



FAA
Weather Sensors and Display Systems
AJW-1444

White Paper – Low Level Windshear Alert System – Relocation/Sustainment (LLWAS-RS) Meteorological Site Survey

Shreveport Regional Airport, LA (SHV)

Survey Date: 9 January 2020

Report Date: 21 January 2020

Background

There are currently plans for an 850ft extension to Runway 06 at SHV. With the proposed extension, the runway will not be properly protected by the Low Level Windshear Alert System (LLWAS) in accordance with the Siting Order (FAA Order 6560.21A). The LLWAS Siting Order states that the protection must be provided out to a point 2,500 feet beyond the runway threshold. With an 850 foot extension, protection will only be provided out to 2,300 feet. Based on this information, one additional sensor will be required with the runway extension. The purpose of this report is to document potential sites for the additional remote station.

Analysis

A formal site survey was conducted at SHV on 9 January 2020 with representatives from AJW-1444 and Central Service Area (CSA) NAS Planning & Integration. A thorough search was performed to identify potential sites that would meet the siting requirements set forth in FAA Order 6560.21A. These potential sites were surveyed and documented and make up the remainder of this report.

Conclusions/Recommendations

In order for SHV LLWAS-RS to comply with FAA Order 6560.21A, an additional remote station should be located at either the preferred site, alternate site, or within the site search area described in this report.

If a site cannot be acquired at either of the preferred or alternate sites, it is imperative that the LLWAS Siting Meteorologist be contacted at (405) 954-0974. In the case of this system, slight deviations from location recommendations could severely impact the operations of the SHV LLWAS-RS. Constructing the new pole at a different location without first coordinating with the LLWAS Siting Meteorologist could result in the construction of a useless site. Such construction would be both costly and time consuming.

SHV Remote Station Site Search Area #9 (Preferred Site)

Latitude: 32° 26' 28.84" N	Longitude: 93° 51' 15.86" W
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<input checked="" type="checkbox"/> GPS Accuracy: ± 5 m	<input type="checkbox"/> Estimated Method:	<input type="checkbox"/> Other
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Physical Description: City of Shreveport Fire Station #13. South side of property.



PROTECTED RUNWAY:	06-24
BOUNDARIES:	See map above for preferred site
PROPERTIES:	City of Shreveport Contact: Stacy Kuba, Shreveport Airport Authority (318) 673-5370
POWER:	Underground. Transformer at fire station
ACCESSIBILITY:	Public roads and fire station parking lot
OBSERVED SOIL STRUCTURE:	Appears stable and well drained
TERRAIN FEATURES:	Flat

SHV Remote Station Site Search Area #9 (Preferred Site) – Cont'd

Preferred Site



Recommended Pole Height

Comments: 130 feet.

SHV Remote Station Site Search Area #9 (Preferred Site) – Cont'd

OBSTRUCTIONS:	
View North	 <p>Trees: Height: 75-85 feet, Distance: 300 feet.</p> <p>Fire Station: Height: 25 feet, Distance: 100 feet.</p>
View East	 <p>Trees: Height: 75-85 feet, Distance: 300 feet.</p>
View South	 <p>Trees: Height: 75-85 feet, Distance: 500 feet.</p>
View West	 <p>Trees: Height: 70-80 feet, Distance: 700 feet.</p> <p>Church Building: Height: 25 feet, Distance: 400 feet.</p>
REMARKS: None	

SHV Remote Station Site Search Area #9 (Alternate Site)

Latitude: 32° 26' 37.11" N	Longitude: 93° 51' 36.34" W
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<input checked="" type="checkbox"/> GPS Accuracy: ± 5 m	<input type="checkbox"/> Estimated Method:	<input type="checkbox"/> Other
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Physical Description: City of Shreveport, Department of Water Utilities



PROTECTED RUNWAY:	06-24
BOUNDARIES:	See map above for alternate site and search area
PROPERTIES:	City of Shreveport
POWER:	Overhead with transformer nearby
ACCESSIBILITY:	Public roads
OBSERVED SOIL STRUCTURE:	Appears stable and well drained.
TERRAIN FEATURES:	Flat

SHV Remote Station Site Search Area #9 (Alternate Site) – Cont'd

Alternate Site



Recommended Pole Height

Comments: 130 feet.

SHV Remote Station Site Search Area #9 (Alternate Site) – Cont'd

OBSTRUCTIONS:

View North



Water Tanks:

Height: 42 feet, Distance: 80 feet.

Trees:

Height: 70-75 feet, Distance: 225 feet.

View East



Apartment Buildings:

Height: 30 feet, Distance: 45 feet.

Trees:

Height: 75-85 feet, Distance: 250 feet.

View South



Apartment Buildings:

Height: 30 feet, Distance: 45 feet.

View West



Trees:

Height: 60-65 feet, Distance: 150 feet.

REMARKS: None