

**Testimony of the Honorable Duncan Hunter
Ranking Member, Committee on Armed Services
U.S. House of Representatives**

**Committee on Science and Technology
Subcommittee on Investigations and Oversight
June 12, 2007**

Chairman Miller and Ranking Member Sensenbrenner, thank you for giving me this opportunity to share my thoughts regarding the DP-2 Vectored Thrust Aircraft, a science and technology program funded by the Office of Naval Research.

The DP-2 project represents potential leap-ahead technology to support our Marines and Special Forces operators. The project has been supported by a number of Members of Congress over the years and I have been a strong supporter from the outset. The project has received bipartisan endorsement, as the Armed Services Committee and the House Appropriations Committee have provided funding for DP-2 since 1988, during both Democratic and Republican-controlled Congresses.

The project has experienced quite a few technical challenges, but should it be successful, it could provide superior capabilities for our armed forces in terms of the speed, range, and stealth capability of our transport aircraft. Moreover, it is not uncommon for aviation technology to require significant resources and time to mature. In fact, the V-22 aircraft, which will be deployed in combat for the first time this year, is based on the XV-15 tilt-rotor prototype that was first flown in 1977. Research and development expenditures for the V-22 total more than \$11.3 billion. The investment in DP-2 represents pennies on the dollar to expand the scientific knowledge-base for vertical takeoff and landing, or VTOL, aircraft and its continued funding will be re-evaluated annually depending on future progress.

As a member of the Committee on Armed Services, and particularly as the Committee's former Chairman and current Ranking Member, I am fortunate to be briefed on a variety of military technologies that may result in improved warfighting capabilities. Likewise, I am privileged to talk regularly to the men and women of our armed forces to get a better understanding of the true capabilities and limitations of their equipment and areas of continued need. One of the key lessons I have learned is that not everything our armed forces need is captured as a validated requirement by the Department of Defense. Similarly, not every good idea to address warfighting needs comes out of the Pentagon or large defense companies. By nature, the personnel who manage acquisition programs within the Department of Defense are risk adverse. Their performance is not measured in terms of innovation, but rather in terms of delivering capabilities on cost and on schedule. The fate of large defense companies usually rests in the success, or otherwise, of the multi-billion dollar programs with which the companies are associated. As a result, I have found that most innovative concepts emerge from small companies that operate outside of the defense establishment.

In the late 1980's, as the Cold War began to draw to a close and the face of our enemy began to change, I became concerned about the military's ability to insert or extract Marines and Special Operations Forces (SOF) in parts of the world without robust infrastructure such as runways and air bases. In short, we needed an aircraft that could land and take off vertically like a helicopter, but fly with the speed of a jet with the capacity of a transport. At the time, we had the Harrier, a fighter jet that had done and would continue to do yeoman's service for the Marine Corps, but it was a fighter, not a transport. It had been upgraded to the AV-8B in the early 1980's after being in inventory for decades. But our options in terms of transport aircraft, that could hold several combat loaded Marines or SOF, were limited. For example, we had the CH-46 Sea Knight, which was aging – even at that time. The last CH-46 had gone into production in 1971, and has a maximum speed of 165 miles per hour (mph). The V-22 Osprey, a tilt-rotor aircraft that would go faster and farther with more payload than the Sea Knight, was in development, but its future was unclear. Around that time, I learned about a small company called DuPont Aerospace and a concept they had for a VTOL transport aircraft using jet engines. It was an unusual and risky approach from a technological perspective, but I believed that the concept warranted further development. As a result, in 1988 I requested, and the Armed Services and Appropriations Committees granted, the first earmark for the program.

In terms of earmarks, let me say this. Members of Congress and particularly Members of the Armed Services Committee take their constitutional responsibility to, “raise and support armies...to provide and maintain a navy, and to make rules for ...the land and naval forces,” very seriously. Every year the Armed Services Committee receives letters from nearly every Member of this body, which represent our Members' efforts to share their ideas for the best ways to fulfill this responsibility. The Committee evaluates these requests and our Members are given three opportunities to amend and to vote on the requests included in our bill – at the subcommittee level, full committee level, and on the House floor. As Chairman, and now Ranking Member, of the Armed Services Committee I cede my constitutional responsibility to nobody, least of all the Pentagon. While some may cast aspersions on earmarks, I guess you could call it earmarking when I added more money to the President's budget request for up-armored Humvees. I also added money to the budget for portable jammers that our soldiers and Marines could wear during dismounted operations. For that matter, we've added funds for body armor and have been relentless in our pursuit of alternative technologies and the development of testing standards. We have saved American lives with these earmarks, and I am proud of them.

Beyond force protection, I have added money for some of these innovative, but risky, technologies that I have described previously. Although the Pentagon may not have a firm requirement for something and may not have requested funds for it, my job is to listen to our warfighters, to set a vision, and to help the warfighter get the best tools possible to do his or her job. I am willing to

take some risks to get there. Consequently, I have funded programs such as the X-Craft, or Seafighter, a ship sized to operate at high speeds in shallow waters with minimal manning. A lot of people said it couldn't be done, but today it is the fastest ship in the Navy and can be operated with a crew of only 26.

The DP-2 program falls into the same category. Its inventor estimates that the DP-2 can operate at maximum speeds of 724 mph. If successful, it would be the fastest VTOL transport aircraft in the world, operating at more than twice the maximum speed of the V-22, which can only operate at 316 mph. It is absolutely true that the DP-2 program has had and continues to have a number of significant technical challenges. As a result, it has quite a few detractors. Inevitably, new concepts and programs will have such problems and will attract naysayers. In fact, the V-22 has been plagued with negative reports since its inception. Moreover, the Osprey has had several crashes, three of them fatal. I have included, for the record, a number of reports from the General Accountability Office, the defense press, and outside groups that have questioned the progress and utility of V-22. The latest such report from the Congressional Research Service is dated March 31, 2007 and details the strong opposition that V-22 still faces, despite its planned combat fielding for this year. Nevertheless, the V-22 has many supporters and the Marines and SOF are counting on its fielding. Given such support, one would be hard pressed to argue that a technology that could deliver greater speed and greater stealth capabilities has no military utility and is not worth some investment. Every moment the presence of those Marines or those commandoes is known and every moment they are in the air at low altitude, is a moment their lives are in danger.

My own son is a Marine who has served twice in Iraq and is now back in Afghanistan. If I can help foster the next generation of technology that will carry men and women like him out the line of fire from shoulder launched weapons or similar devices, I will do it. To put this in some perspective, the investment we have made in DP-2 is less than one percent (0.6 percent, to be precise) of the investment we have made in V-22 to date. Granted, should the science behind DP-2 prove successful, it will require additional investment. But I consider the investment prudent from a financial and risk perspective.

In closing, it is the Armed Services and Appropriations Committees' job to consider where to place such investments in military science and technology, just as it is our responsibility to recommend cuts to programs that are no longer worth pursuing. We will continue to exercise our best judgment on the potential for this technology in the coming months and years. We look forward to any insights this Committee may have to share with us.

Thank you.