STATE OF ALASKA THE LEGISLATURE

2024

Source CSSJR 20(CRA) Legislative Resolve No. 28



Urging the United States Congress to address outages of Automated Weather Observing System stations and Automated Surface Observing System stations occurring in the state.

BE IT RESOLVED BY THE LEGISLATURE OF THE STATE OF ALASKA:

WHEREAS the Federal Aviation Administration operates and controls Automated Weather Observing System (AWOS) stations; and

WHEREAS the National Weather Service, the Federal Aviation Administration, and the United States Department of Defense cooperatively operate and control the Automated Surface Observing System (ASOS) program; and

WHEREAS there are 109 AWOS stations and 44 ASOS stations in the state; and

WHEREAS ASOS stations were created more recently than AWOS stations; and

WHEREAS, of the multiple types of AWOS stations, the state uses primarily AWOS-3 and AWOS-3PT stations; and

WHEREAS six AWOS stations in the state are private facilities owned and maintained by third parties; and

WHEREAS the three primary functions of AWOS and ASOS stations are to create valid weather observations, broadcast weather observations for a range of approximately 25 miles, and send the data out along landlines on Service A systems, so people can access the data by way of a computer desktop or telephone; and

WHEREAS, because of the state's unique geography, the role of aviation infrastructure and the performance of AWOS and ASOS stations are critical to the citizens of the state, especially those living in rural communities; and

WHEREAS the state Department of Transportation and Public Facilities reports that 82 percent of communities in the state are not connected to the main road system, and citizens of the state rely heavily or exclusively on aviation to connect with supply chains for food, cargo, medicines, and critical care services; and

WHEREAS, because of the state's extreme weather and remoteness, aviation infrastructure must be robust and must incorporate redundancies to reduce the functional effects of outages; and

WHEREAS many state and federal agencies, including the National Weather Service and the United States Department of Defense, rely on AWOS and ASOS stations to certify weather data for inclusion in critical forecasting models and national climate records; and

WHEREAS accurate and reliable weather data is crucial to maintain aviation safety; and

WHEREAS, from 2015 to 2023, 6.6 percent of all aviation accidents and 4.1 percent of all fatal aviation accidents recorded by the National Transportation Safety Board occurred in the state, even though the population of the state makes up only 0.2 percent of the population of the United States; and

WHEREAS, in 2021, ProPublica and Unalaska public radio station KUCB analyzed the number of deaths in the United States resulting from small aircraft crashes and found that, since 2016, 42 percent of these crashes occurred in the state, compared to 26 percent in the early 2000s; and

WHEREAS, according to Federal Aviation Administration outage logs, on an average day in 2023, about one out of every three AWOS and ASOS stations was experiencing some level of outage; and

WHEREAS, from 2019 through 2023, approximately 59 percent of all AWOS and

ASOS stations had a full outage and 77 percent of all AWOS and ASOS stations had a reduced-service outage; and

WHEREAS, from 2019 through 2023, full outages of AWOS and ASOS stations required a median of approximately 3.3 days to resolve, 10 percent of full outages were unresolved for more than 25 days, and five stations had full outages that remained unresolved for more than 154 days; and

WHEREAS, from 2019 through 2023, reduced-service outages of AWOS and ASOS stations required a median of approximately 4.4 days to resolve; 10 percent of reduced-service outages were unresolved for more than 54 days, and five stations had reduced-service outages that remained unresolved for more than 637 days; and

WHEREAS, from 2019 through 2023, approximately 47 percent of outages were caused by equipment-related failures, 44 percent of outages were caused by telecommunications-related failures, five percent of outages were caused by prime or standby power failures, and five percent of outages were related to another type of failure; and

WHEREAS station outages occur more frequently in AWOS stations than in ASOS stations; and

WHEREAS AWOS stations are older than ASOS stations, were designed before satellite communications systems existed, and still rely on landlines for transporting data through Service A systems; and

WHEREAS, when Service A systems are not working, dispatchers and pilots cannot check the weather at a destination before an aircraft departs, which means that, in many cases, pilots and carriers cannot adhere to rules set by the Federal Aviation Administration; and

WHEREAS commercial carriers in the state report many canceled flights because of AWOS and ASOS station outages; and

WHEREAS AWOS and ASOS station outages disrupt the critical flow of goods and passengers, create risks to human life and health in medical emergencies, delay essential medication delivery, and negatively affect the provision of perishable foods to communities;

BE IT RESOLVED that the Alaska State Legislature calls on the United States Congress to include language in the Federal Aviation Administration Reauthorization Act of 2024 to address AWOS and ASOS station outages occurring in the state and specifically to

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(1) require the Federal Aviation Administration to ensure the reliability of

AWOS and ASOS stations or other approved weather system technologies used at airports;

- (2) require the Federal Aviation Administration to take actions necessary to restore the full functionality and connectivity of weather station equipment and the associated telecommunications systems;
- (3) require the Federal Aviation Administration to publish on a publicly available Internet website a dashboard with ASOS and AWOS real-time status updates;
- (4) require the Federal Aviation Administration to include communications outages in its Notices to Air Missions;
- (5) require the Federal Aviation Administration and the National Weather Service to improve AWOS and ASOS spare part availability;
- (6) authorize the Federal Aviation Administration to, by regulation, provide for telecommunications redundancy via low-Earth orbit satellite Internet connectivity, or other approved weather technology, on all AWOS and ASOS stations in the state as a backup to landline connectivity;
- (7) authorize the Federal Aviation Administration to, by regulation, approve commercially available, aviation-specific weather reporting systems that could be installed at lower cost and used as backups or as replacements;
- (8) establish, by regulation, an AWOS and ASOS team specifically for the state, dedicated to keeping weather systems in the state operational; and
- (9) allow the Federal Aviation Administration to, by regulation, authorize the state Department of Transportation and Public Facilities to maintain AWOS and ASOS stations or other weather system technology; and be it

FURTHER RESOLVED that the Alaska State Legislature urges the Federal Aviation Administration and the National Weather Service to work with Senators Lisa Murkowski and Dan Sullivan and Representative Mary Peltola to address, in the Federal Aviation Administration Reauthorization Act of 2024, the AWOS and ASOS station outages occurring in the state; and be it

FURTHER RESOLVED that the Alaska State Legislature urges the Federal Aviation Administration and the National Weather Service to work with the state Department of Transportation and Public Facilities to address the AWOS and ASOS station outages occurring in the state; and be it

FURTHER RESOLVED that the Alaska State Legislature urges the Federal Aviation Administration to adopt regulations that address the AWOS and ASOS station outages occurring in the state in a manner that accounts for the size, weather, and remoteness of the state, reliance of the state on aviation, and other unique challenges of the state; and be it

FURTHER RESOLVED that the Alaska State Legislature urges the Federal Aviation Administration to include the initiatives in this resolution in the Alaska Aviation Safety Initiative, which is an effort designed to identify improvements and investments as part of a comprehensive approach to improving aviation safety in the state.

COPIES of this resolution shall be sent to the Honorable Pete Buttigieg, United States Secretary of Transportation; the Honorable Michael Whitaker, Administrator, Federal Aviation Administration; Sean Torpey, Executive Director for National Engagement and Regional Administration, Federal Aviation Administration; Michael O'Hare, Alaskan Region Regional Administrator, Federal Aviation Administration; Ken Graham, Assistant Administrator for Weather Services and Director of the National Weather Service, National Oceanic and Atmospheric Administration; Scott Lindsey, Regional Director of the National Weather Service Alaska Region, National Oceanic and Atmospheric Administration; the Honorable Mike Dunleavy, Governor of Alaska; the Honorable Ryan Anderson, Commissioner, Department of Transportation and Public Facilities; the Honorable Maria Cantwell, U.S. Senator; the Honorable Ted Cruz, U.S. Senator; the Honorable Sam Graves, U.S. Representative; the Honorable Rick Larsen, U.S. Representative; and the Honorable Lisa Murkowski and the Honorable Dan Sullivan, U.S. Senators, and the Honorable Mary Peltola, U.S. Representative, members of the Alaska delegation in Congress.