

We are to assure that the flight configuration is managed under the overall control of the development centers. It is, of course, unthinkable that we would make modification not in the sense or intent of the developers. Our part of this job here is to make absolutely sure any changes that are needed are under the overall configuration control of the responsible Manned Space Flight installation; also that the intent of the developer, as far as launch vehicles go, and as far as spacecraft go, are fully preserved. Any changes, therefore, that are needed are done with the concurrence of the development center.

We are, of course, specialists here in launch concepts. Therefore, we are continuously overseeing the concepts that are being applied in the launch preparation, and we provide launch preparation requirements as a feedback into the vehicle. In other words, at a very early point of a design of a launch vehicle or a spacecraft, the way in which it will have to be operated here, and the means which are available to operate and prepare it must be built into the vehicle that is to be flown. Therefore, early inputs into the design of the flight hardware are defined by the concept which will prevail for the checkout, assembly, and launch preparations.

The development job we have here is to design, install, and operate launch facilities, including that type of launch support equipment which is not an integral part of the flight hardware and not developed at the development centers.

We furnish on-site technical and administrative support for all NASA programs and we provide NASA a single channel for obtaining launch support from the Eastern Test Range. Here we are a close neighbor and also a tenant as an agency that uses the Eastern Test Range.

The Eastern Test Range (formerly the Atlantic Missile Range, and before that the Joint Proving Ground) as a national range facility provides data acquisition, telemetry, tracking, and similar instrumentation services, as well as support in ground safety, propellants, some logistics, et cetera. We operate as tenants in the Cape Kennedy area and also provide a single entry channel for obtaining any support for NASA's requirements from Eastern Test Range.

Now, as to the geography, a few words.

Next slide, please. (See Figure A-2.)

You see outlined here in red, or orange, the old Cape Canaveral or Cape Kennedy area. This is, if I remember right, something like 15,000 square acres. The early guided missile programs at the cape were started with facilities to the southeast in this area, and there you will find launch pads for the Redstone, for the Thor, for the Pershing, and for the Polaris missiles in this area. General firing direction is 105 to 110 degrees down this area into the Atlantic.

Some of these islands carry all kinds of instrumentations.

As the size of these ballistic missiles grew, the intercontinental ballistic missile pads went up on this north shore. Here you find four pads for the Atlas and four pads for the Titan.

So this is the overall geography. Let me point out, it has some considerable growth potential for future launch configurations that might be decided upon.