visit Saturday afternoon. Also shown is the Mission Operations Office, which represents the interests of launch vehicle development with the Mission Operations, in Washington, and also with the Mission Control Center, in Houston.

Certain functions are centralized in General O'Connor's staff. He has an expert for large industrial contracts. I would like to mention that the great majority of these contracts are now incentivized. That is, we have an incentive fee arrangement on these contracts which enables the contractor to make a greater profit if he delivers for lower cost, on schedule, and if there are no deficiencies in his deliveries. He can also be penalized for sending something incomplete to the Cape that requires some retrofitting or some rework.

The Facilities Office deals essentially with the building of new program facilities and has shrunk to a relatively small operation now because our facility construction program for Apollo has already been completed.

Project Logistics deals with supplying our facilities, particularly test facilities, with test fuel, such as liquid oxygen. It provides the transporation systems that bring stages from stage assembly plants to test facilities and on to the Cape. We have a fleet of about eight barges operated out of this office that bring the stuff all the way from California, to Mississippi, and down to the Cape. Barges also handle large-stage transportation between Huntsville and the Cape. We also have two over-sized aircraft (converted Stratocruiser airplanes) to fly second stages of Saturn I's and large engines across the country.

Finally, there is a Resources Management Office that deals essentially with the resources in terms of manpower and money in the program. These two things, of course, go closely together. Whenever you want to save money you have to reduce manpower because that is where the money goes, and keeping track of manpower and money, and staying on schedule, is a primary job of Industrial Operations.

Whenever there is a serious technical difficulty in any of the industrial programs here, the program managers may require help. They may require knowledgeable people who can get in there, like firefighters, to put out the fire before it spreads too far. Now our main resources for providing this firefighting service in the Apollo program are the expert scientists, engineers, and technicians in Research and Development Operations.

Research and Development Operations is not organized by programs, but by disciplines. For example, we have an Aero-Astrodynamics Lab. This lab deals with wind tunnels, flight dynamics and trajectories, and the aerodynamic loads created on a vehicle as it passes through turbulent layers in the atmosphere. So the primary orientation of this lab is in the areas like optimization of guidance equations, dynamics, mathematics, aerodynamics, even aerodynamic heating.

Astrionics is another laboratory. Astrionics deals with everything involving electricity, you might say: gyroscopes; electronic computers that fly along in the rocket in flight; electrical checkout equipment; telemeter transmitters that send data from the flying rocket back to the ground to enable engineers on the ground to evaluate the performance of the rocket in flight; and actuators that swivel the rocket