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PNSWSH

Service Change Notice 19-86  
National Weather Service Headquarters Silver Spring MD  
825 AM EDT Thu Oct 10 2019

To:           Subscribers  
              -NOAA Weather Wire Service  
              -Emergency Managers Weather Information Network  
              -NOAAPORT  
              Other NWS Partners, Users and Employees

From:         Bruce Entwistle, Chief, Aviation and Space Weather Services  
              Branch

Subject:      Implementation of International Civil Aviation Organization  
              Space Weather Advisory Products Effective on or about  
              November 7, 2019

Effective on or about November 7, 2019, the NWS Space Weather Prediction Center (SWPC) will begin disseminating new International Civil Aviation Organization (ICAO) mandated space weather advisory products.

In November 2018, ICAO selected SWPC as one of the three global space weather centers (SWXC) to monitor and provide advisory information on space weather phenomena. These phenomena include events that may affect high-frequency radio communications, communications via satellite, Global Navigation Satellite System (GNSS)-based navigation and surveillance systems and/or pose a radiation risk to aircraft occupants.

The new ICAO space weather advisories are produced as conditions warrant according to ICAO Annex 3. Once an advisory is issued, it will be updated at 6-hour intervals from the nearest hour after the advisory is issued until the space weather phenomena are no longer detected and/or are no longer expected to have an impact. The SWXCs will maintain a 24-hour watch and issue space weather advisories covering the entire Earth.

The ICAO space weather advisories will provide information and services required for safe and efficient aircraft operations that users can employ for decision making. The intended use of the ICAO space weather advisories is to better prepare flight crews, operators, air navigation service providers, and civil aviation authorities when developing flight plans and operational procedures for managing flights in areas impacted by space weather events. Also, in terms of situational awareness, the space weather advisories need to be properly integrated into the existing docket of aviation considerations as prescribed actions, center requirements, and other

functional necessities to address the deleterious impacts to aviation in the State's purview.

ICAO space weather advisory users include the NWS, Federal Aviation Administration (FAA), international civil aviation authorities, domestic and international commercial airlines and private companies.

More information about ICAO Space Weather advisories can be found in the Product Description Document (PDD) linked below:

[https://nws.weather.gov/products/PDD/PDD\\_NewSpaceWeatherAdvisoryProducts.pdf](https://nws.weather.gov/products/PDD/PDD_NewSpaceWeatherAdvisoryProducts.pdf)

Please provide any comments/feedback on the provision of the [mandated] ICAO Space Weather advisory products to:

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National Service Changes Notices are online at:

<https://www.weather.gov/notification>

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