Best Practices & Mitigation Strategies for Special Airports

Best Practices

Pre-departure or Dispatch
- Consider Special Training and Qualification required for JAC (Simulator training, Operational Experience, Line check, etc.)
- Consider the impact of the airport elevation on aircraft performance such as density altitude and true airspeed. High airport elevation (density altitude, true airspeed)
- Consider the impact of a relatively short runway (for the airport elevation)
- The areas beyond the paved surface of the runway are short (blast pads are not useable portions of the runway)
- MEL – consider limitations, especially with multiple items
- When landing Runway 19, be prepared for a landing downwind and downhill. Check aircraft performance limitations prior to dispatching into Jackson Hole to ensure performance capabilities.
- Weather knowledge is critical - Know the weather forecast before you go. Changing weather and wind conditions could exceed aircraft landing limitations.
- Noise abatement does not apply to missed approach
- Turbojet aircraft have a limited margin for error when landing at JAC. Be prepared for possible failures/malfunction/surprises

Approach
- Stabilized approach to touchdown - on speed, on path, configured
- Touchdown point- within first third (2000 ft) of runway (consider 1000 ft target)
- No extended flares - make a positive touchdown
- If the approach is unstabilized go around. (If current situation does not look right for any reason)

Braking
- Use autobrakes if available and per operator policy
- Pilot monitoring must immediately notify Pilot flying of autobrake disengagement/failure
- Full manual braking usually provides a greater deceleration rate than maximum autobrake settings
- When manually braking, use steady pressure, and do not pump the brakes.
- JAC runway may be slippery from rubber, rain, snow, ice
- Provide a braking action report (PIREP) as soon as permissible

Spoilers/Speedbrakes
- If auto-extension of the spoilers/speedbrakes fail, extend manually
- Pilot Monitoring must notify pilot Flying of the activation or failure of spoiler/speedbrakes immediately
- Most effective during high-speed portion of landing

The following information expands upon SAFO11011.

SAFETY Alerts for Operators (SAFO) are posted at:
http://www.faa.gov/other_visit/aviation_industry/airline_operators/airline_safety/safo/
More important than reversers

**Thrust Reversers**
- Not as important as Spoilers/Speedbrakes. Crew must understand effectiveness
- Caution (for asymmetric thrust) when deploying in crosswinds and on slippery runways

**Performance**
- Minimize fuel tankering as this could extend the aircraft landing distance.
- Avoid landing with a tailwind if possible (density altitude, true airspeed)
- Understand correlation between higher density altitude and increased landing distance due to higher true airspeed.
- Obtain latest weather and runway conditions (braking action reports, friction values and contaminant type and depth) - Always use the most current weather for calculating aircraft performance.
- Clearly understand performance margins based on landing data used

**Training**
- Generic training for challenging airport operations- Simulator sessions, Check Airman programs, manuals.
- Provide online training and simulated re-creations of approaches into Jackson Hole
- Simulator training using high altitude models – landing distance charts
- Dispatcher/Flight Follower/Flight Tracker training for special airports

**Mitigation Strategies**

To further assist in the reduction of runway excursions, these additional items were evaluated and should be considered by operators.

- Operators should consider sharing Flight Operations Quality Assurance data for JAC
- Flight departments, training centers and industry should work together to produce training videos simulating approaches during a clear day, a winter visual, and an instrument approach with visibility minimums. These videos should be pilot narrated with an explanation of visual cues, approach techniques, and working with air traffic.
- Captain only approach and landing
- Require review of FAA Advisory Circular 91-79 (Runway Overrun Prevention) as appropriate
- Review of SAFO 06012 - Landing Performance Assessments at Time of Arrival (Turbojets)

To highlight the risk of an overrun, in 2010 the FAA has added runway excursion notes in the Airport Facility Directory and on the FAA JAC Terminal Procedures Publication Airport Diagram.