

SPACE STATION FREEDOM CURRENT STATUS AND PROSPECTS
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Space Station Freedom (SSF) is the next major step in space exploration. It is a joint effort between the United States, NASA; the European Space Agency (ESA); the Japanese Space Agency (NASDA); and the Canadian Space Agency (CSA). It will be constructed in space via shuttle flights over a period of 5 years. Once in place it will provide research facilities that are more sophisticated and powerful than anything available on shuttle or free flying platforms. It will have a greater power and data capability as well as many more science equipment racks. From the standpoint of basic biological research, habitats will be present to support experiments on living specimens from cell cultures and prokaryotes through invertebrate and vertebrate animals and plants. Research equipment will be present for conduct of investigations and collection and preservation of samples for later analysis on earth. The opportunity will be present to conduct detailed seed to seed studies in plants as well as developmental and generational studies on animals. The centrifuge facility, will be used to maintain 1 g controls as well as to investigate the effects of partial and intermittent gravity. SSP will be the test bed for and prelude to permanent human settlements on the moon and Mars. In addition to conducting biological research in space its external attachments can be used for a variety of earth and atmosphere observing activities in the tropical regions of our planet.