## 11-6-19 SDCL REVIEW AIP 3-46-0048-031 & 032 RUNWAY 14-32 AND TAXIWAY A SEPARATION PROJECT RAPID CITY REGIONAL AIRPORT

## **DESCRIPTION OF REQUEST**

The Rapid City Regional Airport requests approval from the Planning Commission in regards to the 11-6-19 SDCL review for the *Parallel Taxiway A / Runway 14-32 Separation Project*. Project development has been coordinated with the Federal Aviation Administration and the South Dakota Department of Transportation Office of Aeronautics and meets their design criteria.

The Rapid City Regional Airport proposes to increase the distance between the Runway 14-32 centerline and the Taxiway A centerline from 262 feet to 450 feet to enhance safety. The Federal Aviation Administration's Advisory Circular 150/5300-12 and 150/5340 –1E requires the runway centerline to parallel taxiway centerline separation to be a minimum of 400 feet and the standard location for holding aircraft to be 250 feet from runway centerline.

In 1970 the FAA imposed restrictions on operations at the Rapid City Regional Airport to provide for adequate safety standards. Specifically, the FAA prohibited the use of the taxiway within 400 feet of the runway centerline for simultaneous use by large aircraft (Convair 240 and larger). In other words, the simultaneous use of the runway and parallel taxiway was not permitted when two large aircraft were involved. However, an aircraft was permitted at the holding line at the end of the runway.

In 1983, a waiver was granted which permitted the holding markings to be placed at 200 feet from the runway centerline rather than the required 250 feet since the separation distance between the runway centerline and taxiway centerline was less than the required 400 feet.

In 2003 the FAA informed the Airport that the waiver would not be renewed for safety concerns and that the Airport must implement improvements to meet current design criteria or enforce the restriction on the movement of multiple aircraft within the previously discussed zone. The Airport and the FAA agreed that the movement restrictions would greatly hamper the capacity of the Airport and have a negative impact on commercial services and begun the project development process to increase the separation between the Taxiway A and Runway 14-32 and bring the Airport into compliance with FAA standards for separation distances and holding markings.

The project is being developed in four phases:

- Phase 1 Construct Earthwork for Taxiway A South. This phase consist of the earthwork to increase the separation to 450 feet between centerlines and the relocation of the perimeter security fence to accommodate the earthwork activities.
- Phase 2 Construct Pavements for Taxiway A South. This phase consists of the final grading, placement of base courses, placement of concrete pavements, installation of taxiway lighting, installation of a pavement conditions sensor system, relocation of internal communication facilities and miscellaneous activities.
- Phase 3 Construct Earthwork for Taxiway A North. This phase consist of the earthwork to increase the separation to 450 feet between centerlines and the relocation of the perimeter security fence to accommodate the earthwork activities.
- Phase 4 Construct Pavements for Taxiway A North. This phase consists of the final grading, placement of base courses, placement of concrete pavements, installation of taxiway lighting, installation of a pavement conditions sensor system and miscellaneous activities.