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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man. The committee's subcommittee on health and scientific research, which oversees NSF and NIH and was headed for a number of years by Edward M. Kennedy of Massachusetts, has been abolished. Its responsibilities are to be handled by the full committee. Jurisdiction over NSF

Orrin Hatch

could be transferred to a Commerce Committee subcommittee headed by Harrison H. Schmitt of New Mexico as a result of a Schmitt request.

Schmitt, a former Apollo astronaut, is the new chairman of the Committee on Commerce, Science, and Transportation, replacing a western Democrat, Senator Howard W. Cannon of Nevada. Schmitt will chair the subcommittee on science, technology, and space, formerly headed by Adlai Stevenson of Illinois who did not seek reelection. Schmitt will have a further say on science and health matters as chairman of an Appropriations Committee subcommittee on labor, health, human services, and education.

New chairman of the full Appropriations Committee is Mark O. Hatfield of Oregon, replacing Warren G. Magnuson of Washington who was defeated in November. Jake Garn of Utah will chair the Appropriations HUD-independent agencies subcommittee that oversees NSF, NASA, and Environmental Protection Agency funding. The subcommittee's former chairman, William Proxmire of Wisconsin will now be the ranking minority member.

Easterner Robert Stafford of Vermont replaces Jennings Randolph of West Virginia as chairman of the Committee on Environment and Public Works. A newly created subcommittee on toxic substances and environmental oversight is chaired by freshman Senator Slade Gorton of Washington. The subcommittee will have jurisdiction over environmental research and development, the National Environmental Policy and Toxic Substances Control acts, noise pollution, and drinking water.

James A. McClure of Idaho is chairman of the Committee on Energy and Natural Resources, succeeding Henry M. Jackson of Washington. The subcommittee on energy research and development is chaired by Pete V. Domenici of New Mexico. Domenici is also moving into the chairmanship of the Budget Committee which orchestrates the budget process.

The Armed Services Committee, chaired by John G. Tower of Texas, who replaced John C. Stennis of Mississippi, has abolished its subcommittee on research and development. Its functions will be handled by a new tactical warfare subcommittee headed by Barry Goldwater of Arizona who was a member of the displaced R & D panel.

The new chairmanships generally represent a tilt to the right politically as well as to the west geographically. Hatfield and Gorton rate as Republican moderates, but Domenici, Garn, Goldwater, Hatch, McClure, Schmitt, and Tower all assay out as varying grades of conservative.

White House Science Still in Transition

Engineer and entrepreneur Simon Ramo, a founder of TRW, Inc., continues to dominate speculation on who will fill the post of President's science adviser in the Reagan Administration. Asked to comment on reports current on Capitol Hill that he has been tapped for the post, Ramo would say only that he had not been offered the job; he added that no such invitation had been extended to any other in a group of what he called "excellent candidates" for the job.

The White House science office itself has apparently survived transition-period scrutiny by the Reagan team. At a meeting between transitioners and outgoing Carter Administration officials, top Reagan aide Edwin Meese III reportedly questioned the need for such an office. Informed sources say the Reagan team was giving the whole White House organization a hard look with a view to reducing staff where possible. The impression is that the questioners were satisfied with the case made for the Office of Science and Technology Policy by those who have been advising the new Administration on science matters. It is understood that staffing of the science office was given an upgraded priority, and a serious search for a science adviser was begun in mid-January.

The White House science job is one of a number of subcabinet posts that were still unfilled at the time of President Reagan's inauguration and on which final decisions are apparently being handled by the busy White House staff. Word on developments on the White House science front has been meager, in part because of more-than-usually strict observance by both insiders and outsiders of the usual no-comment rule.

Another favorite in early odds-making on the science adviser post, Arthur M. Bueche, took himself out of consideration for the job. General Electric senior vice president for corporate technology, Bueche shared the cochairmanship of the Reagan advisory task force on science and technology with Ramo. Bueche also served in Washington during the latter part of the transition as a policy coordinator for science and technology, but made it clear he was not a candidate for the White House job.

Brown Departs Research Subcommittee

The House of Representatives is still in the throes of organizing its committees, but Representative George E. Brown, Jr. (D–Calif.) has indicated that he will give up the chairmanship of the Science and Technology Committee's subcommittee on science, research, and technology to head an Agriculture subcommittee.

Brown has been an active chairman of the panel that oversees National Science Foundation activities and science policy issues generally. He was designated chairman of the Agriculture subcommittee on investigations, oversight, and research at a recent caucus of the committee's Democrats. Confirmation as chairman hinges on the vote of the full committee, but is regarded as virtually assured.

John Walsh