For instance, most of the aircraft noise litigation in the United States is not over civil aircraft noise, but military aircraft noise.

This limitation of H.R. 3400 becomes even more significant when you talk about sonic boom because, anomalously, the bill covers only civil aircraft which do not create sonic boom, but it does not cover military aircraft which create the only sonic boom that we have today.

To the extent that the SST, down the road, will create sonic boom, that can be dealt with through contractual provisions on the part of the Administrator as the contractor for the design of the aircraft.

In all events, certification for noise cannot afford any magic results. Certification can yield no more than technology can produce. At best, certification holds out the promise of quieter aircraft when and as technology makes them available and economics can sustain them.

This result would probably follow even without any legislation. But there ought to be no illusions about the promises of technology. I think Secretary Boyd made this point the other day. NASA, for example, is attempting at a cost of \$50 million to develop a so-called quiet engine.

Now, this is for research purposes only-not an economically viable engine. It isn't even hoped to have such an engine before 1972, and even if it is successful, it is anticipated that that engine would have

a service life of 50 hours.

To develop an acceptable quiet engine for actual production would require an engine service life at least roughly comparable to that of current jets, which ranges up to 12,000 hours. So that, however substantial a degree of reduction might be achieved as to noise at the source, it is questionable whether the so-called aircraft noise "problem" can ever be expected to really be solved.

The oft-used term "aircraft noise problem" is very seldom defined, but what it really means is complaints. If anything has been learned from the exhaustive studies which have been made of noise complaints in this country and abroad, it is that no matter how much you reduce the noise level there always remains an ineradicable hard core

of complainants.

Both British studies and American studies have demonstrated, for example, that, even if you reduce the amount of noise below the ambient noise level, you are still left with about 30 percent of the population around airports registering complaints.

In this sense you will never solve the noise "problem." Oklahoma City testing for sonic boom by FAA was a good example. I am sure you gentlemen heard that, during the course of those tests, on given days they would not fly any sonic boom flights just to see what would happen.

What happened was that FAA got nearly as many complaints on the days when they weren't flying, as on the days when they were.

Even the achievement of an economical quiet engine would not mark the end of complaints against airport operations, because complaints against airport operations are not confined only to noise. They cover a wide spectrum of other types of disturbance created by aircraft operating at the airport.

This is why the reduction of noise alone is only a piece of the problem, and why ultimately you must deal with the land use around

the airport if you really expect to solve airport complaints.