Summary

Congress is seeking assurance that there exists sufficient technical basis, user community support and user benefits to justify moving ahead with implementation of a major new air traffic control system which will require large funding over time. The following summarizes the statements and discussions during the l-day OTA seminar on the Discrete Address Beacon System:

- The Federal Aviation Administration (FAA) believes that the development work on DABS has been thorough and complete, and that the system is now ready for implementation.
- Some compatibility testing with military systems remains to be done, but neither FAA nor the Department of Defense (DOD) expects any unresolvable problems to arise throughout the remainder of the test program. In addition, there is a need to update some military Identification Friend or Foe (IFF) equipment, a need which exists independently of DABS.
- Debugging and developing confidence in DABS/ATARS requires the procurement and use of hardware in real-world operations in order to validate development and simulation test results. The initial congressional appropriation for implementation would support initial procurement of some of the hardware and allow debugging to begin.
- FAA has designed the DABS signal format to be compatible with existing secondary surveillance radar (SSR). Some questions on international acceptance remain, but are likely to remain unanswerable until the International Civil Aviation Organization (ICAO) can address them—a lengthy process. Rather than delaying the program by waiting for ICAO approval, FAA has gone to considerable lengths to make DABS interoperable and compatible with the present international SSR/ATCRBS (Air Traffic Control Radar Beacon Service) system, and has provided step-by-step information on the DABS program to the international community throughout its development. FAA asserts, without derogating ATCRBS in any way, that DABS will reduce garble (signal confusion due to simultaneous response from more than one aircraft) and enhance the quality of SSR/ATCRBS system response.
- It is impossible to predict with any confidence just what the user acceptance of DABS will be, or at what rate airborne equipment will be installed. No decision has been made on the question of mandatory versus voluntary airborne equippage, nor does there yet exist an approved ground site implementation plan.
- FAA's DABS Implementation Plan is being reviewed within the Agency. It is not likely to receive final approval by the Secretary of Transportation before mid-1980, although he has approved the initial implementation authorization request of $20 million.
- Airline operators and avionics equipment manufacturers foresee fleet operational benefits and marketing opportunities, and therefore are interested in early implementation of DABS. On the other hand, the more diffuse user community of private and business operators is reluctant to commit to a system whose benefits are not yet demonstrated and whose costs are not yet well-defined.

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- User community support would be expected to increase if and when a ground network were to be established, providing demonstrable services which users can evaluate vis-a-vis equipment investment and maintenance costs.
- Implementation plans for DABS should be carefully reviewed and monitored at the level of the FAA Administrator, the Secretary of Transportation, and the congressional committees having jurisdiction to assure that overall system needs are being met.