NATIONAL WEATHER SERVICE INSTRUCTION 20-101

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Training and Education

Training and Education NWSPD 20-1
SEASONAL READINESS SIMULATIONS

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SUMMARY OF REVISIONS: This directive supersedes NWSI 20-101, *Use of Weather Event Simulator*, dated October 27, 2016. Content changes are listed below:

- Renamed this Instruction "Seasonal Readiness Simulations".
- Changed annual requirement from four Weather Event Simulator cases per year to four seasonal readiness simulations per year.
- Added a section to describe the tools available to WFOs to develop/perform seasonal readiness simulations.

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Seasonal Readiness Simulations

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1 Purpose

The purpose of this Instruction is to define the minimum number of required seasonal readiness simulations to be completed each year by Weather Forecast Office (WFO) staff and Weather Service Office (WSO) American Samoa staff with forecast and warning responsibilities.

2 Definition

A seasonal readiness simulation is a training exercise for a student or group of students to review meteorological or hydrological data to demonstrate understanding of concept(s), verify process or procedure, and/or maintain proficiency in product or service delivery.

3 Annual Requirement

The Meteorologist-in-Charge (MIC) and Science and Operations Officer (SOO) at each WFO and MIC at WSO American Samoa will ensure staff with forecast and warning responsibilities complete at least four unique seasonal readiness simulations per year. As part of the four, one appropriate seasonal readiness simulation must be completed prior to the start of each significant weather season or high-impact event. These simulations will also be an opportunity for deployment ready staff to check off items from their checklists in order to stay current.

Offices are encouraged to develop seasonal readiness simulations that employ the whole office concept, with participation by all office staff (e.g., Electronics Technicians, Hydrologist, Administrative Support Assistant, and Information Technology Officer) as it is feasible or appropriate. They are also encouraged to plan collaborative seasonal readiness simulations that involve participation by other WFOs, RFCs, CWSUs, National Centers and partners.

4 Significant Weather Seasons and High-Impact Events

The MIC, in collaboration with the office staff, will define significant weather seasons and high-

impact events for the WFO or WSO. Significant weather seasons may vary among offices and can include periods characterized by severe convection, winter weather, heavy rainfall, fire weather, drought, aviation weather hazards, and so on. High-impact events can include the Super Bowl, major outdoor music festival, major auto race, hot air balloon festival, hazmat incident, train derailment, etc. At a minimum, all offices will define at least two significant weather seasons and one high-impact event.

5 Simulation Tools

Seasonal readiness simulations should include an analysis of meteorological or hydrological datasets. The method used to view and interrogate the datasets should align with the objective of the simulation.

For simulations where the objective is to maintain proficiency in convective warning operations or product issuance, the Weather Event Simulator (WES) should be used. For all other objectives, internet-based resources, applications such as GR2Analyst, or the WES may be used to view and interrogate datasets.