

ULTRAMAR
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GENTEX[®]
AIRCREW SYSTEMS

Fully Integrated Headborne Systems

AIRCREW SYSTEMS PRODUCT CATALOG



TRUE SYSTEM LEVEL PERFORMANCE. INDUSTRY LEADING PROTECTION.

With a history of innovation that spans 100 years, Gentex is the leading supplier of high-performance flight equipment for military, law enforcement, and rescue aircrew worldwide. Our comprehensive line of durable and innovative head protection systems and services for fixed and rotary wing aircrew allow for the easy integration of advanced capabilities without sacrificing protection. With Gentex, you'll get the performance you need with the protection you can count on.

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FIXED WING HELMET SYSTEMS

Gentex is the world-leader in lightweight, high-performance flight helmets for high-G environments, multi-platform aircrafts, and trainers.



HGU-55/P

FIXED WING HELMET SYSTEMS

The Gentex HGU-55/P light weight helmet provides improved peripheral vision for advanced fighter/attack aircraft aircrew personnel, enhanced center of gravity under G-loading and maximum stability.

The HGU-55/P helmet features a leather-edge roll covering the soft foam core, specially integrated chin/nape strap, visor bump stops atop the helmet, and an innovative matte clear coat with a rigid composite shell that reduces the helmet weight by approximately 4 ounces from the standard fiberglass HGU-55/P helmet a tremendous advantage in today's high-G environment. Approved by the U.S. Air Force, the helmet meets or exceeds all performance requirements of MIL-H-87174, Helmet Flyers, HGU-55/P helmet.



Photo courtesy of U.S. Department of Defense Photo by U.S. Air Force Master Sgt Jack Braden

HGU-68/P

FIXED WING HELMET SYSTEMS

The Gentex HGU-68/P helmet meets the rigorous requirements of the U.S. Navy Tactical Aircrew (TACAIR) and U.S. Marine Corps in today's high-G environment. The HGU-68/P helmet incorporates advanced technology to provide improved helmet comfort, stability, retention and protection for aircrew personnel.

The HGU-68/P helmet is equipped with a single visor system that is qualified for 600 KEAS (knots equivalent airspeed) in accordance with MIL-H-85047A and offers a cut back frontal opening at the temple region to provide maximum peripheral vision.



Photo courtesy of U.S. Department of Defense Photo by U.S. Navy Mass Comm. Specialist 3rd Class Dylan McCord

PARAMASTER HALO/HAHO



Photo courtesy of U.S. Department of Defense Photo by U.S. Air Force Staff Sgt. Jeremy T. Lock

FIXED WING HELMET SYSTEMS

Specifically designed for military and civilian parachutists performing High Altitude Low Opening (HALO) and High Altitude High Opening (HAHO) jumps, the Gentex PM HALO/HAHO helmet and oxygen mask system offers unsurpassed life support and performance benefits for airborne operations.

Unique features of the PM HALO/HAHO helmet include a modular design that allows crew members to select communication components, oxygen mask receivers, a range of helmet fitting system, visor/goggle components and optional earcups or earpads depending on noise protection requirements.

KEY FEATURES:

- Close fitting, snag free design
- Available in high or low-noise sound attenuation versions
- Two sizes that fit the 5th to 95th percentile



AIR COMBAT SYSTEM (ACS)



Photo courtesy of U.S. Department of Defense Photo by U.S. Air Force Master Sgt. Benjamin Bloker

FIXED WING HELMET SYSTEMS

Designed for the Eurofighter Aircraft (EFA), the Gentex ACS, when combined with the Gentex EFA/ACS oxygen mask provides Pressure Breathing for G (PBG) capability for extended high performance aircraft maneuvers. The helmet system features locking dual visors (clear and dark) that are certified safe to eject at up to 600 knots indicated airspeed. And it is configured with an inflatable bladder system to stabilize the helmet during high-G operations. The helmet system is built with lightweight composite materials to reduce head borne weight while providing a very strong protective shell, and its unique integrated chin and nape strap system helps ensure the helmet remains comfortable and stable through all phases of flight.





ROTARY WING HELMET SYSTEMS

Gentex manufactures the widest range of Rotary Wing Helmets designed to provide unparalleled capabilities with exceptional safety.

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Photo courtesy of U.S. Department of Defense Photo by U.S. Army Sgt. Felix Acevedo

HGU-56/P

ROTARY WING HELMET SYSTEMS

Designed to keep pace with innovations in flight technology and emerging mission scenarios, the Gentex HGU-56/P rotary wing helmet offers modular engineering for cross-platform use within multiple Army, Air Force, Coast Guard, Law Enforcement and Civilian rotary aircraft. The unique design of the HGU-56/P helmet features a multitude of options to improve aircrew personnel fit, functionality, mission adaptability and essential head safety and protection with superior hearing protection.

Photo courtesy of U.S. Department of Defense Photo by U.S. Air Force Tech. Sgt. Manuel J. Martinez & U.S. Marine Corps Lance Cpl. Ryan Carpenter



HGU-84/P



Photo courtesy of U.S. Department of Defense Photo by U.S.M.C. Lance Cpl. Danny L. Shaffer II

ROTARY WING HELMET SYSTEMS

Developed for the U.S. Navy and U.S. Marine Corps, the Gentex HGU-84/P rotary wing helmet with a bungee dual visor helmet assembly integrates the latest advances in technology to provide superior protection, stability, retention and comfort in a lightweight, low-profile design.

The helmet system integrates with the Gentex MBU-12/P Oxygen Mask, MCK-3/P mask, AN/AVS-6 Night Vision Goggles, and EDU-1/P spectacles. The helmets frontal opening is cut back in the temple regions to provide the maximum peripheral vision to the user.



HELMET SYSTEM COMPONENTS

Our broad array of system components seamlessly integrate into our Rotary and Fixed Wing helmet system platforms providing additional system functionality without sacrificing protection.



Photos courtesy of U.S. Department of Defense
Photos by U.S. Navy Airman Javier Capella (left) & U.S. Army Sgt. Randy Ojeda (right)

HELMET LINERS

HELMET SYSTEM COMPONENTS

X LINER®

The X LINER is our most advanced, lightweight, comfort-fitting helmet liner. This revolutionary system uses a unique bi-layer, temperature insensitive material that provides an easily adjustable fit. It offers maximum comfort even in extreme climates or during prolonged missions and minimizes heat build-up and liner roll or creep.

The unique design offers nearly 50% greater heat transfer resulting in cooler and greater comfort to user compared to similar products available today. The X Liner incorporates an anti-microbial fabric for field hygiene, and the hand-washable material is designed and proven to inhibit odor-causing bacteria while reducing electrostatic discharge. Its the only product of its kind fully tested and approved by Gentex for use in the Gentex HGU-55/P, HGU-68/P, and HGU-84/P helmets, and meets all military impact test requirements.



THERMO PLASTIC LINER (TPL®)

A custom-fitting helmet comfort liner, the Gentex Thermo Plastic Liner (TPL) is comprised of multiple layers of moldable thermo plastic material that can be added to or reduced to create the proper and individual helmet fit. The TPL offers maximum helmet comfort during aircraft maneuvering, acceleration and long-duration missions.



SUPER COMFORT LINER (SCL)

A superior custom fitting helmet product, the Super Comfort Liner (SCL) provides the protective benefits of the Gentex TPL, but offers enhanced comfort. The helmet comfort liner provides a more plush cover padding compared to the TPL, but still offers maximum helmet retention during aircraft maneuvering, acceleration and long-duration missions.

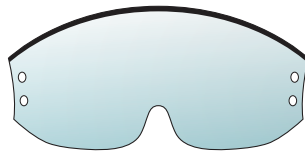


VISORS

HELMET SYSTEM COMPONENTS

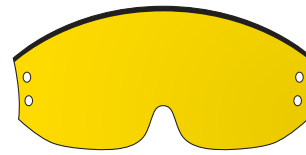
VISOR ASSEMBLIES

Visor Assemblies are designed to provide aircrew with facial protection from windblast, high-intensity light, fragments resulting from canopy or screen failure, ballistic and fragmentation threats, and dust and debris from rotary and jet wash. Each visor is available for use in single or dual visor configurations, and all Gentex helmet visors (including clear), provides 99% protection from damaging UVA, UVB, and UVC sunlight. Each visor meets the requirements of MIL-V-43511 and provides impact protection equivalent to a 0.22 caliber fragmentation projectile at up to 560 feet per second (fps).



CLEAR

Designed to provide aircrew with facial protection.



AMBER

Engineered with its yellow hue, to offer basic contrast to the field of view in hazy or foggy conditions.



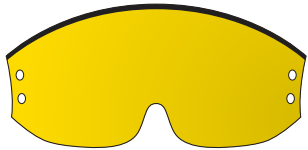
NEUTRAL GRAY

Developed to provide aircrew with facial protection; neutral gray provides sun glare protection.



VISORS (CONTINUED)

HELMET SYSTEM COMPONENTS



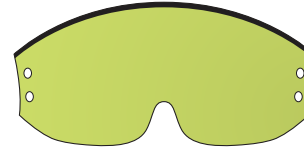
HIGH CONTRAST

Specifically engineered for use in snow, haze and fog conditions, the Gentex High Contrast Visor (HCV) provides aircrew with a heightened and enhanced field of vision when flying in low-light conditions, such as foggy, overcast, hazy or cloudy environments. This advanced polycarbonate HCV creates a viewing field where all blue components appear black or very dark and other color components are nearly normal. Absorber dyes that are molded into the polycarbonate visor renders the visor a unique yellow color and filters certain invisible and visible wavelengths for the visor user.



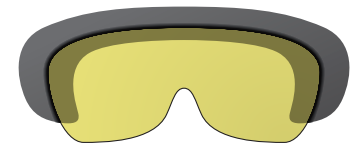
LIGHTWEIGHT GRADIENT

Engineered specially for protection against sun glare, the Gentex Lightweight Gradient Visor allows aircrew to see instrumentation clearly. The visor is a standard neutral gray color at the top, which gradually transitions to clear near the bottom edge of the visor.



LASER

Specially engineered for use with leading Gentex HGU-55/P helmet with integrated chin/nape strap, this cutting-edge assembly was qualified at 600 KEAS (Knots Equivalent Air Speed) at attitudes specified in MIL-H-85047, including head on/head up, rotated 45 degrees starboard/head up, head on/tilted 45 degrees aft, and rotated 45 degrees port/tilted 45 degrees aft. This visor offers improved high speed facial protection without the additional weight and mass of tracked visor systems.



STEP-IN®

Provides eye protection and allows proper eye relief while using Night Vision Goggles (NVGs). Its contoured shape and finished edge conform to the helmet-shell edge rather than suspending over the front of its shell, creating a fit that's closer to the face than other visors. STEP-IN visors can be used with the Gentex HGU-55/P, HGU-68/P and the HGU-84/P helmets to provide eye protection while also allowing the use of NVGs.

Gentex is a world leader in the design and manufacture of laser eye protection solutions for emerging commercial and military-grade laser threats. This capability can be provided in standard helmet visor, STEP-IN visor, and spectacle formats that are used for fixed and rotary wing aircrew personnel.

VISOR HOUSINGS

HELMET SYSTEM COMPONENTS

The Gentex HGU-56/P helmets are designed to accept a variety of visor housings. The Gentex HGU-56/P series can come with one of two types. The Quick Disconnect version and the Platform version. The Platform version provides a platform to permanently attach an NVG mount. The Quick Disconnect version allows that mount to be installed or removed at the touch of a button.



Photo courtesy of U.S. Department of Defense Photo by U.S.M.C. Sgt. Pete Thibodeau

ADDITIONAL COMPONENTS

HELMET SYSTEM COMPONENTS

MAXILLOFACIAL SHIELDS (MFS)

The Gentex Maxillofacial Shield (MFS) safeguards the lower face from rotor wash, flying debris and windblast during helicopter operations. It is an optional upgrade to Gentex HGU-55/P, HGU-56/P or HGU-84/P helmets and significantly improves communication. The MFS weighs less than five ounces, and offers an interface between shield and visor that reduces wind on the face. The shield offers ballistic fragmentation protection up to 550 feet per second (fps).



HELMET BAGS

The Helmet Bag offers a place to store your helmet when not in use. These bags have a large compartment for your helmet with two smaller pockets inside and outside for other items. We offer a lightweight smaller basic bag (shown left) suitable for all helmets, or a deluxe bag that was designed with the Gentex HGU-56/P helmet specifically in mind. The deluxe helmet bag, offered in black, ACU camo and woodland camo, is larger, has more padding and comes with a shoulder strap.



FLEX AND WIRE BOOM MICROPHONES

Flexible and Wire Boom Microphones offers a wide variety for the entire range of flight helmets. Gentex Wire Boom Microphones are a low-cost, reliable standard helmet component, while Gentex Flex Boom Microphones offer improved adjustment and mounting features and are available as an upgrade to our helmets.



ADDITIONAL COMPONENTS (CONTINUED)

HELMET SYSTEM COMPONENTS

INTERCOMMUNICATION UNITS

The Gentex Intercommunication Unit allows acoustic or electronic communication in chemically toxic environments. Its compact size quickly clips to the outside of chemical defense or other protective clothing while providing communication in hazardous, high-noise environments. A pilots speech is broadcast over speaker to crew; the crews speech is then picked up by a microphone and presented to a pilots-helmet earphones. It plugs into oxygen mask microphones and helmet earphones through a helmet communication cord. A second helmet cord can be connected for two-way hardwire communication powered by a standard 9-volt battery. The unit has four settings: hardwire, talk/listen, listen only, and off.



RETENTION ASSEMBLIES

The Gentex HGU-56/P helmet offers two retention system versions: the Double D-Ring and the Snap. Both are designed to reduce aircrew impact injury and are subject to a 400lb chinstrap pull test. The Double D-Ring Retention Assembly is the original standard retention, with a solid sewn chinstrap that is fastened by interlocking the webbing in two D rings. The Snap Retention Assembly version is the latest retention, providing the same level of protection as the Double D-Ring version, but offers a fast and easy method of donning and doffing the helmet. The chinstrap has a D-Ring adjustment point on one end and a snap fastener on the other.



RESPIRATORY SYSTEMS & COMPONENTS

A critical component of our helmet systems, our respiratory technologies are used in fixed and rotary aircraft platforms protecting aircrew domestically and in nations throughout the world.



OXYGEN MASKS

RESPIRATORY SYSTEMS & COMPONENTS



MBU-20/P OXYGEN MASK

The Gentex MBU-20/P Oxygen Mask is an integral component of the man-worn COMBAT EDGE System and provides Pressure Breathing for G (PBG) capability to tactical aircrew, while reducing the probability of G-induced Loss Consciousness (GLOC). Issued to all U.S. Air Force F-15, F-16 and F-22 aircrew members, this exceptional unit offers a low-profile design and is typically donned with a Gentex HGU-55/P helmet. Modified bayonets interface with the receivers and allow the mask to hang on either side of the helmet. Separate inhalation and exhalation valves enable low-breathing resistance and a special reflective edge provides optimum sealing. Standard M-169A/AIC microphone and communication interfaces are used, and the mask meets all current speech intelligibility requirements. A traditional mask-supply hose incorporates the PBG helmet bladder supply hose and a male quick-disconnect connector that interfaces with the female connector attached to the aircrew helmet.

Contact Gentex for more information on product training information.



MBU-20A/P OXYGEN MASK

A U.S. Air Force approved and supportable Non-PBG Gentex MBU-20A/P oxygen mask is offered for non-pressure breathing applications and is a reduced cost variant of the COMBAT EDGE configured Gentex MBU-20/P. Reference T.O. 14P3-1-161, Change 29. The following features make the non-PBG Gentex MBU-20A/P the mask of choice:

- è All the benefits of the Gentex MBU-20/P in a non-PBG configuration
- è Five sizes available that Plug & Play and offer direct replacement for Gentex MBU-12/P
- è Increases range of fitting to the 97th percentile male-aircrew member down to the 3rd percentile female aircrew member
- è Low profile for increased downward field of view
- è Lower Inhalation and exhalation resistance
- è Ejection windblast qualified to over 600 knots for superior retention and function

OXYGEN MASKS (CONTINUED)

RESPIRATORY SYSTEMS & COMPONENTS



MIĞ/SUKHOI HA/LP OXYGEN MASK

The Gentex MiG and Sukhoi HA/LP oxygen mask is an advanced variation on the Gentex High Altitude/Low Profile (HA/LP) oxygen mask, adapted to interface with Russian Aircraft Platforms for MiG 15, 17, 21, 23 and 29 and Sukhoi 17, 20, 22, 24, 25 and 27 aircrafts. Designed for use with the Russian KKO-5 Type Oxygen System and KP-52M Type Oxygen Regulator, specially integrated helmet and mask combination includes the Gentex MiG/ Sukhoi Variant HA/LP oxygen mask and a specially configured Gentex HGU-55/P helmet with dual visors, and earphone adapter.



MBU-23/P OXYGEN MASK

The choice oxygen mask of the U.S. Navy, the Gentex MBU-23/P is designed for use in tactical aircraft for both Pressure Breathing for G (PBG) and Non-PBG applications. It offers two configurations without communications hardware, and is identified and supported by NAVAIR 13-1-637-3.

Light-weight and low-profile, this exceptional unit provides optimal Positive Pressure Breathing (PPB) sealing capabilities and +600-knot windblast protection. A silicone rubber face piece incorporates a reflective seal design to optimize sealing capabilities, and the hardshell may be custom-trimmed to allow optimum comfort while maintaining appropriate fit. Separate inhalation and exhalation valves minimize breathing resistance and reduce aircrew fatigue, while cheek flaps and a chin cup offer additional injury protection following high-speed or high-altitude ejection. Its configurable with M-101 Microphone and M-169 Microphone with amp from Gentex or other mask mounted amplifiers. The mask comes complete with a U.S. Navy compatible communications cord.

OXYGEN MASKS (CONTINUED)

RESPIRATORY SYSTEMS & COMPONENTS



HIGH ALTITUDE/LOW PROFILE (HA/LP) OXYGEN MASK

Gentex HA/LP oxygen masks are designed for use in both Pressure Breathing for G (PBG) equipped high-performance fighter/attack aircraft and Non-PBG equipped aircraft and are used by the U. S. and Foreign Military Services throughout the world.

The HA/LP oxygen masks are derivatives of the Gentex MBU-20/P oxygen mask supplied to the U.S. Air Force. They provide a bladder supply hose that connects the mask assembly to an occipital bladder in the helmet to provide automatic mask tensioning during high G flight and are direct replacements for both Gentex MBU-12/P and MBU-5/P masks.

Similar to the Gentex MBU-20/P, the HA/LP oxygen masks provide +600 knot windblast protection. The lightweight, low-profile mask design provides optimal positive pressure breathing (PPB) sealing capabilities. Separate inhalation and exhalation valves minimize breathing resistance thus reducing aircrew fatigue.



EFA/ACS OXYGEN MASK

The Gentex EFA/ACS oxygen mask is an integral component of the Gentex Man-Worn Air Combat helmet system and provides PBG capability to tactical aircrew, while reducing the probability of G-induced Loss of Consciousness (GLOC).

Issued to Eurofighter aircraft pilots, this exceptional unit offers a low-profile design and is typically donned with the Air Combat System (ACS). Bayonets specifically designed to interface with the ACS receivers not only secure the mask to the helmet but also supply the helmet bladder with pressure from the oxygen breathing hose via the bayonet probe. This allows the helmet bladder to inflate during high G maneuvers adding increased stability to both the helmet and mask during critical stages of flight. Separate inhalation and exhalation valves enable low-breathing resistance and a special reflective edge provides optimum sealing.

OXYGEN CONNECTORS

RESPIRATORY SYSTEMS & COMPONENTS



CRU-94/P INTEGRATED TERMINAL BLOCK (ITB)

The Gentex CRU-94/P Integrated Terminal Block (ITB) provides PBG capability to tactical aircrew reducing the probability of GLOC during high performance flight. Designed to distribute pressurized breathing gas from the aircraft-mounted regulator to the pilots oxygen mask and bladders, it is located in the vest and Gentex COMBAT EDGE HGU-55/P helmet. The unit coordinates with the Gentex MBU-20/P oxygen mask and its cast aluminum body interfaces with the standard parachute harness and features two outlet ports to supply breathing gas to the mask and vest bladder during PBG. Its equipped to relieve pressure within the ITB, and a vest outlet port connects to the vest supply hose using a 4-pin connector. It also features two inlet ports: a breathing gas inlet which incorporates the standard Quick-Disconnect with restrictor valve and spring loaded relief valve installed, and a standard Emergency Oxygen inlet port.



CRU-60/P CONNECTOR

The standard for restraint harness connectors, the Gentex CRU-60/P connects the aircraft oxygen supply hose from panel mounted oxygen regulators to demand breathing masks. Designed to assure positive locking and prevent flailing during an ejection, this preferred unit is normally secured to a dovetail mounting plate and attached to an airmans parachute harness. It connects to a standard three-pin bayonet oxygen mask hose connector, and incorporates an omnidirectional disconnect to assure proper alignment of disconnect forces during an ejection. This advanced fitting also warns the pilot when a disconnection has occurred. It meets the requirements of U.S. Air Force MIL-C-38271B, and features a bail-out oxygen attachment nipple designed to mate with a bail-out bottle supply tube fitting. It can be coordinated with the Gentex HA/LP, MBU-20/P, MBU-15/P or MBU-5/P oxygen masks.



MODIFIED B1-B CONNECTOR

Designed for the B1 Bomber aircrew, the Gentex Modified B1-B Connector Assembly is essentially a Gentex CRU-60/P with a reversible dovetail. Engineered with a special yoke that allows the dovetail to be mounted on either the left or the right side, the pilot has the option of wearing the connector on different sides of the torso.

OXYGEN CONNECTORS (CONTINUED)

RESPIRATORY SYSTEMS & COMPONENTS



QUICK DISCONNECT ASSEMBLY

Designed to meet the requirements of MIL-C-83867, Gentex offers a choice of two Quick Disconnect Assemblies; the G002-1060-01 Quick Disconnect Assembly and the G002-1060A-01 Quick Disconnect Assembly.

The Gentex G002-1060-01 Quick Disconnect Assembly features superior over-pressure relief capabilities. Both the Gentex G002-1060-01 and G002-1060A-01 Quick Disconnect Assembly feature the ability of the hose barb to mate with oxygen mask assembly hoses, including the Gentex MBU-5/P, MBU-12/P, MBU-20/P and HA/LP. Either unit disconnects from a MS22058 connector between 12 and 20 lbs., and a pin is provided for attachment of a strain relief cord.



3-PIN CONNECTOR

Designed to meet the requirements of the MS27796, the Gentex 3-Pin Connector mates with mask assembly breathing hoses including the Gentex MBU-5/P, MBU-12/P, MBU-20/P and HA/LP. A pin is provided for attachment of a strain relief cord.

OXYGEN MASK ACCESSORIES

RESPIRATORY SYSTEMS & COMPONENTS



ROTATABLE BAYONET RECEIVERS (R2)

The Gentex R2 features: a versatile design, which allows the wearer to mount and hinge the unit on either side of the helmet providing easy access with either hand; 30° of rotation over existing receivers with three hinge settings (left side, right side or neutral); anti-snap contoured features prevent parachute risers from becoming entangled with either the bayonet or receiver. Compatible with Gentex MBU-12/P, MBU-20/P, HA/LP, Joint Service Aircrew Mask (JSAM), and Aircrew Eye & Respiratory Protection (AERP) oxygen masks; NVGs; and High Speed and Gentex Step-In Visors. They provide plug-and-play replacement for current bayonet receivers without modification to the helmet shell. They're made from durable, flame and UV resistant materials; available in black, white and gray to match various helmet color schemes; and come with a mounting template to aid in proper location on the helmet shell.



OXYGEN MASK LIGHT

The Gentex Oxygen Mask Light is designed to provide aircrew access to a supplemental light source without sacrificing flight safety. It incorporates the Gentex M-169A/AIC microphone which has a lip activated switch mounted to it to provide a hands-free means to turn the light on and off. It fully integrates with our Gentex MBU-20/P, MBU-20A/P, MBU-23/P and HA/LP series of oxygen masks and directly replaces the Gentex M-169A/AIC microphone used for dynamic communication systems. It is a lightweight, low profile, night vision compatible light source. Its filtered LED is qualified to meet the rigorous standards outlined in MIL-STD-3009, Night Vision Imaging System (NVIS) Compatible Aircraft Lighting making it safe to use in conjunction with sensitive NVGs



M169-A/AIC MICROPHONE

A superior noise-canceling moving coil microphone element, the Gentex M-169A/AIC modified microphone is specially designed for use in an oxygen mask or pressure helmet at altitudes where oxygen is required. The unit integrates with the HA/LP and MBU-20/P Oxygen Masks, providing more accurate placement within the masks and substantially better intelligibility and noise rejection over its predecessor, the Gentex M-101/AIC.

The Gentex M-169A/AIC incorporates a state-of-the-art adjustment and placement system that provides exceptional stability for the microphone element and is manufactured to rigorous MIL-PRF-26542/12 Standards.



SMOKE GOGGLES

The Smoke Goggle Assembly is available for aircrew personnel uses on transport U.S. Air Force aircraft, including C-5, C-9, KC-10, C-17, C-27, C-130, KC-135 and C-141. The goggle is designed to protect the wearers eyes from potential smoke in the cockpit or cargo areas. A superior goggle, the unit features a clear plastic lens as well as a comfortable, lightweight silicone rubber frame and strap that provides for quick, easy donning and doffing. One size fits all. Individual replacement components are available.

OXYGEN MASK ACCESSORIES (CONTINUED)

RESPIRATORY SYSTEMS & COMPONENTS

OXYGEN MASK TOOL KIT

The Gentex Tool Kit provides all of the necessary tools to support maintenance of the Gentex MBU-20/P COMBAT EDGE, MBU-23/P, HA/LP-PPB, MBU-12/P and the MBU-5/P Oxygen Masks and contains: Elastrators, Calipers, Wrench Combination, Wrench Valve Pin Restraint, Wrench Valve Nut, Pliers Hose Clamp, Driver Handle 3/8 and Tool Case.



GRAB-N-GO OXYGEN MASK TOOL KIT

The portable and convenient Gentex tool kit provides all of the necessary tools to support maintenance of the Gentex MBU-20/P, non-PBG MBU-20/P (MBU- 20A/P), MBU-23/P, and HA/LP-PPB® oxygen masks which incorporate an improved Inhalation Valve Assembly (P/N: G010-1050-03). The tool kit contains: Elastrators, Calipers and Wrench Combination.



VEST VALVE PLUG

The Gentex Vest Valve Plug was designed to block the counter pressure vest port on the CRU-94 Integrated Terminal Block (ITB) when a pilot chooses not to wear the CSU-17/P counter pressure vest. This benefits the pilot by permitting increased COMBAT EDGE pressures to the oxygen mask and flight helmet even though the counter pressure vest is not worn and preventing the CRU-94 ITB from dumping the increased pressure out of the vest valve port.



ANTI-SUFFOCATION VALVE (ASV)

The Gentex ASV can be incorporated on the Gentex HA/LP® oxygen masks. The inspiratory activated anti-suffocation valve allows an unconscious or disabled aircrew member to breathe in the event the mask is not removed from the face.



VALSALVA VALVE

The Gentex Valsalva Valve can be incorporated on the compensated exhalation valve of the Gentex HA/LP oxygen masks to assist the aircrew member in performing Valsalva. This method acts as a secondary means to accomplish Valsalva when required and is in addition to the standard method of performing Valsalva via pinching of the nose.



TEST SETS

RESPIRATORY SYSTEMS & COMPONENTS



LIFE SUPPORT INTEGRATED TESTER (LSIT-1)

Specially designed to provide functional testing of the Gentex COMBAT EDGE Ensemble and derivatives, the LSIT-1 offers reliable checks for the Gentex MBU-20/P and MBU-23/P oxygen masks, Gentex CSU-17/P vest assembly, Gentex HGU-55/P helmet with occipital bladder, Gentex CRU-94/P Integrated Terminal Block, Gentex CRU-60/P Connector, and/or Gentex PBG Chest Mounted Regulator, and various lower Anti-G garments. The unit provides the operational support capability required to perform equipment tests on PBG manside equipment that uses a Gentex CRU-94/P Integrated Terminal Block (and aircraft mounted breathing regulator). Among its basic functions are proper positive pressure breathing schedules and flows and various forms of communication testing. The test set comes standard with battery backup, an LED indication of pre-programmed test parameters and a 9-pin Sub D interface connector for RS-232 data transfer.



SELF-CONTAINED AIR SOURCE (SCAS)

Built to provide filtered air to perform all aircrew life support equipment (ALSE) component tests, initial fitting and pre-flight checkout, the SCAS connects to the standard Gentex LSIT-1/A Test Set and replaces the need for compressed air bottles. The unit's easy to operate design requires very little maintenance and operates at lower pressures for added safety. It contains an integral reservoir for a reduced duty cycle and is fully charged in 30 seconds. Easily transported in a convenient, rugged wheeled case, the SCAS is compatible with 110 V/60 Hz or 220 V/50 Hz inlet power and NATO Standard CB Filters.



AIRCREW SYSTEMS TESTER (AST)

The Gentex AST is a portable test set supporting three basic functions needed to provide aircrews with life support testing: oxygen masks and regulators; oxygen mask/helmet communications; and pre-flight checkout of pilot/aircrew equipment. Designed to be carried by one person, it is lightweight, compact and equally useful in the lab, the shop or the flight line. The AST is powered by either the internal rechargeable battery or external 110 VAC Power Cord. The internal battery provides a minimum of 30-minutes operating time. The AST has an internal compressor whose design leverages the Gentex SCAS.

The AST will test the Gentex MBU-23/P, MBU-20/P, MBU-12/P, and HA/LP; CRU-series regulators, including CRU-82/P, CRU-88/P and CRU-103/P; and 10 VDC, 28 VDC, Dynamic, and Electret communications sets.

CBRN PROTECTION

RESPIRATORY SYSTEMS & COMPONENTS

Building on our core competency in head-borne life support systems, Gentex provides Chemical Biological, Radiological, and Nuclear (CBRN) personal protective equipment (PPE) with in-house capabilities that span from development all the way to fielding and sustainment and all of the steps in between.

Key capabilities include:

- Product development (TRL 5+)
- Product testing
- Systems integration (e.g. cockpit, pilot torso, and overall man to machine interface)
- Full rate production
- Product fielding and sustainment
- Training
- Subject matter experts
- Specialized test equipment
- Production fixtures
- Tooling
- Tailorable production floor space

GENTEX CBRN INTEGRATED PRODUCT LINE

Our primary CBRN offerings are respirators for high performance aircraft (fixed wing or rotary wing). Gentex's CBRN respirator portfolio (JSAM, FAS, and M52 (JSCESM)/QuickPro®) offers a unique combination of high protection performance coupled with seamless integration with other Personal Protective Equipment (PPE) including Gentex helmets and Oxygen masks.



GENTEX[®]

AIRCREW SYSTEMS



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