduled airlines have made it a general practice to utilize the IFR system regardless of weather conditions in order to gain the advantages of ATC separation. This is not true of all other airspace users. Complete separation of all aircraft flying the airways does not occur with this practice because there can be a mixture of VFR (uncontrolled) with the IFR (controlled) traffic. However, the practice does have the advantage that ATC separation is provided between those who voluntarily participate. Safety from collision will therefore be enhanced, in direct proportion to the number of aircraft that participate in this voluntary practice.

The airlines recommend that: To the maximum practical extent, qualified pilots utilize the IFR system, regardless of weather, in order to gain the advantages of ATC separation.

Positive control. The airlines believe the use of "see-and-avoid" procedures alone for collision prevention is unrealistic where jet aircraft operate. We have offered a number of recommendations which will serve to augment the use of "see-and-avoid" procedures in certain airspace. However, the airlines believe that there is other airspace wherein the density of traffic or the operating characteristics of the aircraft make it necessary to replace "see-and-avoid" with "positive control" regardless of weather conditions. Under this form of control, separation between all aircraft is the direct responsibility of the ATC system.

Expansion of positive control. Positive control service is now provided by FAA between 24,000 and 60,000 feet over practically all of the contiguous 48 States. This service is designed to eliminate the mixture of controlled and uncontrolled flights in specified airspace so that all traffic therein will receive positive separation by ATC, without reliance on the "see-and-avoid" principle, even in clear weather conditions.

The airlines are convinced that safety requires the expansion of positive control service in congested airspace and specifically recommend that:

a. Positive control service be extended down to and including 18,000 feet over the entire 48 contiguous States by January 1968.

b. Positive control service be extended further by lowering it to 10,000 feet within the "Golden Triangle" area (New York, Washington, and Chicago) by January 1969.

c. Positive control service be lowered down to and including 10,000 feet along the west coast between San Francisco and Los Angeles (to encompass all routes used by traffic operating between these two cities) by January 1970.

d. Positive control service be extended from 10,000 feet down to the ground in certain critical high density terminals. Terminals that