National Aeronautics and Space Administration

Office of the Administrator
Washington, DC 20546-0001

March 5, 2013

Dr. Steven W. Squyres
Chairman
NASA Advisory Council
Washington, DC 20546

STEVE

Dear Dr. Squyres:

Enclosed is NASA's response to a recommendation from the NASA Advisory Council meeting held November 28-30, 2012, at NASA Marshall Space Flight Center. Please do not hesitate to contact me if the Council would like further background on the response. I appreciate the Council's thoughtful consideration leading to the recommendations and welcome its continued findings, recommendations, and advice concerning NASA's Aeronautics program.

I look forward to working closely with you and members of the Council in the future.

Sincerely,

Charles F. Bolden, Jr.
Administrator

Enclosure:
2012-03-03 (AC-02) Aeronautics Flight Research Capability

I HAVE ASKED JAIWON TO BRIEF THIS NAC ON HIS JUST COMPLETED SIP BRIEFING. THIS WILL PROVIDE ADDITIONAL - MORE POSITIVE - RESPONSES. INFO NOT IN THIS

NASA Advisory Council Recommendation

Aeronautics Flight Research Capability
2012-03-03 (AC-02)

Recommendation:
Over the past few years, a number of external and internal assessments of NASA's Aeronautics research programs have been undertaken. More recently, at the request of NASA, the National Research Council (NRC) undertook a study of how best to integrate flight research in ARMD's current research activities. The NASA Advisory Council strongly endorses the critical role of flight research as underscored by the NRC and believes that NASA should sustain and enhance that capability. The NASA Advisory Council believes that there is significant value in proving technology performance in a relevant environment via flight testing.

The NASA Advisory Council feels that the current balance between fundamental and integrated systems level research within the ARMD is appropriate for the given funding level. The Council also agrees with ARMD's plans for where and how to employ flight testing within the given budget and expects this work to continue to advance aviation and aerospace. However, the Council believes there is an opportunity for NASA to make even more substantial contributions by supporting more robust flight research, which will result in a much better balance among all critical elements of conducting world class research: analytical methods, ground testing, and flight testing.

The NASA Advisory Council therefore recommends that NASA expand the use of flight test as an integral part of its overall research portfolio. However, the Council believes that additional resources outside of those currently allocated will be necessary to effectively implement additional flight research activities and it would be advantageous for ARMD to collaborate as much as practical with industry and other government agencies.

In recognition of Neil Armstrong's dedication and contributions to both the NRC study and flight research, including as an X-15 test pilot, the NASA Advisory Council believes that expanding the depth of flight research at NASA could be appropriately dedicated to his legacy.

Major Reasons for Proposing the Recommendation:
While the Council recognizes the contributions of current ARMD activities that utilize flight assets (such as the EDA activity executed by the Airspace Systems Program in concert with the Federal Aviation Administration), the Council feels that increased flight test research is critical to the health of the aeronautics enterprise. The Council recognizes that many factors have impacted the ability of NASA to sustain a robust flight research program. However, the resources and a strategic planning process through which NASA is able to establish priorities for utilizing flight research in balance with other technical capabilities will assure the long-term health and contributions of the NASA Aeronautics Research Program.

Enclosure

Consequences of No Action on the Proposed Recommendation:
The competition for program resources not only at NASA but at other federal agencies has put the Nation's world-class flight research capability as risk. With continued budgetary pressures, the under-utilization of flight testing will further erode NASA's flight research capability.

NASA Response:
NASA concurs with the NAC on the importance of flight research to advancing aeronautical research and proving out technologies in a relevant environment and supports the recognition of Neil Armstrong's contributions to flight research. NASA also appreciates the NAC's agreement with the balance that ARMD has achieved in its research program and our plans for employing flight research within our current budget. We also understand the NAC's position that additional resources would enable a productive expansion in flight research and a better balance to be achieved between analytical methods, ground testing, and flight testing. However, NASA cannot commit to increasing the resources available to ARMD at this time. As part of the annual budget process, NASA will perform strategic and programmatic analysis to determine the priority for augmenting ARMD resources to expand aeronautical flight research. NASA will further consider this recommendation at that time. In addition, ARMD remains committed to maximizing its partnerships in flight research to leverage as much as feasible from its existing budget portfolio. ARMD will provide a briefing on the status of flight research partnerships at the NAC's request and looks forward to guidance from the Council and the NAC Aeronautics Committee for continued improvements in leveraging partnership to strengthen flight research. Further, ARMD will commit to an internal assessment for new approaches to flight research that could be implemented within existing resources while achieving research objectives.