Requirements for flight into high density airports. Traffic at major airports has reached a volume and complexity that warrants careful attention. The time has come for FAA to specify pilot qualifications and aircraft equipment required for flight into and out of certain high density airports, such as Kennedy, La Guardia, O'Hara, Washington National, Miami, Los Angeles, and San Francisco. The complexity of operations at these airports is such that only experienced pilots should be permitted to use them. In fact, it may be that two experienced pilots should be required in each airplane in order to safely and efficiently carry out the duties required in these areas. As far as pilot experience is concerned, we concede that this will be difficult to spell out. However, since major airports use procedures that closely approximate IFR procedures in good weather conditions, we suggest that, as a minimum, an instrument rating be required.

The FAA provides many electronic facilities at major airports. These contribute to safer and more efficient operations—provided the aircraft are equipped to use them. We believe that in addition to the requirement for a safe standard of pilot experience, all aircraft operating into or out of major airports of the type noted above should be

equipped with operating:

1. VOR and DME, or two VOR receivers.

2. ILS and marker beacon receivers.

3. Radar transponder beacons with 64 identity codes now, and later with 4096 identity codes and automatic altitude reporting.

4. VHF communications transmitter and receiver having switch and pushbutton-type channel selectors on the specific frequencies required for efficient operation in these areas.

The airlines recommend that: The above standards be prescribed

by FAA for flight into and out of high density airports.

LOOKING TO THE FUTURE

What we have recommended is by no means the whole story. It is the minimum that must be done to meet the traffic demands of today let alone catch up with yesterday—with state-of-the-art equipment and the regulatory environment to make the most of this equipment.

For the future, however, greater effort and innovation will be needed. Therefore, there is a continuing and urgent need to expedite research and development that will increase the capacity of the ATC system and speed the development of future ATC systems. Some of the major areas that deserve attention are:

1. Conflict prediction. Flow control planning.

Terminal approach sequencing.

Digital communications.

5. Improved man-machine workload relationships.

6. Application of time-frequency technology in air traffic control.

7. VOR/DME area navigation.

8. V/STOL and SST ATC requirements.

9. Measurement techniques to determine ATC system efficiency.

10. An airport simulator which would test the efficiency and capacity of airport plans before funds are committed for construction.