

groups such as the Ku Klux Klan." Was he including the John Birch Society? "They're not on the Attorney General's subversive list," Goldwater answered. "The KKK are." There sounded in the wilder reaches of the imagination the lonely cry of some moderate adviser: "My God, Senator, you got to repudiate the Klan. They're on the Attorney General's list."

The new Barry Goldwater was carefully explaining that the only proper standard for personal taste in people is the dictate of the state he is to save us from. "I think it was the Germans," the historian in him remembered, "who originated the modern concept of peace through strength." But "I will be a civilian President," the constitutional purist in him promised. "I'm not going to run the Army and Navy."

So he had not changed in anything essential, and neither had Nelson Rockefeller, who came to stand in the residue of the Eisenhower-Goldwater press conference and reiterate his commitment to the two-party system. He welcomed what seemed to be Goldwater's position "as of today." He would support the ticket, which, he conceded under questioning, is Barry Goldwater and Bill Miller.

Rockefeller was saying almost nothing that he had not said in Albany a week before. The unfortunate Mr. Nixon had sat at the public ceremonies beside Goldwater in the character of exhibit, with no responsibility except the private one of doing his best to look like a man who had not sunk, but only dived and would get up again. Governor Scranton was there, exercising his most intense public enthusiasm, which is for greeting and seating visitors. The other guests had a low visibility rate that may have resulted from calculation. Most of them were Republican governors or Republican governor pretenders, a class not prematurely pro-Goldwater. Even now, some seemed to feel that this was not a house of the sort in which a wise man attracts the attention of the self-righteous or the prurient. The distraction of the Eisenhower-Goldwater ceremony must have been a convenience to them. When it was over, the journalists emerged to find that such habitual volubles as George Romney and Charles Percy had fled like thieves in the night. So everyone sat where he had sat before. You could almost hear the ghost of John Foster Dulles intoning the litany that the fruits of summitry are ashes. By all the old rules it had been a barren day.

But who can say for sure that Barry Goldwater is governed by the rules, or hopes the hopes that control other politicians? We may be watching not a politician but a force of nature, who asks of his hereditary allies no more than that they agree to coexist with him while he follows his impulse to travel alone. Can we suppose indeed that Barry Goldwater called all these defeated captains together out of no desire except publicly to forgive them for the crime of losing to him? M. K.

Sonic Boom Town

Oklahoma City

Not since 1884, when land "boomers" from the East had to be repulsed by US troops, has this city been so up in arms. But now it is the federals who are the boomers and the local landowners who have been doing the repulsing. From February 3 to the beginning of August, the Federal Aviation Agency invaded homes, offices and factories here with a daily series of sonic booms that at times were loud enough to rattle dishes, crack windows and cause personal injuries.

The 600,000 residents fired back at the FAA in phone calls, letters to Congressmen, the city council, and the newspapers, trying to "ban the boom." Repeated court actions have been unsuccessful in blocking the six-month-long test series.

In a court case brought by an anti-boom vigilante committee, the FAA put on the witness stand two psychiatrists from the University of Oklahoma Medical School. Dr. L. J. West testified that under certain circumstances sonic booms might even be good for you. He said that when there is environmental stress, as during the sonic boom tests or during the London blitz, the suicide rate declines and so do admissions to mental hospitals.

But the FAA admitted that public complaints at times reached 500 a day and even on slow days 25 or more complaints were recorded. Most complaints were made by telephone, by women, and about half the people complaining said the sonic booms had caused property damage of one kind or another. One woman called three times to say that a particularly loud boom broke the straps on her brassiere.

Farmers said the booms were causing chickens to stop laying eggs and cows to stop giving milk. In the court hearings, a real estate broker said the booms had caused \$50,000 in damages to his home, and another witness testified that the booms had made his wife ill. The tests are defended as essential to the development of a 2,000 mile-per-hour transport airplane. The FAA says: "It was in the national interest to conduct an extended sonic boom study over a representative community in the United States to determine, if possible, the level of public acceptability." Some civic leaders here tried to improve public acceptability with the argument that Oklahoma City was drafted and it was the community's "patriotic duty" to be patient. The FAA says that "in the years ahead the citizens of Oklahoma will take pride in their participation and contribution to the national supersonic transport development program."

The booms' intrusion into privacy is an issue that the FAA has wisely kept silent about. Courts elsewhere have been generous in sustaining damage claims of householders and others who have suffered excessive

aircraft noise. In a decision earlier this year, the Supreme Court of the state of Washington, by a 9-0 decision, held that an airport must pay damages to owners of nearby homes because jet aircraft noise was shaking the walls, drowning out the television and making conversation difficult. The court said that the home owners did not have the right to stop jets from using the nearby airport, but "there is little doubt that the noise of jet aircraft in the process of landing or taking off can amount to a taking or damaging of property for which Amendment Nine of the Washington Constitution requires that compensation be made."

So far the courts here have not had to rule on damage claims, but they have refused to bar the sonic boom tests. Late in July, when ban-the-boom vigilantes made a last-ditch legal stand against the tests, United States District Judge Stephen S. Chandler dismissed the suit against the FAA "with prejudice." He found that the boom tests were essential to the development of an American-made supersonic transport plane and that the tests were of value to the Air Force, and thus to the defense efforts of the United States.

At the heart of the court's ruling were three findings of fact:

"Plaintiffs have established only that minor property damage in a few individual instances has been caused by the sonic boom tests at Oklahoma City.

"Plaintiffs have not established that they have suffered any physical or mental harm or that any such harm alleged by them is causally related to the sonic boom tests. Such physical or mental effects as they have established amount at most to slight increase in the stress, irritation and inconvenience inevitably attendant upon living in a complex mechanized society, which increase might be traceable to any great number of factors other than the sonic boom tests.

"The defendants' expert medical testimony establishes that sonic boom tests neither caused, nor could cause, any injury to the health of Oklahoma City residents. Further, this testimony establishes that the tests neither did, nor could, aggravate or precipitate any pre-existing or latent physical, mental, psychological or neurological condition of Oklahoma City residents."

Against this court opinion must be set the fact that the FAA has had to contend with nearly 9,000 claims for damage, and more are still coming in. Of the damage complaints received, about 2,000 have resulted in a formal claim being filed. Most were denied promptly, but about 10 percent have resulted in payments, mostly small sums averaging about \$50. All but a handful of the claims paid were either for damage to plaster walls and ceilings, or to window glass of one kind or another. Three claims for personal injury have so far been approved for payment; the total amount involved is \$330.

The booms were mostly of a sound level calculated

by FAA engineers at two pounds of "overpressure" per square foot. A shock wave of this strength will distort a plate-glass window by about two-tenths of an inch when it hits. The sound is like that of a thunderclap close enough to be both heard and felt. The sound alone is usually loud enough to rattle dishes and to wake up a light sleeper.

The FAA program began in February with a single daily boom of only a pound or so overpressure. Six months later, when the tests ended, the booms came at the rate of eight a day and the overpressure at times was as high as four pounds per square foot. Programmed overpressure was two pounds, but weather conditions sometimes caused the sound waves to focus and reinforce one another. Sonic booms were much louder on cool, moist days than they were on hot, dry ones, experimenters found.

Four types of 1,000 mph air force jets were used for the tests: three fighter types, the F-101, F-104 and the F-106, and a B-58 bomber. Each was sent along a flight path which crossed the heart of the city southwest to northeast. The sonic boom was generated when the aircraft accelerated to the speed of sound - about 660 miles an hour - and beyond. The boom is continuous so long as the aircraft is going faster than the speed of sound; it trails along like a noisy shadow heard up to 20 miles on either side of the flight path.

The farther away the aircraft, the less loud its boom. In the tests here, altitude varied upwards from 25,000 feet, depending on weather conditions and the amount of boom required for the test program. None of the boom runs was as high as 60,000 feet; at this height the level of noise on the ground is about a half-pound overpressure. This is heard as a distant roll of thunder and is neither obtrusive nor annoying.

Complete data from the tests will not be processed until the fall, but preliminary results have been made public by the FAA. From the way official news is being given out, it would seem that an effort may be made to convince the general public, as well as Congress and the aeronautical authorities of other communities, that the Oklahoma City tests were a "success" in the sense that they proved that two-pound booms are tolerable to a community.

If the FAA does attempt to adopt such a conclusion, it will do a real disservice to the 600,000 heroes who endured their booming ordeal as patiently - and patriotically - as they did.

Noise considerations are a major problem to be overcome in developing an SST and all the world is waiting to know what conclusions have been reached here. If a two-pound boom is officially declared acceptable, and then it turns out that this is more than the public will tolerate, it may be too late - and too costly - to redesign the aircraft to meet the new noise minimums.

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