The sample boxes come in here and are introduced into this vacuum system here, and through arrangements of gloves and mechanical manipulators the boxes are opened and the samples removed. Then they are moved down to the Physical Chemistry Laboratory, others down to the Biological Laboratory.

This is the Gas Analysis Laboratory located here (fig. 33), and then, down below ground, is the Radiation Counting Laboratory with its large shields, because you are trying to count radiation of a very low level here, and you don't want the normal background affecting your counting (fig. 34).

So much for a rapid runthrough on the lunar surface science program.

Looking beyond this, we here at this center, have three major areas of interest in the Applications program. One is extended lunar investigation.

I showed you a number of instruments that we would like to put out on Apollo. There are additional instruments under development. For example, a device that when placed on the lunar surface could tell you the constituents of the very minute amount of lunar atmosphere that is there.

We want to go to different locations, for example, a seismometer to measure the motion going on inside the Moon. We want them located at several places so you can essentially triangulate and find the source of the particular motion.

You would like to be able to go farther away from the spacecraft to visit some of the more interesting geological places and to study them longer. We would like to, through a combination of different spacecraft location and additional mobility, to study some of the particular craters there.

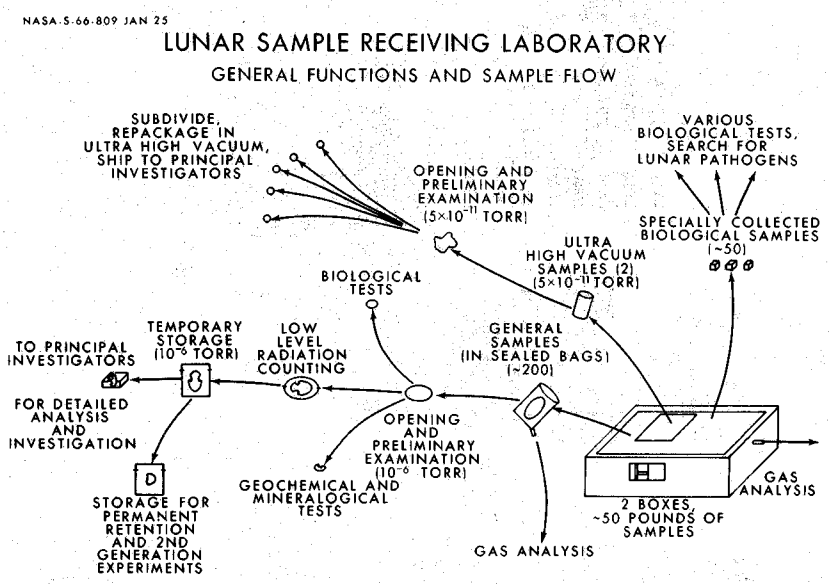

FIGURE 32