WHEN CONDITIONS ARE AT THEIR WORST, YOU’RE AT YOUR BEST

Real-time, eyes-forward capability that enhances safety and operations
Collins Aerospace’s Head-Up Guidance System, HGS™-6000, is the latest head-up display technology available for Boeing 737 fleets.

The HGS™-6000 can decrease operational costs and keep the aircraft running on time with:

- Low Visibility Takeoff (LVTO)
- CAT I-III landing capabilities
- Rollout guidance
- Autonomous flare
- Tailstrike avoidance

**BETTER VISION, GREATER PRECISION**

**Head up, eyes forward**

- Provides a conformal display
- Shows the flight path in all flight stages
- Delivers greater awareness of the aircraft energy state

**FLIGHT PATH INDICATOR**
- Inertially derived
- Instantaneous indication of where the aircraft is going

**GUIDANCE CUE**
- Uses landing aid (ILS, GLS) and IRS to compute and position cue

**ENERGY MANAGEMENT**

- FAST, BUT DECELERATING
- SLIGHTLY SLOW & DECELERATING
- STABLE

**Seamless extension of the pilot:**
**Pilot in the loop**

- Enables eyes-forward flying, reducing lag time
- Provides the best aircraft feedback system
- Enables approach visualization
- Improves training methods
- Increases situational awareness
EFVS: Exceeding human vision

- See through the weather: Fog, smoke and low-visibility conditions
- Reduced minima: Enhanced Flight Vision Systems (EFVS) approach and landing/rollout
- Lower the risk of runway incursion and excursion

HGS reduced operating minima (RVR)

<table>
<thead>
<tr>
<th>CAT</th>
<th>BRAZIL</th>
<th>US</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>550 m</td>
<td>1800 ft</td>
</tr>
<tr>
<td>SA I</td>
<td>450 m</td>
<td>1400 ft DH 150 ft</td>
</tr>
<tr>
<td>II</td>
<td>350 m</td>
<td>1000 ft</td>
</tr>
<tr>
<td>III</td>
<td>200 m</td>
<td>600/400 ft</td>
</tr>
<tr>
<td>Takeoff</td>
<td>75 m</td>
<td>300 ft</td>
</tr>
</tbody>
</table>

Percentage of accidents likely preventable by HGS*

- Takeoff/landing: 19%
- Loss of control: 33%
- Miscellaneous: 57%
- Propulsion: 3%
- Undercarriage: 69%

Above and beyond today’s standards

AN EXTRA MARGIN OF SAFETY

- Maximize landing benefits for CAT I or visual/VOR-only runway options
- Cost-effective way to stay aligned with industry trends
- Proven economic benefits

*Flight Safety Foundation special report, November 2009