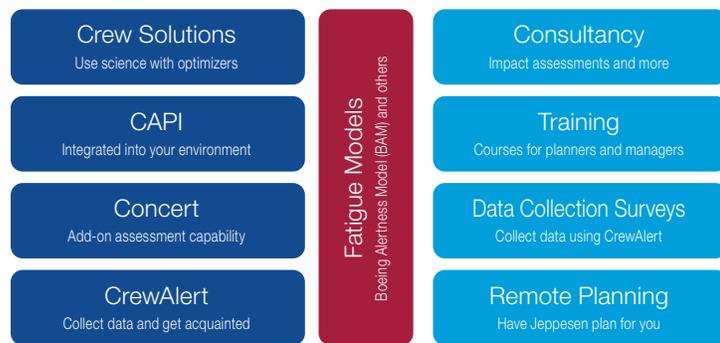




Jeppesen Fatigue Risk Management

Manage fatigue risk in your planning process.

Jeppesen Fatigue Risk Management helps you address safety issues while boosting efficiency.



Jeppesen offer airlines a variety of solutions to control crew fatigue and fatigue risk in crew planning and operation.

Jeppesen Fatigue Risk Management improves safety and increases efficiency.

Managing fatigue risk not only helps you address major safety issues and regulations, it makes your operation more efficient. Jeppesen Fatigue Risk Management provides strategies and proven solutions to fatigue risk issues. The solution suite covers the entire crew management process, and also provides tools for crew members to forecast and mitigate fatigue.

Manage fatigue risk with Jeppesen solutions.

Jeppesen Crew Management

All Jeppesen Crew Management solutions can be connected to fatigue models such as the Boeing Alertness Model, BAM. This allows you to boost alertness while constructing your pairings and rosters with Jeppesen optimizers, and also find weak formulations in your current rule set.

Jeppesen Concert

You can easily conduct a fatigue assessment on thousands of pairings or rosters in seconds through the web-based Jeppesen Concert. The service, which connects to any scheduling solution, allows you to show control or progress internally or to a regulator by measuring and tracking predicted alertness from a scientific model.

Jeppesen CrewAlert iPhone® Application

The CrewAlert iPhone application allows you to get acquainted with BAM at a minimal cost. You may investigate individual patterns and see how science “plays out” on a roster. CrewAlert can also be used by crew for fatigue reporting and for collecting fatigue data from actual operation.

CrewAlert contains fatigue mitigation advice produced on-the-fly fitting the context of the individual.

See what we can do for your operation.

Analyze upcoming time tables to avoid unnecessarily building in fatigue.

Analyze aircraft configuration and augmentation, hotel choices, timing, frequency and positioning options.

Value: Reduces the unavoidable part of fatigue built into the flight schedule from the very beginning.

Alternatively, you can more correctly assess operating costs when making the decision to operate the flights.

Regularly measuring planned and actual crew schedules with regards to predicted alertness levels allows you to see trends over time and monitor improvement or deterioration.

Build early to have statistics to base future decisions on.

Value: You stay in control of the average planned and actual fatigue levels, and the statistics can be used in a Fatigue Risk Management System (FRMS) as part of "managing fatigue," which is required by ICAO. You can also identify fatigue growth between flight schedule, through planned production and then to actual to address fatigue where it matters most.

The predicted alertness levels can be used to more efficiently quality-assure, investigate, and possibly alter, crew schedules before operating them.

In the recurrent pairing or roster reviews, the metrics can single out the concerning part of the production.

Value: Reduced work for monthly pairings and rosters QA, and direct focus on the most concerning fleets/patterns.

You can control and maintain, or increase, predicted alertness in the crew schedules during construction in the crew optimizers in lieu of introducing overly restricting rules.

- ✔ Stay within existing constraints
- ✔ Avoid adding additional restrictions
- ✔ Relax existing constraints

Value: You can place difficult flights in the best possible context in pairings and rosters to enhance safety, and avoid introducing low-precision rules that constrain productivity. Plus, you are able to relax existing rules (FTLs and LBAs) while maintaining an equivalent level of safety and enhanced crew productivity.

The predicted alertness can serve as one possible common metric to moderate internal discussions when evaluating scenarios and altering crew agreements.

Value: Allows fatigue to be a quantifiable property that is also taken into account when altering crew agreements. You are able to make sure that changes are also good from a fatigue perspective. Better collaboration with unions over common metrics will lead to a better outcome for both parties.

Using the model as part of a Fatigue Risk Management System (FRMS) assists in complying with regulatory requirements.

Value: You can avoid the inefficiency and costs associated with manually applying sleep and performance science to your crew scheduling processes. Manually applied guidelines, reactive and isolated rule changes and a lack of metrics are very costly – both to perform but also in terms of end result on safety and crew efficiency.

Use the model to investigate possible causes of fatigue reports and find effective corrective actions.

- ✔ Investigate context
- ✔ Use actual reported sleep
- ✔ Compare with other planned/actuals
- ✔ Alternative context, augmentation or modify sleep opportunity
- ✔ Personal characteristics
- ✔ Find buffer strategies for robustness

Value: You can qualify and set fatigue reports in relation to other parts of the operation. If this situation is so fatiguing – what about this other one? The model can serve as one tool for drilling down to root cause, and also to moderate the internal discussion by having a common metric. You are able to make the right changes to the operation to maintain efficiency and enhance safety.

Use the model with the optimizers and penalties to stress-test rules (company rules, pilot working agreement and FTLs) to identify and assist with improving predicted alertness levels.

Value: By finding the weak spots in the current rule set and correcting them leads to enhanced flight safety. The corrections are most efficiently done by rules and penalties connected to a model rather than using traditional rules based on duty/rest times.

Go from fatigue management to fatigue risk management by adding fatigue context to better reflect mission risk.

Value: Increase flight safety even further, and reduce true fatigue risk when constructing crew schedules. You can also focus risk reduction efforts correctly by having risk scores on all flights.

Visualize and control alertness during manual modifications to the crew schedules.

Value: Maintain, or even increase alertness levels when manually modifying crew schedules.

[Learn more about how we can support your operation.](#)

For more information about Jeppesen Fatigue Risk Management, visit jeppesen.com/FRM.