**Focus Group Protocol for Space Weather Advisory Group User Survey**

 **AVIATION SECTOR**

**Focus Group Information**

Focus Group time/date:

Moderator: [Add before focus group]

Focus Group Participants: [Make sure people complete the sign in sheet]

**Focus Group Protocol**

**Welcome**

Good [morning/afternoon] and thank you so much for agreeing to participate in this focus group.

**Introduction**

My name is [name] and I am a member of the Space Weather Advisory Group also known as the SWAG.

I am joined by [name] for today's conversation who is assisting by taking notes as we go along.

Our time is limited so rather than go around the group, please say your name and organization before you speak for the first time.

**Purpose of The Focus Group**

The purpose of this focus group is to understand how space weather affects your work and what forecasts, products, and services you would like to see.

The SWAG will use the information gathered to identify the space weather research, observations, forecasting, prediction, and modeling advances required to improve space weather products.

The PROSWIFT Act, which led to the SWAG’s formation, also laid out the topics for the user survey. We will be asking you questions about current use and future needs for space weather information, technological systems, components, or elements affected by space weather, and current and future risk reduction and resilience activities.

**Ground Rules**

We want this to be a discussion so please feel free to respond to each other's comments. That said, let’s go over the ground rules for today’s conversation.

1. We would like everyone to participate so I might call on you if I haven’t heard from you in a while.
2. There are no right or wrong answers. Every person’s experiences and opinions are valued and important. Speak up when you agree or respectfully, when you disagree. We want to hear a range of opinions.
3. What is said here today stays here. We want folks to be comfortable sharing information so please do not discuss who said what once you leave.
4. We want to capture everything you say so we will record the conversation. By participating today, you are consenting to being recorded. No one will be identified by name in our report. The recording will only be used for note taking. As required by the PROSWIFT Act, the results of the user need survey(s) including any recommendations will be compiled into a report that will be delivered to Congress as well as made public.

Thank you again for your time and cooperation. Before we begin, do you have any questions for me?

**Let’s begin with your current use of space weather observations, information and forecasts:**

1. How do you use space weather observations, information or forecasts or other information such as advisories or alerts?
2. What are your sources for space weather information?
	1. How do you use the NOAA Space Weather Prediction Center website as a source for space weather information?
	2. How do you use information from commercial space weather sources?
3. What regulations and/or policies require you to use space weather observations, information, or forecasts?

**Let's turn to future need for space weather observations, information and forecasts:**

1. What educational tools, formats, or vehicles would best assist the aviation sector to better understand space weather?
2. How do you foresee enhancements or changes to current information dissemination?

**The next set of questions are related to technological systems, components, or elements affected by space weather:**

1. How do you assess the specific impact of space weather on communication, navigation, and human health?
2. What are the specific limits and thresholds for decision making?
3. How should Safety Management System (SMS) protocols be incorporated into space weather products and notifications?

**Finally, let’s talk about current and future risk reduction and resilience activities:**

1. What are the current risks to your enterprise or operation from space weather?
2. On a scale from 1 to 5 where 1 is inconvenient and 5 is severe, how would you assess the risks to personnel/equipment safety, economic, and operations?
3. Which policies or procedures do you have to mitigate the risks associated with space weather?
4. What kinds of simulations or exercises do you perform to enhance risk mitigation of future events?
5. What are new or other sources of space weather information do you require to mitigate risks?

**Last Question**

1. Are there any other things that we have not asked about that you wish to share?

**Wrap Up**

Those are all the questions we have for you. Let us know if you are interested in keeping in touch and please let us know who else to speak with as part of this effort. We hope to have initial results from the SWAG User Survey by AGU and AMS. Thank you once again for your time and energy.

Public Burden Statement

A Federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with an information collection subject to the requirements of the Paperwork Reduction Act of 1995 unless the information collection has a currently valid OMB Control Number. The approved OMB Control Number for this information collection is 0648-XXXX. Without this approval, we could not conduct this information collection. Public reporting for this information collection is estimated to be approximately 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the information collection. All responses to this information collection are voluntary. Send comments regarding this burden estimate or any other aspect of this information collection, including suggestions for reducing this burden to the Dr. Jennifer Meehan, National Weather Service, NAA, 1325 East West Highway, Silver Spring, MD, 20910, jennifer.meehan@noaa.gov.