Initial Information

• Mountain Air Service - (DHC-2 Beaver)
  • One pilot, one airplane
  • Pilot had 11,000 total flight hours

• Taquan Air - (DHC-3 Otter)
  • 25 pilots, 13 airplanes
  • Pilot had about 25,000 total flight hours
Garmin GSL 71

- Unit was OFF during the accident flight
- Unit was likely turned OFF during routine maintenance two weeks before the accident
- Unit was never subsequently turned ON
- Otter pilot unaware the unit was OFF
Taquan Training and Operating Procedures

• Otter pilot 2019 recurrent training
  • Completed 8 hours of Capstone EFIS training
  • Lacked understanding of GSL 71 purpose

• Taquan checklists
  • No line item for the GSL 71
  • Checking the GSL 71 control head knob was not part of the Otter pilot's standard pre-takeoff flow
Pilot Collision Avoidance – FAA Resources

- FAA Aeronautical Information Manual (AIM) and Pilot’s Handbook of Aeronautical Knowledge (PHAK) address pilot's role in collision avoidance.
- Neither publication specifically addresses the limitations of human visual monitoring, the benefits of CDTI, or the importance of alerting.
Pilot Collision Avoidance – Industry Groups

- Industry groups could elevate awareness of midair collision risks and countermeasures
- Brief members on the details of this accident
- Encourage members to install and effectively utilize traffic displays with alerting
Taquan Air Safety Management

- Taquan lacked an SMS at the time of the accident
- SMS guidance indicates operators should perform a risk assessment when equipment changes
- SMS could have identified the loss of alerting that resulted from the Capstone UAT upgrades
- SMS could have identified the risk of the GSL 71 being left in the OFF position