



Participation Reference Guide For Pilot

SIA-NUS Digital Aviation Corp Lab
Employee Wellness Study
NUS-IRB-2020-255



About the Study

Introduction

The goal of this study is to develop for SIA a novel fatigue modelling and prediction model with consideration of individual heterogeneity and complex interactions that exist among fatigue factors to provide more accurate fatigue predictions and to enhance pilot and cabin crew safety and well-being while upholding levels of performance.

About the Study

Reimbursement

Reimbursement includes redemption of **(a) Fitbit Sense 2 (worth S\$428)** and **(b) KrisPay Miles (Worth up to S\$100 worth of KrisPay Miles)**.

(a) To keep your Fitbit Sense 2:

- Complete at least 70% of the minimum questionnaire-based tasks
(per rostered flight)
- Wear tracker for at least 70% of the time

(b) To earn the KrisPay Miles:

- Complete additional Fatigue Questionnaire and Psychomotor Vigilance Task (PVT) during rostered flights

Minimum Tasks Requirements

Tasks to Complete	Short Haul Flights (Duration less than 3 hours)
(i) Pre-Flight	
Fatigue Questionnaire (iPad) x 01	✓
PVT Task (iPad) x 01	✓
(ii) At Top of Climb (TOC)	
Fatigue Questionnaire (iPad) x 01	
PVT Task (iPad) x 01	
(iii) At Top of Descent (TOD)	
Fatigue Questionnaire (iPad) x 01	✓
PVT Task (iPad) x 01	✓
(iv) Post-Flight	
Fatigue Questionnaire (iPad) x 01	
PVT Task (iPad) x 01	
NASA Task Load Index (iPad) x 01	✓

Minimum Tasks Requirements

Tasks to Complete	Long Haul Flights (Duration 3 hours and longer)
(i) Pre-Flight	
Fatigue Questionnaire (iPad) x 01	✓
PVT Task (iPad) x 01	✓
(ii) At Top of Climb (TOC)	
Fatigue Questionnaire (iPad) x 01	✓
PVT Task (iPad) x 01	✓
(iii) At Top of Descent (TOD)	
Fatigue Questionnaire (iPad) x 01	✓
PVT Task (iPad) x 01	✓
(iv) Post-Flight	
Fatigue Questionnaire (iPad) x 01	✓
PVT Task (iPad) x 01	✓
NASA Task Load Index (iPad) x 01	✓

Frequently Asked Questions

What is the Duration of This Study?

6 months

Can Tasks be Completed Offline During Flight?

Yes, records of completed tasks are stored in your devices.

Can I Exceed the Minimum Tasks During Flight?

Yes. This includes the **Positive Affect & Wellbeing Questionnaire** and additional questionnaire attempts (up to a cap per task and flight); you will receive additional KrisPay Miles. Refer to your **Participant Information Sheet – Summary Sheet** for details.

Frequency of Wearing Tracker

24/7, including sleep time

Frequency of Synchronizing Tracker

Once a day at minimum, as often as possible

Frequently Asked Questions

How long is each Psychomotor Vigilance Task (PVT) test?

3 minutes per attempt¹

How Much KrisPay Miles do I Earn per Task?

Fatigue Questionnaire	2 KrisPay Miles
Psychomotor Vigilance Task (PVT)	10 KrisPay Miles
NASA Task Load Index	4 KrisPay Miles
Positive Affect & Wellbeing Questionnaire	10 KrisPay Miles
Wearing Tracker Daily	10 KrisPay Miles
Wearing Tracker to Sleep Daily	10 KrisPay Miles

¹ 3 minutes is the minimum scientifically proven duration for the accurate capture of attention span

Thank You for
Your Participation!

