

Title of Study1: Flight Procedures & Episodic Memory I: Study 2

Principal Investigator: Nathan A. Sonnenfeld, M.S.

**Key Information:** The following is a short summary of this study to help you decide whether or not to be a part of this study. More detailed information is listed later on in this form.

### Why am I being invited to take part in a research study?

We invite you to take part in this research study because you fully completed *Flight Procedures & Episodic Memory I: Study 1* and are a UCF student ages 18-64. Whether you choose to participate is up to you.

# Why is this research being done?

The purpose of this study is to advance our understanding of how pilots acquire the knowledge and skills to perform procedures during flight operations. Modern approaches to flight crew training may vary in effectiveness due to (a) various design differences, and (b) for different types of tasks. In this research we are investigating the effectiveness of various modern training systems using different instructional strategies, across a series of scenarios involving procedures associated with flight operations. Specifically, here, we are studying your long-term memory and knowledge of the instruction received in Study 1.

# How long will the research last and what will I need to do?

This study involves an online follow-up study involving the completion of a series of retention questions (30-60 minutes).

We expect that your active participation in this follow-on study will last a maximum of 60 minutes. You will be asked to complete the following:

Retention Measures (Online). You will be asked to complete some follow-up surveys lasting approximately 30-60 minutes. This is related to activities completed in Study 1.

More detailed information about the study procedures can be found under "What happens if I say yes, I want to be in this research?"

# Is there any way being in this study could be bad for me?

There are no anticipated risks of participation in this follow-on study.

# Will being in this study help me in any way?

We cannot promise any benefits to you or others from your taking part in this research. However, your participation may help develop better training for pilots in the future.

 $<sup>^1</sup>$  This template satisfies AAHRPP elements I.1.G, I.4.A, I-9, II.3.C-II.3.C.1, II.3.E, II.3.F, II.4.B, III.1.F, III.1.G UCF HRP-502 Template v  $\frac{1}{3}\frac{1}{2023}$ 

### What happens if I do not want to be in this research?

Your participation in this study is voluntary. You are free to withdraw your consent and discontinue participation in this study at any time without prejudice or penalty. Your decision to participate or not will in no way affect your continued enrollment, grades, employment or your relationship with UCF or the individuals who may have an interest in this study. Your alternative to participating in this research study is to not participate.

**<u>Detailed Information</u>**: The following is more detailed information about this study in addition to the information listed above.

### What should I know about a research study?

- Someone will explain this research study to you.
- Whether or not you take part is up to you.
- You can choose not to take part.
- You can agree to take part and later change your mind.
- Your decision will not be held against you.
- You can ask all the questions you want before you decide.

#### Who can I talk to?

If you have questions, concerns, or complaints, or think the research has hurt you, talk to the research team: by contacting the principal investigator (Nathan Sonnenfeld) by email <a href="Mathan.Sonnenfeld@ucf.edu">Nathan.Sonnenfeld@ucf.edu</a>. Nathan is a PhD student in the Modeling & Simulation program in the School of Modeling, Simulation, & Training.

You may also reach out to the advisor, Dr. Florian Jentsch, Professor, Department of Philosophy Chair, Team Performance Laboratory, Institute for Simulation & Training, University of Central Florida, by email <a href="mailto:Florida.google.com">Florida.google.com</a>. University of Central Florida, by email <a href="mailto:Florida.google.com">Florida.google.com</a>.

This research has been reviewed and approved by an Institutional Review Board ("IRB"). You may talk to them at 407-823-2901or <u>irb@ucf.edu</u> if:

- Your questions, concerns, or complaints are not being answered by the research team.
- You cannot reach the research team.
- You want to talk to someone besides the research team.
- You have questions about your rights as a research subject.
- You want to get information or provide input about this research.

#### How many people will be studied?

We expect 120 people will be in this research study.

### What happens if I say yes, I want to be in this research?

Retention Measures (Online). Presently, approximately one (1) week after your in-person participation in *Flight Procedures & Episodic Memory I: Study 1*, you are being asked (but not required) to complete some follow-up retention measures in a period lasting approximately 30-60 minutes. These surveys will assess your knowledge of the task and memories of your experience of the preflight inspection simulation you interacted with. These surveys include a range of questions about the instructional material, in multiple-choice, short answer, open response, and similar types of question formats. You will have a 24-hour period

from receiving the message in SONA to respond to these follow-up surveys, but you may otherwise complete these at a time/location of your convenience.

Your participation, feedback, and expertise are highly valued and will help us advance our understanding of how pilots acquire the knowledge and skills to perform procedures during flight operations.

#### **Data Collection**

Your responses as a part of this follow-on Study 2 will be linked to your responses in that prior study. As a reminder, the following types of data may be recorded from your overall participation in this research:

- **Survey Data** used to better understand individual difference factors in training:
  - Knowledge Assessments
  - o Edited image file (as part of assessment) used to mark inspection items
- Audio Recording used to examine qualities of memory and knowledge
  - One of the questions will prompt you to provide an open-ended audio response to a question related to your memory and knowledge of the pre-flight inspection

### **Privacy**

To protect your privacy during data collection, the experiment will be conducted in a private room in a UCF laboratory space where only you and the researchers are present. Signage on the door will be placed to indicate that a study is under progress and to not disturb. As a participant in this study, you will only interact with the researchers conducting their data collection session and will do so only by choice. You will have the option to withdraw at any time rather than answer any questions or complete any experimental tasks that cause you distress or discomfort. We will limit data access in this study to people who have a need to review this information. Access to raw data will be limited to the PI and study members directly involved in the coding and transfer of raw data.

### What happens if I say yes, but I change my mind later?

You can leave the research at any time it will not be held against you. Your data up to the point of withdrawal will be stored in a separate file from the data to be used for final analysis, and not included in the final analysis of data due to being incomplete.

#### What happens to the information collected for the research?

Efforts will be made to limit the use and disclosure of your personal information, including research study records to people who have a need to review this information. We cannot promise complete secrecy. Organizations that may inspect and copy your information include the funding sponsor (FAA), the IRB, and other representatives of this organization.

If identifiers are removed from your identifiable private information that is collected during this research, that information could be used for future research studies or distributed to another investigator for future research studies without your additional informed consent.

### Can I be removed from the research without my OK?

You may be withdrawn from the research without your consent with or without cause at any time. We will consider withdrawing participants without their consent in the following circumstances:

- For malingering or "Christmas Treeing" (e.g., after being asked to stop this behavior by the researcher in charge), or if the researcher in charge determines that continuing participation is not in your best interest (e.g., in the event of tornado warning in the building, participant is falling asleep, etc.).
- If you are disrupting the participation of other participants, being disrespectful to other participants, research staff, or research equipment, or if you engage in conduct that is not compliant with the University's Golden Rule policy.

#### What else do I need to know?

You will be compensated at a rate of 0.25 SONA credits per half hour of participation. You may expect to receive up to a maximum of ~0.5 SONA credits for fully completing this study (Study 2).

Your information (both identifiable and de-identified) may be used to create products or to deliver services, including some that may be sold and/or make money for others. If this happens, there are no plans to tell you, or to pay you, or to give any compensation to you or your family.