# FireHawk M7 Air Mask



Through the NFPA, firefighters have strived to improve the durability and performance of SCBA and PASS devices.

To this end, the new NFPA 2007-edition standards for self-contained breathing apparatus and personal alert safety systems call for a PASS alarm that performs at 500° F, electronics that remain waterproof after six immersion cycles at 1½ meters depth of water and a 350°F heat exposure, and electronics that function after a rigorous 3-hour tumble test. They also raised the bar on voice communication capability, now requiring a minimum score of 85% at a 10-ft distance (allowing an electronic or mechanical system). (Previously this was 72% at 5 feet.)

MSA's new FireHawk M/ Air Mask represents a true technological achievement in critical personal protection. As firefighters determined the safety requirements that would be needed to meet the new NFPA 1981 and 1982–2007-edition standards, MSA's engineering teams began designing the solutions.

The new FireHawk M7 Air Mask emerged with seven life-safety design components built on a modular Air Mask platform, developed to exceed the new NFPA 2007 requirements and provide firefighters with the highest-quality SCBA currently available.

#### 1. TAKING THE HEAT

Although MSA PASS alarms have performed in extreme temperatures for more than a decade, a top priority was to design an alarm that could **really take the heat!** The new M7 alarm (patent pending) was developed in cooperation with prominent university acoustic experts, resulting in an emitter that exceeds 95 decibels with solid performance at the NFPA 500F test! Once again, giving you that lifesaving edge in the face of danger.



#### 2. VIRTUALLY "BULLET-PROOF" ELECTRONICS

Like an armor shield, the M7 HUD, Power Module, and Control Module are encased in a proprietary high-temperature impact-grade polymer, providing the highest possible protection against impact and water ingress.

Electronics enclosures are permanently sonically **welded** to a hermetic standard and use a high-pressure 0-ring to ensure a consistent water-tight seal. The new M7 electronics are virtually "bullet-proof" against fire-ground hazards.





#### 3. STRAIGHT-TALK COMMUNICATIONS

We've got you covered with communications, starting with a high-performance mechanical speech diaphragm, performing so well that it may likely serve as a stand-alone solution to meet the latest NFPA communications requirements! Backing the mechanical diaphragm is an electronic amplifier with an internal facepiece microphone for ultimate clarity, a digital signal processor to eliminate feedback even when shouting, three volume levels, and an auto-off feature after 20 minutes of no-use to save batteries. The new Air Mask speaks loud and clear when it comes to communications.

#### 4. FIREGROUND MANAGEMENT

Firefighter accountability systems have never before been as practical, complete, and user-friendly as the MSA M7 Accountability System. It's based on the ICM® TxR Unit introduced in mid-2006, which has thousands of systems deployed in virtually every type of fire department, and they're performing phenomenally! It displays a full array of visual and audible information for up to 100 firefighters within a one-mile-line-of-site — exactly what incident commanders wanted. Record keeping is also made easy by downloading reports. This crown jewel is available only from MSA!



#### 5. EXTENDED PROTECTION

The new FireHawk M7 Air Mask is not your typical SCBA. Firefighters need to be prepared for the unexpected, and emergency egress from a 2nd-floor or higher can be impossible without the right safety equipment. That's why the new M7 Air Mask offers an NFPA- compliant integrated rappelling system, called the Rescue Belt, providing firefighters with one more lifesaving option in the face of danger.

"Above and beyond" protection is also provided with the CBRN FireHawk MMR. The CBRN FireHawk includes a positive-protection Tetraplex™ shield, to prevent contact between chemical warfare agents and the most vulnerable component of regulators, their thin elastomeric diaphragm. Other "air-wash" approaches may pass in laboratory conditions. The shield provides positive protection against all potential conditions.

External hazards are bad enough without having concerns of spreading illness among firefighters through shared-use SCBA. The Ultra Elite® facepiece protects you against user cross-contamination with MSA's inhalation check-valve: a "must have" in modern safety equipment.



Designed to meet the new NFPA 2007-edition standard.

Determined to exceed your safety equipment expectations!

#### 6. LIGHTWEIGHT AND EASY TO USE

Firefighters already have enough weight to carry and gear to maintain, so MSA engineers set out to lighten the load of components, reduce parts counts, **simplify maintenance**, maximize user comfort, and **modularize** the design. The FireHawk M7 Air Mask has a lightweight polymer backplate, with quick-release harness straps, an error-proof cam-lock cylinder attachment, fast change-out electronic components, a large swiveling lumbar pad, and regulators that will fit in the palm of your hand (**less than 30 parts** for the MMR and 14 for the 1st stage). Our time-tested Ultra Elite facepiece has unbeatable comfort, visibility, communications, cross-contamination protection, fit, and seal.

#### 7. PLATFORM FOR THE FUTURE

The FireHawk M7 Air Mask is designed to accept **future technology upgrades**. Included in every M7 electronics ensemble is a 2.4GHz **personal wireless network**, a network that transmits and receives encrypted information over a short-range on a firefighter's body.

This new wireless feature provides the capability to add on future technology that can provide additional information back to incident command through the FireHawk M7 Accountability System.

Software can also be upgraded wirelessly in the field, through the M7 wireless network. You never have to worry about radio interference either — we have you covered with a thoroughly-tested RFI shield design that protects against all fireground radio signals. The new FireHawk M7 Air Mask provides you with the best technology today and positions you for well into the future.



FireHAWK® M7 Air Mask

## **Industrial SCBA**

#### AirHawk® MMR Air Mask

Based on the highly successful MSA FireHawk Air Mask which sees duty in the harshest environment —firefighting— MSA's Airhawk MMR Air Mask incorporates the latest technologies available for industrial, agricultural, HazMat and HVAC work.

What sets the Airhawk SCBA apart from the rest of the field is the long list of options that let you customize the apparatus for your specific needs.

- The Advantage 4000 Facepiece that can be configured to air-purifying, supplied-air and SCBA usage via MSA's unique adapter design.
- The Airhawk SCBA is available in lowpressure (2216 psig) or high-pressure (4500 psig) versions
- Three different 30-minute rated low-pressure cylinder types—aluminum, hoop-wound or carbon-fiber—let you choose low weight or low-cost
- High-pressure Carbon Fiber-wrapped Composite cylinders are available in 30-, 45- or 60-minute rated durations

- The innovative Firehawk PTC (Push-To-Connect) Regulator easily and securely attaches to your facepiece
- The industry leading Ultra Elite® Facepiece offers the choice of three sizes in either SoftFeel® Hycar rubber or silicone
- Dual-purpose options allow the connection of an air-line. Five different quick-disconnect fittings are available
- The harness assembly is available in Nylon or flame-and-heat-resistant (FHR)Kevlar material. A chest strap, lumbar pad and shoulder pads can also be added, making this the most comfortable industrial Air Mask on the market today



AirHawk® MMR Air Mask with Advantage 4000 Facepiece

Designed with the industrial user in mind, employing the latest in engineering advancements, the Airhawk MMR Air Mask will perform wherever firefighting compliance to NFPA 1981 is not required. See p. 54 for AirHawk ATO ordering information.

#### **Tactical Air Masks**

#### BlackHawk® Tactical Air Mask

The BlackHawk Tactical Air Mask is especially designed for tactical situations. Certain BlackHawk features eliminate reflections and/or audible sounds that would compromise concealment—in other words, it is black, sleek and silent.

#### **Ultra Elite® Facepiece**

- All-black Ultra Elite facepiece, available in Hycar or silicone rubber
- Three sizes of facepiece with two sizes of black nosecups
- HUD System mounting bracket
- SpeeD-ON® Kevlar Head Harness

#### **Mask-Mounted Regulator**

- Firehawk® Regulator with Push-to-Connect feature
- Neoprene intermediate pressure hose
- · Variable flow bypass system

#### **EOSTI / Gauge**

- Nightfighter Heads-Up Display functions silently as the low pressure warning device and the cylinder pressure gauge\*
- System consists of a transmitter mounted on the gauge line and a receiver that mounts on the facepiece
- A series of LEDs provides the user with cylinder volume information
- LEDs function in an intermittent mode and can be refreshed by depressing the refresh button on the transmitter
- \* There is no audible low-pressure warning device on this unit.

See p. 54 for BlackHawk ATO ordering information.

#### **Harness and Carrier**

- Composite backplate reinforced with glass fibers
- Large side handles on the backplate for pulling the wearer to safety
- Waistbelt, shoulder straps and pull strap are all made of flame and heat-resistant (FHR) Kevlar material
- Optional FHR shoulder pads and lumbar pad (solid or swiveling)
- Optional FHR chest strap
- Adjustable Kevlar cylinder retention strap with over-center latching system
- Cylinder shroud that encompasses the cylinder and Air Mask pneumatics. Shroud is made of Advance FHR material

#### **Cylinders**

- The Blackhawk Air Mask is available in both low-pressure (2216 psi) and high-pressure (4500 psi) operating systems
- Carbon- fiber cylinders available for use are: L-30 Stealth, H-30 Stealth, H-45 Low-Profile Stealth, H-60 Stealth

#### **Quick-Fill® System Option**

A shoulder-mounted Quick-Fill System option is offered

#### **Workline Accessory**

 For extended-use applications, an air-line accessory is available with your choice of five different types of fittings

#### **Rescue Belt**

- Emergency egress system integral to the SCBA waist belt
- Includes Kevlar line and rappelling hardware



BlackHawk® Tactical Air Mask

#### Carrying Case

A hard case or soft case are offered for storage purposes

#### **CBRN Protection**

- Optional CBRN hardened facepiece and regulator assembly
- · Positive protection from CBRN agents
- Same CBRN components as the very popular FireHawk Air Mask



## **SCBA Key Components**

### Facepiece Assemblies for FireHawk M7 Air Masks

#### **Ultra Elite® Facepiece**

The MSA Ultra Elite Facepiece offers an effective combination of comfort and performance.

Designed to provide exceptional peripheral and downward vision, the Ultra Elite Facepiece features a super-soft facepiece texture for a smooth and comfortable fit. It also resists chemical attack and temperature extremes, and withstands rugged day-to-day use without tearing and ripping.

The design of the Ultra Elite Facepiece is based on extensive anthropometric studies of the face-length, temple-width and chin-width data from more than 8,000 individuals. The result is a facepiece that provides improved seals against a wide range of facial contours. To provide a secure, comfortable fit, the facepiece utilizes five adjustable straps with stainless steel, field-replaceable buckles that resist chemical attack. The straps also feature slightly larger adjustment tabs that are easier to manipulate, even with gloves on.

For slip-on convenience, the Ultra Elite Facepiece can be equipped with the SpeeD-ON® Facepiece Harness. Made of flame- and heat-resistant Kevlar Fabric, the harness features a hair-net type, five-point suspension that can be easily and securely adjusted at each point.

Lenses on MSA full facepieces are molded from polycarbonate, and a special super hardcoating provides a tough, durable facepiece lens to resist scratching.

#### Firehawk® MMR

The Firehawk MMR, MSA's mask-mounted regulator assembly, is available with two different attachment systems, the Firehawk MMR truly redefines ease-of-use and ease-of-maintenance, combined with outstanding performance.

The Firehawk second-stage regulator features a unique Slide-To-Connect (STC) attachment system that allows firefighters to hang the regulator on the facepiece in the "ready position," then simply push it into the facepiece when SCBA air is needed. Doffing of the regulator, while wearing gloves, is also easy with two large release buttons that automatically turn-off the flow of air as the regulator is doffed. A dual-swivel feature on the pressure hose provides maximum freedom-of-head movement and the silicone hose material ensures hose flexibility even at very cold temperatures.

In addition to the STC system, MSA also offers a second connection option for the Firehawk Regulator, the Push-to-Connect (PTC). The PTC's



Adapter self-centers the Firehawk regulator and the loud dual sound of the regulator engaging onto the facepiece provides you with confidence that the Firehawk PTC is securely attached to your facepiece—an action that takes just seconds, when seconds count!

Maintenance is also a breeze, considering the Firehawk design requires no tools, adhesives, or sealants, and has approximately 70% fewer parts as compared to other regulators on the market. Additionally, there are no internal adjustments required. Any adjustments to the regulator may be accomplished at a single adjustment point through the outlet port of the regulator.

Ease of use and maintenance, combined with outstanding performance, makes the Firehawk MMR clearly the product of choice.

#### Heads-Up Display (HUD)

When you open your Air Mask's cylinder valve, the HUD automatically activates, displaying the cylinder pressure reading in 25% increments.



#### **ClearCommand Communications System**

MSA's ClearCommand Communications System is designed specifically to meet the modern communications needs of firefighters. It features an internally mounted microphone coupled with a large-diameter (50mm) amplifier speaker for optimal clarity and volume. Using a proprietary circuit design, the system delivers more than twice the volume of a facepiece alone. Mounted in an "out-of-the-way" position, the ClearCommand System doesn't block vision or mechanical communication. The Ultra Elite's mechanical voicemitter is still fully functional, even with the system installed.

Ultra Elite M7 Fac	epiece, SpeeD-ON	Head Harness, No	secup and M7 HU[	) Bracket	
	Firehawk STC			Firehawk PTC	
	Standard speaking diaphragm	ClearCommand ready		Standard speaking diaphragm	ClearCommand ready
Small	10084689	10084821	Small	10084690	10084822
Medium	10084823	10084825	Medium	10084824	10084826
Largo	1009/1927	1009/1920	Lorgo	1009/1929	1009/1920

<b>Heads-Up Display</b>	1
10083132	FireHawk M7 Receiver



#### **Emergency Egress System**

#### **Rescue Belt**

In a continuation of MSA's pursuit of firefighter safety, the Rescue Belt is being introduced to the fire service. This is an NFPA-compliant emergency egress system that is unique to MSA. The belt can be integrated into the carrier and harness assembly of the MSA Vulcan or Airframe Carrier and Harness assemblies. A 50 foot or 75 foot Kevlar line with a descender and caribiner is weaved into the belt to allow a trapped fire fighter to escape to either the ground or to a floor below the fire.

The belt is available in three lengths, standard (56 inches), mid-size (66 inches) and long (76 inches).



Rescue l	Belt
10052766	50' Standard Rescue Belt
10071003	50' Mid-Size Rescue Belt
10052767	50' Long Rescue Belt
10052768	75' Standard Rescue Belt
10071004	75' Mid-Size Rescue Belt
10052769	75' Long Rescue Belt

#### **Carrier & Harness Assembly**

#### FireHawk M7 Carrier and Harness Assembly

The one component of any SCBA that has the most impact on firefighter comfort is the carrier and harness assembly. MSA is introducing a new carrier and harness assembly that places an emphasis on firefighter comfort while maintaining the robustness and reliability that is expected in the fire service. The carrier and harness comes standard with large side handles and a central attachment point for pulling firefighters to safety in rescue scenarios. The swiveling lumbar pad provides maximum freedom of movement and comfort when crawling or climbing.

The assembly utilizes the proven pieces from previous generations of Air Masks such as the tunneled shoulder straps for hose containment, and tri-bar slides for easy removal/installation of the waist belt and shoulder straps.

at, of the

FireHawk M	7 Carrie	r and H	arness A	ssemblies
Dood No.	Pres	sure	Chest	Swiveling
Part No.	Low	High	Strap	Lumbar Pad
10083128	Х			
10083129		Х		
10086663	Х		Yes	Yes
10086662		Х	Yes	Yes
10086664	Х		Yes	
10086665		Х	Yes	
Accessories				
10083134	Replacem	ent FireHav	vk M7 Lumba	ır Pad
10012167	Chest Stra	р		

All units are equipped with double-pull waist belts and an optional chest strap is available.

### **Cylinders**



#### **Carbon-Wrapped Cylinders**

Carbon-wrapped Cylinders are the lightest SCBA air cylinders ever developed by MSA. They feature a unique outerwrap made of lightweight, high-performance carbon fibers, which reduces cylinder weight by two to six pounds when compared to fiberglass-wrapped cylinders and as much as ten pounds when compared to aluminum cylinders. They are available in five models to accommodate a wide range of applications.

Cylinde	rs for SCBA			
Part No.	Cylinder Type (Cylinder & Valve)	NIOSH Service Rating Life	Pressure	Weight* (empty)
807586	L-30	30'	2216 psig	7 lb – 9 oz.
816115	L-30+	30'	3000 psig	9 lb – 14 oz.
469619	Fiberglass Hoop-Wound	30'	2216 psig	13 lb.
809872	Aluminum	30'	2216 psig	18 lb.
807587	H-30	30'	4500 psig	7 lb – 3 oz.
807570	H-45	45'	4500 psig	10 lb – 9 oz.
10035644	H-45 LP	45'	4500 psig	10 lb – 6 oz.
807588	H-60	60'	4500 psig	12 lb – 11 oz.

<sup>\*</sup>All weights shown are approximate figures.

For more information see Bulletin 0108-11-MC. See Bulletin 0108-13-MC for information on Custom-Logoed cylinders for your MSA Air Mask.



## **MSA Accountability System**

Accountability is key to every firefighter's safety on a fire scene. MSA's new optional Accountability System revolutionizes fireground safety by combining the latest computer software with a high-performance radio module and the field-proven technology of MSA's ICM Tx Integrated PASS.

#### A new way to monitor vital information

- Each MSA base station can monitor up to 50 firefighters, and you can use multiple base stations on a single computer.
- The FireHawk M7 Air Mask with telemetry transmits to incident command the firefighter's name, team assignment, cylinder pressure, service-time remaining, PASS alarms (motion or manual), thermal alarms, battery status, radio connectivity, and evacuation acknowledgement.

#### A fireground management system

- Personalized ID tags for each firefighter tell incident command exactly who is on scene.
- An integrated PAR (personnel accountability report) timer helps manage radio calls to each team.
- Incident command can manually add firefighters who are not wearing an SCBA or mutual aid firefighters, so all personnel can be accounted for.

#### Intuitive and easy to use

- Assign firefighters to teams by clicking on a firefighter's icon and dragging it to another team.
- A volume of critical information is available at a glance of the screen, due to the large number of firefighters that can be displayed and the pictorial format of the information.
- Receive both audible and visual indications of critical events such as PASS alarms or lowpressure alarms.

# Incident command is assured that firefighters receive all evacuation messages. When incident command transmits the alarm through the FireHawk M7 Air Mask, they'll know the firefighter received it, because the unit auto-

matically sends a confirmation message to the

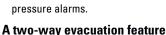
base station.

- By simply pressing a button on his/her own control module, a firefighter can send a manual confirmation to acknowledge that they have received and understand the critically important evacuation message.
- Firefighters will hear the evacuation alarm on their own personal PASS device. Also, visual indications in the HUD and an icon on the control module will alert the firefighter that it is time to evacuate.
- An individual firefighter, a team of firefighters, or all firefighters can be evacuated with the click of a button.

 Although certain concrete and steel commercial structures can challenge any radio signal, MSA's Accountability System coverage with radio technology provides highly reliable performance for a 1-mile line-of-sight range.

Self-Contained Breathing Apparatus

- Due to the spread-spectrum design, it does not interfere with other high-band radio frequency equipment.
- For additional safety, both base station and firefighter modules have an icon message to inform users if a firefighter falls out of radio signal range, so that alternate accountability measures, such as voice radio contact with teammates, can be taken.



#### **Accountability System** MSA's new M7 Accountability System revolutionizes fireground safety by combining the latest computer software with a high-performance radio module and the field-proven technology of MSA's ICM TxR Integrated PASS. 10072240 Accountability Base Station Kit (includes software, antenna kit, USB cable and 8-24 volt power cable) 10083876 M7 Control Module Reader / M7 ID tag writer 10083875 M7 ID tags 10075756 Antenna kit 10063880 USB cable 10049410 8-24 volt, power cable 10047342 Wall mount power cable (not included in 10072240 kit)

## **Emergency Breathing Systems**

#### The Quick-Fill® System



The patented Quick-Fill System lets MSA Air Mask users refill and transfill air cylinders while the SCBA is worn, without removing the air cylinder—even in IDLH atmospheres. Use this MSA-exclusive option to:

- Fill an SCBA cylinder from a mobile compressor or cascade system in less than a minute.
- Transfill between two cylinders, providing an Emergency Breathing System.
- Extend the air supply over longer durations, using a remote compressed-air source.

Because performance is not affected, MSA Air Masks retain NIOSH certification during use of the Quick-Fill System.

Air Masks compliant to recent NFPA standard have the Quick-Fill URC fitting located at the Audi-Larm warning device. A Quick-Fill hose with a quick-disconnect connects the air source to the adapter for air transfer. See Bulletin 0105-92-MC for a Question & Answer overview of Quick-Fill Systems.

The Qu	The Quick-Fill System									
Replace	ment Parts for the Quick-Fill System									
485366	EBS hose package, includes 3-foot emergency transfill hose in Kevlar pouch									
485331 Emergency transfill hose, less Kevlar pouch										
485390	Kevlar pouch									
485391	Male stainless steel quick-disconnect with SAE-10 thread, complete with dust cover (also for use as a fitting for customized refilling systems)									
485392	Female quick-disconnect with SAE-4 thread, complete with dust cover									

#### Quick-Fill Hoses

25-ft lengths are stocked; other "custom lengths" are available on a special material basis. All SAE Fittings are for high-pressure service. Female quick-disconnect fittings have dust covers.

25 ft	12 ft	10 ft	8 ft	6 ft	3 ft	
485332	802690	802689	802688	802687	485331	FQD x FQD
487907	802677	802675	802673	802671	492796	FQD x CGA-347 Outlet
487909	802685	802683	802681	802679	487427	FQD x CGA-347 CN
487906	802704	802703	802702	802701	802705	FQD x SAE-4
487908	802678	802676	802674	802672	492797	FQD x CGA-346 Outlet
487910	802686	802684	802682	802680	487428	FQD x CGA-346 CN

## RescueAire™ II Portable Air-Supply System

The RescueAire II Portable Air Supply System is designed to meet the needs of Rapid Intervention Teams (RITs). The system consists of a lightweight Carbon-Wrapped cylinder, Quick-Fill® emergency breathing system, ExtendAire™ emergency breathing system, and an MMR regulator, supported by a flame- and heat-resistant harness. The RescueAire is a complete system that can provide emergency breathing air for most any victim.

The RescueAire II System is available in both lowpressure (2216 psig) and high-pressure (4500 psig) versions. An optional-use shoulder strap is also provided for hands-free carrying.





Rescue	Aire™ II F	Portable Air-Supply System									
with L-30 cylinder	less cylinder	Low-Pressure (2216 psig)									
10025491	10033312	RescueAire II with L-30 Cylinder									
10041196	10041198	RescueAire II, Firehawk STC MMR									
10041230	10041232	RescueAire II, Firehawk PTC MMR									
with H-60 cylinder	less cylinder	High-Pressure (4500 psig)									
10025462	10025492	RescueAire II with H-60 Cylinder									
10041195	10041197	RescueAire II, Firehawk STC MMR									
10041199	10041231	RescueAire II, Firehawk PTC MMR									

#### The ExtendAire™ System

The ExtendAire System can be used as both an emergency breathing system and a dual-purpose device for MMR SCBA to allow firefighters to quickly and easily connect to an air-line.



The Ex	tendAire™ System
812958	ExtendAire Air-line Hose with foster plug
812973	40" Rescue Hose
10031798	ExtendAire Upgrade Kit for Threaded Firehawk MMR
10031797	ExtendAire Upgrade Kit for Quick-Connect Firehawk MMR

## **How to Order SCBA: Get the Exact Model You Need**

## The Assemble-To-Order System

MSA's Assemble-To-Order System (ATO) will make ordering the right mask easier and faster than ever. Instead of choosing from a handful of complete Air Mask assemblies, users can order a custom-made Air Mask with every option exactly as desired. Contact MSA Customer Service Center for details.

## FIREHAWK M7 Air Mask

Air Mask Pressure	Carrier/ Harness Assembly	Lumbar Pad/ Rescue Belt	Cylinder	MMR Type	Emergency Breathing Support	Facepiece	Nosecup	Head Harness	Electronic Communications	Integrated Pass/Telemetry	Case
M 3000	A Single Pull without chest strap B Single Pull with chest strap C Double Pull without chest strap D Double Pull with chest strap Options A & B can only be chosen if a rescue belt is selected.	0 None 1 Swivelling Lumbar Pad A Rescue Belt - Standard, 50' B Rescue Belt - Mid-Size, 50' C Rescue Belt - Standard, 75' E Rescue Belt - Mid-Size, 75' F Rescue Belt - Mid-Size, 75' If choosing a rescue belt, the carrier/harness assembly must be a single pull (loptions A or B).	0 None 1 3AL Aluminum with air 2 Hoop Wrapped with air 3 30' Carbon with air 4 3AL Aluminum less air 5 Hoop Wrapped less air 6 30' Carbon less air 0 None 1 30+ Carbon less air 0 None 1 30+ Carbon with air 2 45' Carbon with air 4 50' Carbon with air 5 30' Carbon low-profile with air 6 60' Carbon less air 6 45' Carbon less air 7 45' Carbon less air	A CBRN Firehawk STC, threaded, B CBRN Firehawk STC, QC, C CBRN Firehawk PTC, threaded, D CBRN Firehawk PTC, CRC, QC,	0 None 1 Quick-Fill 2 ExtendAire 3 Quick-Fill and ExtendAire M is not compatible with Quick-Fill	A None B Hycar Small C Hycar Medium D Hycar Large	0 None 1 Medium 2 Large	0 None 2 SpeeD-ON less neck strap 4 SpeeD-ON with neck strap	A None B Clear Command Ready C with bracket D Clear Command Amp Clear Command Amp/RI	thermal alarm activated  B PASS without thermal alarm activated	Case
							<del>/                                    </del>	ff			



## BlackHawk® MMR Self-Contained Breathing Apparatus Assemble-To-Order (ATO) Matrix

SCBA Type		Carrier/ Harness Assembly		Lumbar Pad/ Rescue Belt <sup>†</sup>		Cylinder		MMR Regulator Type		Air-Line Options		Emergency Breathing System	F	acepiece	N	losecup	ı	Head Iarness	C	ommunications		HUD Options		Case
BL 2216 BlackHaw Air Mask	0	with Chest Strap Kevlar with Shoulder Pads	0 1 2 A B C D E F	None Lumbar Pad Swiveling Lumbar Pad Rescue Belt - Standard 50' Rescue Belt - Standard 75' Rescue Belt - Long 50' Rescue Belt - Long 75' Swiveling Rescue Belt - Standard 50' Swiveling Rescue Belt - Long 50' Swiveling Rescue Belt - Long 50' Swiveling Rescue Belt - Long 50'	1 2 0 1 2 3 4	None 30' Carbon 30' Carbon less Air  None 30' Carbon 45' Carbon Low-Profile 60' Carbon less Air  45' Carbon Low-Profile less Air 60' Carbon less Air	i	Firehawk PTC, Solid Cover Firehawk PTC, Solid Cover, CBRN	0 1 2 3 4 5	None Snap-Tite Aluminum Hansen SST Hansen Brass Foster Steel Snap-Tite Locking Aluminum	1	None Quick-Fill Shoulder Mounted	A B C D E G	None Ultra Elite Hycar, Small Ultra Elite Hycar, Medium Ultra Elite Hycar, Large Ultra Elite Silicone, Small Ultra Elite Silicone, Medium Ultra Elite Silicone, Large	0 1 2	None Med Large	0 1 2	None Rubber SpeeD- On	B C D	Standard Speaking Diaphragm Clear- Command Ready Clear- Command Amp Clear- Command Amp/RI (Less PTT)	1	Night- Fighter HUD	0 1 2	None Hard Case Soft Case
			_		_		Ţ		7		J						J						J	
				C - Pai	ť	Number												up to	5	Standard Rescue 4 inches. Long Re p to 74 inches.	B esc	elt fits w cue Belt f	ais its	t sizes waist

#### AirHawk® MMR Self-Contained Breathing Apparatus Assemble-To-Order (ATO) Matrix

S	СВА Туре		arrier/ arness	P	ad Options	-	Cylinder	Re	MMR gulator Type		Air-Line Option		Facepiece	N	osecup	Н	Head larness		PASS		Case
AH	AirHawk- MMR (2216 psig)  AirHawk- MMR (4500 psig)	A B C D	Nylon without chest strap Nylon with chest strap Kevlar without chest strap Kevlar withch- est strap	0 1 2 3 4 5	None Shoulder Pad Lumbar Pad Shoulder Pad & Lumbar Pad Swiveling Lumbar Pad Swiveling Aswiveling Swiveling	0 1 2 3	None 3AL Aluminum Hoop- Wound 30' Stealth  None 30' Stealth 45' Stealth Low Profile 60' Stealth	G	Firehawk PTC with Swivel & Solid Cover	0 1 2 3 4 5	None Snap-Tite Aluminum Hansen SST Hansen Brass Foster Steel Snap-Tite Locking Aluminum Foster SST	ABCDEFGGHI	None Ultra Elite, Hycar, Small Ultra Elite, Hycar, Medium Ultra Elite, Hycar, Large Ultra Elite, Silicone, Small Ultra Elite, Silicone, Medium Ultra Elite, Silicone, Medium Ultra Elite, Silicone, Medium Ultra Elite, Silicone, Small Advantage 4000, Hycar Small Advantage 4000, Hycar Medium Advantage 4000, Silicone Medium Advantage 4000, Hycar Large Advantage 4000, Silicone Large	0 1 2	None Med Large	0 1 2 3 4	None Rubber SpeeD- ON Silicone Net	0	Gauge	0 1 2	None Hard Case Soft Case
				I		I =		Ţ		Ţ		J									
	B — Part Number													ı							

## **ClearCommand® HCS Helmet Communication System**

The Helmet Communication System from MSA is a state-of-the-art radio interface device which significantly improves the user's ability to receive and send messages even in loud ambient-noise environments. It goes wherever you go. The system consists of a helmet-mounted microphone and ear speaker assembly that weighs 5.3 ounces and easily snaps onto the user's fire helmet or industrial-style helmet's ratchet suspension. The helmet mic/ear speaker assembly connects to a lapel microphone or optional stand-alone PTT (push-to-talk) unit. The lapel microphone and PTT are permanently fitted with a connector for attachment to the specific radio



of choice. The Helmet Communication System also offers a plug-in truck communication adapter that can be used by firefighters, along with their helmet microphone assembly, on the way to a fire scene or other incident. Once the firefighter arrives at the scene, the truck system cable is unplugged from the helmet microphone, and the helmet microphone cable end is connected to the user's lapel mic or PTT.

The user of the Helmet Communication System has uninterrupted communication from the time the alarm sounds until the incident is over.

For more complete information, see Bulletin 3639-01-MC.





#### **Features & Benefits**

- Incorporates a "noise-eliminating" boneconduction voice transmitter that virtually eliminates high ambient noise levels.
- Custom user-fitted ear speaker brings all incoming communication directly to the user's ear. No need to lift your lapel mic up to your ear to hear transmission.
- Easily snaps onto the ratchet suspension of fire helmets or industrial-style helmets.
   The unit can be easily transferred to other users, and no tools are required for removal.
- Can be used over the top of facepiece head harnesses, hoods and liners without losing the quality of the transmission.
- The bone-conduction microphone is made of soft silicone material, which makes it comfortable to wear, with no pressure points.
- The helmet microphone assembly can be reversed on the helmet suspension to position the ear speaker on either ear.

- The helmet mic system, when used with the lapel mic or PTT, is powered by the battery from the radio. No need to replace or re-charge dry cells.
- Special connectors suitable for most common radios are available for the lapel microphone and PTT, which allows users to adapt the system to their existing radios.
- The helmet mic is NFPA-certified which allows its use while fighting fires.
- Intrinsic safety approvals allow the use of the Helmet Communication System in hazardous environments.
- The stand-alone PTT unit is designed for use under hazardous material suits. The large button makes it easy for the user to depress and communicate.
- The helmet mic incorporates a cable keeper which allows for storage of the cable when it's not connected to the lapel mic or PTT.

Helmet Microphone Assembly		
10042902	Helmet Microphone Assembly (includes Custom Fitted Flannel Headband Liner)	
Lapel Mic Kits for Radio Interface*		
10042908	Maxon SP120, SP130, SP140	
10042909	Motorola HT600, MT1000, MTX820, MTX900, Radius P200 & P500	
10042903	Motorola HT1000, JEDI, MT2000, MTS2000, MTX838, MT839, MTX8000, MTX9000	
10042904	Motorola Astro and Saber	
10042905	Motorola Radius GP300, P110, SP50, LTS2000, Spirit-III, GTX, SP21	
10042912	Motorola STX, MX800, MX840	
10042906	GE Ericsson PCS, PC2005	
10042907	GE Ericsson MRK, LPE-200, Prism, PX 126T	
Stand-Alone PTT Kits for Radio Interface*		
10045667	Maxon SP120, SP130, SP140	
10045668	Motorola HT600, MT1000, MTX820, MTX900, Radius P200 & P500	
10045662	Motorola HT1000, JEDI, MT2000, MTS2000, MTX838, MT839, MTX8000, MTX9000	
10045663	Motorola Astro and Saber	
10045664	Motorola Radius GP300, P110, SP50, LTS2000,Spirit-III, GTX, SP21	
10045669	Motorola STX, MX800, MX840	
10045665	GE Ericsson PCS, PC2005	
10045666	GE Ericsson MRK, LPE-200, Prism, PX 126T	
Truck System		
10045732	Nexus Adapter, D. Clarke	
10045731	Phonejack Adapter, D. Clarke	
Parts and Accessories		
10046087	Dust Cover	
10046123	Guard Ring, Tall	
10046122	Guard Ring, Short	
10046089	Belt Clip Assy, Standard	
10046120	Belt Clip Assy, Clothes Pin Type	
10046121	O-Ring, Single Pin Connector	
10045778	Flannel Head Band Liner	

<sup>\*</sup>If your specific radio is not listed, please contact MSA Customer Service.



# ClearCommand® Communications System for Ultra Elite® Facepieces

MSA's ClearCommand Communications System is designed specifically to meet the modern communications needs of firefighters.

Because it's available in two versions, amplifier and amplifier with radio interface, firefighting teams can be properly fitted for the job at hand. Also, the systems are designed for "shareduse" of the amplifier with a unique "bus-bar" arrangement, so individual issue is not required.

The ClearCommand systems feature an internally mounted microphone coupled with a large-diameter (50mm) amplifier speaker for optimal clarity and volume. Using a proprietary circuit design, the system delivers more than twice the volume of a facepiece alone.

Mounted in an "out-of-the-way" position the

Mounted in an "out-of-the-way" position, the ClearCommand System doesn't block vision or mechanical communication. The Ultra Elite's

mechanical voicemitter is still fully functional, even with the system installed.

The radio interface version features the same amplifier as the amp-only version, combined with an ear-speaker for incoming radio messages and a lapel mic assembly for interface with over 100 radios. The lapel mic can be used as a component of the ClearCommand system or as a stand-alone hand mic.

Both the amplifier and radio interface models are intrinsically safe, and meet the applicable requirements of NIOSH and NFPA 1981, 2002 edition.



Field Maintenance and Repair

MSA offers a complete program for maintenance and repair of MSA Air Masks.

The program is supported with personalized training tailored to customers' needs and taught in the field by

MSA-authorized personnel.

User maintenance covers procedures necessary to conduct general cleaning, inspection, and limited maintenance in accordance with the Occupational

Safety and Health Administration (OSHA), National Fire Protection Association (NFPA), and the American National Standards Institute (ANSI) standards.

C.A.R.E. Certified Air Mask Repair Education covers all maintenance for both low- and high-pressure SCBA. Air Mask inspection and maintenance can be performed by MSA or a factory-authorized service center. Or, individuals can obtain training for C.A.R.E certification from MSA. By having a C.A.R.E-certified technician on staff, fire departments and other facilities with a large number of Air Masks can perform all inspection and maintenance in-house.

- All repairs and maintenance can be done in the field.
- A selection of overhaul kits, spare parts, and tool kits is available.
- Users may conduct periodic performance testing using an authorized MSA regulator tester.



ClearCommand System Kits		
10024074	Amplifier Kit, complete with microphone	
10051290	Amplifier Radio Interface Kit, w/ microphone, less PTT	
10023055	Microphone Kit, with mounting bracket	
Lapel Mic Kits for Radio Interface*		
10042908	Maxon SP120, SP130, SP140	
10042909	Motorola HT600, MT1000, MTX820, MTX900, Radius P200 & P500	
10042903	Motorola HT1000, JEDI, MT2000, MTS2000, MTX838, MT839, MTX8000, MTX9000	
10042904	Motorola Astro and Saber	
10042905	Motorola Radius GP300, P110, SP50, LTS2000, Spirit-III, GTX, SP21	
10042912	Motorola STX, MX800, MX840	
10042906	GE Ericsson PCS, PC2005	
10042907	GE Ericsson MRK, LPE-200, Prism, PX 126T	
Stand-Alone PTT Kits for Radio Interface*		
10045667	Maxon SP120, SP130, SP140	
10045668	Motorola HT600, MT1000, MTX820, MTX900, Radius P200 & P500	
10045662	Motorola HT1000, JEDI, MT2000, MTS2000, MTX838, MT839, MTX8000, MTX9000	
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10045664	Motorola Radius GP300, P110, SP50, LTS2000,Spirit-III, GTX, SP21	
10045669	Motorola STX, MX800, MX840	
10045665	GE Ericsson PCS, PC2005	
10045666	GE Ericsson MRK, LPE-200, Prism, PX 126T	
Truck System		
10045732	Nexus Adapter, D. Clarke	
10045731	Phonejack Adapter, D. Clarke	
Parts and Accessories		
10046087	Dust Cover	
10046123	Guard Ring, Tall	
10046122	Guard Ring, Short	
10046089	Belt Clip Assy, Standard	
10046120	Belt Clip Assy, Clothes Pin Type	
10046121	O-Ring, Single Pin Connector	
10045778	Flannel Head Band Liner	

<sup>\*</sup>If your specific radio is not listed, please contact MSA Customer Service



## **SCBA Accessories**

#### **APR Adapter**

MSA's APR adapter provides firefighters with the versatility they need to perform all tasks at the fire ground with one common facepiece. From fire-fighting to overhaul to homeland security, firefighters can switch from a positive-pressure facepiece to a negative-pressure air-purifying respirator simply by engaging the APR Adapter. The APR Adapter uses MSA's comprehensive family line of air-purifying cartridges; select from the Advantage cartridges or our CBA/RCA canisters to protect against a multitude of airborne contaminants.

The APR Adapter is designed for use in non-IDLH environments and is NIOSH-approved. Contact MSA for more information.



#### Spectacle Kit for Full-Facepiece Respirators

For use by workers who must wear corrective lenses, the Spectacle Kit can be easily inserted into the facepiece. The kit includes a wire support, rubber guide, and pair of metal-frame spectacles. There are two kits for the Ultra Elite facepiece; one uses a side wire support to hold the lenses in the facepiece, while the other uses a center support to position the unit. Desired adjustment is obtained by moving the spectacles in and





Side-Support Spectacle Kit Center-Support Spectacle Kit for Ultra Elite® Facepiece

for Ultra Elite® Facepiece

out of the rubber guide and up and down the wire support. One size of spectacle frame is used (S-7 shape, 48-mm lens size) with Universal Bridge Corrective Lenses that can be obtained from local sources. The Spectacle Kit can be used with a nosecup.

## Nosecups

Molded from a soft rubber compound that is resistant to facial oils, the optional nosecup helps reduce the possibility of lens fogging. The nosecup is particularly effective under conditions of high humidity and/or low temperatures by inhibiting contact of moist exhaled air with the facepiece lens. A nosecup can be easily affixed to the facepiece without tools. Any size nosecup may be installed in any size Ultra Elite Facepiece for a customized, more comfortable fit.

#### **High-Pressure Filling Hose**

Provides a convenient means to connect and charge highpressure air into a high-pressure 4500 psig cylinder.



**Accessories for Filling** Low-Pressure (2216 psig) Cylinders



#### **APR Adatpers** Firehawk MMR STC Version 10032511 APR Adapter 10032927 APR Adapter Individual Kit 10032925 APR Adapter Truck Kit Firehawk MMR PTC Version 10040052 APR Adapter 10040055 APR Adapter Individual Kit 10040054 APR Adapter Truck Kit Accessories 10037809 Ultra Elite, Anti-Fog Applique (10/pkg) 10037810 Ultravue, Anti-Fog Applique (10/pkg) 817590 CBA/RCA Canisters (box of 6) 809858 Replacement Baffle 813341 Replacement Bayonet Cover **Spectacle Kits** 804638 Ultra Elite Spectacle Kit (side wire support) 493581 Ultra Elite Spectacle Kit (center support) **Nosecups** 495188 Medium Black Nosecup 495189 Large Black Nosecup **High-Pressure Filling Hose** 476105 High-Pressure Filling Hose Assembly

**Accessories for Filling Low-Pressure** 

Air Outlet Connection, complete w/ Gauge

Low-Pressure Air-Filling Hose, 5 feet long

(2216 psig) Cylinders

Air Pigtail

Air Coupler Tee

68846

68850

68851

476156

# **Shop Online for MSA Gear**

MSA FireSlayer and Be Ready promotional items are available to anyone via MSA's Internet site. Sporting appropriate logos are shirts, duffels, caps, golf items, mugs, money clips, lighters and more. The Fireslayer logo helps promote our products to the firefighting market, while the Be Ready logo is aimed at Homeland Security. Look for the "MSA Gear" link in the Resources & Info area after selecting MSA North America; MSA United States from the MSA homepage at MSAnet.com.

After making your selections, complete the shipping information and furnish a credit card number. Your order will be processed, and you should receive it within a week. Express service is also available.

