MSA ACCOUNTABILITY SYSTEM

Revolutionize your fireground safety!

Accountability is key to every firefighter's safety on a fire scene. You simply can't afford not to have the very best telemetry technology available. *And it's here!*

MSA's 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.

Add this technologically-advanced Accountability System to MSA's state-of-the-art FireHawk® M7 Air Mask, and you'll be wearing the best integrated SCBA-Accountability System available.

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 Accountability System 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.
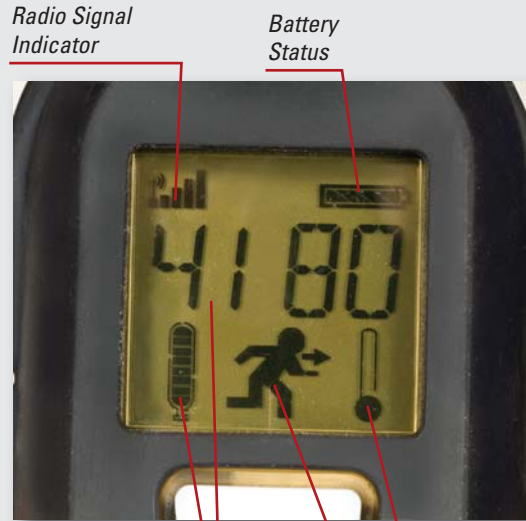
Intuitive and easy to use

- 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 low-pressure alarms.

A two-way evacuation feature

- Incident command is assured that firefighters receive all evacuation messages. When incident command transmits the alarm through the M7 PASS device, they'll know the firefighter received it, because the unit automatically sends a confirmation message to the base station.
- By simply pressing a button on his/her own personal M7 PASS device, 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 M7 PASS device will alert the firefighter that it is time to evacuate.
- An individual firefighter, a team of firefighters, or all firefighters can be evacuated.
- Although certain concrete and steel commercial structures can challenge any radio signal, the Accountability System coverage with radio technology provides highly reliable performance for a 1-mile line-of-sight range.
- 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.

MSA's M7 Accountability System consists of five main components:

1. The M7 Control Module

Radio Signal Indicator

Battery Status

Pressure Indicator (digital and icon)

Evacuation signal icon

Thermal Indicator

- Provides a graphical display of: battery status, cylinder pressure, heat alarm, evacuation commands, radio connectivity, and service-time remaining.

- Measures and calculates your air consumption rate during the first three minutes of use. After the initial calculation, the service-time remaining function is updated every 30 seconds.

The highly reliable solid-state accelerometer detects firefighter motion

- It's sensitive to motion, yet resistant to false alarms, and durable enough to meet the demands of the job.

- It's notably resistant to the wear associated with mechanical components.

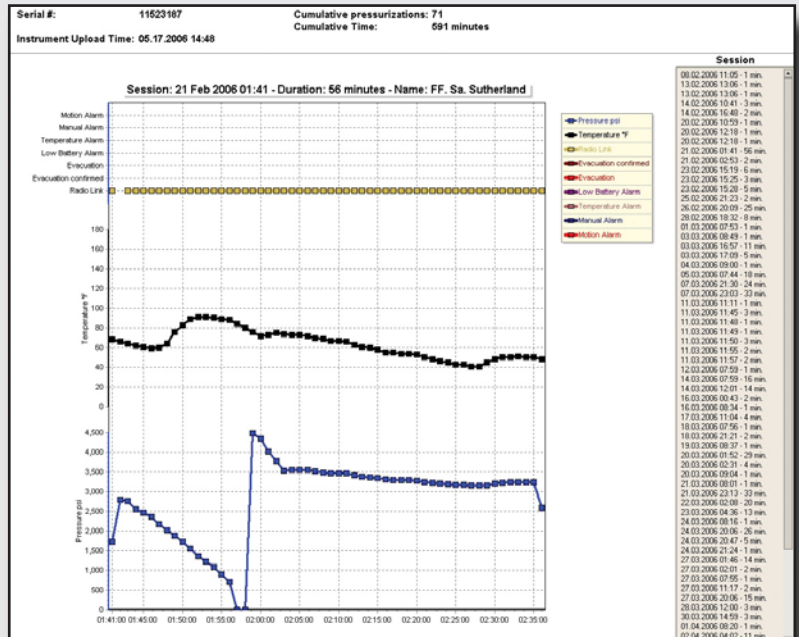*The "buddy light" increases visibility*

- In the monitor mode, a bright green LED flashes behind the translucent manual PASS alarm button.

- When the PASS goes into full alarm, the light turns red for quick recognition of a firefighter in distress.

The optional Heat Sensor monitors temperature

- The temperature-sensing unit (thermistor) measures heat on a time-weighted average (based on the guideline that 180°F for 18 minutes is just as hazardous as 600°F for one minute).

- At either extreme, and every temperature in between, an alarm will sound to alert you that dangerous heat levels are looming.

Data logging makes recordkeeping simple

- Information detailing the most recent 25 hours of use is stored by the M7 PASS device and special software lets you download, display, and store the data on your PC.

- Each time your SCBA is pressurized, a use session records the day, time, name of the firefighter (if ID Tags are used), cylinder pressure, air consumption rate, and time of alarms (thermal, PASS, and low-pressure warning).

- If previous data was not downloaded to your PC, the M7 PASS device will simply record over the earliest information in storage, retaining the most recent 25 hours of usage information.

2. ID Tag

- Using a personalized ID Tag, each firefighter can store his/her name, jump seat location, station number, and other information.

- Your personal information then becomes part of the datalogging record retrieved when all the PASS information is downloaded.

3. FireHawk M7 Reader / ID Tag Writer

- Plugs into your computer's USB port and downloads the data from the M7 PASS device.

- Programs the ID Tags.

4. Accountability Base Station Incident Command Module

- Transmits and receives radio signals to and from the M7 PASS device via the license-free 902 – 928 MHz frequency band.

5. M7 Accountability Software

- Enables incident command to view each firefighter's vital statistics on scene, such as: PASS alarms, cylinder pressure, thermal alarms, battery status, time-remaining calculations, and evacuation acknowledgement.

- Pulls critical information to the front of the screen using "pop-up" windows.

- Uses a color-coded icon system which enables incident command to quickly determine the status of each firefighter. This color-coding scheme is the same as that used in the HUD. This builds consistency for personnel on both sides of the fire scene: incident command and firefighters in the structure.

Cylinder Pressure	HUD Display	Helmet Icon shown on laptop screen
100 – 76%	4 Green LEDs	Green
75 – 51%	3 Green LEDs	Green
50 – 26%	2 Yellow LEDs	Yellow
Less than 25%	1 Blinking Red LED	Red

- Incorporates a Personnel Accountability Report (PAR) timer. Because departments use different time increments for PAR, the system can be programmed to have PAR reminders at predetermined intervals.

- Can assemble all details of all events quickly and easily into a complete incident report.

- The minimum system requirements for the PC are 1 GHz Pentium III processor or equivalent, 256 MB RAM, USB 1.1, 16 MB Graphics Card, 200 MB Free Disk Space, and Windows XP Service Pack 1 or Windows 2000 Professional Service Pack 3 operating systems.

Activity by person — MSA

Steck

ICM TxR serial-no.   11521703

Incident No.   42606003

Incident start	Incident end	Duration	Pressure consumption/PSI
04.26.2006 10:51:30	04.26.2006 10:58:04	5 Min.	1

Date	Time	Message	Pressure/PSI
04.26.2006	10:52:33	join team :SQUAD2	0
04.26.2006	10:52:39	Mission start	1
04.26.2006	10:54:09	Evacuation sent	1
04.26.2006	10:54:13	Evacuation sent	1
04.26.2006	10:54:18	Evacuation sent	1
04.26.2006	10:54:18	Evacuation received	1
04.26.2006	10:54:25	Evacuation confirmed	1
04.26.2006	10:57:57	End of mission	1

Incident No.   42606002

Incident start	Incident end	Duration	Pressure consumption/PSI
04.26.2006 10:34:45	04.26.2006 10:39:39	3 Min.	0

Date	Time	Message	Pressure/PSI
04.26.2006	10:35:57	Mission start	1
04.26.2006	10:38:04	End of mission	1

Incident No.   42606001

Incident start	Incident end	Duration	Pressure consumption/PSI
04.26.2006 10:19:41	04.26.2006 10:29:19	1 Min.	0

Date	Time	Message	Pressure/PSI
04.26.2006	10:25:36	Mission start	1
04.26.2006	10:25:46	join team :Team 1	1
04.26.2006	10:25:56	Evacuation sent	1
04.26.2006	10:26:01	Evacuation sent	1
04.26.2006	10:26:02	Evacuation received	1
04.26.2006	10:26:02	Evacuation confirmed	1
04.26.2006	10:26:22	End of mission	1

Editor: SCBA monitoring   Page 1/1

Accountability Software Screen

Legend:

1. HOLDING BIN FOR ARRIVING FIREFIGHTERS
2. TASK ASSIGNMENT
3. TEAM NAME
4. PAR TIMER
5. TEAM DETAIL AREA
6. RADIO CONTACT INDICATORS
7. EVACUATION BUTTONS
8. LOW-BATTERY INDICATOR
9. THERMAL ALARM
10. PASS ALARM
11. EVACUATION ALARM INDICATOR
    - SENT
    - RECEIVED
    - ACKNOWLEDGED
12. AIR TIME REMAINING CALCULATOR
13. CYLINDER PRESSURE DISPLAY
14. SCBA DETAIL AREA

Accountability System

MSA's 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 FireHawk M7 Air Mask PASS.

Part number	Description
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)*

Corporate Headquarters
P.O. Box 426, Pittsburgh, PA
15230 USA
Phone   412-967-3000
www.MSAnet.com

U.S. Customer Service Center
Phone   1-877-MSA-FIRE
Fax   1-800-967-0398

MSA Canada
Phone   416-620-4225
Fax   416-620-9697

MSA Mexico
Phone   52-55 21 22 5770
Fax   52-55 5359 4330

MSA International
Phone   412-967-3354
FAX   412-967-3451

Offices and representatives worldwide
For further information:

MSA
The Safety Company