Scalable Data Collection using CrewAlert TOD

Information to operators assessing their operation using CrewAlert TOD

Background

CrewAlert TOD (TOD for 'Top Of Descent') is an application for easy gathering of large amounts of data from crew regarding their sleepiness levels during operation. The application can be used for one-off data collections campaigns, as well as for creating a continuous data flow that enables tracking positive/negative trends and identifying fatigue hotspots in a way not possible with fatigue reports or traditional data collections.

CrewAlert TOD is designed for ease-of-use so that crew only need to spend a few seconds for each data entry, with a minimal initial learning curve. The trade-off is that just a minimal set of data is collected; a self-assessment of sleepiness using the Karolinska Sleepiness Scale (KSS). There is no actigraphy or PVT collected, but on the other hand full scalability making it possible to collect from all crew, all the time.

This document informs operators on the procedures, and considerations needed, when running a data collection campaign.

One-off data collection campaign

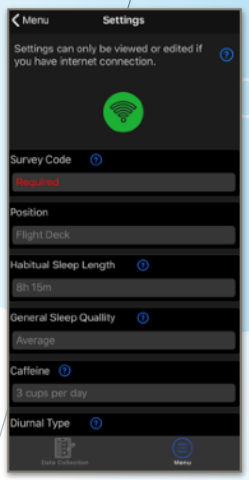
The procedure is the following:

1. Contact the Jeppesen Scheduling Safety team via the email frm@jeppesen.com to request a campaign. Inform about the identity of the data collection coordinator (DCC) and the approximate number of crew to participate.
2. Jeppesen will provide A) a unique 'survey code' that will be common to all crew participating, and B) a set of individual, but anonymous, user accounts (*personal ID code*) to be used by the participating crew.
3. The DCC will then recruit crew, provide them with the survey code and their personal ID code and point to the instructions found here (or a modified version that the operator provides separately).

Note: in case there is a wish to merge collected data with actual roster data later, the DCC will need to keep a register over which crew member received which personal ID code.

4. The DCC will let Jeppesen know when the data collection is finished, after which Jeppesen will extract all data associated with the survey code and pass back to the DCC. The data will contain:
   - Meta-data of the crew from the settings in the CrewAlert app, such as position, age, diurnal type, habitual sleep length etc.
   - All assessments made with UTC time stamp, KSS, controlled rest, prior sleep and RSME data.
5. The DCC may now use the data as-is, or merge the collected data with actual flown roster data in PMP500 in Concert, and upload an extended ADSF into PMP600 where further analysis can be performed to correlate scores to the multitude of SPIs and KPIs available there.

For Jeppesen Concert customers, running up to two campaigns per calendar year is included at no additional cost. For non-Concert customers, contact your Jeppesen sales representative for a quote.



Continuous data collection

CrewAlert TOD and Concert can also be used for a setting up a continuous data collection - automatically integrating the collected data with actual roster data. Please contact your Jeppesen sales representative for pricing and more details.

FAQ

Q: Will the collected data be representative?
***A**: Representativeness is best achieved by either A) randomly selecting crew and make them, without much fall-out, participate, - or B) by having a clear majority of crew (>70%) participating in the collection.*

Q: How is anonymity guaranteed for crew?
***A**: The data is, by design, anonymous to Jeppesen. Collected data is only identifiable by the DCC knowing which crew is associated with which Personal ID Code. Data is treated as described in the 'informed consent' section of the app and handled and processed by Jeppesen in accordance with the declaration of Helsinki.*