Jeppesen Concert

Monitor and Control Fatigue Risk.

Jeppesen Concert is a tool for detailed monitoring and analysis of fatigue risk built for both operators and regulators. Concert allows for quantifying risk at several measurement points in the crew management process such as planned pairings, planned rosters, on the day, and flown rosters. Concert connects to any crew management solution over a simple file interface and runs as a SaaS reducing any need of local installation.

Using interactive data visualisation, Concert allows for investigating any part of the operation and filter out for example a fleet, a period in time, a base, a region or any combination thereof. Risk can be adressed on the overall level looking at many years of data but also down to the greatest level of detail on a specific flight using leading science for analysis and for developing prevention and mitigation strategies.

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Manage fatigue risk – on a new level.

Jeppesen Concert allows for detailed monitoring and control of crew fatigue risk. From the holistic level, down to the individual flights - even into development of fatigue prevention and mitigation. Concert uses the leading fatigue model: The Boeing Alertness Model.

0. Setup.
Install a regular feed of (de-identified) data from your current crew solution. Configure alert thresholds.

1. Automatic Monitoring.
Concerts continuously scans each base, rank and fleet for limit violation and new trends in crew fatigue risk.

2. Ensured Awareness.
Risk owners automatically receives an email alert with a link leading into the detailed information in Concert.

9. Is it effective?
Follow-up to measure efficiency of actions taken.

From. Concert
Subject. Alert #1, 14 dec 2014

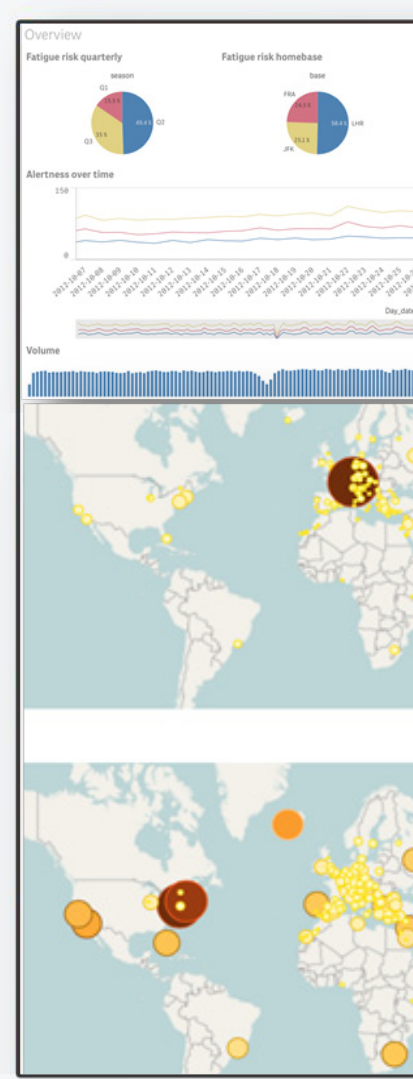Fatigue risk has passed red threshold for:

Base: ATL
Rank. CP
Fleet 737

Follow **this link** for detailed analysis.

3. Where in the operation?
Get instant overview of the full operation and your trend changes. Metrics are available for absolute and normalized risk throughout the crew management process.

Overview

Fatigue risk quarterly

Fatigue risk homebase

Alertness over time

Volume

Fatigue Risk Statistics	June	2014		Metric:	PA5	(WF, PA1, PA5, PA10,

Base, last 20 periods

			Published Pairings		Published Rosters		Actualized Ros
Fleet	Base	Rank	SPI1	Trend1	SPI2	Trend22	SPI3	Tr
737	LAX	CP	1324	-5	1092	-20	912	
737	LAX	FO	1342	8	1282	28	1247	
737	JFK	CP	1175	-8	1089	-25	1008	
737	JFK	FO	1496	-23	1412	-14	1340	
320	LAX	CP	1369	18	1336	-26	1250	
320	LAX	FO	1657	-10	1627	17	1561	
320	JFK	CP	1163	7	1086	25	998	
320	JFK	FO	1044	-1	1004	8	972	
ALL	ALL	ALL	1321	-2	1241	-1	1161	

7b. Large-scale what if's.

Alternatively, if using Jeppesen Crew Optimizers, run what-if's to find alternative roster designs that reduces crew fatigue at minimal impact (even gains) in crew efficiency.
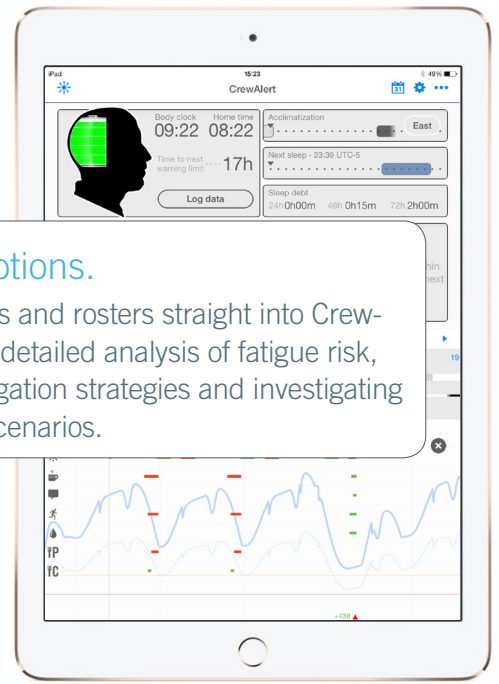
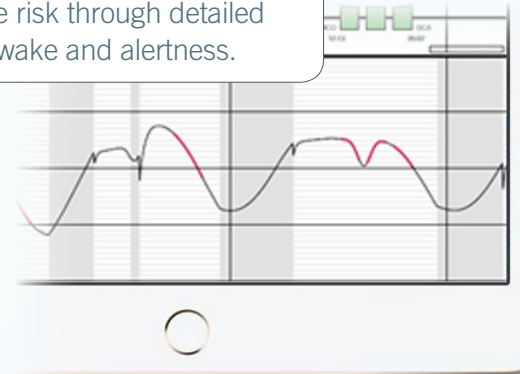Identify improvement potential of the rule set.

7. Find options.

Load pairings and rosters straight into Crew-Alert Pro for detailed analysis of fatigue risk, develop mitigation strategies and investigating alternative scenarios.
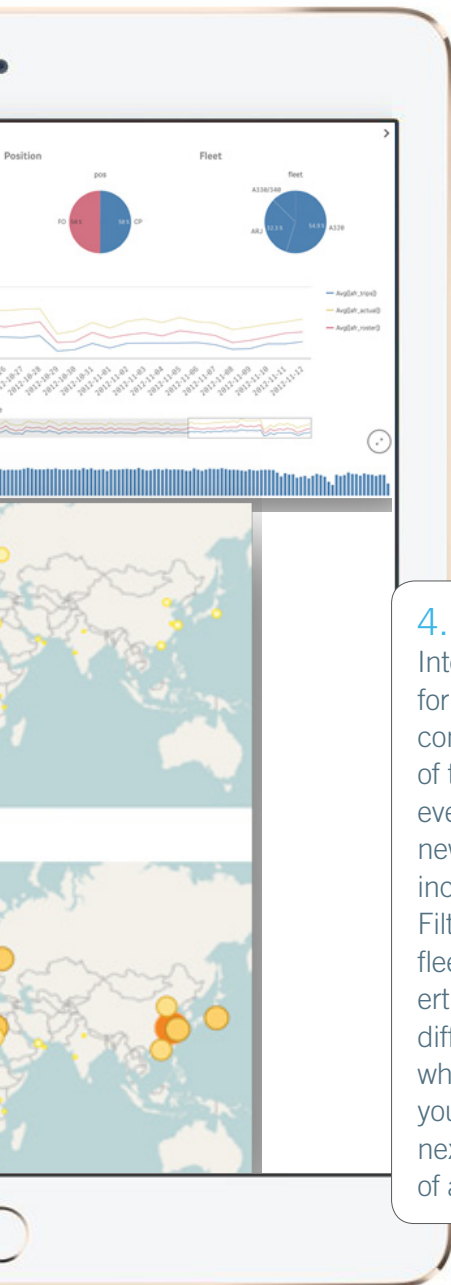
FRM Action Register

8. Initiate Actions.

Implement preventive changes to processes, scheduling, or propose mitigations.

6. "Why?"

Plot flights in their actual context and find the reason for fatigue risk through detailed predictions of sleep/wake and alertness.

4. How severe?

Interactive graphics allows for drilling down into, and compare, different parts of the operation. Concert even allows for you to create new views of your data for increased analytical power. Filter, zoom in, on ranks, fleets, bases and flight properties. Even drill down into different regions finding out where in your operation are you most likely to suffer your next fatigue related incident of accidents.

5. "Which flights?"

Investigate which flights are the most concerning and contribute the most to crew fatigue.

Frequently Asked Questions

What is Concert, and what information will we receive back from this service?
Concert is a web service that continuously monitors and evaluates crew fatigue risk in your operation based on both planned and operated crew rosters. Concert quantifies fatigue risk using leading state-of-the-art bio-mathematical modeling, enabling you to take a predictive/proactive approach to fatigue risk management.

How is fatigue risk quantified?
Concert uses the Boeing Alertness Model to predict crew fatigue at each point in time over all pairings and rosters. This enables both analysis of individual flights, pairings and rosters, but also of differences in overall risk metrics per fleet, base and rank – and how that risk develops over time.

Who are the intended users of Concert?
Concert is built for airline management, flight safety personnel, the Fatigue Safety Action Group but also for regulators with a wish of holistic quantification of fatigue risk.

Can Concert be connected to our non-Jeppesen crew scheduling system?
Yes. Concert only requires a regular data feed on a simple comma-separated format that can be created from a any system.

How is the data protected?
Data is transferred in encrypted form over SSL and stored in de-identified form behind secure firewalls and regularly backed-up, all using industry best practices.

What is Concert used for?
Concert is an important component in any airline's Fatigue Risk Management System (FRMS). Concert is used for monitoring the performance of your planning processes evaluating pairing scenarios, roster scenarios as well as tracking actual rosters flown. With concert it is possible to quantify and show and prove fatigue risk control to the organization, as well as to a regulator. We already schedule our crew with Jeppesen products.

Can we easily start using Concert?
Yes. The needed interface is available as a plug-in. Please contact your Jeppesen service manager for details.

We already use BAM with our crew optimizers and track overall fatigue risk ourselves with built-in reports and Excel. What extras will Concert bring us?
Concert will reduce workload, add automatic alerts, mobile access, more detailed yet simpler analysis of your information and also integration with CrewAlert Pro.

What is the cost of using Concert?
Concert is charged for on a subscription basis and the fee is in part depending on the size of your airline. Please contact us for a quote.

For more request of demo or more information about Concert please contact us at frm@jeppesen.com.

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