



International Civil Aviation Organization

**EIGHTEENTH MEETING OF THE COMMUNICATIONS/NAVIGATION  
AND SURVEILLANCE SUG-GROUP (CNS SG/18) OF APANPIRG**

Asia and Pacific Regional Sub-Office, Beijing, China  
(21 – 25 July 2014)

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**Agenda Item 11: Any other business**

**SAFETY CONCERN DUE TO STRESS AND FATIGUE ON ATSEPs**

(Presented by India)

**SUMMARY**

With global change in ANS infrastructure and introduction of the new technology and state of-the-art CNS-ATM systems Controllers' and Pilots' today heavily depends on these systems.

We cannot ensure safe airspace and airports without the availability, serviceability and integrity of the CNS-ATM systems.

Air Traffic Safety Electronics Personnel (ATSEPs) plays a safety critical role in ensuring safe Air Navigation Service.

**Action:**

1. Need for urgent study related to ATSEPs Stress, Fatigue, Hazards, Environment and working hours; and
2. Providing new or adequate procedures for ATSEPs

**1. INTRODUCTION**

1.1 With global change in ANS infrastructure and introduction of the new technology and state of-the-art CNS-ATM systems, Air Navigation Services is arranged in a single uniform system by integrating flight infrastructure, methods, procedures, and regulations to ensure safe, efficient and effective operations.

1.2 The Controllers' and Pilots' today heavily depends on these systems. In modern days we cannot ensure safe airspace and airports without the availability, serviceability and integrity of the CNS-ATM systems.

1.3 Air Traffic Safety Electronics Personnel (ATSEPs) plays a safety critical role in ensuring safe Air Navigation Service.

1.4 In today's rapid changes, it is necessary for ANS to accommodate Stress, Fatigue, Health hazards in the working environment of ATSEPs.

## 2. DISCUSSION

2.1 **Safety** is **the state** in which the **risk of harm to persons or property damage** is reduced to, and maintained at or below, an **acceptable level** through a continuing process of **hazard identification and risk management**.

2.2 **Hazard** - Condition or activity with the potential of causing injuries to personnel, damage to equipment or structures, loss of material, or reduction of ability to perform a prescribed function.

2.3 Most hazards are generated by operational interactions among different system components. More specifically, the interaction of people with technology is potential contributors to hazardous conditions.

2.4 Human errors and violations are contributing factors in most aviation occurrences.

2.5 **ATSEPs' working environment** - System level up-gradation and changes, new equipment and machines, absence or inadequate new procedures, need of achieving safety and efficiency, need to solve practical problems in the real world. Need to ensure overall performance of ANS.

2.6 **Causes of Stress** – Performance variation in the team with reference to time and place. Rapid evolution of technologies. Prioritizing for the decision making, demanding skills. Poorly defined roles and goals. Demand for consistent up-gradation of the knowledge. Organizational and social factors. Changes in the working environment. Fear of failures or insecurity. Being alert and effective for longer hours. Inadequate ATSEPs.

2.7 **Effect of Fatigue** - Lapses in performance. Possibilities of error. Not being the part of the group. Not being assertive. Overlooking technical degradation. Unable to react on sudden technical system failures. Lack of concentration and increasing frustration.

2.8 **Health Hazards due stress** - Sleeping and eating disorder. Raised pulse rate. Diabetics. Ulcers. Back pain.

## 3. ACTION BY THE MEETING

3.1 The meeting is invited to note the contents of the paper;

3.1 Deliberate to evolve a Roadmap to address safety concerns;

3.2 Suggest implementation and mitigation strategy.

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