

DO YOU KNOW?

Marine Corps Safety & Force Preservation

HELICOPTER AIRCREW & BACK PROBLEMS

The 'Helo Hunch' – a much maligned posture forced upon helicopter aviators in order to pilot their aircraft. This musculoskeletal nightmare is caused by a plethora of reasons spanning from basic aircraft design and seating requirements to aircrew anthropometrics (the fitting of a pilot to an aircraft). The end result is a notable level of neck, back and leg pain experienced by pilots which, if left unattended, can result in life-long debilitating injuries.

Two recent surveys by former and active duty helicopter pilots in 2010/2011 identified a notable area of concern with respect to neck, back and leg pain. Treatment sought for pain relief covered the full gamut of the medical spectrum, whether authorized or not, some of which could be considered downright foolish – anything to keep flying.



Igor Sikorsky - Sept 14, 1939. First flight of a helicopter (Note: Helo Hunch present)

PREVENTATIVE MEASURES

So what can helicopter pilots do for themselves to help prevent or minimize the injury potential due to the Helo Hunch? The following tips should be considered:

- Pre/post flight stretching exercises. The focus of your routine should be on the neck, back and hips. Appropriate stretching exercises can be found at <http://www.sportsinjuryclinic.net/>.
- A comprehensive strengthening program (3 times per week) targeting one's core, back and neck musculature which will assist in injury prevention, rehabilitation and performance enhancement. Core stability exercises can also be found at the above website as well as <http://www.sport-fitness-advisor.com/>.
- Proper use of approved lumbar support, if approved lumbar support is not available, a flight clearance request can be submitted online at: <https://airworthiness.navair.navy.mil>. NAVAIRINST 13034.1D provides more detailed information regarding the flight clearance process.
- Ensure proper fit of all flight equipment (i.e. helmet, vest, harness, survival items, etc.). Step by step fitting, adjustment and inspection procedures for all flight equipment can be found in the NAVAIR 13-1-6 series manual at <https://mynatec.navair.navy.mil>. Your local Aeromedical Safety Officer (AMSO) and/or paraloft/flight equipment shop can assist this effort.

DO YOU KNOW?

HELO HUNCH STRIKES AGAIN



Aviator Before Hunch



Aviator After Hunch

Preventative Measures Continued:

- Ensure aircraft seat cushions are properly maintained – if discrepancies are found submit a maintenance action form (MAF).
- Adjust the seat and pedals to fully manipulate the controls through the entire range of motion while optimizing comfort and visibility. See your AMSO if you have any concerns.
- During extended/long flights, as the mission permits, it is critical to get out of the seat to stretch and/or walk around.
- Lastly, if you are experiencing any physiological issues, seek out your flight surgeon early in order to minimize short and long term injury potential.

If you have questions or concerns regarding any of these suggestions, your local AMSO is your first line of defense and should be more than able and willing to assist.

“Aircrew discomfort inhibits endurance and affects situational awareness resulting in a less effective warfighter and a hazard to one’s self and crew.”

