NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety
Washington, D.C. 20594

June 1, 2020

Group Chairmen's Factual Report – Attachment 15

DUT Weather Office visit record

OPERATIONAL FACTORS/HUMAN PERFORMANCE

DCA20MA002

Weather Observation Center Visit—Dutch Harbor Airport

10/22/2019

- Spoke with Andrea (observer on duty), Jim (supervisor), and Brock (observer)
- The office is manned from 7am – 7pm during winter hours (which is what they are on now)
- Pilots normally radio Weather Observation 20 minutes out for significant weather conditions
- *FlightAware* is used to observe who is flying into Dutch Harbor
- Weather Observation Center receives minute by minute AWOS information, but they cannot edit the data
- When flight crews fly into Dutch Harbor, they use the METAR
- The 420 system used by the observers has two anemometers There is one midfield near the AWOS anemometer, and one on the approach end of Runway 31. They use that system as a supplement for the AWOS information. The figure shows midfield wind speed and direction on the top display and 31 wind speed and direction on the bottom display. Altimeter settings are shown on a display to the left of the wind displays.
- METAR information comes from AWOS observations. They can edit the METAR with observed weather (sky conditions, and remarks like black water and observed peak wind). They cannot change the wind output on the METAR.
- The weather information that appears on their computer monitor is a 2 minute average of winds.
- The METAR is put out hourly.
- Observer uses FAA domes on a mountainside visible from the weather office (~320 feet elevation) assist in evaluating ceiling heights
- As wind gusts change, the weather observer communicates the changes on frequency radio. The transmitter is on deck of building. 129.5-frequency was previously used by Alaska Airlines; It is now used by PenAir flights to obtain weather as they approach the airport.
- Dutch weather operates on a frequency different from CTAF. This weather frequency is not listed on the Approach Charts for the airport, but is listed in the airport supplement.
- The observer has a view of the two bodies of water off the ends of runways 13 and 31. *Black Water* is a term communicated to the pilots by Dutch Weather. *Black Water* is when winds are spilling over from Ballyhoo Mountain down into the water. (The airport sits at the base of Ballyhoo Mountain.) The observers identify black water as black streaks in the water. This indicates downdraft conditions.
- Weather Observation Specialists study the National Weather Service Manual, then take an exam that is proctored. They receive a certificate of authority to take weather observations.
- After that, observers can begin on-the- job training and work with another observer. The observer on duty said she worked with someone else for about 2 months before working on her own.
- Weather Observation Specialists must stay current with 5 observations a month.
- Michelle is the supervisor and has been with Dutch weather for 18 years. She was the observer on duty at the time of the accident.

Instruments at the weather observer's station at DUT.