

Jeppesen FRM Use Cases



Crew Use Cases, using CrewAlert

1. Predict fatigue risk in detail using BAM (load roster, personalize settings, log sleep/wake)
2. Obtain fatigue risk-, and sleep debt-, awareness
3. Obtain guidance on light exposure and physiologically sound sleep timings
4. Investigate different fatigue mitigation strategies
5. Report fatigue
6. Collect fatigue data (for the company) using KSS, SP and built-in validated PVT
7. Perform what-if analysis
8. Import sleep from any wearable device using Apple Health
9. Learn about sleep and performance interaction



Push roster data from any system over a simple JSON URL, or load from Rosterbuster, Logten, iAIMS...

[Data collection will only require CrewAlert Lite, free of charge on Appstore].

More info: [here](#), [here](#), [here](#), [here](#) and [here](#).

FSAG Use Cases, using CrewAlert Pro

1. Analysis of a fatigue report
2. Modelling and analysis of an incident or accident
3. Modelling and analysis of new route, standard pairing or any roster pattern
4. Modelling and analysis of problematic patterns, developing mitigation strategies
5. Sharing any modeled scenario with colleagues
6. Visualization and exploration of collected fatigue data
7. Storage and analysis of collected fatigue data
8. Analysis of 'what-if' on an pairing or roster; modify assumptions, sleep/wake, chain of activities, etc...
9. Analysis of additional SPIs on any pairing or roster



More info: [here](#), [here](#), [here](#), [here](#), [here](#) and [here](#).

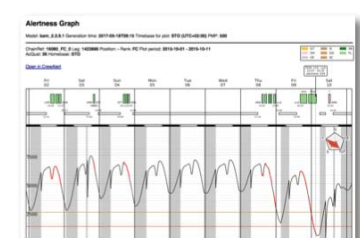
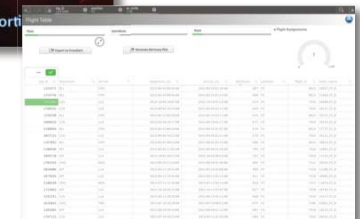
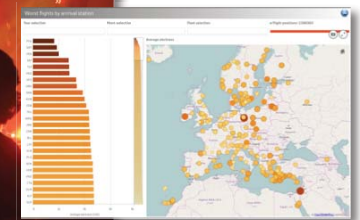
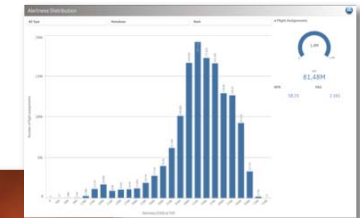
FSAG Use Cases, using Concert

1. Monitoring and quantification of overall fatigue risk
 - Per fleet/rank/base/station, any time period
 - AFR / NFR
 - Any PMP (process measuring point)
2. Identification of trends and fatigue hotspots for the entire operation, over several years
3. Producing statistics for monthly reporting
4. Investigation of fair distribution of fatigue risk over the crew population
5. Follow-up, per the above, of additional SPIs (about 100 in total) such as productivity
6. Investigation into the fair rostering of an individual or a sub-group compared to a larger set
7. Bring up any pairing or roster, from any PMP, and investigate details
8. Monitor your entire crewing process and receive automatic alerts

More info: [here](#), [here](#), [here](#) and [here](#).



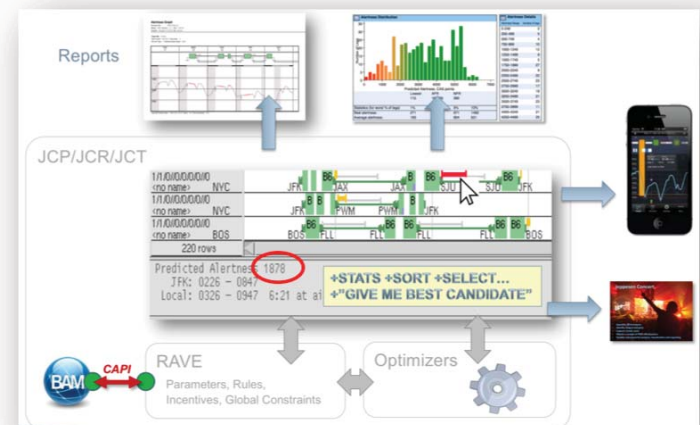
- Cloud-based solution, no local installation
- Access via web browser
- Simple and secure integration with any crew solution



Crew Management Use Cases

1. Visualize fatigue risk in the native GUI
2. Use fatigue risk in decision support
3. Sort/filter/select trips, rosters and flights according to predicted fatigue risk in native GUI
4. Plot detailed predictions on any pairing or roster in the native GUI
5. Quantify overall risk metrics (on partial or full solution)
6. Use planning rules directly based on fatigue predictions
7. Suppress fatigue risk during crew planning optimization with incentives in objective function
8. Distribute fatigue risk between crew
9. Alert on fatigue risk in day of operation
10. "Find most suitable crew" in terms of risk
11. Identify suitable rule-relaxations and build safety business case for a derogation
12. Identify loop-holes in current rules

More info: [here](#).



Three options:

- a) Tight integration over CAPI
- b) Integration over ADSF (.csv) with batch uploads to Concert
- c) Asynchronous request-response REST API with the Concert server

