



Jeppesen Concert

Manage fatigue risk - at an entirely new level

- Uses the leading science
 - Open model, proper validation, built to support the full crew management process



- Planned pairings, Planned rosters, Published rosters, Flown rosters
- Built for operators and regulators
- Enables comparison of risk for fleets / ranks / bases, both in absolute risk levels and normalized risk (per flight)
- Identifies trends automatically and issues "alerts" over email
- Enables "drill down"; from overall risk → to a part of the operation
 → to a set of flights → to specific rosters → into CrewAlert for
 analysis and counter measures.
- Interactive graphics for intuitive analysis
- Connects over a simple interface to any airline.
- Cloud solution = no need for local installation or hardware.



Jeppesen Concert



Manage fatigue risk - at an entirely 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.

O. 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.



9. "Is it effective?"

Follow to measure

efficiency of actions taken.

8. Initiate Actions.

7b. Large-scale what-if's.

(even gains) in crew efficiency.

Identify improvement potential

of the rule set.

Alternatively, if using Jeppesen Crew Optimizers, run what-if's to find alternative roster designs

that reduces crew fatigue at minimal impact

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



FRM Action Register

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.

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

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..





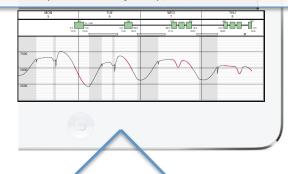
jeppesen.com/frm



7. Find options. Load pairings and rosters straight into CrewAlert Pro for detailed analysis of fatigue risk, develop mitigation strategies and investigating alternative scenarios.



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



5. "Which flights?" Investigate which flights are the most concerning and contribute the most to crew fatigue.

FLRECN	0 DEPSTN	: ARRSTN	1 FLEET	CREWID	ALERTNESS	TMESTAMP 0	BASE	POS
1400505	BRU	ZRH	A320	542489	5001	2012-05-01 04 59:13	ZRH	CP
1400507	284	NOE	A320	533369	5761	2012/05/01 07:05:20	ZRH	CP
400505	NOE	ZRH	A320	543129	5963	2012-05-01 05 50:42	ZRH	CP
1400509	284	VOE	A320	512887	4979	2012/05/01 10:56:56	ZRH	CP
400510	YOU	ZRH	A320	541471	4481	2012-05-01 13 01:02	ZRH	CP
1400511	284	009	A320	538062	6141	2012/05/01 15:47:42	2RH	CP
400512	DUS	ZRH	A320	541095	5056	2012-05-01 17.46:12	ZRH	CP
1400518	284	OSL	A320	542499	6427	2012/05/01 14:53:36	2RH	CP
400521	805	ZRH	A330/340	543838	1817	2012-05-01 01:47:34	ZRH	CP
1400561	284	OUS	A320	543617	4414	2012-05-01 05 22:09	28H	CP
400552	DUS	ZRH	A320	524714	5130	2012-05-01 05:07:51	ZRH	CP



FAQ

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.

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 plugin. 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.

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 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.

Will other important KPIs, such as crew productivity, also be possible to track over time using Concert?

Yes, from Q4 2015.

Is Concert also able to keep and visualize fatigue report statistics if issued by the crew using CrewAlert Pro?

Yes, this is planned for Q4 2015.

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





