

The airlines' alternative is to persuade community authorities across the country to build longer runways. But such construction often is financed by bond flotations, and airport bonds are usually secured by income furnished by the airlines under landing fee or airport-use contracts.

Such contracts often call for higher landing fees when the local airport operator needs additional income to pay off new bondholders. To completely close the circle, the longer the runway, the higher the V1 speed allowable under FAA's certification regulation. The margin for safety is canceled.

A SUBSEQUENT EXAMPLE

Succumbing to industry pressure, FAA quietly withdrew its proposal to increase jet takeoff distances on July 7, 1965. In justifying this reversal of position, the agency said, as the ATA did earlier, that "there have been no overrun aborted takeoffs experienced in air carrier operations with a turbojet-powered airplane on a dry runway."

But last Nov. 6 in Cincinnati, rain or snow did not fall yet a passenger-carrying jet careened off the runway. Fortunately, the situation encountered by TWA in Cincinnati was not encountered by Pan American in Honolulu during the same month of November.

On Nov. 14, FAA fined Pan Am \$10,000 for allowing 135 overloaded jet takeoffs from Honolulu International Airport. Company charts had shown Honolulu's usable runway length to be 8030 feet whereas in fact it was 7381 feet, an error that canceled the margin for safety supposedly provided by refusal speed theory.

FAA's reversal had still left hanging its proposal to increase wet runway landing distances by about 1200 feet. But the airlines found fault with even this precautionary measure.

"In view of the economic penalties involved," ATA commented, "it is imperative that an acceptable alternative means of demonstrating compliance with this regulation become available. If it is not, jet service to a number of cities may be reduced or, in some cases, curtailed altogether."

The trade association found it unnecessary to remind FAA that few things annoy Congressmen more than the curtailment of airline service back home.

ONE UNPULLED TOOTH

On Nov. 19, 1965, FAA responded to the airlines' plea. In an "advisory circular" to all companies, the agency again reversed itself, allowing airlines to demonstrate their ability to land jets on wet runways in the same old distances—distances that FAA had earlier called "inadequate."

The demonstration requirement is the last unpulled tooth in FAA's original proposal. It consists of five landings per airline, not necessarily in the rain but on "well-soaked" runways.

Despite its shortcomings, the certification process has served for more than 30 years as a catalyst to keep air transportation tolerably safe. But there is evidence that it might fail in the future.

Recent FAA budgets have provided about \$7000 annually for every civil aircraft that flies; the agency's payroll includes approximately one employee for every three aircraft. Even so, FAA's Lee Warren predicts, current budget levels may soon force curtailment of the agency's role in aircraft certification.

Why? Because FAA lacks the technical manpower to inspect and test the forbiddingly complicated systems inside aircraft now being assembled—Boeing's supersonic transport and giant 747 jet, for example. A dilemma thus takes shape:

Either Congress must provide more money so that FAA can hire more engineers and test pilots for such inspections. Or the FAA must abdicate, at least partially, its statutory responsibility to ensure "the highest degree of safety" in airline operations.

The agency would then—as it does to a degree now—delegate responsibility to trusted employees of the manufacturer. Such in-plant inspectors, of course, would divide their loyalty between two masters—the public and their company.

LESSONS FROM ACCIDENT

The most recent U.S. jetliner to undergo FAA certification was Boeing's 737, a short-range twin-engine transport that the agency declared ready for airline service on Dec. 15. How might it have profited from Northwest Airlines' accident in the Florida Everglades?