

SLIDE 38

Here (slide 39) you see a typical test to determine the metabolic

load caused by wearing a spacesuit.

Beyond medical research into medical operations, we have medical monitors (slide 40) in all of our test facilities when we conduct manned tests in the vacuum chambers, on the Centrifuge, in all the facilities in fact, that do use men. During mission operations (slide 41) Dr. Berry and his people monitor the medical data in real-time during the flight.

After the flight (slide 42) they then determine the effects of space

flight in detail. Dr. Berry will cover that this afternoon.

The newest directorate, as I mentioned, is Science and Applications (slide 43) under Dr. Hess. The major areas covered by this directorate include lunar exploration, the scientific exploration of the Moon, in Apollo and in future programs; and investigations in Earth Sciences and Applications to learn what man can contribute to a better determination of the Earth's weather, and to study the Earth's natural resources, including water, air, and land resources.

The directorate is also responsible for space physics, to gain knowledge which enables us to design our spacecraft to fly in the radiation and the micrometeoroid environment of space. The directorate also has responsibility for experiments, has conducted many experiments in Gemini, and will conduct many more in Apollo and Apollo Applications. Also, this directorate supports Deke Slayton's directorate in

the scientific training of our astronauts.

This (slide 44) is a solar telescope located here at Houston. Its purpose is to develop methods to help us predict the space weather, including radiation effects, just as today our meteorologists are predicting the Earth's weather.