

Now, in terms of a capability, this provides the development of the capability of staying for long periods of time in orbit so that we can measure the effects of the environment on man and also so we can develop the equipment to support him effectively for long periods of time. We will want to develop the equipment for continuous operations in space, first resupplied and then continuously operating on its own supplies so that we eventually reach the capability for interplanetary travel.

This baseline kind of advanced program is one of many that we have looked at and the dates here aren't necessarily any that would be met and, of course, the progress in this kind of a program depends upon the funding made available. Nevertheless, this is a baseline program that could be done providing it was found desirable to proceed in this direction and providing resources could be made available. Another way of looking at it is shown in this chart (MC66-5358A, fig. 2) which is one that we have used in the past. It represents a probable kind of a program evolution for manned spaced activities beginning with Gemini and going through Apollo, to Apollo Applications plus the experiments program. All of which leads to the conclusion that the next major module that will probably be required on the next major development will be a manned space station. A manned space station can, if the design constraints are proper from our studies, be designed so that it could be useful for a number of different end objectives. Because it is a major investment, it is probably desirable to have as flexible a design as possible and this is the area in which our advanced missions program is working. From



FIGURE 1