

Appendix A
Airport Inspection Report

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MEMORANDUM

DATE: June 30, 2020

TO: Jessica Wuttke-Campoamor, Central Region DOT&PF Project Manager

FROM: Tor Anderzen, PE

RE: Existing Airport Conditions Observed During Birchwood Airport Site Inspection

HDL Engineering Consultants, LLC (HDL) completed a site investigation of the Birchwood Airport on June 23, 2020. The investigation was performed by Tor Anderzen, P.E. and Tae Voigt between 8:00 AM and 1:30 PM. The weather at the time of the investigation was overcast with light winds.

Tor and Tae started the investigation by meeting ADOT&PF Maintenance Superintendent, Kurt Koehler, to discuss the general condition of the airport and any known deficiencies. Following the meeting, they performed a “walk-through” of the airport areas. The following observations were noted:

Runway 02L/20R:

- Runway dimensions are 4,010 feet by 100 feet.
- The runway surface was paved in 2013 and is in good condition.
- Pavement markings are worn and are in fair condition, as noted in the 2019 5010 inspection.
- Airport users and maintenance noted safety concerns associated with the location of the RSA fence line along Runway 2L.
- Runway lights are in fair condition.

Runway 02R/20L:

- Runway dimensions are 2,200 feet by 50 feet.
- This runway is primarily used by aircraft with tundra tires in summer and ski equipped aircraft in winter.
- The north 600 feet of the runway is paved, this part of the runway was rehabilitated in 2018 and is in good condition. So are the pavement markings.
- The southern 1,600 feet of the runway is surface with gravel and in fair condition.
- During the inspection it was noted that pilots using 2R landed before the runway and landed on the Taxiway A instead. This method of landing makes the 4-foot fence and the trees just outside airport property a concern upon landing.
- Cones runway edge markers are in fair condition.

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Runway Safety Areas:

- A portion of the RSA and the entire RPZ are not on airport property for Runway 2L.
- Information has been distributed to lease lot owners informing them not to plow within 10 feet of lighting structures. At times individual leaseholders plow after DOT&PF maintenance and leave snow piled in unauthorized areas.

Taxiways:

- Taxiways A and B are parallel taxiways to Runway 02L/20R. Taxiway A is 240 feet from the runway centerline, Taxiway B is 300 feet
- Taxiways C, D, E, and G connect the parallel taxiways to Runway 02L/20R.
- All taxiways except the southern portion of Taxiway A are equipped with medium intensity taxiway edge lights (MITL). Lights are operable and in fair condition. The Maintenance Superintendent reported that the existing constant current regulators are overloaded and would like the lights converted to LEDs or a new regulator.
- Taxiway B lights extend almost to the new building on the southwest side and are hidden by building materials.
- The paved portion of Taxiway A prior to the Runway 20L safety area is in poor condition with weeds growing through cracks in the pavement.
- Taxiway B, C, D, E, and G were repaved in 2019 – pavement condition and markings are in good condition,

Signage:

- Runway Signs: At all hold locations there are L-858 Style 2, Class 2 signs that were installed in May, 2005. Signs are operable and in fair condition.

Aprons

- The airport has three primary aprons: the Northeast, the Southeast, and the West apron. There is also a transient apron that provides short-term tiedown areas available to transient pilots.
- The Northeast Apron was reconstructed and paved in 2019 and the pavement is in good condition. The apron measures 424 feet by 920 feet and provides eighty (80) 25-foot by 20-foot tie-down spaces. Of these 80 spaces, sixteen (16) include additional 41-foot wide wingtip tie-downs and sixty-four (64) include additional 38-foot wide wingtip tie-downs.
- The Southeast Apron was reconstructed and paved in 2019 and the pavement is in good condition. The apron varies in width between 150 feet and 233 feet over its 1,000-foot length. It provides thirty-eight (38) 25-foot by 20-foot tie-downs for lease. The apron is primarily used by tenants with smaller aircraft using tundra tires or skis that rely on Runway 02R/20L for their operations.
- The west apron measures 48 feet by 3,151 feet and is located between Taxiway B and the lease lots on the west side of the airport. The southern 1,400 feet of the west apron is gravel and is in fair condition. The paved portion of the apron was reconstructed and paved in 2019 and is in good condition. There is no aircraft parking on the west apron.

- The transient apron measures 140 feet by 226 feet and was reconstructed and paved in 2019. There are seven (7) 25-foot by 20-foot tie-downs available on the transient apron, three include additional 36-foot wingtip tie-downs and four include additional 38-foot wingtip tie-downs.

Visual Aids:

- Lighted wind cone and segmented circle markers are installed in the infield area between Runway 02L/20R and Taxiway B. The wind cone was replaced in 2005 and is nearing the end of its useful life.
- There is an unlit supplemental wind cone installed east of Runway 02R/20L. The wind cone was erected and is maintained by local pilots. It is not an official visual aid. It currently sits on a moveable foundation, is in poor condition, and is not correctly sited for its application.
- The segmented circle markers are in very good condition and are at most a few years old, the as-built from the 2013 runway construction does not include installation of segmented circle markers. The segmented circle markers include traffic pattern indicators directing circling traffic to the west of the field.
- Airport Beacon is installed on a 51-foot mast that was erected in 1977. The overall height of the mast and beacon is approximately 62 feet. The beacon has likely been replaced by maintenance staff at a later date. The mast and beacon are in good operational condition.
- Runway 20R is equipped with visual approach slope indicators (VASIs) that are owned and maintained by DOT&PF. The 4 Box VASI, type FA-9458, was replaced in April 2005 and is in operational and fair condition.
- Runway 02L/20R has medium intensity edge lights (MIRL) that are in fair condition. Existing light fixtures contain incandescent bulbs. DOT&PF maintenance noted that the regulator is overloaded and expressed their preference to switch to LED style fixtures.

Weather Equipment:

- The airport is equipped with a Type III-B Automated Weather Observation System (AWOS) located on the west side of the airfield, adjacent to the transient apron. The AWOS is reporting data and appears to be in good condition. However, the AWOS is located within 600 feet of nearby hangars, which does not meet FAA siting criteria.

Airport Facilities:

- Access to the regulator building is located next to an existing lease lot, which could make construction on or inside the building difficult. The L-282 regulators are single phase. There are two regulators in use and one spare. The labeling of "Runway" and "Spare" are not correct. DOT&PF maintenance noted that the regulators are overloaded. Maintenance is not aware of any lighting projects within the last 26 years. However, DOT&PF maintenance expressed that they would like to see LED lights used at the airport.

- DOT&PF does not maintain Airport Pilots Lounge located on the Transient Apron. building is part of a legislative grant from 1979/81. The septic has reportedly failed and will need work.
- The Snow Removal and Equipment Building has four bays. Two bays are used by the Chugiak Fire Department for free for perpetuity as part of the legislative grant from 1979/81.
- The airport perimeter fence is overgrown with vegetation. The gates are constantly left open and fence does not keep moose out in some areas. Users suggested adding a one-way moose gate to help direct moose out of the airfield.
- There are eight general use gates (1, 2, 12, 18, 19, A, B, C) and fourteen personal use gates (3-11, & 13-17). Most gates are left open or are in poor condition. Security is an issue due to animal, traffic, and people incursions. People are often seen walking dogs off leash on airport property.

Airport Maintenance:

- During the winter snow plowing of runway, taxiways, and aprons is done by DOT&PF airport maintenance. Snow plowing of lease lots is done by the individual leaseholders.