

QUESTIONS SUBMITTED TO FRANK W. LEHAN BY THE SUBCOMMITTEE ON SCIENCE RESEARCH AND DEVELOPMENT

1. How much research is DOT funding in NASA and DOD laboratories and what is the purpose of such research?

OFFICE OF THE SECRETARY

The amount of research currently funded by this Department in DOD and NASA laboratories is limited. It should be recognized, however, that various laboratories, particularly NASA's, undertake research on behalf of and of direct interest to this Department. This research is an support of activities such as aircraft noise abatement, SST design, air cushion vehicle dynamics, and transoceanic aircraft communications improvement.

FEDERAL HIGHWAY ADMINISTRATION

National Highway Safety Bureau

"Human Impact Tolerance."—Holloman Air Force Base, U.S. Air Force Systems Command. This effort is being funded at the rate of \$100,000 during FY 68. The purpose of this work is to establish by dynamic sled tests the impact of tolerance of humans of varying dimensions, weight, and sex. The results of this will assist the Bureau in establishment of motor vehicle safety performance standards relating to the crashworthiness of vehicle interiors."

"Wide Oval Tire Testing."—Army Tank Automotive Command, U.S. Army Materiels Command. This effort was funded for \$6,000 during FY 68. The purpose of this effort is to obtain selected measurements on Firestone wide oval tires with respect to determining alleged sidewall weakness in early production."

FEDERAL RAILROAD ADMINISTRATION

Office of High Speed Ground Transportation

"Presently none is being funded. However, OHSGT has made a strong effort to utilize the capabilities of other Government agencies in work on advanced technology. As an example, NASA has made a major contribution to our Tracked Air Cushion Vehicle Project through the participation of their aerodynamic experts and the conduct of wind tunnel tests at their Langley Research Center (no transfer of funds).

"The Langley support is expected to continue. The Naval Research Laboratory has demonstrated for us the capability of high velocity projectiles fired by light gas guns to fracture rock (no transfer of funds).

"The Air Force has loaned three T-64 turbine engines which are being used on the linear motor testing program (no transfer of funds).

"Wind tunnel tests of railroad car models were completed by the Naval Ship R&D Center (funded at \$14,000)."

UNITED STATES COAST GUARD

"The Coast Guard is funding a few testing projects in DOD laboratories, but little or none of this work could properly be classified as research."

FEDERAL AVIATION ADMINISTRATION

FAA is not funding any work in NASA labs. The following projects are being funded in DOD labs.

Laboratory	Program	Fiscal year 1968 funds
Air Force Weapons Laboratory.....	High altitude radiation tests.....	\$63,000
U.S. Army Aviation Material Laboratory, Fort Eustis, Va.	Demonstrate to FAA a typical civil transport pilot's armored seat (510-004-18H).	4,000
Aviation Medical Acceleration Laboratory, Naval Air Development Center, Johnsville, Pa.	FAR-25 jet pilot reaction during flight in heavy atmospheric turbulence (540-011-01H).	25,000
USAF Flight Dynamics Laboratory, WPAFB, Ohio....	Investigate force wheel steering (560-002-08H)....	35,000
U.S. Navy Aircraft Engine Laboratory, Philadelphia, Pa.	Investigation of relative crash fire hazards of jet fuels (520-005-04X).	84,000
Total.....		221,000