Sierra Nevada Corporation’s FAA certification–pending, radar-based, Degraded Visual Environment solution provides the ability to operate in degraded visual conditions (fog, pollution, snow, sand, dust, smoke, icing), while visually detecting obstacles including terrain. The system offers access to otherwise inaccessible airfields in order to maintain the flow of operation. REVS® achieves NextGen goal of increasing access, efficiency and throughput during low visibility operations.
Enhanced Vision Solution for Degraded Visual Environment

Features

- 94 GHz Frequency radar key to penetrating 0/0 conditions
- 3D imaging offers contour of terrain on approach, missed approach and low false alarm detection of runway obstacles/incursion
- Combined vision, using an IR Camera, offers multispectral capability while eliminating any parallax of the IR image
- Integrated symbology
- Lower minima operations in IMC with no ground infrastructure required

Benefits

- Meets and exceeds requirements in recent FAA Rule change for EFVS
- Dispatch, release or takeoff when destination visibility is forecast/reported below minimums
- Initiate and continue approach when destination airport below visibility minimums
- Reduce crew, fuel and maintenance costs
- Increased customer goodwill
- No airport infrastructure investment required

Validation of Runway Location

Enhances Existing EVS Systems

- IR
- MMW Radar
- Combined Vision

Capabilities

Aircraft-Centric Operation

- Visual Approach
- Plug-and-Play with current EVS systems (IR Camera, Synthetic Vision Databases, etc)
- Integrates seamlessly with installed displays
- No added dependency on ground aids
- No added runway augmentation with lights and markers
- Retains ability to divert to alternate destinations

Landing in Zero Visibility Ceiling (0/0) Conditions

- Use 3D imagery to operate under “VFR” rules in degraded environments
- Runway incursion detection
- Detection of small obstacles/runway damage
- Terrain awareness

Cockpit Display Symbology