CIRCADIAN's Aviation FRMS services are provided from our global offices in North America, South America, Europe, Asia, and Australia.

CIRCADIAN FRMS Solutions for the Aviation Industry

CIRCADIAN®, the world leader in FRMS implementation, provides airlines with a comprehensive set of Aviation Fatigue Risk Management solutions, including:

• CAS-5 Fatigue Risk Model

• Crew Planning with our Partners at AD OPT, a division of Kronos®

• Actigraphy Watches to Monitor Sleep & Flight Duty Schedules

• FACTS™ Expert Fatigue Incident Analysis for ASAP

• FRMS Training, Audits and Certification

• Scientific Expert Support and Change-Management Consulting

CIRCADIAN Aviation FRMS Solutions • www.circadian.com • info@circadian.com
CAS-5 – AVIATION FATIGUE RISK MODEL

The Circadian Alertness Simulator (CAS) is the longest operationally-used fatigue model with a 20 year validated record of reducing errors, incidents and injuries in FRMS applications.

The latest version of CAS (CAS-5) is specially optimized for airline FRMS to assess fatigue risk in crew pairings, bidlines, and day of operations data. Some of the key features of CAS-5 are:

- Designed for Short haul/commuter, Long haul, Freight and Corporate operations
- Can track Pilots, Flight attendants, Ground crew
- Supports crew planning, crew pairings, bidlines, crew requirements
- Scientifically optimized with sleep/fatigue data
- Full featured: Crew type, Duty type, Rest type, Time zone shifts etc.
- Personalized to individual sleep

CAS-5 – ALTITUDE™ - FATIGUE-INFORMED CREW PLANNING

Empower your crew planners to address the risk of fatigue during the build of pairings and bidlines, and fix fatigue risk issues before sequences are flown.

AD OPT and CIRCADIAN® have partnered to allow your planners to assess fatigue risk on their screens when generating crew pairings and bidlines.

The ‘engine’ at the heart of the fatigue assessment is CIRCADIAN’s scientifically-validated fatigue risk model CAS™.

The direct interface between Altitude-Pairing and PBS screens and CAS helps you establish effective fatigue minimized schedules and diminish the risk of non-compliance with FRMS targets.
FRMSWatch™ – AIRCREW SLEEP & FLIGHT DATA COLLECTION

Specially designed for the aviation FRMS market, the new FRMSWatch™ collects both sleep-wake actigraphy and flight duty-time recording using an altitude/air pressure sensor. This is a full-function sports wristwatch with dual time-zones and a clearly readable watchface that enables you to document both ground and in-flight sleep and actual flight vs. non-flight time. Sensitive 3-axis sensors provide precise sleep & activity measurement. Data is downloaded wirelessly to PC software on your desk or laptop for analysis of the sleep-wake cycles duty-rest cycles of your aircrew.

FACTS™ – OBJECTIVE DETERMINATION OF FATIGUE IN AIRCREW INCIDENTS

You don’t need a panel of fatigue experts to determine how many incidents or ASAP reports are caused by fatigue-related errors, or the annual cost of fatigue events. FACTS™ (Fatigue Accident/Incident Causation Testing System) solves this problem using a scientifically validated expert web-based system which objectively analyzes fatigue probability. FACTS probability judgments correlate 91% with the decisions of an expert human panel. FACTS can be linked to ASAP Reports and to Fatigue Reports to provide an objective assessment of fatigue with specific versions available for flight & ground crews.

A free demo version is online at: (http://facts.circadian.com/aviation/).

CIRCADIAN also licenses a secure corporate version of FACTS which enables to you to store and analyse all fatigue reports and analyse the causal factors.
CIRCADIAN AVIATION FRMS TRAINING, AUDITS & CERTIFICATION

Fatigue Review Committee Training & Certification

The expertise of the Fatigue Safety Action Group/Fatigue Review Committee is critical to the success of an airline’s FRMS. CIRCADIAN provides training and certification to bring all FRC stakeholder representatives to the required ICAO-defined level of scientific and technical competence. Topics include:

- Scientific basis for aviation FRMS
- Effective FRMS implementation strategies
- Managing and auditing the FRM processes;
- Tools and software for FRMS safety assurance
- FRMS promotion & education processes.

Aircrew Fatigue Training

CIRCADIAN® provides a broad range of training options for aircrew to meet the requirements of HR 5900 and ICAO guidelines. These include:

- Classroom training
- Train-the-Trainer
- Fatigue Training Online

CIRCADIAN AVIATION RESEARCH:
DATA COLLECTION & ANALYSIS

CIRCADIAN has the global scientific resources and 20 year expertise in conducting large scale studies of aircrew fatigue in passenger and freight operations. We have helped define the standard for collecting sleep, fatigue and aircrew performance data in airline studies.

By collecting sleep and alertness data in its own operations, an airline can refine

"Feedback from the 11 Fatigue Review Committee (FRC) Team members was very positive. They were glad they took the time to attend, and felt much better about their understanding of the FRMP issues and ability to perform as a member of the FRC. Circadian’s course was informative, professional and light hearted enough to generate some great discussion."

– Captain Ron W. Bean
Flight Safety/Special Projects
American Eagle Airlines, Inc.
and optimize the sleep and alertness predictions to incorporate the unique characteristics of its operators in the CAS-5 fatigue risk model.

CIRCADIAN AVIATION FRMS CONSULTING

FRMS Audits
CIRCADIAN’S experienced team provides FRMS audits for airlines around the world. We have worked with and assessed airline fatigue management plans against the National Regulatory Authorities, including CASA, EASA, and the FAA.

FRMS Implementation and Change Management Consulting
CIRCADIAN, with its proven change management process, is the recognized industry leader in helping organizations determine and implement fatigue risk management systems. Working with CIRCADIAN, you can rest assured that your FRMS will incorporate all necessary legislated and negotiated requirements while maintaining operational efficiencies and safety.
About CIRCADIAN®

CIRCADIAN is the global leader in fatigue risk management systems, and 24/7 workforce performance solutions for businesses that operate around the clock. From our global offices in North America, South America, Europe, Asia, and Australia, we provide consulting expertise, research, training, products and software tools to help extended hours operations optimize employee performance and reduce the inherent risks, costs, and liabilities of running a 24-hour operation.

Contact CIRCADIAN at info@circadian.com or visit our website at www.circadian.com.

CIRCADIAN® can help you construct the FRMS jigsaw and provide the missing pieces

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