



See More

with SureSight[®]
Integrated Sensor Systems
for Enhanced Flight Vision
System Applications



SureSight Scene



Visual Scene

- Superior image quality - key to expanding operational capabilities at lower minima
- Improved image processing - optimized for performance in adverse visual conditions
- Packaged in a single, lightweight enclosure, with performance designed to meet your needs

SureSight

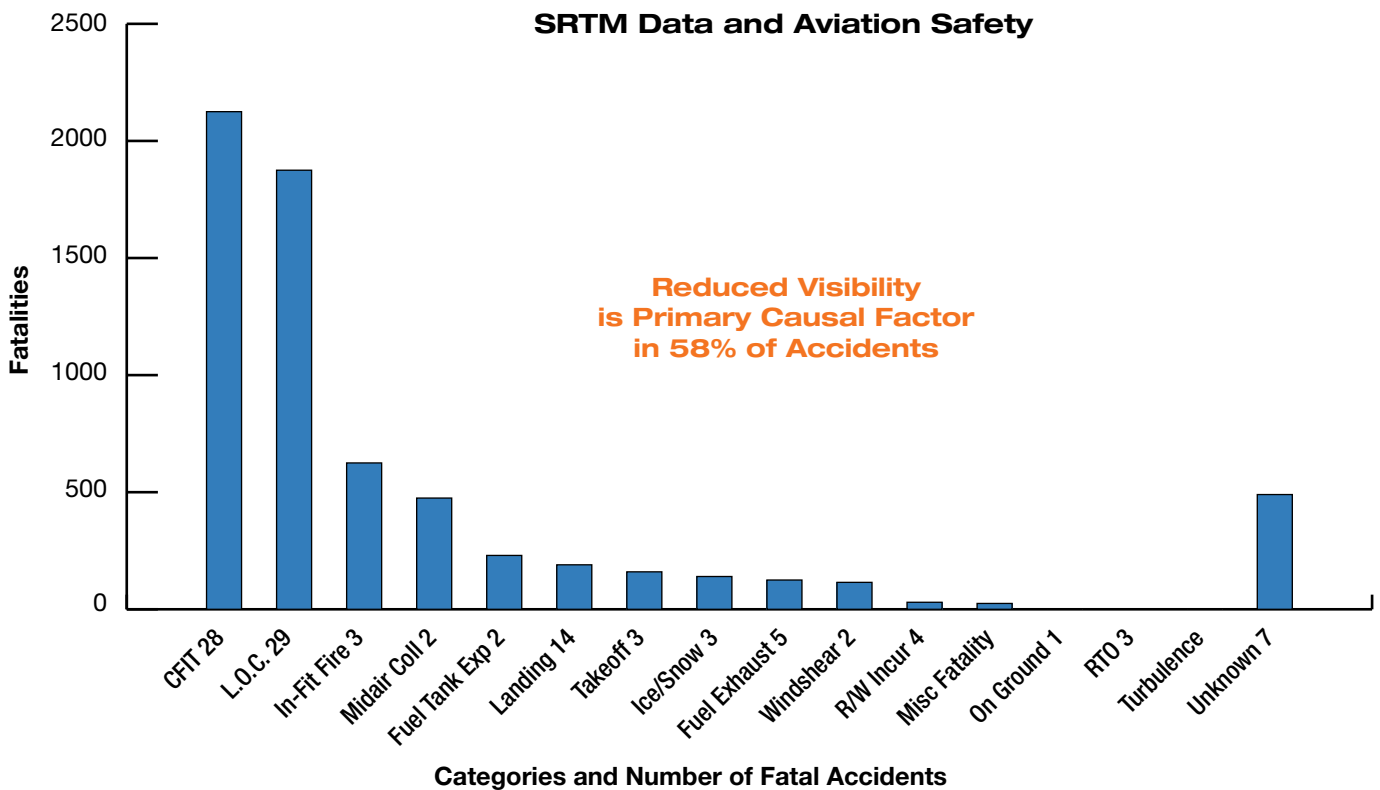
Reaching the Next Level of Performance in Adverse Visual Conditions



⁽¹⁾ Source: Flight Safety Digest, Flight Safety Foundation, May 2004

Loss of Situational Awareness — a Major Contributor to Business Jet Accidents

- 62.9% of business jet accidents attributed to loss of situational awareness⁽¹⁾
 - 41.4% of accidents occurred during approach and landing phase of flight
 - 48.1% of 27 CFIT (Controlled Flight Into Terrain) accidents cited loss of situational awareness as contributing factor
- 64.4% of ALA (Approach and Landing Accidents) involved lack of stabilized approach
 - 10% of accidents involved hard landings





CMA-2600 Scene

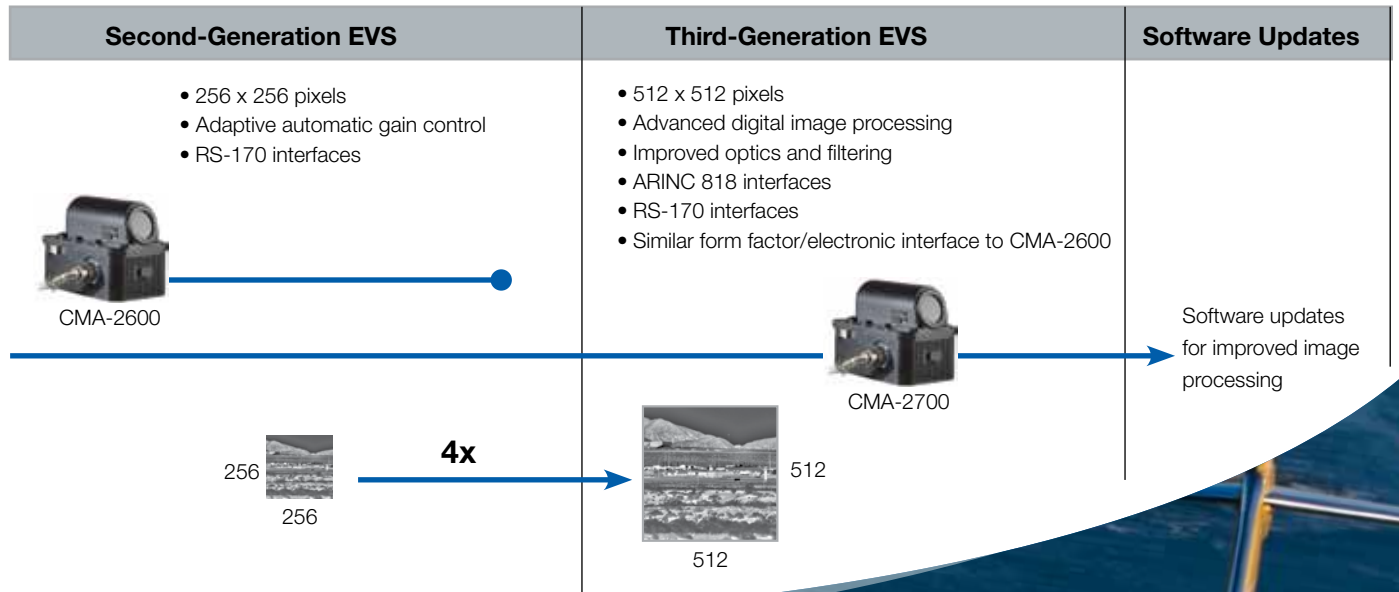


CMA-2700 Scene

SureSight Imaging Sensors for Enhanced Flight Vision Systems

- Single LRU (Line Replaceable Unit) Imaging Systems
- Certified on 8 different aircraft platforms
- CMA-2700, the culmination of many years of experience:
 - 4 times the resolution of previously certified systems
 - End-to-end digital video system with low latency
 - Developed to Design Assurance Level B
 - Compatible with single or dual HUD installations
 - Backward compatible with CMA-2600 installations

Evolution of CMC's I-Series Sensors



Typical Nose Installations



SureSight™ Integrated Sensor System (ISS) for Enhanced Vision System applications

	CMA-2600	CMA-2700
APPLICATION	Operators seeking additional operational credits through the use of an Enhanced Flight Vision System (EFVS).	Operators seeking additional operational credits through the use of an Enhanced Flight Vision System (EFVS).
WEIGHT	Less than 21 lb	Less than 21 lb
FIELD OF VIEW	30° x 30°	30° x 30°
SENSOR TECHNOLOGY	<ul style="list-style-type: none"> • Cryogenically cooled Indium Antimonide (InSb) Focal Plane Array Sealed, Stirling cycle cooler – no maintenance required • 256 pixels x 256 pixels 	<ul style="list-style-type: none"> • Cooled Indium Antimonide (InSb) Focal Plane Array Sealed, Stirling cycle cooler - no maintenance required • Highest resolution ISS for EFVS applications: 512 x 512 pixels • Next-generation image processing: advanced 14-bit digital processing • Improved optics and wave band filtering
DETECTED WAVELENGTHS	Broadband filtering <ul style="list-style-type: none"> • 1.2 – 5 microns 	Multi band filtering <ul style="list-style-type: none"> • 1.4 – 2.5 microns shortwave infrared • 3.5 – 5.0 microns midwave infrared
CERTIFICATION STANDARDS	<ul style="list-style-type: none"> • Hardware: RTCA DO-160D • Software: RTCA DO-178B, DAL C • Firmware: RTCA DO-254, DAL C 	<ul style="list-style-type: none"> • Hardware: RTCA DO-160F • Software: RTCA DO-178B, DAL B • Firmware: RTCA DO-254, DAL B
TEMPERATURE (Continuous)	-55° C to + 50° C	-55° C to + 50° C
INPUT POWER	28 Volts DC – 70 watts (nominal)	28 Volts DC – 70 watts (nominal)
INSTALLATION CONFIGURATIONS	<ul style="list-style-type: none"> • Sensor may be installed upright or inverted with image inversion selectable on installation. 	<ul style="list-style-type: none"> • Sensor may be installed upright or inverted with image inversion selectable on installation • Mechanical and electrical compatibility with the CMA-2600 ISS – ideal for retrofit of legacy CMC SureSight ISS
SENSOR CONTROL INPUTS	ARINC 429 and discrete signals for installation flexibility <ul style="list-style-type: none"> • Display configuration • Sensor orientation • Sensor on/off/standby • Non uniformity calibration (NUC) • Infrared window (IRW) temperature • Troubleshooting test port 	ARINC 429 and discrete signals for installation flexibility <ul style="list-style-type: none"> • Display configuration • Sensor orientation • Sensor on/off/standby • Non uniformity calibration (NUC) • Infrared window (IRW) temperature • Troubleshooting test port • Supports EFVS with dual Head-Up Display installations
SENSOR OUTPUTS	<ul style="list-style-type: none"> • Two (2) – ANSI/SMPTE 170M (formerly RS-170 - monochrome NTSC) • Sensor status (via ARINC 429) • Aircraft IR window heater control (when desired) • Troubleshooting test port 	<ul style="list-style-type: none"> • Two (2) ARINC 818 Digital Interfaces • Two (2) ANSI/SMPTE 170M (formerly RS-170 monochrome NTSC) • Sensor status (via ARINC 429 and A818) • Aircraft IR window heater control (when desired) • Troubleshooting test port • Supports EFVS with dual Head-Up Display installations
BUILT IN TEST (BIT)	Power up testing Continuous background testing On request testing	Power up testing Continuous background testing On request testing

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References to the various certification levels refer to planned certification. Please contact us for actual certified levels and schedules. For information purposes only. To accommodate product improvements, specifications are subject to change without notice. EVS 4-pager 07/12 PRINTED IN CANADA