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NASA
National Aeronautics and
Space Administration

MHR-12

George C. Marshall Space Flight Center
Marshall Space Flight Center, Alabama 35812

Chronology:
MSFC Space Station Program

1982 – Present
Major Events
(December 1988)

Compiled by:
Management Operations Office
Contract NAS8-35900

FOREWORD

The Marshall Space Flight Center maintains an active history program to assure that the foundation of the Center's history is captured and preserved for current and future generations. As part of that overall effort, the Center began a project in 1987 to capture historical information and documentation on the Marshall Center's roles regarding Space Shuttle and Space Station.

Working under Contract NAS8-35900, three historians employed by MSI, a Division of the Bionetics Corporation, began compiling bibliographies, chronologies and oral interview transcripts. MSI historians Jessie E. Whalen and Sarah L. McKinley did the work for Space Shuttle. Historian Thomas G. Gates did the work for Space Station.

The products that the historians have prepared are intended to provide supportive research essential to the writing of formal narrative histories of Marshall's contributions to the Space Shuttle and Space Station. The products will also help ensure that historically significant facets of Marshall's involvement in both programs are not overlooked or lost, whether they be in the form of events, documents, or personal interviews.

This supportive research is that which is basic to any historical research project and is not intended to be an end unto itself. It is designed to give the historian the necessary data from which to compile the aforementioned written histories and to preserve records of historically significant aspects of Marshall's involvement in Space Shuttle and Space Station.

This document is Marshall History Report 12 (MHR-12), **Chronology: MSFC Space Station Program, 1982-Present.** It contains listing of major events directly related to the Space Station Program at Marshall. This information will provide the researcher with a means of following the chronological progression of the program.

Questions concerning this document should be directed to the Marshall Space Flight Center Historian, CN22, Marshall Space Flight Center, Alabama 35812.

PREFACE

The Space Station History Project is on-going; therefore, the following **Chronology** will be updated and amended continually. If there appear to be gaps or omissions in this **Chronology,** they should be rectified as research continues.

The body of this document contains synopses of major events listed according to the dates of their occurrence; the sources from which the synopses were taken are also given. Indices follow the synopses and provide additional data concerning the events listed. The **Event Index** provides a brief listing of all the events without synopses. The **Element Index** lists the specific elements of the Space Station Program under consideration in the events. The **Location Index** lists the locations where the events took place. The indices and synopses may be cross-referenced by using dates.

Acronyms and abbreviations used in the **Chronology** may be found either in the separately bound **MSFC Space Station Program Commonly Used Acronyms and Abbreviations Listing** or in the **List of Source Abbreviations** in this document.

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LIST OF SOURCE ABBREVIATIONS

AvWk	Aviation Week
B'ham-News	Birmingham News
B'ham-PH	Birmingham Post-Herald
Dec-Daily	Decatur Daily
Gowan/Morris-Chron	Gowan, Pamela and Morris, L.J., A Chronology of Events of the U.S./International Space Station Program, Edition #1.2, August 1987 (NASA History Office, NASA Headquarters, Washington, D.C.)
HSV-Times	Huntsville Times
I&PS-Chron(1987)	1987 Historical Chronology Institutional and Program Support (MSFC)
M-Star	Marshall Star
MSFC-Chron(1984)	1984 Marshall Center Chronology
MSFC-Chron(1985)	1985 Marshall Center Chronology
MSFC-Rel	MSFC News Release
SSMC-Minutes	Space Station Management Council Meeting Minutes
SSPO-Chron(1986)	1986 Historical Chronology Space Station Projects Office (MSFC)
SSPO-Chron(1987)	1987 Historical Chronology Space Station Projects Office (MSFC)
Wash-Post	Washington Post
Wash-Times	Washington Times

DATE	EVENT	SOURCE
82/01/06	A $550,000 MSFC contract was awarded to TRW, Inc. in Redondo Beach, CA for the continuation of the alternate system design concept study of Space Platform.	MSFC-Rel-82-1
	NASA Administrator James Beggs tasked Dr. Jack L. Kerrebrock, Associate Administrator for Aeronautics and Space Technology, to organize a Space Station Technology Steering Committee to advise NASA management of the availability and planned development of appropriate technology. The committee was to include participants from NASA/HQ, MSFC, and other NASA centers.	M-Star(1/6/82)
	NASA Administrator James Beggs tasked General James Abrahamson, Associate Administrator for Space Transporation System, Dr. Jack L. Kerrebrock, Associate Administrator for Aeronautics and Space Technology, and Philip E. Culbertson, Associate Deputy Administrator, with special assignments for space station planning and technology activities. Abrahamson was to organize NASA's station definition activities, including overall planning and integration on NASA's technical support, coordination of space station utilization studies, and the establishment of an interface with the Department of Defense on development planning and utilization.	M-Star(1/6/82)
82/02/24	The General Accounting Office (GAO) started its survey of NASA's research and development activity related to unmanned, low-altitude Space Platforms, unmanned geostationary Space Platforms, a manned operations center, and various elements of orbital equipment. The title of the assignment was "Survey of NASA's Planning and Development of Space Stations and Other Earth-Orbital Systems." The survey prompted the GAO to conduct a review of Space Station planning.	Gowan/Morris-Chron
82/03/15	The Space Station Technology Steering Committee and Working Groups held a meeting at MSFC.	Gowan/Morris-Chron
82/03/19	Ivan Bekey of the Office of Space Flight and Daniel H. Herman, Director of Space Station Concept Development within the Office of Space Science and Applications, held informal discussions with Dr. Gottfried Greger of the Bundesministerium fuer Forschung und Technologie. The topic of discussion was the potential of cooperation between the US and the Federal Republic of Germany with respect to the development of the Space Station.	Gowan/Morris-Chron
82/04/02	A Space Station Mission Analysis Studies Briefing was given to explore commercial involvement in the Space Station Program.	Gowan/Morris-Chron
82/04/19	The Soviet Union launched its Salyut 7 space station into orbit.	Gowan/Morris-Chron
	The Space Station Technology Steering Committee and Working Groups held meetings at LaRC.	Gowan/Morris-Chron
82/04/27	The first Space Operations Study meeting was held in Washington, D.C. Topics of discussion included Space Station modules, hardware, and technology available for the Space Station.	Gowan/Morris-Chron
82/05/19	A Space Station Mission Analysis Studies briefing was held at JSC.	Gowan/Morris-Chron
82/05/21	MSFC awarded several study contracts for firms to explore the early uses of the US Space Station. The contracted firms were invited to describe how an early Station could be used as a test facility in advance of operations in the 1990s. One study was to look at the role of the Station in building large structures in	MSFC-Rel-82-54

DATE	EVENT	SOURCE
82/05/21	orbit; a second study would examine the servicing and maintaining of satellites; and a third study would examine the relationship of the Station with an Orbital Transfer Vehicle. According to William Huber, Manager of the Space Station Task Force at MSFC, the studies were to assume a Station would be in orbit by 1990. Responses to the request for proposals were due by 21 June 1982, and the contracts were to be awarded by August 1982. They were to run for eight months.	
82/06/02	NASA established a Space Station Task Force under the direction of John D. Hodge, Assistant for Space Station Planning and Analysis in the Office of the Associate Deputy Administrator. The Task Force was to be responsible for the development of the programmatic aspects of the Space Station as they evolve, including mission analysis, requirements definition, and program management, according to the announcement by NASA Administrator James Beggs. In carrying out the Task Force's functions, Hodge was to report to Philip E. Culbertson, Associate Deputy Administrator for Space Station, and was to draw from the Space Station-related activities of each of the NASA program offices and field centers.	M-Star(6/2/82)
82/06/10-11	Dr. Hans Mark, NASA Deputy Administrator, and Lt. Gen. Richard Henry, Space Division Commander of the USAF Space Command, co-chaired a launch vehicle symposium at MSFC. Space Station was one of four major issues discussed.	Gowan/Morris-Chron
82/06/11	NASA officials and Japanese representatives of the National Space Development Agency (NASDA) held a meeting for the purpose of discussing Space Station planning. Japan had two organizations conducting Space Station studies: one by their Science and Technology Agency, the second by the Ministry of International Trade and Industry (MITI). The two studies were to be integrated by NASDA before being presented to NASA.	Gowan/Morris-Chron
82/06/15	Rep. Don Fuqua (D-FL), Chairman of the US House Committee on Science and Technology sent President Ronald Reagan a letter stating, "...the Soviet Union has gained a leadership position in manned spaceflight through its space station activities. Therefore, I urge you to reaffirm this Nation's commitment to preserving a position of world leadership in space through continuation of a balanced space science and applications program and commitment to a long range goal of establishing a United States permanent manned presence in space."	Gowan/Morris-Chron
82/06/17	NASA Administrator James Beggs met with European Space Agency Director General Erik Quistgaard in Paris to agree to general principles for NASA/ESA cooperative agreements.	Gowan/Morris-Chron
82/06/23	The Space Station Technology Steering Committee held a meeting at GSFC.	Gowan/Morris-Chron
82/06/28	NASA released a request for proposals (RFP) for Space Station Mission Analysis Studies. This was the RFP for the phase of the Program better known as Phase A.	Gowan/Morris-Chron
82/07/09	The Space Station Task Force established a Mission Requirements Working Group.	Gowan/Morris-Chron
82/07/15	The Space Station Program Planning Working Group held a meeting at NASA/HQ.	Gowan/Morris-Chron
	The Space Station Systems Working Group held a meeting at NASA/HQ. The meeting was devoted primarily to organizing the activities of the Systems	Gowan/Morris-Chron

DATE	EVENT	SOURCE
82/07/15	Working Group and establishing near-term milestones.	
82/07/16	The Japanese National Space Development Agency (NASDA) established a space station office.	Gowan/Morris-Chron
82/07/19	NASA Administrator James Beggs, Dr. Hans Mark, Philip E. Culbertson, and John D. Hodge met to discuss Space Station planning. Hodge presented a plan for a two-year, NASA-led program definition program with "enhanced upfront funding," an approach which Beggs accepted. Beggs indicated he would support a program with a runout cost to an initial operating capability of around $4 billion; he did not support programs at lower levels such as $1.5 to $2.5 billion. Beggs did not intend to include a new-start line item for FY84; instead, he wanted to distribute a series of supporting items (totaling $80 to $110 million) in the FY84 budget.	Gowan/Morris-Chron
82/07/21	Members of the US Senate Committee on Commerce, Science, and Transportation requested an assessment of the need for a permanent orbiting facility. The study was to be conducted by the Office of Technology Assessment (OTA).	Gowan/Morris-Chron
	The European Space Agency (ESA) released an announcement of opportunity for a number of contracts with European industry in order to support direct participation in NASA's Space Station studies.	Gowan/Morris-Chron
	The NASA Advisory Council held a meeting in which the Council reviewed the NASA FY84 five-year planning and new initiatives under consideration. The Council concluded that the Space Station was "not only the next logical step after acquisition of the Space Transportation System, but is the most exciting prospect in space for the forseeable future." However, the Council also felt "it is important that NASA bring in a representative group of outsiders early enough to influence Space Station requirements and design." NASA Administrator James Beggs was informed of the same.	Gowan/Morris-Chron
82/07/26-30	The Space Sciences Board of the National Research Council (NRC) conducted a brief summer study on Space Station.	Gowan/Morris-Chron
82/07/29-30	The Space Station Program Planning Working Group (SSPPWG) held a meeting at NASA/HQ. The group had to generate presentation charts for the Space Station Program Review Committee which was to meet 30 July 1982.	Gowan/Morris-Chron
82/07/30	The Space Station Program Review Committee (SSPRC) held a meeting at NASA/HQ.	Gowan/Morris-Chron
82/08/09	The Space Station Steering Committee held a meeting at NASA/HQ.	Gowan/Morris-Chron
82/08/10	NASA selected eight companies for final negotiations leading to firm fixed-price contracts of less than $1 million apiece for Space Station mission studies. These studies were to aid development of specific mission requirements and architectural options. The eight companies were Boeing, General Dynamics, Grumman, Lockheed, Martin Marietta, McDonnell Douglas, Rockwell, and TRW. These contracted studies were to be the next step in the planning activity for the Space Station. The studies were to last for eight months and were to identify and analyze scientific, commercial, national security, and space-operational missions. Alternate concepts for the Space Station were also to be considered by the contractors.	MSFC-Rel-82-75

DATE	EVENT	SOURCE
82/08/19	The Space Station Program Planning Working Group met. Each field center had a representative who commented on program strategies, budget, and program plan content.	Gowan/Morris-Chron
82/08/20	NASA contracted for eight $787,500 studies, one for each of eight companies. The studies were known as the Mission Analysis Studies.	Gowan/Morris-Chron
82/09/13	MSFC selected four aerospace firms for negotiations leading to contracts for exploring the early uses of the Space Station. Boeing, Martin Marietta, TRW, and General Dynamics were selected for the four contracts worth $375,000. They were to run for eight months. These studies were to complement a concurrent missions study managed by NASA/HQ. Each contract was to address a particular area in which an operational manned facility would play an active role: Boeing (building large structures in space); Martin Marietta/TRW (servicing and maintenance of satellites); and General Dynamics (OTV-Space Station relationship). The contracts were to have the companies to examine what experiments need to be carried out on an early Station in order to learn how to build and use most effectively a fully operational Space Station by the end of the 1990s.	MSFC-Rel-82-82
	The Office of Space Station held a Space Station international orientation briefing at NASA/HQ.	Gowan/Morris-Chron
82/09/15	NASA Administrator James Beggs submitted the proposed NASA budget for FY84 to David Stockman, Director of the Office of Management and Budgement.	Gowan/Morris-Chron
82/09/16	The Space Station Program Planning Working Group produced its First Definition Phase Schedule.	Gowan/Morris-Chron
	The Space Station Program Review Committee held a meeting.	Gowan/Morris-Chron
82/09/21	Director of the Space Station Task Force John D. Hodge, Robert F. Freitag, and Frank Simokaitis met at the White House to discuss Space Station with Gil Rye of the National Security Advisor staff. Rye warned the NASA officials to strengthen three buttresses for a Space Station: the Department of Defense, the commercial community, and the international communities. Rye felt that the DOD would be "slow in coming aboard."	Gowan/Morris-Chron
82/10/03	The Space Station Steering Committee met at NASA/HQ.	Gowan/Morris-Chron
82/10/14-15	The Space Station Program Review Committee held a meeting at JSC.	Gowan/Morris-Chron
82/11/01	NASA personnel held a meeting at the Office of Technology Assessment (OTA) in order to brief Philip Chandler on the status of international activities and international potential for participation in the Space Station Program.	Gowan/Morris-Chron
	The Office of Space Science and Applications announced a $400,000 program to investigate innovative uses of the Space Station Program. Subsequently, the innovative utilization of the Space Station Program study was unofficially and incorrectly publicized as a NASA contest for 16 "best ideas" on how to use the Space Station. The resulting flood of suggestions then had to be sorted out from more serious in-depth proposals.	Gowan/Morris-Chron
82/11/03-13	Robert F. Freitag, Deputy Director of the Space Station Task Force, visited	Gowan/Morris-Chron

DATE	EVENT	SOURCE
83/02/11	is the next major NASA initiative." Beggs further explained that he was asking Associate Deputy Administrator Philip E. Culbertson and John D. Hodge, Director of the Space Station Task Force, to organize "an in-house effort concentrating on technology and systems engineering. By using our personnel, facilities and the technical expertise for which we are justifiably proud, we can make sure that we will be 'smart buyers' and effective managers of future industry participation."	
83/02/15	The Chairman of the US House Subcommittee on HUD-Independent Agencies, Rep. Edward P. Boland (D-MA), held a hearing on the appropriations request for the Office of Science and Technology Policy, in which Dr. George Keyworth, National Science Advisor to the President, testified: "On the subject of space station, I would support additional funding if I were shown something that I have not yet been shown--a single well defined application of a space station."	Gowan/Morris-Chron
83/03/07-11	Philip E. Culbertson, NASA Associate Deputy Administrator, accompanied by Dr. Terence T. Finn of the Space Station Task Force, visited Japanese officials in Tokyo to discuss Space Station planning. "It is interesting to note," wrote Dr. Finn, "that NASDA has already assigned to Japanese industry the potential elements for a Japanese contribution to a U.S. space station. Each of seven companies is working on a separate piece."	Gowan/Morris-Chron
83/03/10	The Space Station Program Review Committee held a meeting at NASA/HQ.	Gowan/Morris-Chron
83/03/28-31	The Space Station Technology Workshop was held at the National Conference Center in Williamsburg, VA.	Gowan/Morris-Chron
83/04/11	President Ronald Reagan approved National Security Study Directive Number 5-83. This document established the terms of reference for a study with the objective "to establish the basis for an Administration decision on whether or not to proceed with the NASA development of a permanently based, manned Space Station." The NSSD 5-83 also stated: "In order to assess the policy issues in a balanced fashion, NASA will provide a background paper outlining four example scenarios that represent possible approaches for the continuation of this nation's manned space program. These example scenarios are: Space Shuttle and Unmanned Satellites; Space Shuttle and Unmanned Platforms; Space Shuttle and an Evolutionary / Incrementally Developed Space Station; Space Shuttle and a Fully Functional Space Station."	Gowan/Morris-Chron
83/04/21	On 21 April, a two-week briefing by several aerospace companies was completed. The topic of the briefings was the results of eight NASA/HQ space station studies. The study contracts were issued to the companies in August 1982 and were designed to contribute to the development of specific mission requirements and overall architectural options. The results were to be incorporated into NASA studies of a proposed Shuttle-tended, permanent-orbiting system. The studies were part of a NASA planning activity that was considering a space station as the next possible major initiative in space. The studies identified and analyzed the scientific, commercial, national security, and space operational missions that could be conducted aboard a space station. The contractors developed concepts for a station system. Boeing, TRW, Lockheed, General Dynamics, Martin Marietta, MDAC, Rockwell, and Grumman participated.	M-Star(5/4/83)
83/04/27	The Concept Development Group (CDG) occupied their quarters in a General Services Administration building near NASA/HQ.	Gowan/Morris-Chron

DATE	EVENT	SOURCE
83/05/02-13	LaRC hosted a Mission Synthesis Workshop. The purpose of this workshop was to create three time-phased mission sets supporting science/applications, commercial, and technology-development areas which would represent actual Space Station missions. From those sets, a Space Station "architecture" would be derived along with cost estimates. Those materials would then form the basis for an agency budget decision in mid-August and also assist the Senior Interagency Group. The participants of the workshop were a mixture of government personnel and industry representatives from major aerospace contractors.	Gowan/Morris-Chron
83/05/06	A draft version of a request for proposals was released to eight Space Station contractors.	Gowan/Morris-Chron
83/05/12	The Space Station Program Review Committee held a meeting at LaRC.	Gowan/Morris-Chron
83/05/25	NASA accepted 18 proposals for studies which were to lead to innovative uses of a space station. The studies, funded for a total cost of $400,000 by the Office of Space Science and Applications, were in line with NASA's desire to involve space station users early in the planning process so that their requirements would be fully considered in the design and construction of hardware. The 18 proposals were selected from more than 300 submitted between 1 November 1982 and 1 January 1983. The selected proposals covered a wide range of potential users for a space station, including life sciences, astrophysics, Earth and environmental sciences, materials processing, artistic potential, new technology development, and commercial possibilities. Half of the studies were to be conducted at universities, a third by the private sector, and the rest by government. Final reports were due in September 1983.	M-Star(5/25/83)
83/05/27	The Office of Space Flight released a solicitation to develop a business plan for commercial opportunities to the eight Space Station system analysis contractors (see 6 May 1983).	Gowan/Morris-Chron
83/06/02-13	A Mission Requirements Workshop was held at LaRC during 2-13 May 1983. There were 48 members of the workshop from NASA, USAF, and aerospace industry. The observed design considerations called for a three-man Space Station with four berthing ports and 2000 sq. ft. of living space; cost was $7 billion. One hundred seven missions were examined: 48 in science, 28 in communications operations, and 31 in technology development. MSFC managed the following from the Baseline Mission Set: science and applications (space plasma physics, animal and plant vivarium, and space telescope); commercial (materials processing, electrophoresis operations); technology (materials performance, telepresence and EVA, satellite servicing, and OMV servicing).	HSV-Times(6/8/83)
83/06/07	The Senior Interagency Group Space Station Working Group held a meeting.	Gowan/Morris-Chron
83/06/13	The Space Station Steering Committee held a meeting at NASA/HQ. The members discussed the following question: when will the Space Station Task Force make the transition from a promotional organization to a program organization?	Gowan/Morris-Chron
83/06/13-15	The Space Station Program Planning Working Group held a meeting at NASA/HQ.	Gowan/Morris-Chron
83/06/16	John D. Hodge, Director of the Space Station Task Force, briefed Richard Malow of the US House of Representatives Appropriations Subcommittee staff concerning the Space Station missions synthesis results. Mr. Malow expressed doubts about present and future benefits of the Space Station Program as	Gowan/Morris-Chron

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83/06/16	compared to the cost of using present Space Shuttle orbiters.	
83/06/20	The Department of Defense (DOD) informed Robert McFarland, Deputy Assistant to the President for National Security Affairs, that the DOD could not identify a mission which could be uniquely fulfilled by a manned space station. "Further, no projected requirements could be identified that would be significantly enhanced by the development of a space station... Studies to date have identified no unique, cost effective contributions that man-in-the-loop can make to the execution of military missions such as surveillance, navigation and communications. Further, considering the cost of developing and procuring one or more space stations and the difficulty in making a space station survivable, questions are raised concerning the reliance that could be placed on the availability of a space station in conflict." The Defense Department also noted that it had not been pleased with the history of previous manned space programs.	Gowan/Morris-Chron
83/07/07	The NASA Policy Review Committee and center directors held a meeting at NASA/HQ. This meeting was concerned with NASA's program planning for FY85 through FY89. Space Station was a major topic of discussion. The group decided that Dr. Hans Mark, NASA Deputy Administrator, would ask each of the center directors to prepare an evaluation of what the Station needed, whether NASA was ready to provide what was necessary, and if there were any "show stoppers." The center directors responded that they needed to know more about the capabilities and technical characteristics of the Station on which the Task Force had been working. A strategy was suggested to combat the continued lack of support for Space Station from the Department of Defense.	Gowan/Morris-Chron
83/07/18	NASA Administrator James Beggs announced at a NASA and AIAA Symposium that NASA appeared to have approval within a year for Space Station, which was to be in orbit by 1991. Funding in the FY85 budget for Space Station was in the range of $100-200 million.	HSV-Times(7/18/83)
	The Space Station Steering Committee held a meeting at NASA/HQ. Discussions at the meeting resulted "in a consensus that the budget territory has been mapped."	Gowan/Morris-Chron
83/07/20-21	The Space Station Program Review Committee held a meeting 20-21 July 1983.	Gowan/Morris-Chron
83/07/26-27	The NASA Advisory Council held a meeting in Washington, D.C. to review NASA's five-year program and preliminary budget planning for the following year. The Council believed that "a space station development program should be started only with an adequate technology base, and that considerable technology advance is still required. Adequate funding for this purpose must be provided to assure a good start and an effective program." The Council maintained that a possible use for the Space Station was engineering research and that Station users might be industry interested in internal research and development (IR&D) projects, but it recommended that "the Space Station Technology Steering Committee develop further the idea for flying IR&D projects on the Space Shuttle and, if it appears feasible, present a better-defined concept to the Council at a subsequent meeting."	Gowan/Morris-Chron
83/08/03	President Ronald Reagan met with 11 corporate executives to hear their arguments for strong commercial participation in the Space Station Program.	Gowan/Morris-Chron

DATE	EVENT	SOURCE
83/08/04	The Space Station Steering Committee held a meeting at NASA/HQ. The point of the meeting was to ensure that all elements of NASA involved with the Space Station understood and agreed with their responsibilities. Presentations were delivered by Jesse W. Moore of the Office of Space Flight, Raymond S. Colladay of the Office of Aeronautics and Space Technology, Robert E. Smylie of the Office of Space Tracking and Data Systems, and Dr. Burton I. Edelson of the Office of Space Science.	Gowan/Morris-Chron
83/08/10	The Senior Interagency Group held a meeting in which NASA Administrator James Beggs solicited support from Secretary of Defense Caspar Weinberger for NASA's Space Station Program.	Gowan/Morris-Chron
83/08/29	The Space Station Management Colloquium held its first session at the Wallops Flight Facility, Wallops Island on 29 August and 1 September. Deputy directors and senior project managers attended the meeting. Center representatives were asked to brief their center directors on the outcome of that meeting.	Gowan/Morris-Chron
83/09/01-02	The Space Station Program Review Committee held a meeting at the Wallops Flight Facility, Wallops Island.	Gowan/Morris-Chron
83/09/13	The Space Station Steering Committee held a meeting at NASA/HQ.	Gowan/Morris-Chron
83/10/24	The Space Station Steering Committee held a meeting at NASA/HQ.	Gowan/Morris-Chron
83/10/27	The Chairman of the Space Applications Board of the National Research Council's Commission on Engineering and Technical Systems summarized the position of the Space Applications Board on Space Station: "...a manned space station program which included a remote sensing platform in near-polar orbit could be useful and beneficial to the many space applications interests."	Gowan/Morris-Chron
83/10/31	Dr. Milton A. Silveira was formally make chair of the Space Station Steering Committee. Dr. Silveira replaced Mr. Robert E. Smylie, who retired in October 1983.	Gowan/Morris-Chron
83/11/09	The Concept Development Group held a meeting in which it presented interim results of the Space Station Crew Safety Alternatives Study at NASA/HQ on 1 November 1983.	Gowan/Morris-Chron
83/11/15	The US Senate Subcommittee on Science, Technology, and Space held hearings on the development of the civilian Space Station. A number of witnesses testified, including Peter W. Wood of Booz-Allen and Hamilton, Chairman of the Space Applications Board of the National Research Council, Thomas M. Donahue, Chairman of the Space Science Board of the National Academy of Sciences, and Thomas Rogers, Project Director of the Office of Technology Assessment of Space Station. Members of the Space Station Task Force considered Rogers' statement to be negative. John D. Hodge, Director of the Space Station Task Force, noted, "It is felt this testimony (of Rogers) is, in many cases, inaccurate...Rogers and his staff are aware of our reaction and have suggested we sit down for a point-by-point, line-by-line critique of the paper. We have not acceded to this suggestion feeling it was better to let sleeping dogs lie."	Gowan/Morris-Chron
83/11/17	President Ronald Reagan was expected to decide within a few weeks of mid-November 1983 to favor the building Space Station. The Station was to have	HSV-Times(11/17/83)

DATE	EVENT	SOURCE
83/11/17	capacity for six to eight men and be in operation by the 1991-92 timeframe. In the FY85 NASA budget $200 million was expected for work on the Space Station. It was to include four to six cylindrical modules (60 ft. long and 15 ft. wide). It was to be in a 200-mile orbit with the Shuttle putting the elements in space. It would be expandable to a 12-18-man Station with a total cost of $20 billion. The Space Station could repair satellites, do research, and act as a way station to the moon and planets. Space Station would weigh approximately 300,000 lbs. The comment was made that the Space Station would be played up by Reagan amidst a possible presidential race with Senator John Glenn.	
83/11/28-30	The Space Station Technology Steering Committee held a meeting at JSC.	Gowan/Morris-Chron
83/12/01	The White House Cabinet Council for Commerce and Trade held a meeting in which NASA Administrator James Beggs presented options on the cost and content of a space station program to President Ronald Reagan.	Gowan/Morris-Chron
83/12/15	Philip E. Culbertson, Associate Deputy Administrator, and others met with Dr. Maxime A. Faget, President of Space Industries Inc., to discuss a space station dependent free-flying industrial facility. Faget had initially looked at the possibility of building a commercially funded space station, but concluded that cost made such impossible. Subsequently, NASA and Space Industries Inc. would sign a memorandum of understanding to explore the feasibility of an industrial space facility (ISF). See 28 February 1984.	Gowan/Morris-Chron
84/01/03	MSFC released a request for proposals inviting industry to describe how to define the concept of an Orbital Maneuvering Vehicle (OMV) for moving satellites and other orbiting objects hundreds of miles above the Earth. The companies had until 14 February 1984 to respond to the request, after which time MSFC was to select at least three companies for contracts ranging from $1.7-1.9 million over a 12-month period. The OMV was to supplement the Shuttle due to its limitations in maneuvering to higher altitudes. The OMV would be 15 ft. in diameter and 3 ft. in length. The OMV would be deployed from the Shuttle in the early years for short duration missions; later, it would remain in orbit for extended periods of time. Its most essential attribute was that it would be of support to the future Space Station. The OMV would be operationally available for assembly/buildup on an initial Space Station in the early 1990s.	MSFC-Rel-84-1
84/01/16	Secretary of Defense Caspar Weinberger informed NASA Administrator James Beggs that the Defense Department found not only no military justification for a manned Space Station, but that such a program might adversely affect national security. "My reservations about your proposal," wrote Weinberger, "relate to cost and impact on the STS...In today's constrained fiscal environment, unprogrammed cost growths can only be funded at the expense of other programs... You would not wish to cancel any of your approved civil programs to meet increased funding requirements for Station any more than we in Defense would like to see our national security budget jeopardized."	Gowan/Morris-Chron
84/01/25	In his State of the Union address before Congress, President Ronald Reagan saw space as the next and immediate frontier: "Nowhere do we so effectively demonstrate our technological leadership and ability to make life better on Earth...Tonight, I am directing NASA to develop a permanently-manned Space Station and to do it within a decade."	Gowan/Morris-Chron
84/02/09	NASA Administrator James Beggs held a meeting with eight top industry	Gowan/Morris-Chron

DATE	EVENT	SOURCE
84/02/09	officials to discuss political aspects of the Space Station Program. Attendees made plans for similar discussions in the future.	
	NASA established seven inter-center teams to conduct advanced development activities for high potential technologies to be used in Space Station design and development. These assignments were to identify emerging technologies for advanced development for Station design and to establish test beds into which prototype technology hardware could be integrated, tested, demonstrated, and evaluated. JSC was designated as lead in Data Management System, Environmental Control and Life Support System, and Thermal Management System.	MSFC-Rel-84-11
	The US House Subcommittee on Space Science and Applications held a hearing concerning NASA's Task Force on the Scientific Uses of the Space Station (TFSUSS). Dr. Peter Banks of Stanford University prepared a statement for delivery before the subcommittee.	Gowan/Morris-Chron
84/02/10	John D. Hodge, Director of the Space Station Task Force, distributed the POP 84-1 Guidelines for Space Station definition. A Program Operating Plan (POP) is a schedule of performance and associated budgets; every office generates them as a matter of course for budget and information planning. Since POPs are reviewed (and often revised) several times, they are numbered. Since submissions of POP 84-1 were due 30 March 1984, the Space Station Task Force, in order to become a program office, needed to generate their's as quickly as possible, requiring cooperation from all centers.	Gowan/Morris-Chron
84/02/16	JSC was chosen as lead center for work on the US Space Station Program. Hans Mark, NASA Deputy Administrator, said MSFC was never in the running for lead center, but it would be "deeply involved" in many aspects of Station. The division of Station work among the different centers was to be accomplished by the end of 1984.The centers would have roles in evaluating contract proposals from aerospace companies. Alabama Senator Howell Heflin was characterized as surprised by the announcement of JSC as lead center. Heflin also wanted to know what MSFC's roles would be. Systems engineering and integration, business management, operations, integration, customer integration, and Level A support were to be JSC's basic responsibilities. Gerald D. Griffin, JSC Director, was given a directive by NASA Administrator James Beggs to form a program office in order to execute those responsibilities.	HSV-Times(2-16-84)
84/02/19	John D. Hodge, Director of the Space Station Task Force, stated that Space Station Phase B and Advanced Technology work would begin around July or August 1984. Hodge also discussed NASA's plans for establishing test beds at MSFC, JSC, and LeRC to stimulate various subsystems that would go into the Space Station. He noted that NASA's efforts were geared toward Phase B, which was defined as the advanced definition effort where two or more major contractors were hired to develop their best ideas on design, after which NASA would pick the best proposal in advance of building hardware in Phase C/D. The Concept Development Group was set up to make NASA a smarter buyer going into Phase B by getting a handle on costs and the right approach to developing Space Station. Four concepts were examined: planar concept; high-T; delta truss; and rotating. Also reference was made to the Space Station as the "Hodge Hotel."	HSV-Times(2/19/84)
84/02/27	MSFC was assigned lead center responsibilities for three Space Station Test Beds. The test beds involved the Attitude Control and Stabilization System, the Auxiliary Propulsion System, and the Space Operations Mechanisms.	MSFC-Chron(1984)

DATE	EVENT	SOURCE
84/02/28	NASA and Space Industries Inc. of Houston signed a memorandum of understanding "to explore the feasibility of development and demonstration of a specialized commercial orbiting structure called the Industrial Space Facility (ISF)."	Gowan/Morris-Chron
84/02/29	The Space Station Task Force chose its priorities for the construction of new facilities at various NASA centers related to Space Station design and development. Choosing construction of facilities requirements was an annual process.	Gowan/Morris-Chron
84/03/01	MSFC's roles in Space Station work were outlined. MSFC was given lead status in three Advanced Development activities and was to work in two of four "inter-center teams" concentrating on identifying and developing technology. The development team activities were to take place during a two-year definition period, but they may continue after that period. MSFC had teams dealing with development and testing of technology for the Attitude Control and Stabilization System, the Auxiliary Propulsion System, and the Space Operations Mechanism. Marshall was also slated to participate in the Electrical Power System team and the Thermal Management System team. In this article, the "team" concept was described as a "new, innovative approach;" the teams were to tackle advanced development and testing of "high-potential technologies." The article contains a complete explanation of the inter-center team breakdown.	HSV-Times(3/1/84)
84/03/02	A draft request for proposals (RFP) was approved for transmittal to Level B in order to guide the definition procurement effort. The draft RFP was the result of the work of the Space Station Task Force's Procurement Development Group.	Gowan/Morris-Chron
84/03/05	NASA held the Mission Synthesis Workshop at Hampton, VA on 5-8 March 1984.	Gowan/Morris-Chron
84/03/07	Bob Marshall, the Director of MSFC's Program Development, noted, "We're not very pleased with not being named as lead center." While JSC was named as lead center for Station, and MSFC would develop the "Big Dumb Booster," an unmanned version of the Shuttle. MSFC was assigned about half of the significant roles in Space Station development. One role which was not specifically given to Marshall but which was expected to go to Huntsville, was the Electric Power System (EPS). MSFC at the time had a "breadboard" or test model for the EPS.	HSV-Times(3/7/84)
84/03/12	The Space Station Task Force submitted its IOP 84-1 estimates. An IOP is an institutional operation plan and lists office personnel. John D. Hodge, Director of Space Station Task Force, wrote: "The Administrator has agreed to the continuation of the Task Force's policy of utilizing a significant number of Center detailees to staff the Task Force. He felt that this practice would provide a constant infusion of the kind of fresh, highly motivated talent not always available at Headquarters, while permitting a very desirable cross-pollination of ideas and understanding between Headquarters and the Field Centers." The Space Station Task Force wanted to increase its number of personnel from 68 to 100.	Gowan/Morris-Chron
84/03/14	NASA selected Space Station Phase B (preliminary design and development) contracts to be managed by MSFC, GSFC, and LeRC. These bundles of contracts were referred to as "work packages."	Gowan/Morris-Chron
	The Space Station Steering Committee held a meeting at NASA/HQ.	Gowan/Morris-Chron

DATE	EVENT	SOURCE
84/03/16	NASA Administrator James Beggs defended the FY85 request for $150 million for Space Station definition as "the minimum amount sufficient to begin an endeavor of this importance and scope..."	Gowan/Morris-Chron
	NASA selected McDonnell Douglas Astronautics of Huntington Beach, CA and TRW of Redondo Beach, CA for negotiations that were to lead to two parallel Space Station study contracts. These contracts were to be for the development of functional, performance, and technology requirements, the definition of system architecture for the Space Station Data System, and the relationship of that system to overall NASA end-to-end flight and ground information system. Each contract was to be for a firm fixed price of approximately $2 million covering approximately 27 months beginning in March. JSC was to negotiate and administer the TRW contract and GSFC the McDonnell Douglas contract. Four other companies submitted proposals for the studies: Boeing Aerospace of Seattle, General Electric of Philadelphia, Lockheed Missiles and Space Co. of Sunnyvale, CA, and Rockwell International of Downey, CA.	M-Star(3/28/84)
84/03/18	Wyle Laboratories of Huntsville was considering operating a fee-for-service laboratory on the Space Station. At this time, Wyle was conducting preliminary studies on the concept, and the decision was to be made on the project when more was known about the configuration of the Space Station and its commercial applications. Wyle was also talking to NASA and potential users about the project.	HSV-Times(3/18/84)
84/03/22	The Space Station Task Force generated a list of "controlled milestones" for the Space Station Program. The milestones formed the framework for the definition and development phases of the Program and could not be changed without approval of the Director of the Space Station Task Force.	Gowan/Morris-Chron
84/03/23	NASA center directors' controlling offices with responsibility for parts of the Space Station held a meeting at JSC on 23 March 1984.	Gowan/Morris-Chron
84/03/29	The Program Operating Plan 84-1 was submitted to the Space Station Task Force at NASA/HQ.	MSFC-Chron(1984)
	The US House of Representatives approved $150 million requested by the Reagan Administration for starting the design and development work on the Space Station Program for FY85. The vote in the House was 389-11 in favor of the $7.49 billion NASA budget. The figure discussed for total cost of the Space Station was $8 billion. An argument used by some in the debate over Space Station was that it would cost $30 billion by the year 2000.	HSV-Times(3/29/84)
84/03/30	Several members of the Ohio congressional delegation were up in arms over what they saw as an attempt by NASA to slight LeRC in favor of MSFC in the division of Station work. Some Ohio legislators went so far as to say that their support of Station depended upon how much of the pie LeRC received. They wanted LeRC named lead center of one of the seven inter-center teams given the task of developing advanced technology. MSFC had already been given lead-center status on three and JSC was given the lead on three others. MSFC officials believed they would be given lead on the seventh of the inter-center teams, the one dealing with the Electric Power System. LeRc claimed to have expertise in the Electric Power System area that MSFC did not have.	HSV-Times(3/30/84)
84/04/09	Neil Hutchinson, the flight director who helped guide the Shuttle Columbia	MSFC-Rel-84-28

DATE	EVENT	SOURCE
84/04/09	into orbit on its maiden voyage, was named Space Station Program Manager at JSC. Mr. Hutchinson had been with NASA 22 years at the time of this news release. He was flight director for the last Apollo mission, the 3 Skylab missions, the Apollo-Soyuz Test Project, and the first four Shuttle flights. John W. Aaron was named Deputy Manager.	
84/04/10	The International Cooperation Working Group held their first meeting at NASA/HQ.	Gowan/Morris-Chron
84/04/11	President Ronald Reagan asked the Senior Interagency Group for Space to conduct a study to establish the basis for an Administration decision on whether to proceed with NASA's development of a permanently manned Space Station. The group was headed by William P. Clark, the Assistant to the President for National Security Affairs. The group was to consider four example scenarios of possible approaches for continuing the US manned space program, following final development of the Shuttle. The scenarios: 1)Shuttle and unmanned satellites; 2) Shuttle and unmanned platforms; 3)Shuttle and evolutionary Space Station; and 4) Shuttle and fully functional Station. Issues discussed included: how a Space Station would help maintain US leadership in space and how foreign policy and national security issues would be affected. A working group chaired by NASA, with members from the Departments of Defense and State, would report findings.	MSFC-Rel-83-24
84/04/27	The International Cooperation Working Group held a meeting at JSC.	Gowan/Morris-Chron
84/05/04	The Space Station Steering Committee held a meeting at NASA/HQ.	Gowan/Morris-Chron
84/05/08	The International Cooperation Working Group held a meeting at NASA/HQ.	Gowan/Morris-Chron
84/05/10	Philip E. Culbertson, Acting Director of Interim Space Station Program Office, delineated POP 84-2 goals for JSC: "The primary purpose of the POP 84-2 is to resolve outstanding programmatic issues from 84-1 and to solidify the planning bases for FY85 through FY90 to provide an input for the FY86 Budget to OMB and eventually Congress."	Gowan/Morris-Chron
84/05/23	The International Cooperation Working Group held a meeting at NASA/HQ.	Gowan/Morris-Chron
84/06/01	In June 1984, MSFC awarded $1 million Phase A contracts to Boeing Aerospace and Martin Marietta for studies leading to Phase B for the Orbital Transfer Vehicle (OTV). Before this, OTV work had stalled at the Phase B level. The major question for the OTV during Phase A was to be where the vehicle would be based, in space or on the ground. Phase B was scheduled for the 1986-87 timeframe with the Phase B request for proposals in late 1985. Phase C/D was to begin in FY88. Initial operating capability was to be either in 1992 or 1994-95, depending upon whether the OTV system was ground-based or space-based.	HSV-Times(9/17/84)
84/06/04	The International Cooperation Working Group held a meeting at NASA/HQ.	Gowan/Morris-Chron
84/06/14	NASA personnel held a Space Station Program review.	Gowan/Morris-Chron
84/06/19	NASA personnel held a utilization budget review for NASA/HQ and center personnel at GSFC.	Gowan/Morris-Chron
84/06/21-22	NASA Space Station personnel and European, Canadian, and Japanese government representatives held a meeting to review schedules and plans at	Gowan/Morris-Chron

DATE	EVENT	SOURCE
84/06/21-22	NASA/HQ. This meeting was referred to as the First International Space Station Workshop.	
84/06/28	NASA/HQ announced that four centers would take part in the Definition and Preliminary Design Studies for Space Station. MSFC would reportedly have 40% of the work, including responsibility for the following: pressurized modules; the environmental control and life support system; OMV; definition of a plan for equipping the Common Modules, of which one would serve as a laboratory and two or three as Logistics Modules. Luther Powell said, "We're satisfied with the responsibilities that have been assigned to the Marshall Center." A number of alternative design concepts were being considered for Space Station and the preliminary design activities were to aid in narrowing the multiple versions of Station to a single concept. JSC, GSFC, and LeRC also had responsibilities. A request for proposals was to be released later in the summer which would lead to the awarding of contracts. Awarding of contracts was scheduled for early 1985.	M-Star(7/5/84)
84/07/03	The International Cooperation Working Group held a meeting at NASA/HQ. The agenda of this meeting included a review of request for proposals language and a critique of the first international workshop.	Gowan/Morris-Chron
84/07/09	The Space Station Steering Committee met at NASA/HQ.	Gowan/Morris-Chron
84/07/11	Contracts were awarded to companies for studies of the Orbital Transfer Vehicle (OTV). Martin Marietta in Denver and Boeing in Seattle each were awarded $1 million contracts to run for 15 months. The studies were to examine both space-based and ground-based concepts of the OTV. The space-based version would be maintained and refueled at the Space Station, whereas a ground-based OTV was to be transported to and from space by the Shuttle. The OTV concept involved an unmanned upper stage initially, then it would develop into a manned vehicle able to ferry a crew capsule.	MSFC-Rel-84-57
84/07/18	President Ronald Reagan signed Public Law 98-371, which required NASA to report the results of the Man-Tended Option study to the US House of Representatives and Senate Appropriations Committees "prior to the selection by the Administrator of a configuration for the permanently manned Space Station." (See 25 November 1983)	Gowan/Morris-Chron
84/07/24	A set of aerospace companies was selected for negotiations leading to contracts for Orbital Maneuvering Vehicle (OMV) System Definition Studies: LTV Aerospace and Defense of Dallas, Martin Marietta of Denver, and TRW of Redondo Beach, CA. The contracts were to be managed by MSFC and were to be 12 months in duration with a combined dollar value of $5 million. One of these companies was speculated ultimately to receive the contract for building the hardware for the approved OMV. The OMV would have the ability to retrieve and reboost satellites from and to higher orbits than are accessible by the Shuttle. As initially conceptualized, the OMV was to be deployed from the Shuttle for short-duration missions; later it would remain in orbit for extended periods of time for use in both Shuttle-based and Station-based missions. The OMV was expected to be available for assembly and buildup of an initial Station in the early 1990s.	MSFC-Rel-84-67
84/08/01	NASA/HQ established the Office of Space Station to direct the agency's efforts in building the Space Station. Heading the new office was to be Philip E. Culbertson as Associate Administrator for Space Station and John D. Hodge as Deputy Associate Administrator. The new office was provide overall policy and	M-Star(8/1/84)

DATE	EVENT	SOURCE
84/08/01	program direction for the Space Station. The Space Station Program Office at JSC was to report to the new office at NASA/HQ, as would other Space Station offices.	
84/08/07	The International Cooperation Working Group held a meeting at NASA/HQ. The agenda for this meeting was to review the first draft of a generic Phase B memorandum of understanding.	Gowan/Morris-Chron
84/08/10	Associate Administrator for Space Station Philip E. Culbertson recommended to the NASA Comptroller a FY86 budget for the Office of Space Station totalling $280 million.	Gowan/Morris-Chron
84/08/13	The Space Station Steering Committee met at NASA/HQ. This was the first meeting of the Steering Committee since the Office of Space Station was formed with Philip Culbertson as Associate Administrator for Space Station and John D. Hodge as Deputy Associate Administrator for Space Station.	Gowan/Morris-Chron
84/08/23	NASA personnel held a Level A/B Review. Such reviews, held at intervals throughout the year, were opportunities for the Office of Space Station and other NASA/HQ personnel to exchange information and opinions with members of the systems engineering and integration team from JSC.	Gowan/Morris-Chron
84/09/06	The International Cooperation Working Group held a meeting at NASA/HQ.	Gowan/Morris-Chron
84/09/10	During the week of 10 September, a three-day Space Station technology conference was held at Williamsburg, VA, near the LaRC. The purpose of this conference was to ensure that all Space Station technology was available to the people who would be selling Space Station hardware and to cut across "parochial lines" between the different NASA centers.	HSV-Times(9/20/84)
	The Space Station Steering Committee met at NASA/HQ.	Gowan/Morris-Chron
84/09/14	NASA issued a request for proposals to US industry for definition and preliminary design of a permanently manned Space Station to be operational in low Earth orbit in the 1990s. Proposals were due 15 November. The RFP contained four work packages covering the definition and preliminary design of Station elements. Following the 18-month Phase B study, NASA planned to move into the final design and development stage in 1987. Proposers for the definition and preliminary design phase were to have the capability to perform and manage the design, development, and test phase (Phase C/D) of their appropriate work package.	MSFC-Rel-84-79
84/09/16	The Phase B requests for proposals (RFP) issued showed a 7% reduction in contract values compared to the initial RFP proposed on 20 August. The total value of the four work packages during Phase B was $134 million instead of $144.8 million. Work Package One was worth $51.7 million under the original Phase B plan, but after the reduction it was $48 million (a 7.2% reduction). The other work packages saw similar reductions. JSC (WP-02) had an original allotment of $54 million, but it was reduced by 9.8%. GSFC (WP-03) had an original package worth $20 million, but it was reduced by 3.4%. LeRC (WP-04) was given a $12 million package, but had it reduced by 4.2% after the reductions in Phase B amounts.	HSV-Times(9/27/84)
84/09/20-21	NASA personnel and representatives from international partner agencies held	Gowan/Morris-Chron

DATE	EVENT	SOURCE
84/09/20-21	a Space Station International Workshop. Issues discussed included the introduction of draft agreements for Phase B, an operations cost working group, and policy regarding technology transfer.	
84/09/21	The Space Station Projects Office functions were augmented within the Program Development Directorate. The office was to assume responsibility for the Space Station assignments made to MSFC, pending formal approval by the NASA Administrator of a new Marshall project office reporting to the Director. At the time of this creation, MSFC was to have responsibility for the Common Module, Laboratory Module, and Logistics Module. Also, a Propulsion and Vehicle Accommodation function was to be established to incorporate responsibility for the propulsion subsystem development and the Orbital Maneuvering Vehicle/Orbital Transfer Vehicle accommodation systems.	M-Star(9/26/84)
84/09/23	James M. McMillion was appointed Chief Engineer for the Space Station Program at Marshall. McMillion was to be assigned administratively to the Office of the Associate Director for Engineering in the Science and Engineering Directorate and functionally to the Manager of the Space Station Projects Office.	M-Star(9/26/84)
	The Space Station Systems Engineering Division was established within the Systems Analysis and Integration Laboratory of Science and Engineering.	MSFC-Chron(1984)
84/09/24	NASA sponsored a workshop for the Space Station Mission Requirements Working Group at Woods Hole Study Center, MA. Participants included representatives from the US government, non-US governments, and selected US commercial industries. At the workshop, mission information was updated as usual, and information supplied by non-US interests were accepted and integrated into the requirements data base.	Gowan/Morris-Chron
84/09/26	NASA personnel sponsored a "preproposal" conference concerning the RFPs for Phase B (preliminary design and development) activities of the Space Station at JSC. An amendment to the RFP was issued.	Gowan/Morris-Chron
84/09/27	General Dynamics and Grumman Aerospace formed a team to pursue the assignment of Work Package One at MSFC. Boeing Aerospace and Martin Marietta Aerospace had previously announced plans to seek Work Package One. Also announced was the naming of William Rector as Vice President for Space Station at General Dynamics.	HSV-Times(9/27/84)
84/10/09	Associate Administrator for Space Station Philip E. Culbertson established the Space Station Management Council.	Gowan/Morris-Chron
	The Space Station Steering Committee met at NASA/HQ.	Gowan/Morris-Chron
84/10/11	The International Cooperation Working Group held a meeting at NASA/HQ. The agenda of the meeting included a review of technical guidelines for participation in the Space Station Program and issue papers supporting Space Station Phase B agreement negotiations.	Gowan/Morris-Chron
84/10/19	The MSFC Space Station Projects Office was activated with Mr. Luther Powell, Manager, and Mr. Cecil Gregg, Deputy Manager.	MSFC-Chron(1984)
84/10/24	The International Cooperation Working Group held a meeting at NASA/HQ.	Gowan/Morris-Chron

DATE	EVENT	SOURCE
84/10/24	The Marshall Star announced that NASA Administrator James Beggs approved the establishment of a Space Station Projects Office at MSFC. According to the announcement relayed by MSFC Director William Lucas, "...the Space Station Projects Office is moved organizationally from Program Development and becomes a project office reporting to the Director's office." Luther Powell, who had served as Manager of the 25 kW Power Module Project Office since March 1979, was to be Manager of the new office. Cecil C. Gregg was to serve as Deputy Manager. The Space Station Projects Office was to have responsibility for the overall project management of the Station elements assigned to MSFC, consisting of the Common Module, Laboratory Module, and a Propulsion and Vehicle Accommodation element. The new office was also to manage the systems engineering and integration responsibilities assigned to Marshall.	M-Star(10/24/84)
84/10/30	The Space Station Management Council held its first meeting at NASA/HQ. The Council was to be chaired by the Associate Administrator for Space Station, and membership was to consist of the Associate Administrator and the Deputy Associate Administrator, as well as the Level B Program Manager at JSC and his Deputy Manager, and the Directors of GSFC, JSC, KSC, LeRC, and MSFC. Level C Space Station Program Managers were also invited to the meetings, although they were not members of the Council. Meetings were to rotate between NASA/HQ and field centers and were to be held every six to eight weeks. The meetings were to focus on management issues. For the first meeting, management structure, Space Station level relationships, systems engineering and integration, FY85 program operating plans, and international cooperation were to be discussed. Also an executive session was held during which a wide variety of topics was covered.	SSMC-Minutes(10/30/84)
84/11/05	The International Cooperation Working Group held a meeting at NASA/HQ.	Gowan/Morris-Chron
	The Space Station Steering Committee met at NASA/HQ.	Gowan/Morris-Chron
84/11/13	The congressional Office of Technology Assessment (OTA) released a 230-page report on 13 November, saying that Congress should not commit to building a large, manned space station until space goals are outlined more clearly. OTA said that the potential uses of the proposed Space Station did not justify its $8 billion price tag. The OTA report recommended the development of permanent space equipment in stages, as well as the increased use of private industry. The study which culminated in this report was requested by Congress in 1982 and was under the direction of Thomas Rogers and a panel of other scientists and advisers.	HSV-Times(11/13/84)
	The Task Force on Scientific Uses of the Space Station, also known as the Banks Committee, held a meeting at GSFC in order to review the utilization and performance requirements data base reference set at GSFC.	Gowan/Morris-Chron
84/11/14	NASA spokesman William O'Donnell made a response to the report of the Office of Technology Assessment (OTA) that NASA's plan for a Space Station was ill-advised. NASA's response maintained that the space agency was simply carrying out the directions of the President and Congress and attempting to develop the active participation of international partners in the Space Station.	HSV-Times(11/14/84)
84/11/15	Proposals in response to the Space Station Definition Study request for proposals were received from industry. Thirteen proposals were received in response to the RFP issued 14 September 1984. Proposals for each of the four work packages were submitted. For MSFC's Work Package One, three major	M-Star(11/28/84)

DATE	EVENT	SOURCE
84/11/15	contractors submitted proposals, with each having a number of subcontractors. Boeing, Martin Marietta, and Grumman were the three major contractors.	
84/11/19	Peter M. Banks, Chairman of the Task Force on the Scientific Uses of the Space Station, wrote Dr. Burton I. Edelson of the Office of Space Station to express support for the Extended Duration Orbiter. Banks closed his letter by saying, "We urge you to present the case for the extended duration orbiter as an important request from the national space research community."	Gowan/Morris-Chron
84/11/20	Teledyne Brown Engineering was selected as prime contractor and Boeing was selected as subcontractor for a study defining requirements and configuration of the Microgravity Materials Processing Facility (MMPF). This $2 million contract was to run for two years and be managed by MSFC. This study also was to identify potential research and development activities in which MMPF could be used and establish requirements and protocols for government, academic, and private sector use of the MMPF. The MMPF was described as being used for materials sciences, including crystal growth, solidification of alloys and composites, and containerless processing, including biotechnology and several applications in physics and chemistry. [contract # NAS8-36122]	HSV-Times(11/20/84)
84/11/30	A contract worth $2 million was awarded to Teledyne Brown Engineering to study aspects of an orbiting research facility. The two-year contract was for a basic conceptual study of equipment and other aspects of a pressurized microgravity materials science laboratory module. MSFC was charged with management of the design of a Common Module, several of which would be used for the Space Station. This Common Module was to be designed for living quarters, lab research, manufacturing, logistics, and storage. Teledyne Brown was to study the requirements that scientific research and commercial manufacturing would impose on the Common Module and to identify specific equipment which would go into the module, potential commercial research and development activities in which the module could be used, and to establish operational requirements. The module was called the Microgravity Materials Processing Facility.	MSFC-Rel-84-96
84/12/03	The Space Station Steering Committee met at NASA/HQ.	Gowan/Morris-Chron
84/12/13	Associate Administrator of Space Station Philip E. Culbertson announced the formation of a Commercial Advocacy Group, which was to carry on the Commercial Working Group activities in developing domestic and international commercial participation under the Space Station Task Force. The Group was to function as part of the Utilization and Performance Requirements Division.	Gowan/Morris-Chron
84/12/14	NASA submitted the Space Station Management Plan and Procurement Strategy Report to Congress.	Gowan/Morris-Chron
	The Office of Space Station submitted requirements for construction of facilities which the Office of Space Station intended to support for the period from FY87 through FY92.	Gowan/Morris-Chron
84/12/18	The Space Station Management Council held its second regularly scheduled meeting at GSFC. At this particular meeting, the following topics were discussed: Space Station management; systems engineering and integration; operations planning; international planning and management; and GSFC's Space Station presentation. Space Station schedules were also discussed during the meeting.	SSMC-Minutes-(12/18/84)

DATE	EVENT	SOURCE
84/12/20	The initial evaluation of the Space Station Phase B proposals, the value of which was $48 million, was completed.	MSFC-Chron(1984)
85/01/07	NASA and European Space Agency (ESA) representatives reached an agreement on the language describing ESA Phase B (preliminary design and development) study activities, as negotiations were to continue in Paris on 7-8 January.	Gowan/Morris-Chron
85/01/09	The Space Station Steering Committee met at NASA/HQ.	Gowan/Morris-Chron
85/01/23	Associate Administrator for Space Station Philip E. Culbertson established a Task Force on the Man-Tended Option for Space Station. The Task Force was to be chaired by Richard F. Carlisle.	Gowan/Morris-Chron
85/01/30	The International Cooperation Working Group held a meeting at NASA/HQ.	Gowan/Morris-Chron
85/02/06	President Ronald Reagan, in his State of the Union address, reaffirmed his commitment to a permanently manned Space Station. "We have seen the success of the space shuttle. Now we are going to develop a permanently manned space station and new opportunities for free enterprise..."	Gowan/Morris-Chron
	The Space Station Attitude Control Advanced Development Team had its first technical meeting at MSFC on 6 February 1985, with JSC, JPL, LaRC, and MSFC personnel attending.	MSFC-Chron(1985)
85/02/12-13	The Chairman of the US House Subcommittee on Space Science and Applications, Rep. Bill Nelson (D-FL), visited on-going Space Station Program activities at JSC and MSFC.	Gowan/Morris-Chron
85/02/13	The Space Station Steering Committee met at NASA/HQ.	Gowan/Morris-Chron
85/02/19	NASA personnel briefed the Task Force on the Scientific Uses of the Space Station on utilization and performance functional requirements at MSFC.	Gowan/Morris-Chron
85/02/26	NASA personnel held a Level A/B planning meeting and Level A/B/C meetings at the Lunar and Planetary Institute near JSC. The purpose of this meeting was to clarify and establish accountability for accomplishing management tasks at Levels A and B, i.e., the Office of Space Station and the Space Station Level B located at JSC. The desire was to make sure that working relationships were consistent with policies established by Associate Administrator for Space Station Philip E. Culbertson, Deputy Associate Administrator for Space Station John D. Hodge, Level B Program Manager Neil Hutchinson, and Level B Deputy Program Manager John Aaron.	Gowan/Morris-Chron
85/02/27	The International Cooperation Working Group held a meeting at the Lunar and Planetary Institute at JSC.	Gowan/Morris-Chron
85/03/08	Peter M. Banks, chairman of the NASA Space and Earth Science Advisory Committee's Task Force on the Scientific Uses of the Space Station, delivered testimony on the recommendations of the Task Force summer study of 13-14 August 1984 to the US Senate Subcommittee on Science, Technology, and Space.	Gowan/Morris-Chron
	The Office of Space Station transmitted guidelines for a Program Operation Plan (POP 85-2) to the Systems Engineering and Integration Office at JSC (Level B).	Gowan/Morris-Chron

DATE	EVENT	SOURCE
85/03/11	Level A/B/C Advanced Development Program Managers completed their meeting held at JSC. The purpose of this meeting was to reestablish goals, schedules, and criteria for advanced technology development selection.	Gowan/Morris-Chron
85/03/12	The Space Station Task Force Research and Development Program Operating Plan was submitted to JSC.	MSFC-Chron(1985)
85/03/14	Senator Jake Garn (R-UT), Chairman of the US Senate Appropriations Subcommittee on HUD-Independent Agencies, held hearings to review Space Station automation and robotics. Dr. Robert A. Frosch and Aaron Cohen both appeared as as witnesses.	Gowan/Morris-Chron
85/03/14-15	The Level B Systems Integration Board held a meeting at JSC.	Gowan/Morris-Chron
85/03/17-18	Canadian Prime Minister Brian Mulroney accepted President Ronald Reagan's invitation to participate in the NASA Space Station Program. The meeting between Mulroney and Reagan was held in Quebec, and the meeting often is referred to as the "Shamrock Summit."	Gowan/Morris-Chron
85/03/20	The Marshall Star announced that NASA selected six industry teams for negotiations leading to definition and preliminary design contracts for Space Station. The contractors chosen to define Work Package One were Boeing Aerospace of Seattle and Martin Marietta of Denver. Contracts for Space Station work at JSC, GSFC, LeRC, as well as MSFC, were set to begin 15 April. They were to run for 21 months. The approximate value of the MSFC contract was to be $24 million (JSC-$27 million; GSFC-$10 million; and LeRC-$6 million). The work package contractors were required to study how Station elements would change were the Station originally man-tended rather than permanently manned. Following the completion of the 21-month contracts, NASA planned to move into Phase C/D in 1987.	M-Star(3/20/85)
85/03/25	The Level B Space Station Control Board held its first meeting at JSC.	Gowan/Morris-Chron
85/03/28	The Policy Review Committee and center directors held a joint meeting on the subject of Space Station evolution and its advanced missions.	Gowan/Morris-Chron
85/04/00	David Black of ARC was selected in April 1984 as Space Station Program Scientist. Black's office was located at Level A, and he was to report to Philip E. Culbertson, NASA Associate Administrator for Space Station. Black noted that he was "to be the first line of defense" when changes were considered that might damage the ability of space scientists to use the Space Station. The assignment placed Black in a unique position in NASA, for it placed a scientist near the top of a major engineering effort. Black was to be a watchdog along with three scientists around NASA: Robert Naumann at MSFC, Owen Garriott at JSC, and Kenneth Frost at GSFC. The scientists' major goals were to focus the user and design requirements for the unmanned space platforms when tension built between NASA and the science community and to ensure commonality with the Space Station.	HSV-Times(5/30/85)
85/04/01	The Space Station Integrated Systems Data Base was initially implemented on the IBM, the 4341, and the VAX 11/785.	MSFC-Chron(1985)
85/04/09-10	NASA personnel conducted a Phase B "readiness review" at JSC on 9-10 April The review, chaired by the Associate Administrator for Space Station, was attended by senior program management personnel from NASA/HQ, Level B, the work	Gowan/Morris-Chron

DATE	EVENT	SOURCE
85/04/09-10	package centers, and other NASA centers and organizations. After a thorough review of Level B and work package status and plans the Associate Administrator determined that the program management structure and planning were ready for the Phase B contract start.	
85/04/15	The Space Station Preliminary Design and Definition (Phase B) contracts were set to begin on 15 April 1985 and run for 21 months at the four work package centers. At the end of Phase B in 1987, Phase C/D was to begin.	M-Star(3/20/85)
85/04/16	The Space Station Management Council, the NASA/HQ Space Station Control Board, representatives from the Department of Defense, the Office of Science Technology Policy National Oceanic and Atmospheric Administration, the European Space Agency, Japan, Canada, and representatives from Levels B and C of the the Space Station Program at NASA, all reviewed the Space Station user functional requirements envelope. In a subsequent executive session, the Management Council decided to use the functional requirements envelope as the Phase B definition phase Space Station performance design goal.	Gowan/Morris-Chron
85/04/19	Space Station Program Office Manager Neil Hutchinson authorized the start of the Phase B contracts. The original official contract start date for Phase B definition was supposed to be the 15th of the month; all of the work package contracts were awarded four days later.	Gowan/Morris-Chron
85/04/22	NASA personnel sponsored the "kickoff" meeting for Phase B definition contract work at the JSC. This was an opportunity for personnel from NASA organizations and industry contractors to meet with each other. A similar meeting was held for Japanese representatives three days later.	Gowan/Morris-Chron
85/04/24-25	An Open Forum on Space Station Software Issues was held at MSFC.	MSFC-Chron(1985)
85/04/30	The Level B Systems Integration Board held a meeting at JSC.	Gowan/Morris-Chron
85/05/08	The Space Station Steering Committee held a meeting at NASA/HQ.	Gowan/Morris-Chron
85/05/09	Representatives of NASA and Japanese space officials signed a memorandum of understanding for Japanese participation in the definition and preliminary development of the Space Station.	Gowan/Morris-Chron
85/05/13-17	NASA personnel held a NASA-wide automation and robotics meeting at JSC on 13-17 May 1985. An automation and robotics implementation plan was derived, although its scheduled release from Level B was deferred to the next Space Station Control Board meeting.	Gowan/Morris-Chron
85/05/17	The Level B Space Station Control Board held a meeting at JSC.	Gowan/Morris-Chron
85/05/21-23	The Level B Space Station Operations Panel held a meeting at the JSC.	Gowan/Morris-Chron
85/05/23	The Program Control Managers from Space Station Levels A, B, and C held a meeting at GSFC.	Gowan/Morris-Chron
85/05/28-31	The Task Force on the Scientific Uses of the Space Station held a meeting at JSC.	Gowan/Morris-Chron
85/06/03	Representatives of NASA and the European Space Agency (ESA) signed a	Gowan/Morris-Chron

DATE	EVENT	SOURCE
85/06/03	memorandum of understanding for ESA participation in the definition and preliminary development of the Space Station.	
85/06/06	The International Cooperation Working Group held a meeting at NASA/HQ.	Gowan/Morris-Chron
85/06/12	The Space Station Steering Committee held a meeting at JSC.	Gowan/Morris-Chron
85/06/13	The Space Station Management Council held a meeting at LeRC. At this meeting, the project managers concurred on the need for developing key program strategies for Space Station. To this end, Level A planned the formation of an ad hoc Program Strategy Working Group. This working group was intended to function for one year in order to assist the Level A Plans and Policy Office in preparation of "baseline policies" and also to allow center participation in that process.	Gowan/Morris-Chron
85/06/14	The Level B Space Station Control Board held a meeting at JSC.	Gowan/Morris-Chron
85/06/21	The first Space Station Phase B major milestone review (RUR-1A) was held and review products were distributed.	MSFC-Chron(1985)
	The International Cooperation Working Group held a meeting at GSFC.	Gowan/Morris-Chron
	The Level B Space Station Control Board held a meeting at JSC.	Gowan/Morris-Chron
85/06/24	The MSFC Space Station Pre-Development Review was held to brief Center management.	MSFC-Chron(1985)
85/06/27	According to a spending plan produced by the US House of Representatives the Orbital Maneuvering Vehicle (OMV) could have been delayed in order to funnel more NASA money into the Space Station. NASA would have lost $30 million according to the expenditure plan, but the agency could take the money from OMV and give it to Station, thus easing the cut in funds by $10 million. NASA had asked for $25 million for a new start for the OMV in FY86. The diversion of funds from OMV to Station seemed desirable to NASA because Space Station was a higher priority.	HSV-Times(6/27/85)
85/06/28	Associate Administrator for Space Station Philip E. Culbertson established the position of his office on the subject of the Extended Duration Orbiter (EDO). "The Office of Space Station has not identified any requirement for an Extended Duration Orbiter (EDO) capability; no user requirements have been advocated forward to this office, and we do not believe EDO to be a necessity for Station assembly. We will reexamine the question as we develop more detailed assembly sequence. It is our belief that the issue should be settled on the basis of needs before the Space Station era," wrote Culbertson to Jesse Moore, Associate Administrator for Space Flight.	Gowan/Morris-Chron
85/07/01	The Office of Space Station Research and Development Program Operating Plan 85-2 was submitted to JSC.	MSFC-Chron(1985)
85/07/09-11	The Level B Systems Integration Board held a meeting at the NOVA Building in Houston. This was the meeting held during RUR-1.	Gowan/Morris-Chron
85/07/09-17	NASA personnel met for the first Reference Update Review process. The "convergence subjects" included: 1) selection of module internal operating	Gowan/Morris-Chron

DATE	EVENT	SOURCE
85/07/09-17	pressure; 2) narrowing of options for module pattern; 3) narrowing of Space Station configuation options; 4) criteria for accommodating growth; and 5) Work Breakdown Structure format update.	
85/07/12	The Level B Space Station Operations Panel held a meeting at the JSC.	Gowan/Morris-Chron
85/07/15	The International and Technical Integration Panel held a meeting at JSC. This meeting was concerned with the RUR-1.	Gowan/Morris-Chron
85/07/16	The Space Station Projects Office Operations Office was established at MSFC.	MSFC-Chron(1985)
85/07/16-17	The Level B Space Station Control Board held a meeting at JSC. This meeting was concerned with RUR-1.	Gowan/Morris-Chron
85/07/22	The Office of Space Station established a Level A Space Station Control Board. The Level A Control Board is the controlling body for the Level A program requirements document, a Space Station budget at the unique project level, Level A program requirements document, a Space Station reserve, and Level A program directives. It is distinguished from the Level B Space Station Control Board which decided chiefly technical matters relating to policy.	Gowan/Morris-Chron
85/07/25-26	The International Cooperation Working Group held a meeting in Washington, D.C.	Gowan/Morris-Chron
85/07/30	NASA personnel were able to review a revised draft of the memorandum of understanding between the Office of Space Station and the Office of Space Flight on the subject of the Orbital Maneuvering Vehicle.	Gowan/Morris-Chron
	The Guidance, Navigation, and Control Technical Integration Panel met at MSFC. The panel discussed a number of items relevant to payload pointing, microgravity requirements, and momentum management.	Gowan/Morris-Chron
85/07/30-31	The Mechanisms Technical Integration Panel held a meeting at MSFC.	Gowan/Morris-Chron
85/08/04-05	The Aeronautics and Space Engineering Board held a meeting on cost techniques at MSFC. The meeting consisted of its regular panel members plus five outside guests; these guests were selected because of their personal experience with the non-manned spaceflight aerospace industry as well as their experience with NASA.	Gowan/Morris-Chron
85/08/06-07	The Structures Technical Integration Panel held a meeting at MSFC.	Gowan/Morris-Chron
85/08/13-15	The Task Force on the Scientific Uses of the Space Station, chaired by Peter Banks of Stanford University, sponsored a Space Station summer study at Stanford during 13-15 August 1985. The Task Force was a subcommittee of the Space and Earth Science Advisory Committee, which in turn is part of the overall NASA science advisory structure.	Gowan/Morris-Chron
85/08/14	Associate Administrator for Space Station Philip E. Culbertson requested the first major "scrub" of Space Station Program definition. In a letter to Neil Hutchinson, Manager of the Space Station Program Office, Culbertson wrote: "...it is now timely to initiate an analysis of a number of possible ways of reducing or deferring development costs in order to have in hand a number of	Gowan/Morris-Chron

DATE	EVENT	SOURCE
85/08/14	options to consider as program definition continues and our understanding of overall development cost matures...I recognize that this request adds to an already heavy workload at both Levels B and C. I believe it is mandatory that these options be carefully examined, however, in order to support the critical program decisions which lie ahead."	
85/08/15	The Level B Space Station Control Board held a meeting at JSC.	Gowan/Morris-Chron
85/08/19-23	The Task Force on the Scientific Uses of the Space Station held a summer study focusing on science operations and data systems at Stanford, CA. The Task Force was chaired by Professor Peter Banks of Stanford University.	Gowan/Morris-Chron
85/08/20	The International Cooperation Working Group held a meeting at LaRC. One issue of importance discussed at the meeting was the need for reaching an agreement on Level C/international management interfaces for Phase C/D (hardware development and construction).	Gowan/Morris-Chron
85/08/30	The Level B Space Station Control Board held a meeting at JSC.	Gowan/Morris-Chron
85/09/10	The International Cooperation Working Group held a meeting at NASA/HQ.	Gowan/Morris-Chron
85/09/10-13	NASA sponsored a Space Station Evolution Workshop at Williamsburg, VA. The participants recommended technology development requirements and "scarring" for evolution. They also discussed other key evolution concepts for Space Station.	Gowan/Morris-Chron
85/09/11	The Space Station Steering Committee held a meeting at NASA/HQ.	Gowan/Morris-Chron
85/09/12	The Level B Space Station Control Board held a meeting at JSC.	Gowan/Morris-Chron
85/09/19	The Level B Space Station Control Board held a meeting at JSC. At this meeting, members made decisions on assumptions concerning the Space Shuttle. This was the first Space Station Control Board held during RUR-2.	Gowan/Morris-Chron
85/09/25	The Level B Systems Integration Board held a meeting at the NOVA Building in Houston.	Gowan/Morris-Chron
85/09/26	The Level B Space Station Control Board held a meeting at JSC. At this meeting, members made decisions on module pattern, airlock location, and the interconnect module.	Gowan/Morris-Chron
85/10/03	The Level B Space Station Control Board held a meeting at JSC. At this meeting, members made decisions on the dual egress requirement, altitude (operations/assembly), reboost strategy, Space Station flight mode, and the reference configuration.	Gowan/Morris-Chron
85/10/09-10	The Level B Systems Integration Board held a meeting at JSC. The board made a decision on the safe haven approach and what it would require.	Gowan/Morris-Chron
85/10/10	The Technical Management Information System Project Office was formed.	Gowan/Morris-Chron
85/10/16	The Level B Systems Integration Board held a meeting at JSC.	Gowan/Morris-Chron
85/10/17	The Level B Space Station Control Board held a meeting at JSC. At this meeting, members made a decision that the Space Station module pressure would be	Gowan/Morris-Chron

DATE	EVENT	SOURCE
85/10/17	fixed at 14.7 psi.	
85/10/23	The Level B Systems Integration Board held a meeting at JSC.	Gowan/Morris-Chron
85/10/24-25	The Level B Space Station Control Board held a meeting at JSC.	Gowan/Morris-Chron
	The Space Station Management Council held a meeting at MSFC.	Gowan/Morris-Chron
85/10/26-27	NASA held its FY88 Space Station Construction of Facilities (COF) Review at JSC. "The review was attended by the Space Station Projects Offices of all the NASA centers and a briefing was given by each covering their requirements for major and minor facility projects in FY88. The purpose of the meeting was to allow the Space Station Facility Review Board to assess these requirements, to rank them in importance to the Space Station Program, and to develop recommendations which will be brought forward to the Level B and Level A management," wrote R.W. Richie of the Space Station Office Operations Divisions. Two important issues under discussion were JSC's Mission Control Center upgrade and a KSC Space Station facility.	Gowan/Morris-Chron
85/10/31	The Level B Space Station Control Board held a meeting at JSC.	Gowan/Morris-Chron
85/11/01	The request for proposals for the Orbital Maneuvering Vehicle was released.	Gowan/Morris-Chron
85/11/04-05	All of the systems engineering and integration (SE&I) managers, plus representatives from LaRC and KSC held an SE&I managers meeting at the Michoud Assembly Facility. The first day was used to brief the managers on specific topics of interest. The second day was used for planning of actions up to the Systems Requirements Review.	Gowan/Morris-Chron
85/11/05	Associate Administrator for Space Station Philip E. Culbertson and Associate Administrator for Space Flight Jesse Moore signed a memorandum of understanding concerning the Orbital Maneuvering Vehicle.	Gowan/Morris-Chron
85/11/06	Associate Administrator for Space Station Philip E. Culbertson and Associate Administrator for Space Flight Jesse Moore agreed to form an Orbital Maneuvering Vehicle (OMV) Task Force for joint oversight of the request for proposals and operational capabilities of the OMV.	Gowan/Morris-Chron
85/11/07	NASA personnel at MSFC released a request for proposals for development of the Orbital Maneuvering Vehicle (OMV). The three companies involved in previous definition studies for OMV (Ling-Temco Vought, TRW, and Martin Marietta) were invited to compete for the development contract.	Gowan/Morris-Chron
85/11/08	The Level B Systems Integration Board held a meeting at JSC.	Gowan/Morris-Chron
85/11/13	Representatives of NASA/HQ, MSFC, and JSC held a meeting on the subject of communications linkage between the Space Station and the Orbital Maneuvering Vehicle. The discussion centered around whether the link should be with S-band frequency, Ku-band frequency, or both.	Gowan/Morris-Chron
	The Level B Systems Integration Board held a meeting at JSC.	Gowan/Morris-Chron
85/11/14	Associate Administrator for Space Station Philip E. Culbertson sent a letter to NASA Administrator James Beggs reminding him of the omnipresent	Gowan/Morris-Chron

DATE	EVENT	SOURCE
85/11/14	problem of inter-center rivalries: "It is difficult for the Centers to take the broad perspective when to do so would endanger their ability to support their institutional base. The Space Station Management Colloquium held on September 22-23, 1983, at the Langley Research Center was to explore options on how to manage the Space Station Program even though we, at the time, did not have an approved program. At this meeting, the Center Directors agreed to the lead center concept and to work together once you made the final decisions. Unfortunately, the latter agreement may need to be reinforced."	
85/11/14-15	The Level B Space Station Control Board held a meeting at JSC.	Gowan/Morris-Chron
85/11/19	Space Station Research and Technology Operating Plans (RTOP) were submitted to the Office of Aeronautics and Space Technology in NASA/HQ.	MSFC-Chron(1985)
85/11/19-20	NASA personnel held an Advanced Development Program (ADP) overview at KSC. Following the overview, a number of discipline working sessions were held at the lead center in each of 13 ADP technical disciplines.	Gowan/Morris-Chron
85/11/20	The Space Station Propulsion Advanced Development Program was presented to industry at KSC. The industry briefing was sponsored by the Space Station Level B Program Office.	MSFC-Chron(1985)
85/11/21	The Space Station Reference Update Review was completed.	MSFC-Chron(1985)
85/11/25	President Ronald Reagan signed the FY86 HUD-Independent Agencies appropriations bill, which contained funding for NASA. This bill designated $5 million in the FY86 Space Station budget for automation and robotics. The bill showed a decrease in the Space Station funding level from the requested $230 million to a final figure of $205 million.	Gowan/Morris-Chron
85/11/26	The Level B Systems Integration Board held a meeting at JSC.	Gowan/Morris-Chron
85/12/05	The Level B Space Station Control Board held a meeting at JSC.	Gowan/Morris-Chron
85/12/11	The Level B Systems Integration Board held a meeting at JSC. This was the first Systems Integration Board meeting to take place during the Interface Requirements Review/Systems Requirements Review process (IRR/SRR).	Gowan/Morris-Chron
85/12/12	The Level B Space Station Control Board held a meeting at JSC. This was the first of the Space Station Control Board meetings to be held during the Interface Requirements Review/Systems Requirements Review process (IRR/SRR).	Gowan/Morris-Chron
85/12/18	The Level B Systems Integration Board held a meeting at JSC.	Gowan/Morris-Chron
85/12/23	The Office of Management and Budget proposed a cut of $480 million out of $580 million requested by NASA for the Space Station in FY87.	Gowan/Morris-Chron
85/12/26	Mr. John D. Hodge was appointed as Acting Associate Administrator for Space Station at NASA/HQ.	MSFC-Chron(1985)
85/12/30	John D. Hodge, Aaron Cohen, and Office of Space Station division directors held a meeting on the subject of work packages. Summarizing the problem, a presentation viewgraph exclaimed: "There is universal agreement to change the Work Packages. There is no agreement on the changes!"	Gowan/Morris-Chron

DATE	EVENT	SOURCE
86/00/00	An agreement between MSFC and JSC for the conduct of activities relating to the Environmental Control and Life Support Systems was finalized. (No specific date given.)	SSPO-Chron(1986)
86/01/07	NASA personnel held a Level A Review at NASA/HQ. Level A Reviews were gatherings of all Office of Space Station division directors, branch chiefs, and other interested personnel, for the purpose of presenting progress reports on the work of each and to stimulate intra-office communication. Such reviews were held periodically.	Gowan/Morris-Chron
86/01/08	According to Luther Powell, Manager of the MSFC Space Station Projects Office, over the next four-month period decisions were to be made on the manned module size, the propulsion system and the type of propellant to be used for re-boost, the arrangement of modules, the secondary power distribution, and the orbital assembly sequence. These decisions would be made in light of the October 1985 decision to switch from a single-keel to a dual-keel Space Station. This switch was made to provide more stability for the Station. Later in January 1986 the decision was to be made on the Space Station's power system (solar dynamics was considered best, but traditional solar cells for large solar arrays probably would be used--it was decided earlier that Station would be powered by 400 Hz AC power distribution over 20 KHz DC system because of unproven technology.)	HSV-Times(1/8/86)
	The Level B Systems Integration Board held a meeting at JSC.	Gowan/Morris-Chron
86/01/09	The Level B Space Station Control Board held a meeting at JSC.	Gowan/Morris-Chron
86/01/14	The International Cooperation Working Group held a meeting at NASA/HQ.	Gowan/Morris-Chron
	The Level B Systems Integration Board held a meeting at JSC. The meeting took place on 14, 15, and 17 January 1986.	Gowan/Morris-Chron
86/01/16	The Level B Space Station Control Board held a meeting at JSC.	Gowan/Morris-Chron
86/01/22	The Level B Systems Integration Board held a meeting at JSC.	Gowan/Morris-Chron
86/01/23-24	The Level B Space Station Control Board held a meeting at JSC.	Gowan/Morris-Chron
86/01/28	The Office of Space Station submitted a revised FY86 plan to the NASA Comptroller. The plan represented a reduction of $9.7 million from the previously approved operating plan guideline of $205 million for a new total of $195.3 million. This reduction was a result of the Gramm-Rudman-Hollings Defecit Reduction Act.	Gowan/Morris-Chron
	The Shuttle Challenger (Mission 51L) disintegrated 73 seconds into its mission. The accident, suggesting that the design of the Space Shuttle System was unsafe, brought all launches to a halt. This halt would delay other thermal and materials flight experiments, "whose results are of critical importance to Space Station design."	Gowan/Morris-Chron
86/01/28-29	The Level B Systems Integration Board held a meeting at JSC.	Gowan/Morris-Chron
86/02/03	President Ronald Reagan established a presidential commission to investigate the Challenger accident. The Commission was chaired by William Rogers, and it therefore was referred to as the Rogers Commission.	Gowan/Morris-Chron

DATE	EVENT	SOURCE
86/02/04	In his State of the Union address before Congress, President Ronald Reagan confirmed his commitment to the Space Station. "We're going forward to build our Space Station," he said.	Gowan/Morris-Chron
	Representatives of NASA and the Canadian Government met in Washington, D.C. They agreed to the terms of the Phase B memorandum of understanding which covered Canada's hardware contributions to the Space Station.	Gowan/Morris-Chron
86/02/05	A resolution was brought before the US House of Representatives to place a Challenger memorial plaque on the future Space Station.	Gowan/Morris-Chron
	President Ronald Reagan's FY87 budget asked for $410 million for the Space Station Program, doubling the amount of Station funds from the previous year. The total NASA budget for 1987 was to be $7.69 billion. This important increase in funding would move Space Station into the development phase toward its placement on track to operation by the mid-1990s.	HSV-Times(2/5/86)
	The Level B Systems Integration Board held a meeting at JSC.	Gowan/Morris-Chron
86/02/06-07	The Level B Space Station Control Board held a meeting at JSC.	Gowan/Morris-Chron
86/02/11	The Level B Systems Integration Board held a meeting at JSC.	Gowan/Morris-Chron
86/02/12-13	The Structures/Dynamics Technical Integration Panel (TIP) held a meeting at MSFC. The purpose of the meeting was to review recommendations on program redirection made by the Structures/Dynamics Advanced Development subpanel and to develop the necessary data for an integrated structures flight experiment proposal.	Gowan/Morris-Chron
86/02/14	Personnel from NASA field centers held a briefing for Acting Associate Administrator for Space Station John D. Hodge and project-level managers on the status of plans for the Technical Management Information System. The meeting was held in Washington, D.C.	Gowan/Morris-Chron
86/02/18	The Level B Space Station Control Board held a meeting at JSC.	Gowan/Morris-Chron
86/02/19	The Level B Systems Integration Board held a meeting at JSC.	Gowan/Morris-Chron
	The USSR launched the core element of a modular space station, named Mir, into low Earth orbit.	Gowan/Morris-Chron
86/02/19-20	The Prelaunch Operations Working Group held a meeting at KSC. This meeting was considered a milestone because the Working Group, representing all NASA centers, achieved agreement on two key Level B documents: JSC 30000 Section 4, Part 1 ("Prelaunch/Post Landing") and JSC 30202 ("Prelaunch/Post Landing Operations Plan"). The JSC 30000 document was also known as the Program Definition and Requirements Document, (PDRD). Undergoing continual change, the PDRD represented the "official" agreement on what a Space Station was supposed to be and would serve as the basis for the writing of a request for proposals.	Gowan/Morris-Chron
86/02/20-21	The Level B Space Station Control Board held a meeting at JSC.	Gowan/Morris-Chron
86/02/25-26	The Level B Space Station Operations Panel held a meeting at the JSC.	Gowan/Morris-Chron

DATE	EVENT	SOURCE
86/02/25-26	The Level B Systems Integration Board held a meeting at JSC.	Gowan/Morris-Chron
86/02/28	JSC announced that Neil Hutchinson would step down as Space Station Program Manager at JSC. The change was to take place immediately and was due to personal reasons. Hutchinson was to remain at JSC as Assistant to the Director of Space Operations. John W. Aaron, the Deputy Program Manager, was to be Acting Program Manager until Hutchinson's replacement was named. Acting NASA Administrator William R. Graham said, "Neil has been instrumental in forging the agency's space station team and has led the project through its critical conceptual and initial design phases to the point we are ready to move on to final design and contruction phases."	M-Star(3/5/86)
	The NASA Space and Earth Science Advisory Committee Task Force on the Scientific Uses of the Space Station published its Space Station Summer Study Report. This report was result of the second summer study, which took place 19-23 August 1985.	Gowan/Morris-Chron
86/03/05	The Level B Systems Integration Board held a meeting at JSC.	Gowan/Morris-Chron
86/03/05-06	A Level A/B/C Work Package Analysis Team held a meeting. Two management approaches to a fair and sensible division of labor emerged from the meeting. The two approaches were called "primary integration" and "equal accountability."	Gowan/Morris-Chron
86/03/06	The Space Station Systems Requirements Review was completed.	MSFC-Chron(1985)
86/03/06-07	The Level B Space Station Control Board held a meeting at JSC.	Gowan/Morris-Chron
86/03/12	The Level B Systems Integration Board held a meeting at JSC.	Gowan/Morris-Chron
86/03/14	The Level B Space Station Control Board held a meeting at JSC.	Gowan/Morris-Chron
	The Level B Systems Integration Board held a meeting at JSC.	Gowan/Morris-Chron
86/03/19	The Level B Systems Integration Board held a meeting at JSC.	Gowan/Morris-Chron
	The Space Station Management Council held a meeting at NASA/HQ. Among the topics reviewed were the products of the A/B/C Work Package Analysis Team, which met 5-6 March 1986.	Gowan/Morris-Chron
	The Space Station Steering Committee held a meeting at NASA/HQ.	Gowan/Morris-Chron
86/03/20	The Level B Space Station Control Board held a meeting at JSC.	Gowan/Morris-Chron
86/03/25-27	The Systems Requirements process culminated into a baseline configuration for preliminary design and a Phase C/D (hardware) proposal.	Gowan/Morris-Chron
86/03/26-27	The Level B Space Station Control Board held a meeting at JSC. This was the last Control Board meeting to deal with the Interface Requirements Review/Systems Requirements Review process (IRR/SRR), culminating in the formal Systems Requirements Review.	Gowan/Morris-Chron
86/03/28	NASA General Manager Philip E. Culbertson sent Acting Associate Administrator for Space Station John D. Hodge the "lifeboat" memorandum. This was sent in the aftermath of the 51-L accident. Culbertson said: "I believe	Gowan/Morris-Chron

DATE	EVENT	SOURCE
86/03/28	it requires a reexamination of most, if not all, of the safety considerations that have gone into our concept of the Space Station. The most striking of these considerations and the one which may well be the most challenging was the fundamental question of the presence or absence of a lifeboat...it raises the question of the availability of a rescue capability in the 28-day time scale that we have assumed."	
86/03/29	NASA personnel completed the Systems Requirements Review (SRR) process.	Gowan/Morris-Chron
86/04/03	The Space Station Management Council held a meeting at NASA/HQ. The Council discussed the Space Station work packages, progressed in eliminating the overlap and definition of interfaces between work packages, and decided that Level B would complete interface definition in order to simplify preliminary design.	Gowan/Morris-Chron
86/04/15	NASA officials reviewed the Orbital Transfer Vehicle (OTV) Phase A follow-on studies at NASA/HQ.	Gowan/Morris-Chron
86/04/16	The Level B Systems Integration Board held a meeting at JSC.	Gowan/Morris-Chron
86/04/17	Members of the Office of Space Station formulated a Space Station Program Planning Strategy. The strategy held several key features including revised launch planning, achieving an early, useful man-tended capability, an early, balanced permanently manned capability, with a rephased and deferred build-up of the total desired capability to match available funding levels. "It is compatible with an achievable resources plan in spite of the austere times," wrote John Hodge, "in order to provide maximum understanding of our top level planning."	Gowan/Morris-Chron
	Philip E. Culbertson, NASA General Manager, announced a streamlining of the Space Station Program by eliminating "overlaps" in work assigned to the Space Station work package centers. Some technical and management changes were also expected. These changes were to do away with parallel tasks as the Space Station moved into preliminary design. Parallel tasks would be unnecessary when producing hardware. The area of electical power for the Space Station was noted as the area in which there was duplication; LeRC and MSFC both had worked on the power system for the Space Station.	HSV-Times(4/17/86)
	The Level B Space Station Control Board held a meeting at JSC.	Gowan/Morris-Chron
	The Space Science and Applications Subcommittee of the US House of Representatives approved the $410 million appropration for Space Station for FY87. This funding was out of a total approved NASA budget of $7.9 billion.	HSV-Times(4/17/86)
86/04/23	The Level B Systems Integration Board held a meeting at JSC.	Gowan/Morris-Chron
	The NASA Task Force on the Scientific Uses of the Space Station, the Banks Committee, released its second major report, calling for the need to generate general guidelines for the design, development, operation, and future evolution of the Space Station as a way of ensuring its effectiveness as a research facility. Recommendations and conclusions of the report include: facilities must be operated with goal of producing outstanding scientific results; need for well-equipped, permanently manned labs to support a broad range of research; scientific payloads; free-flying platforms for science; NASA should enhance manned research activities in pre-initial orbit configuration period using	M-Star(4/23/86)

DATE	EVENT	SOURCE
86/04/23	Spacelabs and other attached payloads; development of man-tended mode on Station would be of limited value; NASA must look to activities on Station over its 25-30 year life span; and develop new type of research named "science in space."	
86/04/24	The Level B Space Station Control Board held a meeting at JSC.	Gowan/Morris-Chron
	The Space Station Steering Committee held a meeting at NASA/HQ.	Gowan/Morris-Chron
86/04/30	The Level B Systems Integration Board held a meeting at JSC.	Gowan/Morris-Chron
86/05/00	NASA adopted the official Space Station Program "logo."	Gowan/Morris-Chron
86/05/07	The Level B Systems Integration Board held a meeting at JSC.	Gowan/Morris-Chron
86/05/08	The Level B Space Station Control Board held a meeting at JSC.	Gowan/Morris-Chron
86/05/12	Dr. James C. Fletcher was sworn in as NASA Administrator by President Ronald Reagan.	Gowan/Morris-Chron
86/05/13	NASA Administrator Dr. James C. Fletcher told the House Subcommittee on Appropriations that USAF Retired General Sam Phillips, former Director of the Apollo Program, had agreed to head a group to study the overall NASA program management structure. General Phillips was to develop a list of people to serve with himself. The Phillips Management Study Group was to have repercussions on the Space Station Program, including the distribution of Space Station responsibilities among the work package centers.	M-Star(5/21/86)
86/05/14	NASA/HQ announced the baseline configuration of the Space Station planned for construction in orbit beginning in 1993 with completion by 1996. Dr. James C. Fletcher and John D. Hodge, Acting Associate Administrator for Space Station, presented an overview of the plan. The configuration was described as the dual-keel concept, which had gained attention in recent months. This design utilized a cluster of modules centered within football-field-long parallel trusses joined by shorter booms at either end; solar arrays attached to both ends of a perpendicular truss through the center of construction provided power. Development contracts were scheduled to be awarded in May 1987. MSFC would continue to manage roughly 40% of total Station work. In a reorganization of the Station work, MSFC lost responsibility for management of the Reboost System to JSC, while JSC lost control of Interconnect Nodes and Thermal Control.	M-Star(5/21/86)
86/05/21	The Level B Systems Integration Board held a meeting at JSC.	Gowan/Morris-Chron
86/06/01	NASA tested a hydrogen/oxygen fueled thruster built by Rocketdyne at MSFC (see similar tests in mid-May 1986).	Gowan/Morris-Chron
86/06/02	A tentative agreement was reached between the European Space Agency (ESA) and US representatives for the program-level design of ESA contributions to the Space Station.	Gowan/Morris-Chron
86/06/04	The Level B Systems Integration Board held a meeting at JSC.	Gowan/Morris-Chron
86/06/05	The Level B Space Station Control Board held a meeting at JSC.	Gowan/Morris-Chron
86/06/12	The Level B Space Station Control Board held a meeting at JSC.	Gowan/Morris-Chron

DATE	EVENT	SOURCE
86/06/23	NASA/HQ announced the week of 23 June 1986 that TRW Inc., Redondo Beach, CA, would be selected for negotiations leading to a contract to develop the MSFC-managed Orbital Maneuvering Vehicle (OMV). The OMV was to be developed by 1991. The resulting contract was to be valued at $205 million. Other aerospace companies competing for the contract were Martin Marietta, Denver and LTV Aerospace and Defense Co., Dallas. The selection came after the three companies spent 12 months in a definition effort. The OMV was overseen by the Office of Space Flight at NASA/HQ, but development was to be managed by MSFC.	M-Star(7/2/86)
86/06/24	The Space Station Management Council held a meeting at NASA/HQ.	Gowan/Morris-Chron
86/06/25	The Space Station Steering Committee held a meeting at NASA/HQ.	Gowan/Morris-Chron
86/06/26	The Level B Space Station Control Board held a meeting at JSC.	Gowan/Morris-Chron
86/06/30	A plan was announced by NASA Administrator Dr. James C. Fletcher which reorganized the Space Station Program. NASA's plan redistributed work from JSC to MSFC. Also, the plan put control of the Station Program at NASA/HQ instead of JSC. The directive was to shift responsibility from JSC to MSFC for outfitting living quarters and gave JSC the job of developing a thruster propulsion system, which was formerly part of MSFC's responsibility. Whereas JSC formerly had 43% of Space Station work and MSFC had 31%, after the redistribution, JSC would have only 29% compared to MSFC's 44%. MSFC's share of long-range Space Station funding was $1.874 billion and JSC's was $2.539 billion before the changes. Funding allotments for MSFC increased by $871 million and decreased by $741 million for JSC. Responsibility shifted to MSFC for nodes, airlocks, tunnels/interconnects, and Habitat Module outfitting.	HSV-Times(7/17/86)
	Andrew J. Stofan was appointed Associate Administrator for Space Station. Stofan had been Director of the LeRC since July 1982. Prior to the Lewis appointment, Stofan was Associate Administrator for Space Science and Applications at NASA/HQ.	M-Star(7/2/86)
86/07/03	Dr. William R. Lucas, Director of the MSFC, was to retire effective 3 July 1986. Lucas, who had been with the Army Ballistic Missile Agency and MSFC for 30 years in one position or another, had been Director since 15 June 1974.	M-Star(6/11/86)
86/07/10	NASA issued a request for proposals (RFP) for a Technical and Management Information System. The RFP called for a system to provide a data link among the NASA field centers and would automate interchange of correspondence, budget, and technical information.	Gowan/Morris-Chron
86/07/14	William Huber was named as Manager of the Orbital Maneuvering Vehicle (OMV) Project within the Special Projects Office organization. The OMV had been within the purview of Program Development during its conceptual and definition phases. Huber had been with the Project for nearly three years.	M-Star(7/23/86)
86/07/15	The Space Station Interim Systems Review was completed.	MSFC-Chron(1985)
86/07/24	NASA Administrator Dr. James C. Fletcher announced projected increases for JSC manpower levels based on recent changes in Space Station Program management. He said that Space Station development would require an increase of 1,600 jobs over the present level of 14,000 jobs. He announced that Associate Administrator for Space Station Andrew J. Stofan would conduct an implementation review for	Gowan/Morris-Chron

DATE	EVENT	SOURCE
86/07/24	the revised work package roles. Fletcher said, "I have also instructed Mr. Stofan to incorporate in his review the formal assumption that JSC shall retain its long-term role as NASA's pre-eminent center of excellence for the development of manned spacecraft systems...and have reiterated my view that the JSC role...is not to be diminished as a result of the restructuring of work package roles between JSC and MSFC."	
86/07/25	NASA Administrator Dr. James C. Fletcher met with Houston Mayor Kathy Whitmire to discuss JSC's role in future projects. After the meeting, Mayor Whitmire expressed disappointment that Fletcher had not given any specific assurances concerning JSC.	Gowan/Morris-Chron
86/07/31	NASA Administrator Dr. James C. Fletcher announced that any change in Space Station reorganization was to be delayed up to three months. This occurred after pressure was applied by the members of the Texas congressional delegation who were afraid of the possible detrimental effects to Houston as a result of the changes in Space Station Program organization. Fletcher conceded that he had not properly consulted Congress before announcing changes. Ninety days were to be used to study issues involved in the reorganization. An amendment was added to the 1987 NASA spending bill which would prohibit the spending of NASA monies on the proposed reorganization changes. The congressmen were not concerned about the management changes, but with the work package changes.	HSV-Times(7/31/86)
86/08/01	The US House of Representatives approved a bill giving NASA $410 million for Space Station work, but the money could not be spent to reorganize the Program without congressional approval. As well, $150 million was to be held back until NASA met several design and assembly requirements set by the House Appropriations Committee. This $410 million was part of a total NASA budget of $7.65 billion. Some $260 million of the $410 million were to be spent for Phase B activities and the other $150 million was reserved for initial hardware development, but only to be spent if NASA submitted to the following conditions: a minimum of 37.5 kW of power for initial operating capability, rather than the 25 kW envisioned by NASA; a fully equipped materials processing lab by the sixth Shuttle flight and before crew habitat was launched; early launch of scientific payloads; and deployment of US core elements before foreign Station elements.	HSV-Times(8/1/86)
86/08/05	General Samuel Phillips testified before the US House Subcommittee on Space Science and Technology concerning the findings of the Management Study Group, a.k.a., the Phillips Committee, which the General chaired. The General noted, "We determined that the management structure in place when we began our review simply would not work and that unless a major change was made, the Program would continue to be plagued by organizational problems." General Phillips advocated the formation of a Space Station Program Office and a realignment of center responsibilities.	Gowan/Morris-Chron
86/08/18	NASA Associate Administrator for Space Station Andrew J. Stofan announced the week of 18 August that two review teams would be formed to review the Space Station design and work package assignments and functions. A Space Station Configuration Critical Evaluation Task Force headed by W. Ray Hook, Manager of the Space Station Office at LaRC, would conduct a technical review of Space Station architecture and systems. The activities were to take place at Langley. An Executive Technical Committee, headed by Stofan, was to provide oversight and guidance to the Task Force and would assess the impact of any design modifications or changes on individual NASA-center and contractor roles. About	M-Star(8/27/86)

DATE	EVENT	SOURCE
86/08/18	35 people were to serve on the task force full-time; 6 were to be from MSFC. The results of the overall evaluation were to be factored into the request for proposals to be released to industry in 1987.	
86/09/01	During the week of 1 September, NASA Administrator Dr. James C. Fletcher told reporters that either the Space Station must receive increased funding or face a scaling-down of the Program. These comments were made regarding the $8 billion price tag originally given to the Space Station; an amount which came to be seen as insufficient for building the Space Station.	HSV-Times(9/7/86)
86/09/03	An agreement as ratified between NASA Administrator Dr. James C. Fletcher and European Space Agency (ESA) Director General Professor Reimar Luest marked a major milestone in defining specific Space Station elements in preparation for beginning development of the project in the spring of 1987. The agreement called for ESA to conduct the preliminary design of a permanently-attached pressurized lab module and a polar orbiting platform for the remainder of the definition and preliminary design phase (Phase B) which extended through early 1987.	M-Star(9/3/86)
	Andrew J. Stofan, Associate Administrator for Space Station, announced 3 September that he had appointed Dr. Franklin D. Martin to be Deputy Associate Administrator for Space Station. Stofan also announced that former Space Station Deputy John D. Hodge accepted the position as Deputy Associate Administrator for Operations. Martin was to serve as deputy for the office responsible for developing the Space Station. Hodge in his new position was to direct agency-wide planning efforts for how the Space Station was to be operated when placed in orbit.	M-Star(9/10/86)
86/09/08	The Critical Evaluation Task Force (CETF) presented its "Report to the NASA Executive Technical Committee." Task Force members reported on issues including extravehicular activity, management options, productivity, transportation, and user accommodation.	Gowan/Morris-Chron
86/09/09	Associate Administrator for Space Station Andrew J. Stofan announced the formation of an Operations Task Force to review options and recommend concepts for managing and conducting operations aboard the Space Station. The Task Force was to be co-chaired by Carl Shelley of JSC and Dr. Peter Lyman of JPL. Approximately 25 were to serve on the task force full-time; additional personnel were to serve part-time as consultants. NASA personnel, members of the private sector, and members of the academic community, as well as personnel from other governmental agencies, were to be members of the group. Axel Roth, chief of the Operations Office in the MSFC Space Station Projects Office was to be the Marshall member of the Task Force. Roth and other MSFC specialists were to provide support to the Task Force in areas such as logistics and lab operations which were directly related to MSFC's hardware development responsibilities.	M-Star(9/17/86)
86/09/10	Andrew J. Stofan, Associate Administrator for Space Station, approved the Space Station Commercial Development portion of the Phase C/D request for proposals. Included were details on the statement of work and instruction and evaluation criteria for commercial development of the Space Station Program.	Gowan/Morris-Chron
86/09/15	The Critical Evaluation Task Force (CETF) presented its "Final Presentation to the NASA Executive Technical Committee."	Gowan/Morris-Chron
86/09/16	An agreement on Work Package One and Work Package Two roles relating to the	SSPO-Chron(1986)

DATE	EVENT	SOURCE
86/09/16	Nodes and Propulsion System for the Space Station was finalized.	
86/09/19	The Space Station Program Procurement Coordination Committee was established.	SSPO-Chron(1986)
86/09/24	The Offices of Space Station and Space Science and Applications met to discuss early payloads in support of early Space Station activities. The participants agreed to meet on a regular basis.	Bowan/Morris-Chron
86/09/25	NASA Administrator Dr. James C. Fletcher presented a status report on Space Station to the House Subcommittee on Space Science and Applications of the House Committee on Science and Technology. The report focused on two areas: a follow-up analysis of the Station baseline design and a review of Space Station work package assignments among various NASA centers. Associate Administrator for Space Station Andrew J. Stofan testified along with Fletcher. Responsibility for the Laboratory Module, Habitation Module, Logistics Module, and the Resource Node structure were to be assigned to MSFC according to the report.	
86/09/29	NASA Administrator Dr. James C. Fletcher announced the appointment of James R. Thompson as Director of the MSFC on 5 August 1986. Dr. Fletcher said, "We are very fortunate to have J. R. take on this assignment which is so critical to NASA's continuing position of leadership in space exploration. I view his appointment as another positive step in the process of safely returning the Space Shuttle to flight. His extensive and varied experience makes him eminently qualified to assume this post, and I know I speak for the entire Agency in welcoming him back to NASA." Thompson, who was 50 at the time, was sworn in as Director on Monday, 29 September 1986.	M-Star(8/6/86)
86/10/06	An agreement between MSFC and JSC for the conduct of activities relating to the Man Systems discipline was finalized.	SSPO-Chron(1986)
	Dale D. Myers was appointed NASA Deputy Administrator by President Ronald Reagan.	Bowan/Morris-Chron
86/10/13	MSFC Director J. R. Thompson announced the week of 13 October a realignment within the Science and Engineering Directorate which was to become effective on 1 December. The realignment was to "prepare the Center for its substantial role in the Space Station program as well as other important projects both assigned and anticipated." The chief engineer functions were to be divided between the Associate Director for Propulsion Systems or the Associate Director for Space Systems, as appropriate, to permit more focus on these important areas. A Propulsion Laboratory and a Structures and Dynamics Laboratory were formed.	M-Star(10/00/86)
86/11/03	The Space Station Operations Task Force Oversight Committee was formed with its first meeting scheduled for 14 November 1986.	Bowan/Morris-Chron
86/11/17	Thomas L. Moser was named Director of the Space Station Program Office which was to be located in the Washington, D.C. area. The Program Office was to be responsible for overall technical direction and content on the Space Station Program, including systems engineering and analysis, configuration management, and the integration of all elements into an operating system which was responsive to customer needs. Moser was to answer to Andrew J. Stofan, Associate Administrator for Space Station. The establishment of the Program Office was in response to a recommendation by the Management Study Group headed by General	M-Star(10/29/86)

DATE	EVENT	SOURCE
86/11/17	Sam Phillips.	
86/11/25	A presentation of the Management Study Group's findings was made to top NASA managers and center directors.	Gowan/Morris-Chron
	The draft request for proposals (RFP) for Phase C/D was released by the MSFC Space Station Projects Office. The proposal invited aerospace companies to examine the draft and suggest clarifications in the language of the document about precisely what would be expected of the companies under Station contracts. The suggested changes were due back to MSFC on 12 December. The suggested clarifications were to be considered by the Projects Office, and those changes deemed necessary were to be incorporated into the final request for proposals. The final RFP was scheduled for release in mid January-1987 and the awarding of the contract was set for August 1987. Other work package centers also released RFPs on this day.	M-Star(12/3/86)
86/12/10	The Advanced Development Program Review was held at JSC.	Gowan/Morris-Chron
86/12/11	The Space Station Advisory Committee and National Research Council representatives met.	Gowan/Morris-Chron
86/12/14	In response to a memorandum from the NASA Comptroller, former Acting Associate Administrator for Space Station John D. Hodge detailed the probable effects on the Space Station Program of four-, eight-, or twelve-month delays in Shuttle launches. Hodge wrote: "The thermal and materials disciplines in the flight experiments program will be severely impacted by a 12-month delay in their flight assignments. This slip in an ongoing series of thermal flight experiments investigating the effect of zero gravity on heat transported by two-phase fluids, will add greater uncertainty to system design decisions for the Initial Orbiting Capability (IOC) Space Station. In the thermal area, space operation of the system cannot be completely correlated to the ground based operations before the design approach must be adopted...Delay in these test results will definitely impact the materials selection process..."	Gowan/Morris-Chron
86/12/27-28	The Level B Space Station Control Board held a meeting at JSC.	Gowan/Morris-Chron
87/01/05	NASA Administrator Dr. James C. Fletcher commented on President Ronald Reagan's NASA budget for FY88 which called for $9.5 billion for the space agency. Fletcher noted that the $767 million for Space Station "provides for the initiation of a phased build-up of developmental activities consistent with results of the intensive program review undertaken over the past year. That review resulted in an updated Station configuration and new cost projections, which are currently being reviewed to determine if the program was consistent with the schedule of funding."	M-Star(1/7/87)
87/01/18	Space Station Preliminary Design and Definition (Phase B) Studies were completed.	SSFO-Chron(1987)
87/01/26	A 60-member group from Louisiana lobbied lawmakers and NASA officials in Washington regarding the distribution of Space Station work packages. In hopes that New Orleans could receive the benefits of the Station work as a result of Martin Marietta's victory in the competition for Work Package One, New Orleans Mayor Sidney Barthelemy met with NASA Administrator Dr. James C. Fletcher.	HSV-Times(1/27/87)

DATE	EVENT	SOURCE
87/01/26	Mark Hess, the Space Station public affairs officer, announced that congressional funding cuts would delay the launch of NASA's first Space Station component by up to a year, and crews may not be based on the Station until 1997. NASA's schedules up to this time had called for Station components to be carried into orbit beginning in early 1994. The Space Station would have been permanently manned in early 1996.	HSV-Times(1/26/88)
87/01/29	The Marshall Space Station Projects Office was reorganized to reflect the abolition of the Space Station Common Module Office.	SSPO-Chron(1987)
87/01/30	The Final Space Station Work Package directives were signed.	SSPO-Chron(1987)
87/02/04	During the week of 4 February, NASA issued a request for proposals (RFP) to US industry for a program support contractor to assist the NASA Space Station Program Office in Washington with the systems engineering, analysis and integration activities and also to support field offices to be established at five NASA centers. The program support contractor proposals were due 3 April. The program support contractor was to assist the Space Station Program Office in assuring that top-level system design considerations were preserved, that the program goals of productivity and versatility to achieve user needs were achieved, and that NASA's goals of flight safety and cost effective performance were met. This was the third major RFP to be issued in support of future Space Station development activities. The TMIS and software support environment RFPs had already been underway, and contracts were to be awarded in April and May.	M-Star(2/11/87)
87/03/11	The House Budget Committee considered a plan to freeze the FY88 NASA budget at current levels and cut sharply, or even eliminate, the Space Station Program. The Democrats of the Budget Committee convened closed-door deliberations in an effort to find $36 billion-worth of budget cuts or new revenues for FY88. The Democrats were to present their plan to the entire Budget Committee the following week (the week of 16 March 1987).	HSV-Times(3/11/87)
	Witnesses from the space and science communities testified before the House Space Science Subcommittee, warning the committee members that the Space Station should not be built cheaply. Glen Wilson, Executive Director of the National Space Society, and Steven Flajser, Chairman of the Institute of Electrical and Electronics Engineers, testified. Flajser told the panel that the Station needs to be part of a balanced program and that NASA needs to have some long-range goals. John Logsdon of the American Institute of Aeronautics and Astronautics spoke of the need for NASA to set goals for itself and to commit funding for NASA programs, including Space Station.	HSV-Times(3/11/87)
87/03/15	Four hundered members of the National Conference of State Legislators (NCSL) met in Montgomery, AL for their national convention. As a part of the convention, a delegation of the NCSL came to Huntsville, where NASA Astronaut S. David Griggs spoke to the delegation regarding US space policy. Griggs stressed to the legislators the importance of the US Space Station, noting that if the US were to keep up with the Soviet challenge in space, American technology would have to advance. Grigg noted that the Space Station was an integral part of this advancement.	HSV-Times(3/15/87)
87/03/16	MSFC Director J.R. Thompson spoke with Rep. Ronnie Flippo, Senator Howell Heflin, and Senator Richard Shelby regarding the importance of the Space Station Program. He received support from the legislators for the Space Station Program.	HSV-Times(3/17/87)

DATE	EVENT	SOURCE
87/03/16	These discussions took place in the face of congressional budget cutting and negotiations between the White House and NASA over the increased cost of the Space Station.	
87/03/19	Some aerospace firms noted at this time in March 1987 that they were spending approximately $100,000 a day to keep their Space Station teams going, while the Reagan Administration reevaluated the plans for the Space Station. In Huntsville, Boeing assembled 250 engineers, architects, and other professional staff members at its Technology Complex. This was done after Boeing received $24 million for preliminary design work, while investing at least twice as much of its own funds in Space Station work. The delays were a result of the aerospace companies' waiting on NASA to release RFPs for Phase C/D. At this time, Boeing's contract money had run out two months earlier, and the company was attempting to avoid lay-offs of workers.	HSV-Times(3/19/87)
87/03/31	Rep. Bill Nelson (D-FL), Chairman of the House Space Sciences Subcommittee, proposed that Congress authorize $15 billion for the US Space Station and related costs over a period of up to 10 years. Such a plan would ensure a steady flow of funds for the Space Station Program and would challenge NASA to build the Station for that amount. Associate Administrator for Space Station Andrew J. Stofan was less than amenable to the proposal, stating that $15 billion would not cover everything required for the Space Station Program, including the Ground Support System, launch services, and personnel. Stofan, however, did support a multi-year funding scheme for NASA and the Space Station.	HSV-Times(4/1/87)
87/04/03	The Reagan Administration approved a $10.9 billion Space Station for NASA that would also require an additional $1.3 billion for support costs over the next eight years. Terence Finn of the Policy Division at NASA/HQ stated that the new Baseline Configuration would have little effect on MSFC; no major MSFC Space Station element would be eliminated. Finn also stated that the Phase C/D request for proposals would be sent to industry after Congress approved the President's new plan. Rep. Bill Nelson (D-FL) called the Reagan Space Station plan "half a Station." Under NASA's Space Station Baseline Configuration, the facility would be in orbit by 1996, not 1994, as previously planned. This delay, as well as the increased cost of the Station, was deemed understandable by NASA officials who understood that the 1987 Station was nearly twice the size of the one originally presented to the President.	HSV-Times(4/4/87)
87/04/06	NASA said that it hoped to request bids from industry for Space Station work and to select contractors before October 1 and the beginning of FY88.	HSV-Times(4/7/87)
87/04/07	In a 7 April letter to Secretary of State George Shultz regarding the US Space Station, Secretary of Defense Caspar Weinberger recommended that the US reject any international cooperation on the space project unless European, Japanese, and Canadian partners accept conditions on the cooperative efforts. The chief condition was that the US would have the right to conduct national security activities aboard the Space Station without fear of a detrimental one-way flow of American technology.	HSV-Times(4/9/87)
	NASA officials were urged to rearrange the Space Station construction schedule in order to get scientific research projects orbiting sooner. In a hearing of the House Appropriations subcommittee which oversees NASA, Rep. Edward P. Boland (D-MA), the Chairman, said NASA ought not sacrifice early scientific return in space for the sake of Permanent Manned Capability on the	HSV-Times(4/8/87)

DATE	EVENT	SOURCE
87/04/07	Space Station.	
87/04/22	A request for proposals for the Space Station Work Package One development, design, test, and evaluation was issued. The solicitation specified two program options. Program Option One consisted of a phased program with a Revised Baseline Configuration. Program Option Two consisted of an Enhanced Configuration Program. The estimated value of Work Package One was $4.5 billion.	I&PS-Chron(1987)
87/04/23	The President's National Security Council (NSC) released a statement regarding the operations of the future Space Station. The NSC statement went with wording which favored the civilian space agency's approach to the Station, according to NASA Associate Administrator for Space Station Andrew J. Stofan. The wording did not rule out using the Station for military research, but instead described the Station as being for "peaceful purposes consistent with international law." This statement was issued in the aftermath of Secretary of Defense Caspar Weinberger's insistence that explicit language be applied to the Station Program which would reserve the military's right to use the Station for "national security purposes."	HSV-Times(4/23/87)
87/05/05	The Space Station Program Office was established in Washington, D.C. (Reston, VA).	SSPO-Chron(1987)
87/05/08	Three engineers who worked for Rockwell International criticized NASA's Space Station configuration by remarks they made in a newspaper interview. They were reprimanded by Rockwell for not clearing their comments with the company's public affairs officials. The three engineers were Oliver P. Harwood, 64, Donald E. Koch, 61, and John E. Krieter, 56. The men also commented that NASA and aerospace industry stifle criticism of NASA plans. Harwood had proposed his own plan for the Space Station in 1984, which would have brought radical changes in the facility when its uses were better defined (the components--either habitable modules or struts--laid out in triangular patterns; three modules would be connected at the corners with spherical nodes; modules and struts could be added at any time).	HSV-Times(5/8/87)
87/06/25	The Senate committee with NASA oversight and the House Appropriations Committee approved $767 million for Space Station without tampering with present funding. The House panel also agreed to let Space Station use "passive defenses" to dodge or deflect an attack in space, but the panel turned down an amendment which would have allowed for more defensive purposes on the Space Station.	HSV-Times(6/25/87)
87/06/27	The House Science, Space, and Technology Committee approved a FY88 NASA budget of $9.52 billion, which was $40 million more than requested by the Administration. The Senate approved a $9.62 billion NASA budget. The House Committee also approved of the House Appropriations Subcommittee plan which allowed defense research on the Station, but which prohibited operational testing or deployment "or [activities] in contravention of United States law or treaty." An amendment was made to the subcommittee's statement: the word "or" was changed to "if." This was viewed as a very significant change for it meant that the Pentagon would be allowed to carry on operations on the Station unless they were expressly forbidden by law or treaty.	HSV-Times(6/27/87)
87/06/30	The National Research Council (NRC), an operating arm of the National Academy of Sciences and the National Academy of Engineering, submitted its report on the Space Station to the Reagan Administration. The report said that	HSV-Times(7/7/87)

DATE	EVENT	SOURCE
87/06/30	the Station would cost $32.8 billion in 1988 dollars, instead of the $8 billion in 1984 dollars as projected in 1984. The NASA estimate in mid-1987 was $16 billion ('84 dollars) or $19 billion ('88 dollars). The NRC noted that NASA estimates considered only the cost of services, hardware, and software purchased from contracts in NASA budgets listed as research and development. The report was seven pages long and was signed by Robert C. Seamans, Jr. It was sent to National Security Advisor Frank Carlucci, Science Advisor William R. Graham, Budget Director James C. Miller, and NASA Administrator Dr. James C. Fletcher. Associate Administrator Andrew J. Stofan called the NRC report "constructive."	
87/07/08	NASA reported that the new estimates of higher costs for the development of the Space Station would not require the re-writing of proposals. Concerns over rising costs were in the wake of the National Research Council's report which said the Space Station would cost some $32 billion. The proposals from the Work Package One competitors, Boeing and Martin Marietta, were due by 28 July.	HSV-Times(7/8/87)
	NASA selected Grumman Aerospace Corporation, Space Station Programs Support Division, Bethpage, NY, for negotiations leading to the award of a cost-plus-award-fee Space Station Program Support Contract (PSC). The contract provided for Space Station systems engineering and integration in addition to a broad range of management support to the Space Station Program Office. Principal place of performance was to be in the Washington, D.C. area. PSC field offices were also to be located in other NASA field centers, including MSFC, JSC, GSFC, LeRC, and KSC. The contract period of performance was to extend through the completion of assembly of Space Station in orbit plus one year. Grumman's proposed cost for the currently planned performance period of approximately 11 years was $841 million, with a price option for additional support of $406 million.	M-Star(87/07/08)
87/07/10	NASA Associate Administrator for Space Station Andrew J. Stofan spoke to a luncheon meeting of the Huntsville Chapter of the National Space Club. In his message to the space enthusiasts, Stofan said that the National Research Council (NRC) report on Space Station was not critical of NASA, in fact the NRC figures were based on NASA figures. Stofan said that NASA was already studying some of the concerns which the NRC had expressed in its report of 30 June. These concerns included the development of back-up hardware, in case the Shuttle had an accident, and operations costs, which were estimated at $1 billion annually. Stofan noted that NASA had an operations task force looking into NASA and international partners sharing expenses.	HSV-Times(7/11/87)
87/07/20	Martin Marietta Corporation submitted its proposal for meeting the requirements of Work Package One. The aerospace company flew its proposal to MSFC. The proposal itself was some two million pages long and weighed 8,780 lbs.	HSV-Times(7/20/87)
87/07/21	The Boeing Aerospace Company submitted its proposals for doing the work as required by MSFC's Work Package One. Boeing's proposal was due at 4:30 pm on 21 July. The proposal was contained in 121 boxes and weighed 6,000 lbs. (Martin Marietta's proposal was contained in 186 boxes).	HSV-Times(7/21/87)
87/07/28	Boeing and Martin Marietta submitted proposals for a two-part construction plan for a smaller version of the Space Station. This smaller version would save NASA several billions of dollars. The proposal submitted on 21 July was for the complete Space Station.	HSV-Times(7/29/87)

DATE	EVENT	SOURCE
87/07/28	NASA Associate Administrator for Space Station Andrew J. Stofan spoke before the House Subcommittee on Space Science and noted that the Space Station would require funding of approximately $31 billion. This statement was made in light of recent reports by the National Research Council that the Station was going to cost considerably more than NASA's 1984 estimate of $8 billion. When asked about the 1984 figure, Stofan said that it "was a guess."	HSV-Times(7/28/87)
87/08/31	A request for proposal (RFP) for a research study entitled, "Space Station Microbial Monitoring," was issued. The period of performance for this effort was to be three years. Estimated value of the contract was $550,000.	I&PS-Chron(1987)
87/09/14	The National Research Council (NRC) released a report stating that NASA had not gone far enough in tightening the management of the Space Station Program when it created the Space Station Program Office. The Program Office was created in 1986. The NRC recommended that all Space Station personnel, even at NASA centers, should report along a chain of command to the Program Office in Reston, VA. This NRC report also suggested that NASA delay its commitment to Phase II of the Station, that NASA develop a rescue module for the Station, and that NASA also develop a series of expendable rockets.	HSV-Times(9/14/87)
87/10/30	President Ronald Reagan signed into law a bill which authorized $9.6 billion for NASA, and which provided full funding for work to begin on the Space Station. The act called for $767 million for the Space Station for FY88.	Wash-Post(10/31/87)
87/11/02	The NASA Space Station spokesman at NASA/HQ announced that the decision regarding who would get the multi-billion dollar contract to build the Space Station would be delayed because of new budget worries. With White House and congressional officials just having agreed on the basis of a deficit-reduction package, NASA officials wanted to wait and see what the package held for NASA before making a decision on the contract. The budget package under consideration was designed to cut the federal budget by some $75 billion over two years through a combination of budget cuts and tax increases. Cuts in NASA's overall budget could have changed the Space Station contract amounts.	B'ham-PH(11-2-87)
87/11/03	NASA Associate Administrator for Space Station Andrew J. Stofan denied that the postponement of the announcement regarding Space Station contracts was related to the problems of the federal budget. NASA Administrator Dr. James C. Fletcher announced on 2 November that there would be a delay of several weeks in awarding the contracts, but Stofan said that the delay was due to the voluminous amounts of information which Fletcher had to digest before making his decision.	Wash-Times(11/5/87)
87/11/03-05	On 3 November NASA began a three-day workshop in Nashville, TN designed to promote the commercial potential of space. The agency was specifically looking for private partners for its Space Station. One hundred forty companies were represented at the workshop.	Wash-Times(11/5/87)
87/11/13	An unpublished report by two former professors at the University of Alabama in Huntsville showed that 5,000 jobs and $50 million in earnings would be added to the Huntsville-area economy if the Space Station Program had full impact on Huntsville. The study used the Skylab Program as a baseline for its estimates and did not favor any of the companies competing for the $9.2 billion worth of contracts. The study was commissioned by an unnamed private company and was conducted by Professors Ernst Goss and George Vozikis. The study assumed that	Dec-Daily(11/15/87)

DATE	EVENT	SOURCE
87/11/13	spending and hiring patterns would remain virtually the same, and that the same contract percentages would be spent in Huntsville. The study was conducted in January 1987.	
87/11/16	H. Hollister Cantus, Associate Administrator for External Relations, announced that the selection of companies to build a US Space Station remained on hold while NASA Administrator Dr. James C. Fletcher met privately with his lieutenants at a planning conference retreat in West Virginia. Cantus also said that an announcement of the contract selection could come Thursday or Friday (19 or 20 November), but next week (the week of 23 November) was more likely. Cantus reported that Fletcher had "a problem" in his review of the Space Station competition. Fletcher was then involved in a session of NASA's Strategic Planning Council, with field center directors and top program staff members attending a private retreat at the Bavarian Inn in Shepardstown, WV. The meeting began Monday, 16 November and was to go through Wednesday, 18 November.	HSV-Times(11/17/87)
87/11/23	An announcement was made saying NASA Administrator Dr. James C. Fletcher was still not ready to make a decision regarding selection of Space Station contractors. The NASA statement said, "the administrator does not intend to select the winning proposals until he has had an opportunity to evaluate the impact of the budget decisions made last Friday" (20 November 1987).	HSV-Times(11/23/87)
87/11/24	NASA Associate Administrator for Space Station Andrew J. Stofan complained about the delays in beginning the Space Station Program, and blamed uncertainty surrounding it on the nation's "lack of leadership" on space issues. Stofan spoke at a breakfast sponsored by American Politics magazine, saying he did not know when NASA Administrator Dr. James C. Fletcher would make the decision regarding Station contracts, but that a decision would be made and announced before the end of the year. Stofan also warned that the Program could still be delayed longer if the Station's congressional appropriation for FY88 fell short of NASA's request. The House had recently authorized $767 million, while the Senate had approved only $558.7 million; the gap had not been closed. Stofan commented that the Gramm-Rudman cuts had also clouded the picture further.	HSV-Times(11/24/87)
87/12/01	Contractors for the Phase C/D Space Station contracts were selected. In a news conference scheduled for 1 pm CST, NASA Administrator Dr. James C. Fletcher announced that Boeing Aerospace of Huntsville and its subcontractor team were selected for Work Package One. Teledyne Brown Engineering and TRW were the major subcontractors. The award was reported to be worth nearly $800 million and 2,000 jobs for the Huntsville-area economy.	HSV-Times(12/1/87)
87/12/02	The National Research Council released a report on space technology which was critical of NASA's alleged "preoccupation" with programs such as the Shuttle and the Space Station. Such preoccupation, according to the report, undercut long-range national space interests. As a result, NASA had been left with "a technology base inadequate to support advanced space missions." The report recommended that NASA earmark at least 7% of its budget over the next decade for long-term research projects.	HSV-Times(12/3/87)
87/12/07	Senator Howell Heflin (D-AL) attempted to avert a 70% cut in federal funds for Space Station. The 70% figure was the worst-case scenario and probably would not come to pass, but Heflin did say that some cuts would be likely. The 70% cut would shrink the 1988 Space Station appropriation down to $200-300 million.	HSV-Times(12/8/87)

DATE	EVENT	SOURCE
87/12/16	House and Senate Conferees agreed to give the Space Station Program $425 million for FY88, a $342 million cut from NASA's original request. This figure was arrived at in the midst of a congressional battle for a catch-all funding bill for FY88. At certain times during the budget talks, consideration was given to cutting Space Station funding to a figure as low as $200-300 million; such a figure, in the opinion of NASA officials, would have necessitated the discontinuation of the Space Station Program.	HSV-Times(12/17/87)
	In the FY88 Continuing Resolution signed into law before Christmas 1987, Congress ordered NASA to provide a "rescoping" plan for the Space Station by 29 February 1988. At the same time, $425 million was allotted to NASA for the Station, but only $200 million of that was available before 1 June 1988. NASA had to satisfy Congress' desire for a "rescoped" program. There was some disagreement as to what Congress meant by "rescoped." Some NASA officials believed the term referred to a reduction of the Space Station's design, while some believed it to refer to putting together a slower development schedule.	AvWk(1/4/88)
87/12/22	The letter contract NAS8-50000 was signed for Work Package One Phase C/D Space Station activities.	SSPO-Chron(1987)
87/12/24	Philip E. Culbertson, who served as NASA General Manager and who headed the Space Station work when it first began, was said to be retiring in mid-January 1988. At the time of his retirement, Culbertson was heading the NASA Office for Policy and Planning. He was to become President of the Lew Evans Foundation, which supports and encourages the use of space to improve life on Earth.	HSV-Times(12/24/87)
88/01/25	President Reagan requested $1 billion for the Space Station Program in 1989. The request was made in a written message sent to Congress prior to the President's State of the Union Message. The written message contained executive recommendations on various legislative proposals. Along with the $1 billion in 1989, Reagan asked Congress to give NASA a three-year appropriation "commitment" totalling $6.1 billion for the Space Station.	HSV-Times(1/26/88)
88/02/06	International Space Station partners concluded formal negotiations on the documents which were to govern cooperation on the Program during development and operations. The foreign partners hoped to complete all work on the agreements by early March. Each of the partners were to have two agreements, a multilateral intergovernmental agreement between the cooperating nations and a memorandum of understanding agreement between the space agencies that were to carry out the Program. State Department and NASA officials said that no additional negotiating sessions were planned.	AvWk(2/15/88)
88/02/08	Congress held $90 million carried over from 1987 which the Space Station Program said it needed in order to carry the Program beyond the end of February. In December, Congress agreed to give the Space Station $425 million, with $225 million of that available only after 1 June and the "rescoping" of the Program. The $90 million was also attached to the $225 million. The Program was to run out of money by the end of February or early March if the funds were not forthcoming. Mark Hess, Station public affairs officer at NASA/HQ, said that NASA would have to pay some $20 million in shut-down costs if the funds were not made available.	HSV-Times(2/8/88)
88/02/12	President Ronald Reagan announced a new space policy which had the long-range goal of extending the "human presence" into the solar system while	HSV-Times(2/12/88)

DATE	EVENT	SOURCE
88/02/12	also promoting human business in Earth orbit. The policy called for government to concentrate on science and exploration, while turning over many other space functions to private industry. The President expressed his desire for $1 billion for Space Station in 1989 as part of a three-year $6.1 billion commitment to the Space Station.	
88/02/18	In a letter from NASA Administrator Dr. James C. Fletcher, signed by NASA Deputy Administrator Dale Myers, the space agency requested House and Senate subcommittees to release $90 million in Space Station funds so that the Program would not grind to a halt. The money had been held by Congress in a dispute with NASA over the way NASA planned to assemble the Station in the mid-1990s. NASA also requested a delay in the delivery of the "rescoping" report which was due back to Congress by 29 February. NASA said it would need until early April to have the report finalized and would thus need the $90 million to keep the Station Program afloat during the interim. Also, several congressmen expressed their dissatisfaction that NASA was delaying deployment of the Station at a man-tended mode in favor of a permanently manned mode at a later date.	HSV-Times(2/23/88)
88/02/27	House and Senate funding subcommittees released $45 million to continue Space Station work at least until early April 1988, at which time NASA was to complete a report on the "rescoping" of the project and its construction schedule. NASA had threatened to stop the work being done by major Space Station contractors if the $90 million in unspent 1987 funds were not forthcoming. According to Senator Howell Heflin (D-AL), the $45 million was released as part of a compromise to continue the project until NASA completed the "rescoping" report.	HSV-Times(2/27/88)
88/03/10	A letter dated Thursday, 10 March was sent to Speaker of the House Jim Wright (D-TX) regarding the proposed cuts in NASA's FY89 budget. Thirty congressmen said they would vote against a budget bill which they felt slighted space and science. The letter emphasized that Congress must continue such activities as the Space Station, basic energy research, and the National Science Foundation. The letter went on to say that cuts in space and science funding would "lead to an unacceptable loss in our nation's vitality and international competitiveness" at a most inopportune time. Most of the letter's signers were members of the House Science, Space and Technology Committee. Although it was not uncommon for congressmen to lobby for their pet projects, it was uncommon, as noted by one congressional staffer, for the Science, Space and Technology Committee to threaten to oppose a budget resolution.	HSV-Times(3/11/88)
	Associate Administrator for Space Station Andrew J. Stofan, who was to retire from NASA as of 1 April, testified before a House panel that a 25-30% cut in Space Station funds could delay the Station indefinitely and add to its $14.5 billion cost. Stofan told that House members that a $342 million cut in the FY89 budget already added $1.4 billion worth of long-range costs. NASA was requesting $967 million for Space Station in FY89 as part of an $11.5 billion agency budget. The House Budget Committee reported that it was unlikely that NASA could expect more than $10 billion, with Station receiving no more than $700 million. Rep. Jack Buechner (R-MO) told Stofan that the Station budget was in trouble, and he suggested that NASA come up with some "creative funding" schemes, much the same as those used to finance the renovation of the Statue of Liberty. Buechner also recommended that NASA name the Space Station.	HSV-Times(3/10/88)
	Rep. Edward P. Boland (D-MA), Chairman of the House Appropriations	Wash-Post(3/11/88)

DATE	EVENT	SOURCE
88/03/10	Committee subcommittee which oversees NASA's budgets, warned that his subcommittee must be given more funding for housing here on Earth, or Congress will "kiss goodbye to the space station."	
88/03/14	During the week of 14 March, NASA mailed tentative contract requirements for a leased commercial space facility to more than 35 companies. NASA announced its intentions to lease a man-tended space station on 24 February 1988. A draft statement of work followed on 2 March with comments due 8 March. A draft industry request for proposals was issued 7 March with comments due on 14 March. According to Lee Tilton of NASA/HQ, the final request for proposal that was to lead to a contract was due out by the end of the month.	HSV-Times(3/16/88)
88/03/16	The House Budget Committee was reportedly preparing to recommend a freeze on funding for space and science activities for FY89. The members tentatively agreed to the freeze in an informal 12-10 vote on 15 March in a closed-door session. The freeze resolution, if passed by both houses, would have set spending limits for the committees which draft authorization and appropriations bills for individual programs. In the FY89 budget, NASA was requesting an $11.5 billion appropriation from Congress, about $2.6 billion more than it received for 1988.	HSV-Times(3/16/88)
88/03/17	The House Budget Committee backed away from a proposed spending freeze on US space and science programs, but was $1.5 billion short of President Ronald Reagan's request for FY89. The Budget Committee recommended an additional $1.65 billion for space and science in 1989, about half of what Reagan wanted. NASA had been seeking a $2.4 billion boost in funding, i.e., a 29% increase. Under the Budget Committee's plan, NASA would receive at least $750 million less than their request. Rep. Ronnie G. Flippo (D-AL) praised the Budget Committee's recommendation as a "great victory" for NASA and the Space Station. Overall, the Committee approved $12.45 billion for the space and science category budget; the President had sought $13.9 billion for 1989. Reagan's budget proposed $10.6 billion for NASA, including $967 billion for the Space Station.	HSV-Times(3/18/88)
88/03/23	The House of Representatives passed by a 319-102 vote a 1989 budget resolution which assumed a $10.2 billion ceiling for NASA. This amount was about $1.3 billion more than NASA received for 1988, but was only half the increase the President requested. This budget resolution sets overall spending guidelines for the congressional committees that later were to draft funding bills for specific programs; the resolution's totals were supposed to be binding, but the recommendations for individual areas were not. The focus of attention after this point was to shift to the Senate, where NASA's Senate allies were to attempt to augment the House allocation to the space agency. NASA Administrator Dr. James C. Fletcher noted that such an amount was too small to allow continuance of the Space Station Program.	HSV-Times(3/24/88)
88/03/29	NASA Administrator Dr. James C. Fletcher testified before the Senate Appropriations Subcommittee chaired by Senator William Proxmire (D-WI). Senator Proxmire and Senator Patrick Leahy (D-VT) both made clear their skepticism regarding the Space Station. Leahy asked Fletcher, "Does it make sense to spend nearly $1 billion next year to build a station when we're not sure where the train's going to go." The only defender of the NASA budget on this subcommittee was Senator Jake Garn (R-UT), who accused Congress of trying to undermine the nation's technological edge by holding down spending for science and space activities.	HSV-Times(3/30/88)

DATE	EVENT	SOURCE
88/03/30	The Senate Budget Committee voted to recommend a 25% increase in 1989 for NASA, including the full $967 million sought for Space Station work. The Senate panel's figure fell about $400 million short of what President Ronald Reagan had requested, but it was $800 million more than the allowance of the House budget resolution. The Senate Budget Committee's recommendation requested $10.4 billion for the space portion of the NASA budget, with an additional $700 million for aeronautics. The Senate panel called for $13.4 billion for the broad budget category that included NASA's space activities along with the National Science Foundation and Department of Energy research (the House resolution called for $12.45 billion). Full Senate action was to come on the resolution soon after Congress returned from Easter recess. A House-Senate conference committee was to work out the differences in the two houses' budget resolutions.	HSV-Times(3/31/88)
88/04/01	Andrew J. Stofan, Associate Administrator for Space Station, planned to retire from NASA on 1 April 1988. After 30 years with the space agency, Stofan was to leave a career which had seen him as Director of LeRC and the leader of the Space Station Program through some very trying times. The Space Station Program Office in Reston, VA was established, eight major contracts were awarded, and a major cost review of Space Station was conducted during Stofan's tenure as Associate Administrator for Space Station.	HSV-Times(2/8/88)
	Veteran MSFC executive James B. Odom was to take was to assume the position of Associate Administrator for Space Station from Andrew J. Stofan as of 1 April 1988. Odom, who had been noted for his role in guiding the Hubble Space Telescope Program through difficult times, was to see the Space Station Program through some difficulties in obtaining congressional backing.	HSV-Times(3/3/88)
88/04/14	NASA announced that the end of 1995 was the earliest date at which it could hope to begin man-tended operations on Space Station. This was about nine months later than NASA's original target date announced before the agency suffered a $342 million cut in Station funding in the 1988 budget request. By rearranging the Station's assembly sequence, NASA hoped to minimize the delay in man-tended capability. Overall, the Station Program was to slip by one year, with the first launch scheduled for early 1995 and permanent manned basing by 1997. This information was part of a report mandated by Congress to detail how budget cuts would affect the Station's scope and schedule. Congress had also requested that NASA move toward man-tended capability at an earlier date.	HSV-Times(4/15/88)
88/05/12	The House Appropriations Committee's Subcommittee on Housing and Urban Development and Independent Agencies approved a FY89 budget for NASA which called for $10.706 billion, instead of the $11.488 billion requested by the space agency. The largest reduction was in the Shuttle Program, which received a $200 million cut. The Subcommittee members also cut $65 million from the $967 million requested by NASA for Space Station.	B'ham-PH(5/13/88)
88/05/21	NASA Administrator Dr. James C. Fletcher warned Senator Jake Garn (R-UT) that any cut in the $10.7 billion NASA budget approved by a House Appropriations subcommittee as of 13 May would have to come from the Space Station funds; and as a result, the Space Station would probably be killed. Fletcher said NASA would recommend a halt on Space Station development "as currently planned" if the final NASA appropriation is "significantly below" the proposal that was pending in the House. NASA had asked for $967 million for Space Station in FY89, and the House panel had recommended only $902 million for the Program.	HSV-Times(5/21/88)

DATE	EVENT	SOURCE
88/05/22	In an interview with Huntsville Times during the week of 22 May, Senator William Proxmire (D-WI) said he was ready to renew his efforts at cutting the Space Station. As Chairman of the Senate Appropriations panel that oversaw NASA funding, Proxmire had attempted on numerous occasions to cut funding for the space agency. The proposed spending bill which Proxmire was considering might not have included any money for Space Station. Proxmire noted, "We have to make some cuts, and if we fund the space station especially, it's going to be hard... I think it's going to be extremely hard for our subcommittee to provide that amount ($10.7 billion for NASA)."	HSV-Times(5/29/88)
88/06/02	A three-year $41.6 billion NASA budget passed the House of Representatives. The measure called for $11.5 billion for the space agency in 1989, $14.4 billion in 1990, and $15.7 billion in 1991. Expected cuts would make the NASA FY89 appropriation closer to $10.7 billion. This would be an $800 million cut from President Ronald Reagan's request. Many saw this measure as a means of giving NASA more long-term funding, in place of the annual battle for funds.	HSV-Times(6/3/88)
88/06/14	A House Appropriations Committee plan was approved which would allow the president who would take office in January 1989 to decide the fate of the Space Station. The plan would give the new president until 15 April 1989 to give or withhold his support for the Station. Otherwise, work on the Program would end. The Committee passed a $10.7 billion NASA funding measure which was to include $902 million for Station work in 1989. Five hundred fifteen million dollars would be withheld until 15 April, after which time it would become available if the new president chose to endorse the Program. The president would have to send a "special message" to Congress between 1 February and 15 April announcing his support.	HSV-Times(6/14/88)
88/06/16	A Senate Appropriations subcommittee voted to cut funding for the Space Station to only $200 million for FY89, some $700 million less than the Reagan Administration requested. The bill also called for the next administration to make a decision as to whether or not progress would continue on the Space Station Program. Several key senators noted dismay at the Appropriations action. Senator Lloyd Bentsen (D-TX) said the $200 million was only enough "for the slow strangulation" of the Space Station. Senator Phil Graham (R-TX) noted that Congress was playing politics, not looking to the future of the country.	HSV-News(6/17/88)
88/06/22	The full Senate Appropriations Committee voted $200 million for the Space Station for FY89, per the suggestion of an Appropriations subcommittee. Another Senate subcommittee had acted to add $600 million to the Space Station by transferring unspent defense funds to NASA. The full Appropriations Committee was expected to approve the suggested $600 million transfer on 23 June 1988. President Ronald Reagan was not pleased with the Senate action, for it not only appropriated $700 million less than he requested for Station, but it also sought to take funds from defense.	HSV-News(6/23/88)
	The US House of Representatives voted to appropriate $10.7 billion to NASA for FY89 after members defeated an attempt to divert $400 million from Space Station funds to social programs. The funds for NASA were part of a $59.7 billion Housing and Urban Development and independent agencies budget. The spending measure passed by a 377-40 vote. The House voted down the amendment of Rep. Charles Schumer (D-NY) which would have diverted Space Station funds. The vote against this amendment was 256-186.	HSV-News(6/23/88)

DATE	EVENT	SOURCE
88/07/13	The US Senate voted to fund the Space Station with $200 million in FY89, an amount which was greatly distressing to NASA and the agency's supporters on Capitol Hill. Mark Hess, spokesman for the Space Station Program, said that the amount approved by the Senate was "going-out-of-business level" funding for the Station. Overall, the Senate bill gave NASA $10.1 billion, which was $1.4 billion less than the Administration had requested. The NASA budget was part of a $59.1 billion spending bill which included items for Housing and Urban Development and other independent agencies. The alleged Senate rationale in giving only $200 million to Station was that such an amount would either allow the next president to approve or phase-out the Space Station Program.	Wash-Times(7/14/88)
88/07/18	President Ronald Reagan announced that the permanently-manned NASA Space Station was to be named "Freedom." The name "Freedom" was recommended by a team of NASA representatives and international Space Station partners. The name was selected from more than 700 suggestions sent to NASA from its employees, contractors, the international partners, and the general public. President Reagan's earliest statements on the Station Program were tied to the idea of liberty, as evidenced in his 1984 State of the Union message which announced the Administration's support for a Station. He said that, along with our allies and friends, "we can strengthen peace, build prosperity, and expand freedom for all who share our goals."	M-Star(7-20-88)
88/07/25	A Media General-Associated Press poll found in a national survey of 1,223 adults that 40% of the respondents felt the United States was doing too little in space. Some 36% felt the US was doing enough, whereas 19% believed the US should cut back on its efforts in space. Fifty-five percent supported the development of Space Station, whereas 34% were against the effort; 30% had no opinion. Nearly half of those surveyed said they had lost confidence in NASA as a result of the Challenger accident, and 28% said that they still had doubts regarding the space agency.	B'ham-News(7/25/88)

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	MSFC Contract Awarded to TRW For Space Platform Work
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82/03/15	Space Station Technology Steering Committee and Working Groups Meet
82/03/19	NASA and West Germany Discuss Space Station Cooperation
82/04/02	Mission Analysis Studies Briefing Given
82/04/19	Salyut 7 Launched
	Space Station Technology Steering Committee Meets
82/04/27	Space Operartions Study Meeting Held
82/05/19	Space Station Mission Analysis Studies Briefing Held
82/05/21	MSFC Awards Study Contracts To Explore Early Uses of Space Station
82/06/02	Space Station Task Force Is Formed
82/06/10-11	Launch Vehicle Symposium at MSFC
82/06/11	NASA Meets with Representatives of NASDA
82/06/15	Chairman of House Science Committee Writes President Reagan
82/06/17	Beggs Meets with ESA Director
82/06/23	Space Station Technology Steering Committee Meets
82/06/28	NASA Released RFP's for Space Station Mission Analysis Studies
82/07/09	Space Station Task Force Establishes Mission Requirements Working Group
82/07/15	Space Station Program Planning Working Group Meets
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82/07/19	Beggs, Mark, Culbertson, and Hodge hold Space Station Planning meeting
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	NASA Advisory Council Meets to Discuss Five-Year Planning
	Senate Committee Tasks OTA to Study Need for Orbiting Facility
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82/07/29-30	SSPPWG Meets at NASA/HQ
82/07/30	SSPRC Meets at NASA/HQ
82/08/09	Space Station Steering Committee Meets
82/08/10	NASA Selects 8 Companies for Space Station Mission Studies
82/08/19	Space Station Program Planning Working Group Meets
82/08/20	NASA Contracted Eight Mission Analysis Studies.
82/09/13	MSFC Selected 4 Firms For Contracts To Study Early Uses of Space Station
	Office of Space Station Holds International Orientation
82/09/15	Beggs Submits NASA FY84 Budget
82/09/16	Space Station Program Review Committee
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82/12/13	Tethered Satellite System Orientation Meeting Held
82/12/14	Space Station Program Review Committee Meets
82/12/14-15	Operations Working Group Meets
82/12/17	Potential International Participants Briefed by SSTF on Available Data
83/01/18	Hodge Formalized List of Space Station Level A Requirements
83/01/19-21	Space Station Technology Steering Committee Meets
83/01/25-26	Space Station Program Review Committee Meets
83/02/03	Beggs and Mark Testify Regarding 1984 NASA Budget Authorization
83/02/11	Beggs Sent Letter to Center Directors Reaffirming Support of Station
83/02/15	Keyworth Testifies Regarding Space Station
83/03/07-11	Culbertson Discusses Space Station With Japanese Officials
83/03/10	Space Station Program Review Committee Meets
83/03/28-31	Space Station Technology Workshop Held
83/04/11	Reagan Approves Study Conducted to Establish Decision on Space Station
83/04/21	Briefings Conducted at MSFC On Space Station Study Contracts
83/04/27	Concept Development Group Moves in Building
83/05/02-13	Mission Synthesis Workshop Held
83/05/06	Draft RFP Issued
83/05/12	Space Station Program Review Committee Meets

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DATE	EVENT
83/05/25	Eighteen Space Station Uses Study Proposals Accepted
83/05/27	Solicitation For Developing Commercial Space Business Plan Released
83/06/02-13	Mission Requirements Workshop Held at LaRC
83/06/07	Senior Interagency Group Meets
83/06/13	Space Station Steering Committee Meets
83/06/13-15	Space Station Program Planning Working Group Meets
83/06/16	Hodge Briefs House Subcommittee Staff Concerning Space Station Missions
83/06/20	McFarland Informed of Defense Missions of Space Station
83/07/07	Policy Review Committee Meets at NASA/HQ
83/07/18	Beggs Announces NASA's Plans for Space Station
	Space Station Steering Committee Meets
83/07/20-21	Space Station Program Review Committee Meets
83/07/26-27	NASA Advisory Council Discusses Space Station
83/08/03	President Reagan Meets With Corporations Concerning Space Station Support
83/08/04	Space Station Steering Committee Meets
83/08/10	Beggs Requests Support from Weinberger for Space Station
83/08/29	Space Station Management Colloqium Meets
83/09/01-02	Space Station Program Review Committee Meets
83/09/13	Space Station Steering Committee Meets
83/10/24	Space Station Steering Committee Meets
83/10/27	Space Applications Board Report to NASA Regarding Space Station
83/10/31	Silveira Becomes Chairman of Space Station Steering Committee
83/11/09	The Concept Development Group Met Concerning Crew Safety
83/11/15	US Senate Subcommittee Held Hearings On Space Station

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DATE	EVENT
83/11/17	Reagan Expected to OK Permanent Space Station
83/11/28-30	Space Station Technology Steering Committee Meets
83/12/01	Council for Commerce Meets with Beggs Regarding Space Station
83/12/15	Culbertson Meets with Faget to Discuss Free-Flying Industrial Facility
84/01/03	MSFC Invited Aerospace Companies to Describe How They Would Define OMV
84/01/16	Weinberger Tells Beggs Of Lack Of Military Need for Manned Space Station
84/01/25	Reagan's 1984 State of the Union Address Announcing Support for Station
84/02/09	Beggs Meets With Industry Officials Regarding Space Station
	House Subcommittee Holds Hearing on Task Force on Scientific Uses
	NASA Establishes 7 Inter-Center Teams for Station Advanced Development
84/02/10	Hodge Distributes POP 84-1 Guidelines for Station Program Definition
84/02/16	JSC Named Lead Center for Space Station
84/02/19	Phase B To Begin Around July or August 1984
84/02/27	MSFC Assigned Lead Center Responsibilities for Test Beds
84/02/28	Memorandum of Understanding Signed Regarding Construction of ISF
84/02/29	Space Station Task Force Chooses Priorities for Facilities
84/03/01	Marshall's Role in Space Station Work Is Outlined
84/03/02	A Draft RFP Approved for Transmittal to Level B
84/03/05	NASA Held Mission Synthesis Workshop
84/03/07	MSFC Responds to Lead Center Announcement
84/03/12	Space Station Task Force Submits IOP 84-1 Estimates

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DATE	EVENT
84/03/14	Phase B Contracts for MSFC, GSFC, and LeRC Chosen
	Space Station Steering Committee Meets
84/03/16	Beggs Defends FY85 Request for $150 Million
	NASA Selected McDonnell Douglas and TRW for Parallel Station Contracts
84/03/18	Wyle Considers a Laboratory for Space Station
84/03/22	Phase B "Controlled Milestones" Generated
84/03/23	NASA Center Directors' Controlling Offices Meet at JSC
84/03/29	POP 84-1 Submitted to Space Station Task Force
	Space Station Funds Clear First Congressional Hurdle
84/03/30	Ohio Lawmakers Upset Over South's Space Dominance
84/04/09	Hutchinson Named Manager of Space Station Program at JSC
84/04/10	International Cooperation Group Meets
84/04/11	President Reagan Asks For Study on Whether To Proceed With Space Station
84/04/27	International Cooperation Group Meets
84/05/04	Space Station Steering Committee Holds Meeting
84/05/08	International Cooperation Group Meets
84/05/10	Culbertson Delineates POP 84-2 for JSC
84/05/23	International Cooperation Group Meets
84/06/01	Awarding of Orbital Transfer Vehicle Phase A Contracts
84/06/04	International Cooperation Group Meets
84/06/14	NASA Personnel Hold Space Station Program Review
84/06/19	NASA Personnel Hold Utilization Budget Review
84/06/21-22	NASA and Foreign Officials Meet Regarding Space Station
84/06/28	NASA Announces Four Centers for Phase B Design Studies
84/07/03	International Cooperation Group Meets

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DATE	EVENT
84/07/09	Space Station Steering Committee Holds Meeting
84/07/11	Awarding of Contracts for Studies of Orbital Transfer Vehicle
84/07/18	Reagan Signs Law Requiring Man-Tended Options Study
84/07/24	Aerospace Companies Selected for Negotiations Leading to OMV Contracts
84/08/01	NASA Establishes Office of Space Station/Culbertson made AA for OSS
84/08/07	International Cooperation Group Meets
84/08/10	Culbertson Makes Recommendation Regarding FY86 Space Station Funding
84/08/13	Space Station Steering Committee Holds Meeting
84/08/23	NASA Personnel Hold Level A/B Review
84/09/06	International Cooperation Group Meets
84/09/10	Space Station Steering Committee Holds Meeting
	Space Station Technology Conference Held
84/09/14	RFP Issued for Definition & Preliminary Design of Low Earth Orbit Station
84/09/16	Reduction in Value of Phase B Contracts
84/09/20-21	Space Station International Workshop Meets
84/09/21	Space Station Projects Office Augmented Within Program Development
84/09/23	McMillion Appointed Chief Engineer for Space Station Program at MSFC
	Space Station Systems Engineering Division Established
84/09/24	NASA Sponsored Workshop for Station Mission Requirements Working Group
84/09/26	NASA Sponosrs Preproposal Conference
84/09/27	General Dynamics and Grumman Form Team to Seek Work Package One
84/10/09	Culbertson Establishes Space Station Management Council

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DATE	EVENT
84/10/09	Space Station Steering Committee Meets
84/10/11	International Cooperation Group Meets
84/10/19	MSFC Space Station Projects Office Activated
84/10/24	Beggs Approves the Formation of a Space Station Projects Office at MSFC
	International Cooperation Group Meets
84/10/30	Space Station Management Council Holds First Meeting
84/11/05	International Cooperation Group Meets
	Space Station Steering Committee Meets
84/11/13	Office of Technology Assessment Releases Space Station Report
	Task Force on Scientific Uses of the Space Station Meets
84/11/14	NASA Defends Its Plan for a Space Station Against OTA Report
84/11/15	Proposals in Response to Space Station Definition Study RFPs Received
84/11/19	Banks Supports Extended Duration Orbiter
84/11/20	Contract for Microgravity Materials Processing Facility Selected
84/11/30	Contract to Teledyne Brown to Study Orbiting Research Facility
84/12/03	Space Station Steering Committee Meets
84/12/13	Culbertson Announces Formation of Commercial Advocacy Group
84/12/14	NASA Submitted Space Station Management Plan
	Office of Space Station Submits Requirements for COF in FY 1987-FY 1992
84/12/18	Space Station Management Council Holds Meeting
84/12/20	Initial Evaluation of Space Station Phase B Proposals Completed
85/01/07	NASA and ESA Agreed on ESA Phase B Description

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DATE	EVENT
85/01/09	Space Station Steering Committee Meets
85/01/23	Culbertson Establishes Ad Hoc Task Force on Man-Tended Option
85/01/30	International Cooperation Group Meets
85/02/06	Reagan Reaffirms Commitment to Space Station
	Space Station Attitude Control Advanced Development Team Meets
85/02/12-13	Bill Nelson Visits JSC and MSFC
85/02/13	Space Station Steering Committee Meets
85/02/19	Task Force on Scientific Uses of Space Station Briefed at MSFC
85/02/26	Level A/B Planning Meeting and Level A/B/C Meetings Held
85/02/27	International Cooperation Group Meets
85/03/08	Office of Space Station Transmits Guidelines for POP 85-2
	Peter Banks Testifies before Senate Subcommittee
85/03/11	Level A/B/C Advanced Development Program Managers Meet
85/03/12	Space Station Task Force Research and Development POP Submitted
85/03/14	Hearings Held on Automation and Robotics
85/03/14-15	Level B Systems Integration Board Meets
85/03/17-18	US and Canada Join in Space Station Efforts
85/03/20	NASA Selects Two Industry Teams for Marshall Space Station Contracts
85/03/25	Level B Space Station Control Board Meets
85/03/28	Policy Review Committee and Center Directors Discuss Evolution
85/04/00	Space Station Scientist Assigned
85/04/01	Space Station Integrated Systems Data Base Implemented
85/04/09-10	Phase B "Readiness Review" Conducted at JSC

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DATE	EVENT
85/04/15	Space Station Phase B Contracts Set to Run from 15 April 1985
85/04/16	Space Station User Functional Requirements Envelope Reviewed
85/04/19	Hutchinson Authorized Start of Phase B Contracts
85/04/22	Kickoff Meeting for Phase B Held
85/04/24-25	Open Forum on Space Station Software Issues Held
85/04/30	Level B Systems Integration Board Meets
85/05/08	Space Station Steering Committee Meets
85/05/09	Phase B Memorandum of Understanding Signed With Japanese
85/05/13-17	NASA-wide Automation and Robotics Review Held
85/05/17	Level B Space Station Control Board Meets
85/05/21-23	Level B Space Station Operations Panel Holds Meeting
85/05/23	Level A/B/C Program Control Managers Meet
85/05/28-31	Task Force on the Scientific Uses of the Space Station Meets
85/06/03	Phase B Memorandum of Understanding Signed With ESA
85/06/06	International Cooperation Group Meets
85/06/12	Space Station Steering Committee Holds Meeting
85/06/13	Space Station Management Council Meets
85/06/14	Level B Space Station Control Board Meets
85/06/21	First Space Station Phase B Review Held
	International Cooperation Group Meets
	Level B Space Station Control Board Meets
85/06/24	MSFC Space Station Pre-Development Review Held
85/06/27	Possibility of MSFC Losing OMV Funds In Order to Increase Station Funds
85/06/28	Culbertson Gives Space Station Position on Extended Duration Orbiter

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DATE	EVENT
85/07/01	Office of Space Station Research and Development POP 85-2 Submitted
85/07/09-11	Level B Systems Integration Board Meets
85/07/09-17	NASA Personnel met for RUR-1 Process
85/07/12	Level B Space Station Operations Panel Holds Meeting
85/07/15	International and Technical Integration Panel Held Meeting
85/07/16	Space Station Projects Office Operations Office Established
85/07/16-17	Level B Space Station Control Board Holds Meeting
85/07/22	Office of Space Station Establishes Level A Control Board
85/07/25-26	International Cooperation Group Meets
85/07/30	Guidance, Navigation and Control Technical Integration Panel Meets
	Memorandum of Understanding Signed Regarding OMV
85/07/30-31	Mechanisms Technical Integration Panel Holds a Meeting
85/08/04-05	The Aeronautics and Space Engineering Board Meets
85/08/06-07	Structures Technical Integration Panel Holds Meeting
85/08/13-15	Task Force on Scientific Uses of Space Station Holds Workshop
85/08/14	Culbertson Requests "Scrub" For Space Station Program
85/08/15	Level B Space Station Control Board Holds a Meeting
85/08/19-23	Task Force on Scientific Uses of Space Station Holds Summer Study
85/08/20	International Cooperation Group Meets
85/08/30	Level B Space Station Control Board Holds Meeting
85/09/10	International Cooperation Group Meets
85/09/10-13	Space Station Evolution Workshop Meets
85/09/11	Space Station Steering Committee Holds Meeting
85/09/12	Level B Space Station Control Board Meets

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DATE	EVENT
85/09/19	Level B Space Station Control Board Holds Meeting
85/09/25	Level B Systems Integration Board Meets
85/09/26	Level B Space Station Control Board Meets
85/10/03	Level B Space Station Control Board Meets
85/10/09-10	Level B Systems Integration Board Meets
85/10/10	Technical Management Information System Project Office Was Formed
85/10/16	Level B Systems Integration Board Meets
85/10/17	Level B Space Station Control Board Meets
85/10/23	Level B Systems Integration Board Meets
85/10/24-25	Level B Space Station Control Board Meets
	Space Station Management Council Meets
85/10/26-27	FY88 Space Station COF Review Held
85/10/31	Level B Space Station Control Board Meets
85/11/01	RFP for the Orbital Maneuvering Vehicle Is Released
85/11/04-05	Systems Engineering and Integration Managers Meet
85/11/05	Memorandum of Understanding Signed Regarding OMV
85/11/06	Orbital Maneuvering Vehicle Task Force Agreed Upon
85/11/07	MSFC Releases RFP for Orbital Maneuvering Vehicle
85/11/08	Level B Systems Integration Board Meets
85/11/13	Level B Systems Integration Board Meets
	NASA/HQ, MSFC, and JSC Representatives Meet on Communications with OMV
85/11/14	Culbertson Writes to Beggs Regarding Inter-Center Rivalry
85/11/14-15	Level B Space Station Control Board Meets
85/11/19	Space Station Research and Technology Operating Plans Submitted
85/11/19-20	Advanced Development Program Overview Held

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DATE	EVENT
85/11/20	NASA Space Station Propulsion Advanced Development Program Presented
85/11/21	Space Station Reference Update Review-2 Held
85/11/25	Reagan Signs FY86 HUD-Independent Agencies Appropriations Bill
85/11/26	Level B Systems Integration Board Meets
85/12/05	Level B Space Station Control Board Meets
85/12/11	Level B Systems Integration Board Meets
85/12/12	Level B Space Station Control Board Meets
85/12/18	Level B Systems Integration Board Meets
85/12/23	OMB Recommends Huge Cut for Space Station in FY87
85/12/26	Hodge Appointed as Acting Associate Administrator for Space Station
85/12/30	Hodge et al Hold Meeting Regarding Work Packages
86/00/00	MSFC/JSC Agreement Regarding Environmental Control and Life Support
86/01/07	Level A Review Held
86/01/08	Level B Systems Integration Board Meets
	Refinement of Space Station to Continue over 4-Month Period
86/01/09	Level B Space Station Control Board Meets
86/01/14	International Cooperation Group Meets
	Level B Systems Integration Board Meets
86/01/16	Level B Space Station Control Board Meets
86/01/22	Level B Systems Integration Board Meets
86/01/23-24	Level B Space Station Control Board Meets
86/01/28	Mission 51L Accident
	Office of Space Station Submits Revised FY86 Plan to NASA Comptroller

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DATE	EVENT
86/01/28-29	Level B Systems Integration Board Meets
86/02/03	Reagan Appoints the Rogers Commission
86/02/04	Phase B Memorandum of Understanding Signed With Canada
	Reagan Confirms Commitment to Space Station in State of the Union
86/02/05	Level B Systems Integration Board Meets
	Resolution Made to Honor Challenger Aboard Space Station
	Space Station Funding Doubled for 1987
86/02/06-07	Level B Space Station Control Board Meets
86/02/11	Level B Systems Integration Board Meets
86/02/12-13	Structures and Dynamics TIP Meets at MSFC
86/02/14	Field Center Personnel Brief John Hodge on TMIS
86/02/18	Level B Space Station Control Board Meets
86/02/19	Level B Systems Integration Board Meets
	USSR Launches Mir Space Station
86/02/19-20	Prelaunch Operations Working Group Meets
86/02/20-21	Level B Space Station Control Board Meets
86/02/25-26	Level B Space Station Operations Panel Meets
	Level B Systems Integration Board Meets
86/02/28	Hutchinson Steps Down as Space Station Program Manager
	TFSUSS Report Issued
86/03/05	Level B Systems Integration Board Meets
86/03/05-06	Level A/B/C Work Package Analysis Team Meets
86/03/06	Systems Requirements Review Completed
86/03/06-07	Level B Space Station Control Board Meets
86/03/12	Level B Systems Integration Board Meets
86/03/14	Level B Space Station Control Board Meets

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DATE	EVENT
86/03/14	Level B Systems Integration Board Meets
86/03/19	Level B Systems Integration Board Meets
	Space Station Management Council Meets
	Space Station Steering Committee Holds Meeting at NASA/HQ
86/03/20	Level B Space Station Control Board Meets
86/03/25-27	SRR Process Culminates Into a Baseline Configuration
86/03/26-27	Level B Space Station Control Board Meets
86/03/28	Culbertson Sends "Lifeboat" Memorandum
86/03/29	Systems Requirements Review Completed
86/04/03	Space Station Management Council Meets
86/04/15	Orbital Transfer Vehicle Studies Review Held
86/04/16	Level B Systems Integration Board Meets
86/04/17	House Panel Approves Space Station Funds
	Level B Space Station Control Board Meets
	Office of Space Station Formulates Station Program Planning Strategy
	Space Station "Overlaps" to be Eliminated
86/04/23	Banks Committee Issues Second Report on Scientific Uses of Space Station
	Level B Systems Integration Board Meets
86/04/24	Level B Space Station Control Board Meets
	Space Station Steering Committee Holds Meeting at NASA/HQ
86/04/30	Level B Systems Integration Board Meets
86/05/00	NASA Adopts Space Station Logo
86/05/07	Level B Systems Integration Board Meets
86/05/08	Level B Space Station Control Board Meets
86/05/12	Fletcher Becomes NASA Administrator

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DATE	EVENT
86/05/13	General Phillips to Head Study of NASA Management
86/05/14	Space Station Baseline Configuration Announced
86/05/21	Level B Systems Integration Board Meets
86/06/01	Hydrogen/Oxygen Fueled Thruster Built at MSFC
86/06/02	Tentative Agreement Reached Between ESA and NASA
86/06/04	Level B Systems Integration Board Meets
86/06/05	Level B Space Station Control Board Meets
86/06/12	Level B Space Station Control Board Meets
86/06/23	TRW Selected as Contractor for OMV
86/06/24	Space Station Management Council Meets
86/06/25	Space Station Steering Committee Holds Meeting at NASA/HQ
86/06/26	Level B Space Station Control Board Meets
86/06/30	Changes In Space Station Program Organization Announced
	Stofan Appointed Associate Administrator for Space Station
86/07/03	Lucas to Retire
86/07/10	RFP For Technical Management Information System Issued
86/07/14	Huber Named Manager of OMV Project within Special Projects Office
86/07/15	Space Station Interim Systems Review Completed
86/07/24	Fletcher Announces Changes in Manpowe Levels at JSC
86/07/25	Fletcher Meets With Houston's Mayor
86/07/31	Delay Announced in the Shifting of Space Station Reorganization
86/08/01	House Funds for Space Station Have Strings Attached
86/08/05	General Phillips Testifies Regarding Management Study Group
86/08/18	Stofan Announces Formation of Space Station Review Teams
86/09/01	Fletcher Warns of Scaling-Down Unless Station Gets

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DATE	EVENT
86/09/01	Increased Funding
86/09/03	Franklin Martin Becomes Deputy Associate Administrator for Space Station
	NASA and ESA Agree on Hardware for Space Station Phase B
86/09/08	Critical Evaluation Task Force Presents Report
86/09/09	Stofan Announces Formation of Operations Task Force for Space Station
86/09/10	Stofan Approves Station Commercial Development Portion of Phase C/D RFP
86/09/15	Critical Evaluation Task Force Reports
86/09/16	WP-01 and WP-02 Agreement on Nodes and Propulsion
86/09/19	Space Station Program Procurement Coordination Committee Established
86/09/24	Office of Space Station and OSSA Discuss Payloads to Support Station
86/09/25	Fletcher Presents Report on Space Station to Congress
86/09/29	J. R. Thompson Appointed Marshall Center Director
86/10/06	MSFC/JSC Agreement on Man Systems
	Myers Appointed NASA Deputy Administrator
86/10/13	Science and Engineering Realignment to Prepare MSFC for Station Work
86/11/03	Space Station Operations Task Force Oversight Committee Formed
86/11/17	Moser Named Director of Space Station Program Office
86/11/25	Draft RFP Released to Industry
	Management Study Group Reports
86/12/10	Advanced Development Program Review Held
86/12/11	Space Station Advisory Committee and National Research Council Meet
86/12/14	Hodge Details Effects of Shuttle Launch Delays on Space Station

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86/12/27-28	Level B Space Station Control Board Meets
87/01/05	Fletcher Comments on the Reagan Budget's Allottment for NASA in 1988
87/01/18	Space Station Phase B Completed
87/01/26	Fund Cuts to Delay Space Station to 1997
	Louisianians Lobby for Space Station
87/01/29	MSFC Space Station Projects Office Reorganized
87/01/30	Work Package Directive Signed
87/02/04	Proposals Sought for Space Station Support
87/03/11	House Budget Committee Discusses Possible Cuts in Station Funds
	Witnesses Warn House Subcommittee Not to Build Station on "the Cheap"
87/03/15	National Conference of State Legislators Told of Station Importance
87/03/16	J.R. Thompson Speaks With Congressmen Regarding Space Station
87/03/19	Space Station Firms Frustrated By Costly Delays
87/03/31	Space Station Design-to-Cost Plan Proposed
87/04/03	Reagan Approves $12.3 Billion Plan for Space Station
87/04/06	Space Station Contractors to be Chosen by 1 October 1987
87/04/07	NASA Urged to Rearrange Space Station Construction Schedule
	Weinberger Writes Shultz Regarding Space Station
87/04/22	RFP for Space Station Work Package One Issued
87/04/23	National Security Council Releases Statement Regarding Space Station
87/05/05	Space Station Program Office Formed
87/05/08	Space Station Critics Told to Stifle Remarks
87/06/25	Congressional Committees Argue Over Defense Use of Station

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DATE	EVENT
87/06/27	House Committee Approves Defense Research on Station
87/06/30	National Research Council Space Station Report Is Presented
87/07/08	Higher Costs Not to Require Re-Writing of Station Proposals
	Space Station Support Contract Goes to Grumman Aerospace
87/07/10	Stofan Speaks to the Huntsville Chapter of the National Space Club
87/07/20	Martin Marietta Submits Proposal for Work Package One
87/07/21	Boeing Submits Proposal for Work Package One
87/07/28	Boeing and Martin Marietta Submit Modified Plans
	Stofan Tells of New Price Tag for Space Station
87/08/31	RFP for Study of Microbial Monitoring Issued
87/09/14	National Research Council Releases Report on Space Station Management
87/10/30	Reagan Signs Bill Providing Funds for Space Station
87/11/02	NASA Postpones Awarding of Space Station Contract
87/11/03	Stofan Denies Postponement of Contract Announcement Is Related to Budget
87/11/03-05	Workshop Held in Nashville Promoting Commercial Uses of Space
87/11/13	Report Predicts 5,000 New Jobs Created by Space Station In Huntsville
87/11/16	Space Station Contract Selection Is Still On Hold
87/11/23	Fletcher Still Not Ready to Announce Space Station Contracts
87/11/24	Stofan Complains About Space Station Delays
87/12/01	Phase C/D Contractors Selected
87/12/02	National Research Council Report Critical of NASA
87/12/07	Senator Heflin Seeks to Avert 70% Cut in Space Station Funds

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87/12/16	Congressional Agreement Gives Station $425 Million for FY88
	NASA Directed to Adapt to Shrinking Space Station Budget
87/12/22	Work Package One Letter Contract Signed
87/12/24	Philip E. Culbertson To Retire
88/01/25	Reagan Asks for $1 Billion for Space Station in 1989
88/02/06	International Space Station Partners End Negotiations
88/02/08	Congress Holds Partial Allocation for Space Station
88/02/12	President Reagan Unveils Space Policy
88/02/18	NASA Asks for $90 Million in Space Station Funds
88/02/27	Subcommittees Release $45 Million for Space Station
88/03/10	Bipartisan Congressmen Send Letter to Speaker Wright Regarding NASA
	Rep. Boland Comments Regarding Housing versus Space Station
	Stofan Testifies Concerning Ill Effects of Cutting Space Station Funds
88/03/14	Contract Requirements for Commercially Developed Space Facility Mailed
88/03/16	House Committee Considers Freezing Space and Science Funding in 1989
88/03/17	House Committee Backs Off From Space and Science Funding Freeze for 1989
88/03/23	House Passes Budget for 1989--Fletcher Says Too Low to Continue Station
88/03/29	Dr. Fletcher Answers Questions for Senate Appropriations Subcommittee
88/03/30	Senate Committee Recommends 25% Hike in NASA's 1989 Budget
88/04/01	Andrew J. Stofan Plans Retirement from NASA
	James B. Odom to be Associate Administrator for Space Station

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DATE	EVENT
88/04/14	NASA Pushes Back the Target Date for Man-Tended Capability Aboard Station
88/05/12	House Subcommittee Cuts NASA Budget
88/05/21	Fletcher Warns of Repercussions to Station if Funding Is Cut
88/05/22	Senator Proxmire To Renew Efforts at Cutting Space Station
88/06/02	Multi-Year NASA Budget Passes House
88/06/14	New President To Be Given Opportunity To Decide Space Station's Fate
88/06/16	Senate Panel Votes To Cut Spending for Station To $200 Million in FY89
88/06/22	House Approves $10.7 Billion for NASA for FY89
	Senate Appropriations Committee Votes $200 Million for Space Station
88/07/13	Senate Votes to Fund Space Station With $200 Million in FY89
88/07/18	Space Station Is Named "Freedom"
88/07/25	Poll Shows Americans Favor NASA and Space Station

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A&R	85/03/14	Hearings Held on Automation and Robotics
	85/05/13-17	NASA-wide Automation and Robotics Review Held
ACS	84/12/20	Initial Evaluation of Space Station Phase B Proposals Completed
	85/02/06	Space Station Attitude Control Advanced Development Team Meets
ADP	84/03/01	Marshall's Role in Space Station Work Is Outlined
	85/03/11	Level A/B/C Advanced Development Program Managers Meet
	85/11/19-20	Advanced Development Program Overview Held
	86/02/12-13	Structures and Dynamics TIP Meets at MSFC
	86/12/10	Advanced Development Program Review Held
CDG	83/04/27	Concept Development Group Moves in Building
CDSF	88/03/14	Contract Requirements for Commercially Developed Space Facility Mailed
CETF	86/09/08	Critical Evaluation Task Force Presents Report
	86/09/15	Critical Evaluation Task Force Reports
COF	84/02/29	Space Station Task Force Chooses Priorities for Facilities
	84/12/14	Office of Space Station Submits Requirements for COF in FY 1987-FY 1992
	85/10/26-27	FY88 Space Station COF Review Held
Commercial Uses	83/08/03	President Reagan Meets With Corporations Concerning Space Station Support
	87/11/03-05	Workshop Held in Nashville Promoting

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ELEMENT	DATE	EVENT
Commercial Uses	87/11/03-05	Commercial Uses of Space
Configuration	86/01/08	Refinement of Space Station to Continue over 4-Month Period
	86/05/14	Space Station Baseline Configuration Announced
Cost	83/12/01	Council for Commerce Meets with Beggs Regarding Space Station
	84/06/19	NASA Personnel Hold Utilization Budge Review
	84/09/16	Reduction in Value of Phase B Contracts
	85/08/14	Culbertson Requests "Scrub" For Space Station Program
	86/01/28	Office of Space Station Submits Revised FY86 Plan to NASA Comptroller
	87/03/19	Space Station Firms Frustrated By Costly Delays
	87/03/31	Space Station Design-to-Cost Plan Proposed
	87/06/30	National Research Council Space Station Report Is Presented
	87/07/28	Stofan Tells of New Price Tag for Space Station
Critics	84/11/13	Office of Technology Assessment Releases Space Station Report
	87/05/08	Space Station Critics Told to Stifle Remarks
Defense	82/09/21	Space Station Task Force Members Meet With National Security Staff
	83/06/20	McFarland Informed of Defense Mission of Space Station
	83/08/10	Beggs Requests Support from Weinberge for Space Station
	84/01/16	Weinberger Tells Beggs Of Lack Of Military Need for Manned Space Statio

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ELEMENT	DATE	EVENT
Defense	87/04/07	Weinberger Writes Shultz Regarding Space Station
	87/04/23	National Security Council Releases Statement Regarding Space Station
	87/06/25	Congressional Committees Argue Over Defense Use of Station
	87/06/27	House Committee Approves Defense Research on Station
ECLSS	85/10/17	Level B Space Station Control Board Meets
	86/00/00	MSFC/JSC Agreement Regarding Environmental Control and Life Support
ESA Lab	85/01/07	NASA and ESA Agreed on ESA Phase B Description
	86/09/03	NASA and ESA Agree on Hardware for Space Station Phase B
Funding	82/09/15	Beggs Submits NASA FY84 Budget
	83/02/03	Beggs and Mark Testify Regarding 1984 NASA Budget Authorization
	83/02/15	Keyworth Testifies Regarding Space Station
	84/03/16	Beggs Defends FY85 Request for $150 Million
	84/03/29	Space Station Funds Clear First Congressional Hurdle
	84/08/10	Culbertson Makes Recommendation Regarding FY86 Space Station Funding
	84/12/14	NASA Submitted Space Station Management Plan
	85/02/12-13	Bill Nelson Visits JSC and MSFC
	85/11/25	Reagan Signs FY86 HUD-Independent Agencies Appropriations Bill
	85/12/23	OMB Recommends Huge Cut for Space Station in FY87

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ELEMENT	DATE	EVENT
Funding	86/02/05	Space Station Funding Doubled for 1987
	86/04/17	House Panel Approves Space Station Funds
	86/08/01	House Funds for Space Station Have Strings Attached
	86/09/01	Fletcher Warns of Scaling-Down Unless Station Gets Increased Funding
	86/09/25	Fletcher Presents Report on Space Station to Congress
	87/01/05	Fletcher Comments on the Reagan Budget's Allottment for NASA in 1988
	87/01/26	Fund Cuts to Delay Space Station to 1997
	87/03/11	House Budget Committee Discusses Possible Cuts in Station Funds
		Witnesses Warn House Subcommittee Not to Build Station on "the Cheap"
	87/04/03	Reagan Approves $12.3 Billion Plan for Space Station
	87/10/30	Reagan Signs Bill Providing Funds for Space Station
	87/12/07	Senator Heflin Seeks to Avert 70% Cut in Space Station Funds
	87/12/16	Congressional Agreement Gives Station $425 Million for FY88
		NASA Directed to Adapt to Shrinking Space Station Budget
	88/01/25	Reagan Asks for $1 Billion for Space Station in 1989
	88/02/08	Congress Holds Partial Allocation for Space Station
	88/02/18	NASA Asks for $90 Million in Space Station Funds
	88/02/27	Subcommittees Release $45 Million for Space Station

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ELEMENT	DATE	EVENT
Funding	88/03/10	Rep. Boland Comments Regarding Housing versus Space Station
		Stofan Testifies Concerning Ill Effects of Cutting Space Station Funds
	88/03/16	House Committee Considers Freezing Space and Science Funding in 1989
	88/03/17	House Committee Backs Off From Space and Science Funding Freeze for 1989
	88/03/23	House Passes Budget for 1989--Fletcher Says Too Low to Continue Station
	88/03/29	Dr. Fletcher Answers Questions for Senate Appropriations Subcommittee
	88/03/30	Senate Committee Recommends 25% Hike in NASA's 1989 Budget
	88/05/12	House Subcommittee Cuts NASA Budget
	88/05/21	Fletcher Warns of Repercussions to Station if Funding Is Cut
	88/05/22	Senator Proxmire To Renew Efforts at Cutting Space Station
	88/06/02	Multi-Year NASA Budget Passes House
	88/06/16	Senate Panel Votes To Cut Spending for Station To $200 Million in FY89
	88/06/22	House Approves $10.7 Billion for NASA for FY89
		Senate Appropriations Committee Votes $200 Million for Space Station
	88/07/13	Senate Votes to Fund Space Station With $200 Million in FY89
GN&C	85/07/30	Guidance, Navigation and Control Technical Integration Panel Meets
Industry	83/12/15	Culbertson Meets with Faget to Discuss Free-Flying Industrial Facility
	84/02/09	Beggs Meets With Industry Officials Regarding Space Station

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ELEMENT	DATE	EVENT
Industry	84/02/28	Memorandum of Understanding Signed Regarding Construction of ISF
	84/03/18	Wyle Considers a Laboratory for Space Station
	84/12/13	Culbertson Announces Formation of Commercial Advocacy Group
International	82/03/19	NASA and West Germany Discuss Space Station Cooperation
	82/06/11	NASA Meets with Representatives of NASDA
	82/06/17	Beggs Meets with ESA Director
	82/07/16	NASDA Establishes a Space Station Office
	82/07/21	ESA Announces Opportunity for Space Station Contracts
	82/09/13	Office of Space Station Holds International Orientation
	82/11/01	NASA Gives Briefing Concerning International Participation at OTA
	82/11/03-13	Freitag Visits ESA
	82/12/17	Potential International Participants Briefed by SSTF on Available Data
	83/03/07-11	Culbertson Discusses Space Station With Japanese Officials
	84/04/10	International Cooperation Group Meets
	84/04/27	International Cooperation Group Meets
	84/05/08	International Cooperation Group Meets
	84/05/23	International Cooperation Group Meets
	84/06/04	International Cooperation Group Meets
	84/06/21-22	NASA and Foreign Officials Meet Regarding Space Station
	84/07/03	International Cooperation Group Meets

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ELEMENT	DATE	EVENT
International	84/08/07	International Cooperation Group Meets
	84/09/06	International Cooperation Group Meets
	84/09/20-21	Space Station International Workshop Meets
	84/10/11	International Cooperation Group Meets
	84/10/24	International Cooperation Group Meets
	84/11/05	International Cooperation Group Meets
	85/01/30	International Cooperation Group Meets
	85/02/27	International Cooperation Group Meets
	85/03/17-18	US and Canada Join in Space Station Efforts
	85/05/09	Phase B Memorandum of Understanding Signed With Japanese
	85/06/03	Phase B Memorandum of Understanding Signed With ESA
	85/06/06	International Cooperation Group Meets
	85/06/21	International Cooperation Group Meets
	85/07/15	International and Technical Integration Panel Held Meeting
	85/07/25-26	International Cooperation Group Meets
	85/08/20	International Cooperation Group Meets
	85/09/10	International Cooperation Group Meets
	86/01/14	International Cooperation Group Meets
	86/02/04	Phase B Memorandum of Understanding Signed With Canada
	86/06/02	Tentative Agreement Reached Between ESA and NASA
	88/02/06	International Space Station Partners End Negotiations
Launch Vehicles	82/06/10-11	Launch Vehicle Symposium at MSFC

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ELEMENT	DATE	EVENT
Local Issues	84/03/30	Ohio Lawmakers Upset Over South's Space Dominance
	87/01/26	Louisianians Lobby for Space Station
Man Systems	86/10/06	MSFC/JSC Agreement on Man Systems
Management	83/08/29	Space Station Management Colloqium Meets
	84/02/16	JSC Named Lead Center for Space Station
	84/03/07	MSFC Responds to Lead Center Announcement
	84/03/23	NASA Center Directors' Controlling Offices Meet at JSC
	84/04/09	Hutchinson Named Manager of Space Station Program at JSC
	85/12/26	Hodge Appointed as Acting Associate Administrator for Space Station
	86/05/12	Fletcher Becomes NASA Administrator
	86/05/13	General Phillips to Head Study of NASA Management
	86/06/30	Changes In Space Station Program Organization Announced
		Stofan Appointed Associate Administrator for Space Station
	86/07/03	Lucas to Retire
	86/07/15	Space Station Interim Systems Review Completed
	86/07/31	Delay Announced in the Shifting of Space Station Reorganization
	86/09/03	Franklin Martin Becomes Deputy Associate Administrator for Space Station
	86/09/29	J. R. Thompson Appointed Marshall Center Director
	86/10/06	Myers Appointed NASA Deputy

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ELEMENT	DATE	EVENT
Management	86/10/06	Administrator
	86/10/13	Science and Engineering Realignment to Prepare MSFC for Station Work
	86/11/25	Management Study Group Reports
	87/02/04	Proposals Sought for Space Station Support
	87/05/05	Space Station Program Office Formed
	87/07/08	Space Station Support Contract Goes to Grumman Aerospace
	87/09/14	National Research Council Releases Report on Space Station Management
	87/12/24	Philip E. Culbertson To Retire
	88/04/01	Andrew J. Stofan Plans Retirement from NASA
		James B. Odom to be Associate Administrator for Space Station
Microbial-Monitoring	87/08/31	RFP for Study of Microbial Monitoring Issued
Missions	82/04/02	Mission Analysis Studies Briefing Given
	82/05/19	Space Station Mission Analysis Studies Briefing Held
	82/05/21	MSFC Awards Study Contracts To Explore Early Uses of Space Station
	82/06/28	NASA Released RFP's for Space Station Mission Analysis Studies
	82/07/09	Space Station Task Force Establishes Mission Requirements Working Group
	82/08/10	NASA Selects 8 Companies for Space Station Mission Studies
	82/08/20	NASA Contracted Eight Mission Analysis Studies.
	82/09/13	MSFC Selected 4 Firms For Contracts To Study Early Uses of Space Station

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ELEMENT	DATE	EVENT
Missions	82/11/01	OSSA Announced a $400K Program to Investigate Uses of Space Station
	82/11/15-18	Mid-Term Briefings for Mission Analysis Studies Were Given
	82/12/06	Mission Requirements Working Group Meets
	83/04/21	Briefings Conducted at MSFC On Space Station Study Contracts
	83/05/02-13	Mission Synthesis Workshop Held
	83/05/25	Eighteen Space Station Uses Study Proposals Accepted
	83/06/02-13	Mission Requirements Workshop Held at LaRC
	83/06/16	Hodge Briefs House Subcommittee Staff Concerning Space Station Missions
	83/10/27	Space Applications Board Report to NASA Regarding Space Station
	84/03/05	NASA Held Mission Synthesis Workshop
	84/09/24	NASA Sponsored Workshop for Station Mission Requirements Working Group
	85/03/28	Policy Review Committee and Center Directors Discuss Evolution
MMPF	84/11/20	Contract for Microgravity Materials Processing Facility Selected
	84/11/30	Contract to Teledyne Brown to Study Orbiting Research Facility
MSFC-SSPO	84/09/21	Space Station Projects Office Augmented Within Program Development
	84/10/19	MSFC Space Station Projects Office Activated
	84/10/24	Beggs Approves the Formation of a Space Station Projects Office at MSFC
	85/07/16	Space Station Projects Office Operations Office Established

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ELEMENT	DATE	EVENT
MSFC-SSPO	87/01/29	MSFC Space Station Projects Office Reorganized
MTA	84/07/18	Reagan Signs Law Requiring Man-Tended Options Study
	85/01/23	Culbertson Establishes Ad Hoc Task Force on Man-Tended Option
	88/04/14	NASA Pushes Back the Target Date for Man-Tended Capability Aboard Station
Naming of SS	88/07/18	Space Station Is Named "Freedom"
OMV	84/01/03	MSFC Invited Aerospace Companies to Describe How They Would Define OMV
	84/02/09	NASA Establishes 7 Inter-Center Teams for Station Advanced Development
	84/07/24	Aerospace Companies Selected for Negotiations Leading to OMV Contracts
	85/06/27	Possibility of MSFC Losing OMV Funds In Order to Increase Station Funds
	85/07/30	Memorandum of Understanding Signed Regarding OMV
	85/11/01	RFP for the Orbital Maneuvering Vehicle Is Released
	85/11/05	Memorandum of Understanding Signed Regarding OMV
	85/11/06	Orbital Maneuvering Vehicle Task Force Agreed Upon
	85/11/07	MSFC Releases RFP for Orbital Maneuvering Vehicle
	85/11/13	NASA/HQ, MSFC, and JSC Representatives Meet on Communications with OMV
	86/06/23	TRW Selected as Contractor for OMV
	86/07/14	Huber Named Manager of OMV Project within Special Projects Office
Operations	82/04/27	Space Operartions Study Meeting Held
	82/12/14-15	Operations Working Group Meets

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ELEMENT	DATE	EVENT
Operations	86/09/09	Stofan Announces Formation of Operations Task Force for Space Station
OSS	84/08/01	NASA Establishes Office of Space Station/Culbertson made AA for OSS
OTV	84/06/01	Awarding of Orbital Transfer Vehicle Phase A Contracts
	84/07/11	Awarding of Contracts for Studies of Orbital Transfer Vehicle
	86/04/15	Orbital Transfer Vehicle Studies Review Held
Phase A	83/05/06	Draft RFP Issued
	83/05/27	Solicitation For Developing Commercial Space Business Plan Released
Phase B	84/02/19	Phase B To Begin Around July or August 1984
	84/03/02	A Draft RFP Approved for Transmittal to Level B
	84/03/14	Phase B Contracts for MSFC, GSFC, and LeRC Chosen
	84/03/22	Phase B "Controlled Milestones" Generated
	84/06/28	NASA Announces Four Centers for Phase B Design Studies
	84/09/14	RFP Issued for Definition & Preliminary Design of Low Earth Orbit Station
	84/09/26	NASA Sponosrs Preproposal Conference
	85/03/20	NASA Selects Two Industry Teams for Marshall Space Station Contracts
	85/04/09-10	Phase B "Readiness Review" Conducted at JSC
	85/04/15	Space Station Phase B Contracts Set to Run from 15 April 1985
	85/04/16	Space Station User Functional

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ELEMENT	DATE	EVENT
Phase B	85/04/16	Requirements Envelope Reviewed
	85/04/19	Hutchinson Authorized Start of Phase B Contracts
	85/04/22	Kickoff Meeting for Phase B Held
	85/06/21	First Space Station Phase B Review Held
	87/01/18	Space Station Phase B Completed
Phase C/D	86/09/10	Stofan Approves Station Commercial Development Portion of Phase C/D RFP
	86/11/25	Draft RFP Released to Industry
	87/04/06	Space Station Contractors to be Chosen by 1 October 1987
	87/11/02	NASA Postpones Awarding of Space Station Contract
	87/11/03	Stofan Denies Postponement of Contract Announcement Is Related to Budget
	87/11/16	Space Station Contract Selection Is Still On Hold
	87/11/23	Fletcher Still Not Ready to Announce Space Station Contracts
	87/12/01	Phase C/D Contractors Selected
Policy	82/06/15	Chairman of House Science Committee Writes President Reagan
	82/07/21	NASA Advisory Council Meets to Discuss Five-Year Planning
		Senate Committee Tasks OTA to Study Need for Orbiting Facility
	82/07/26-30	NRC Space Sciences Board Conducts Space Station Study
	83/04/11	Reagan Approves Study Conducted to Establish Decision on Space Station
	83/07/07	Policy Review Committee Meets at NASA/HQ

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ELEMENT	DATE	EVENT
Policy	83/07/18	Beggs Announces NASA's Plans for Space Station
	83/07/26-27	NASA Advisory Council Discusses Space Station
	83/11/17	Reagan Expected to OK Permanent Space Station
	84/01/25	Reagan's 1984 State of the Union Address Announcing Support for Station
	84/04/11	President Reagan Asks For Study on Whether To Proceed With Space Station
	84/11/14	NASA Defends Its Plan for a Space Station Against OTA Report
	85/02/06	Reagan Reaffirms Commitment to Space Station
	85/06/24	MSFC Space Station Pre-Development Review Held
	86/02/04	Reagan Confirms Commitment to Space Station in State of the Union
	86/04/17	Office of Space Station Formulates Station Program Planning Strategy
	86/12/11	Space Station Advisory Committee and National Research Council Meet
	87/12/02	National Research Council Report Critical of NASA
	88/02/12	President Reagan Unveils Space Policy
	88/06/14	New President To Be Given Opportunity To Decide Space Station's Fate
POP	84/02/10	Hodge Distributes POP 84-1 Guidelines for Station Program Definition
	84/05/10	Culbertson Delineates POP 84-2 for JSC
	85/03/08	Office of Space Station Transmits Guidelines for POP 85-2
Procurement	86/09/19	Space Station Program Procurement Coordination Committee Established

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ELEMENT	DATE	EVENT
Propulsion	85/11/20	NASA Space Station Propulsion Advanced Development Program Presented
Propulsions	86/09/16	WP-01 and WP-02 Agreement on Nodes and Propulsion
PSV	88/03/10	Bipartisan Congressmen Send Letter to Speaker Wright Regarding NASA
Public Relations	83/02/11	Beggs Sent Letter to Center Directors Reaffirming Support of Station
	87/03/15	National Conference of State Legislators Told of Station Importance
	87/03/16	J.R. Thompson Speaks With Congressmen Regarding Space Station
R&D	82/02/24	GAO Initiates Survey of NASA's Planning and Development of Space Stations
	85/07/01	Office of Space Station Research and Development POP 85-2 Submitted
RUR	85/07/09-17	NASA Personnel met for RUR-1 Process
	85/11/21	Space Station Reference Update Review-2 Held
Safety	83/11/09	The Concept Development Group Met Concerning Crew Safety
	86/03/28	Culbertson Sends "Lifeboat" Memorandum
Schedules	85/05/23	Level A/B/C Program Control Managers Meet
	86/12/14	Hodge Details Effects of Shuttle Launch Delays on Space Station
	87/04/07	NASA Urged to Rearrange Space Station Construction Schedule
	87/11/24	Stofan Complains About Space Station Delays
Science	85/04/00	Space Station Scientist Assigned
SE&I	85/11/04-05	Systems Engineering and Integration Managers Meet

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ELEMENT	DATE	EVENT
SIB	85/03/14-15	Level B Systems Integration Board Meets
	85/04/30	Level B Systems Integration Board Meets
	85/07/09-11	Level B Systems Integration Board Meets
	85/09/25	Level B Systems Integration Board Meets
	85/10/09-10	Level B Systems Integration Board Meets
	85/10/16	Level B Systems Integration Board Meets
	85/10/23	Level B Systems Integration Board Meets
	85/11/08	Level B Systems Integration Board Meets
	85/11/13	Level B Systems Integration Board Meets
	85/11/26	Level B Systems Integration Board Meets
	85/12/11	Level B Systems Integration Board Meets
	85/12/18	Level B Systems Integration Board Meets
	86/01/08	Level B Systems Integration Board Meets
	86/01/14	Level B Systems Integration Board Meets
	86/01/22	Level B Systems Integration Board Meets
	86/01/28-29	Level B Systems Integration Board Meets
	86/02/05	Level B Systems Integration Board Meets
	86/02/11	Level B Systems Integration Board

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ELEMENT	DATE	EVENT
SIB	86/02/11	Meets
	86/02/19	Level B Systems Integration Board Meets
	86/02/25-26	Level B Systems Integration Board Meets
	86/03/05	Level B Systems Integration Board Meets
	86/03/12	Level B Systems Integration Board Meets
	86/03/14	Level B Systems Integration Board Meets
	86/03/19	Level B Systems Integration Board Meets
	86/04/16	Level B Systems Integration Board Meets
	86/04/23	Level B Systems Integration Board Meets
	86/04/30	Level B Systems Integration Board Meets
	86/05/07	Level B Systems Integration Board Meets
	86/05/21	Level B Systems Integration Board Meets
	86/06/04	Level B Systems Integration Board Meets
SIG	82/11/22	SIG Space Station Working Group Meets
	83/06/07	Senior Interagency Group Meets
Software	85/04/24-25	Open Forum on Space Station Software Issues Held
SP	82/01/06	MSFC Contract Awarded to TRW For Space Platform Work
SRR	86/03/06	Systems Requirements Review Completed
	86/03/25-27	SRR Process Culminates Into a Baseline Configuration

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ELEMENT	DATE	EVENT
SRR	86/03/29	Systems Requirements Review Completed
SS	86/09/24	Office of Space Station and OSSA Discuss Payloads to Support Station
	87/07/10	Stofan Speaks to the Huntsville Chapter of the National Space Club
	88/07/25	Poll Shows Americans Favor NASA and Space Station
SS-CCET	86/08/18	Stofan Announces Formation of Space Station Review Teams
SS-Program Office	86/02/28	Hutchinson Steps Down as Space Station Program Manager
	86/11/17	Moser Named Director of Space Station Program Office
SS/General	82/04/19	Salyut 7 Launched
	82/07/15	Space Station Systems Working Group Meets
	82/07/19	Beggs, Mark, Culbertson, and Hodge hold Space Station Planning meeting
	83/11/15	US Senate Subcommittee Held Hearings On Space Station
	84/03/16	NASA Selected McDonnell Douglas and TRW for Parallel Station Contracts
	84/11/19	Banks Supports Extended Duration Orbiter
	85/04/01	Space Station Integrated Systems Data Base Implemented
	85/06/28	Culbertson Gives Space Station Position on Extended Duration Orbiter
	85/07/30-31	Mechanisms Technical Integration Panel Holds a Meeting
	85/08/04-05	The Aeronautics and Space Engineering Board Meets
	86/01/28	Mission 51L Accident
	86/02/03	Reagan Appoints the Rogers Commission

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ELEMENT	DATE	EVENT
SS/General	86/02/05	Resolution Made to Honor Challenger Aboard Space Station
	86/02/19	USSR Launches Mir Space Station
	86/05/00	NASA Adopts Space Station Logo
	86/06/01	Hydrogen/Oxygen Fueled Thruster Built at MSFC
SS/Level A	83/01/18	Hodge Formalized List of Space Station Level A Requirements
	85/07/22	Office of Space Station Establishes Level A Control Board
	86/01/07	Level A Review Held
SS/Level A\B	84/08/23	NASA Personnel Hold Level A/B Review
	85/02/26	Level A/B Planning Meeting and Level A/B/C Meetings Held
SS/Level B	85/05/21-23	Level B Space Station Operations Panel Holds Meeting
	85/07/12	Level B Space Station Operations Panel Holds Meeting
	86/02/19-20	Prelaunch Operations Working Group Meets
	86/02/25-26	Level B Space Station Operations Panel Meets
	86/06/26	Level B Space Station Control Board Meets
SS/S&E	84/09/23	McMillion Appointed Chief Engineer for Space Station Program at MSFC
		Space Station Systems Engineering Division Established
SSCB	85/03/25	Level B Space Station Control Board Meets
	85/05/17	Level B Space Station Control Board Meets
	85/06/14	Level B Space Station Control Board Meets

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ELEMENT	DATE	EVENT
SSCB	85/06/21	Level B Space Station Control Board Meets
	85/07/16-17	Level B Space Station Control Board Holds Meeting
	85/08/15	Level B Space Station Control Board Holds a Meeting
	85/08/30	Level B Space Station Control Board Holds Meeting
	85/09/12	Level B Space Station Control Board Meets
	85/09/19	Level B Space Station Control Board Holds Meeting
	85/09/26	Level B Space Station Control Board Meets
	85/10/03	Level B Space Station Control Board Meets
	85/10/24-25	Level B Space Station Control Board Meets
	85/10/31	Level B Space Station Control Board Meets
	85/11/14-15	Level B Space Station Control Board Meets
	85/12/05	Level B Space Station Control Board Meets
	85/12/12	Level B Space Station Control Board Meets
	86/01/09	Level B Space Station Control Board Meets
	86/01/16	Level B Space Station Control Board Meets
	86/01/23-24	Level B Space Station Control Board Meets
	86/02/06-07	Level B Space Station Control Board Meets
	86/02/18	Level B Space Station Control Board

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ELEMENT	DATE	EVENT
SSCB	86/02/18	Meets
	86/02/20-21	Level B Space Station Control Board Meets
	86/03/06-07	Level B Space Station Control Board Meets
	86/03/14	Level B Space Station Control Board Meets
	86/03/20	Level B Space Station Control Board Meets
	86/03/26-27	Level B Space Station Control Board Meets
	86/04/17	Level B Space Station Control Board Meets
	86/04/24	Level B Space Station Control Board Meets
	86/05/08	Level B Space Station Control Board Meets
	86/06/05	Level B Space Station Control Board Meets
	86/06/12	Level B Space Station Control Board Meets
	86/12/27-28	Level B Space Station Control Board Meets
SSMC	84/10/09	Culbertson Establishes Space Station Management Council
	84/10/30	Space Station Management Council Holds First Meeting
	84/12/18	Space Station Management Council Holds Meeting
	85/06/13	Space Station Management Council Meets
	85/10/24-25	Space Station Management Council Meets
	86/03/19	Space Station Management Council Meets
	86/04/03	Space Station Management Council Meets

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ELEMENT	DATE	EVENT
SSMC	86/06/24	Space Station Management Council Meets
SSOTF	86/11/03	Space Station Operations Task Force Oversight Committee Formed
SSPPWG	82/07/15	Space Station Program Planning Working Group Meets
	82/07/29-30	SSPPWG Meets at NASA/HQ
	82/08/19	Space Station Program Planning Working Group Meets
	82/09/16	SSPPWG Produces Schedule
	82/12/01	Space Station Program Planning Working Group Completes Studies
	83/06/13-15	Space Station Program Planning Working Group Meets
SSPRC	82/07/30	SSPRC Meets at NASA/HQ
	82/09/16	Space Station Program Review Committee
	82/10/14-15	Space Station Program Review Committee Meets
	82/12/14	Space Station Program Review Committee Meets
	83/01/25-26	Space Station Program Review Committee Meets
	83/03/10	Space Station Program Review Committee Meets
	83/05/12	Space Station Program Review Committee Meets
	83/07/20-21	Space Station Program Review Committee Meets
	83/09/01-02	Space Station Program Review Committee Meets
	84/06/14	NASA Personnel Hold Space Station Program Review
SSSC	82/08/09	Space Station Steering Committee Meets
	82/10/03	Space Station Steering Committee Meets

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ELEMENT	DATE	EVENT
SSSC	83/06/13	Space Station Steering Committee Meets
	83/07/18	Space Station Steering Committee Meets
	83/08/04	Space Station Steering Committee Meets
	83/09/13	Space Station Steering Committee Meets
	83/10/24	Space Station Steering Committee Meets
	83/10/31	Silveira Becomes Chairman of Space Station Steering Committee
	84/03/14	Space Station Steering Committee Meets
	84/05/04	Space Station Steering Committee Holds Meeting
	84/07/09	Space Station Steering Committee Holds Meeting
	84/08/13	Space Station Steering Committee Holds Meeting
	84/09/10	Space Station Steering Committee Holds Meeting
	84/10/09	Space Station Steering Committee Meets
	84/11/05	Space Station Steering Committee Meets
	84/12/03	Space Station Steering Committee Meets
	85/01/09	Space Station Steering Committee Meets
	85/02/13	Space Station Steering Committee Meets
	85/05/08	Space Station Steering Committee Meets
	85/06/12	Space Station Steering Committee Holds Meeting
	85/09/11	Space Station Steering Committee Holds Meeting
	86/03/19	Space Station Steering Committee Holds Meeting at NASA/HQ
	86/04/24	Space Station Steering Committee Holds Meeting at NASA/HQ
	86/06/25	Space Station Steering Committee Holds

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ELEMENT	DATE	EVENT
SSSC	86/06/25	Meeting at NASA/HQ
SSTF	82/06/02	Space Station Task Force Is Formed
	84/03/12	Space Station Task Force Submits IOP 84-1 Estimates
	84/03/29	POP 84-1 Submitted to Space Station Task Force
	85/03/12	Space Station Task Force Research and Development POP Submitted
SSTSC	82/01/06	Beggs Tasks Kerrebrock To Organize Station Technology Steering Committee
	82/03/15	Space Station Technology Steering Committee and Working Groups Meet
	82/04/19	Space Station Technology Steering Committee Meets
	82/06/23	Space Station Technology Steering Committee Meets
	83/01/19-21	Space Station Technology Steering Committee Meets
	83/11/28-30	Space Station Technology Steering Committee Meets
Technology	82/01/06	Beggs Makes Special Assignments for Station Planning and Technology Work
	83/03/28-31	Space Station Technology Workshop Held
	84/09/10	Space Station Technology Conference Held
	85/08/06-07	Structures Technical Integration Panel Holds Meeting
	85/09/10-13	Space Station Evolution Workshop Meets
	85/11/19	Space Station Research and Technology Operating Plans Submitted
Testbeds	84/02/27	MSFC Assigned Lead Center Responsibilities for Test Beds
Tethers	82/12/13	Tethered Satellite System Orientation Meeting Held

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ELEMENT	DATE	EVENT
TFSUSS	84/02/09	House Subcommittee Holds Hearing on Task Force on Scientific Uses
	84/11/13	Task Force on Scientific Uses of the Space Station Meets
	85/02/19	Task Force on Scientific Uses of Space Station Briefed at MSFC
	85/03/08	Peter Banks Testifies before Senate Subcommittee
	85/05/28-31	Task Force on the Scientific Uses of the Space Station Meets
	85/08/13-15	Task Force on Scientific Uses of Space Station Holds Workshop
	85/08/19-23	Task Force on Scientific Uses of Space Station Holds Summer Study
	86/02/28	TFSUSS Report Issued
	86/04/23	Banks Committee Issues Second Report on Scientific Uses of Space Station
TMIS	85/10/10	Technical Management Information System Project Office Was Formed
	86/02/14	Field Center Personnel Brief John Hodge on TMIS
	86/07/10	RFP For Technical Management Information System Issued
Work Assignment	86/07/24	Fletcher Announces Changes in Manpowe Levels at JSC
	86/07/25	Fletcher Meets With Houston's Mayor
Work Assignments	85/11/14	Culbertson Writes to Beggs Regarding Inter-Center Rivalry
	85/12/30	Hodge et al Hold Meeting Regarding Work Packages
	86/03/05-06	Level A/B/C Work Package Analysis Team Meets
	86/04/17	Space Station "Overlaps" to be Eliminated

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ELEMENT	DATE	EVENT
Work Assignments	86/08/05	General Phillips Testifies Regarding Management Study Group
WP-01	84/09/27	General Dynamics and Grumman Form Team to Seek Work Package One
	84/11/15	Proposals in Response to Space Station Definition Study RFPs Received
	87/01/30	Work Package Directive Signed
	87/04/22	RFP for Space Station Work Package One Issued
	87/07/08	Higher Costs Not to Require Re-Writing of Station Proposals
	87/07/20	Martin Marietta Submits Proposal for Work Package One
	87/07/21	Boeing Submits Proposal for Work Package One
	87/07/28	Boeing and Martin Marietta Submit Modified Plans
	87/11/13	Report Predicts 5,000 New Jobs Created by Space Station In Huntsville
	87/12/22	Work Package One Letter Contract Signed

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LOCATION	DATE	EVENT
	82/08/19	Space Station Program Planning Working Group Meets
	86/07/15	Space Station Interim Systems Review Completed
AIAA Symposium	83/07/18	Beggs Announces NASA's Plans for Space Station
CIA/Virginia	82/11/22	SIG Space Station Working Group Meets
ESA	82/07/21	ESA Announces Opportunity for Space Station Contracts
	82/11/03-13	Freitag Visits ESA
GSFC	82/06/23	Space Station Technology Steering Committee Meets
	84/06/19	NASA Personnel Hold Utilization Budget Review
	84/11/13	Task Force on Scientific Uses of the Space Station Meets
	84/12/18	Space Station Management Council Holds Meeting
	85/05/23	Level A/B/C Program Control Managers Meet
	85/06/21	International Cooperation Group Meets
GSFC-NASA/HQ	83/01/25-26	Space Station Program Review Committee Meets
Hampton,VA	84/03/05	NASA Held Mission Synthesis Workshop
Houston	85/07/09-11	Level B Systems Integration Board Meets
	85/09/25	Level B Systems Integration Board Meets
Huntsville	84/03/18	Wyle Considers a Laboratory for Space Station
	87/03/19	Space Station Firms Frustrated By Costly Delays

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LOCATION	DATE	EVENT
Huntsville	87/07/10	Stofan Speaks to the Huntsville Chapter of the National Space Club
	87/11/13	Report Predicts 5,000 New Jobs Created by Space Station In Huntsville
Industry	83/05/06	Draft RFP Issued
	83/05/27	Solicitation For Developing Commercial Space Business Plan Released
Japan	82/07/16	NASDA Establishes a Space Station Office
JSC	82/05/19	Space Station Mission Analysis Studies Briefing Held
	82/10/14-15	Space Station Program Review Committee Meets
	83/11/28-30	Space Station Technology Steering Committee Meets
	84/03/23	NASA Center Directors' Controlling Offices Meet at JSC
	84/04/09	Hutchinson Named Manager of Space Station Program at JSC
	84/04/27	International Cooperation Group Meets
	84/09/26	NASA Sponosrs Preproposal Conference
	85/02/26	Level A/B Planning Meeting and Level A/B/C Meetings Held
	85/02/27	International Cooperation Group Meets
	85/03/11	Level A/B/C Advanced Development Program Managers Meet
	85/03/12	Space Station Task Force Research and Development POP Submitted
	85/03/14-15	Level B Systems Integration Board Meets

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LOCATION	DATE	EVENT
JSC	85/03/25	Level B Space Station Control Board Meets
	85/04/09-10	Phase B "Readiness Review" Conducted at JSC
	85/04/19	Hutchinson Authorized Start of Phase B Contracts
	85/04/22	Kickoff Meeting for Phase B Held
	85/04/30	Level B Systems Integration Board Meets
	85/05/13-17	NASA-wide Automation and Robotics Review Held
	85/05/17	Level B Space Station Control Board Meets
	85/05/21-23	Level B Space Station Operations Panel Holds Meeting
	85/05/28-31	Task Force on the Scientific Uses of the Space Station Meets
	85/06/14	Level B Space Station Control Board Meets
	85/06/21	Level B Space Station Control Board Meets
	85/07/12	Level B Space Station Operations Panel Holds Meeting
	85/07/15	International and Technical Integration Panel Held Meeting
	85/07/16-17	Level B Space Station Control Board Holds Meeting
	85/08/15	Level B Space Station Control Board Holds a Meeting
	85/08/30	Level B Space Station Control Board Holds Meeting
	85/09/12	Level B Space Station Control Board Meets
	85/09/19	Level B Space Station Control Board Holds Meeting

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LOCATION	DATE	EVENT
JSC	85/09/26	Level B Space Station Control Board Meets
	85/10/03	Level B Space Station Control Board Meets
	85/10/09-10	Level B Systems Integration Board Meets
	85/10/16	Level B Systems Integration Board Meets
	85/10/17	Level B Space Station Control Board Meets
	85/10/23	Level B Systems Integration Board Meets
	85/10/24-25	Level B Space Station Control Board Meets
	85/10/26-27	FY88 Space Station COF Review Held
	85/10/31	Level B Space Station Control Board Meets
	85/11/08	Level B Systems Integration Board Meets
	85/11/13	Level B Systems Integration Board Meets
	85/11/14-15	Level B Space Station Control Board Meets
	85/11/26	Level B Systems Integration Board Meets
	85/12/05	Level B Space Station Control Board Meets
	85/12/11	Level B Systems Integration Board Meets
	85/12/12	Level B Space Station Control Board Meets
	85/12/18	Level B Systems Integration Board Meets
	86/01/08	Level B Systems Integration Board

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LOCATION	DATE	EVENT
JSC	86/01/08	Meets
	86/01/09	Level B Space Station Control Board Meets
	86/01/14	Level B Systems Integration Board Meets
	86/01/16	Level B Space Station Control Board Meets
	86/01/22	Level B Systems Integration Board Meets
	86/01/23-24	Level B Space Station Control Board Meets
	86/01/28-29	Level B Systems Integration Board Meets
	86/02/05	Level B Systems Integration Board Meets
	86/02/06-07	Level B Space Station Control Board Meets
	86/02/11	Level B Systems Integration Board Meets
	86/02/18	Level B Space Station Control Board Meets
	86/02/19	Level B Systems Integration Board Meets
	86/02/20-21	Level B Space Station Control Board Meets
	86/02/25-26	Level B Space Station Operations Panel Meets
		Level B Systems Integration Board Meets
	86/02/28	Hutchinson Steps Down as Space Station Program Manager
	86/03/05	Level B Systems Integration Board Meets
	86/03/06-07	Level B Space Station Control Board Meets

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LOCATION	DATE	EVENT
JSC	86/03/12	Level B Systems Integration Board Meets
	86/03/14	Level B Space Station Control Board Meets
		Level B Systems Integration Board Meets
	86/03/20	Level B Space Station Control Board Meets
	86/03/26-27	Level B Space Station Control Board Meets
	86/04/16	Level B Systems Integration Board Meets
	86/04/17	Level B Space Station Control Board Meets
	86/04/23	Level B Systems Integration Board Meets
	86/04/24	Level B Space Station Control Board Meets
	86/04/30	Level B Systems Integration Board Meets
	86/05/07	Level B Systems Integration Board Meets
	86/05/08	Level B Space Station Control Board Meets
	86/05/21	Level B Systems Integration Board Meets
	86/06/04	Level B Systems Integration Board Meets
	86/06/05	Level B Space Station Control Board Meets
	86/06/12	Level B Space Station Control Board Meets
	86/06/26	Level B Space Station Control Board Meets
	86/07/24	Fletcher Announces Changes in

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LOCATION	DATE	EVENT
JSC	86/07/24	Manpowe Levels at JSC
	86/12/10	Advanced Development Program Review Held
	86/12/27-28	Level B Space Station Control Board Meets
JSC/MSFC	85/02/12-13	Bill Nelson Visits JSC and MSFC
KSC	82/12/14-15	Operations Working Group Meets
	83/01/19-21	Space Station Technology Steering Committee Meets
	85/11/19-20	Advanced Development Program Overview Held
	85/11/20	NASA Space Station Propulsion Advanced Development Program Presented
	86/01/28	Mission 51L Accident
	86/02/19-20	Prelaunch Operations Working Group Meets
LaRC	82/04/19	Space Station Technology Steering Committee Meets
	82/12/06	Mission Requirements Working Group Meets
	83/05/02-13	Mission Synthesis Workshop Held
	83/05/12	Space Station Program Review Committee Meets
	83/06/02-13	Mission Requirements Workshop Held at LaRC
	85/08/20	International Cooperation Group Meets
LeRC	85/06/13	Space Station Management Council Meets
MAF	85/11/04-05	Systems Engineering and Integration Managers Meet
Montgomery/Huntsville	87/03/15	National Conference of State Legislators Told of Station

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LOCATION	DATE	EVENT
Montgomery/Huntsville	87/03/15	Importance
MSFC	82/01/06	MSFC Contract Awarded to TRW For Space Platform Work
	82/02/24	GAO Initiates Survey of NASA's Planning and Development of Space Stations
	82/03/15	Space Station Technology Steering Committee and Working Groups Meet
	82/05/21	MSFC Awards Study Contracts To Explore Early Uses of Space Station
	82/06/10-11	Launch Vehicle Symposium at MSFC
	82/09/13	MSFC Selected 4 Firms For Contracts To Study Early Uses of Space Station
	82/12/13	Tethered Satellite System Orientation Meeting Held
	82/12/14	Space Station Program Review Committee Meets
	83/04/21	Briefings Conducted at MSFC On Space Station Study Contracts
	84/01/03	MSFC Invited Aerospace Companies to Describe How They Would Define OMV
	84/02/27	MSFC Assigned Lead Center Responsibilities for Test Beds
	84/03/01	Marshall's Role in Space Station Work Is Outlined
	84/03/07	MSFC Responds to Lead Center Announcement
	84/06/01	Awarding of Orbital Transfer Vehicle Phase A Contracts
	84/07/11	Awarding of Contracts for Studies of Orbital Transfer Vehicle
	84/07/24	Aerospace Companies Selected for Negotiations Leading to OMV

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LOCATION	DATE	EVENT
MSFC	84/07/24	Contracts
	84/09/10	Space Station Technology Conference Held
	84/09/21	Space Station Projects Office Augmented Within Program Development
	84/09/23	McMillion Appointed Chief Engineer for Space Station Program at MSFC
		Space Station Systems Engineering Division Established
	84/09/27	General Dynamics and Grumman Form Team to Seek Work Package One
	84/10/19	MSFC Space Station Projects Office Activated
	84/10/24	Beggs Approves the Formation of a Space Station Projects Office at MSFC
	84/11/15	Proposals in Response to Space Station Definition Study RFPs Received
	84/11/20	Contract for Microgravity Materials Processing Facility Selected
	84/11/30	Contract to Teledyne Brown to Study Orbiting Research Facility
	84/12/20	Initial Evaluation of Space Station Phase B Proposals Completed
	85/02/06	Space Station Attitude Control Advanced Development Team Meets
	85/02/19	Task Force on Scientific Uses of Space Station Briefed at MSFC
	85/03/20	NASA Selects Two Industry Teams for Marshall Space Station Contracts
	85/04/24-25	Open Forum on Space Station

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LOCATION	DATE	EVENT
MSFC	85/04/24-25	Software Issues Held
	85/06/21	First Space Station Phase B Review Held
	85/06/24	MSFC Space Station Pre-Development Review Held
	85/06/27	Possibility of MSFC Losing OMV Funds In Order to Increase Station Funds
	85/07/16	Space Station Projects Office Operations Office Established
	85/07/30	Guidance, Navigation and Control Technical Integration Panel Meets
	85/07/30-31	Mechanisms Technical Integration Panel Holds a Meeting
	85/08/04-05	The Aeronautics and Space Engineering Board Meets
	85/08/06-07	Structures Technical Integration Panel Holds Meeting
	85/10/24-25	Space Station Management Council Meets
	85/11/07	MSFC Releases RFP for Orbital Maneuvering Vehicle
	86/01/08	Refinement of Space Station to Continue over 4-Month Period
	86/02/12-13	Structures and Dynamics TIP Meets at MSFC
	86/06/01	Hydrogen/Oxygen Fueled Thruster Built at MSFC
	86/06/23	TRW Selected as Contractor for OMV
	86/07/03	Lucas to Retire
	86/07/14	Huber Named Manager of OMV Project within Special Projects Office
	86/10/13	Science and Engineering

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LOCATION	DATE	EVENT
MSFC	86/10/13	Realignment to Prepare MSFC for Station Work
	87/01/29	MSFC Space Station Projects Office Reorganized
	87/01/30	Work Package Directive Signed
	87/04/22	RFP for Space Station Work Package One Issued
	87/07/08	Higher Costs Not to Require Re-Writing of Station Proposals
	87/07/20	Martin Marietta Submits Proposal for Work Package One
	87/07/21	Boeing Submits Proposal for Work Package One
	87/07/28	Boeing and Martin Marietta Submit Modified Plans
	87/08/31	RFP for Study of Microbial Monitoring Issued
	87/12/22	Work Package One Letter Contract Signed
MSFC/JSC	86/00/00	MSFC/JSC Agreement Regarding Environmental Control and Life Support
	86/09/16	WP-01 and WP-02 Agreement on Nodes and Propulsion
	86/10/06	MSFC/JSC Agreement on Man Systems
NASA	82/08/10	NASA Selects 8 Companies for Space Station Mission Studies
	83/05/25	Eighteen Space Station Uses Study Proposals Accepted
	83/06/07	Senior Interagency Group Meets
	83/07/20-21	Space Station Program Review Committee Meets
	84/02/09	Beggs Meets With Industry Officials Regarding Space Station

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LOCATION	DATE	EVENT
NASA	84/03/14	Phase B Contracts for MSFC, GSFC, and LeRC Chosen
	84/09/14	RFP Issued for Definition & Preliminary Design of Low Earth Orbit Station
	84/09/16	Reduction in Value of Phase B Contracts
	84/11/14	NASA Defends Its Plan for a Space Station Against OTA Report
	85/04/00	Space Station Scientist Assigned
	85/04/01	Space Station Integrated Systems Data Base Implemented
	85/04/15	Space Station Phase B Contracts Set to Run from 15 April 1985
	85/05/09	Phase B Memorandum of Understanding Signed With Japanese
	85/06/03	Phase B Memorandum of Understanding Signed With ESA
	85/07/09-17	NASA Personnel met for RUR-1 Process
	85/10/10	Technical Management Information System Project Office Was Formed
	85/11/01	RFP for the Orbital Maneuvering Vehicle Is Released
	85/11/13	NASA/HQ, MSFC, and JSC Representatives Meet on Communications with OMV
	85/11/21	Space Station Reference Update Review-2 Held
	86/02/28	TFSUSS Report Issued
	86/03/05-06	Level A/B/C Work Package Analysis Team Meets
	86/03/06	Systems Requirements Review Completed

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LOCATION	DATE	EVENT
NASA	86/03/29	Systems Requirements Review Completed
	86/04/23	Banks Committee Issues Second Report on Scientific Uses of Space Station
	86/06/02	Tentative Agreement Reached Between ESA and NASA
	86/07/25	Fletcher Meets With Houston's Mayor
	86/09/08	Critical Evaluation Task Force Presents Report
	86/09/15	Critical Evaluation Task Force Reports
	86/09/19	Space Station Program Procurement Coordination Committee Established
	86/11/25	Draft RFP Released to Industry
		Management Study Group Reports
	87/01/18	Space Station Phase B Completed
NASA/DOD	84/01/16	Weinberger Tells Beggs Of Lack Of Military Need for Manned Space Station
NASA/HQ	82/01/06	Beggs Makes Special Assignments for Station Planning and Technology Work
		Beggs Tasks Kerrebrock To Organize Station Technology Steering Committee
	82/04/02	Mission Analysis Studies Briefing Given
	82/06/02	Space Station Task Force Is Formed
	82/06/28	NASA Released RFP's for Space Station Mission Analysis Studies
	82/07/09	Space Station Task Force Establishes Mission Requirements

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LOCATION	DATE	EVENT
NASA/HQ	82/07/09	Working Group
	82/07/15	Space Station Program Planning Working Group Meets
		Space Station Systems Working Group Meets
	82/07/19	Beggs, Mark, Culbertson, and Hodge hold Space Station Planning meeting
	82/07/21	NASA Advisory Council Meets to Discuss Five-Year Planning
	82/07/29-30	SSPPWG Meets at NASA/HQ
	82/07/30	SSPRC Meets at NASA/HQ
	82/08/09	Space Station Steering Committee Meets
	82/08/20	NASA Contracted Eight Mission Analysis Studies.
	82/09/13	Office of Space Station Holds International Orientation
	82/09/16	Space Station Program Review Committee
		SSPPWG Produces Schedule
	82/10/03	Space Station Steering Committee Meets
	82/11/01	OSSA Announced a $400K Program to Investigate Uses of Space Station
	82/11/15-18	Mid-Term Briefings for Mission Analysis Studies Were Given
	82/12/01	Space Station Program Planning Working Group Completes Studies
	82/12/17	Potential International Participants Briefed by SSTF on Available Data
	83/01/18	Hodge Formalized List of Space Station Level A Requirements

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LOCATION	DATE	EVENT
NASA/HQ	83/02/11	Beggs Sent Letter to Center Directors Reaffirming Support of Station
	83/03/10	Space Station Program Review Committee Meets
	83/06/13	Space Station Steering Committee Meets
	83/06/13-15	Space Station Program Planning Working Group Meets
	83/07/07	Policy Review Committee Meets at NASA/HQ
	83/07/18	Space Station Steering Committee Meets
	83/08/04	Space Station Steering Committee Meets
	83/09/13	Space Station Steering Committee Meets
	83/10/24	Space Station Steering Committee Meets
	83/10/31	Silveira Becomes Chairman of Space Station Steering Committee
	83/11/09	The Concept Development Group Met Concerning Crew Safety
	83/12/15	Culbertson Meets with Faget to Discuss Free-Flying Industrial Facility
	84/02/09	NASA Establishes 7 Inter-Center Teams for Station Advanced Development
	84/02/10	Hodge Distributes POP 84-1 Guidelines for Station Program Definition
	84/02/16	JSC Named Lead Center for Space Station
	84/02/19	Phase B To Begin Around July or August 1984

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LOCATION	DATE	EVENT
NASA/HQ	84/02/28	Memorandum of Understanding Signed Regarding Construction of ISF
	84/02/29	Space Station Task Force Chooses Priorities for Facilities
	84/03/02	A Draft RFP Approved for Transmittal to Level B
	84/03/12	Space Station Task Force Submits IOP 84-1 Estimates
	84/03/14	Space Station Steering Committee Meets
	84/03/16	Beggs Defends FY85 Request for $150 Million
		NASA Selected McDonnell Douglas and TRW for Parallel Station Contracts
	84/03/22	Phase B "Controlled Milestones" Generated
	84/03/29	POP 84-1 Submitted to Space Station Task Force
	84/04/10	International Cooperation Group Meets
	84/05/04	Space Station Steering Committee Holds Meeting
	84/05/08	International Cooperation Group Meets
	84/05/10	Culbertson Delineates POP 84-2 for JSC
	84/05/23	International Cooperation Group Meets
	84/06/04	International Cooperation Group Meets
	84/06/14	NASA Personnel Hold Space Station Program Review
	84/06/21-22	NASA and Foreign Officials Meet Regarding Space Station

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LOCATION	DATE	EVENT
NASA/HQ	84/06/28	NASA Announces Four Centers for Phase B Design Studies
	84/07/03	International Cooperation Group Meets
	84/07/09	Space Station Steering Committee Holds Meeting
	84/08/01	NASA Establishes Office of Space Station/Culbertson made AA for OSS
	84/08/07	International Cooperation Group Meets
	84/08/10	Culbertson Makes Recommendation Regarding FY86 Space Station Funding
	84/08/13	Space Station Steering Committee Holds Meeting
	84/08/23	NASA Personnel Hold Level A/B Review
	84/09/06	International Cooperation Group Meets
	84/09/10	Space Station Steering Committee Holds Meeting
	84/09/20-21	Space Station International Workshop Meets
	84/10/09	Culbertson Establishes Space Station Management Council
		Space Station Steering Committee Meets
	84/10/11	International Cooperation Group Meets
	84/10/24	International Cooperation Group Meets
	84/10/30	Space Station Management Council Holds First Meeting
	84/11/05	International Cooperation Group Meets

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LOCATION	DATE	EVENT
NASA/HQ	84/11/05	Space Station Steering Committee Meets
	84/11/19	Banks Supports Extended Duration Orbiter
	84/12/03	Space Station Steering Committee Meets
	84/12/13	Culbertson Announces Formation of Commercial Advocacy Group
	84/12/14	NASA Submitted Space Station Management Plan
		Office of Space Station Submits Requirements for COF in FY 1987-FY 1992
	85/01/09	Space Station Steering Committee Meets
	85/01/23	Culbertson Establishes Ad Hoc Task Force on Man-Tended Option
	85/01/30	International Cooperation Group Meets
	85/02/13	Space Station Steering Committee Meets
	85/03/08	Office of Space Station Transmits Guidelines for POP 85-2
	85/03/28	Policy Review Committee and Center Directors Discuss Evolution
	85/05/08	Space Station Steering Committee Meets
	85/06/06	International Cooperation Group Meets
	85/06/12	Space Station Steering Committee Holds Meeting
	85/06/28	Culbertson Gives Space Station Position on Extended Duration Orbiter
	85/07/01	Office of Space Station Research

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LOCATION	DATE	EVENT
NASA/HQ	85/07/01	and Development POP 85-2 Submitted
	85/07/22	Office of Space Station Establishes Level A Control Board
	85/07/30	Memorandum of Understanding Signed Regarding OMV
	85/08/14	Culbertson Requests "Scrub" For Space Station Program
	85/09/10	International Cooperation Group Meets
	85/09/11	Space Station Steering Committee Holds Meeting
	85/11/05	Memorandum of Understanding Signed Regarding OMV
	85/11/06	Orbital Maneuvering Vehicle Task Force Agreed Upon
	85/11/14	Culbertson Writes to Beggs Regarding Inter-Center Rivalry
	85/11/19	Space Station Research and Technology Operating Plans Submitted
	85/12/26	Hodge Appointed as Acting Associate Administrator for Space Station
	85/12/30	Hodge et al Hold Meeting Regarding Work Packages
	86/01/07	Level A Review Held
	86/01/14	International Cooperation Group Meets
	86/01/28	Office of Space Station Submits Revised FY86 Plan to NASA Comptroller
	86/03/19	Level B Systems Integration Board Meets
		Space Station Management Council Meets

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LOCATION	DATE	EVENT
NASA/HQ	86/03/19	Space Station Steering Committee Holds Meeting at NASA/HQ
	86/03/25-27	SRR Process Culminates Into a Baseline Configuration
	86/03/28	Culbertson Sends "Lifeboat" Memorandum
	86/04/03	Space Station Management Council Meets
	86/04/15	Orbital Transfer Vehicle Studies Review Held
	86/04/17	Office of Space Station Formulates Station Program Planning Strategy
		Space Station "Overlaps" to be Eliminated
	86/04/24	Space Station Steering Committee Holds Meeting at NASA/HQ
	86/05/00	NASA Adopts Space Station Logo
	86/05/13	General Phillips to Head Study of NASA Management
	86/05/14	Space Station Baseline Configuration Announced
	86/06/24	Space Station Management Council Meets
	86/06/25	Space Station Steering Committee Holds Meeting at NASA/HQ
	86/06/30	Changes In Space Station Program Organization Announced
		Stofan Appointed Associate Administrator for Space Station
	86/07/10	RFP For Technical Management Information System Issued
	86/07/31	Delay Announced in the Shifting of Space Station Reorganization
	86/08/18	Stofan Announces Formation of

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LOCATION	DATE	EVENT
NASA/HQ	86/08/18	Space Station Review Teams
	86/09/01	Fletcher Warns of Scaling-Down Unless Station Gets Increased Funding
	86/09/03	Franklin Martin Becomes Deputy Associate Administrator for Space Station
		NASA and ESA Agree on Hardware for Space Station Phase B
	86/09/09	Stofan Announces Formation of Operations Task Force for Space Station
	86/09/10	Stofan Approves Station Commercial Development Portion of Phase C/D RFP
	86/09/24	Office of Space Station and OSSA Discuss Payloads to Support Station
	86/09/29	J. R. Thompson Appointed Marshall Center Director
	86/10/06	Myers Appointed NASA Deputy Administrator
	86/11/03	Space Station Operations Task Force Oversight Committee Formed
	86/11/17	Moser Named Director of Space Station Program Office
	86/12/14	Hodge Details Effects of Shuttle Launch Delays on Space Station
	87/01/05	Fletcher Comments on the Reagan Budget's Allottment for NASA in 1988
	87/04/06	Space Station Contractors to be Chosen by 1 October 1987
	87/05/05	Space Station Program Office Formed
	87/11/02	NASA Postpones Awarding of Space Station Contract

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LOCATION	DATE	EVENT
NASA/HQ	87/11/16	Space Station Contract Selection Is Still On Hold
	87/11/23	Fletcher Still Not Ready to Announce Space Station Contracts
	87/12/24	Philip E. Culbertson To Retire
	88/03/14	Contract Requirements for Commercially Developed Space Facility Mailed
	88/04/01	Andrew J. Stofan Plans Retirement from NASA
NASA/SSPO	87/02/04	Proposals Sought for Space Station Support
	87/07/08	Space Station Support Contract Goes to Grumman Aerospace
Nashville	87/11/03	Stofan Denies Postponement of Contract Announcement Is Related to Budget
	87/11/03-05	Workshop Held in Nashville Promoting Commercial Uses of Space
New York	88/07/25	Poll Shows Americans Favor NASA and Space Station
Paris, France	82/06/17	Beggs Meets with ESA Director
	85/01/07	NASA and ESA Agreed on ESA Phase B Description
Quebec	85/03/17-18	US and Canada Join in Space Station Efforts
Rockwell	87/05/08	Space Station Critics Told to Stifle Remarks
Stanford, CA	85/08/13-15	Task Force on Scientific Uses of Space Station Holds Workshop
	85/08/19-23	Task Force on Scientific Uses of Space Station Holds Summer Study
Tokyo	83/03/07-11	Culbertson Discusses Space Station With Japanese Officials

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LOCATION	DATE	EVENT
USSR	82/04/19	Salyut 7 Launched
	86/02/19	USSR Launches Mir Space Station
Wallops Flight Facility	83/08/29	Space Station Management Colloqium Meets
	83/09/01-02	Space Station Program Review Committee Meets
Washington	82/03/19	NASA and West Germany Discuss Space Station Cooperation
	82/04/27	Space Operartions Study Meeting Held
	82/06/11	NASA Meets with Representatives of NASDA
	82/06/15	Chairman of House Science Committee Writes President Reagan
	82/07/21	Senate Committee Tasks OTA to Study Need for Orbiting Facility
	82/07/26-30	NRC Space Sciences Board Conducts Space Station Study
	82/09/15	Beggs Submits NASA FY84 Budget
	82/09/21	Space Station Task Force Members Meet With National Security Staff
	82/11/01	NASA Gives Briefing Concerning International Participation at OTA
	83/02/03	Beggs and Mark Testify Regarding 1984 NASA Budget Authorization
	83/02/15	Keyworth Testifies Regarding Space Station
	83/04/11	Reagan Approves Study Conducted to Establish Decision on Space Station
	83/04/27	Concept Development Group Moves in Building
	83/06/16	Hodge Briefs House Subcommittee Staff Concerning Space Station

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LOCATION	DATE	EVENT
Washington	83/06/16	Missions
	83/06/20	McFarland Informed of Defense Missions of Space Station
	83/07/26-27	NASA Advisory Council Discusses Space Station
	83/08/03	President Reagan Meets With Corporations Concerning Space Station Support
	83/08/10	Beggs Requests Support from Weinberger for Space Station
	83/10/27	Space Applications Board Report to NASA Regarding Space Station
	83/11/15	US Senate Subcommittee Held Hearings On Space Station
	83/11/17	Reagan Expected to OK Permanent Space Station
	83/12/01	Council for Commerce Meets with Beggs Regarding Space Station
	84/01/25	Reagan's 1984 State of the Union Address Announcing Support for Station
	84/02/09	House Subcommittee Holds Hearing on Task Force on Scientific Uses
	84/03/29	Space Station Funds Clear First Congressional Hurdle
	84/03/30	Ohio Lawmakers Upset Over South's Space Dominance
	84/04/11	President Reagan Asks For Study on Whether To Proceed With Space Station
	84/07/18	Reagan Signs Law Requiring Man-Tended Options Study
	84/11/13	Office of Technology Assessment Releases Space Station Report
	85/02/06	Reagan Reaffirms Commitment to Space Station

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LOCATION	DATE	EVENT
Washington	85/03/08	Peter Banks Testifies before Senate Subcommittee
	85/03/14	Hearings Held on Automation and Robotics
	85/04/16	Space Station User Functional Requirements Envelope Reviewed
	85/07/25-26	International Cooperation Group Meets
	85/11/25	Reagan Signs FY86 HUD-Independent Agencies Appropriations Bill
	85/12/23	OMB Recommends Huge Cut for Space Station in FY87
	86/02/03	Reagan Appoints the Rogers Commission
	86/02/04	Phase B Memorandum of Understanding Signed With Canada
		Reagan Confirms Commitment to Space Station in State of the Union
	86/02/05	Resolution Made to Honor Challenger Aboard Space Station
		Space Station Funding Doubled for 1987
	86/02/14	Field Center Personnel Brief John Hodge on TMIS
	86/04/17	House Panel Approves Space Station Funds
	86/05/12	Fletcher Becomes NASA Administrator
	86/08/01	House Funds for Space Station Have Strings Attached
	86/08/05	General Phillips Testifies Regarding Management Study Group
	86/09/25	Fletcher Presents Report on Space Station to Congress

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LOCATION	DATE	EVENT
Washington	86/12/11	Space Station Advisory Committee and National Research Council Meet
	87/01/26	Fund Cuts to Delay Space Station to 1997
		Louisianians Lobby for Space Station
	87/03/11	House Budget Committee Discusses Possible Cuts in Station Funds
		Witnesses Warn House Subcommittee Not to Build Station on "the Cheap"
	87/03/16	J.R. Thompson Speaks With Congressmen Regarding Space Station
	87/03/31	Space Station Design-to-Cost Plan Proposed
	87/04/03	Reagan Approves $12.3 Billion Plan for Space Station
	87/04/07	NASA Urged to Rearrange Space Station Construction Schedule
		Weinberger Writes Shultz Regarding Space Station
	87/04/23	National Security Council Releases Statement Regarding Space Station
	87/06/25	Congressional Committees Argue Over Defense Use of Station
	87/06/27	House Committee Approves Defense Research on Station
	87/06/30	National Research Council Space Station Report Is Presented
	87/07/28	Stofan Tells of New Price Tag for Space Station
	87/09/14	National Research Council Releases Report on Space Station Management

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LOCATION	DATE	EVENT
Washington	87/10/30	Reagan Signs Bill Providing Funds for Space Station
	87/11/24	Stofan Complains About Space Station Delays
	87/12/01	Phase C/D Contractors Selected
	87/12/02	National Research Council Report Critical of NASA
	87/12/07	Senator Heflin Seeks to Avert 70% Cut in Space Station Funds
	87/12/16	Congressional Agreement Gives Station $425 Million for FY88
		NASA Directed to Adapt to Shrinking Space Station Budget
	88/01/25	Reagan Asks for $1 Billion for Space Station in 1989
	88/02/06	International Space Station Partners End Negotiations
	88/02/08	Congress Holds Partial Allocation for Space Station
	88/02/12	President Reagan Unveils Space Policy
	88/02/18	NASA Asks for $90 Million in Space Station Funds
	88/02/27	Subcommittees Release $45 Million for Space Station
	88/03/10	Bipartisan Congressmen Send Letter to Speaker Wright Regarding NASA
		Rep. Boland Comments Regarding Housing versus Space Station
		Stofan Testifies Concerning Ill Effects of Cutting Space Station Funds
	88/03/16	House Committee Considers Freezing Space and Science Funding in 1989

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LOCATION	DATE	EVENT
Washington	88/03/17	House Committee Backs Off From Space and Science Funding Freeze for 1989
	88/03/23	House Passes Budget for 1989--Fletcher Says Too Low to Continue Station
	88/03/29	Dr. Fletcher Answers Questions for Senate Appropriations Subcommittee
	88/03/30	Senate Committee Recommends 25% Hike in NASA's 1989 Budget
	88/04/01	James B. Odom to be Associate Administrator for Space Station
	88/04/14	NASA Pushes Back the Target Date for Man-Tended Capability Aboard Station
	88/05/12	House Subcommittee Cuts NASA Budget
	88/05/21	Fletcher Warns of Repercussions to Station if Funding Is Cut
	88/05/22	Senator Proxmire To Renew Efforts at Cutting Space Station
	88/06/02	Multi-Year NASA Budget Passes House
	88/06/14	New President To Be Given Opportunity To Decide Space Station's Fate
	88/06/16	Senate Panel Votes To Cut Spending for Station To $200 Million in FY89
	88/06/22	House Approves $10.7 Billion for NASA for FY89
		Senate Appropriations Committee Votes $200 Million for Space Station
	88/07/13	Senate Votes to Fund Space Station With $200 Million in FY89

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LOCATION	DATE	EVENT
Washington	88/07/18	Space Station Is Named "Freedom"
Williamsburg,VA	83/03/28-31	Space Station Technology Workshop Held
	85/09/10-13	Space Station Evolution Workshop Meets
Woods Hole Study Center	84/09/24	NASA Sponsored Workshop for Station Mission Requirements Working Group

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16. ABSTRACT

This document contains listings of major events directly related to the Space Station Program at Marshall. The information will provide the researcher with a means of following the chronological progression of the program.

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