

**Report on participation in the IAFF John Redmond Foundation Symposium
Health and Safety for the Professional Fire Fighter
Chicago October 21-23, 2007**

The IAFF Redmond Symposium is held every biennially. The Symposium is characterized by a dual emphasis - providing an excellent educational forum for fire fighters as well as inducing medical personnel, occupational safety and health experts and others to get involved in the problems associated with fire fighting and emergency medical response.

During this 19th Redmond Symposium, fire service manufacturers and fitness companies exhibited their products. As part of the WPI project to develop an integrated Location and Physiological Monitor for the fire service, Globe Manufacturing demonstrated a prototype of the proposed technology, and, through a short survey, obtained responses from 50 members of the firefighting community directly involved in the health and safety. The attached report lists the questions asked and summarizes the survey responses.


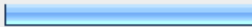
There was an enthusiastic response to the technology concept, and the attendees readily participated in the survey. Overall, the view of the participants was that such new technology is critically important to the health and safety of firefighters. In addition, the form of the technology (T-Shirt based, consistent with current gear) and the software display received very positive feedback. Many expressed interest in learning more about the technology, and saw the technology as useful and relevant to their Fire Departments.

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Physiological Status Monitoring Survey Results from the IAFF Redmond Symposium, 10/22/2007



1. Does your department currently evaluate or monitor your firefighters' health and fitness levels (aside from routine check-ups in a doctors office)?		
	Response Percent	Response Count
Yes 	54.3%	25
No 	45.7%	21
<i>answered question</i>		46
<i>skipped question</i>		4

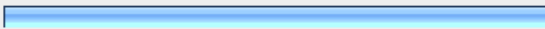

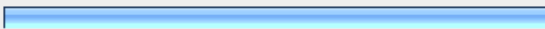
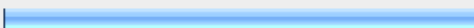
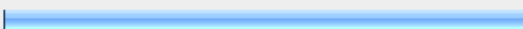
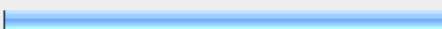


2. If yes, please give some examples of what your department evaluates or monitors and how often?	
	Response Count
	46
<i>answered question</i>	46
<i>skipped question</i>	4

3. Please rank the questions below:									
	Would make no difference						Would make a big difference	Rating Average	Response Count
How much do you believe the ability to collect and analyze physiological data (heart rate, respiration rate, etc.) in real time for all your firefighters during training would improve firefighter safety?	0.0% (0)	0.0% (0)	4.0% (2)	8.0% (4)	8.0% (4)	26.0% (13)	54.0% (27)	6.18	50
How much do you believe the ability to collect and analyze physiological data(heart rate,respiration rate, etc.) in real time for all of your firefighters on the ground would improve firefighter safety?	0.0% (0)	0.0% (0)	0.0% (0)	8.0% (4)	6.0% (3)	24.0% (12)	62.0% (31)	6.40	50
How much do you believe that the ability to determine firefighter location in real time and in 3-dimensions on the fire ground would improve firefighter safety?	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	4.4% (2)	15.6% (7)	80.0% (36)	6.76	45
							<i>answered question</i>		50
							<i>skipped question</i>		0

4. Please rank the questions below:										
	Would not be willing							Would be very willing	Rating Average	Response Count
How willing would you be to wear a specially modified T-shirt or tank top (eg comfortable, fire-resistant, moisture-wicking) during training in order to collect data to establish an individualized safe-training regimen?	0.0%	0.0%	4.2%	6.3%	2.1%	18.8%	68.8%	6.42	48	
	(0)	(0)	(2)	(3)	(1)	(9)	(33)			
How willing would you be to wear a specially modified T-shirt or tank top (eg comfortable, fire-resistant, moisture-wicking) during training in order to collect and transmit physiological data to the training instructor so that he and you can be alerted when you are approaching or have reached a dangerous physiological condition?	0.0%	0.0%	4.1%	2.0%	8.2%	12.2%	73.5%	6.49	49	
	(0)	(0)	(2)	(1)	(4)	(6)	(36)			
How willing would you be to wear a specially modified T-shirt or tank top (eg comfortable, fire-resistant, moisture-wicking) on the fire ground in order to collect and transmit physiological data to the training instructor so that he and you can be alerted when you are approaching or have reached a dangerous physiological condition?	0.0%	0.0%	2.1%	6.3%	6.3%	14.6%	70.8%	6.46	48	
	(0)	(0)	(1)	(3)	(3)	(7)	(34)			
How willing would you be to carry a 1-lb radio on the fire ground in order to collect and transmit data to the incident commander so that your location can be tracked?	0.0%	2.2%	0.0%	6.7%	11.1%	13.3%	66.7%	6.33	45	
	(0)	(1)	(0)	(3)	(5)	(6)	(30)			
<i>answered question</i>									49	
<i>skipped question</i>									1	

5. Based on the limited information we have provided, what concerns or questions do you have?	
	Response Count
	30
<i>answered question</i>	
	30
<i>skipped question</i>	
	20

6. Would you like your department to participate in testing such a physiological monitoring system?			
		Response Percent	Response Count
Yes		93.2%	41
No		6.8%	3
<i>answered question</i>			44
<i>skipped question</i>			6

7. Please provide the information below so that we can follow up with additional questions and provide updated information concerning this technology.			
		Response Percent	Response Count
Name and Rank		100.0%	48
Age		91.7%	44
Department		100.0%	48
Email		87.5%	42
City/Town:		95.8%	46
State/Province:		81.3%	39
ZIP/Postal Code:		8.3%	4
Phone		89.6%	43
<i>answered question</i>			48
<i>skipped question</i>			2