**Note: Observe HSE guidelines as detailed in** [**GAP-02**](file:///C%3A%5CLocalLib%5CASPM%5CEffective%20Manual%5CGAP%5CGAP-02%20-%20POLICY%20MATTERS%20REV.%202.pdf) **Section 3.14, IMS registers EMS-F01 and GCAA-IMS-P02 F01.**

|  |  |  |
| --- | --- | --- |
| **File #**  |  |  |
| **Operator Name:**  |  |  |
| **Compliance Issues Check:**  | **[ ]  Pass** | **[ ]  Fail** |

**Elements that have to be appropriately addressed in an FRMS application:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Element** (for details, refer to relevant page)  | **Page**  | **Satisfactory**  | **Unsatisfactory**  |
| Foreword  |  |   |   |
| Document Control  |  |   |   |
| Introduction/Policy Statements  |  |   |   |
| System Elements  |  |   |   |
| Scope and Definitions  |  |   |   |
| Identification and Assessment of Fatigue Risks  |  |   |   |
| Measures to Control Fatigue Risks  |  |   |   |
| Roster Principles  |  |   |   |
| Education and Training  |  |   |   |
| System Review  |  |   |   |
| Consultation  |  |   |   |
| Communication  |  |   |   |
| Quantitative and Qualitative Monitoring of Fatigue  |  |   |   |
| Accident/Incident Investigation  |  |   |   |
| Responsibility and Accountability  |  |   |   |
| Contingency Planning  |  |   |   |
| Contractual Considerations  |  |   |   |
| References  |  |   |   |
| Attachments  |  |   |   |
| Transition Arrangements  |  |   |   |

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| --- | --- | --- |
| **Operator’s brief:** |  | **Remarks** |
| Legal name and trading name  | [ ]  Yes[ ]  No |  |
| AOC | [ ]  Yes[ ]  No |  |
| Area of operations  | [ ]  Yes[ ]  No |  |
| Type of operations  | [ ]  Yes[ ]  No |  |
| Number and type of aircraft  | [ ]  Yes[ ]  No |  |
| Number and category of operating crew (Permanent/Part Time)  | [ ]  Yes[ ]  No |  |

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| **Document Control**  |  | **Remarks** |
| Has the operator provided a method of amendment including a list of effective pages? | [ ]  Yes[ ]  No |  |

This is where the operator “sets the scene” for the management of fatigue. This is their opportunity to convince the GCAA that that they will manage fatigue by directly addressing the FRMS criteria and outlining their safety culture/policy in relation to fatigue management.

|  |  |  |
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| Has the operator stated the FRMS’s purpose?  | [ ]  Yes | [ ]  No |
| Has the operator provided clear statements of what the operator’s fatigue management policy is? For example, is it “Company Safety First’s policy that…..”  | [ ]  Yes | [ ]  No |
| (Note that lengthy theoretical paragraphs in the introduction are not appropriate) Is this a practical document with procedures for flight crew? [ ]  Yes [ ]  No  |

The following statement is mandatory for inclusion somewhere within the FRMS:

“Notwithstanding anything contained in this Fatigue Risk Management System, a flight crew member shall not fly, and the {INSERT OPERATOR NAME HERE} shall not require a flight crew member to fly if either the flight crew member is suffering from, or, considering the circumstances of the particular flight to be undertaken, is likely to suffer from, fatigue or illness which may affect judgment or performance to the extent that safety may be impaired.”

|  |  |  |
| --- | --- | --- |
| **System Elements** |  | **Remarks** |
| Does the operator have a reputable scientifically-based method of monitoring fatigue?  | [ ]  Yes[ ]  No |  |
| Does the operator have a contact with a reputable scientific Organization to monitor fatigue?  | [ ]  Yes[ ]  No |  |
| Does the operator have an informal method of reporting fatigue issues/incidents?  | [ ]  Yes[ ]  No |  |
| Does the operator have a regular formal method of reporting fatigue issues/incidents (with appropriate audit trail)?  | [ ]  Yes[ ]  No |  |
| Does the operator regularly identify fatigue risks/hazards?  | [ ]  Yes[ ]  No |  |

**Fatigue Risk Management System Scope and Definitions**

|  |  |  |
| --- | --- | --- |
| Has the operator clearly defined who the FRMS does/does not apply to? | [ ]  Yes | [ ]  No |
| Has the operator identified the rules to be followed to establish the FRMS?  | [ ]  Yes | [ ]  No |

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| **About the Operator** |  | **Remarks** |
| Has the operator listed the risk factors unique to their organization and type(s) of operations?  | [ ]  Yes[ ]  No |  |
| Has the operator included all types of activities, including different types of flying operations, admin (particularly important for the Chief Pilot), training etc?  | [ ]  Yes[ ]  No |  |
| Has the operator provided a procedure for identifying and reporting fatigue related risks/hazards on an ongoing basis?  | [ ]  Yes[ ]  No |  |

**Control Measures**

|  |  |  |
| --- | --- | --- |
| Has the operator stated what measures have been put in place to mitigate the fatigue risks they have identified?  | [ ]  Yes[ ]  No |  |
| Does the operator define work practices within their system for pilots to work (can have normal operations limits and exceptional circumstances limits). For example: Maximum number of operation? Minimum hours to rest (i.e. amount of sleep opportunity?) Maximum number of consecutive working days? Maximum number of hours in a fortnight?  | [ ]  Yes[ ]  No |  |
| Does the operator publish in advance the Flight and cabin crew on-board rest cycle to plan their rest before reporting for their duty? | [ ]  Yes[ ]  No |  |
| Has the operator stated what facilities and services they provide? What are the evidences? | [ ]  Yes[ ]  No |  |
| Does the Operator ensure flight and cabin crew fatigue data is collected from actual operating environments? | [ ]  Yes[ ]  No |  |

**Education and Training**

Has the operator provided:

|  |  |  |
| --- | --- | --- |
| Syllabus of Induction Training (initial) (Fatigue Awareness).  | [ ]  Yes  | [ ]  No |
| Syllabus of Recurring Training. (Fatigue Awareness). | [ ]  Yes  | [ ]  No |
| A method of assessments.  | [ ]  Yes  | [ ]  No |
| Appropriate reference material used.  | [ ]  Yes  | [ ]  No |
| A statement of who is responsible for training.  | [ ]  Yes  | [ ]  No |
| Details of when and how the training is to occur, and who by?  | [ ]  Yes  | [ ]  No |
| System to assess competence of training personnel  | [ ]  Yes  | [ ]  No |

Does the fatigue training cover:

|  |  |  |
| --- | --- | --- |
| Fatigue and circadian rhythms.  | [ ]  Yes  | [ ]  No |
| Indicators of fatigue i.e. how will they know when they or a colleague is fatigued.  | [ ]  Yes | [ ]  No |
| Possible causes of fatigue.  | [ ]  Yes | [ ]  No |
| Consequences of fatigue (short-term with respect to performance, and long-term with respect to gastrointestinal disorders, psychological disorders etc).  | [ ]  Yes | [ ]  No |
| Mitigation of short-term stress and conditions.  | [ ]  Yes | [ ]  No |
| Advice and personal coping strategies to enable employees to determine what they can do to manage fatigue (i.e. diet, sleeping conditions, proper use of caffeine…etc)?  | [ ]  Yes | [ ]  No |
| Sleep disorders  | [ ]  Yes | [ ]  No |
| Sleep Inertia  | [ ]  Yes | [ ]  No |
| An explanation of the company’s Contingency Plan  | [ ]  Yes | [ ]  No |
| The pitfalls of self-diagnosis of impairment levels  | [ ]  Yes | [ ]  No |

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| --- | --- | --- |
| Everyone’s responsibilities within the fatigue management system.  | [ ]  Yes | [ ]  No |
| The hard limits within the FRMS (i.e. 5 hours sleep in 24).  | [ ]  Yes | [ ]  No |
| The use of fatigue incident/issues reporting mechanisms?  | [ ]  Yes | [ ]  No |
| Does the operator have fatigue management training guidance material which is route specific to include rest strategies, Duty/rest provisions to cover the entire ULR operation from pre-duty, in-flight, layover, and return-to-base rest for both flight crew and cabin crew and follow up on the crew responsibility to implement those strategies? | [ ]  Yes | [ ]  No |

**System Review**

|  |  |  |
| --- | --- | --- |
| Does the operator state when the review occurs (annually, not >13 months)?  | [ ]  Yes[ ]  No |  |
| Does the operator state who is involved (must have representatives/input from both management pilots and cabin crew)?  | [ ]  Yes[ ]  No |  |
| Does the operator state the purpose for a formal review?  | [ ]  Yes[ ]  No |  |
| Does the operator state how the review will occur, and what will be involved?  | [ ]  Yes[ ]  No |  |
| Does the operator state who is responsible for initiating the review?  | [ ]  Yes[ ]  No |  |
| Does the operator state their procedures for making system corrections?  | [ ]  Yes[ ]  No |  |
| Does the operator explain their record keeping procedures? (keep 3 years)  | [ ]  Yes[ ]  No |  |
| Does the operator state their procedure and who is responsible for keeping abreast of current research?  | [ ]  Yes[ ]  No |  |

**Consultation**

|  |  |  |
| --- | --- | --- |
| Does the operator actively/systematically solicit feedback from employees (i.e. on fatigue, fatigue risks, fatigue management, and the fatigue management system)?  | [ ]  Yes[ ]  No |  |
| Does the Operator develop a mechanism for providing open and continuous feedback to the stakeholders including flight and cabin crew and should periodically assess whether the communication channels are effective? | [ ]  Yes[ ]  No |  |
| How does the operator respond/address the feedback they receive? How often does this occur?  | [ ]  Yes[ ]  No |  |
| Is there evidence of the operator making adjustments/changes as a result of employee input?  | [ ]  Yes[ ]  No |  |
| Does the operator consult at regular and defined intervals? When does it occur?  | [ ]  Yes[ ]  No |  |
| How does the operator ensure that employees can contribute or raise issues without fear of retribution?  | [ ]  Yes[ ]  No |  |
| Are there both spontaneous and routine feedback procedures?  | [ ]  Yes[ ]  No |  |

|  |  |  |
| --- | --- | --- |
| **Communication** |  | **Remarks** |
| What fatigue related information does the operator communicate to employees? (For example, changes in system, timeframe for system review, recurring education.)  | [ ]  Yes[ ]  No |  |
| How does the operator communicate with employees?  | [ ]  Yes[ ]  No |  |
| What are the formal and informal channels of communication?  | [ ]  Yes[ ]  No |  |

**Comments:**

**Monitoring Fatigue** This section helps to answer the question: “**At any one time**, how does the operator **know** that fatigue is being managed **effectively** within their organization?”

|  |  |  |
| --- | --- | --- |
| Does the operator demonstrate processes that do not permit a person to operate when they can be considered a fatigue risk?  | [ ]  Yes[ ]  No |  |
| Does the operator provide both quantitative and qualitative procedures to record and monitor fatigue levels of pilots?  | [ ]  Yes[ ]  No |  |
| Does the operator provide details of their roster, method of monitoring validation and record keeping?  | [ ]  Yes[ ]  No |  |

**Predictive**

|  |  |  |
| --- | --- | --- |
| Does the operator pre-validate rosters?  | [ ]  Yes | [ ]  No |
| Does the operator use a worst case scenario analysis?  | [ ]  Yes | [ ]  No |

**Retrospective**

|  |  |  |
| --- | --- | --- |
| Does the operator monitor actual hours worked (as opposed to rostered hours)?  | [ ]  Yes | [ ]  No |

**Quantitative**

|  |  |  |
| --- | --- | --- |
| What scientifically-based (and GCAA approved) model does the organization use to monitor fatigue? (For example, FAST, circadian adjusted sleep calculator.)  | [ ]  Yes[ ]  No |  |
| Who is responsible for this monitoring?  | [ ]  Yes[ ]  No |  |
| What procedures are followed for this monitoring?  | [ ]  Yes[ ]  No |  |
| How often does it occur?  | [ ]  Yes[ ]  No |  |
| What records are kept?  | [ ]  Yes[ ]  No |  |

**Qualitative**

Computer models do not present the whole picture. For example, **FAST** can produce a low score which appears to be fine, until you talk to the pilot who says that for particular reasons (personal, e.g.: new baby, or professional, e.g.: lack of experience, low level flying…etc) he/she considers that it is too fatiguing.

|  |  |  |
| --- | --- | --- |
| Does the operator (either formally or informally) monitor by actually asking what the pilots are experiencing?  | [ ]  Yes[ ]  No |  |
| Who is responsible for this monitoring?  | [ ]  Yes[ ]  No |  |
| What procedures are followed for this monitoring?  | [ ]  Yes[ ]  No |  |
| How often does it occur?  | [ ]  Yes[ ]  No |  |
| What records are kept, and are they kept for 3 years?  | [ ]  Yes[ ]  No |  |

|  |  |  |
| --- | --- | --- |
| Does management clearly state their commitment to managing fatigue and not flying anyone as a fatigue risk?  | [ ]  Yes | [ ]  No |

**Contingency Planning**

|  |  |  |
| --- | --- | --- |
| What situations that require contingency planning have the operator identified? (For example, pilot unfit to fly, loss of computer containing FAST.)  | [ ]  Yes[ ]  No |  |
| What procedures are to be followed for each situation?  | [ ]  Yes[ ]  No |  |
| How does the operator ensure that a pilot who does not fly due to fatigue is not discriminated against in any way?  | [ ]  Yes[ ]  No |  |

|  |  |
| --- | --- |
| Are all references used to produce the information on fatigue or to develop the FRMS listed? | [ ]  Yes[ ]  No |
| Are stated references immediately available to inspectors?  | [ ]  Yes[ ]  No |

**Comments:**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Attachments**

For example:

|  |  |  |
| --- | --- | --- |
| ULR Operational Plan  | [ ]  Yes | [ ]  No |
| Roster analysis  | [ ]  Yes | [ ]  No |
| Duty Statements  | [ ]  Yes | [ ]  No |
| Fatigue Occurrence Report Form  | [ ]  Yes | [ ]  No |
| Training syllabus  | [ ]  Yes | [ ]  No |

**Comments:**

|  |  |  |
| --- | --- | --- |
| How will the operator ensure that all employees are educated about fatigue and how their fatigue management system works before they stop working to prescriptive limits?  | [ ]  Yes[ ]  No |  |
| When will this education occur?  | [ ]  Yes[ ]  No |  |
| How will the operator identify issues/problems/oversights etc?  | [ ]  Yes[ ]  No |  |

**Is this organization in compliant with CAR-Ops 1 (Subpart Q) and** [**CAAP 14**](file:///C%3A%5CLocalLib%5CCAAP%5CEffective%20Manual%5CCAAP%2014%20-%20ULR.pdf)**?**

|  |
| --- |
| **RESULT** |
| [ ]  **Satisfactory** [ ]  **Unsatisfactory** |
| Flight Operations Inspector’s Name: |  | Signature: |  |
| Date: |