

**REVIEW OF U.S. HUMAN SPACEFLIGHT
PLANS COMMITTEE
Washington, DC**

March 25, 2010

The Honorable Frank R. Wolf
U.S. House of Representatives
241 Cannon Building
Washington, DC 20515

Dear Congressman Wolf:

This correspondence responds to the request for information contained in your letter of March 23, 2010. I will try to answer your questions as directly as possible and then provide a modest amount of background that I hope may be of help to you and the other members of the subcommittee. In order to provide a prompt reply I have not coordinated this document with my colleagues on the Review of U.S. Human Spaceflight Plans Committee; however, I am not aware of any areas where there would likely be substantive disagreement.

The request you made was that I advise whether the panel “made any recommendations to the President” and “specifically, whether the proposal that is included in the President’s budget for NASA was one of the options offered or recommended in (the panel’s) report.”

With regard to the former, the panel in its charter was asked to provide options, not recommendations. As I understand it, the purpose of this approach was to permit the panel to focus on producing a balanced assessment of alternatives as opposed to advocating a single solution. A second consideration was that our panel was obviously not in a position to judge what the nation could afford for a human spaceflight program.

Given the above, we made no specific recommendations but rather offered five representative options (from the approximately 3,000 possible in our model) and noted that various combinations of the elements of the options were exchangeable – with corresponding impacts on cost, schedule, safety, etc. All ten of us endorsed the material presented in our report; however, I am uncertain what, if any, option various individual members of the panel might prefer. Transparency requires that I state what is perhaps obvious and that is that we are all interested in human spaceflight and therefore hope for as energetic a program as might be affordable.

It should be clear that in a few instances the assessments we conducted led to what might be seen as obvious conclusions; however, we again simply sought to present the facts as they related to those issues.

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As to the second matter you posed, the program contained in the FY11 et seq. federal budget was not one of the specific options contained in our panel's report. It perhaps most closely approximates Option 5B; however, the difference in available funding, even though increased relative to the prior budget plan, obviously has to be considered. It could be argued that were one to decide to terminate the Ares I development (as is the case in Option 5B), and with the not unimportant exception of its impact on the Orion effort, that action is tantamount to canceling the entire Constellation program in its present form since work has barely begun on the Ares V and the Altair.

As is noted in the panel's report, the Constellation program could well have been considered by NASA as executable at the time it was initiated and at the budget level then presumed. For a variety of reasons the actual budget has fallen short of that presumption by approximately one-third (exacerbated by what could be considered not altogether unexpected technical problems), such that the issue no longer became one of "Can Ares I be developed," but rather "Should Ares I be developed?"

The two primary underlying issues driving the human spaceflight program remain "Is our goal a space program or a jobs program?" and "How much can our nation afford for human spaceflight?" Once these questions have been answered, the options narrow rapidly. I have enormous confidence that given a program where the means match the ends, NASA, under the exceptional leadership of Charlie Bolden, can produce a highly successful human spaceflight program at an appropriate level.

I hope these thoughts will be of help to you and your colleagues as you conduct your deliberations. As the members of the Review of U.S. Human Spaceflight Plans Committee have stated, we are honored to have been asked to take on the responsibility of examining such an important issue.

Sincerely,

A handwritten signature in black ink that reads "Norman R. Augustine". The signature is written in a cursive style with a large, prominent initial 'N'.

Norman R. Augustine

cc: Chairman Bart Gordon
Administrator Charlie Bolden
Dr. John Holdren
Members of the Human Spaceflight Plans Committee