# The Practice of Tactical Dehydration is an unnecessary RISK to Military aviation.

## One of the most costly Safety and Performance RISK Factors to Military Aviation today is ignored

The piddle pack requires the pilot unbuckle from their ejection seat harness, partially undress and move the seat to use, so pilots Tactically Dehydrate for short missions and flight training to avoid the use of piddle pack. The military has spent hundreds of millions to provide the ejection seat technology as a safety net for pilots of fighter aircraft, only to be completely negated by their short sighted issuing of the piddle pack to pilots as a bladder relief solution. The Air Force and Navy have recognized that the issuing of the piddle pack results in and promotes the long standing practice of Tactical Dehydration by aircrew, that it results in a 40% to 50% reduced G-Force tolerance at only 3% dehydration (negating the effectiveness of the G-suit as well), reduced SA and increased SD, and so they are now making deployment and flying dollars available to address the situation.

### The piddle pack does not have a Safe To Fly certification on record with the US Air Force.

The piddle pack recently was tested and failed the Safe To Fly Flame Test, as it explosively bursts into flames, drips molten flaming plastic (even after removal of flame source) and produces life threatening toxic PVC fumes, as can be seen in this video link:

http://www.omnimedicalsys.com/videos/firetest/NewPiddlePackSponge\_Burn\_Small.mp4

The next generation version of the Legacy AMXD, the AMXDmax was authorized for use by US Navy and US Marine Aviation in August of 2013 and the US Air Force approved and authorized the AMXDmax Safe To Fly on its military aircraft in February of 2014. See Comparison Flame Test Video link: <a href="http://www.omnimedicalsys.com/videos/firetest/BurnComp\_Small.mp4">http://www.omnimedicalsys.com/videos/firetest/BurnComp\_Small.mp4</a>

<u>Document: "Pilot Tactical Dehydration - An Operational Risk Comparable to Intoxication"</u> (see attached) One of these recent studies "Effects of Dehydration on Cognitive Function of Pilots" by Paul Lindseth, PhD for the Department of Aviation that was published in Military Medicine 07/2013, showed significantly poorer results; a 57% reduction in flight performance, a 26% reduction in spatial cognition, and a 17% reduction in short-term Memory Response Time tests scores for pilots who had low fluid intakes and experienced 1-3% dehydration in comparison to properly hydrated pilots.

http://aviationkowledge.wikidot/aviation:effects-of-hydration-on-cognative-function#toc2

# News Article Video on F-35 Critical Bladder Relief Issue

Bladder relief is specified in the IAE and is current on-going Safe-to-Fly process on the F-35. See attached picture of F-35 Harness and flight ensemble, Pilot must unbuckle from Ejection Seat Harness and undress and move seat while flying. Even though the piddle pack does not have a Safe To Fly certification on record with the US Air Force, according to a video interview with F-35 test pilot, they are currently using the piddle pack on long duration test flights. This means they are unstrapping their ejection seat harness and they are Tactically Dehydrating or holding it, for shorter flights. <a href="https://www.f35.com/resources/test-pilot-tuesdays/detail/bathroom-breaks-flying/P12/">https://www.f35.com/resources/test-pilot-tuesdays/detail/bathroom-breaks-flying/P12/</a>

#### News Article "Pilot lost Jet using Piddle Pack"

An Air force Pilot Lost Control Of his \$19.9 Million F-16 fighter when he went to use his piddle pack. <a href="http://news.google.com/newspapers?nid=1876&dat=19910322&id=FLAeAAAIBAJ&sjid=ec4EAAAAIBAJ&pg=5830,2935756">http://news.google.com/newspapers?nid=1876&dat=19910322&id=FLAeAAAIBAJ&sjid=ec4EAAAAIBAJ&pg=5830,2935756</a>

#### News Article of Pilots joking about the safety issues of using piddle pack.

"At our regular continuation training meetings we were usually briefed on the recent safety incidents around the Air Force. One of them left us in tears from laughing. An F-16 pilot at 35,000 feet had to use his piddle pack and sometime after unstrapping his lap belt, the belt interacted with the side-mounted joystick and caused the jet to do a few aileron rolls and lose a few thousand feet of altitude."

http://www.aopa.org/News-and-Video/All-News/2012/December/17/Fly-like-a-fighter-To-pee-or-not-to-pee.aspx

News Article Published Fighter Pilot on Tactically Dehydration and then Over Distention (holding it) so as not to use piddle pack - a long history of practice.... "People often wonder, and it is rarely discussed - how did you relieve yourself, strapped into an ejection seat and immobile for 7+ hours? Well as for me - although we were provided with little "piddle-packs" - I personally held it for 7 hours . . . as I had planned and for which I had prepared by remaining dehydrated. (Hey, I'm a fighter pilot.) However, upon arrival in Torrejon, I could barely salute the welcoming Air Force Colonel. Bending over and doubled-up under pressure, I feverishly ran to the nearest 'head' to relieve myself - for seemingly and refreshingly forever, before I could then return to properly meet, greet, and properly salute the receiving Air Force Colonel." <a href="http://flitetime.net/iran.html">http://flitetime.net/iran.html</a>