

## **RISING OVERWEIGHT TRENDS RAISE CONCERNS FOR OBSTRUCTIVE SLEEP APNOEA, IN TURN AVIATION SAFETY**

*L'AUGMENTATION DES TENDANCES EN SURPOIDS SOULÈVE DES PRÉOCCUPATIONS POUR L'APNÉE OBSTRUCTIVE DU SOMMEIL, À SON TOUR LA SÉCURITÉ AÉRIENNE*

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**Introduction:** Association between overweight and obstructive sleep apnoea (OSA) and its higher incidence among males is known. Rising obesity trends, including among pilots, may indicate rising incidence of OSA. Thus regulators have the responsibility to ensure that pilots with OSA do not compromise aviation safety due to fatigue. Civil Aviation Safety Authority (CASA) mandates that those with body-mass index (BMI) more than 35 are assessed by their Designated Aviation Medical Examiner or General Practitioner using a questionnaire for referral for sleep study, if required. This paper aims to discuss CASA's approach to diagnose OSA.

**Method:** An analysis of randomly selected 136 medical files for one calendar year was undertaken. Controllers, females and those with established diagnosis of OSA or who did not provide the report were removed from the sample. This left a sample size of 94 pilots to find those referred for sleep study and diagnosed as OSA.

**Results:** 32.97% pilots with BMI more than 35 were referred for sleep study of which 29.78% were diagnosed as OSA. 53.57% had mild, 14.28% had moderate and 32.14% were diagnosed as severe case of OSA. 57.44% were given clearance by their DAME while 5.7% had BMI less than 35. Interestingly, 8.51% proactively reduced their weight.

**Conclusion:** Majority of pilots despite raised BMI did not require referral for sleep study. Yet nearly one-third pilots being diagnosed suggest the likely incidence of OSA. Admittedly, the applied tools may not be highly sensitive but serve the purpose as a useful screening tool for diagnosis of OSA, in turn contribute towards fatigue risk management in aviation. The need to focus on the objective variables rather than the subjective ones in the present protocol is commented upon.