Deception Charged in Presentation of SST Study

The $21-million Climate Impact Assessment Program (CIAP) mounted by the Department of Transportation (DOT) in 1971 to investigate the effects of stratospheric pollution by aircraft—particularly by supersonic transports (SST's)—is widely regarded to have been a largely successful venture in technology assessment. The only trouble is, some of the university scientists who took part in the CIAP have felt that the "executive summary" in which the results of the study were first made public last winter was deceptive, whether intentionally or not.

A House Government Operations Subcommittee on Transportation is now aggressively exploring this complaint. But to judge from what has been learned so far, if the executive summary reflected a strong pro-SST bias, it was precisely what could have been expected from a department dedicated to the promotion of new transportation technology.

The American SST project died in 1971 when the U.S. Senate, on a close vote, refused to appropriate the money needed to continue it. The British and French have pushed on with their joint Concorde project, however, and the Soviets have continued with plans to build a fleet of TU-144's. At the moment, the number of Concordes and TU-144's to enter service over the next several years is not expected to exceed 30, and it could be much smaller than that. Indeed, the Concorde will probably be a dead duck if landing privileges for limited service into John F. Kennedy International Airport in New York and Dulles International near Washington are denied.

The controversial summary of the CIAP report was released just as the DOT was beginning to come to grips with the landing rights issue, which, according to a recent announcement by Secretary William T. Coleman, Jr., will be decided not later than 4 February 1976. The full report, complete with supporting monographs and appendices, runs to 7200 pages and represents the work of some 550 individuals and numerous agencies and institutions. Even the one-volume Report of Findings itself is a bulky document, and, because of printing delays, copies were not available for general distribution when the report was submitted to Congress on 21 January 1975. What newsmen were given at a DOT press conference on that date was a 27-page distillation of the report which emphasized these several conclusions:

- Climatic effects attributable to the 30 Concordes and TU-144's expected to enter service would be "smaller than minimally detectable."
- With the growth of stratospheric aviation in the future, harmful environmental effects could be avoided "if proper measures [were] undertaken in a timely manner to develop low-emission engines and fuels." Such advances would be achievable within 10 to 15 years, the summary indicated, and at a cost "small compared to the potential economic and social cost" of continuing to rely on the existing state of the art. In fact, without such advances, increased use of stratospheric "vehicles"—SST's, subsonic aircraft, space shuttles, and whatever—could result in "significant disturbance of the environment."
- Remaining uncertainties as to the effects of stratospheric pollution could be reduced through continuous atmospheric monitoring and research.

Besides the several courses of action implicit in the above conclusions, the summary called for the immediate development of a plan for international regulation of the aircraft emissions and fuels pertinent to stratospheric flight.

The summary had been prepared chiefly by the manager of CIAP, Alan J. Grobecker, who had come to DOT in 1971 after 18 years with North American Aviation and 3 years with the Institute for Defense Analysis, and by Grobecker's former boss, Robert H. Cannon, Jr., an aeronautical engineer who had resigned as DOT's assistant secretary for systems development and technology in 1974 to head the division of engineering and applied science at the California Institute of Technology. Simply by having described the stratospheric pollution problem as one readily amenable to a technological fix, Grobecker and Cannon no doubt were inviting strong criticism from those CIAP participants and others who believe that supersonic transports are unacceptable both economically and environmentally. But what made the criticism especially sharp and intense was really not of their doing.

An Associated Press reporter attending the press conference at which the summary was presented misquoted Grobecker on a vital point. According to his dispatch, which was used by many newspapers and commented upon editorially by some of them, Grobecker had said that the fleet of 500 big Boeing SST's which was envisioned before the American SST program was killed would not have impaired the shield of ozone that reduces ultraviolet radiation and serves as a safeguard against a high incidence of skin cancer. Actually, while the summary did not discuss the fleet of 500 Boeings explicitly, it indicated—though without much force or clarity—that SST operations on anything like that scale would pollute the stratosphere severely with nitrogen oxides (NO_x) and thus degrade the ozone shield.

The flood of misinformation and editorial comment resulting from the AP story was particularly upsetting to Harold S. Johnston, a professor of chemistry at the University of California at Berkeley, and Thomas M. Donahue, chairman of the Department of Atmospheric and Oceanic Science at the University of Michigan. Johnston was one of the first scientists to warn that the NO_x emissions from the SST could dangerously impair the ozone shield. Donahue, as one of the scientists active in reviewing the work in the CIAP as it progressed, did not want it to appear that such timely warnings by Johnston and other scientists were now being repudiated.

It was principally Donahue and Johnston who, testifying before the House subcommittee on 13 November, charged that the summary of the report was misleading. But, although Grobecker and Cannon did not act immediately to correct the erroneous news stories, the record is clear that, at a CIAP conference held in Cambridge, Massachusetts, in early February, they affirmed that the study showed that there was a potential ozone and skin cancer problem.

Representative William J. Randall (D–Mo.), the subcommittee chairman, appears to be fishing for evidence of bad faith. But finding an explanation for the fact that the ozone and skin cancer problem were addressed obliquely in the summary does not require questioning anyone's motives. If Congress expected a report couched strictly in terms of potential environmental problems—with little emphasis on how future SST technology might overcome them—it would have done better to put the Environmental Protection Agency or the National Atmospheric and Oceanic Administration in charge of CIAP.

—LUTHER J. CARTER