

Beyond this, we can think of more advanced concepts of space stations such as this completely modularized unit. This station would be built of a series of modules, one atop the other. We could make the stack as long as we wish. Down through the center of the station would be a tunnel for traffic between floors. For example, on top could be an astronomical department with a swivel-mounted telescope. Next, we could have an astronomy and biology slice. Then we could have a general research and development station. The next lower floor may accommodate power supply and life support subsystems, then come living quarters and Earth resources and meteorology department, and down here at the bottom maybe the kitchen and food storage for the station. This is just one idea of how this modular stack concept could work and how it could grow organically and logically out of the Apollo Applications program. In other words, using the S-IVB workshop as an interim learning tool, we would ultimately wind up with a tailor-made, optimized modularized station. Several of such more advanced space station concepts are presently under study. There is no reason why this country couldn't have a second-generation space station such as this in the 1973-75 time period.

Here is a typical "slice" module several of which would make up the "stack" I just showed you. This one is a research and development laboratory for advanced space-related technologies. For instance, look at the space here: It could be evacuated (by opening valves to the vacuum outside) and repressurized (by reconnecting it to the pressurized volumes). With these remote manipulators operated from the pressurized control room, a man could perform experiments in the vacuum here. If he wanted to get back into the test chamber,

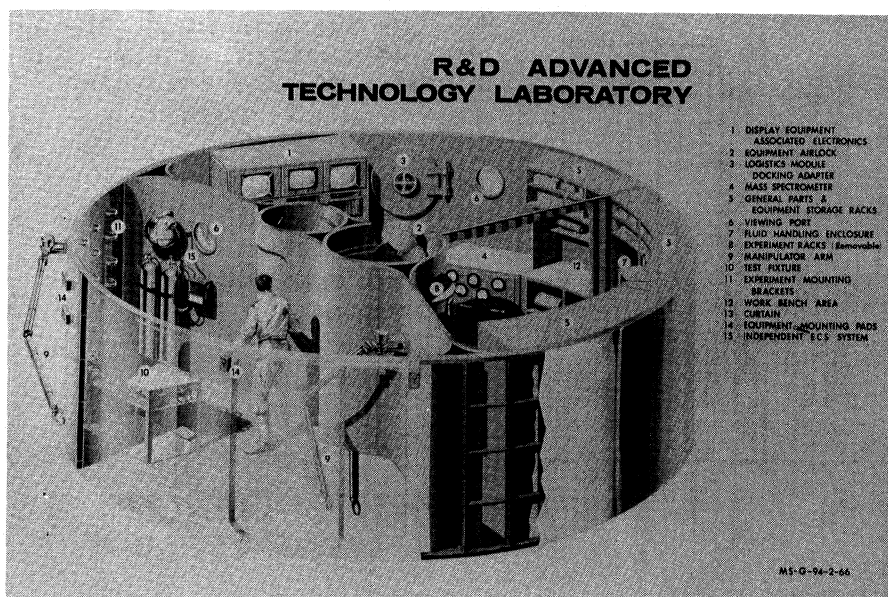


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