OXYGEN SYSTEM

AERODYNE OXYGEN SYSTEM is a portable diluter demand oxygen system for HAHO and HALO missions based on 200 bar (3,000 psi) technology that provides extended oxygen duration compared to other systems while using the same cylinder volume but are working only in the in 127 bar (1,850 psi) systems pressure range.

AERODYNE OXYGEN SYSTEM could operate either in 200 bar mode or 127 bar mode, depending on the pressure of the oxygen supply source.

A dedicated ascent cylinder is optional and upon request available. This ascent cylinder consists of a pressure reducer with pressure gauge and an oxygen supply cylinder (2 L or 4 L) so that the systems can also used on small aircrafts without an oxygen console).

AERODYNE OXYGEN SYSTEM provides pure oxygen (100 % mode) on demand (during the pre-breathing period) and at altitudes above 25.000 ft. During descent (below 25.000 ft.) the system uses ambient air enriched with sufficient oxygen from an oxygen supply source (air mix mode).
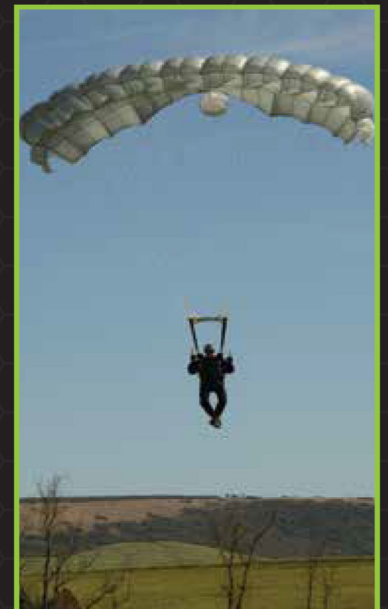
SPECIFICATIONS

- Max. operational altitude
- 40.000 ftMax. decompression altitude
- -40°C to +70°COperational temperature
- -54°CMax. temp. limited time (descent)
- -55°C to +85°CStorage temperature
- ascent cylinder volume
- Descent cylinder volume
- 2 L HAHO operations
- 200bar Cylinder Pressure
- Useable Oxygen Quantity
  - ➜ 195 L (1 L – Cylinder)
  - ➜ 390 L (2 L – Cylinder)
  - ➜ 780 L (4 L - Cylinder

ENVIRONMENTAL CONDITIONS AND TECHNICAL DATA

Operating Altitude	Altitude	33.000ft (26.2 kPa abs)
Storage Temperatures	Low High	-55°C +85°C
Operational Temperatures	Low Short Time Low High	-40°C -54°C +70°C
Performance Data	According to Type Certificate 1660-020	

1	2	3	4	5	5a	5b
PNR	N/A	Name	Vol	Pressure	Pressure	Pressure
			[L]	[bar]	[bar]	[bar]
E31342-00		Oxygen-bottle AG1/200	1	200	300	480
E31342-00		Oxygen-bottle AG1/200	1	200	300	480

1	1	1	1	1	1	1
PNR	Flaschen-Korper/	1	1	1	1	1
	Raw Cylinder			[kg]	[mm] (Tol.)	[mm] (Tol.)
E31342-00	130520058#	1.7220 (34CrMo4)	17E EN 11116-1	1.6	275 (-5)	82,5 (±0,8)
E29187-00F-0001	130520058#	1.7220 (34CrMo4)	17E EN 11116-1	1.6	275 (-5)	82,5 (±0,8)

AERODYNE RESEARCH MANUFACTURING

MULTIFUNCTIONAL NAVIGATION SYSTEM opens unprecedented possibilities for Tactical HAHO possibilities
In addition to the classic instrumentation such as :

ALTIMETER
COMPASS
GPS
The system allows the attachment of
OXYGEN VALVE
LIGHTS
TRANSPONER
RADIO
OTHER DEVICES

The MULTIFUNCTIONAL NAVIGATION SYSTEM meets all requirements and offers maximum comfort and Safety

FEATURES

- *Customized Modular System*
- *Flexible Navigation device location*
- *Integrated Safety cutaway system*
- *Fold back System for better visibility during landing*
- *Reduced risk of landing injuries*
- *One hand fold/unfold operation*
- *Easy Installation to Molle System*
- *Lightweight*
- *Extremely Robust*
- *Minimum Air Drag*

Ballistic Helmet

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The LASA AC915 is Morgan's latest ultra-lightweight high cut tactical ballistic helmet. It combines Morgan's hybrid ballistic helmet shell and tactical add-ons with Team Wendy's 4-point chinstraps and D3O's blunt impact protection.
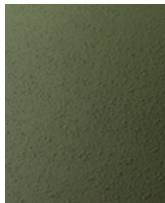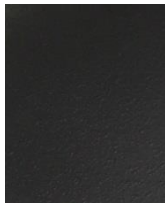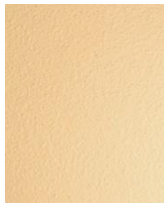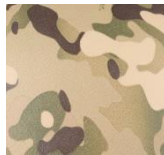
9% improved ballistic performance* at 17% lighter weight in comparison to the US Army ACH

*17 gr FSP v50

Key helmet features include:

- Morgan's ultra lightweight ballistic helmet shell delivering outstanding ballistic, fragmentation, flammability and blunt trauma protection.

- Integration of renowned class leading D3O TRUST$^{®}$ padding and Team Wendy's CAM-FIT™ retention systems for comfort and stability during enduring missions.

- Available in three sizes which fit 1st percentile female up to 98th percentile male.

- Available with lightweight open architecture side rails, bungees and a 3-hole NVG shroud for mounting tactical accessories including lights, hearing protection/comms, strobes, cameras, night vision goggles and mounts, HAHO/HALO O2 masks and CBRN/Gas Masks.

The LASA AC915 utilizes the latest helmet technology from Morgan who is a world leader in composite ballistic materials and battle proven helmets for the past thirty years, delivering over one million helmets to customers worldwide.

Ballistic Performance and Technical Specifications

Fragmentation and Ballistic Protection	17 gr FSP V50	16 gr Sphere V50	9mm FMJ Vproof
	>735 m/s	> 620 m/s	436 m/s
Compression resistance	Front to back	Side to Side	Top to Bottom
	1100N	1100N	1500N
Flammability protection	Provides Flammability protection to CAN/CSA 22.2 Test A and B		
Blunt Trauma Protection	Exceeds U.S. Army 10 fps ACH impact standards using D3O® Ambient, High & Low Temperature Performance (-10˚C, +53˚C)		
Colours	Olive Green	Black	Desert Tan / Other colors (e.g. Multicam) available on request

Ballistic Testing
Development and Quality Assurance undertaken 'in-house' at the Coventry Test Laboratory.
UK MoD and ISO 9001 approved Test Range.
Comparative Testing undertaken with Internationally recognised Test Houses

Quality Assurance Approval
ISO 9001

Lab competence, calibration and testing Approval
ISO 17025 UKAS Accreditation

Size	AC915 Helmet Weight		Helmet Sizing			Coverage	
	Helmet Only	Helmet with NVG Shroud, Rails and Bungees	Circumference	Length	Width	Surface Area	Head Coverage
Small	1.08 kg (2.38 lb)	1.23 kg (2.71 lb)	up to 545mm	up to 190mm	up to 155mm	899cm²	507cm² (1)
Medium	1.10 kg (2.43 lb)	1.26 kg (2.78 lb)	545 – 580mm	190 – 200mm	155 – 165mm	958cm²	577cm² (2)
Large	1.17 kg (2.57 lb)	1.31 kg (2.89 lb)	580 – 610mm	200 – 210mm	165 – 175mm	1058cm²	628cm² (3)

(1) 545mm circumference BSI headform; (2) 575mm circumference BSI Headform; (3) 610mm circumference BSI Headform

Team Wendy CAM-FIT™ retention

Fully adjustable 7 piece D3O TRUST® padding

Optional open architecture side rails

Optional lightweight NVG shroud

AERODYNE HELMET COMMUNICATIONS KIT

If operations require helmet communications, Aerodyne offers a standard military communications package which includes:

- Modified "Y" harness CX-4707
- Speaker harness CX-4708/AIC
- Chrome boom BA-138-002
- Two earphones 5965-00-615-0104
- M-87 microphone 5965-00845-5500