Mr. Blatnik. Gentlemen, please be seated. All right, Mr. May.

Mr. W. May. Mr. Chairman, the staff of the institute prepared a detailed report concerning research objectives and accomplishments of the institute. I ask that that be marked "Exhibit 15."

Mr. Blatnik. Without objection, so ordered. (Exhibit 15 is retained in subcommittee files.)

Mr. W. May. Dean Benson, perhaps for the benefit of the committee, you can begin by describing the institute and its objectives.

TESTIMONY OF DR. FRED J. BENSON, DEAN, COLLEGE OF ENGINEER-ING. DIRECTOR. TEXAS ENGINEERING EXPERIMENT STATION. TEXAS A. & M. UNIVERSITY; DR. CHARLES J. KEESE, EXECUTIVE OFFICER, TEXAS TRANSPORTATION INSTITUTE, TEXAS A. & M. UNIVERSITY; DR. NEILON J. ROWAN, PROJECT SUPERVISOR, TEXAS TRANSPORTATION INSTITUTE; AND DR. T. J. HIRSCH, HEAD, STRUCTURAL RESEARCH DEPARTMENT, TEXAS TRANS-PORTATION INSTITUTE, COLLEGE STATION, TEX.

Dr. Benson. Thank you.

Mr. Chairman and Congressmen of the subcommittee, it is a very distinct pleasure for us to be here today, to appear before the Special Subcommittee on the Federal-Aid Highway Program.

Since the mid-1910's, Texas A. & M. University has been active in

the training of highway engineers and in research dedicated to a better system of highways for our State and Nation.

Following World War II, Mr. Gibb Gilchrist, chancellor of the Texas A. & M. University; Mr. Thomas H. McDonald, chief and later commissioner of the Bureau of Public Roads; and Mr. D. C. Greer, State highway engineer of Texas, conceived and brought into being the Texas Transportation Institute dedicated to research important to all forms of transportation. In 1953, Chief McDonald came to Texas A. & M. to head the program and bring the institute to fruition.

A major portion of the Transportation Institute program has been the cooperative program with the Texas Highway Department and in more recent years including also the U.S. Bureau of Public Roads. This portion of our program has been dedicated to the solution of longrange problems involving the transportation system on the highways.

In the period 1948-52, Prof. C. J. Keese and I started a modest effort in safety research, beginning first with the idea that major achievements could be had through improvement in driver attitude and driver skills. We found this to be rather discouraging, probably because neither of us was well-qualified for work in this area. In 1956-57, under my direction, Mr. Robert Schleider, a graduate student, made a study of the accidents on Texas Highway No. 6 between College Station, Tex., and Navasota, Tex., a distance of 22 miles. This study indicated that most of the fatal accidents and serious injury accidents involved cars leaving the highway and striking trees or culvert headwalls in the right-of-way and at some distance from the shoulder line. Actually, we were astonished at the number of accidents which involved striking off-the-road obstacles.