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## **AIRCREW NECK PAIN: RECOMMENDATIONS OF NATO RESEARCH TASK GROUP 252**

*AIRCREW NECK PAIN: RECOMMANDATIONS DU GROUPE DE TRAVAIL DE L'OTAN 252*

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Introduction: NATO nations' aircrews continue to report neck pain that impact not only their mission performance and effectiveness but also their health. This presentation will outline the work of the recent NATO Research Task Group (RTG): HFM 252 on Aircrew Neck Pain.

Background: Aircrew neck pain is a multifactorial problem that has plagued the aviation profession for decades. Initially more a problem of fixed-wing high performance aircrew, generally attributed to G-loading, neck pain has become a problem for rotary-wing aircrew as well. Factors such as added head-supported mass and increased maneuverability have contributed to the epidemic of neck pain, and related risks and consequences of acute and chronic effects. The HFM RTG 252 compiled the accumulated literature in support of aircrew neck pain in various environments, as well as surveying evidence for effective prevention and treatment strategies from the international team members, representing NATO and invited nations. Recommended measures include a) standardized survey methods and instruments to allow for combined datasets and improved statistical analyses; b) standardized EMG diagnostic methods and conventions; c) the 'professional athlete model' of psychological and physical health to ensure optimal short- and long-term performance and well-being.

Summary: The HFM 252 overall objective was to seek creative administrative, procedural, preventive as well as ergonomic and engineering solutions for reducing neck pain. The RTG has taken a multi-disciplinary approach that involves engineers, human system integration and ergonomics specialists, physiologists, medical officers, physiotherapists, helmet manufacturers, and operators. The presentation will outline the Group's conclusions and recommendations, which will be of interest to the international community.