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To: UASrfc2015@ntia.doc.gov
Subject: FAA-NTIA: My Comment On "Process for Developing Best Practices for Commercial and Private Use of Unmanned Aircraft Systems" ("UAS") -- Stop Using The Terms "Unmanned" And "Manned"
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FAA-NTIA:

In response to your Request for Comment (RFP) on the "Process for Developing Best Practices for Commercial and Private Use of Unmanned Aircraft Systems" ("UAS"), as one of the interested multistakeholders, my comment is this: I strongly recommend that the FAA-NTIA – as well as the rest of the federal government – stop using the terms "unmanned" and "manned" in any and all documentation associated with this process and the best practices crafted for it.

Instead, there are several gender-neutral and more technically accurate alternative terms that need to be used instead of "unmanned," e.g., "remotely piloted," "pilotless," "drone" (although this term also has problems), "robotic," "autonomous," and "semi-autonomous," to name the obvious alternatives.

Also, according to General Mark Welsh [Chief of Staff, U.S. Air Force (USAF)], the more accurate term is "remotely piloted aircraft" (interview on National Public Radio's "Weekend Edition Saturday," 2015 January 24): "...A primary reason we call them remotely piloted aircraft is because there is somebody flying them. There is somebody in that decision loop. In fact, there are lots of somebodies in it who are adding the human judgments that we think are critical..."

Likewise, instead of "manned," the gender-neutral and more technically accurate alternatives of "piloted" and "crewed" need to be used.

The terms "unmanned" and "manned" are holdovers created by a 20th Century aviation/aerospace community that was clearly and openly anachronistic, misogynistic, and chauvinistic, to put it mildly. These two terms came into use during an era of "those magnificent men in their

flying machines,” when women in aviation/aerospace were few and far between, or absent entirely, and were actively discouraged from becoming part of the aviation/aerospace community, except as stewardesses.

For instance, during the early Space Age, more than one little girl enthusiastically expressing an interest in becoming a NASA astronaut was told that girls couldn't grow up to become astronauts, as NASA was about “manned spaceflight” sending “manned spacecraft” to put “a man on the Moon,” with “unmanned spacecraft” built and launched by men (the proverbial rocket scientists) leading the way with Lunar reconnaissance. One of those little girls grew up to become the future First Lady, Senator, Secretary of State, and Democratic Presidential Candidate Hillary Clinton.

Now that we have entered the 21st Century, these two terms have no place what so ever for continued use, particularly given that these best practices are intended to be utilized for decades to come.

I am fully aware that these two terms have been used for decades in referring to aviation/aerospace technologies and practices. But, just as technologies become obsolete, are discarded and new technologies incorporated in their place, likewise with the terms used regarding those technologies.

There are a number of precedents for the federal government changing its using long used, and deeply entrenched terminology. For example, the names of tropical weather systems (tropical storms, hurricanes, and typhoons) once were always given female names by the essentially all-male federal government weather personnel monitoring them. The reason given – as those men put it – was because these systems reminded them of women by being temperamental, unpredictable, etc. Eventually that practice was stopped, and the current gender-fair terminology of today was adapted instead without any problems.

Similarly, the U.S. Constitution once had the federal government using the term “persons not taxed” in referring to African-Americans held in bondage as slaves, First Nations members (at least the ones who could

be counted), and immigrants who weren't citizens yet. This term certainly would not be used today in referring to these same demographics.

The term "unmanned" also needs to stop being used because it opens up the legal loophole that so-called "unmanned" craft in aviation/aerospace could still be piloted and crewed by women, minors (boys and/or girls), hermaphrodites, eunuchs, castratos, and transsexual women.

These two terms also indirectly perpetuate a hostile environment in the aviation/aerospace community (as in "No Chicks") that only adds to the dearth of female interest in, support for, and representation in that community's aviation/aerospace engineering and entrepreneurial component in particular, as well as in other related STEM fields in general.

Similarly, these two terms have no place in a Democratic Presidential administration claiming to champion gender equality. For these two terms glaringly stand out by discouraging the female half of our nation's population from participating in ensuring that the United States maintains its leadership and promotes innovation in this growing industry while promoting economic competitiveness. Let other nations use these two terms to hobble their economic competitiveness by discouraging their female innovators and entrepreneurs, not the United States.

The FAA-NTIA also needs to champion the stamping out of the use of these terms "unmanned" and "manned" as part of its promoting the multistakeholder approach to policy development both internationally and domestically, in both the public and private sectors.

My recommendation is not being made as someone with progressive/liberal Democratic leanings wanting "the thought police" to invoke "political correctness" as part of "the wussification of the American male." Instead, my recommendation is bipartisan. For one need only note the American visitorship at aviation/aerospace venues, like Florida's Kennedy Space Center Visitors Complex (KSCVC), to

conclude that the female representation in today's private, commercial, and military aviation/aerospace community leans largely Republican or Independent. I'm certain that any survey of their attitudes about the use of these two terms would find that they do object to them.

Finally, I can't understand how the FAA-NTIA's female personnel can tolerate dealing with the documentation associated with this process without raising strong objections to these two terms being used, particularly given that this matter can easily be solved by always using – Instead – the gender-neutral and more technically accurate alternatives mentioned earlier.

If my recommendation is a case of pointing out the obvious, because so many people tend to overlook it, then so be it.

-- Daniel J. Costanzo