

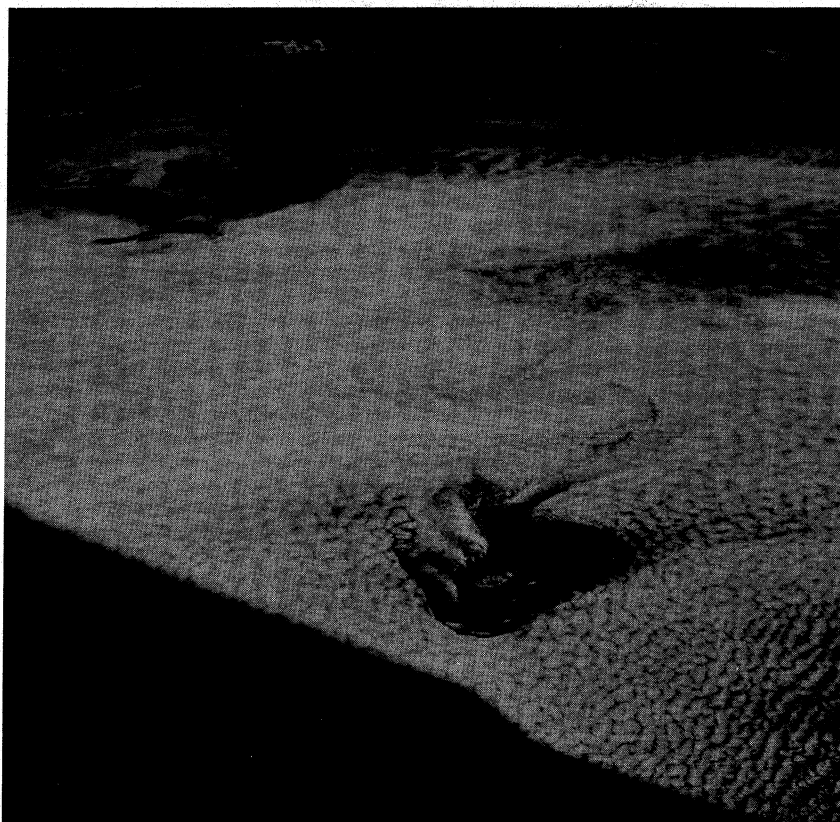


FIGURE 15

On the lunar surface here are the things we will ask the astronaut to do.

Obviously he will make observations (fig. 22), and this is something we don't want to overlook. Just being there, and what he sees, will be a tremendous amount of information that we do not have now. Sample collection is probably the most important of our more formal scientific activities. We will bring samples back, and then we can address some of these basic questions in many of these fields.

The second thing the astronaut will do is deploy an experiment package, to leave on the surface, which will make certain geophysical measurements for a year after we depart, and some of these experiments should tell us what some of the things are going on inside the Moon.

And, then, the third, he can start to study the geologic structure that he sees on the lunar surface.

We have built into the spacecraft certain capabilities to carry these scientific equipments (fig. 23). For example, we can carry to the lunar surface 250 pounds of scientific equipment. We can return some 80 pounds of lunar samples and film.