

Noise-Abatement R&D Could Help
Employment Problems of Physicists

May 12, 1971

It is against the law to sound an automobile horn in Paris. To anyone with experience of rush-hour Parisian traffic, this may seem like pure Gallic *gaillardise*, a sort of auditory blindfold to heighten risk in an already dangerous sport. The purpose of the prohibition, however, is simply to cut down noise.

The automobile horn is among the least of problems dealt with in *The Tyranny of Noise*¹ by Robert Baron, who comes to the not surprising conclusion that the public needs an ombudsman to protect it from the deleterious mental and physical effects of one of our worst pollutants.

Wallace Waterfall, Secretary of the American Institute of Physics, has pointed out that forty years' research by members of the Acoustical Society of America has made available ways of reducing a high percentage of today's noise, but very few of their research results have been applied in any way.² One wonders whether the early fate of the SST might have been different if its proponents could have shown the Congress some serious effort to control the noise component of its pollutant capabilities.

One need not, however, in discussion of noise pollution, rise to the heights of the SST. A more down-to-earth example is the snowmobile. According to J.G. Bollinger of the University of Wisconsin, the snowmobile is "a beauti-

ful example of how a solution to some of our problems—getting around in winter and providing new cold-weather recreation—has created a whole new set of problems with its noise generation."³ However, the snowmobile can "be made quiet enough to pose no serious threat to the environment." One wonders why it wasn't made so in the first place. Snowmobile riders definitely risk temporary or permanent hearing damage, as well as death. At least one snowmobiler has been killed at a railroad crossing because he couldn't hear the train's warnings.

If drugs and cigarettes must carry manufacturers' warning labels, perhaps snowmobiles ought to do the same, and some other noisy gadgetry as well. Few people, especially parents, need to be reminded these days that virtually no private or public electronic amplifying system takes advantage of existing methods of automatic feedback for volume control. And there is plenty of evidence that rock music played at the decibel level its devotees insist upon, does more to perturb the inner ear than the soul.

That so many highly trained physicists and engineers should be unemployed when we are in such desperate need for further noise-abatement R&D seems to me but another example of our warped sense of national priorities. The financial loss due to industrial noise alone (in terms of reduced effi-

ciency, medical and insurance costs, time lost, etc.) would justify expenditures comparable with those of the Apollo program. Scientists and engineers, including acoustical engineers, have not done enough to get public support for wide application of available technology for noise abatement. They need not be ashamed to seem to promote their self-interest if it happens to coincide with the interest of the community at large. Their limited efforts in this direction can perhaps be seen in the absence of any ferment

about noise among industrial and governmental organizations comparable with that concerning air and water pollution, to which many a large corporation now willingly, piously, indeed proudly and lushly advertises itself as a past miscreant now bent on the common good. Where technology exists--and noise-abatement technology does--scientists should be among the first to demand and promote public support for application of remedial R&D.

1. Baron, R.A. *The Tyranny of Noise*. (New York, St. Martin's Press, 1970, 294 pp.)
2. Waterfall, W. Private Communication. April 1, 1971.
3. Bollinger, J.G. As quoted in *UW News*, April 6, 1971.