

Chapter 2

Purpose and Need for the Action

The City of McCall and the McCall Municipal Airport are required to comply with FAA design standards as they are a recipient of Federal funding. The purpose of the proposed project is to bring the runway/taxiway centerline separation at the Airport into compliance with current FAA design standards. The existing runway/taxiway centerline separation is 200 feet. The present separation of 200 feet at McCall is based upon a previous standard prescribed in Advisory Circular (AC) 150/5300-4B, *Utility Airports* (1983-1989), which applied when the runway and taxiway was constructed. According to the current AC 150/5300-13, *Airport Design*, a minimum runway/taxiway centerline separation of 240 feet is required.

FAA design standards guide the widths, minimum clearances and other dimensional criteria for runways, taxiways, safety areas, aprons, and other physical features. The Airport Reference Code (ARC) is a coding system used to relate and compare airport design criteria to the operational and physical characteristics of the aircraft intended to operate at the Airport. The ARC is comprised of two components.

The first component, depicted by letter (e.g., A, B, C, D or E) is the aircraft approach category and relates to aircraft approach speed based upon operational characteristics. An aircraft's category is based on 1.3 times its stalling speed at maximum gross weight in the landing configuration. Speeds and examples of the aircraft approach category are A: less than 91 knots (Beech Bonanza); B: between 91 knots and less than 121 knots (Dassault Falcon 900); C: between 121 knots and less than 141 knots (Gulfstream III); D and E represent even faster aircraft.

The second component of the ARC is the airplane design group. The airplane design group is based on an aircraft's physical characteristics (wingspan or tail height, whichever is most demanding) and is depicted by a Roman numeral (e.g. I, II, III, IV, V or VI). **Table 2A** defines each group:

Table 2A. FAA Airplane Design Groups

Airplane Design Group	Tail Height (ft)	Wingspan (ft)	Example
I	<20	<49	Beech Baron
II	20 - <30	49 - <79	Cessna Citation II
III	30 - <45	79 - <118	Gulfstream V
IV*	45 - <60	118 - <171	Boeing 757
V*	60 - <66	171 - <214	Boeing 747
VI*	66 - <80	214 - <262	Airbus 380

* Operations not typical at the Airport.

Generally speaking, aircraft approach speed applies to runways and runway-related facilities, while aircraft wingspan/tail height is primarily related to separation criteria associated with taxiways and taxilanes.

In 2007, the City of McCall, with assistance from the FAA, prepared an Airport Master Plan. The Plan included an inventory of airport facilities, forecasts for future airport demand, and a comparison of facilities to FAA design standards. Based upon this Master Plan, the appropriate ARC for McCall is B-II. As previously indicated, the runway/taxiway centerline separation requirement for the Airport (ARC B-II) is 240 feet. However, the Master Plan also indicated the Airport is forecasted to become an ARC C-II, with a long-term designation of ARC C-III.

In summary, the purpose of the project is to increase runway/taxiway centerline separation from the currently deficient 200 feet to a minimum 240 feet. The project is required for Airport compliance with the minimum FAA standards.

2.1 Proposed Action

While the current aircraft operations at the Airport comprise an ARC B-II, operations by larger aircraft such as the Gulfstream II, III and IV, and Learjet 35 and 45 series do occur at the Airport. The 2017 forecast in the Master Plan projects the Airport's ARC to change from B-II to C-II. The standard runway/taxiway separation for C-II is 300 feet, while C-III is 400 feet. Accordingly, the City of McCall proposes to increase the runway/taxiway separation to meet FAA standards and the future needs of the Airport. The FAA will evaluate at a minimum a runway/taxiway separation of 240 feet for the environmental impact.

The McCall City Council, after giving great consideration to the alternatives, voted on January 28, 2010 the proposed action to be considered within this EA will be a runway/taxiway centerline separation of 300 feet at a taxiway width of 50 feet. Additionally, land will be acquired out to the 400 feet separation to ensure future land use compatibility in the event the Airport becomes a C-III in the future.

The proposed action is further described in Chapter 3, *Alternatives*.

2.2 Requested Federal Action

The Federal Action requested is funding for construction of the proposed taxiway relocation.

2.3 Timeframe of the Proposed Action

The Proposed Action is anticipated to be constructed in phases, during 2012 and 2013.