RA 2345 - Aircrew Fatigue Management

Rationale

Fatigue poses a well-documented risk to aviation and can significantly reduce Aircrew performance. This Regulation places limits on Aircrew maximum flying times, cockpit alert time and compulsory rest periods in order to reduce this risk to a level that is As Low As Reasonably Practicable and Tolerable.

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Management of Aircrew Fatigue

2345(1) Aviation Duty Holders (ADH) and Accountable Managers (Military Flying) (AM(MF)) shall define the maximum allowable flying hours and measures to provide for compulsory rest periods for Aircrew.

Acceptable Means of Compliance 2345(1)

1. ADH and AM(MF) should define in orders the ‘crew duty day’ that is allowable for Aircrew in any 24-hour period. They should also take into account the aspects required to perform special operations and missions, and as a minimum consider:
   a. Maximum flying times.
   b. Cockpit alert time.
   c. Standby duties.
   d. Compulsory rest periods.

2. Periods of activity should alternate with compulsory rest periods. The maximum accumulated flying hours should not exceed the hours stipulated in the table below:

   Table 1. Maximum Accumulated Flying Hours.

<table>
<thead>
<tr>
<th>Flying Hours</th>
<th>Type of Air System</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Single Pilot</td>
</tr>
<tr>
<td>Per Month</td>
<td>90</td>
</tr>
<tr>
<td>Per Quarter</td>
<td>240</td>
</tr>
<tr>
<td>Per Annum</td>
<td>850</td>
</tr>
</tbody>
</table>

3. Supervisors should monitor and enforce the fatigue management limits and measures stated in orders.

4. Prior to their next planned duty cycle, Aircrew should make full use of opportunities to rest and avoid activity detrimental to the next crew duty period. Non-military flying and other fatiguing activities should be considered when reviewing activity prior to the next planned duty cycle.

5. ADH and AM(MF) should define in orders the procedures for granting extensions or exceptions to fatigue management limitations.

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¹ Table as per STANAG 3527 - Aircrew Fatigue Management.
Management of Aircrew Fatigue

6. The following factors may be useful when defining Aircrew maximum flying times and compulsory rest periods:
   a. The need for climatic or environmental acclimatization.
   b. The type and distance of accommodation used by Aircrew from the operating base.
   c. Disturbance and actual rest taken during the stand-down period.
   d. The time that Aircrew arrived on duty.
   e. Flying related ground activities (instructions, briefings, mission planning, simulator training etc).
   f. Type of Air System (in relation to Air System performance, noise and vibration, workload and effort of the individual Aircrew).
   g. Cumulative and/or split duty periods.
   h. Extremes of temperature during ground operations.
   i. The time taken to complete the task, delays incurred and expected (latest) landing time.
   j. Trans-meridian flight.
   k. Personal and social situation of individual Aircrew.
   l. The fatiguing effect of non-military flying.

7. Supervisors at all levels may impose more stringent Aircrew fatigue management limits in the interests of flight safety.

Use of Temazepam in the Management of Work and Rest in Aircrew

2345(2) ADH shall issue orders regarding the use of Temazepam in the management of work and rest schedules in their Area of Responsibility (AoR).

Use of Temazepam in the Management of Work and Rest in Aircrew

8. Temazepam should be prescribed and used in accordance with (iaw) AP1269A².

9. ADH should issue orders regarding the planned use of Temazepam within their AoR in consultation with Aviation Medical Subject Matter Experts and iaw AP1269A²

10. ADH orders should reflect that the use of Temazepam should only be considered as an adjunct and should not be considered a substitute for effective scheduling and rest patterns.

11. Aircrew should undergo a successful ground trial of temazepam, with the outcome recorded in their logbook, in advance of any intended use to ensure no adverse side effects are experienced.

12. Temazepam should not be taken for any longer than 5 days consecutively and should not be taken for more than a total of 20 days in a 60-day period.

13. The use of Temazepam should only be used by Aircrew in the management of work and rest on operations, operational training and route flying. Accordingly, the use of Temazepam should not be considered by Defence Contractor Flying Organizations.

² Refer to AP1269A - Assessment of Medical Fitness, Leaflet 5-19 Annex C - Temazepam in the Management of Work and Rest in Aircrew.
Use of Temazepam in the Management of Work and Rest in Aircrew

14. Military Aviation Medical Examiners may prescribe Temazepam for use by Aircrew in the management of work and rest in operational scenarios, operational training and route flying. The drug is effective in inducing sleep and leaves no residual conditions or complications when used judiciously. Its short duration of activity prevents significant accumulation in the body, and extensive testing has failed to detect any harmful effects on individuals’ performance 6 hours after ingestion. However, the use of Temazepam is an adjunct to an effective management plan for work and rest schedules, it is not a substitute.

15. Further guidance on the management and employment of Temazepam can be found in AP1269A²