



FAA Weather Technical Exchange Meeting



Kennedy Space Center

Kennedy Space Center Weather Office Spaceport Integration & Services



Dr. Kristin Smith
**Lightning Advisory Panel Liaison
and Technical Lead
FAA Interface**

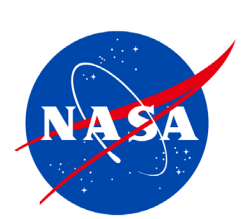


Kathy Rice
**KSC Weather Officer
Meteorological Requirements**

NOT EXPORT CONTROLLED

This document has been reviewed by the KSC Export Control Office and it has been determined that it does not meet the criteria for control under the International Traffic in Arms Regulations (ITAR) or Export Administration Regulations (EAR).

Reference EDR Log #: 10585 NASA KSC Export Control Office, (321) 867-9209

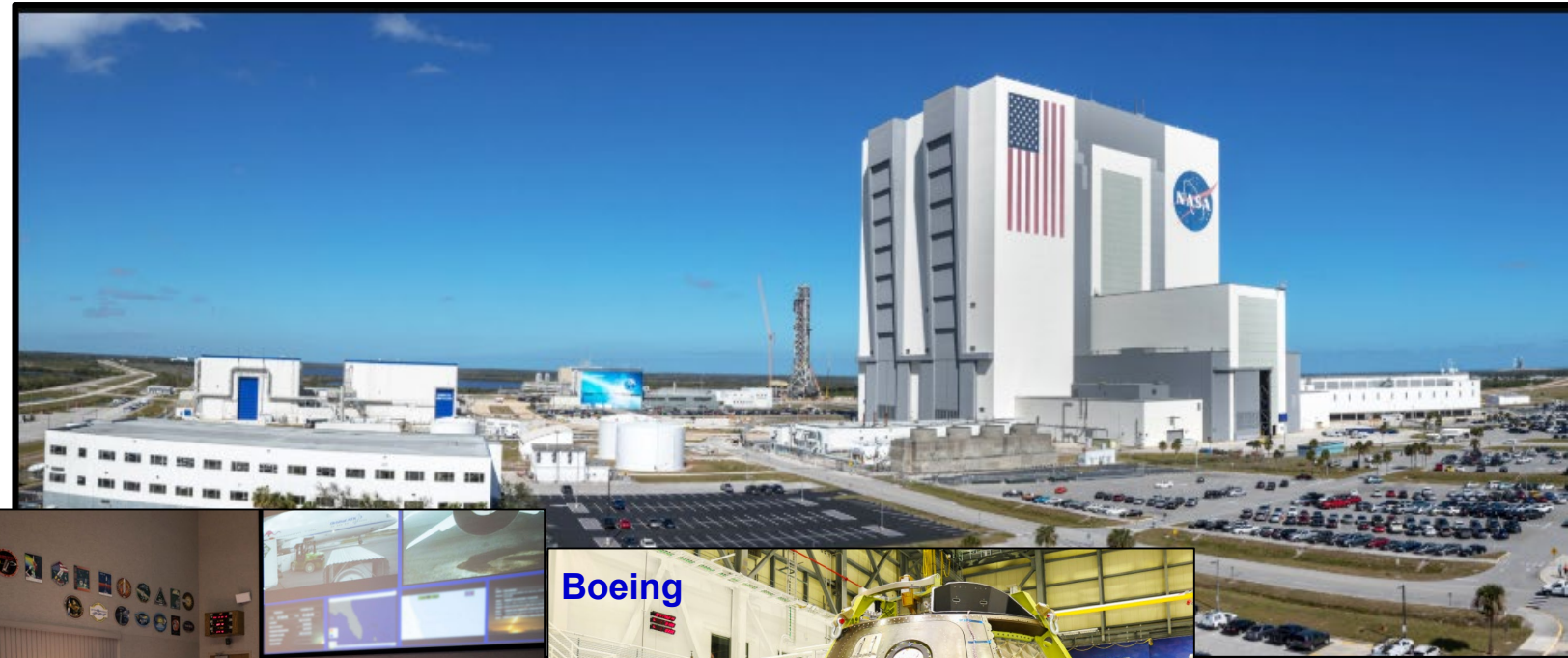


Spaceport Integration & Services



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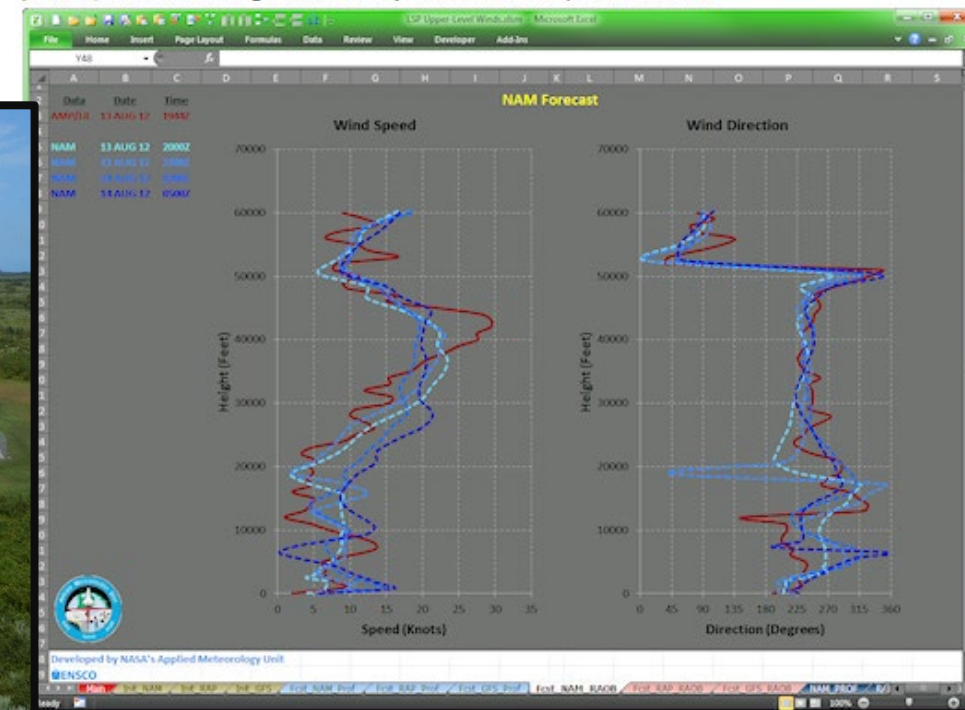
➤ Kennedy Space Center – Multi-user Spaceport



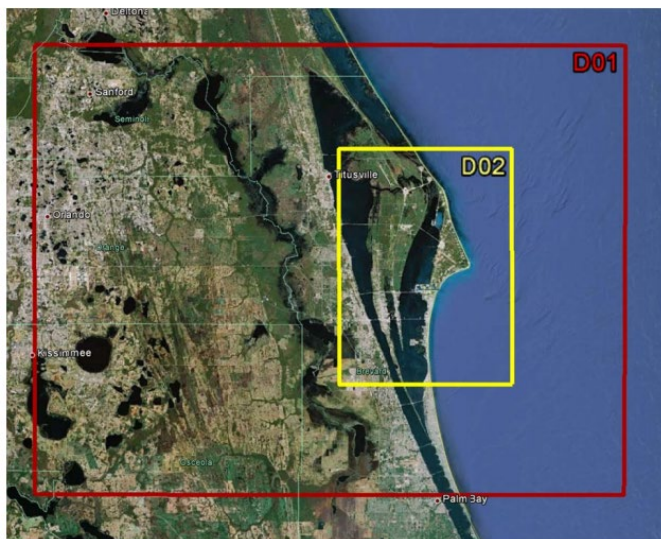
- **KSC Weather Officer provides customers information on weather capabilities including instrumentation, weather data, and operational weather support**
- **Looking ahead to improve meteorological capabilities to meet future multi-user spaceport needs**

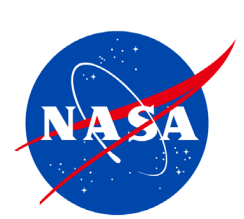
Data Displays

Instrumentation



Optimizing Mesoscale Model



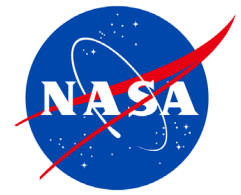


Artemis-1 Mission



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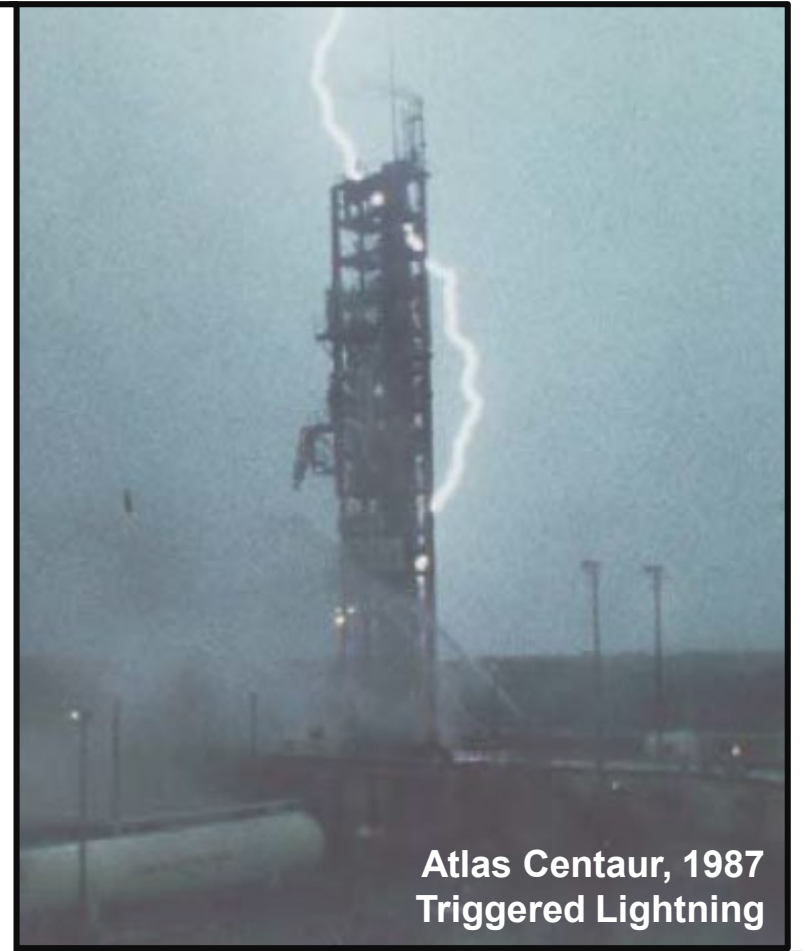
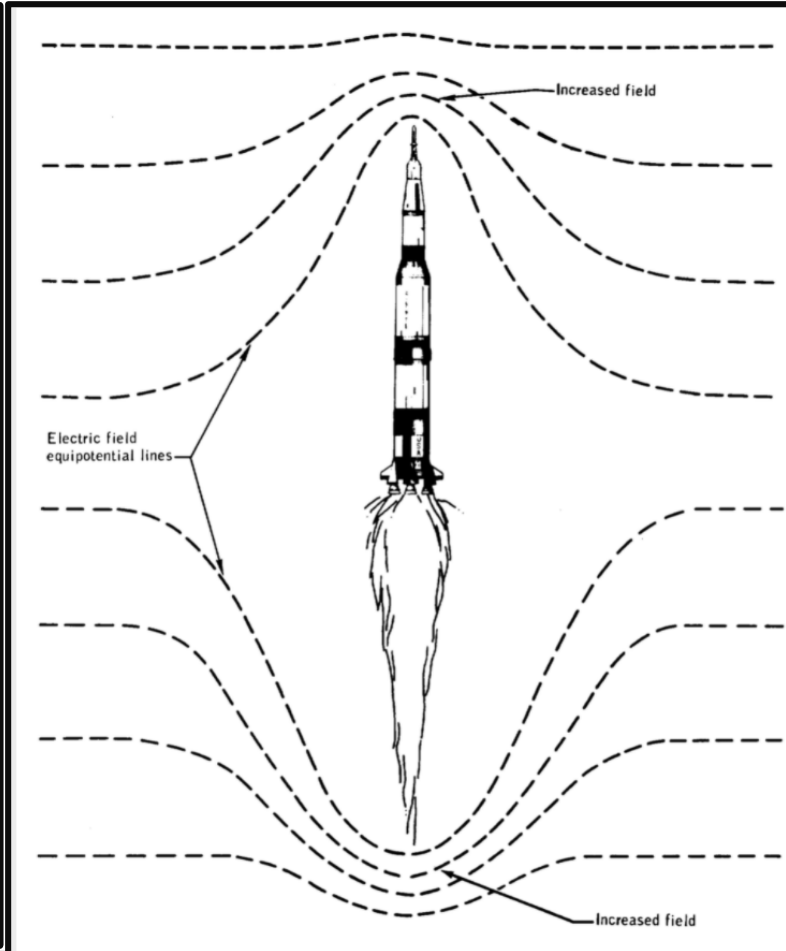


Lightning Launch Commit Criteria Development Lighting Advisory Panel



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The Lightning Advisory Panel (LAP) was formed following investigation of triggered lightning event on launch (AC-67) to provide rules and associated technical rationale for launch constraints to preclude triggered lightning during launch.

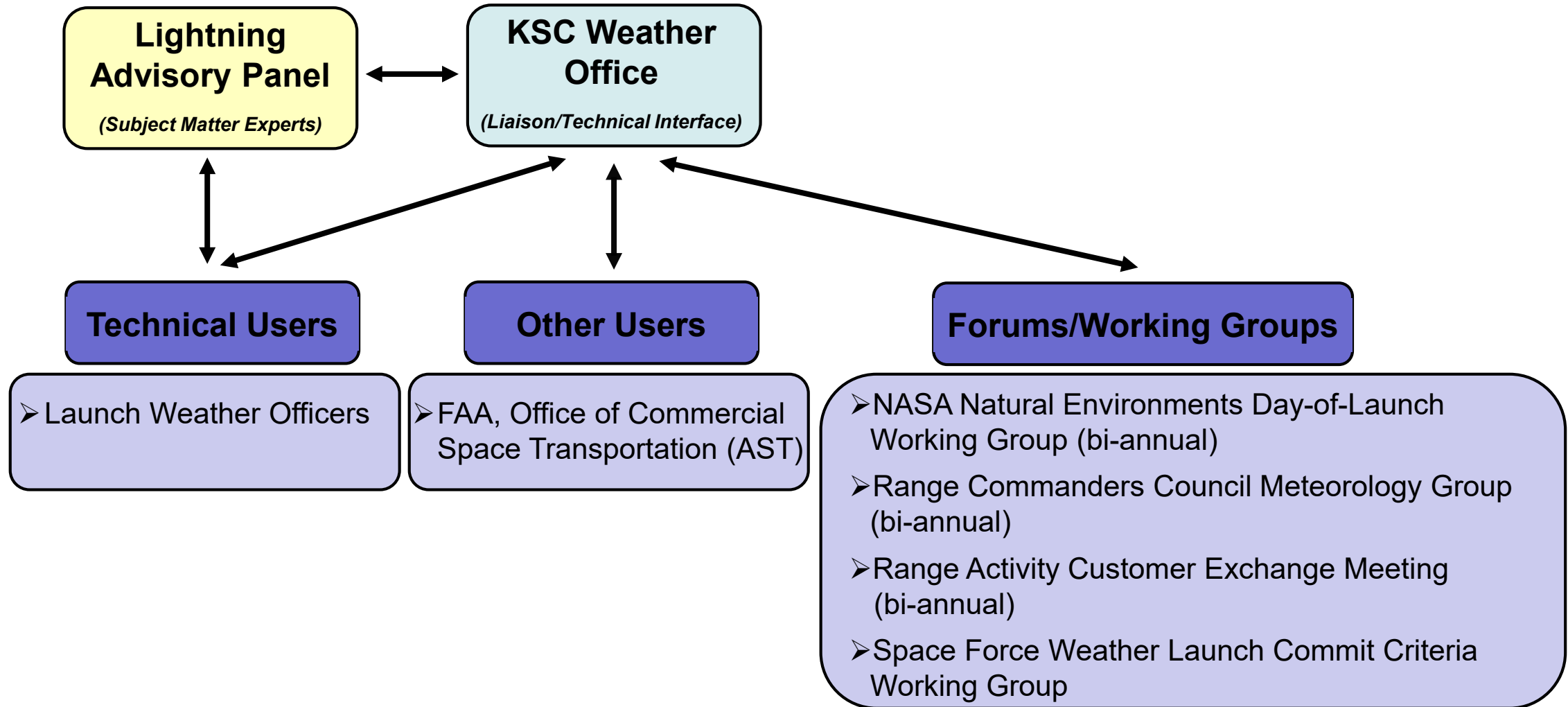


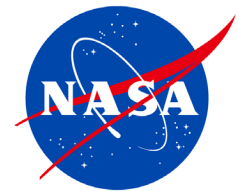


Interactions for Lightning Launch Commit Criteria Development & Notification



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Lightning Launch Commit Criteria Documents



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KSCWeather.ksc.nasa.gov

The screenshot shows the KSC Weather website interface. At the top left is the NASA logo and the text "KSC Weather". At the top right is the text "John F. Kennedy Space Center". Below this is a navigation menu with several items, each with a dropdown arrow. The "Lightning Launch Commit Criteria" item is highlighted with a red box. To the right of the menu is a large block of text providing an overview of the KSC Weather service and its role in supporting launch operations.

Lightning Launch Commit Criteria

- [NASA-STD-4010](#)
- [Rationales for the Lightning Launch Commit Criteria](#)
- [A History of the Lightning Launch Commit Criteria and the Lightning Advisory Panel for America's Space Program](#)

Kennedy Space Center (KSC) Weather is part of KSC's Spaceport Integration and Services Directorate. As a part of the multi-user spaceport, KSC Weather provides information on local weather capabilities, including instrumentation, weather data, and operational weather support. KSC Weather works closely with groups inside and outside of KSC, like other NASA Centers, the Department of Defense, and subject matter experts, to develop the weather requirements and Lightning Launch Commit Criteria (LLCC) that keep people and vehicles safe, while also allowing operations to proceed when possible. KSC Weather also interfaces and collaborates with other government agencies like the National Oceanic and Atmospheric Administration (NOAA) and the Federal Aviation Administration (FAA).

We ensure that operational weather support is available to KSC through tailored forecasts provided by the 45th Weather Squadron and observations from our local, densely populated instrumentation network. The local weather data is archived and made publicly available to researchers and engineers internal and external to NASA for applications that include, but are not limited to, vehicle design, launch availability analyses, the development of new tools and techniques that can be used to improve weather forecasts, and improving the scientific community's understanding of atmospheric science.

This website serves as a single resource for local weather forecasts, the KSC Weather Data Program, the Applied Meteorology Unit (AMU), and the Airborne Field Mill (ABFM) project. It also provides useful links related to other types of impactful weather, such as severe weather, tropical cyclones, space weather, and droughts.