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Rediscovering Space: The Rise and Fall of the Congressional Space Caucus, 1981-1989

Senior Honors Thesis
Department of History
Carnegie Mellon University

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Introduction

The 1970s and 1980s witnessed the birth, development, and subsequent multiplication of congressional caucuses, which have adapted and evolved over several decades into powerful, unofficial, congressional institutions. Despite their importance to the broader congressional system, caucuses have received little scholarly attention. Author Susan Webb Hammond published the most thorough and substantive study to date, entitled *Congressional Caucuses in National Policymaking* (1998). According to Hammond, the traditional congressional structure was unable to respond effectively to the "changes in the polity" that arose during this time period, leading to the emergence of congressional caucuses.[1] The central change came when "an increasing number of complex, crosscutting, and interconnected issues began to occupy the congressional agenda."[2] Hammond provides the example of the environment as a growing topic of national attention that simultaneously raised concerns for health, economics, and several other intersecting areas. Congress grew increasingly ineffective in handling these issues that began falling "into jurisdictional cracks" or were dispersed across several committees and subcommittees.[3]

Not only were caucuses important for their work in bringing underrepresented issues to congressional attention, but they also acted as legitimate and accessible means for congressmen, especially newer members and members without strong committee positions, to impact the broader agenda and create a base on which to build their names. Hammond notes that the "constituent demands for policy responsiveness, representation, and accountability" and the heterogeneity of constituent needs were always increasing, and "the congressional reforms of the

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[1] Susan Webb Hammond, *Congressional Caucuses in National Policy Making* (Baltimore: Johns Hopkins University Press, 2001), 14.
[2] Ibid.
[3] Ibid, 15.

1970s created the expectation that a member, even a junior one, ought to be effective."[4] With the increasing complexity of policy issues, effectiveness, especially as a junior member, became difficult to achieve in the traditional congressional structure. Many congressmen soon began to launch their Washington careers via caucuses they founded during their early years. A prime example of this phenomenon was Newt Gingrich's creation of the Conservative Opportunity Society in 1983. This caucus, designed to be a counterpart to the Democratic Study Group, acted as a "springboard" for Gingrich's Republican Revolution and his ultimate rise to the speakership in 1995.[5] Yet, before Newt Gingrich launched the Conservative Opportunity Society, he had been the key player in creating the Congressional Space Caucus as a second-term congressman in 1981.[6]

Hammond groups caucuses into six types "by the reasons for which members join and the range of issues on which a caucus works": 1) party caucuses 2) personal-interest caucuses 3) national constituency caucuses 4) regional caucuses 5) state/district caucuses 6) industry caucuses.[7] She categorizes the Congressional Space Caucus as a personal-interest caucus, which she defines using four primary characteristics. First, "the common characteristic for members of personal-interest caucuses is an issue" that is usually broad or is jurisdictionally under more than one committee. Second, "caucus activities are not directly linked to representation of constituent interests." Third, "many personal-interest caucuses focus on agendas or information because their large memberships agree on the importance of an issue but not on specific programs."

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[4] Ibid.
[5] Ibid, 7.
[6] Gingrich also co-founded the Congressional Military Reform Caucus in 1981 alongside "some two dozen senators and congressmen, most of them Republican and conservative Democrats." J. Record, "The Military Reform Caucus," *Washington Quarterly* 6, no. 2 (1983): 125, Taylor and Francis Online (accessed April 11, 2012).
[7] Hammond, *Congressional Caucuses*, 31-35.

Fourth, these caucuses "are generally bipartisan."[8] Hammond goes on to say that "the Congressional Space Caucus is an example of a personal-interest caucus created to stimulate congressional response to the decline of an issue on the administrative agenda," and that the Caucus focused its efforts on "making noise on the Hill" in support of space.[9]

This designation of the bipartisan Space Caucus as "personal-interest" is accurate in a broad sense, but the reality of the Caucus's scope and success was much larger. While the mission of the Space Caucus was to make Congress aware of the impact it could have on revitalizing space, the Caucus also sought to influence the broader national agenda by not just informing congressmen of what was already being done in space, but by also making them aware of the plethora of bold, new programs that could be pursued, like commercialization of space and space stations. While the Space Caucus was primarily an information network for space, it used information as a means of impacting the nation as a whole, and thus impacting all constituents. The Space Caucus may not have expressly supported legislation, but it played an enormous role in the mid-1980s in the creation of landmark legislation such as the Space Commerce Act and getting the International Space Station passed in the House of Representatives.

On November 20, 1981, Congressional Space Caucus co-founders Newt Gingrich (R-GA) and Daniel Akaka (D-HI) sent out a first round of "Dear Colleague" letters to their House colleagues. Gingrich's futurist space leanings and Akaka's regional ties to space made them an effective tandem to lead the Space Caucus. This initial letter, co-signed in a bipartisan fashion by Congressmen Tom Bevill (D-AL), Wayne Grisham (R-CA), Timothy Wirth (D-CO), Joe Skeen (R-NM), Norman Mineta (D-CA), and Ken Kramer (R-CO), called on members of Congress to

[8] Ibid, 32.
[9] Ibid, 94.

join in support of "the common goal of revitalizing America's space program."[10] This common goal reflected uneasy sentiments at the time regarding the future of the United States manned space exploration program, despite renewed public attention on space following the Space Shuttle *Columbia's* two successful voyages on April 12 and November 12 of 1981. Questions about the United States of America's future leadership and command of space were widespread.

This thesis will explore the founding of the Congressional Space Caucus in November 1981, taking a close look at the founders' differing motivations, as well as the importance of their staff, in the creation and operation of the Caucus. The topics championed and furthered by the Space Caucus will be illustrated in the context of the time period. The relationship of the Space Caucus with both the National Aeronautics and Space Administration (NASA) and the House Science and Technology Committee will be examined from a period of tense beginnings through the point of eventual acceptance and collaboration. Finally, the thesis will outline the effects of the departure of founders Gingrich and Akaka from the Space Caucus.

Motivations for Forming the Space Caucus

According to Simon Ramo, founder of TRW, "the Apollo flights lost the attention of the public after a half dozen successful landings had accomplished the program's psychological mission."[11] The Apollo program was devised in response to President John F. Kennedy's historic Cold War directive on May 25, 1961 to "achieve the goal, before this decade is out, of landing a

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[10] Daniel Akaka and Newt Gingrich, "Dear Colleague" Letter, November 20, 1981, NASA History Program Office Archives, NASA Headquarters, Washington, D.C., "Congressional Space Caucus" folder, record no. 19554, loc. V/A/5.

[11] Simon Ramo, *The Business of Science: Winning and Losing in the High-Tech Age* (New York: Hill and Wang, 1988), 133. TRW, Inc. was an aerospace corporation that began development of inter-continental ballistic missiles (ICBM) in the 1950s and produced spacecraft for NASA in the 1960s.

man on the moon and returning him safely to Earth."[12] While the Apollo 11 mission, which successfully landed the first humans on the Moon on July 20, 1969, was and remains one of the species' greatest accomplishments in space, the subsequent five successful Apollo Moon landings could never conjure up the pride and prestige of the first. The follow-on Space Shuttle program, which was a highly debated initiative from its inception in the 1970s, strikingly mimicked Apollo in that its vision and goals did not evolve throughout the duration of the program. Instead, the same result, in this case using reusable spacecraft to reach low-Earth orbit, was repeatedly achieved. The billions of dollars already spent on the Shuttle by the early 1980s, and the billions more proposed for the continuation of the program, left little room for the creation and realization of other potentially revolutionary projects in space. Without a new, progressive agenda, the threat of the loss of American space supremacy seemed very real.

While space was primarily considered the jurisdiction of the House Science and Technology Committee and its Subcommittee on Space Science and Application, the foundation of the Space Caucus was predicated on the notion that the possibilities for space were far greater and were not being adequately pursued at present. The futurist vision of the caucus was candidly captured in the Space Caucus's first "Dear Colleague" letter, an invitation to membership that expressed the founders' beliefs about the potential that space could offer as a new frontier and as a solution to global problems.

[12] John F. Kennedy, "Special Message to the Congress on Urgent National Needs," Washington, D.C., May 25, 1961.

> *Space has become a commonplace contributor to an integral part of our everyday life, but this is just the beginning. Space offers staggering opportunities for solving major global problems and the development of vital new industries.*[13]

According to James Muncy, future Gingrich intern and staffer, as well as the Executive Director of the Action Committee for Technology and a founder of the Congressional Staff Space Group, who played an integral role in encouraging Gingrich to form the Space Caucus, it represented "a desire by Gingrich and others to support space by promoting a more positive, more future-oriented space program, where money was spent in more creative ways than NASA and other organizations were currently spending it."[14] Thus, the members of the caucus were aiming to renew interest in space through the circulation of new, innovative ideas that would harness the full capacity of space exploration while simultaneously keeping the United States at the forefront of the worldwide space community.

As co-founders and co-chairmen of the early Congressional Space Caucus, Gingrich and Akaka dedicated considerable personal time, in addition to the time of their own staff members, to informing members of Congress on both the current status of the United States space program and the unbounded possibilities that had yet to be pursued in space. Their personal backgrounds and motivations for forming the Caucus differed, with Gingrich's affinity for space coming more from personal interest and Akaka's stemming more from traditional local pork barrel concerns.

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[13] Daniel Akaka and Newt Gingrich, "Dear Colleague" Letter, November 20, 1981, NASA History Program Office Archives, NASA Headquarters, Washington, D.C., "Congressional Space Caucus" folder, record no. 19554, loc. V/A/5.

[14] James Muncy, Interview with the author, November 17, 2011. The Action Committee for Technology was a pro-technology lobbying group founded and operated by James Muncy in the late 1970s through the early 1980s. James Muncy and Diana Hoyt founded the Congressional Staff Space Group in 1981 in an effort to better inform congressional staff on space-related issues.

Congressman Newt Gingrich (R-GA)

In a conversation with science fiction writer Jerry Pournelle shortly before the formation of the Space Caucus, Gingrich passionately stated, "The space program is always in trouble because it has never been championed by a politician. I want to be that politician. You technical people show me what we can do, and I'll try to take it from there."[15] As hinted by his separation of himself from the "technical people," Gingrich's keen interest in space did not spring from an educational background in science, technology, engineering, or mathematics. In speeches, Gingrich shamelessly referred to himself as "technically fairly ignorant," or said that he was speaking about space as "a history teacher-turned-politician." [16] A historian by profession, the Congressman's fondness for science fiction and futurist approaches to history fostered a romantic vision of the opportunities presented by exploration of outer space. As an impressionable teenager, Gingrich was strongly influenced by the launch of the Soviets' *Sputnik* and President Kennedy's Apollo directive, two events that fueled the Cold War space race. He fondly reminisced reading *Missiles and Rockets* magazine in the eighth grade and consuming science fiction, most notably the Isaac Asimov *Foundation* trilogy, which "reset the decline and fall of the Roman Empire into a space-based civilization centuries in the future."[17] In describing

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[15] Jerry Pournelle, foreword to *Window of Opportunity*, by Newt Gingrich (New York: Tom Doherty Associates, Inc., 1984).
[16] Newt Gingrich, "Speech before the National Space Club," Rayburn House Office Building Rooms B338-340, September 29, 1982, 7, NASA History Program Office Archives, NASA Headquarters, Washington, D.C., "Newt Gingrich" folder, record no. 792, loc. LEK 1/7/3.
[17] Gregory Anderson, "A few words with Newt Gingrich," *The Space Review*, May 15, 2006. http://www.thespacereview.com/article/623/1 (accessed April 2, 2012). John J. Pitney Jr., "Understanding Newt Gingrich," 1996 Annual Meeting of the American Political Science Association, August 29-September 1, 1996, 11.

Gingrich in an article in *Space News*, Muncy elaborated further on the Congressman's attachment to space:

> *Gingrich grew up reading science fiction writer Robert Heinlein and would rather talk with futurists Alvin Toffler or Jerry Pournelle about ideas than with party officials about politics. It is therefore not surprising that Gingrich sees space as a place, not a program. To him space is a natural extension of the Earth's frontiers; and opening space to human enterprise and settlement is a uniquely American response.*[18]

Gingrich made bold statements about the future of the United States space program early in his congressional career. A few months into his second term in 1981, he was featured in an article in *Defense Daily*, entitled "Two Congressmen Seek Support for Redirected Space Program." The plan for this redirection, touted by Gingrich and fellow Republican Congressman Paul Trible of Virginia, contained a number of project proposals for a more robust and technologically advanced space program. According to the article, "the unique part of the proposal would be to initiate the development of manned 'Space Interceptors' designed to deter, or shoot down if necessary, Soviet ballistic missiles launched at this country."[19] This precursor to Ronald Reagan's Strategic Defense Initiative ("Star Wars") was one of the hallmarks of the plan,

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[18] James Muncy, "After the Republican Deluge," *Space News*, December 19-25, 1995, 15, NASA History Program Office Archives, NASA Headquarters, Washington, D.C., "Newt Gingrich" folder, record no. 792, loc. LEK 1/7/3.

[19] "Two Congressmen Seek Support for Redirected Space Program," *Defense Daily*, March 23, 1981, 131, NASA History Program Office Archives, NASA Headquarters, Washington, D.C., "Newt Gingrich" folder, record no. 792, loc. LEK 1/7/3.

coupled with two additional notable proposals: one for space-based solar power systems, and another for a Space Operations Center.

The logic behind space-based solar power systems as an alternative energy supply was and remains coherent today, yet it is easier conceptualized than realized. As explained by an expert in 2008, the basis is that "around the clock, 1.3 gigawatts of energy [from the sun] pour through every square kilometer of space around the earth. This energy could be captured by vast arrays of photovoltaic cells mounted on a satellite in orbit around the planet. The solar-power satellite would [then] send the collected energy down to earth in the form of a microwave beam, which would be picked up on the ground by a huge array of antennae, spread over several square kilometers in open country."[20] At a time in the late 1970s and early 1980s when debates over the nation and the world's energy futures were raging, this sci-fi energy solution captivated the attention of futurists like Gingrich. In fact, much earlier in 1941, Gingrich's favorite author Isaac Asimov had published a short story entitled "Reason," the setting of which is "on a space station which collects solar energy from the sun and sends it, via microwave beams, to Earth and other planets."[21]

The reference to a Space Operations Center, defined by the Gingrich/Trible proposal as "a permanently manned space station capable of supporting privately-financed space industrial activities," was the predecessor to what would ultimately materialize from President Reagan's 1984 State of the Union Address call for creating a permanently manned space station.[22] This definition also touched on Gingrich's and some fellow congressmen's growing interest in the

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[20] "Let the sun shine in," *The Economist*, Technology Quarterly: Q4 2008, December 4, 2008. http://www.economist.com/node/12673299 (accessed April 1, 2012).
[21] Ibid.
[22] "Two Congressmen Seek Support for Redirected Space Program," *Defense Daily*, March 23, 1981, 131, NASA History Program Office Archives, NASA Headquarters, Washington, D.C., "Newt Gingrich" folder, record no. 792, loc. LEK 1/7/3.

privatization of space, which married the space station idea to the concept of "privately-financed space industrial activities."

In reaction to the Gingrich/Trible proposal, James Muncy's science and technology lobbying group, the Action Committee on Technology, observed, "this is really the first recent organized effort within Congress to marshal support for space. During the 1970s, a few congressional proponents of a strong U.S. space program struggled alone against the shortsighted and misdirected assaults on NASA budgets."[23] While the Gingrich/Trible initiative represented only one opinion on the United States space program, it illustrates Gingrich's attention to space at a time when most members of Congress largely ignored the "last frontier."[24]

During the early years of his congressional career, Gingrich found innovative approaches to leverage his doctorate in history to further his interests. As a second-term congressman, just months before he formed the Space Caucus, Gingrich sponsored a bill known as the National Space and Aeronautics Policy Act of 1981 (H.R. 4286). Title IV of the proposed bill "set forth provisions for the government of space territories, including constitutional protections, the right to self-government, and admission to statehood."[25] While the legislation never made it out of the Subcommittee on Space Science and Applications, the mere idea of creating the legal conditions for future space colonies to apply for statehood in the United States was so far-out that Gingrich acquired the moniker "Newt Skywalker," a phrase often used in his Georgia district's newspapers for the duration of the decade.[26]

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[23] Ibid.
[24] This was Wernher von Braun's term from his series of articles in *Colliers*, 1952.
[25] Newt Gingrich, "The National Space and Aeronautics Policy Act," Congressional Research Service Summary, THOMAS, July 28, 1981.
[26] Dave Eisenstadt, "Where No Speaker Has Hone Before Wants Space Tax-Free," *New York Daily News*, March 4, 1995.

At a time when the first Space Shuttle had just lifted off and there was only preliminary chatter regarding a permanent presence in space in the form of the International Space Station (ISS), Gingrich's proposed legislation seemed more science fiction than reality. Yet, Gingrich used one of the nation's most important early historical documents to justify his unorthodox legislative move. Explaining his vision for the bill to James Muncy, his staffer who was charged with crafting its specifics, Gingrich invoked the Northwest Ordinance of 1787 as his blueprint.[27] Officially titled "An Ordinance for the Government of the Territory of the United States Northwest of the River Ohio," the Northwest Ordinance of 1787 played a highly significant role in accelerating the westward expansion of the new nation.[28] Essentially, the ordinance declared the Northwest Territories an extension of the American frontier and created the conditions under which territories would be allowed to join the Union.

In a similar vein, Gingrich wanted the National Space and Aeronautics Policy Act of 1981 to proclaim future space colonies as extensions of the American frontier; he harkened back to the Northwest Ordinance that helped to fuel the growth of the new American nation and applied it to space.[29] As *New York Times* columnist Maureen Dowd recently stated, "Mr. Gingrich is a historian who treats the future as history."[30] His invocation of the Northwest Ordinance of 1787 in the highly futurist-oriented bill provides a prime example of Gingrich consciously using the past to shape the future.

While the governance of space territories provision of the National Space and Aeronautics Policy Act was certainly the most unconventional aspect of the bill, it was only a

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[27] James Muncy, Interview with the author, November 17, 2011.
[28] Second Continental Congress of the United States, *An Ordinance for the Government of the Territory of the United States North-West of the River Ohio*, July 13, 1787.
[29] James Muncy, Interview with the author, November 17, 2011.
[30] Maureen Dowd, "Newt Skywalker: A Spacey Presidential Candidate Reads America's Future in the Stars," *Pittsburgh Post Gazette*, December 15, 2011.

small part of the broader measure. In his press release announcing the bill, Gingrich commented, "The time for timid exploration and random research in space is over. Just as Columbus' three tiny ships preceded a wave of human migration to the New World, space will begin a tremendous growth in human research and development."[31] These words captured Gingrich's belief that while the United States' past work in space was crucial to the future of space exploration in the same way that Columbus' three initial ships were crucial to the discovery of America, the time had come to proceed into space with more frequency, renewed vigor, and greater purpose. The remainder of the bill called for a large variety of space pursuits, including ideas that Gingrich had proposed earlier in his Gingrich/Trible redirection plan, such as a space station, the creation of "an Earth to Moon and return transportation system," and a "deep space booster system for manned solar system exploration."[32] In addition to these pursuits, the bill directed "the Administrator of NASA, together with the Director of the Office of Science and Technology Policy, in consultation with appropriate Federal agencies, to develop and submit to Congress a preliminary five-year program including proposed annual funding requirements and a detailed research and development schedule. It also required a final five-year program, a ten-year plan, and 30-year policy goal to be submitted to Congress no later than one year after the date of enactment of this Act."[33]

The inclusion of a proposal for a 30-year plan was an effort to encourage the federal government to be forward thinking about the future of the nation's space endeavors. Not surprisingly, every one of Gingrich's space pursuits had multi-billion dollar price tags that would

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[31] Dave Hamrick, Press Release for the National Space and Aeronautics Policy Act, July 22, 1981, NASA History Program Office Archives, NASA Headquarters, Washington, D.C., "Newt Gingrich" folder, record no. 792, loc. LEK 1/7/3.
[32] Ibid.
[33] Congressional Research Service Summary of the National Space and Aeronautics Policy Act, THOMAS.

have absolutely no chance of implementation without a significant increase to the nation's budget. In his book *Single Stage to Orbit: Politics, Space Technology, and the Quest for Reusable Rocketry*, Andrew Butrica compares conservative Gingrich's space agenda to President Kennedy's "space and frontier rhetoric" and "enthusiasm for large-scale space ventures," noting that "Gingrich saw nothing inconsistent with being a conservative and being in favor of such large-scale federal expenditures."[34]

Just a month after the first Space Caucus "Dear Colleague" letter was sent, Gingrich wrote a bold letter to President Reagan. In the letter, Gingrich stated:

> *I urge you to support a nine billion dollar budget for NASA [for FY 1983]. Nine billion dollars will allow us to build six space shuttles and a number of orbital transfer vehicles. It will allow us to begin a permanent space station and an industrial park around the Earth that will create jobs on Earth by creating jobs in space…*[35] *Why, in a time of tight budgets, do I propose an expanded space effort? It's because I believe true conservatism has to offer hope and prosperity for the future.*[36]

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[34] Andrew Butrica, *Single Stage to Orbit: Politics, Space Technology, and the Quest for Reusable Rocketry* (Baltimore: The Johns Hopkins University Press, 2003), 217.

[35] The concept of building an "industrial park" in space was directly related to the growing phenomenon of industrial and research parks, which began to spring up across the United States during the 1950s and 1960s. These industrial parks became the centers of technological and scientific innovation, while simultaneously pulling industry away from the city centers. This concept applied well to space as a future location for industrial advances. Margaret Pugh O'Mara, *Cities of Knowledge: Cold War Science and the Search for the Next Silicon Valley* (Princeton: Princeton University Press, 2005).

[36] Newt Gingrich, "Letter to President Ronald Reagan," December 23, 1981, NASA History Program Office Archives, NASA Headquarters, Washington, D.C., "Newt Gingrich" folder, record no. 792, loc. LEK 1/7/3.

Gingrich went on to explain the benefits of a strong space program to the nation's military activities, private sector, and even its spiritual health. The Reagan administration's mood at the time was hardly inclined toward a $2.4 billion increase in the space budget, but by appealing to Reagan with calls for "true conservatism" and images of job creation, Gingrich hoped to persuade him of the merits of investing greater funds in space. While President Reagan's response was essentially a polite but curt, "no thanks," Gingrich's letter succeeded in making clear his stance on space.

When advocating for an increase in appropriations, the real audience Gingrich needed to address was his fellow congressmen. In a recommendation before the House Subcommittee on Space Science and Applications in early March 1982, Gingrich advised that the $6.6 billion FY 1983 NASA budget be increased to $9 billion. Using rhetoric speckled with alternative history, he said "that if the nation would have made a sound economic investment in our future by continuing support of the space program after Apollo, we would have spent a total of about $150 billion on space and space-related technologies instead of the $60 billion we have actually spent. The accomplishments would have included an industrial park in space right now."[37] In an interview with the *Los Angeles Herald Examiner* after his proposed budget increases, Gingrich was asked, "Do you seriously think this [$9 billion NASA budget] is something you can persuade Congress to do?" He responded, "I think it is very unlikely. But somebody has to stand up and say, 'This is what we should be doing.'" He also added, "And frankly, my so-called big budget is two-thirds the size in constant dollars of the NASA budget just before we got the

[37] "Congressman Advocates $9 Billion NASA Budget," *Defense Daily*, March 16, 1982, 92, NASA History Program Office Archives, NASA Headquarters, Washington, D.C., "Newt Gingrich" folder, record no. 792, loc. LEK 1/7/3.

moon."[38] Recalling the greatest triumph of the nation's space program, the Apollo moon landing, Gingrich suggested that the nation would have a difficult time achieving this kind of glory again without dedication to maintaining a strong NASA budget.

An important point to note when speaking of Gingrich's interest in aerospace during this time period is that his home district was not devoid of constituents invested in a strong aerospace industry. On the contrary, Gingrich was responsible for representing the Atlanta airport, one of the largest airports in the country. In addition, aerospace companies such as Lockheed Martin maintained important facilities in Gingrich's district. Starting in 1943 and continuing through to the present, Air Force Plant No. 6 in Georgia's Cobb Country became "home to Lockheed Martin Aeronautics Company's Marietta operations… taking Cobb County from a farming community to a major industrial player."[39] Thus, Gingrich's interest in rejuvenating the aerospace industry did not do him any disservice with his constituents. Yet, despite these regional ties, his futuristic, romantic, and expensive approaches to space were certainly not the norm for congressmen at the time.

Congressman Daniel Akaka (D-HI)

When the idea to form a Space Caucus first came into being, Congressman Gingrich and liberal Democratic Congressman Timothy Wirth (D-CO) had discussed serving as co-founders and co-chairmen. Shortly before the first "Dear Colleague" letter was to be sent, however, Wirth

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[38] "Q&A Why we should spend more on space program," *Los Angeles Herald Examiner*, April 13, 1982, NASA History Program Office Archives, NASA Headquarters, Washington, D.C., "Newt Gingrich" folder, record no. 792, loc. LEK 1/7/3.
[39] Lee Rhyant, "Lee Rhyant: Lockheed Martin is taking Georgia's aerospace industry to new altitudes," *The Marietta Daily Journal*, September 16, 2010.

lost interest in the position.[40] Although he ultimately signed the first "Dear Colleague" letter as a founding member, Wirth did not want to play the role of co-founder and co-chairman. One of the Caucus's central tenets was to exude a spirit of bipartisanship, so the loss of Wirth created a Democratic void in the chairmanship. At this time, the Congressional Staff Space Group, under the direction of James Muncy and Diana Hoyt, approached liberal Democratic Congressman Daniel Akaka (D-HI) as the next potential co-chairman.[41]

According to Akaka staffer and future Caucus Executive Director Hoyt, Akaka's interest in space had a variety of regional foundations.[42] One of the foremost of these was Hawaii's importance to the field of astronomy. Mauna Kea, a volcano on the island of Hawaii, was and remains one of the principal sites for ground-based astronomy in the world. The peak of the volcano is the highest point in the state of Hawaii, and it is ideal for viewing space as a result of its "exceptionally dry and stable atmospheric conditions at its 4200-m altitude combined with its dark sky."[43] The use of Mauna Kea for formal astronomical purposes dates back to the early 1960s, and has been relevant ever since, with organizations such as NASA and the United States Air Force maintaining presences there.

A debate over the construction of a mid-level facility on Mauna Kea strengthened Akaka's interest in space-related matters. An article in *Defense Daily* from March 17, 1982 noted that Akaka's interest in space stemmed from "his efforts on behalf of the Mid-Level Facility for

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[40] Michael A.G. Michaud, *Reaching for the High Frontier: The American Pro-Space Movement 1972-84* (Westport, CT: Praeger, 1986), chap. 9, "The Caucus," par. 1, http://www.nss.org/resources/library/spacemovement/chapter09.htm#caucus (accessed November 20, 2011).
[41] Ibid.
[42] Diana Hoyt, Interview with the author, March 30, 2012.
[43] Gunther Hasinger, "The Mauna Kea Observatory: Input to the NSF Portfolio Review," January 2012, www.ifa.hawaii.edu/publications/NSF_PR_Mauna_Kea_rev1.pdf (accessed March 20, 2012).

the NASA Infrared Telescope Facility (IRTF) in Hawaii."[44] Similarly, author Michael Michaud notes that Akaka "became interested in space matters after NASA [initially] refused to fund a support facility for an observatory in Hawaii," in reference to the mid-level facility to support the IRTF.[45] The IRTF had been established at an altitude of ~13,600 feet near the summit Mauna Kea on the island of Hawaii in 1979, just three years after Akaka joined the House of Representatives. According to a 2009 NASA Infrared Telescope Facility white paper, the IRTF provides "vital and unequaled capabilities in planetary research while supporting NASA's flight missions and Strategic Goal for Planetary Science."[46] Thus, the IRTF would be extremely important were the United States space program to pursue future planetary exploration, both unmanned and manned.

The debate that stirred Akaka's interest arose when funds were requested for the construction of a mid-level facility at a 9,300-foot (2,800 meter) elevation on Mauna Kea. The facility's proposed purpose was to serve as a site where astronomers working at the summit facilities on Mauna Kea could spend a few days acclimating to the altitude. According to Hoyt, NASA had initially agreed to fund the construction of the project, but due to its gradually diminishing budget, funding to the project was cut. Akaka had to fight hard in Congress to get monies earmarked for the mid-level facility in NASA's FY 1982 budget. His appreciation for the importance of a strong space program grew throughout the difficult political process, with the facility ultimately being completed in 1983.

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[44] "Congressional Space Caucus Formed to Support Space Program: Has 42 House Members/ Seeks 150 By June." *Defense Daily*, March 17, 1982, NASA History Program Office Archives, NASA Headquarters, Washington, D.C., "Congressional Space Caucus" folder, record no. 19554, loc. V/A/5.

[45] Michaud, *Reaching for the High Frontier*, chap. 9, "The Caucus," par. 1, http://www.nss.org /resources/library/spacemovement/chapter09.htm#caucus (accessed November 20, 2011).

[46] S.J. Bus, J.T. Rayner, A.T. Tokunaga, and E.V. Tollestrup, "The NASA Infrared Telescope Facility," Institute for Astronomy, University of Hawaii, HI, September 15, 2009, 2.

Perhaps influenced by Gingrich, Akaka would soon champion the facilitation of commercial space launches. The regional relationship to this issue arose from the commercial space industry's search for ideal locations for future launches. One of the finalists was none other than South Point, the southernmost point on the island of Hawaii. The possibility that a large amount of industry money, which would stimulate jobs and infrastructure, could be invested in Hawaii made space, especially commercial space, something Akaka was ready to rally around.[47]

Akaka's initial interest in space matters stemmed clearly from the impact space had on the state he represented and on his constituents, rather than science-fiction-based visions that underlay Gingrich's involvement. The presence of this NASA facility in Hawaii and the importance of this project to the nation's planetary exploration made space a topic of regional as well as national importance to Akaka. Thus, co-founder Akaka differed from fellow co-founder Gingrich not only in party affiliation, but also in basic motivation for participating in the Congressional Space Caucus. Whereas Gingrich's attention to space and to the Space Caucus can be characterized as being rooted largely in personal interest, Akaka's attention to space served concrete local and political purposes, at least in the beginning. His passion for the subject grew rapidly; in December 1982, a year after the Space Caucus's formation, *Defense Daily* hailed Akaka as "a leading spokesman on behalf of space in Congress."[48]

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[47] Diana Hoyt, Interview with the author, March 30, 2012.
[48] "Akaka Introduces Bill to Facilitate OK for Private Launches," *Defense Daily*, December 21, 1982, NASA History Program Office Archives, NASA Headquarters, Washington, D.C., "Congressional Space Caucus" folder, record no. 19554, loc. V/A/5.

Caucus Operations and Recruitment

Shortly after the birth of the Congressional Space Caucus, Diana Hoyt was named Executive Director.[49] Hoyt was a member of Akaka's staff, and her appreciation for space made her an ideal candidate for the role. She traced her interest in space to a 1975 Chase Econometrics Study that examined the relationship between NASA expenditures and the United States economy in two parts. The study's first part concluded that a $1 billion transfer of federal expenditure to NASA "would increase manufacturing output in 1975 by 0.1 percent or $153 billion in 1971 dollars and increase 1975 manufacturing employment by 20,000 workers." The second part found that after "relating NASA R&D expenditures to the productivity growth rate of the United States economy from 1960-1974, society's rate of return on NASA R&D expenditures was 43 percent." Overall, the study "confirmed the significant positive effects of NASA R&D expenditures on national productivity and employment levels."[50]

This conclusion highlighted the national economic value of the continued investment in space. Although the study failed to shake more money for NASA from Congress's grip, it certainly sparked Hoyt's interest in space. She noted that while visions of exploration and space colonies are what drive and fascinate many interested in space, including Newt Gingrich, she was driven by "the investment in the economic infrastructure of the country through science and technology." As Executive Director, she was responsible for all day-to-day activities related to the Caucus, from recruiting, to crafting "Dear Colleagues" communications, to organizing events. Hoyt reported that while she was simultaneously acting as Akaka's press secretary,

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[49] Diana Hoyt holds a MS in Science and Technology Studies (Virginia Tech), MA (ABT) in French Literature, and is scheduled to complete her PhD in Science and Technology Studies at Virginia Tech in 2012. "Diana Hoyt," *Elections*, Federal Laboratory Consortium. http://www.federallabs.org/meeting/elections/ (accessed February 12, 2012).
[50] Jerome Schnee, "The Economic Impacts of the U.S. Space Program," http://er.jsc.nasa.gov/seh/economics.html (accessed April 8, 2012).

legislative assistant, and the Caucus's Executive Director, she dedicated a "large portion" of her time to operating the Caucus.[51]

In addition to Hoyt, Gingrich staffer James Muncy played an influential role in operations during the early years of the Caucus.[52] The two first met when Muncy was lobbying actively on the Hill for his pro-technology Action Committee for Technology. When reminiscing on his first encounters with Muncy, Gingrich remarked,

> *Jim Muncy came to my attention because as a college student he had invented the Action Committee on Technology and started getting on Washington radio shows arguing for why we had to be a high technology society. And they kept referring to him as the Director of the Action Committee on Technology and all these powerful people driving to work at rush hour were listening to this 21-year old college kid explain to them, as the Director, why they ought to do certain things.*[53]

Muncy confirms Gingrich's account by joking that despite its official sounding name, he was the sole owner, operator, and member of the Action Committee for Technology.[54] In other words, Muncy and Gingrich shared similar groundings in the reality of where their respective goals

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[51] Diana Hoyt, Interview with the author, March 30, 2012. In 1981, Hoyt co-founded the Congressional Staff Space Group alongside James Muncy. In 1985, she was a founder and first president of Women in Aerospace, a group initially dedicated to serving as a networking forum for the advancement of women in the aerospace industry.
[52] James Muncy holds an MS in Space Studies from the Center for Aerospace Sciences at the University of North Dakota and a BA from the University of Virginia, where he was an Echols Scholar. "James A.M. Muncy," *Our Founders*, Space Frontier Foundation. http://spacefrontier.org/who-we-are/founders/james-muncy/ (accessed August 12, 2011).
[53] Newt Gingrich, "Speech before the National Space Club," Rayburn House Office Building Rooms B338-340, September 29, 1982, 7, NASA History Program Office Archives, NASA Headquarters, Washington, D.C., "Newt Gingrich" folder, record no. 792, loc. LEK 1/7/3.
[54] James Muncy, Interview with the author, November 17, 2011.

actually stood. According to Hoyt, Gingrich really trusted and liked Muncy, as they shared the same ideas about the future potential of science, technology, and, space.[55] As a testament to the relationship that unfolded, Muncy officially joined Gingrich's staff not long after the creation of the Space Caucus.

During the early years of the Congressional Space Caucus, Akaka, Gingrich, Hoyt, and Muncy worked actively to enlist members. The co-chairmen hoped to achieve a roster of 150-200 Congressmen by June 1982 because such "a roster…would create a high profile for space and space-related issues by virtue of sheer size."[56] To reach this goal, they publicized the formation of the Caucus by sending fellow representatives "Dear Colleague" letters and reading notices of the Caucus's formation and goals into the Congressional Record. These "Dear Colleague" letters served as the primary means for attracting members to the group and the principal method of informing members of Congress of relevant space issues and upcoming Space Caucus-sponsored events. Hoyt told me that each time they sent out a "Dear Colleague" communiqué, which was at least once a week, they printed enough copies to accommodate every member of the House and Senate.[57] The original letter sent on November 20, 1981 was the first of many, each providing a different reason why membership in the Congressional Space Caucus was vital for the future of the nation. In an attempt to make the letters appear more prestigious, Congressman Akaka reached out to high-profile members of the space community, including the astronauts of STS-1 and STS-2, requesting "a statement of about 250 words [to attach to the

[55] Diana Hoyt, Interview with the author, March 30, 2012.
[56] Daniel Akaka and Newt Gingrich, "Letter to Mr. Richard Truly," February 4, 1982, NASA History Program Office Archives, NASA Headquarters, Washington, D.C., "Congressional Space Caucus" folder, record no. 19554, loc. V/A/5.
[57] Diana Hoyt, Interview with the author, March 30, 2012.

"Dear Colleague" letters] on the importance of the nation's space enterprise with the implication being that the Congress of the United States is in a position to assign high priority to the issue."[58]

As recorded in a Congressional Record entry from February 23, 1982, Congressman Akaka was granted one minute to address his House colleagues on the creation of the Congressional Space Caucus. In this address, he made the loss of American supremacy in space the principal focus of the Caucus, saying,

> *Mr. Speaker, once we were clearly leaders in the field of space and space-related technology. Once we had a bold plan for the future with long-range policy goals. Today, we are in danger of losing our leading edge to countries which recognize the importance of long-term space policy goals. I strongly believe that whether or not America rises to the space challenge of the future and commits itself to a vigorous space effort depends on whether or not Congress takes a strong lead in promoting the U.S. space enterprise.*[59]

The birth of the Space Caucus thus reflected concerns in Washington and elsewhere surrounding the direction and future of the American space program, concerns that signaled a potential loss of American space supremacy. Akaka's reference to the "space challenge of the future" reflected his belief that without real dedication to futuristic goals and technologies, the United States could not sustain its lead in space.

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[58] Ibid.
[59] Daniel Akaka, "Congressional Space Caucus," Congressional Record-House, February 23, 1982, 436, NASA History Program Office Archives, NASA Headquarters, Washington, D.C., "Congressional Space Caucus" folder, record no. 19554, loc. V/A/5.

The process of recruiting congressmen to join the Caucus was not limited to internal correspondences and prodding from Gingrich, Akaka, Muncy, and Hoyt. Constituents and outside aerospace actors were encouraged to be active from the outside in urging membership. In a speech before the National Space Club on September 29, 1982, Gingrich stressed aggressive lobbying of congressmen by interested private parties to take the Space Caucus seriously:[60]

> *There are a couple areas where you can be helpful. One of them is to get any of you who come from a congressional district or have friends in a congressional district, call and ask if your Member belongs to the space caucus. It's a minor thing, but that one step is a step in the right direction. And Members respond much faster to your calls than they do to mine. And for those of you who have fairly large companies, if you have 25 factories scattered around this country your plant manager in each factory ought to call that congressman and we ought to have 25 new members next week. It's not very difficult, it's not very complicated.*[61]

These remarks nicely illustrate the junior Congressman's approach to building a constituency for space; Gingrich was encouraging a group of people, brought together by their mutual interest in

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[60] The National Space Club (originally organized as the National Rocket Club) was founded on October 4, 1957, as a club to stimulate the exchange of ideas and information about rocketry and astronautics, and to promote the recognition of United States achievements in space. They identify as a non-profit organization devoted to fostering excellence in space activity through interaction between industry and government, and through a continuing program of educational support. "About the National Space Club," National Space Club. http://www.spaceclub.org/about.html#hist (accessed April 1, 2012).

[61] Newt Gingrich, "Speech before the National Space Club," Rayburn House Office Building Rooms B338-340, September 29, 1982, 6, NASA History Program Office Archives, NASA Headquarters, Washington, D.C., "Newt Gingrich" folder, record no. 792, loc. LEK 1/7/3.

space and who were all constituents of one congressman or another, to use their power as voters to make their representatives aware of the value and importance of space as an issue and the Space Caucus as a focal point for registering interest in the issue. Congressmen are highly receptive to the needs and interests of voters and industries in their district because their jobs are dependent on their ability to respond effectively to constituents. Gingrich took advantage of this system to increase membership in the Space Caucus by encouraging constituents to play a role in influencing their policymakers.

In regards to recruitment, Diana Hoyt mentioned that from the outside, McDonnell Douglas Corporation was a key ally in terms of encouraging Space Caucus membership.[62] McDonnell Douglas manufactured a range of products, including "military and commercial aircraft, spacecraft and boosters, missiles, data processing services, and electronics products."[63] As one of the biggest industrial producers of aerospace equipment in the United States at the time, the company's leaders were certainly interested in the Space Caucus's message of a better, stronger space program that also encouraged commercial space enterprise. This interest, combined with the leverage McDonnell Douglas had over its congressional representatives, created a recruitment ally for the Space Caucus. Hoyt noted that representatives from McDonnell Douglas would ask their congressmen if they were members of the Space Caucus, and if they were not, they would encourage them to join. She went so far as calling firms like McDonnell Douglas "essential in recruiting members from the private sector."[64]

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[62] Diana Hoyt, Interview with the author, March 30, 2012.
[63] Judy Rumerman, "McDonnell Douglas Corporation," *Centennial of Flight Commission*, http://www.centennialofflight.gov/essay/Aerospace/McDac/Aero32.htm (accessed April 8, 2012).
[64] Diana Hoyt, Interview with the author, March 30, 2012.

Key Caucus Topics

On March 17, 1982, *Defense Daily* reported the formation of the bipartisan Congressional Space Caucus. The article stated that "the Caucus does not intend to support particular pieces of space legislation in order not to fractionalize its membership, which ranges from those particularly supportive of military aspects of the space program to those advocating increased planetary exploration."[65] While the common goal of the Caucus was to educate congressmen about new and innovative ideas that would move the United States into space more rapidly, subject matter of interest to the early Caucus members was broad. Two particular topics of interest to the early Caucus were the 1) commercialization of space launches and 2) planetary exploration.

While the Caucus as a unit may not have supported particular pieces of space legislation, many early Caucus members were sponsors and cosponsors of bills that related to the core beliefs of the group. A prime example was the "Space Commerce Act" sponsored by Congressman Akaka in late 1982. According to Akaka, this legislation, which was written to facilitate private companies' authorization to perform space launches, "encourages the development of new enterprises in the space field, not by subsidy or special treatment, but rather by opening up new opportunities for entrepreneurs."[66] The concept of commercializing space launches was well aligned with the Caucus's dynamic approach to space and with growing neoliberal thought, with its central tenet of getting the government out of things that private enterprise could ostensibly do better, cheaper, or both. To get into space more rapidly, more

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[65] "Congressional Space Caucus Formed to Support Space Program," *Defense Daily*, March 17, 1982, 101, NASA History Program Office Archives, NASA Headquarters, Washington, D.C., "Congressional Space Caucus" folder, record no. 19554, loc. V/A/5.
[66] "Akaka Introduces Bill to Facilitate OK for Private Launches," *Defense Daily*, December 21, 1982, 269, NASA History Program Office Archives, NASA Headquarters, Washington, D.C., "Congressional Space Caucus" folder, record no. 19554, loc. V/A/5.

frequently, and more innovatively, the argument went, there was a need for more private enterprise in providing space launch services.

As an industry, commercial space was just beginning to emerge. In *Single Stage to Orbit*, Andrew Butrica commented, "the shuttle was a formidable government-subsidized competitor that stymied the development of a commercial space launch industry in the United States."[67] In addition to the shuttle, the introduction of the European-based Arianespace in 1980 as the world's first satellite launch company acted as another threat to the blossoming of commercial space.[68] Both Akaka and Gingrich expressed concern over the emergence of Arianespace. Akaka warned that Arianespace was "rapidly demonstrating that it would be able to provide commercial launch services to the world community on a regular basis," and Gingrich feared that "the United States would lose a lucrative market" with the advent of Arianespace.[69] Both congressmen believed the growth of a strong United States commercial space industry was an absolute necessity.

A big problem for the fledgling firms of the United States commercial space industry, aside from struggling against the shuttle program and Arianespace, was the difficulties associated with being granted permission to launch their equipment. Akaka proposed legislation designed to streamline the private launch process by allowing companies "to get permission to

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[67] Butrica, *Single Stage to Orbit*, 39.
[68] Ibid, 49. According to Butrica, "Arianespace was a private stock company created in March 1980 by European aerospace firms, banks, and the French space agency. The company took over operation of the multinational European Space Agency's *Ariane* rocket, including managing and financing *Ariane* production, organizing worldwide marketing of launch services, and managing launch operations at Kourou, French Guyana."
[69] Ibid, 40. "Akaka Says U.S. Must Respond to Competition From Ariane," *Defense Daily*, 165, NASA History Program Office Archives, NASA Headquarters, Washington, D.C., "Daniel Akaka" folder, record no. 33, loc. LEK 1/1/2.

launch a vehicle into space by contacting a single entity in government [the Secretary of Commerce] rather than the nearly half dozen that they had to contact" at the time.[70]

Akaka's initial bill to promote privatization, the Space Commerce Act, was introduced on December 13, 1982 with 50 cosponsors. Of these 50 cosponsors, 25 were members of the early 42-member Congressional Space Caucus. Although the collective Caucus did not want to speak out in support of any particular space-related legislation, the presence of such a large portion of Caucus members in the co-sponsorship of this particular act spoke to its importance and the possibilities of commercialization of space more generally. According to Hoyt, the House Committee on Science and Technology was less than thrilled about having to hold a hearing on a bill that was sponsored by a congressman outside of the Committee. Yet the sheer size of the list of cosponsors made the bill impossible to ignore, and Akaka himself was asked to testify at the hearing.[71]

Akaka's proposed legislation did not make it out of the Subcommittee on Space Science and Applications, but for him and his cosponsors, the fight for the facilitation of commercial space launches was far from over. Akaka reintroduced the "Space Commerce Act" on January 27, 1983, this time with 65 cosponsors. Of these 65 cosponsors, all but 13 were members of the Congressional Space Caucus. A wave of newly elected members of Congress engulfed the Hill in early January 1983, and the new members that joined as cosponsors more than made up for the previous cosponsors no longer in the House. This second effort advanced slightly farther than the previous one, as a mark-up session was held. Despite progress, the legislation still did not emerge from the committee system. Hoyt explained that the reason the measures kept being struck down, despite the strong show of support, was that the Office of Management and Budget

[70] Ibid.
[71] Diana Hoyt, Interview with the author, March 30, 2012.

(OMB) wanted the Department of Transportation [specifically the Federal Aviation Administration (FAA)] to be the one-stop-shop for commercial space activity, not the Department of Commerce. She added, "it became clear that if we wanted the bill to be passed, we would have to make the change to the FAA."[72]

The third time was the charm. Reintroduced on September 21, 1983 as the "Commercial Space Launch Act," the new legislation contained the key words, "permits the Secretary of Transportation to issue or transfer such licenses to persons who meet the requirements of this Act."[73] On October 30, 1984, the "Commercial Space Launch Act" became Public Law No. 98-575. As a result of the creation of this law, "the Office of Commercial Space Transportation (AST) was established in 1984 as part of the Office of the Secretary of Transportation within the Department of Transportation (DOT)."[74] Of the 49-cosponsors, all but five were members of the Congressional Space Caucus. This was an enormous victory for the commercialization of space in the United States, and the efforts of Akaka, cosponsor Gingrich, and many additional Space Caucus cosponsors made it a reality. Hoyt went as far as contending, "Without the Space Caucus, the legislation would not have gone anywhere."[75]

Desire for increased planetary exploration was another topic that defined the early Congressional Space Caucus. On March 3, 1982, the Caucus released a new "Dear Colleague" letter that expressly detailed members' concerns about the successful landing of the VENERA-13 Soviet spacecraft on the surface of Venus. With Cold War fears still heavily impacting society

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[72] Ibid.
[73] Daniel Akaka, "Commercial Space Launch Act," Congressional Research Service Summary, THOMAS, September 21, 1983.
[74] "About the Office," *Office of Commercial Space Transportation*, Federal Aviation Administration. http://www.faa.gov/about/office_org/headquarters_offices/ast/about/ (accessed April 10, 2012).
[75] Diana Hoyt, Interview with the author, March 30, 2012.

and policy, the idea that the Soviet Union was moving ahead of the United States in exploring the universe was considered highly threatening. The Caucus's new letter intended to elicit an indignant response when it stated, "VENERA-13 carries a picture of Lenin in low relief and the descent module carries the state emblem of the Union of Soviet Socialist Republics."[76] The now decades-old images of the American flag planted on the Moon had provided a very powerful testament to the United States' supremacy in space. Now, conjuring an image of Lenin resting on Venus created fear and, perhaps, loathing about the United States being eclipsed in space by the USSR. From a congressional standpoint, the Space Caucus was troubled that there had been no launches of planetary spacecraft in nearly four years, and that "members of the scientific community were claiming that NASA's FY83 budget for planetary exploration virtually guaranteed shutting down the United States enterprise of planetary exploration."[77] This proposed planetary exploration budget was of particular concern to Akaka, as the NASA Infrared Telescope Facility in Hawaii was at risk of being terminated if the proposed budget was enacted.[78] Thus, the Space Caucus capitalized on these concerns in order to attract new members and to raise awareness throughout the Hill of the consequences of continued stasis in planetary exploration.

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[76] Daniel Akaka and Newt Gingrich, "Dear Colleague" Letter, March 3, 1982, NASA History Program Office Archives, NASA Headquarters, Washington, D.C., "Congressional Space Caucus" folder, record no. 19554, loc. V/A/5.
[77] Ibid.
[78] Daniel Akaka, "The State of Our Planetary Program," Congressional Record-House, February 24, 1982, 2214, HeinOnline (accessed April 20, 2012). The final NASA FY 1983 budget allocated funds for the continuation of the IRTF.

NASA and the Congressional Space Caucus

When the Congressional Space Caucus was established, staff at NASA Headquarters viewed it as possibly "troublesome" because the Caucus represented yet another congressional group NASA would have to oblige. NASA was already at the mercy of the House Science and Technology Committee, its Subcommittee on Space Science and Applications, and the House Appropriations Committee. NASA's leaders were concerned that the Caucus was going to create more problems than potential opportunities. According to Diana Hoyt, NASA did not think Congress needed a Space Caucus: "NASA felt that they had a strong presence on the Hill and they were not happy because they could not exercise the control over the Caucus that they could in authorization and appropriations (i.e. testifying at hearings)." Hoyt also stated that NASA was initially concerned that the Caucus was made up of "flaky space enthusiasts."[79]

Susan Hammond supports Hoyt's observation in *Congressional Caucuses in National Policymaking* when she notes that the initial attitude of NASA officials towards the Space Caucus appeared to be, "We understand the process as it works on the Hill… We know the players. We are not interested in dealing with a new body. We are not interested in having to track the activities of a space caucus."[80] In addition to these concerns, resentment towards Congress ran quite high at NASA during this period, due in large part to the declining budget appropriated to the space program in recent years.

After seeing record highs in 1966, federal funding for space activities began to steadily decrease. According to the initial "Dear Colleague" letter in November 1981, space had been experiencing a "70 percent drop in constant dollars at a time when nearly every other

[79] Diana Hoyt, Interview with the author, March 30, 2012.
[80] Hammond, *Congressional Caucuses*, 140.

government expenditure was seeing increases."[81] These circumstances hardly created an environment in which progressive space exploration ideas could be vigorously pursued. NASA's lack of funds was becoming a major problem, and some critics increasingly called for the termination of entire programs. With the price tag of the Shuttle program totaling around $5 billion by 1980, "the Director of the Office of Management and Budget (OMB) and the NASA Administrator attempted to shut down planetary exploration in order to clear up funds for the development of the Space Shuttle."[82] While proponents of planetary exploration vehemently opposed termination and ultimately prevailed, the resulting budget cuts left the program effectively crippled for years.

Uncertainty during this period ran deeper than budget issues, as the entire future of the nation's space program was wrapped in controversy. Fierce debate surrounding the viability of the Shuttle program existed from the moment President Richard Nixon announced a plan for the "entirely new type of space transportation system" on January 5, 1972.[83] During these early Shuttle construction years, according to Michael Michaud, NASA became "gun-shy, as a result of being the target of many critics, the troubles with [the progression of] the Space Shuttle, and the uncertain backing from the [Carter] White House."[84] While the reusable Shuttle was presented as an economically sound means of exploring space, the idea that the United States could fall behind in planetary exploration as a result of Shuttle program cost overruns did not

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[81] Daniel Akaka and Newt Gingrich, "Dear Colleague" Letter, November 20, 1981, NASA History Program Office Archives, NASA Headquarters, Washington, D.C., "Congressional Space Caucus" folder, record no. 19554, loc. V/A/5.
[82] Lou, Friedman. "Is OMB wiping out planetary exploration?" *The Space Review*, October 10, 2011, http://www.thespacereview.com/article/1947/1 (accessed December 15, 2011).
[83] Richard M. Nixon, "Announcement on the Space Shuttle," San Clemente, CA, January 5, 1972.
[84] Michaud, *Reaching for the High Frontier*, chap. 4, "Legislating the High Frontier," par. 4, http://www.nss.org/resources/library/spacemovement/chapter04.htm#impact (accessed November 28, 2011).

bode well with many, including members of the new Congressional Space Caucus. As a result of the myriad of uncertainties surrounding the space program, a gun-shy NASA was the certainly not going to pursue the pioneering visions of the Caucus.

Initially, NASA approached the swiftly growing Congressional Space Caucus with wariness. Diana Hoyt, Executive Director of the Caucus and staff member from Congressman Akaka's office, regularly corresponded with NASA's Legislative Affairs specialists, updating them on the names of congressmen who recently joined the ranks of the Caucus. One of her earliest communications with congressional-liaison specialist Jack Murphy nearly four months after the Caucus's formation clearly indicates the tension that existed between the two groups.

> *Dear Jack,*
>
> *The Congressional Space Caucus [now] has a roster of 38 and is rapidly growing. We hope to have a membership of 150-200 by June! For your information, I have enclosed a list of members to date.*
>
> *Apropos of the caucus, bits and pieces of puzzling intelligence have been coming my way. Apparently, the folk at NASA HDQ [Headquarters] view the caucus as possibly "troublesome" and mildly L-5ish. Do we need to talk?*
>
> *Sincerely, Diana Hoyt*[85]

Hoyt's brief note captures the uncertain image that experts at NASA Headquarters were forming of the caucus just months after its establishment. Hoyt's reference to "L-5ish" was not shorthand

[85] Diana Hoyt, Memorandum to Jack Murphy, March 5, 1982, NASA History Program Office Archives, NASA Headquarters, Washington, D.C., "Congressional Space Caucus" folder, record no. 19554, loc. V/A/5.

for “elfish” or “selfish” but, rather, a reference to the L-5 Society founded in 1969 on the ideas of Princeton University Professor Gerard K. O'Neill. The primary concern of the L-5 Society was the colonization of outer space, as indicated by O’Neill’s first published paper in *Physics Today* on the subject, “The Colonization of Space” (1974). This paper offered an introduction to the concept of space colonization, and it exposed “a number of people who later became leaders of the L-5 Society to the idea of space colonies.”[86] Colonization of outer space was a very exciting and seemingly plausible concept circulating within the L-5 Society community from the mid-1970s to early-1980s. To encourage its vision, the L-5 Society began printing and distributing a newsletter highlighting all the scientific studies being done to support the prospect of living in space. According to former L-5 member David Brandt-Erichsen, the society’s members truly believed that they would have an opportunity to live in space during their lifetimes.[87] Their belief took a serious hit in 1981 when the L-5 Society lobbied unsuccessfully for the protection of $5.5 million in funding for space-based solar power satellites that had been projected to help alleviate problems associated with the United States’ energy crises of the 1970s. Without these satellites, in their view, all hope was lost for the construction of space colonies in the foreseeable future.

A few names on the Space Caucus’s early membership list may have led NASA officials to conclude that it was “L-5ish.” Caucus member and former Democratic presidential candidate Congressman Morris Udall (D-AZ) was a staunch supporter of the L-5 Society and space colonization. In fact, the first page of the first newsletter published by the L-5 Society in

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[86] David Brandt-Erichsen, “The L5 Society,” *Ad Astra*, November/December 1994. http://www.nss.org/settlement/L5news/L5history.htm (accessed January 3, 2012). David Brandt-Erichsen was a former L-5 member and was Secretary of the National Space Society at the time the article was published. The L-5 Society was one of the precursors to the National Space Society.
[87] Ibid.

September 1975 featured a fervent letter of support from the Congressman. Specifically, Udall directly pledged "anything we in Congress can do to expedite support for studies of important new programs like this [space colonization programs], please let me know."[88]

In addition to Congressman Udall's public support of the program, Newt Gingrich had a history of supporting programs that were promoted by the L-5 Society. Indeed, he had received campaign funds from the political arm of the L-5 organization. Gingrich was on the same side as the L-5 Society in the debate over the establishment of a space-based solar power system, which was viewed as a necessary step for the realization of space colonies. In an effort to become more politically involved, the L-5 Society developed a political arm called the L-5 Spacepac (Spacepac for short) in early 1982. One of its first acts as an organization was to "contribute to eleven pro-space candidates during the 1982 election campaign."[89] Of these eleven candidates, the largest recipient was Congressman Gingrich. According to a *Wall Street Journal* article, "Spacepac gave him $1,000, twice what any other candidate received."[90] In addition to these campaign contributions, the "About the Author" section of Gingrich's 1984 publication, *Window of Opportunity*, acknowledges him as "a member of the L-5 Society's board of directors."[91] Gingrich's direct ties to the L-5 Society, coupled with his leadership position in the Congressional Space Caucus, may have made NASA concerned that the Caucus was merely an extension of the L-5 Society.

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[88] "Morris K. Udall Gives Support to O'Neill," *L-5 News* no. 1, September 1975. www.nss.org/settlement/L5news/L5news/L5news7509.pdf (accessed December 15, 2011).
[89] Michaud, *Reaching for the High Frontier*, chap. 9, "Spacepac," par. 5, http://www.nss.org/resources/library/spacemovement/chapter04.htm#impact (accessed November 28, 2011).
[90] Virginia Inman, "Space Activists Go Into Political Orbit, With Far-Out Goals," *The Wall Street Journal*, November 16, 1983.
[91] Newt Gingrich, *Window of Opportunity: A Blueprint for the Future* (New York: Tom Doherty Associates, Inc., 1984).

The rapid increase in Caucus membership, which included members of the House Science and Technology Committee and its Subcommittee on Space Science and Applications, forced NASA personnel to reevaluate their skeptical attitude towards the Caucus. While still not completely sold on the potential benefits such a group could bring to NASA, they obviously could not ignore the growing Space Caucus and recognized the necessity of establishing a working relationship. The relationship that evolved was primarily based upon information exchange between the two groups, incorporating speaker presentations, facility tours, and distribution of informative materials.

The legislative affairs specialists at NASA were the primary points of contact for the arrangement of these informational exchanges. Space Caucus Executive Director Diana Hoyt frequently worked with these specialists to schedule relevant events. An internal NASA Legislative Affairs presentation on the importance of caucuses in the House of Representatives at the end of 1983 listed the activities NASA held for the Space Caucus during the year. These activities included: four Caucus staff trips to NASA Centers, one "Morning at NASA," seven briefings for Caucus Executive Director Hoyt on topics such as space science, the space station, the space shuttle, and international affairs, and hundred of copies of informative materials such as Mission of NASA Reports, Highlights of NASA 1983, and Radio Tapes from STS-9.[92] These activities suggest that although NASA had been initially concerned about the Caucus's presence on the Hill, NASA's legislative affairs specialists had found a way to use the Caucus as a conduit for supplying information to Congress.

[92] NASA Office of Legislative Affairs, "Briefing on Caucuses in the U.S. House of Representatives", 6, NASA History Program Office Archives, NASA Headquarters, Washington, D.C., "Congressional Space Caucus" folder, record no. 19554, loc. V/A/5.

On October 17, 1983, Gingrich and Akaka wrote NASA Administrator James Beggs thanking him for NASA's support of the Caucus and conveying their hope for a "continuation of the good working relationship" between the two organizations.[93] The aforementioned presentation by the NASA Office of Legislative Affairs at the end of 1983, entitled "Briefing on Caucuses in the U.S. House of Representatives," reflected a change in NASA's attitude when it concluded, "Attention to Caucuses Extends NASA's Influence in Congress."[94] The Congressional Space Caucus had by then come to be viewed as a viable channel for NASA within Congress that increased congressional awareness of space-related programs. The legislative affairs specialists realized that the committee system in the House was structured so that only a small portion of congressmen had significant direct contact with NASA. Thus, the Space Caucus provided NASA with a larger congressional audience than it otherwise could have reached. Looking back on NASA's working relationship with the Congressional Space Caucus in late 1987, after the Caucus had become essentially inactive, NASA legislative affairs specialist Lee Rich commented: "in the past, the Caucus often provided NASA with a useful Congressionally-sanctioned vehicle for informing Members/staff, distributing materials, hosting events, presenting speakers, etc. In the future, a strong [Space] Caucus with interested leadership and a dedicated Executive Director would be a very helpful partner on the Hill."[95] Thus, despite initial hesitations, the Congressional Space Caucus eventually became accepted as an important

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[93] Daniel Akaka and Newt Gingrich, "Letter to the Honorable James M. Beggs," October 17, 1983, NASA History Program Office Archives, NASA Headquarters, Washington, D.C., "Congressional Space Caucus" folder, record no. 19554, loc. V/A/5.
[94] NASA Office of Legislative Affairs, "Briefing on Caucuses in the U.S. House of Representatives", 8, NASA History Program Office Archives, NASA Headquarters, Washington, D.C., "Congressional Space Caucus" folder, record no. 19554, loc. V/A/5.
[95] Lee Rich, "The Congressional Space Caucus," November 24, 1987, NASA History Program Office Archives, NASA Headquarters, Washington, D.C., "Congressional Space Caucus" folder, record no. 19554, loc. V/A/5.

informational ally to NASA through its ability to enlighten members of Congress on NASA activities.

House Science and Technology Committee and the Congressional Space Caucus

In her book, *Congressional Caucuses in National Policymaking*, Susan Hammond discusses the "chilly climate" that initially existed between the House Science and Technology Committee and the Space Caucus as a result of the Committee's worries about protecting its territory and suspicion regarding the Caucus's direction. According to an unnamed observer quoted by Hammond, "historically, space, and especially colonizing space and having manned missions to Mars, has been left largely to space enthusiasts. There has been a problem with long-term projects being perceived as flaky. So committee members weren't sure that this wouldn't turn out to be a very peculiar, sort of spacey, flaky, nonserious caucus."[96] This statement alludes to the futuristic, grand-scale vision for the United States space program associated with the Space Caucus - or at least its most enthusiastic members - as well as the initial reception the Caucus received in the House Science and Technology Committee. Hoyt confirmed the Committee's initial feelings of discomfort towards the Caucus in her interview with me, observing, "the authorizers [House Science and Technology Committee] felt that the creation of the Space Caucus was a challenge to the leadership of the House, but it was not meant that way; it was meant to be an advocacy effort."[97]

Four months after its formation, the Congressional Space Caucus consisted of 42 members. Of these, 10 were also members of the 41-person House Science and Technology Committee (including the powerful Committee Chairman). More specifically, of these 10

[96] Hammond, *Congressional Caucuses*, 156.
[97] Diana Hoyt, Interview with the author, March 30, 2012.

Committee members that were also Caucus members, 6 were members of the 9-person Subcommittee on Space Science and Applications (including the Subcommittee Chairman and the Ranking Member). Moreover, the initial "Dear Colleague" letter sent out to members of the House of Representatives was co-signed by eight congressmen, including two members of the House Science and Technology Committee, Representatives Joe Skeen (R-NM) and Timothy Wirth (D-CO).[98]

The presence of several members of the Committee on the early Space Caucus membership list, particularly the strong showing from the members of the Subcommittee on Space Science and Applications, can be interpreted variously. One interpretation is that these Committee members wanted to keep an eye on the actions of the Congressional Space Caucus to ensure that the Committee's toes were not being stepped on. Specifically, in terms of the presence of several members of the Subcommittee on Space Science and Applications on the Space Caucus membership list, space was supposed to be the Subcommittee's baby. The structure of the House of Representatives granted jurisdiction over space-related matters to them, and they wanted to ensure their jurisdiction was not threatened. There was no membership fee associated with joining the Space Caucus, so these members were not losing anything by enrolling.

Another possible interpretation is that the Committee members who joined the Caucus were genuinely interested in the particular agenda that the Congressional Space Caucus was promoting. It may be especially likely that the two founding cosigners of the first "Dear

[98] Daniel Akaka and Newt Gingrich, "Dear Colleague" Letter, November 20, 1981, NASA History Program Office Archives, NASA Headquarters, Washington, D.C., "Congressional Space Caucus" folder, record no. 19554, loc. V/A/5.

Colleague" letters who were also on the Committee, Skeen and Wirth, were in agreement with the vision of the Space Caucus.

At any rate, the tense relationship between the authorizing Committee and the Congressional Space Caucus soon eased. Hammond attributed a thaw in relations between the Committee and the Caucus to the Committee's realization that "serious members had established and joined the caucus and the caucus began to work on increasing the understanding of -- and support for -- space programs."[99] Hoyt similarly noted that after the initial concern, the Committee "realized that the Caucus built a strong constituency in support of a lot of their legislation."[100] This amelioration of relations even led the Committee to embrace cooperation with the Caucus. By the end of 1983, 25 members of the 43-person House Science and Technology Committee were also on the 158-member Congressional Space Caucus roster.

Reagan's Space Initiatives

In his "Address to the Nation on Defense and National Security" on March 23, 1983, President Reagan introduced to the American public what would become his most well-known space initiative, known popularly as "Star Wars" after the blockbuster Hollywood trilogy of the period.

> *Let me share with you a vision of the future which offers hope. It is that we embark on a program to counter the awesome Soviet missile threat with measures that are defensive. Let us turn to the very strengths in technology that spawned our great industrial base and that have given us the quality of life we enjoy today.*

[99] Hammond, *Congressional Caucuses in National Policy Making*, 156.
[100] Diana Hoyt, Interview with the author, March 30, 2012.

What if free people could live secure in the knowledge that their security did not rest upon the threat of instant U.S. retaliation to deter a Soviet attack; that we could intercept and destroy strategic ballistic missiles before they reached our own soil or that of our allies?[101]

The goal of what would become the Strategic Defense Initiative (SDI) was to create a space-based anti-ballistic missile (ABM) system that would "render nuclear weapons impotent and obsolete."[102] The foundations of this program dated back several decades before President Reagan's 1983 proposal. Michael Michaud highlighted the work of early advocates of space-based defense systems in *Reaching for the High Frontier*. Noting science fiction as the true birthplace of these concepts, Michaud went on to illustrate the work of Eugen Sanger, Arthur Kantrowitz, Maxwell W. Hunter II, Stefan T. Possony, and Jerry E. Pournelle as proponents of space-based defense in the late-1950s through the late-1960s.[103] Perhaps the most influential precursor to "Star Wars" was the study by former Director of the Defense Intelligence Agency, Lieutenant General Daniel O. Graham in late 1980, which "concluded that a space-based ABM

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[101] Ronald Reagan, "Address to the Nation on Defense and National Security," March 23, 1983, http://www.reagan.utexas.edu/archives/speeches/1983/32383d.htm (accessed April 13, 2012).
[102] Ibid. SDI acquired the nickname "Star Wars" from the *Star Wars* science fiction film series, which began with the release of its first film in 1977, the sequel in 1980, and the third installment in 1983. Critics of SDI assigned this highly recognizable nickname to make the point that the concept of SDI was as impossible as the science fiction ideas propagated in the film series.
[103] Michaud, *Reaching for the High Frontier*, chap. 11, "Space Advocates, Beam Weapons, and the Space Based ABM," http://www.nss.org/resources/library/spacemovement/chapter11.htm (accessed April 13, 2012). Michaud references excerpts from Eugen Sanger's 1958 book *Spaceflight- A Technical Way of Overcoming War*, Arthur Kantrowitz's comments in the November 1965 issue of *Astronautics and Aeronautics*, Maxwell W. Hunter II's 1966 book *Thrust into Space*, and Stefan T. Possony and Jerry E. Pournelle's 1969 book *The Strategy of Technology*.

system was feasible."[104] The concepts derived from this study became part of a broader project known as the "High Frontier."

Early support for the "High Frontier" project can be seen in the Gingrich/Trible proposal in late March 1981. The main aspect of their proposal centered on the development of manned "Space Interceptors," designed to "deter, or shoot down if necessary, Soviet ballistic missiles," a program they credited to General Daniel Graham.[105] According to early space-based defense advocate and later crusader for the Strategic Defense Initiative, Jerry Pournelle, "Newt was on the SDI team from the time he was elected to the House."[106] The early Congressional Space Caucus, likely influenced by Gingrich, determined that informing their congressional colleagues about the "High Frontier project" was important. The Space Caucus sponsored a briefing on the project in February 1982.[107]

The early 1980s saw little tangible output towards the creation of this space-based defense initiative. Jerry Pournelle noted that both he and Gingrich were disheartened at the extremely slow, often stagnant progress being made on "Star Wars."[108] The Strategic Defense Initiative, based on the concepts of science fiction, turned out to be too futuristic for the budget and technologies of the time but research and development on it continued through the

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[104] Ibid.
[105] "Two Congressmen Seek Support for Redirected Space Program," *Defense Daily*, March 23, 1981, 131, NASA History Program Office Archives, NASA Headquarters, Washington, D.C., "Newt Gingrich" folder, record no. 792, loc. LEK 1/7/3.
[106] Jerry Pournelle, "Neocons and paleocons after the Cold War. Gingrich, Reagan, and Abrams," *The View from Chaos Manor*, http://www.jerrypournelle.com/chaosmanor/?p=5147 (accessed April 11, 2012).
[107] Daniel Akaka and Newt Gingrich, "For Members' Immediate Attention: Space Caucus Still Seeks Members!" March 4, 1982, NASA History Program Office Archives, NASA Headquarters, Washington, D.C., "Congressional Space Caucus" folder, record no. 19554, loc. V/A/5.
[108] Jerry Pournelle, "Neocons and paleocons after the Cold War. Gingrich, Reagan, and Abrams," *The View from Chaos Manor*, http://www.jerrypournelle.com/chaosmanor/?p=5147 (accessed April 11, 2012).

administrations of Reagan, George H.W. Bush, Bill Clinton, and George W. Bush. Reagan's second major space initiative yielded results much sooner, however.

During his State of the Union address on January 25, 1984, President Reagan gave NASA a new directive to pursue: "America has always been greatest when we dared to be great. We can reach for greatness again. We can follow our dreams to distant stars, living and working in space for peaceful, economic, and scientific gain. Tonight, I am directing NASA to develop a permanently manned space station and do it within a decade."[109] Harkening back to John F. Kennedy's 1961 historic address directing NASA to land a man on the moon "before this decade is out," Reagan employed this nostalgic vocabulary to announce the next step in the progression of the American space program. International cooperation, human durability in space, and scientific advances were all hallmarks of the proposed permanent presence in space.

The idea for a permanently manned space station was circulating in Congress before President Reagan announced his plan. The Gingrich/Trible proposal in March 1981 had called for the development of a permanently manned space station. In August of 1981, a bill known as "A concurrent resolution expressing the sense of the Congress that the United States should embark on a program to construct a permanent manned operations center in low earth orbit within 10 years, and for other purposes" was introduced in the House of Representatives by future Space Caucus member Wayne Grisham (R-CA), who was joined by 14 cosponsors. [110] Eleven of these cosponsors would also become Caucus members, including Newt Gingrich. In addition to pushing for this permanent presence in space, the bill "requested that the President

[109] "Excerpts of President Reagan's State of the Union Address, 25 January 1984," NASA History Division, http://history.nasa.gov/reagan84.htm (accessed March 18, 2012).
[110] Wayne R. Grisham, "H. Con. Res. 173," THOMAS, August 24, 1981.

submit to Congress within one year a plan for implementing such objective."[111] Although the bill died in the Subcommittee on Space Science and Applications, it spoke to the presence of the concept in the legislative branch.

Despite this early support for the idea, an intense congressional debate ensued following President Reagan's address. According to Hans Mark, Deputy Administrator of NASA during the early push for the space station, three sources of opposition to a space station existed within Congress. Some Congressmen believed that "NASA's space station program was premature and a fifth shuttle Orbiter should be built before a commitment to a space station was made." A second group renewed the age-old debate regarding the value of launching humans into space. The third argued that "the commitment to a space station would 'take money away' from other things that NASA was supposed to be doing," particularly the scientific research portion of the space program.[112] While opponents of the station propagated these arguments, Mark included the Congressional Space Caucus among the congressional allies working to get the station pushed through the legislative branch. He recalled receiving "considerable help from the Congressional Space Caucus," whose members were "most helpful in advising them [i.e., Mark and his NASA colleagues] on how to best frame their arguments."[113]

The Congressional Space Caucus supported the establishment of the space station because it was viewed as an important move in making permanent America's presence in outer space. Having a permanent outpost in space would also help facilitate the exploration of the seemingly vast possibilities space offered. In his 1984 book, *Window of Opportunity*, Gingrich called the Reagan proposal for a permanently manned space station "an important step in the

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[111] Ibid.
[112] Hans Mark, *The Space Station: A Personal Journey* (Durham: Duke University Press, 1987), 199.
[113] Ibid, 208.

right direction," while also highlighting the advancements in planetary science, communications, international relations, and medicine as some of the benefits that would arise from the space station project.[114] Yet Gingrich's support for the proposed space station also included a strong note of criticism: "President Reagan's commitment to a permanently manned space station is not enough in itself; neither is commercializing space, although it will help create jobs and generate a network of pro-space groups."[115] Gingrich had put forth a similar critique shortly after the Space Shuttle program began, saying "there is no doubt the Space Shuttle is one of the greatest symbols of America's bold and adventurous spirit of our desire to settle the next frontier. But we must be careful not to sit back and admire our present and past successes and not move bravely into the future… Now is the time to look beyond the exciting opportunities we know the Shuttle will give us. Now is the time to look toward the next generation of space transportation."[116]

Essentially, Gingrich refused to acknowledge that the individual steps being taken in the space arena would create the bold and aggressive space program that he believed the nation needed. Gingrich's criticism reflected the overall desire of the Congressional Space Caucus that the United States expand into space as rapidly and boldly as possible – more so then President Reagan had directed.

The Change in Chairmanship and the Dissolution

After serving as co-chairmen of the Congressional Space Caucus for nearly three and a half years, Congressmen Akaka and Gingrich stepped down on March 28, 1985. Addressing

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[114] Gingrich, *Window of Opportunity*, 48-53.
[115] Ibid, 58.
[116] Newt Gingrich, "The Shuttle Is Great But Let Us Not Stop There," Congressional Record-*Extension of Remarks*, April 5, 1982, E1484. NASA History Program Office Archives, NASA Headquarters, Washington, D.C., "Newt Gingrich" folder, record no. 792, loc. LEK 1/7/3.

Speaker of the House Thomas "Tip" O'Neill (D-MA) in the *Congressional Record*, Akaka stated:

> *Mr. Speaker, as co-chairman of the Congressional Space Caucus since its inception, I have witnessed a renewed interest and commitment to the challenge of space. This growing public and congressional interest was given a dramatic boost by the President's mandate last year to develop a permanently manned space station within a decade and to begin research in earnest in the strategic defense initiative. We are again taking the first step towards a new era in space. At this exciting new stage, I feel it appropriate to pass on the torch of leadership of the Congressional Space Caucus to a new team. I am honored, therefore, to announce the cochairmenship of Hon. Mike Lowry [D] from Washington [and] Hon. Herbert H. Bateman [R] from Virginia.*[117]

The goals in forming the Space Caucus were to raise consciousness among members of Congress about space-related issues and to encourage them to acknowledge the vast possibilities that could be pursued in space. After nearly three and a half years of the Space Caucus's existence, Akaka concluded that public and governmental interest in space was indeed on the upswing as a result of both the Caucus's efforts and President Reagan's new space initiatives.

In spite of Akaka's and Gingrich's apparent optimism in announcing who would succeed them as co-chairmen, few attempts were actually made to keep the Caucus alive and vibrant.

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[117] Daniel Akaka, "Congressional Space Caucus Cochairmanship Change," Congressional Record- House, March 28, 1985, 6547, NASA History Program Office Archives, NASA Headquarters, Washington, D.C., "Congressional Space Caucus" folder, record no. 19554, loc. V/A/5.

Only one noteworthy event in 1985 occurred after the change of chairmen. In coordination with the Subcommittee on Space Science and Applications' series of hearings, entitled "Space Science: Past, Present and Future," the Congressional Space Caucus sponsored a Conference on the Future of Space Science, an event that had been in the works prior to Akaka's and Gingrich's departure.[118] This event, which ran October 8-10, 1985, featured a full panel of "eminent scientists representing all disciplines of space science" and covered topics "ranging from planetary exploration to life science to theoretical research."[119] The event was well attended by representatives of both houses of Congress, as well as NASA employees and outside parties.[120]

Despite this promising event, the Caucus failed to thrive following the change in co-chairmanship and staff. In fact, it became largely inactive in the year following the switch. The chairmen tandem that replaced Akaka and Gingrich did not have the same dedication that helped make the co-founders successful. According to the House of Representatives Telephone Directory, Lowry and Bateman served as co-chairmen from spring 1985 until winter 1986.[121] The chairmanship then changed again; Congressman George E. Brown Jr. (D-CA) replaced Lowry after less than a year of service as chairman. Following the second change in

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[118] "Space Science: Past, Present and Future," Hearings Before the Subcommittee on Space Science and Applications of the Committee on Science and Technology U.S. House of Representatives, Ninety-Ninth Congress, First Session, October 8, 9, 10, 1985, No. 60, HeinOnline (accessed April 15, 2012.) Notable witnesses from the hearings included Dr. Carl Sagan of Cornell University and Dr. James A. Van Allen from the Department of Physics and Astronomy at the University of Iowa.

[119] John F. Murphy, "Congressional Space Caucus Conference on the Future of Space Science," September 26, 1985, NASA History Program Office Archives, NASA Headquarters, Washington, D.C., "Congressional Space Caucus" folder, record no. 19554, loc. V/A/5. Paul Sarbanes, "Congressional Space Caucus on the Future of Space Science," Congressional Record-Senate, October 17, 1985, S13519, NASA History Program Office Archives, NASA Headquarters, Washington, D.C., "Congressional Space Caucus" folder, record no. 19554, loc. V/A/5.

[120] Ibid.

[121] House Telephone Directory, Spring 1985- Spring 1989, House of Representatives Office of the Historian, Cannon House Building, Washington, D.C.

chairmanship, there was a series of talks between NASA Legislative Affairs and Caucus Executive Director Rick Dykema (Congressman Bateman's staffer) about rebuilding the Congressional Space Caucus.

These efforts appeared to be promising as NASA worked with the Space Caucus staff in spring 1986 to arrange speakers, NASA facility tours, and distribute informational materials as had been done in the early years of the Caucus. Co-chairmen Bateman and Brown utilized "Dear Colleague" letters to publicize the first event of what they coined the "new" Caucus, which was a presentation in April by Dr. Terence Finn, NASA Deputy Director of Policy and Plans, who gave a briefing on the space station. According to a post-presentation evaluation by NASA Legislative Affairs, about sixty people attended the event, attendees posed thoughtful questions, and informational materials from NASA were quickly taken.[122] The next three months saw two organized staff visits, one to NASA's Langley/Wallops facilities and the second to the Marshall Space Flight Center in Huntsville, Alabama. The Caucus sponsored two events in June and one in September, including a debate on the Reagan Strategic Defense Initiative, a panel discussion of the National Aerospace Plane, and a panel discussion on commercial use of expendable launch vehicles, respectively.[123]

While the renewal of events signaled a reorganization and reemergence of the Caucus, subsequent events became less and less well attended as the year progressed. By the end of 1986, the "new" Congressional Space Caucus had largely petered out. NASA legislative affairs

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[122] Lee Rich, "Congressional Space Caucus Meeting, April 29, 2:00-3:30 pm, 2318 RHOB," May 1, 1986, NASA History Program Office Archives, NASA Headquarters, Washington, D.C., "Congressional Space Caucus" folder, record no. 19554, loc. V/A/5.

[123] Lee Rich, "Congressional Space Caucus Activities," July 25, 1986, NASA History Program Office Archives, NASA Headquarters, Washington, D.C., "Congressional Space Caucus" folder, record no. 19554, loc. V/A/5. Lee Rich, "Congressional Space Caucus Meeting, 2:00 pm, September 29, 1986, NASA History Program Office Archives, NASA Headquarters, Washington, D.C., "Congressional Space Caucus" folder, record no. 19554, loc. V/A/5.

specialists in late 1987 attributed this situation to the absence of a strong Executive Director, the lack of event promotion by the co-chairmen, and insufficient event attendance. According to Specialist Lee Rich, "at first, some attempts were made to continue a viable program. To my knowledge nothing has happened in 1987. I attended most of the events listed for 1986. While the programs looked fairly substantial on paper and were actually very good, only 5 to 10 people showed up to hear any of them. Despite verbal commitments, the Cochairmen/Executive Directors simply did nothing to promote the program."[124]

Rich noted in particular that the loss of Diana Hoyt as Executive Director was a major cause of decline. Congressman Akaka was able to dedicate Hoyt entirely to working on the Caucus, whereas part-time staffers under Lowry and Bateman were not able to duplicate this level of commitment. Rich Dykema, a staffer from Bateman's office, was listed as the Caucus's Executive Director in the House Telephone Directory from 1985-1989, but his time was not devoted solely to Caucus activities. The Bateman-Brown tandem was listed in the House Telephone Directory up to spring of 1989.[125] An article in the *Washington Times* listed the Space Caucus as completely inactive by 1990.[126]

Conclusions

According to Diana Hoyt, the Congressional Space Caucus became successful as an "information distribution network" for space-related topics in the United States Congress by

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[124] Lee Rich, "The Congressional Space Caucus," November 24, 1987, NASA History Program Office Archives, NASA Headquarters, Washington, D.C., "Congressional Space Caucus" folder, record no. 19554, loc. V/A/5.
[125] Ibid.
[126] Paul M. Rodriguez, "GAO wants to probe House caucuses," *Washington Times*, June 30, 1993, A1, NASA History Program Office Archives, NASA Headquarters, Washington, D.C., "Congressional Space Caucus" folder, record no. 19554, loc. V/A/5.

"informing members of both sides of the issues and letting the information speak for itself."[127] While the Space Caucus did not take official positions on topics, it acted as an advocate for progressive space concepts, such as commercialization, through its sponsorship and cosponsorship of key legislation, like the "Commercial Space Launch Act." Although their initial motives for becoming involved in space politics differed, the Caucus's dynamic co-founders, Gingrich and Akaka, with the invaluable assistance of their respective staffers, were able to create an effective bipartisan front in support of a stronger national space program.

Despite initial hesitation by National Aeronautics and Space Administration officials and the House of Representatives Science and Technology Committee, the Space Caucus also became a valued asset on the Hill for both parties. NASA legislative affairs specialists found that the Space Caucus was an effective outlet for distributing their informative materials to members of Congress, and an ally in reaching out to more congressmen. The House Science and Technology Committee eventually came to accept the existence of a group dedicated to increasing congressional awareness on the topics that the Committee was responsible for authorizing.

Without the leadership of Congressmen Akaka and Gingrich, and with the absence of someone to duplicate Hoyt's critical liaison work as Executive Director, the Space Caucus could not sustain a robust program that met the needs and interests of a large number of representatives. Akaka and Gingrich successfully increased the awareness of space of not only the 160-plus Space Caucus members, but also of the entire Congress during their tenure as co-chairmen. Today, at a time when budgetary woes are the topic on the mind of every American, and when the United States space program faces a highly uncertain future with the retirement of

[127] Diana Hoyt, Interview with the author, March 30, 2012.

the Space Shuttle fleet, Congress would surely benefit from the formation of a vital, new Space Caucus devoted to tackling a myriad of space-related issues that have not been systematically addressed since the pioneering and bipartisan political boosterism of Newt Gingrich and Daniel Akaka.

Bibliography

A Note on Research Method

This research endeavor was born in the basement of NASA Headquarters in Washington, D.C. in the NASA History Program Office archives. During my summer 2011 internship with the NASA History Program Office, I found out I was selected to represent Carnegie Mellon University as a Presidential Fellow with the Center for the Study of the Presidency and Congress. The central responsibility of this fellowship was to produce an original, fifteen-page research paper on a topic related to the Presidency or Congress. While working as an intern at NASA, I had unlimited access to the archives and I was confident that the perfect topic was hiding somewhere in the vast stores of materials. Colin Fries, one of the History Office's four extraordinary archivists, helped confirm my thesis when he showed me a small folder labeled "Congressional Space Caucus." Within one minute of perusing the folder, I was set on pursuing the Space Caucus as my topic for the Center.

As I began to investigate the contents of the folder further, I found that a consistent cast of characters emerged. Congressmen Newt Gingrich and Daniel Akaka arose as the faces of the Space Caucus, but names like Diana Hoyt, Jim Muncy, and Lee Rich (from NASA's Legislative Affairs Office) pervaded a large portion of the documents. I began to ask my NASA colleagues if any of the names rang a bell, and I was pleasantly surprised at the answers. As it turned out, Diana Hoyt worked one floor above my desk in the Office of the Chief Technologist and I met Jim Muncy's wife, who also worked at NASA, in a chance encounter in the lobby of NASA Headquarters. With the help of Steve Garber, my direct supervisor and a historian in the NASA History Program Office, and my *@nasa.gov* email address, I was able to get in touch with both Hoyt and Mrs. Muncy, who put me in touch with her husband. Before I knew it, what began as a

fifteen-page research paper for the Center was morphing into a larger undertaking that turned out to be perfect for a Senior Honors Thesis.

Extensive research into primary source documents from the "Congressional Space Caucus" folder, as well as folders dedicated to both Gingrich and Akaka from the NASA Headquarters archives, coupled with a variety of secondary sources, painted a picture of what the Space Caucus was all about. My interviews with Hoyt and Muncy provided the glue that bound the entire project together. Their insights on not only the Space Caucus, but also the broader space community and its interaction with Congress were indispensable. Their first-hand interactions as staff members to co-founders Gingrich and Akaka allowed me to understand better how the congressmen's unique backgrounds and motivations led them to create the Space Caucus.

In addition to all the connections and access I gained from NASA, the House of Representatives Office of the Historian also proved to be very helpful and a good source of information about the Space Caucus. I was able to obtain phone directories and additional newspapers articles that ended up being very useful in interpreting the Caucus from a more congressional angle. Later in the research process, I came across a database called HeinOnline that had a digitized library of United States Congressional documents. It was highly beneficial to be able to search this database for specific topics. For example, I used the database when I was trying to better understand the debate over the mid-level facility for the Infrared Telescope Facility in Hawaii. It was nice to be able to type in exactly what I was looking for, especially since it proved quite difficult to find any information in published secondary sources.

Lastly, but most importantly, I owe an immeasurable deal of gratitude to my two Senior Honors Thesis advisors, Dr. Steven Schlossman and Dr. David Hounshell. Through countless

meetings and revisions, they suggested additional research paths to pursue, helped me gain access to vital sources, and provided constructive criticism of the highest caliber. Without their expertise and guidance, this project would not have been possible.

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