Congress of the United States

Washington, DC 20515

September 29, 2016

The Honorable Charles Bolden
Administrator
National Aeronautics and Space Administration
300 E Street SW
Washington, D.C., 20546

The Honorable Deborah L. James
Secretary of the Air Force
1670 Air Force Pentagon
Washington, D.C., 20330-1670

The Honorable Michael P. Huerta
Administrator
Federal Aviation Administration
800 Independence Avenue, SW
Washington, DC 20591

Dear Administrator Bolden, Secretary James, and Administrator Huerta

Two catastrophic failures of Space Exploration Technologies Corporation (SpaceX) Falcon 9 rockets in just 14 months compel us to once again voice concern about our nation's assured access to space. While the cost of the payloads lost in the explosions is troubling – $118M of National Aeronautics and Space Administration (NASA) cargo destined for the International Space Station and a $195M AMOS-6 communications satellite – the more troubling issue is what these failures mean for crewed commercial spaceflight and national security space launch. These failures could have spelled disaster, even loss of life, had critical national security payloads or NASA crew been aboard those rockets.

Both SpaceX failures occurred after the Air Force certified the Falcon 9 launch vehicle for U.S. national security launches, less than fifteen months ago. The certification, designed to subject the Falcon 9's design and manufacturing processes to a review of their technical and manufacturing rigor, appears to have fallen short of ensuring reliable assured U.S. access to space for our most important payloads.

Congress, NASA, the Department of Defense and the Federal Aviation Administration (FAA) must be responsible stewards of taxpayer dollars to achieve our military and civil space objectives. The investigative responses to both SpaceX failures raise serious concerns about the authority provided to commercial providers and the protection of national space assets. In both Falcon 9 explosions, NASA and the FAA granted primary responsibility for conducting the mishap investigation to SpaceX. Although subject to FAA oversight, it can be asserted the investigation lacked the openness taxpayers would expect before a return-to-flight. We question whether it is responsible to grant equivalent investigative authority to SpaceX after their subsequent on-pad failure on September 1, 2016.

We feel strongly that the current investigation should be led by NASA and the Air Force to ensure that proper investigative engineering rigor is applied and that the outcomes are sufficient to prevent NASA and military launch mishaps in the future. As SpaceX plans for human flight in the next 11 months under existing Commercial Crew contracts, it must participate and prove its technical

veracity before being permitted to do so. The following questions are pertinent to the current investigation:

Questions for the Air Force:

1. Will the Air Force reconsider certification of the Falcon 9 rocket for national security missions in light of the August pad explosion? If not, please explain.

2. Given continual evolution and upgrades to the Falcon 9 rocket's configuration, will additional certification be required? Are specific additional engineering reviews being conducted on the Falcon 9's second stage given its second failure? If not, please explain.

3. Given the two recent failures of the Falcon 9, will the Air Force add more weight to mission assurance and schedule reliability vs. price in their future launch service procurements? If not, please explain.

4. Given that SpaceX led the investigation into their June 2015 NASA Commercial Cargo explosion, and a second explosion occurred less than 18 months later, does the Air Force plan to take a leading role in the September 1, 2016 SpaceX Falcon 9 failure investigation in order to ensure reliability for pending government contract payloads? If not, please explain.

5. Following the January 23, 2015 mediation agreement between the Air Force and SpaceX, will the contents of that agreement and the Air Force's interpretation now be made public to assure Congress that the agreement adheres to the statutory mandate for fair and open competition for EELV missions, consistent with the Federal Acquisition Regulation? If not, please explain.

6. What is the estimated cost to repair the damage to the Air Force launch pad at Cape Canaveral, as well as any additional structures or equipment owned by the Air Force? Will the Air Force or the launch contractor be responsible for the cost of the repairs? What is the estimated timeframe for completion of the repairs?

7. DoD acquisition policy for space launch services increasingly comes down to Lowest Price Technically Acceptable (LPTA). In light on recent launch failures, does DoD plan to reevaluate its acquisition strategy to reset the balance between price and technical criteria? If not, please explain.

8. DoD acquisition policy indicates that LPTA is properly applied when risk of unsuccessful performance is minimal. Do the inherent risks of space launch services breach the "minimal" threshold in DoD's acquisition policy? If not, please explain.

Questions for NASA:

1. For Commercial Cargo and more specifically Commercial Crew missions, does NASA plan to reconsider flights on the Falcon 9 given the September 1 explosion? If not, please explain.

2. Given continual evolution and upgrades to the Falcon 9 rocket's configuration, will additional certification and/or licensing be required? If not, please explain.

3. Are specific additional engineering reviews being conducted on the Falcon 9's second stage given its second failure? If not, please explain.

4. Given the on-pad failure of the Falcon 9, will NASA still allow ingress of commercial crew astronauts prior to commencing fueling operations of the launch vehicle? If so, please explain.

5. Given that SpaceX led the investigation into their June 2015 NASA Commercial Cargo explosion, does NASA plan to take a leading role in the September 1, 2016 SpaceX Falcon 9 failure investigation? If not, please explain.

6. Given the failures of the Falcon 9, will NASA add more weight to mission assurance, safety, and schedule reliability in future Human Launch Services procurements? If not, please explain.

Questions for the FAA:

1. Will the FAA reconsider issuing licenses to SpaceX in light of the pad explosion? If not, please explain.

2. Is the FAA's oversight role in commercial launch operations consistent with the roles of the Air Force and NASA for national security and civil launches, respectively? If not, please explain the differences and why they exist.

3. What are FAA's licensure requirements to retain launch and preflight insurance for commercial launch payloads? What are the penalties for failure to possess sufficient insurance coverage?

4. Did SpaceX possess sufficient launch and preflight insurance coverage for the September 1 explosion?

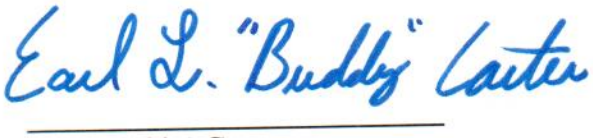
We appreciate your prompt reply to these pressing questions. Please reply no later than October 31, 2016.

Mike Coffman
Member of Congress

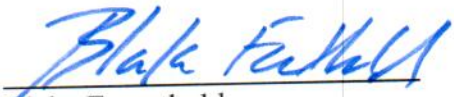
Robert Aderholt
Member of Congress

Doug Lamborn
Member of Congress

Scott Tipton
Member of Congress



Earl 'Buddy' Carter
Member of Congress



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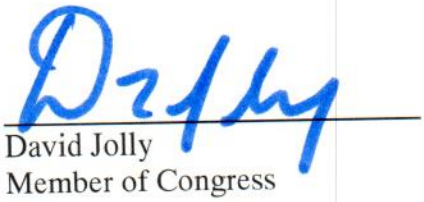

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