problem, and whether it is willing to require anything less than a permanent solution.

Safety experts say there are two ways to look at the problem of cabin fires. One is that the most serious threat is posed by fuel fires outside the cabin started by a crash. Such fires can migrate to the passenger compartment when heat causes acrylic airplane windows to shrink and fall inward. To diminish this problem, the FAA has been investigating chemical additives to aircraft fuel that would prevent jet fuel from misting when its tank ruptures. It is also testing models of a heat-resistant window invented by the National Aeronautics and Space Administration (NASA) in 1973.

The alternative view of the cabin fire problem holds that cabin fires caused while a plane is in flight or on the ground—not involving aircraft fuel—are more hazardous. This is a view that the FAA has been reluctant to accept, partly because most of the early incidents in

> "This may be the most neglected area of air safety."

which passengers were killed by smoke and flame were of the type involving fuel. Unlike the FAA, Congress fastened onto this type of crash early on, and much of its ire over the agency's inactivity is caused by its failure at getting the agency to agree in full. Critics of the agency in Congress and elsewhere are not uninterested in the antimisting additives or the invention of new aircraft windows; they argue only that the FAA has focused on the long-term fuel additive problem at the expense of things that can be done immediately inside the passenger compartment. These improvements, many of them recommended years ago by the NTSB, include adoption of a more rigorous flammability test, use of less flammable seat cushions, and use of better lighting. The NAS has recommended such painless improvements as the elimination of carpets as vertical decoration and the wearing of flame-retardant uniforms by the crew. The agency's ambivalence about interior cabin hazards has apparently kept it from acting.

The General Accounting Office examined the FAA's record on air safety and concluded, for example, that the FAA overlooks short-term improvements in search of an elusive perfect solution. The agency's record on cabin materials is typified by miscarried attempts to restrict smoke emissions, the GAO said. The agency circulated an advance notice of smoke emission regulation in 1969, and followed it with a formal proposal 6 years later, only to withdraw it altogether after another 4 years. A similar advance notice of toxic gases regulation was circulated in 1974 but withdrawn in 1979. The agency said that the industry's reaction to its proposals forced it to return to the drawing boards—that it was persuaded the issues of smoke and toxicity must be joined in a single rule, but only after more study and new discoveries. King, of NTSB, disputes this conclusion. "It is simply not true that any improvements in postcrash survivability must await some future technological breakthrough. Today, we have products on the shelf that if put into the planes will start saving lives. All that is lacking is the will to make changes occur."

At the time the regulations were withdrawn, the FAA appointed a committee to advise it as to where to turn in the search for a safer cabin—a development that some congressmen expected to lead to additional regulatory delay. The Special Aviation, Fire, and Explosion Reduction (SAFER) committee was billed by its chairman, John Enders, a former NASA official, as a collection of "approximately 150 of the world's top experts in aircraft fire safety." About two-thirds of these experts came from the aircraft industry and the FAA itself. The committee's final report, issued last September, concluded, in the words of FAA director Langhorne Bond, that "in general . . . the FAA is doing the right things in the area of postcrash and explosion reduction"—a conclusion he found "personally encouraging." Representative Norman Mineta (D-Calif.), who is frequently critical of the FAA's approach, was skeptical that the 2-year wait was worth this conclusion. He pointedly asked John Harrison, the agency's director of aviation safety, if the agency would be doing anything different as a consequence of the committee's existence. Harrison replied, "That's difficult to say. . . . It is kind of a hard question to answer."

In addition to appointing the committee when its regulations were withdrawn, the FAA contracted with a subsidiary of the McDonnell-Douglas Corporation to develop a sophisticated fire chamber for testing potential hazards to passengers from smoke, heat, and flame.

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Fredrickson Asked to Be a Holdover Again at NIH

Donald S. Fredrickson is likely to continue as director of the National Institutes of Health under the Reagan Administration. His new boss, Secretary of Health and Human Services Richard S. Schweiker, unofficially has asked Fredrickson to stay on, according to a Schweiker aide. Fredrickson told *Science* that he had accepted. Formal approval of the reappointment has to come from President Reagan. Both the aide and Fredrickson said it was unclear whether he would stay for the full Reagan term. Formal approval of the reappointment has to come from President Reagan.

Fredrickson would be serving as NIH director in his third administration. He was named NIH director in July 1975 by President Gerald Ford and was reappointed by President Jimmy Carter.

Fredrickson's retention by Carter was welcomed by an NIH constituency which believes that the NIH directorship should be apolitical even though it is filled by presidential appointment. A decision by Reagan to keep Fredrickson on would doubtless meet the same sort of approval in the biomedical research community.

Senate Westerners Stake a Claim

The realignments and reassignments in the Senate caused by Republican gains in the November election resulted in a strong east to west shift in power over science and technology affairs, at least as determined by committee chairmanships.

Along with their new majority status Republicans won the right to organize the Senate and appoint committee and subcommittee chairman. As it happens, westerners rounded up virtually all the chairmanships associated with science.

Perhaps the most conspicuous changes are those in the Labor and Human Resources Committee, which handles authorizations for the National Science Foundation and National Institutes of Health. Orrin Hatch of Utah has replaced Senator Harrison A. Williams of New Jersey as chair-

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