

carry it to the Moon. The Kennedy Space Center is in essence the launch center, where the various modules or stages of spacecraft meet with the launch vehicle, and are stacked one on top of the other. The whole thing is then checked out against elaborate ground support equipment and launched.

Although we report to Manned Space Flight, we nevertheless conducted about \$23.7 million worth of business in fiscal year 1967 for the three other program offices.

Let me now come to the internal organization of the Marshall Space Flight Center. I brought two charts. The one to your right is the organization of the Center as it looked when we submitted materials to your committee last year. The chart to the left shows today's status, and the elements marked in blue involve changes between last year and this year.

Starting from the top, Dr. Lange went over to the Army and has become chief scientist for the Nike X program. Dave Newby took over this job, as assistant director for scientific and technical analysis. We have established the patent counsel as an entity separate from the chief counsel's office, and we have established a new Saturn Apollo Applications Office in Industrial Operations and have moved the former head of the engine program, Lee Belew, to head this office. Lee's former deputy, Bill Brown, has become head of the engine program office. We closed out the Saturn IB/Centaur program office because this program was terminated. Thus, the total number of program offices in Industrial Operations is the same as it used to be.

Another important change is that Lee James, who was our program director for the Saturn I-IB program, became deputy to General Phillips in Washington. Bill Teir, who had been deputy to James, took over his job.

Another important change is in Research and Development Operations. With the activation of the Saturn/Apollo Applications program, our involvement in experiments to be conducted in space vehicles and space stations of course had to be expanded, so we established an Experiments Office in Research and Development Operations. At the same time, we closed out the Technical Staff.

Another important change is that Mr. Fred Cline, who had been running the Propulsion and Vehicle Engineering Laboratory, under Research and Development Operations, has been replaced by Dr. Lucas. Mr. Cline went back to industry.

Those are the major changes during the past year. Now let me discuss the basic philosophy of our organization. The Marshall Space Flight Center is made up of two major operating elements: Research and Development Operations and Industrial Operations. Maybe we should call Industrial Operations the Office of Program Management, and Research and Development the Office of Penetration in Depth, including operating our own in-house laboratories. Most of the money that we are spending in industry goes to the director of industrial operations, Ed O'Connor, who, through his program managers, administers these four programs.

There are two major facilities attached to Industrial Operations. The Michoud Assembly Facility, in New Orleans, which you will visit Saturday morning, and the Mississippi Test Facility, which you will