he would just repressurize it, open the door, and reenter. This kind of arrangement would offer an ideal physical, medical or biological laboratory that combines zero-gravity with the hard vacuum of outer space without necessitating extra-vehicular activity.

My next chart shows a more advanced astronomy laboratory. Without going into detail, you can see a great variety of instruments deployed in this concept. This is just one possible arrangement.

I would now like to discuss a few tasks we are working on which are aimed at extending manned exploration of the lunar surface under the Apollo Applications program. Our sister center in Houston has over-all responsibility for all this post-Apollo lunar surface work and the things we are doing in this area here at Marshall are in support of the Manned Spacecraft Center.

We at Marshall have been studying lunar surface transportation vehicles for quite some time. One of the fundamental problems in an intelligent post-Apollo lunar exploration program is that an area that may be safe to land on is not necessarily an area of greatest scientific interest. Just as on Earth, the places of greatest geological significance are not always suitable for landing airplanes. So we may have to land on a level surface 10 or 50 miles away and go from there up a rugged ridge to visit an interesting crater or maybe a place where

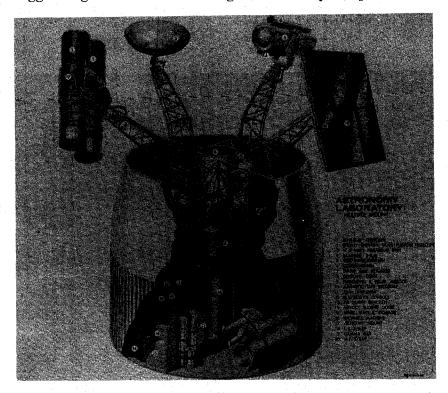


CHART 13