



## St. Cloud Regional Airport (STC) Instrument Landing System (ILS) Project

The St. Cloud Regional Airport (STC) has two runways. Runway 13-31 is the primary runway and is designed to accommodate existing air carrier, air cargo, business, and general aviation aircraft. To support the use of the primary runway, the airport in concert with the Minnesota Department of Transportation (MnDOT) has installed an Instrument Landing System (**ILS**) on both Runway 13 and 31. The ILS is a ground-based navigational system that delivers radio signals to the aircraft providing the pilot both vertical and horizontal guidance necessary to land at the airport in poor visibility. In addition to the ILS, the airport has a sequence of lights called an Approach Lighting System (**ALS**) which further improves the airport's capability. STC has an ILS and ALS for both Runway 13 and 31. This enhanced feature is critical for services such as medical flights, air carrier and cargo operations, and business jet flights.

MnDOT Office of Aeronautics is planning to replace the ILS at STC on Runway 31 which has a displaced threshold that neither the FAA nor MnDOT Office of Aeronautics prefers on runways for safety reasons. To remove the displaced threshold, the ILS and the ALS will need to be relocated. Regardless of the replacement of the ILS, the ALS has outlived its useful life and is becoming more expensive to maintain. STC proposes to relocate the Runway 31 ILS and ALS while simultaneously upgrading the equipment. This cost-effective solution would eliminate the displaced threshold and upgrade both the ILS and ALS systems.

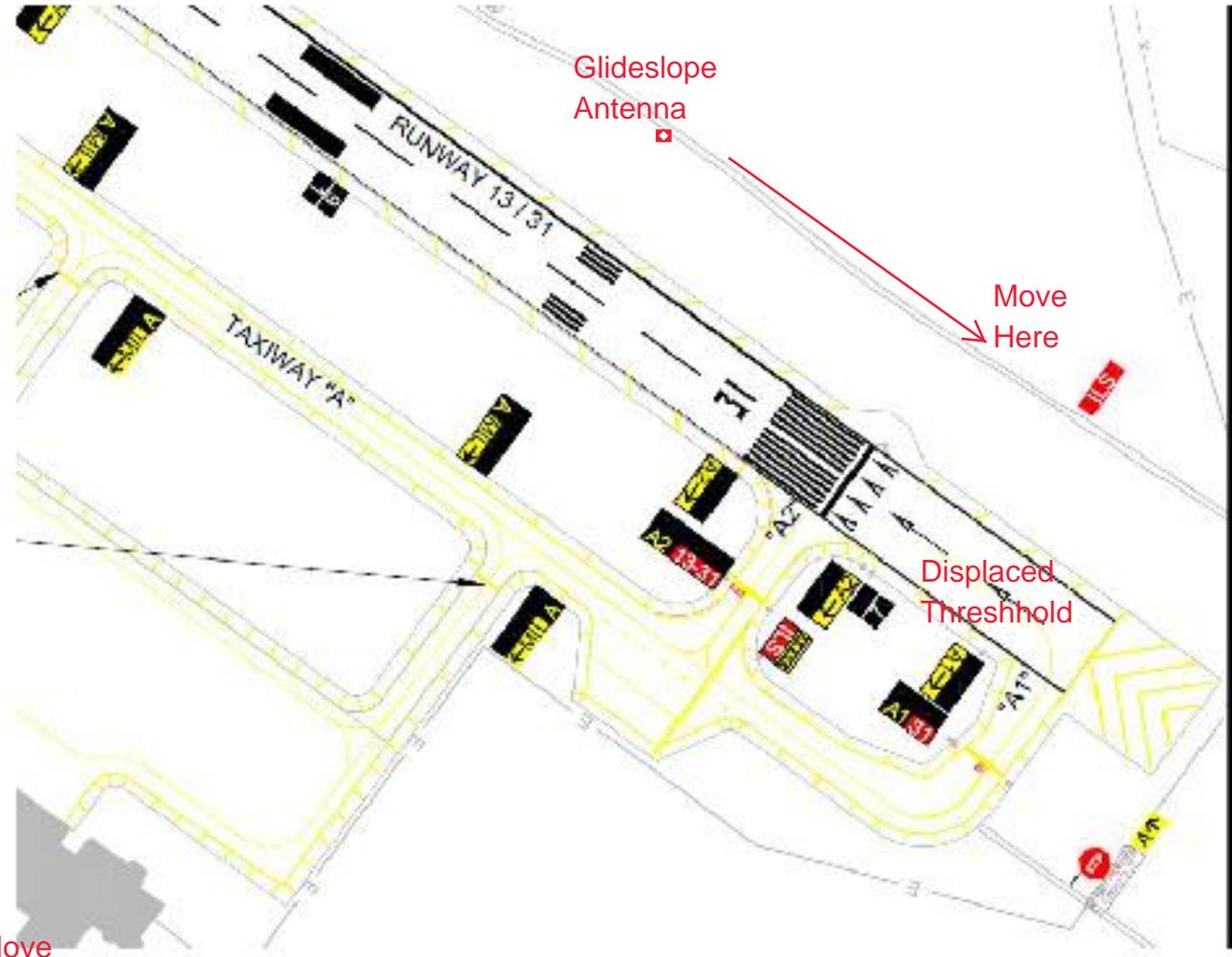
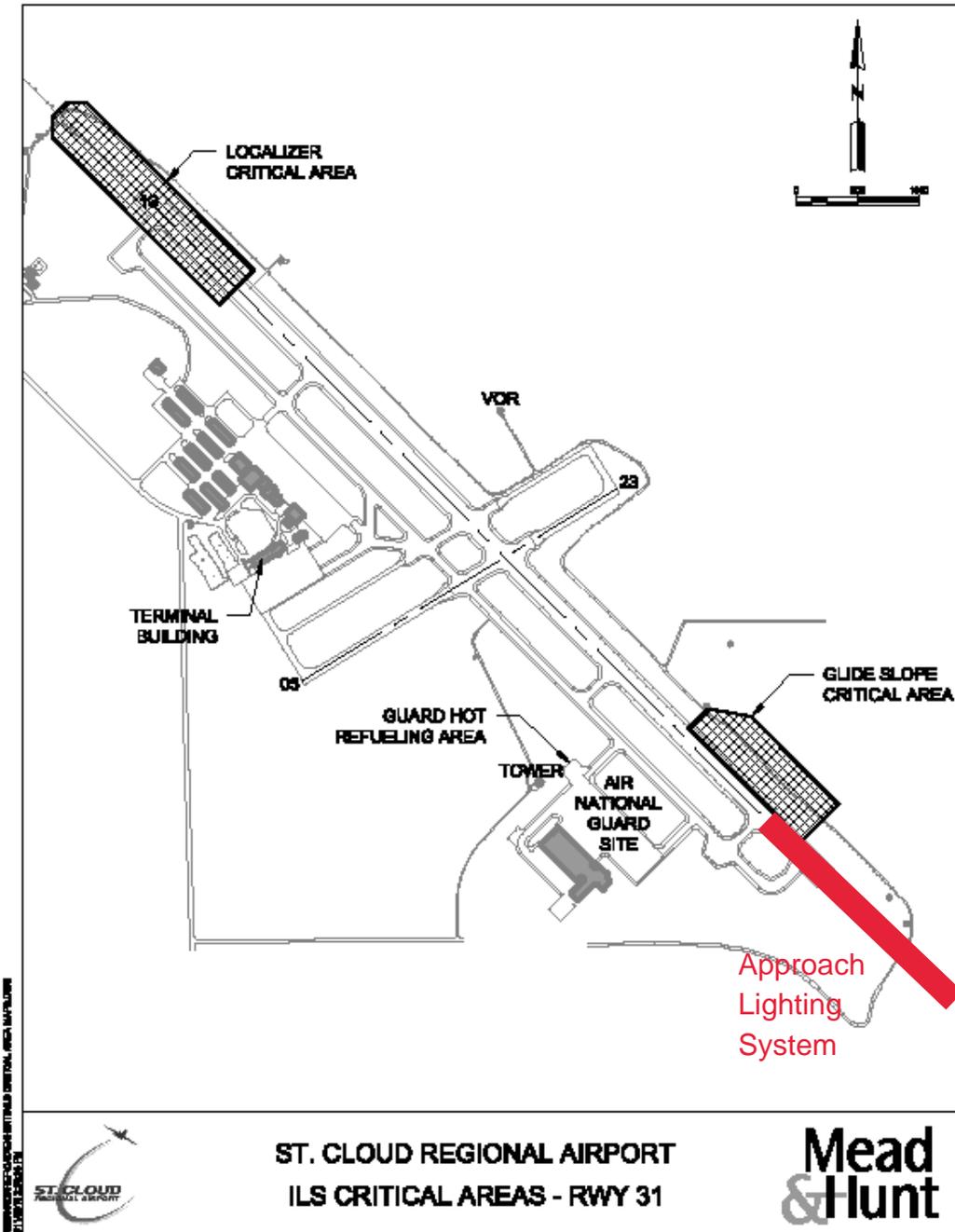
The costs associated with the replacement of the ILS and ALS systems are not eligible for FAA funding, but the costs would be eligible for state funds. Although this would be eligible through the state, MnDOT Office of Aeronautics has indicated they do not have funds available for the Approach Lighting System (ALS).

**Issue:** Both the ILS and ALS are beyond their 20-year life span and need replacing. In fact, they're both almost 40 years old. The replacement of both the ILS and ALS at the same time will allow the airport to eliminate the displaced threshold on Runway 31. The **bonding request is \$3.9M**. The estimated total cost of this project for the replacement and relocation of the ILS and ALS is approximately \$6M.

**St. Cloud Regional Airport (STC)  
 RUNWAY 13-31 NAVAID RELOCATION**

Project Elements	APPROX COST	FAA Share		MnDOT Share		STC Share	
		%	\$	%	\$	%	\$
* - Coordinate New Instrument Approach Procedure / Flight Check	\$ 100,000.00	0%	\$ -	100%	\$ 100.00	0%	\$ -
Environmental Assessment	\$ 350,000.00	90%	\$ 315,000.00	5%	\$ 17,500.00	5%	\$ 17,500.00
Land Acquisition (3 ACRES) / Appraisal / Acquisition Assistance / Update Exhibit A	\$ 300,000.00	90%	\$ 270,000.00	5%	\$ 15,000.00	5%	\$ 15,000.00
AGIS	\$ 300,000.00	90%	\$ 270,000.00	5%	\$ 15,000.00	5%	\$ 15,000.00
13 LOC / 31 GS Civil Site Preparation / Shelter - Road Relocate/ M&H design-CA Service	\$ 500,000.00	0%	\$ -	0%	\$ -	100%	\$ 500,000.00
* - Runway 13-31 Glide Slope & Localizer Equipment Procurement and Installation	\$ 900,000.00	0%	\$ -	100%	\$ 900,000.00	0%	\$ -
Runway 31 MALSR Design (MALSR, Site work, Foundations, Shelter)	\$ 500,000.00			0%	\$ -	100%	\$ 500,000.00
Runway 31 MALSR Equipment Procurement and Installation	\$ 2,500,000.00	0%	\$ -	0%	\$ -	100%	\$ 2,500,000.00
Runway 13-31 Marking (Design / CA-CO, Removal, install)	\$ 250,000.00	90%	\$ 225,000.00	5%	\$ 12,500.00	5%	\$ 12,500.00
Contingency for Inflation on equipment(15%)	\$ 300,000.00	0%	\$ -	0%	\$ -	100%	\$ 300,000.00

**Totals \$ 6,000,000.00      \$ 1,080,000.00      \$ 960,100.00      \$ 3,860,000.00**



# STC ILS Navigational Aid and Appch light system

**Localizer Antenna**



**Glide Slope Antenna**



**Approach Lighting System**

