

Crew Pairing + Calibration

Finding your desired balance between operational robustness and planning costs

Combining advanced visual analytics with the power of Jeppesen Crew Pairing, Calibration allows you to understand what actually happened in operations with your previous plans, as well create future plans where you have the RIGHT buffers in the RIGHT places.

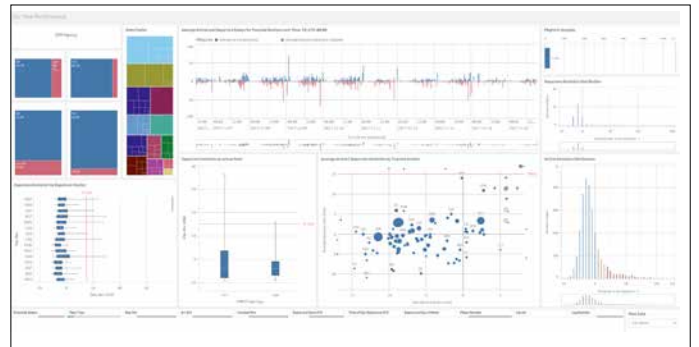
Making your pairings more robust

In an airline operation, we have come to expect the unexpected. Disruptive events such as bad weather at an airport, not having enough ramp personnel and long security queues occur nearly every day throughout your network. But how do you better plan for these types of disruptions? You need a robust plan that can withstand whatever the day throws at you, but efficient enough that you don't waste resources.

Powered by Boeing AnalytX, our Calibration module for Crew Pairing streamlines the way robustness is managed. We enable you to analyze your past operations data, over long periods of time, to identify patterns and gain insights into where adjustments can be made to have more robust crew pairing plans in the future. These new pairing plans would require minimal intervention from ops control or crew recovery teams when facing disruptions.

Power up your crew pairings

As an add-on to Crew Pairing, Calibration is ideal for most airlines especially the ones that operate within congested networks and face many daily disruptions. It is of interest for airlines that are looking to improve their on-time performance and decrease their crew related delays with minimal cost. Alternatively, the airlines that are willing to reduce some of their crew planning cost while keeping their on-time performance intact, can also benefit from Calibration.



See what we can do for your operation

- The use of Calibration will bring a significantly deeper understanding of how crew pairings evolve over time and the impacts of any changes. It will support the crew planning team to have a data driven discussion with other stakeholders within the airline.
- It will enable the refinement of the crew pairing robustness to such a level that buffers can be redistributed without affecting planning cost, while providing a significant improvement in operations. Alternatively, planning costs could be reduced while maintaining the same level of effective robustness. The trade-off between cost and robustness can be determined by the airline in order to align with the corporate strategy.
- An aim of more than one percent savings in crew cost is not unrealistic, as long as there is not a sole focus on improving airline on time performance.

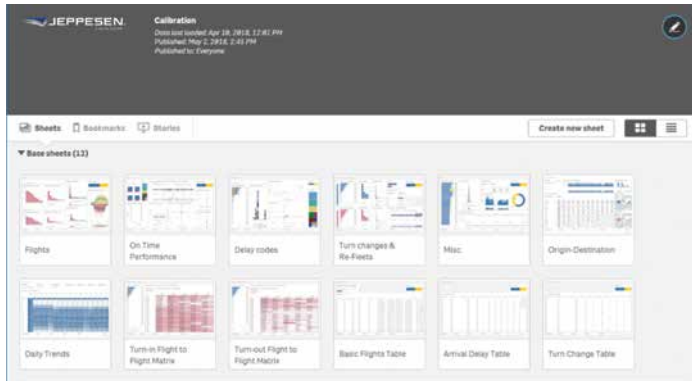
Crew Pairing + Calibration

Finding your desired balance between operational robustness and planning costs

Key product feature

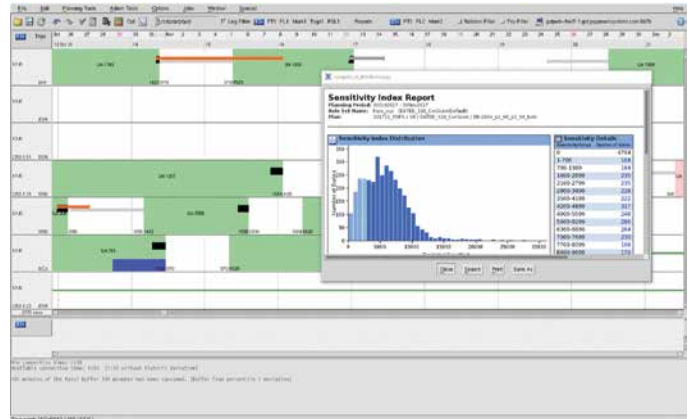
Calibration includes a Visual Analytics tool and additional functionality in Studio.

- **Visual Analytics:** Visual Analytics is an interactive and dynamic web tool, used for data analysis. It includes a set of interactive sheets that could be used to analyze flight schedules, On Time Performance, aircraft rotations over specific periods and delay distributions among others.



Calibration includes a Visual Analytics component enabling targeted post-ops analysis.

- **Sensitivity Index:** Sensitivity Index combines all factors associated with the robustness of a pairing (such as the crew connection buffer, the crew duty buffer, and %crew staying with the aircraft) into a single index. The index is used in the cost function of the Crew Pairing Optimizer to create more robust pairings.
- **Lookback analysis:** The Lookback functionality enables you to analyze if a planned connection time was sufficient. Using the functionality, you can overlay planned pairings on an actual flight schedule in order to investigate how these planned pairings would respect the Flight Time Limitations. Any pairings that do not respect Flight Time Limitations is called a Lookback violation. You can use the Lookback functionality to investigate how many of the Lookback violations in a published pairing are due to the changes made to the flight schedule, including aircraft rotation changes, after the publication of the pairing. You can also find out how many of the Lookback violations could be reduced using the Sensitivity Index functionality.



Calibration includes additional functionalities including History-based Sensitivity Index and Lookback analysis in Studio.

Learn more about Crew Pairing + Calibration at [Jeppesen.com/calibration](https://jeppesen.com/calibration)