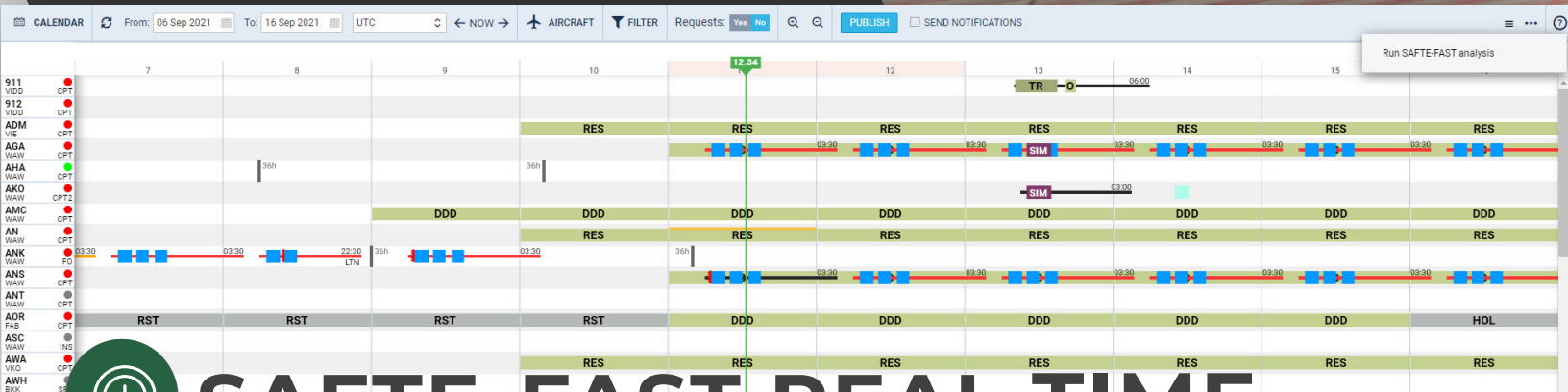




REAL TIME INTEGRATION



# SAFTE-FAST REAL TIME

## Results You Can Trust

SAFTE-FAST is the world's leading bio-mathematical model validated by the US Federal Aviation Administration (FAA).

The model has been peer-reviewed, extensively tested and has over twenty years of research and operational experience behind it. SAFTE-FAST evolved from US Army research on sleep deprivation and performance at the Walter Reed Army Institute of Research.

Validation of the model has demonstrated it can predict changes in the speed of performance against the psychomotor vigilance test (PVT). It can also predict the likelihood and severity of accidents as well as risk and fatigue.

## Solutions Offer

	Basic	Pro
Preparation Time at Home:	N/A	Custom
Preparation Time at Hotel:	N/A	Custom
Preparation Time at Rest Facility:	N/A	Custom
Commute Station <-> Home:	1 Hour	Custom
Commute Station <-> Hotel:	1 Hour	Custom
Commute Station <-> Rest Facility:	1 Hour	Custom
Unwind Time at Home:	N/A	Custom
Unwind Time at Hotel:	N/A	Custom
Unwind Time at Rest Facility:	N/A	Custom
Inflight Rest:	N/A	Custom
Split Duty Rest:	N/A	Custom
Pre-Duty Nap Quality:	N/A	Custom

Fatigue Risk Management Solutions

www.saftefast.com  
info@saftefast.com

The Science of Performance at Work

## SAFTE-FAST Effectiveness

Effectiveness is an objective OPS measurement which has been validated by the FAA. It represents the speed of performance on the Psychomotor Vigilance Test (PVT), scaled as a percent of a fully rested person's normal best performance. It is highly sensitive to fatigue, corresponds to the speed of cognitive performance and correlated with many other cognitive performance metrics.

Effectiveness correlates to:

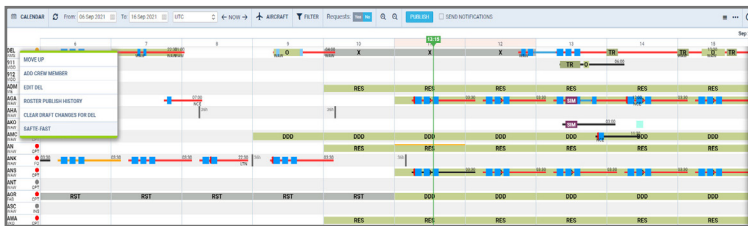
- Continuous Hours of Wakefulness
- Reaction Time
- Lapse Likelihood
- Mean Cognitive Throughput
- Blood Alcohol Concentration

## SAFTE-FAST Reservoir

The Sleep Reservoir in SAFTE-FAST represents the current level of the sleep reservoir expressed as a percent of the full capacity. The cumulative number of hours of sleep that have been missed since the Sleep Reservoir was last at full capacity is represented in SAFTE-FAST as Sleep Debt. In SAFTE-FAST, a 75% Sleep Reservoir is the equivalence of missing a full night sleep (assumed eight hours).

## SAFTE-FAST Percent Below Criterion

The percent below criterion metric depicts the percentage of time where the Effectiveness of a crewmember has fallen below 77% (Criterion) during flight.



## SAFTE-FAST Real Time

SAFTE-FAST		DEPARTURE		ARRIVAL		FLIGHT
DEL Thomas	Effectiveness	Reservoir	Effectiveness	Reservoir	Percent Below Criterion	
6 SEPT + 07:00 + EPWA → → LPPT	73.4	72.9	72.9	76.4	0	
6 SEPT + 10:00 + LPPT → → ESDW	72.1	69.8	70.8	67.7	0	
6 SEPT + 13:00 + ESDW → → EPWA	70.9	66.6	70.2	64.6	0	
7 SEPT + 09:00 + EPWA → → EPKT	83.8	87	88.8	85.9	0	
7 SEPT + 11:00 + EPWA → → EPWA	87.8	84.9	87.2	83.9	0	
9 SEPT + 08:00 + EPWA → → EPWR	98.3	96.6	97.5	94.4	0	
9 SEPT + 16:00 + EPWR → → EPWA	98.1	87.2	98.7	86.2	0	
12 SEPT + 19:00 + EPWA → → LPMN	100.9	88	96.6	86.5	0	
12 SEPT + 21:15 + LPMN → → EPWA	93.2	89.7	84.3	83.1	0	
13 SEPT + 07:00 + EPWA → → LPPT	78.6	75.5	75.5	73.2	0	
13 SEPT + 10:00 + LPPT → → ESDW	74.9	72.4	73	70.4	0	
13 SEPT + 13:00 + ESDW → → EPWA	72.8	69.3	74.7	67.2	0	

Using the SAFTE-FAST metrics in Leon, you can:

- Screen for low performance during departure and arrival.
- Screen for low reservoir during departure and arrival.
- Screen for low performance enroute.

Perform real-time risk assessments and identify whether fatigue in your schedules is due to circadian interactions or excessive sleep debt.

## Free Trial

SAFTE-FAST Real Time is available for a free limited period to any Leon customer. For more information on how to integrate contact us at [info@saftefast.com](mailto:info@saftefast.com).

## About Leon Software

Leon Software ([www.leonsoftware.com](http://www.leonsoftware.com)) excels in delivering an advanced cloud-based solution for the aviation business, including scheduled and cargo operators, business aviation, trip support companies and brokers. From flight OPS and crew management to charter sales, Leon provides a versatile platform design in a digital ecosystem of an aviation organization.

