

# Nonin Medical Onyx<sup>®</sup> 9500 and 9550: U.S. Military Airworthiness Certifications

The Onyx 9500 and 9550 fingertip oximeters from Nonin Medical are the only fingertip oximeters approved for use aboard U.S. military aircraft. To achieve U.S. military airworthiness from both the U.S. Air Force and U.S. Army, the Onyx 9500 and 9550 had to maintain performance and pass ALL of the following required tests.



## U.S. Military Airworthiness Certifications: Required Testing

- **Baseline Performance Assessment**
- **Electrical Safety Testing:** to ensure safety of patients in harsh environments
- **Vibration Testing:** must operate during extreme vibration conditions in helicopters
- **Electromagnetic Interference Testing:** extensive testing to assure operations through interference from radio and radar transmitters
- **Environmental Testing:** must operate in extreme hot, cold and humid conditions
- **Altitude Testing:** must operate in non-pressurized environments at high altitudes (up to 40,000 ft.)
- **Rapid Decompression Testing:** must operate while withstanding immediate decompression to 40,000 ft. without damage
- **Explosive Atmosphere Testing:** must operate safely in an environment filled with explosive vapors without igniting
- **Flight Testing:** in-flight performance test in military aircraft

(Note: Detailed results from U.S. Military-conducted tests are not publicly available.)