



David F. Melcher
President and Chief Executive Officer

June 3, 2016

The Honorable John McCain
Chairman, Armed Services Committee
U.S. Senate
228 Russell Senate Office Building
Washington, DC 20510

The Honorable Jack Reed
Ranking Member, Armed Services Committee
U.S. Senate
228 Russell Senate Office Building
Washington, DC 20510

Dear Senators McCain and Reed:

On behalf of the American aerospace and defense industry, I am writing to express our views about the debate in Congress over the Russian-built RD-180 rocket engine which is used on the United Launch Alliance Atlas V launch vehicles. At the close of the Cold War, the U.S. chose to use the RD-180 to minimize the chance of proliferating rocket technology. For more than a decade, because of its reliability and affordability, the RD-180 powered Atlas rocket has been a trusted and preferred launch system for critical national security space launches.

Now, due to worsening ties with Russia on a range of geopolitical issues, and sanctions imposed on Russia's defense industry, some in Congress seek to sharply limit the ability of the US military to use imported RD-180 engines – potentially to as few as 4 more engines – despite the fact that the Air Force and Department of Defense have clearly stated that, in order to assure sufficient time to create a domestic replacement capability, authorization to use up to 18 additional RD-180 engines is required.

While it may seem odd that a US industry association would seek to allow the use of additional Russian rocket engines, we believe the likely impact to our nation's military, our space industrial base, and our commercial space industry would be substantial and could diminish competition within the industry. The Atlas V has a unique blend of capabilities compared to other launch vehicles. It has greater capacity than the Falcon 9, and is therefore able to lift more payloads to their required orbit. The Atlas V is also significantly less costly to produce and launch than the Delta IV.

Defense Secretary Carter and Air Force Secretary James have both testified about the need to use up to 18 additional RD-180s as a bridge to a new engine alternative. As Secretary Carter stated, *"We have to launch our national security payloads...And we have chosen the choice of going Atlas, recognizing the distasteful fact that that necessitates purchases of up to 18 more RD-180 engines...It's that simple."* AIA urges you to support this vital request.

These same military leaders have also testified it would cost an additional \$1.5-5 billion if the Atlas V couldn't be used until a new domestic launch system is available. In an overly constrained defense budget due to the 2011 Budget Control Act, this funding would have to come from somewhere else – potentially impacting readiness or investment accounts as our nation struggles to develop and field the new systems needed for our armed forces. As a consequence, Pentagon officials are already beginning to look at international backup options such as the European Ariane 5 launch system. Such a development would be devastating to the vast majority of American Atlas V and Delta IV suppliers – many of whom are small businesses.

In addition to defense impacts, as *The Wall Street Journal* reported on May 18, 2016, NASA's commercial crew program and cargo shipments for the International Space Station rely on Atlas V rockets with RD-180 engines. With the military out of the picture, a sharp drop in Atlas V launches overall may make overhead costs for NASA use prohibitive. This could undermine NASA planning for the next decade. The *Journal* reports: "Some industry estimates project the result could add hundreds

of millions of dollars to NASA's launch costs in future years—a budget crunch neither the agency nor its contractors anticipated when current programs were established.” This budget crunch would lead to additional negative effects on the commercial space industry that supports these NASA programs.

Authorizing the use of up to 18 additional engines requested by the U.S. Air Force makes it possible to sustain competition within the industry during the transition to a U.S.-produced launch system. Despite repeated calls for more competition in the launch business, and restoring American commercial space launch competitiveness, new restrictions on the use of the RD-180 would actually create a de-facto monopoly for one company for most military space missions and drive up costs for civilian Atlas V users while limiting the U.S. launch options for our commercial satellite industry.

We strongly urge you to consider all of these consequences before blocking access to the RD-180 until a reliable and affordable domestic alternative is available.

While much has been made of the serious implications for our military and intelligence community if space access is restricted, prematurely ending the use of the RD-180 would also have a tangible negative impact on civil space programs and the commercial space industry.

As this discussion unfolds in Congress, we ask that you support a responsible and measured transition from the RD-180 to a domestic alternative that matches the reliability, capability and affordability that the RD-180 offers our military, civil and commercial customers. This transition also needs continued funding and support to develop a domestic engine replacement capability for the RD-180 powering Atlas V. Interim reliance on a more expensive rocket, a foreign launch vehicle or a single U.S. supplier without the demonstrated reliability or capability of the Atlas V, is not a practical path forward.

We hope you will fully consider the ramifications for both industry and national security throughout this debate. Thank you for your attention on this important matter.

Sincerely and respectfully,

A handwritten signature in black ink, appearing to read "David Melcher". The signature is fluid and cursive, with a large initial "D" and "M".

David Melcher
President and CEO
Aerospace Industries Association