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**Preparing For the Worst: Psychological Excellence
of First Responders - A Katrina Lessons Learned
Study**

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14. ABSTRACT Hurricane Katrina was the most destructive natural disaster in U.S. history. The nation was in shock and many governmental officers and administrators as well as American taxpayers cannot help but wonder what could be done to ensure better preparation as a nation for the next formidable disaster. In fact, there have been several official lessons learned reports and the findings and recommendations from these reports of the response to Hurricane Katrina have been addressed. These reports provided the comprehensive picture of the disaster, pinpointed many deficiency areas, and suggested a corrected course of action at the Federal, State, and local level agencies to prepare, respond, and recover from the massive disasters. Though we fully agree with the needs for better planning and preparedness, those previously reported findings and recommendations are, in general, a culmination of top-down approach based on rational decision-making system. What has been lacking in the previous reports is bottom-up approach to deal with the disaster at the scene by real people, first responders (FR), who are making a difference during the crisis. In this paper, we attempt to understand how and what types of training technologies can be provided to support and prepare our first responders to deal with such unimaginable scale of disaster. Based on our findings, we are now proposing an alternative training model that combines cognitive and behavior aspects when preparing the FR. Consequently, the third project component – developing a training module based on both engineering (cognitive readiness) and sport psychology (mental skills training) – was added.					
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I. CONTENTS

I.	CONTENTS	2
II.	ACKNOWLEDGMENTS	4
III.	EXECUTIVE SUMMARY	5
IV.	RATIONALE/REVIEW OF LITERATURE/PURPOSES	10
V.	OVERVIEW OF THE PROJECT PHASES	14
VI.	PHASE 1: REVIEW OF THE EXISTING FR TRAINING PROTOCOLS	15
VII.	PHASE 2: ON-LINE FIRST RESPONDERS SURVEY	29
	A. DESIGN	
	B: MATERIALS & METHOD	
	B. SAMPLE	
	C. METHOD	
	D. RESULTS	
VIII.	PHASE 3: FIRST RESPONDERS INTERVIEWS	33
	A. DESIGN	
	B. PARTICIPANTS	
	C. INTERVIEWERS & PROCEDURE	
	D. RESULTS	
IX.	GENERAL DISCUSSION	36
X.	REFERENCES	38
XI.	APPENDICES	
	APPENDIX A: FIRST RESPONDERS INTERVIEWGUIDE	39
	APPENDIX B: FR PERFORMANCE STRATEGIES SURVEY –	
	VETERAN VERSION	44
	APPENDIX C: 360 DEGREE FR DEVELOPMENT PLANNING	48
	APPENDIX D: SUMMARY OF INTERVIEW WITH DR. GREG DIFRANZA	
	INSTITUTE OF POLICE TECHNOLOGY AND	
	MANAGEMENT (IPTM), JACKSONVILLE, FL	63
	APPENDIX E: SUMMARY OF INTERVIEW WITH DR. SERGEANT	
	CHARLES CLUNIE – POLICE OFFICE TRAINING	67
	APPENDIX F: TRANSCRIPT FROM INTERVIEW WITH DIRECTOR	

SCHAEFER	70
APPENDIX G: INTERVIEW WITH BUTCH BEACH, DIRECTOR, GEORGIA PUBLIC SAFETY TRAINING CENTER	89
APPENDIX H: INTERVIEW WITH CAPTAIN FRANK STOWE	116
APPENDIX I: INTERVIEW WITH DR. THOMAS STURTERVANT	135
APPENDIX J: LIST OF INTERVIEWEES AND RESULTS FROM THE WEB SURVEY	139
APPENDIX K: SCORING METHOD FOR THE TEST OF PERFORMANCE STRATEGIES (TOPS) QUESTIONNAIRE	144
APPENDIX L: A PAPER ABSTRACT SUBMITTED TO ANNUAL CONFERENCE OF THE NORTH AMERICAN SOCIETY FOR THE PSYCHOLOGY OF SPORT & PHYSICAL ACTIVITY (NASPSA), NORTH AMERICAN SOCIETY FOR THE PSYCHOLOGY OF SPORT & PHYSICAL ACTIVITY (NASPSA); NIAGARA FALLS, ONTARIO. JUNE 5-7 2008.	146

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III. EXECUTIVE SUMMARY

Hurricane Katrina was one of the worst natural disasters in our Nation's history and has caused unimaginable devastation and heartbreak throughout the Gulf Coast Region.

President George W. Bush, September 8, 2005

Hurricane Katrina was the most destructive natural disaster in U.S. history. Overall, destruction created by Hurricane Katrina vastly exceeded that of any other major disaster, such as the Chicago Fire of 1871, the San Francisco Earthquake and Fire of 1906, and more recently, Hurricane Andrew in 1992. Considering property damage alone, Hurricane Katrina is America's number one disaster to approach the \$100 billion mark. The nation was in total shock and many governmental officers and administrators as well as American taxpayers cannot help but wonder what could be done to ensure better preparation as a nation for the next formidable disaster. In fact, there have been several official lessons learned reports and the findings and recommendations from these reports of the response to Hurricane Katrina have been addressed. The major reports include:

- *The Federal Response to Hurricane Katrina Lessons Learned* by White House
- *A Failure of Initiative* by the House of Representatives Select Committee
- *Hurricane Katrina: A Nation Still Unprepared* by the Senate Homeland Security and Governmental Affairs Committee.

These reports provided the comprehensive picture of the disaster, pinpointed many deficiency areas, and suggested a corrected course of action at the Federal, State, and local level agencies to prepare, respond, and recover from the massive disasters. For example, *The Federal Response to Hurricane Katrina Lessons Learned* by White House suggested one hundred and twenty five recommendations in 17 national preparedness issues. The report calls for a National Preparedness System and includes integration of strategy, doctrine, capabilities, response activities, and exercises as well as assessment and evaluation. Furthermore, it is strongly suggested that this System must include routine reporting and assessment of program performance metrics. Though we fully agree with the needs for better planning and preparedness, those previously reported findings and recommendations are, in general, a culmination of top-down approach based on rational decision-making systems. What has been lacking in the previous reports is bottom-up approach to deal with the disaster at the scene by the real people who are making a difference during the crisis.

The Context of First Responders

As was demonstrated with the events of 9/11 and more recently Hurricane Katrina, major events, whether man-made or naturally occurring, quickly exceed the capacity of local jurisdictions. The first responders enter these overwhelming scenes immediately and operate after the major events are initiated, and operatives' responsibilities consider the characteristics of major crisis that make this challenge so difficult to deal with.

Characteristics of Major Events (found in the *National Response Plan*)

- Occur at any time with little or no warning.
- Require significant information-sharing at the unclassified and classified levels across multiple jurisdictions and between the public and private sectors.
- Involves single or multiple geographic areas.
- Span the spectrum of incident management to include prevention, preparation, response, and recovery.
- Result in numerous casualties; fatalities, displaced people; property loss; disruption of normal life support systems, essential public services, and basic infrastructure; and significant damage to the environment.
- Attract an influx of spontaneous volunteers and supplies.
- Require short-notice asset coordination and response.
- Require prolonged, sustained incident management activities.

The Target Capabilities List (TCL) supports the National Preparedness Goal by defining the capabilities needed to achieve national preparedness. The vision for the National Preparedness Goal is: A nation prepared with coordinated capabilities to prevent, protect against, respond to, and recover from all hazards in a way that balances risk with resources. The TCL provides a comprehensive list of capabilities required to achieve the four Homeland Security Missions identified in the goal: Prevent, Protect, Respond, and Recover.

Additionally, the Universal Task List (UTL) is the catalogue of tasks that need to be performed by someone or a team from a Federal, State, tribal, local agency, a non-governmental organization, a private-sector organization, and the general public. The UTL does not identify who will perform the task or how it should be performed. That is left to the implementing agencies. The current version of the UTL is a catalogue of nearly 4,800 tasks across the four mission areas.

The most comprehensive Katrina lessons learned study, *The Federal Response to Hurricane Katrina Lessons Learned* concluded with the chapter: “Transforming National Preparedness” this way.

It describes the imperative remedies for fixing the problems that Hurricane Katrina exposed. The foundations of the recommended reforms result in two immediate priorities: We must institutionalize a *comprehensive National Preparedness System* and concurrently foster a new, *robust Culture of Preparedness* (Italic added).

The above mentioned comprehensive federal reports to better prepare our nation against major disasters mostly touches upon those areas related to upper rank management issues. On the contrary, the focus of the present investigation was to address those issues relevant to the ground level front liners (i.e., first responders [FR]) who had to face the enormous challenges first hand. The UTL was the closest report available at this point; however, we are skeptical about the efficiency of listing 4,800 tasks for them to master.

Instead, we felt that what we desperately needed was a simple core competencies list so that the first responders can concentrate on those key tasks during the overwhelming information overflow.

As revealed by the recent Top Officials (“TOPOFF”) exercise in April 2005, it was evident that the Federal government’s progress was lacking in addressing a number of preparedness deficiencies, many of which had been identified in previous exercises. This lack of progress reflects, in part, the absence of a remedial action plan as presented in this report, to systematically address lessons learned from exercises.

Major Findings

Leadership Development is Critical

We tend to think of leadership as a quality that is required for only those who are positioned at an upper level (e.g., CEO, administrator, or coach) who must lead those under their command. On the contrary, the investigative team found that this quality is critical and in fact, the most important quality that separates between the FR who rise to the occasion and those who fail to meet the challenge. Even though a FR has to deal with a major crisis independently and usually at the very end of their command chain, the key characteristics of effective leaders (e.g., being able to stand firm and relentlessly fighting against crisis while others are hesitating) were apparent when veteran FR trainers were describing the quality of excellent FR. Therefore, the leadership development component should be in place during the early stages of FR training, not at the end of their career. We suggest the 360 Degree FR Developmental Planning (Appendix C) at the onset of FR training.

Importance of Developing a Cohesive Team

Similar to any other successful organization, FR has to work together in order to meet the massive challenges of major crisis. Both task cohesion (e.g., ability to work together toward a common goal) and social cohesion (e.g., ability to get along with other team members) appeared to be important. According to performance excellence literature on team cohesion, it is widely known that task cohesion is more important than social cohesion among the highly successful teams. The investigative team found a similar pattern as to the effective FR unit. However, social cohesion, relatively low importance among the top performing teams, found to be a key characteristic for the success of some FR units. For example, firefighters tend to spend tremendous amount of time together while they were on duty and this increases the importance of having social cohesion to be successful. Moreover, when there is no clear task goals or end point during their operation (e.g., during Katrina, FR were overwhelmed by the amount of needs and the completion of their tasks seemed unreal to many FR), the social cohesion played a significant role for FR to continue their task.

Cultivating Family-Friends as a Resource

Related to the above mentioned finding, most FRs have developed some types of supporting system within their family and friend circle and utilized as a resource to be effective. Specifically, when dealing with a long-term crisis like Katrina, it was critical to have family and friend support to continually motivate the FR. For many FRs, cultivating family-friends as a resource was not an option. Because of very nature of their day-to-day operation.

Block Stressors and Concentrate on Relevant Cues

Being able to block irrelevant information and concentrate on the most critical task at hand is the key factor for FRs to be effective. This selective attention skill was apparent among the top FRs and reiterated over and over again from the veteran FR trainer interviews. In addition to identifying a relevant cue to concentrate, maintaining attention focus was discussed as major aspect of concentration. One detective has to walk in and out of crime scene a number of times because there is usually too much information and relevant cues inside the crime scene. By dissecting information processed each time he walks into the room helps maintain his focus more effectively.

Importance of Systematic Mental Preparation and Training

Certainly, we are not opposed to the virtual reality and simulation method to train future FR. With the advancement of technology, we expect that there will be more creative and relevant simulation training techniques available for FR in the near future. However, while we spend awful amount of time practicing and producing successful outcome (e.g., being able to respond quickly and accurately at the same time), we tend to ignore the process, i.e., systematic training approach to develop those necessary skills. At some point of their FR training, other than the evaluative simulation situation, the trainees should be introduced and systematically taught such critical mental skills as concentration, focus, relaxation, self-talk, imagery to enhance their performance. For example, most Olympic level athletes utilize mental imagery to help enhance their skills development as well as their performance during competition. It is not coincidence that those Olympic athletes are able to meet the challenge and produce their highest performance level in the face of the most stressful situation in their athletic career – they have prepared not only physically but mentally for that moment. Why not implementing those mental skills to FR to optimize their performance during major crisis? The investigative team felt strongly that transferring scientific knowledge on mental training that induces optimal performances to FR training should be the most substantial future step to develop excellent FR.

Finally, there was significant gap between FR's day-to-day operating duties and role they have to play during the major crisis. This inherent discrepancy in intensity and duration of task pose heavy challenge for FR trainer to overcome. Within limited time and resources during FR training period, FR trainers have to come up with the best and more relevant training contents so these rookie FR can perform effectively when they are out on their own. Obviously, usual day-to-day functions as a police officer (e.g., patrolling and checking identifications) and that of a police officer during major crisis (e.g.,

rescuing 70-year-old lady from a submerging roof top). The key is to train FR to adapt their skills learned from their regular duties and transfer applicable skills to battle the major crisis.

Conclusion

Hurricane Katrina was the most destructive natural disaster in U.S. history. However, there is no doubt that our current incident management plans and procedures fell short of what was needed. Various governmental and federal agencies reviewed the previous plans and procedures and reported their own recommendations to ensure we are better prepared to respond such disasters immediately and effectively.

After reviewing the current FR training practices in various institutions and agencies, the investigative research team was convinced that there is a substantial gap between where we are and where we want to be in terms of cultivating excellence among the FRs. Based on our findings, we are now proposing an alternative training model that combines cognitive and behavior aspects when preparing the FR. Consequently, the third project component – developing a training module based on both engineering (cognitive readiness) and sport psychology (mental skills training) – was added (Appendix C).

IV. RATIONALE/REVIEW OF LITERATURE/PURPOSE

Rationale

Depending on the nature of the situation, members of the FR groups are the first to arrive on a disaster scene and must be equipped to make quick decisions under highly stressful and sometimes physically demanding situations. Often there is very little time to fully contemplate the gravity of the situation or deliberate about what the next move will be. Furthermore, the local team must respond to their present environment, as well as, work cooperatively with a larger command unit (Volz, *et. al.*, 2006).

Since this is the nature of the position, emergency management planning is complex. In order to plan for a response to such catastrophes, agencies must consider any deficiencies in the system before the disaster occurs. Once the plans are in place, response to the situation must be practically infallible using a command and control structure that is not easily rendered inoperable such as in the Hurricane Katrina situation. Finally, the split second decisions made by first responders can have long lasting effects as the recovery period begins. The recovery period is the longest phase because the goal is to execute activities which will accelerate the process of getting life back to normal (Coleman, 2005).

Throughout all this, the key to successful emergency management lies with the first responders. Such being the case, every aspect of their roles hinges on being prepared to react and make accurate and appropriate decisions. At one time, a disaster was usually natural in origin; however, nowadays, disasters can be more challenging and devastating as terrorist threats become a major concern. Accordingly, the training which the first responders receive must change and become more sophisticated as the type of threat changes and becomes more sophisticated. Although no amount of training can fully prepare the first responder for every type of situation; what effective training will do is (1) increase the expertise of the individual through repetition and practice; (2) improve the cognitive readiness needed to make better decisions; and (3) place different situations in a context that first responders can refer to when rapid decision making is required through the use of relevant cues to generate a plausible course of action.

Brief Literature Review

Since the September 11, 2001 terrorist attack, technology for the training of first responders has become more advanced in order to help mitigate some of the issues that arise during a time of crisis and chaos. As stated previously, training must be effective for first responders because the decisions they make can have long term effects, especially during the recovery phase. As technology advances, better and more progressive ways have emerged to eliminate the uncertainty of the environment the first responder will face through high tech training. The training technology used for first responders can be classified into two major areas: on-site training facilities and virtual simulation.

Classroom/Online/On-site Training

In higher educational systems, students are normally taught in a classroom environment in order to obtain the fundamentals of their subject matter before they are asked to put into operation practical applications of their knowledge in real life settings such as internships. The same is true for first responders. A certain degree of learning must take place before practical application is introduced. This learning can be in a classroom setting, web-based, over a radio network, and/or in a state of the art training facility.

In 2003, FEMA's Emergency Management Institute (EMI) had a 120% increase in their enrollment from 2001. This increase seemed to be influenced by 9-11 and EMI has adapted their training curriculum to emphasize all hazards and best practices needed to respond to a crisis in the post 9-11 environment. They have even included courses to address public health concerns in light of the SARS and Anthrax threats. EMI offers classes that last anywhere from 2 days to 2 weeks at no cost to the student. Based in Maryland, the training institute prepares first responders using online learning courses or training exercises. Such topics include preparing for a bioterrorism attack or a mass casualty event like a plane crash (US Fire Administration, 2004). Furthermore, online training is becoming increasingly popular. The US Air Force Research Laboratory's Homeland Defense Technology Center under the leadership of Dr. Eileen M. Preisser, created an online training system named RESPOND!. RESPOND! provides online training which uses web conferencing to cover topics such as hazardous materials, urban search and rescue, weapons of mass destruction (WMD) along with other types of emergencies. The benefit of RESPOND! is multiple users can interact for education, exercise, training, or information sharing. Using a Windows environment which is familiar to most users, audio, video, and white boarding, etc makes collaboration with first responders all over America possible (Guarnieri, 2002).

The role of the Department of Justice at the State and Federal levels has become involved in installing first responder training. The New Hampshire Department of Justice installed the training and communication network called Homeland One. Homeland One is a series of customizable training modules based on the guiding principles from the Homeland Security's Office for Domestic Preparedness First Responder Training Guidelines and Standardized Emergency Management System. It is a network which has been allotted 4 broadcast hours and can be used to brief first responders at the time of an emergency for incidence response, command briefing, and coordination of resources (Fire Chief, 2004). The Office of Justice Programs National Institute of Justice held a summit to introduce nearly 700 first responders to a new training technology in 2003. One training tool featured was a computer-based training tool offering interactive simulated scenarios which help to ensure emergency teams are ready for any situation (Department of Justice, 2003).

Under construction in Fort Leonard Wood, MO is a first responder training complex called the Joint Emergency Responders Training Facility. This new state of the art facility was opened in 2007 and has been used to train first responders to handle WMD, chemical, biological, nuclear, and radiological incidents. This facility is part of the US Chemical

School which normally trains for battleground operations but is now expanding to prepare responders for homeland security and homeland defense. This \$15 million facility will train at least 2000 students per year using an urban exercise training area complete with a post office, factory, and two warehouses. Also on-site, there is a simulated cave complex for confined space training, an overturned tanker truck, and a rail yard facility. Army Colonel Don Bailey states that once opened and operational, the Joint Emergency Responders Training Facility will be the “epicenter for this type of training” (Miles, 2006). In Gonzales, LA, a 6,000 square foot training facility has been erected to provide on site training for first responders. There is a multi-use classroom which can hold up to 100 students and takes advantage of multi-media technology for training. Along with the wireless internet and intranet access in the multi-media classroom, there is a rope rescue training course. Paid for with a percentage of sales tax dollars, this \$800,000 complex allows the emergency personnel of Gonzales to be trained locally. For example, a Gonzales firefighter can practice extracting a victim from a multi-story building at this center. The city feels this kind of training is especially important since there are many multi-story construction projects underway in Gonzales (Davis, 2005).

Virtual Training Environments

An extension of the classroom or computer training for first responders would be virtual training environments. These simulated environments are becoming more and more prevalent as the need arises to emulate a multitude of disastrous situations. The benefits of such training are that emergency teams can experience and learn in a setting which does not put them in any danger while confronting them with realistic scenarios. Major emphasis for such training is placed on dealing with WMDs because it would be very difficult to train for such an event by creating a real life circumstance. Therefore, virtual simulation allows first responders to “pretend” such an event is taking place with convincing technology (Berry and Hilgers, 2004). Different organizations have developed distinct versions of virtual simulated training systems to address the various training needs of the different first responder groups.

In North Carolina, the Medical Education Technologies, Inc (METI) set up a simulation environment in Mecklenburg County’s Emergency Medical Services Agency (MEDIC). METI provided MEDIC with 6 human patient simulators and two Trauma Disaster Casualty Kits (TDCKs). This virtual reality center is used to provide ongoing training to emergency medical technicians (EMTs) and paramedics in areas of natural disasters and terrorism using realistic settings from an indoor residence to an industrial accident. The human simulators along with the TDCKs create intense and authentic patient traumas such as bleeding wounds, urination, and tearing (Bailey, 2005). Moreover, AIS, a company out of Seattle, WA, developed a first responder virtual reality simulation training technology for the nation’s homeland security program. The technology is called SVS and allows multiple participants to engage together in the simulated environment. Originally, created for military training, SVS is now being used in the civilian community (Advanced Interactive Systems, 2004).

The gaming industry has introduced many video games that provide realistic graphics to

make the user's experience as real as possible. With this same technology and graphic capability, a new training "game" called Hazmat Hotzone was developed specifically for the training of firefighters in the handling of hazardous material. The purpose of the game is to give the firefighters an opportunity to make decisions with the handling of hazardous material while preparing for the unexpected. Using a PC, the firefighter has a first person inside-helmet view and has full control of his avatar (or virtual firefighter). He can also talk with fellow firefighters, who are also training in the same virtual environment, over a radio. The instructor uses his own terminal to set up the scenarios and watch the interactions and reactions of the firefighters. The designers feel that the realistic nature of the game is what makes it a valuable training tool (Carless, 2005).

Virtual simulation training can also be found at the Baltimore/Washington International Airport (BWI). The Advanced Disaster Management Simulator (ADMS) is a multi-user virtual reality trainer which can train individuals in security breaches, terrorism, and airline crash landings. An example of a situation would be a simulation of a sequence of events surrounding a plane crash and assigns some user to be the first one on the scene. As the scenario plays out, eventually more players become involved providing a shift in command between users. Each player has their own 3-D view of the action and all actions, decisions, and commands are performed in real-time (ADMS, 2005).

Purpose

The purpose of the current grant project was to evaluate the current training practices among first responders (FR) and provide an alternative model (e.g., naturalistic decision-making model) in FR training in order for FR to perform effectively during a major crisis such as Katrina. Since the inception of the project (August of 2006), there has been steady progression relative to the proposed research activities. In our grant proposal, we proposed two major tasks: (1) a comprehensive literature review of current training practices/technologies available for FR; and, (2) development of an identification tool (e.g., interview guide and/or survey) to recognize current level of preparedness (both cognitively and behaviorally) among the FR.

V. OVERVIEW OF THE PROJECT PHASES

This project contained three phases, including (1) review of the existing FR training programs, (2) FR Performance Strategies survey, (3) interviews with FR trainers. A description of each phase, the design and methods used, and the results found are contained in the following three sections of the report.

Phase 1: Review of the Existing FR Training Programs

Each team member independently investigated various types of FR (i.e., firefighters, police officers, and emergency medical doctors), specifically related to their current training practices. Findings were debriefed during the weekly team meetings. We particularly targeted unique training practices/technologies from the each FR field. Also, we were interested in identifying possible changes in recent years after Katrina. During this phase, however, we have not found any significant changes nationally and locally in ways to prepare more effective first responders.

At the same time, a systematic review of literature on FR training was conducted. Several key FR research articles as well as governmental reports have been retrieved and reviewed thoroughly. This process helped us gain in-depth understanding of past and present practices among the FR training programs. As learn more about the current practices among the first responders training programs via literature and other internet resources, we felt strong needs to consult those veteran trainers in the field. Several national-level (both federal and private) training institutions have been identified and contacted consequently.

Phase 2: FR Performance Strategies Survey

As a result, an on-line survey study was conducted in the Phase 2. A total of nineteen experienced first responders was solicited and completed the survey. Then, results were compiled and analyzed descriptively.

Phase 3: Interviews with FR Trainers

From these national-level institutions, individuals responsible for training FR were contacted and engaged in an in-depth phone interview. A total of five individuals from varying institutions completed the interviews. Prior to the interviews, an interview guide (see Appendix A) was developed based on the reviews of literature conducted by the research team. Again, the findings from these interviews were shared during our regular meetings and further guided our research activities. In addition to the national training programs, two local FR officers were contacted and completed face-to-face interviews.

During this phase, the research team examined several previously utilized survey protocols and developed a survey protocol (Appendix B) tapping into the level of preparedness for the FR.

VI. PHASE 1: REVIEW OF THE EXISTING FR TRAINING PROGRAMS

Before reviewing the existing FR training programs, the investigative team felt that it was essential to understand their job descriptions and day-to-day duties of the FR. Their day-to-day operational responsibilities vastly govern the actual contents of training and ultimately what they are supposed to know and supposed to do as a result of their training. Moreover, in order to get a sense of the excellence among first responders, we want to clarify how to become the highest rank in each FR field. We selected first responders included in the following emergency teams in our review (Center for the Study of Traumatic Stress, 2006):

- Firefighters
- Police
- Emergency medical personnel

WHO ARE THE FIRST RESPONDERS? / WHAT ARE THEY REQUIRED TO DO?

Firefighters

This profession requires individuals to work and be of service to people continuously incorporating various functions such as rescue, providing medical services, extinguishing fires. A high level of dedication and professionalism are demanded from those in the firefighter profession requiring them to possess courage and stamina to risk their lives for the sake of others. In order to be effective and efficient in their profession, individuals must successful complete long and extensive periods of training.

When a rookie firefighter walks into the door, she or he is required to complete a job related physical agility test. This test includes:

- Time Distance Run: This test measures the aerobic capacity of the individual. This is known as the best index to person's overall physical fitness. Individuals must run w/o stopping one and one-half mile within 13 minutes. Individuals who do not complete this portion of the test will be eliminated.
- Ladder Climb: This determines if the individual has a fear of height with climbing etc. This test must be completed successfully. Aerial ladders are used up to 65 feet.
- Weight Carry: This test measures the overall strength of the applicant. Mannequin weighing 125 pounds must be lifted from the floor and carried 100ft without stopping.
- Push-Ups: This test demonstrates the individual's strength to push pike poles. Candidates are required to complete a minimal of 15 push ups.

Entry level firefighters start out as temporary seasonal firefighters, and work no more than six months in a 12-month period. After acquiring fire experience, temporary seasonal firefighters can advance to career seasonal firefighters, who work from six

months and one day to no more than 11.5 months in a 12-month period.

65% of all fire departments provide emergency medical service. In addition, some firefighters work in hazardous materials units that are trained for the control, prevention, and cleanup of materials; for example, these firefighters respond to oil spills. Individuals in urban and suburban areas, airports, and industrial sites typically use conventional fire fighting equipment and tactics, while forest fires and major hazardous materials spills call for different methods.

Between alarms, firefighters clean and maintain equipment, conduct practice drills and fire inspections, and participate in physical fitness activities. They also prepare written reports on fire incidents and review fire science literature to keep abreast of technological developments and changing administrative practices and policies.

Most fire departments have a fire prevention division, usually headed by a fire marshal and staffed by *fire inspectors*. Workers in this division conduct inspections of structures to prevent fires and ensure compliance with fire codes. These firefighters also work with developers and planners to check and approve plans for new buildings. Fire prevention personnel often speak on these subjects in schools and before public assemblies and civic organizations.

Some firefighters become *fire investigators*, who determine the origin and causes of fires. They collect evidence, interview witnesses, and prepare reports on fires in cases where the cause may be arson or criminal negligence. They often are called upon to testify in court.

Police Officers

The basic tasks of a law enforcement officer are: keeping public order and protecting lives and property. Detectives engage in sleuthing after a crime has been committed. They are plain clothes officers who are responsible for collecting facts and evidence in criminal cases. The sheriffs and state troopers maintain order in bigger districts, the county level and along the highways. Officers are the first line of defense between the criminal and the victim. However, police work can be quite routine from patrols to investigations to paperwork. Contrary to popular belief, even in Americas largest cities, officers seldom draw their weapons much less fire them. This work is very stressful and because of the dangers as well as the eyewitness accounts of deaths and injuries as a result of criminal behavior.

Generally, police officers are called to maintain regular patrols. These patrols include directing traffic, investigating a burglary, and provide first aid to a victim. In larger departments, officers are often assigned to specific community patrols. In this instance, it is important that they build a good rapport with the community to get them involved in fighting crime. Officers may work alone or with a partner. During a routine shift, an officer may have to identify, pursue, and arrest suspected criminals, as well as resolve problems and enforce traffic regulations and laws.

There are police officers that work on special units. These units could involve chemical and microscopic analysis, firearms instruction, and identification (i.e. fingerprinting). Other special units include horseback, motorcycle, or bike patrols. Some offices work on the canine corps, special weaponry or SWAT teams.

Federal agents include many different areas. The most widely known department is the Federal Bureau of Investigation (FBI). They investigate violations of Federal laws and sensitive national security matters. Some of these include: organized crime, public corruption, fraud, financial crimes, kidnapping, drug trafficking, and civil rights violations. Members of the US Drug Enforcement Agency (DEA) are federal agents who enforce laws and regulations surrounding the use or distribution of illegal drugs. US marshals and deputies serve to protect the courts. They may be called on to protect federal witnesses, transport prisoners, and manage assets seized during criminal investigations. Other federal agents include members of the Department of Homeland Security, the Bureau of Alcohol, Tobacco, Firearms, and Explosives, US Department of State Bureau of Diplomatic Security, Immigration Inspectors, Customs Inspectors, Federal Air Marshals, and the US Secret Service.

Initial job entry stage –

- Most agencies or departments require officers to be at least 20 years old. However some will accept some as young as 18. Police officers are expected to be in good physical shape. Insufficient height, weight, strength and vision can lead to disqualification. Most police forces require at least a high school diploma or GED equivalent. But they are encouraged to seek a higher degree. Candidates must also possess a valid Motor Vehicle Operator License.
- An officer must demonstrate integrity, sound judgment, honesty, and a strong sense of responsibility. Therefore, psychological screenings, drug tests, and background checks are all required. A candidate must have a clean criminal record and no outstanding convictions. Furthermore, candidates are also tested for job skills, interpersonal skills, and communication skills.
- Most federal agent positions require a bachelor's degree and at least 3 years work experience. The FBI requires agents to have a law degree or 4 year degree, as well as a fluency in a foreign language and at least 3 years work experience. Often federal agents must also go through 14 weeks of specialized training at the FBI academy.

Moving through the ranks –

- As officers rise in the ranks, their duties become more specialized. To begin, officers must go through a period of training. Recruits are usually sent to a State or local police academy, which lasts anywhere from 12 to 14 weeks. They go through classroom and hands-on training. Education and clerical work lasts from 1 to 2 years. After a 6 month to 3 year probationary period, officers can be promoted to detective or other specialized police work.

The highest level of their proficiency –

- The promotions range from corporal, sergeant, lieutenant, and then captain. Most

of the time, these promotions depend on the candidate's current position, ranking on the promotion lists, a written examination, and on the job performance.

Emergency Medical Service (EMS) Personnel

Emergency Medical Service Personnel assists with administering emergency medical care to injured and critically ill in an emergency environment or while transporting them to a proper medical facility as a member of an emergency medical team. Usually, EMS personnel administer first-aid treatment and life-support care to sick or injured persons in pre-hospital settings. Their job descriptions include:

- Operate equipment such as EKGs, external defibrillators and bag-valve mask resuscitators in advanced life-support environments.
- Assess nature and extent of illness or injury to establish and prioritize medical procedures.
- Maintain vehicles and medical and communication equipment, and replenish first-aid equipment and supplies.
- Observe, record, and report to physician the patient's condition or injury, the treatment provided, and reactions to drugs and treatment.
- Perform emergency diagnostic and treatment procedures, such as stomach suction, airway management and heart monitoring, during ambulance ride.
- Coordinate work with other emergency medical team members and police and fire department personnel.
- Communicate with dispatchers and treatment center personnel to provide information about situation, to arrange reception of victims, and to receive instructions for further treatment.
- Immobilize patient for placement on stretcher and ambulance transport, using backboard or other spinal immobilization device.
- Drive mobile intensive care unit to specified location, following instructions from emergency medical dispatcher.
- Coordinate with treatment center personnel to obtain patients' vital statistics and medical history, to determine the circumstances of the emergency, and to administer emergency treatment.

CURRENT FR TRAINING PROGRAMS: WHAT'S OUT THERE?

The National Advanced Fire and Resource Institute

The National Advanced Fire and Resource Institute (NAFRI) is a national level center serving the interagency wildland fire community through the development, and implementation of fire, fuels, resource, and incident management skills and educational processes. NAFRI is dedicated to the diverse interagency fire, fuels, resource, and incident management community in developing and enhancing learning experiences. The Institute assists in the creation of innovative solutions that concern fire and all-hazards management.

The Wildland Fire Lessons Learned Center is a part of NAFRI. The vision is to actively promote a learning culture to enhance and sustain safe and effective work practices in the entire U.S. wildland fire community. The Center provides opportunities and resources to foster collaboration among all fire professionals. They facilitate their networks, provide access to state-of-the-art learning tools, and bridge the gap between learning and training.

National Advance Firefighter courses:

(Descriptions of these courses can be found on www.nafri.gov)

Advanced/National level management courses are numbered 500-600

- Advanced National Fire Danger Rating System (NFDRS)
- Fire Chemical Application and Use (FCAU)
- Fire Management Leadership (FML)
- Local Fire Management Leadership (LFML) (offered Geographically)
- National Aerial Firefighting Academy (NAFA)
- D-510 Supervisory Dispatcher
- Incident Management Team (IMT) Leadership (offered Geographically)
- Fire in Ecosystem Management
- Fire Program Management (offered Geographically)
- Applied Fire Effects
- Advanced Incident Management
- Advanced Fire Use Applications
- Advanced Fire Behavior Interpretation
- Area Command

Colorado Wildfire Academy

Some ten years ago, a group of emergency responders from varied response disciplines, founded the Colorado Wildfire Academy and Great Plains Wildfire College realizing the need to provide National Wildfire Coordinating Group (NWCG), Incident Command System (ICS), and other quality emergency management courses. Since inception these colleges and academies have delivered training to over 15,000 students. After the events of September 11, 2001, the board has constantly modified the curriculum to meet the ever changing requirements of fire, emergency medical, law enforcement, and other emergency management agencies and personnel. The value of incident management training has been reinforced numerous times with unprecedented fire seasons, the Columbia Shuttle Recovery and Hurricane's Ivan, Katrina and Rita respectively. To address the future training needs of emergency management, the board voted to adopt a single moniker to express our long-term commitment to a diverse curriculum of quality training. The Colorado Wildland Fire and Incident Management Academy (CWFIMA) will become the overall umbrella of the Academy and College. It is believed to sustain the quality and diversity of education, the CWFIMA more correctly describes the basis of the updated mission.

Mission:

Promote safety and integrate the efforts of local, State, Federal, Tribal, private-sector, and non-governmental emergency response organizations by utilizing the Incident Command System and facilitating a national approach to domestic incident management by providing both the cognitive and hands-on incident management knowledge, instructed by the nation's brightest authorities.

National Fire Academy (www.usfa.dhs.gov)

Regional Face to Face Delivery:

- Initial Fire Investigation (N216)
- Fire Inspection Principles (N220)
- Command & Control of Fire Dept Ops at Target Hazards (N825)
- Fire Cause Determination for Company Officers (N811)
- Hazardous Materials Incident Management (N814)
- Challenges for Local Training Officers (N815)
- Advanced Safety Operations and Management (N822)
- Command & Control of Incident Ops (N831)

Direct Delivery Course

- (F163) Incident Command System for Emergency Medical Services
- (F201) Arson Detection for the First Responder
- (F209) Courtroom Preparation and Testimony for First Responders
- (F271) Fire Prevention for First Responders and Small Departments:

Course Description for F271:

Course stresses the awareness, advocacy, and motivational content needed by those who traditionally have been focused on operations (suppression, EMS, etc.) and who seek to learn new, successful approaches appropriate for communities of all sizes, but most especially for America's smaller communities. The course focuses on identifying exciting and highly successful tools and approaches for addressing the total fire protection challenge via lessons learned in other communities, resources available, and the means and value of building partnerships and coalitions. Students will come away empowered to make change and thus build departments more effective at serving both customers and members, by learning how to manage the fire prevention function better.

- (F272) Prevention and Mitigation Advocacy for Small Departments
- (F273) Marketing Fire Prevention in Your Community
- (F275) Fire Prevention for High Risk Populations: Age and Disability Factors
- (F276) Preventing Fire Risk Based on Socioeconomic Factors: Rural and Urban Settings
- (F290) Training Operations in Small Departments
- (F315) Introduction to Unified Command for Multi-Agency and Catastrophic Incidents
- (F321) Incident Command for High Rise Operations
- (F322) Incident Command System for Structural Collapse Incidents
- (F344) Methods of Enhancing Safety Education

- (F347) Community Risk Issues and Prevention Interventions
- (F455) Strategy and Tactics for Initial Company Operations
- (F458) Preparation for Initial Company Operations
- (F495) National Fire Incident Reporting System - Data Analysis and Problem Solving Techniques
- (F497) National Fire Incident Reporting System - Introduction to NFIRS 5.0
- (F516) Executive Skills Series: Leading Diverse Communities Beyond Conflict
- (F517) Executive Skills Series: Managing and Leading Change
- (F518) Executive Skills Series: Influencing
- (F552) Emergency Response to Terrorism: Tactical Considerations: Company Officer

Course Description for F552: This 2-day course is designed to build upon the existing skills of the initial first-responding supervisor from the Emergency Response to Terrorism: Basic Concepts course or Emergency Response to Terrorism: Self-Study guide. The students will be trained in security considerations, identifying signs of terrorism, anticipating unusual response circumstances, assessing information, and initiating self-protection actions.

- (F553) Emergency Response to Terrorism: Tactical Considerations: Hazardous Materials
- (F554) Emergency Response to Terrorism: Tactical Considerations: Emergency Medical Services

Course Description for F554: This 2-day course is designed for the first on-the-scene responding EMS personnel with the responsibility to render patient care to victims of terrorist incidents. The students will be trained in security considerations, identifying signs of terrorism, anticipating unusual response circumstances, assessing information, and initiating self-protection actions. The students also will apply their knowledge about responding to a terrorist event, providing patient care, identifying and preserving evidence, managing site safety, documenting the event, and debriefing personnel.

- (F555) Emergency Response to Terrorism: Strategic Considerations for Command Officers
- (F602) Shaping the Future
- (F604) Managing in a Changing Environment
- (F610) Introduction to Wildland/Urban Interface Firefighting for the Structural Company Officer

Course Description for F610:

This 2-day course identifies operational activities and safety concerns for structural company officers assigned to a Wildland/Wildland Urban Interface incident. Topics covered include Introduction to Wildland/Wildland Urban Interface firefighting, interface environment, wildland fire behavior, command and control issues of wildland/urban interface firefighting, and tactics.

- (F612) Command and Control of Wildland/Urban Interface Operations for the Structural Chief Officer

Course Description for F612:

This 2-day course is designed to provide students with the essential tools and skills to operate safely in a wildland/urban interface incident. Course content covers interface incidents, fire behavior, safety, and operational considerations.

- (F613) Cooperative Leadership Issues in Wildland/Urban Interface Operations
- (F626) Juvenile Firesetter Intervention Specialist I
- (F627) Juvenile Firesetter Intervention Specialist II
- (F729) Incident Safety Officer
- (F730) Health and Safety Officer
- (F803) Leadership I: Strategies for Company Success
- (F804) Leadership II: Strategies for Personal Success
- (F805) Leadership III: Strategies for Supervisory Success
- (F806) Incident Command System
- (F808) Initial Response to Hazardous Materials Incidents: Concept Implementation
- (F809) Initial Response to Hazardous Materials Incidents: Basic Concepts

Midwest Wildfire Training Academy

University of Missouri's Fire and Rescue Training Institute (MU FRTI) offers a full-range of programs from beginning firefighting through executive leadership programs for chief officers. As demonstrated by the list of courses, it will notice programs in apparatus driving and pumping, live firefighting, a complete series of incident command, hazardous materials and technical rescue training programs as well EMS programs for first responders, EMT's and paramedics. The Institute has a wide variety of programs for company and chief officers as well as instructor development. Finally, our aircraft rescue firefighting program and mobile prop allow local airports to train at their site using their own equipment while saving hundreds of dollars per person in travel costs.

The Institute is one, if not the only, state fire training program in the country that includes an emergency management and exercise and evaluation program. With the events since 9/11 the integration of fire service functions and emergency management is imperative.

Throughout the years one of the hallmarks of MU FRTI has been non bias, qualified faculty. Each of the program areas at MU FRTI is managed by specialists with expertise in their certain field. These individuals have also been active practitioners in their subject area and maintain their professional certifications at various levels.

Curriculum developed by MU FRTI meets national and state standards, federal laws, if applicable and includes a stringent review process by appointed technical expert committees as well as an academic review of adult learning principles using curriculum specialists from the Center for Distance and Independent Study at the University of Missouri. These programs are then externally evaluated by several different organizations throughout the country. These organizations include the Peace Officers and Standards Training (POST), Bureau of EMS, American Council on Education (ACE), National Fire Academy Endorsement Committee and the Office of Domestic Preparedness (ODP).

I-100, L-180, S-130/190 — Introduction to ICS, Human Factors on the Fireline, Firefighter Training and Wildland Fire Behavior

S-131 — Firefighter Type 1 Training

S-211 — Portable Pumps and Water Use

S-212 — Wildfire Power Saws

S-215 — Fire Operations in the Wildland/Urban Interface

S-230 — Crew Boss (Single Resource)

S-231 — Engine Boss

S-234 — Ignition Operations

S-244 — Field Observer

S-260 — Interagency Incident Business Management

S-261 — Applied Interagency Incident Business Management

S-270 — Basic Air Operations

S-300 — Incident Commander Extended Attack

S-390 — Introduction to Wildland Fire Behavior Calculations

S-491 — Intermediate National Fire Danger Rating System

I-300 — Intermediate Incident Command System

I-400 — Advanced Incident Command System

L280 — Followership to Leadership

R.O.S.S. — Resource Ordering and Status System

BHV — BEHAVE, Fire Modeling Techniques

NGPS — Navigation GPS

WCT — Work Capacity Test

Pacific Southwest Region Wildland Fire Training

Organizations in this region that offer training for firefighters in these areas

- Technical Fire Management 2006: Technical Fire Management (TFM) is a continuing education program for fire and resource managers and technicians who have responsibilities for developing, administering and implementing fire management programs or projects. TFM is designed for people in public agencies who have at least some experience in wildland fire suppression, fire prevention, fire management and the use of fire in attaining resource management goals.

(www.fs.fed.us/r5/fire/management/training/tfm_cover_letter_application_2006.doc).

- CA ROSS: This site is designed to support the California Resource and Ordering Status System (CA ROSS) user community with the latest updates and information pertaining specifically to California. (www.fs.fed.us/r5/fire/management/training/ross)

- McClellan Wildland Fire Training and Conference Center: The Wildland Fire Training and Conference Center (WFTC) resides at the McClellan Business Park, formerly McClellan Air Force Base. The WFTC was created to implement National Fire Plan direction for the accelerated development and training of wildland firefighters. WFTC provides classroom and meeting facilities for agency and public non-commercial functions. WFTC is home to the Wildland Firefighter Apprenticeship Program.

(www.fs.fed.us/r5/fire/mcclellan)

- Wildland Firefighter Apprenticeship Scademy: The National Interagency Wildland Firefighter Apprenticeship Program is an accredited, educational program

designed to enhance and develop future Fire and Aviation Managers. The apprentice is required to successfully complete a residential four-week Basic Academy, a prescribed program of Technically Related Supplemental Training, supervised on-the-job training, and an additional residential four-week Advanced Academy (www.wfap.net).

- Aviation Safety Management School: This certificate program is designed to provide students with a firm foundation in aviation safety principles and practices underlying emergency response aviation. Through the values of leadership, teamwork and ethics students will learn current and emerging aviation safety management principles and technologies (www.extension.ucdavis.edu/certificates/index.asp).
- R5 Wildland Fire Training Site: This site enables access to the California Geographic Area Interagency Wildland Fire Training program. There are nine Training Centers that serve the Wildland Fire training needs of the California Geographic Area. The California schedule is located here. The schedule contains pertinent information about courses, workshops and meetings being offered in California. All training center schedules will be updated with the new training year by the end of August of each year (www.nationalfiretraining.net/ca/catraining).
- National Wildland Fire Training Site: This site enables access to Local Area, Geographic Area, National, and other related Interagency Wildland Fire Training information. The home page also contains current training news and a comment section. Allows a user to select a specific geographic area to access information on the area workshops, meetings, and other courses; names of nominees selected; names of students successfully completing courses; course logistical information; current news; and other pertinent geographic area information. Search nationally for interagency schedule of courses which allows a user to query by various topics and complete a nomination form electronically (www.nationalfiretraining.net).
- The National Interagency Prescribed Fire Training Center (NIPFTC): The National Interagency Prescribed Fire Training Center (NIPFTC) is a unique program blending maximum field prescribed burning experience with a flexible curriculum of instruction on topics of interest to prescribed fire practitioners. Attendees will have the opportunity to complete portions of the National Wildfire Coordinating Group (NWCG) approved prescribed fire task books under the guidance of invited specialists (fire.fws.gov/pftc).
- Interagency Aviation Training: This system is made up of 36 modules of specific aviation-related subject matter. Each subject module is designed to stand alone or can be combined with other modules to create a course-like approach. Any module may be presented in an instructor-led classroom setting regardless of format. This allows agency employees to take only those subjects necessary to do their job (www.iat.gov).
- National Wildfire Coordinating Group (NWCG): The group provides a formalized system to agree upon standards of training, equipment, qualifications, and other operational functions (www.nwcg.gov).

Police training can occur at academies or on university campuses with law enforcement training programs. Usually each state will have a facility designed for these purposes. For example, Ohio has the Ohio Peace Officer Training Academy (OPOTA) and Florida has the Institute of Police Technology and Management (IPTM). There is also a national police academy called the FBI National Academy which conducts training for leaders and

managers, who are nominated from state and local police, sheriffs' departments, military police organizations, and federal law enforcement agencies. Some larger police departments have local training centers such as the New York police departments or the Los Angeles police departments.

(a) Traditional/conventional training program;

- Before becoming a sworn officer, most cadets undergo at least 400 hours of police academy training. Most training programs have a standard curriculum. This includes learning firearm training, defensive driving, traffic control, self defense, first aid and emergency response. Other practical skills include communication skills, HAZMAT, Pepper Spray (also known as OC spray from "Oleoresin Capsicum"), and investigation. Knowledge training, which is mostly classroom work, teaches the cadets about laws, polices, and rules pertaining to the job. Some of these topics include civil liberties, state laws, ethics, and cultural diversity. Special classes teach officers to handle domestic violence, as well as the elderly, mentally handicapped, blind, and juvenile populations.

(b) More advanced/current training program

- More advance schools, such as the IPTM, instruct officers on the latest technologies, techniques and changes in rules and regulations. Often the more advance schools training schools use scenario based training for a hands-on experience. Simulations or "laser tag" style training put the officers in real life experiences without the possibility of getting hurt. Most training programs are taught by officers with many years of experience and a vast amount of knowledge.

(c) What's hot? Most current training protocols using technology

- The latest technology for training includes simulated environments and virtual reality gaming. The most popular, is the Firearms Training System (FATS) provides "shoot-don't shoot" scenarios. It has a computerized movie projector attached to a revolver with a laser emitting device. The projector shows a scenario in which the cadet must decide to use deadly force or not. Simunitions is a paint ball style training using colored soap. Officers play out shooting scenarios and while the soap does not harm them, they can "feel" when they have been hit. The Demonstrating, Effective Flexible Agent Coordination of Teams through Omnipresence (DEFACTO) system is software which provides 3D visualization of a disastrous environment. The idea is to teach better decision making and situation awareness to incident commanders by giving them an omni-view of the situation.

Additionally, Scientists at Sandia National Laboratories have designed a game to help first responders practice handling emergency situations. The game, called Ground Truth, starts with a mock newscast describing an emergency. Then, a very lifelike aerial view of the unnamed city, similar to that of the popular SimCity game, appears with a green cloud emanating from the crash scene. It's up to the player to direct the response using the police and fire departments, hazardous materials crews, medical personnel and road barricades. All the while a ticker tracks the death toll in the upper right corner, and tense, ominous music plays in the background. The goal is to save as many people as possible.

Currently, first responders prepare for different scenarios with seminars, drills and exercises, and by getting together with other agencies and role-playing with scripts. Sandia, along with the University of Southern California's GamePipe Laboratory, is one year into a three-year project to develop Ground Truth. Currently, the chlorine release is the only scenario, but different emergencies and twists will be added in the coming years. It's not yet clear what Ground Truth will look like in the end, but the computer scientist Donna Djordjevich, leader of the project at Sandia's Livermore campus envisions a tool that the Department of Homeland Security could distribute to responders across the country, as well as a commercialized version available for the general public to use with their game consoles at home.

As beleaguered as D.C.'s public-safety/emergency-response providers and institutions have been in recent years, it's a welcome bit of good news that the District now has a state-of-the-art nerve center, called Office of Unified Communication Center (UCC), that promises to better streamline and integrate its responses not only to day-to-day events, but should a major incident ever occur. The \$116 million facility, which opened in September, occupies nearly 140,000 square feet of space on the campus of St. Elizabeth's Hospital-the only fully secure federally owned campus in the D.C. area. It houses key communications functions for D.C. fire/EMS, police and emergency management, as well as the mayor's emergency command center. In a disaster, it will serve as a base for regional law enforcement and medical and other first responders, and potentially federal authorities too.

Similar to the nationwide effort to increase FR's readiness to these kinds of disasters and terrorisms, the medical domain has been very active to increase their responsiveness to those events. For example, in the State of Ohio, Riverside Methodist Hospital is equipped with several centers and laboratories.

* The Virtual Care Unit (VCU™) – The VCU™ was created by the Riverside medical education team and consists of four separate hospital environments: an operating room, a trauma unit, an ICU room and a standard patient room. Each has its own advanced, human patient simulator, some capable of more than 72,000 combinations of physiologic responses. The VCU™ features four adult and one pediatric simulator as well as one of the world's first infant simulators.

At the core of the VCU™ is a central control room with one-way windows where “drivers” will be able to run separate scenarios in each of the rooms simultaneously or raise the walls between the rooms for mass casualty exercises. Activity in the room will be recorded with cameras and patient responses on computer for later review and assessment. It will also be possible to recreate actual hospital cases in the VCU™.

* The Cardiac and Endovascular Simulation Lab – The lab is one of the first such systems in the country and was developed by the Medical Simulation Corporation. The system will enable physicians and other healthcare professionals to practice delicate, catheter-based procedures such as balloon angioplasties and stent placements in an incredibly realistic environment. “Simantha™,” the patient simulator, will offer verbal

feedback about how she is “feeling” while vital sign monitors will react to various medications and procedures.

* Laboratory Skills Center (LSC) – A center with a variety of clinical simulators including: airway management trainers for intubations; laparoscopic trainers for practicing minimally invasive surgical techniques; pelvic exam trainers where even the pressure of a doctor’s hand touching an ovary can be measured; a microvascular lab for practicing suturing techniques, tendon reattachments, etc.; and an ob-gyn patient model where teams can practice skills for delivering babies.

In conjunction with medical centers and laboratories nationwide, in August 2002, the National Association of EMS Educators (NAEMSE) and National Highway Traffic Safety Administration (NHTSA) began work on the State of EMS Education Research Project (SEERP). The goal was to examine the current EMS education system's readiness to implement NHTSA's *EMS Education Agenda for the Future*.

The soaring cost of healthcare in the United States has created a demand for accountability in the allocation and delivery of all medical care, including prehospital emergency medical services. A significant contributor to the rising cost of healthcare services has been the cost associated with educating healthcare providers. Large-scale studies of health and health-education professions, in particular those of medicine and nursing, have been undertaken and funded by professional organizations, as well as the federal government. Yet the characteristics of persons who teach in EMS and their work environment had not been previously examined.

After considering all their findings, SEERP investigators presented the following recommendations:

- National EMS education standards should include instructor guides and lesson plans until such time as EMS educators have a better understanding of effective curriculum and course design.
- The EMS educator must be trained to use tools and resources to design and apply evaluation techniques that test each student's critical thinking and understanding of the knowledge, skills and abilities used in the delivery of prehospital care.
- Policy makers must promote, support and facilitate substantial changes in instructor training, capabilities and educational resources.
- Policy makers and educational institutions should promote, support and assist with developing requirements for EMS educators to obtain and maintain state instructor certifications that include training in teaching techniques.
- EMS educators should promote, support and demonstrate cultural competency in teaching practices, and should recruit students that reflect the diversity of the population.
- Policy makers should promote, support and require national accreditation of EMS education programs in order to address concerns related to instructor preparation, teacher characteristics, course resources and curriculum design.

- Vendors should promote, support and develop valid test-item banks for educators to purchase. Instruction in the basics of test development and use of test results must be included in instructor courses.

The time for a major initiative to strengthen the resources, capabilities and infrastructure of EMS education is now. Integration of resources, development of support systems, coordination of initial and continuing education requirements and alliances with professional accreditation services are priorities for improving the working conditions for EMS educators and student performance in the clinical setting.

There is a demonstrated need to increase the theory and knowledge base of EMS educators, to prepare the classroom for change and to improve evaluation of student performance. The integration of educational technologies should become a high priority in order to serve the rural and volunteer EMS provider's needs. Prior to making any changes in the system, regulators, administrators and leaders must understand the current condition of the EMS education setting and the projected changes in the EMS education workforce. Only then can we begin to realize the vision of the *EMS Education Agenda for the Future*.

VII. PHASE 2: ON-LINE FIRST RESPONDERS SURVEY

Design

Using the Test of Performance Strategies (TOPS; Thomas, Murphy, & Hardy, 1999) Survey as a benchmark, a new survey, First Responders' Performance Strategies Survey (FRPS) was created for assessing First Responders' performance strategies and psychological skills as they prepared for, or engaged in emergency situations. The scale includes 8 emergency subscales and 8 training subscales. The subscales are: positive self-talk, emotional control, automaticity, goal setting, mental imagery, activation relaxation, negative thinking, and attentional control. All questions required that the participant respond to 5-point Likert-type scales. Examples of question from the FRPS include: "I set realistic but challenging goals for myself" (goal setting); "While performing a task, I visualize successful past performances" (mental imagery); "My self-talk during an emergency is negative" (self-talk); and "I am able to control distracting thoughts when I am working" (attentional control). Previous study (Gould, Taylor, Chung, Rolo, Pennisi, & Carson, 2002) using TOPS with one hundred seventy six Olympic athletes showed acceptable internal reliabilities within each subscale (Cronbach's alpha ranging from .50 to .87).

Material & Method

The FRPS was then input into an online survey service called Survey Monkey at www.surveymonkey.com. The survey is electronic and consists of 64 questions using the Likert scale format. This service allowed us to collect data using any PC with internet access. A survey link was sent to participants. Upon completion of the survey, data were sent instantly to the site and stored. This method was used as opposed to sending out paper surveys because of time, convenience, and survey management. A copy of the online survey is attached in Appendix D.

These 64 questions

Sample

Twelve surveys provided useful FRPS data. Those twelve individuals were veteran FR trainers (e.g., police captain, detective, manager in protective force operation, supervisor in traffic homicide unit, police training specialist, and emergency physician). All participants were male and on average, they have been training other first responders in their specialized area approximately for 12 years ($mean=12.43$).

Results

To conduct the data analysis on the survey results, some scores need to be converted to the opposite side because the questions are framed in reverse format (question # 4, 20, 24, 31, 32, 38, 43, 44, 50, 58, 60, 61, 62, and 63 – total of 14 questions). Descriptive statistics were computed to characterize the veteran FR trainers on training and emergency

performance strategies and psychological skills. Means and standard deviations of the total sample are shown in Table 1. Inspection of the results reveal that, regarding emergency strategies and skills (competition strategies), veteran FR trainers scored highest on goal setting ($mean=4.02$), activation ($mean=3.81$), imagery ($mean=3.73$) while self-talk and relaxation scored equally ($mean=3.67$) followed by automaticity ($mean=3.52$); relatively low scores on emotional control ($mean=3.15$) and negative thinking ($mean=1.5$). Relative to training strategies and skills (practice strategies), these veteran trainers scored highest on imagery ($mean=3.92$), goal setting ($mean=3.81$) followed by emotional control ($mean=3.52$) and attentional control ($mean=3.5$); relatively lower scores on automaticity ($mean=3.38$), relaxation ($mean=3.33$), and activation ($mean=3.27$). (see Appendix XX for more detail).

Figure 1 shows the average scores for the categories within two general classifications (PS: Practice Strategies, CS: Competition Strategies).

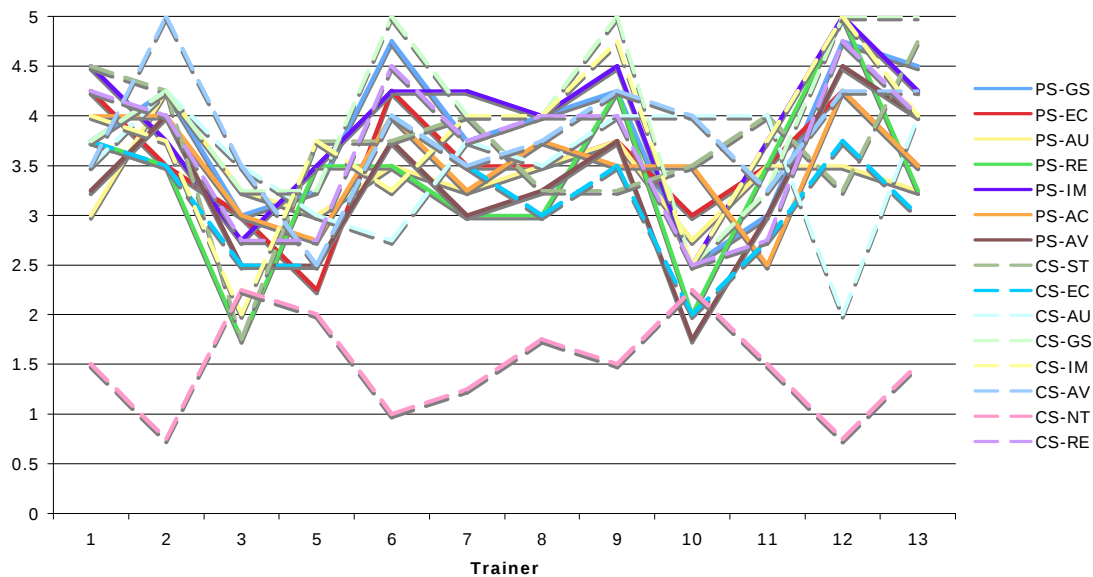


Figure 1. Average scores for the categories within two general classifications (PS: Practice Strategies, CS: Competition Strategies). Broken lines represent the Competition Strategies Category while the solid lines represent Practice Strategies. *GS: goal setting, EC: Emotional Control, AU: AUtomaticity, RE: RElaxation, IM: IMagery, AC: Attentional Control, AV: ActiVation, ST: Self-Talk, NT: Negative Thinking.*

Figure 2 shows the average scores of these categories across the participants. Of all the categories, there are 6 comparisons that can be made; GS (goal setting), EC (Emotional Control), AU (AUtomaticity), RE (RElaxation), IM (IMagery), and AV (ActiVation). Out of these 6 categories, 4 of them (GS, AU, RE, and AV) scored higher in the Competition Strategies than in the Practice Strategies. This means that the expert trainers were able to set their goals effectively, by themselves, while relaxed and more activated even under the extreme pressured emergency situations. Therefore, this result indicates their intuitive approaches learned through the extensive training

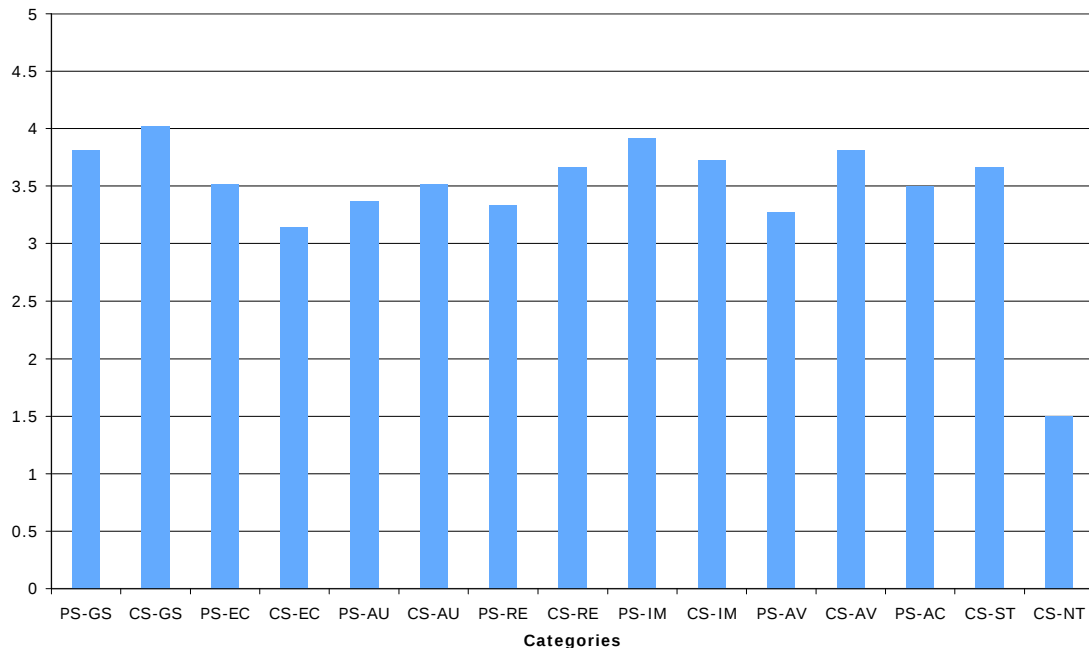


Figure 2. Comparison of the average scores of the categories across the participants between the two general classifications (PS and CS).

One of the surprising results came from the question # 41 (*During a crisis, I do not think about performing much, I just let it happen*) with the average response of 3.17 (opposite would be 1.83). This seems to suggest that these veteran trainers would not take active roles in intervening the crisis situations, instead they would let the situation evolve without any interruptions. Five of ten responders answered at 4 (often).

Further, there were a few questions with low scores. These questions were

- (#4) – *My attention wanders during any type of training*: 2.42

For this question, the responses were very neutral for all participants (9 out of 10 answered either 2 or 3). This is somewhat expected considering that some training courses and materials are prepared or customize to meet the individual demands for training to be a champion.

- (#10) – *During a task, I do not think about my performance much, I just let it happen*: 2.42

For this question, it makes somewhat sense based on some research findings that experts do not usually think about their performance because the process and performance tend to come naturally to them. This result is somewhat consistent with answers to other questions, such as #11 (*I perform my job without consciously thinking about it*). However, this is also contradictory to other questions, including #34 (*During a task, I rehearse or try to feel my performance in my imagination* – average response 3.42), #42 (*During a training exercise, when I visualize my performance, I imagine what it will be like* –

average response 4.08).

Additionally, a few questions seem to point to one direction about the way that experts or veterans perform their tasks on the job. In addition to those two questions discussed above (#34 and #42), responses to #59 (*I rehearse my performance in my mind and during actual tasks* – average response 3.50), and #64 (*During training, when I visualize my performance, I imagine watching my actions as if on a video replay* – average response 3.67) showed that veteran trainers relied on mental simulation and sensemaking process to understand the task or crisis.

Also, there were 19 questions with high averages (over 4.0). These were

- (Q#1) I set realistic but challenging goals for myself.
- (Q#7) During a task, I set specific result goals for myself.
- (Q#12) I rehearse tasks in my mind before performing them.
- (Q#13) I can raise my energy level on the job when necessary.
- (Q#16) I manage my self-talk effectively during an emergency.
- (Q#17) I am able to relax if I get too nervous in an emergency.
- (Q#18) I visualize my tasks going exactly the way I want it to go.
- (Q#22) I evaluate whether I achieved my work goals.
- (Q#25) When I need to, I can relax myself in an emergency in order to get ready to perform.
- (Q#32) I keep my thoughts positive during a task.
- (Q#36) I manage my self-talk effectively during a crisis.
- (Q#37) I set goals to help me use training time effectively.
- (Q#39) When things are going poorly at work, I stay in control of myself emotionally.
- (Q#42) During a training exercise, when I visualize my performance, I imagine what it will be like.
- (Q#45) During training, I focus my attention effectively.
- (Q#46) I set personal performance goals for my tasks.
- (Q#52) I can increase my energy to just the right level for an emergency.
- (Q#53) I have very specific goals for a task.
- (Q#54) During a crisis, I perform instinctively with little conscious effort.

These extremely positive answers indicate high level of self-control during training as well as crisis or emergency situations. This precisely indicates how intuition works and how experts are able to utilize their intuition which must be built during their careers.

VIII. PHASE 3: FIRST RESPONDERS INTERVIEWS

Design

Using the internet, several agencies were found that offer police officer/law enforcement officer training. A great deal of the police academies were affiliated with a college or university in that area. However, there are academies or institutes that operate on behalf of the state in which they reside or are affiliated with the federal government. In the table is a list of the organizations that were contacted and their responses.

Participants

The third phase included six veteran FR trainers. Of the six trainers that participated in the interview study, three were directors of national police officer training institutes, two were firefighter trainers, one was director of emergency training institute, and one was a detective. We were particularly interested in finding out what those who spend long years preparing first responders would think regarding the level of preparedness and challenges of preparing first responders. Finally, all six participants were male.

Table 1. Interview Contact List

Organization	Name	Title
University of Tennessee Law Enforcement Center	Mike Hill	Program Director
University of Central Missouri National Police Institute	Dr. Mike Wiggins	Director
Advanced Law Enforcement Academy		
University of Illinois at Urbana-Champaign Police Training Institute	Tom Dempsey	Director
Law Enforcement Leadership Institute		
Northeast Alabama Law Enforcement Academy	Billy Ducker	Director
Executive Office of Public Safety – State of WA	Marylou Powers	Training
College of DuPage Suburban Law Enforcement Academy	William Lawler	Director
Kansas Law Enforcement Training Center		
National Law Enforcement Training Center		
Basic Security Police Officer Training	Cliff Gordon	
Federal Law Enforcement Training Center	David L. Strickland	
Georgia Public Safety Training Center	Butch Beach	Director, GA Police Academy
The National Organization of Black Law Enforcement Executives	Robert Stewart	Director, NOBLE Center for Training and Development

*There was no contact name or title available via the website.

Interviewers & Procedure

A female Ph.D. student from the Industrial Engineering Department and a female Master's student from the Human Performance & Leisure Studies Department conducted the interviews. The interviews were of a semi-structured, open-ended format, and the data were collected via audiotape. A series of questions about issues relating to FR's training and preparedness during the major crisis were contained in the interview guide. Refer to Appendix A for a copy of the complete interview guide. Interviews ranged in length from 45 to 80 minutes. The interviews were then transcribed and content analyzed. See Appendix D, E, F, for more detail.

Results

Current FR training methods. A mixture of hands-on simulation, role playing, as well as traditional classroom lecture format was used to train FR. However, there seems to be general recognition toward more real life simulation method than traditional approach.

Overall success rates. Among the experienced FR trainers, overall success rates of their training were modest at best. First of all, it was not clear what success meant for FR specially, dealing with major crisis like Katrina.

How has 9/11 and Katrina affected the FR training. Prior to our investigation, one of the assumptions that we had was there should be some significant changes in FR training as a result of 9/11 and Hurricane Katrina. However, no significant changes in terms of training method and content to better prepare to those major and unprecedented disasters. It is alarming yet, understandable phenomenon. Most lessons learned investigations and reports have been focused on upper level decision-making process and subsequent resource management issues on a federal and state level. Other than few procedural changes in communication among FR, vast majority of FR trainers did not recognize the needs to change their existing training protocol.

Preparation and planning. Most FR trainers agreed that preparation and planning is the key for excellent first responders. As with any performance based profession, prepare and plan beforehand and follow and stick to the plan was the significant ingredient for their success.

The Importance of mental skills. Certainly, we are not opposed to the virtual reality and simulation method to train future FR. With the advancement of technology, we expect that there will be more creative and relevant simulation training techniques available for FR in the near future. However, while we spend awful amount of time practicing and producing successful outcome (e.g., being able to respond quickly and accurately at the same time), we tend to ignore the process, i.e., systematic training approach to develop those necessary skills. At some point of their FR training, other than the evaluative simulation situation, the trainees should be introduced and systematically taught such critical mental skills as concentration, focus, relaxation, self-talk, imagery to enhance their performance. For example, most Olympic level athletes utilize mental imagery to

help enhance their skills development as well as their performance during competition. It is not coincidence that those Olympic athletes are able to meet the challenge and produce their highest performance level in the face of the most stressful situation in their athletic career – they have prepared not only physically but mentally for that moment. Why not implementing those mental skills to FR to optimize their performance during major crisis? The investigative team felt strongly that transferring scientific knowledge on mental training that induces optimal performances to FR training should be the most substantial future step to develop excellent FR

Team factors. Similar to any other successful organization, FR has to work together in order to meet the massive challenges of major crisis. Both task cohesion (e.g., ability to work together toward a common goal) and social cohesion (e.g., ability to get along with other team members) appeared to be important. According to performance excellence literature on team cohesion, it is widely known that task cohesion is more important than social cohesion among the highly successful teams. The investigative team found a similar pattern as to the effective FR unit. However, social cohesion, relatively low importance among the top performing teams, found to be a key characteristic for the success of some FR units. For example, firefighters tend to spend tremendous amount of time together while they were on duty and this increases the importance of having social cohesion to be successful. Moreover, when there is no clear task goals or end point during their operation (e.g., during Katrina, FR were overwhelmed by the amount of needs and the completion of their tasks seemed unreal to many FR), the social cohesion played a significant role for FR to continue their task.

Post-disaster care. Though not the focal target of this investigation (e.g., how to train FR to meet the challenge of major crisis), some veteran FR trainers suggested that post-disaster care is as important as pre-disaster training. Similar to those returning from the war zone, these FR tend to experience Posttraumatic Stress Disorder (PTSD) long after their operation was completed. In fact, the investigative team suspected that FR population is even more vulnerable than other professional group due to their suppressive male culture.

Emotional response to disaster. Related to the above mentioned point, we tend to forget the significance of emotional response to disaster. Though not discussed openly, the investigative team was able to get the first hand anecdotes from these veteran FR trainers regarding their own emotional response to their traumatic experience. Some suggested that systematic assessment after the disaster would be helpful to identify those who struggle emotionally.

The future of FR training. All respondents agreed that there have been steady positive changes in FR training in the past and were optimistic that the future of FR training will evolve in accordance to the current demand of disasters.

IX. GENERAL DISCUSSION

In the wake of the September 11 terrorist attacks on the United States and more recently, Hurricane Katrina, government (local, state, and federal) agencies have been strategizing and developing ways to create an effective emergency management system. In this development, the key to an effective and efficient system is the proper management of resources and responsibilities when dealing with all types of emergencies including natural disasters and terrorist attacks. There are three key elements of the emergency management process: planning, response, and recovery, which all define the success or failure of the system (Coleman, 2005).

Using a sports analogy, "People will play the game the way they practice." It is vital to keep the concepts of incident command and triage fresh. There are several ways to do this without the major MCI drills where most participants only get to play one part.

CHARACTERISTICS OF A SUCCESSFUL FIREFIGHTER

- maintain effective working relationships with superiors and subordinates
- get along with others
- stay calm; handle stress
- use common sense
- listen to others
- be flexible
- be self-motivated
- be decisive
- counsel, support and be empathic toward others
- work under stressful conditions
- maintain emotional control
- do repetitive tasks
- work with little or no supervision
- take charge when needed
- determine priorities
- have a good sense of humor
- accept constructive criticism from others
- be resourceful
- handle critical decision-making under life-threatening conditions
- perform complex tasks under life-threatening conditions
- work under tight time frames
- deal with critically injured/ill people
- perform tasks requiring long periods of intense concentration
- perform under unpleasant circumstances or in traumatic situations
- work as a team member
- maintain a positive attitude
- enthusiasm
- honesty
- initiative
- innovativeness

- judgment based on common sense
- stability
- willingness to be patient, non-judgmental and accepting of other people
- desire to serve and help people regardless of who they are, where they are and what their beliefs are
- demonstrate a genuine caring attitude toward all people
- must have an awareness and understanding of differences between different cultures
- have an optimistic attitude and believe that the best outcome will occur in emergency situations
- driven by strong values and ethics along with an awareness to act upon those values and ethics
- willing to put the best interests of the organization above personal interests or differences

In his book *Gut Feelings*, internationally well known psychologist Gerd Gigerenzer introduces not so conventional but fascinating cases on human cognition and performance. For instance, when you learn to fly an airplane, you will be instructed to use a simple rule to avoid ultimate disaster – collision. When another plane approaches, look at a scratch in your windshield and observe whether the other plane moves relative to that scratch. If it does not, you should drive away as soon as you can. You may not be able to calculate the trajectory of the other plane in three-dimensional vector. Even if you can, you will not have enough time to produce the answer. This simple rule that pilots use to avoid airplane collision is called *gaze heuristic*, the same rule that baseball players use to increase collision – catching a fly ball. Theoretically, the player has to estimate the initial distance, velocity, and projection angle of the ball. In addition, he should include more information such as air resistance, the speed and direction of wind, and the ball's spin into his estimation and find the right spot to catch the ball. Most players would solve this mathematically formidable equation by concentrating on one variable – the angle of gaze.

In ordinary circumstances, gathering enough information and meticulously comparing pros and cons would help reach an ideal decision-making. However, in military actions, emergency units, as well as in sports, decisions need to be made fast, and striving for perfection by prolonged deliberation can lose the game or somebody's life.

In summary, we feel pretty confident about our multidisciplinary approach to the FR training practices and are convinced that this would lead us into an alternative training practices in preparing FR and eventually applicable to preparing excellent Air Force combatant.

X. REFERENCES

- ADMS, 2005
- Advanced Interactive Systems, 2004
- Bailey, B. (2005). *METI announces major order for North Carolina Virtual Training Center*. Available at www.meti.com/downloads/MEDIC_METI.pdf
- Berry, A.G., & Hilgers, M.G. (2004). Modeling first-responder emergency sensors for virtual training. A paper presented at the 2004 Modeling and Simulation Conference.
- Carless, S. (2005). *Hazmat: Hotzone – first-person first responder gaming*. Gamasutra.com. Available at http://www.gamasutra.com/features/20051102/carless_01b.shtml
- Center for the Study of Traumatic Stress. (2006). *Hurricane Katrina: sustaining effectiveness in first responders*. Available at www.usuhs.mil/psy/CSTSSustainingeffectivenessinfirstresponders1.pdf
- Coleman, K. (2005). Technology supporting emergency response. *Directions Magazine*. Retrieved April 12, 2006 from www.directionsmag.com/article.php?article_id=1964
- Davis, L. (2005). Public safety center provides training for first responders. *Nation's Cities Weekly*.
- Department of Justice. (2003). *Justice Department to showcase cutting edge technologies for first responders*. Available at www.ojp.usdoj.gov/newsroom/2003/NIJ03149.htm
- Fire Chief. (2004). *Grant funds statewide first responder network*. February available at http://firechief.com/newsitems/firefighting_new_hampshire_grant/
- Gingerenzer, G. (2007). *Gut feelings: The intelligence of the unconscious*, New York, NY: Viking Penguin.
- Gould, D., Taylor, M., K., Chung, Y., Rolo, C., Pennisi, N.S., & Carson, B.A. (2002). *2000 Sydney Olympic Games: U.S. athlete and coach performance lessons learned assessment*. U.S. Olympic Committee Sport Science and Technology Final Grant Report. Colorado Springs, Colorado.
- Guarnieri, P.S. (2002, May). Creating a knowledge-based first responder force. *SIGNAL Magazine*.
- Miles, (2006). Miles, D. (2006, February 15). Joint emergency responders training facility. *Military Training Technology*.
- Thomas, P.R., Murphy, S.M., & Hardy, L. (1999). Test of performance strategies: Development and preliminary validation of a comprehensive measure of athletes' psychological skills. *Journal of Sport Sciences*, 17(9), 697-711.
- US Fire Administration. (2004). *FEMA's training of nation's emergency responders emphasizes leadership, technology and best practice*. Available at <http://www.usfa.fema.gov/about/media/2004releases/010504.shtm>
- Volz, R.A., Sukasdadi, K., Underhill, K., Sharrock, R., and Abichandani, A. (2006). First responder support and training (FRST) system.

APPENDIX A

FIRST RESPONDERS INTERVIEW GUIDE

Standard Protocol for FR Interview

Step 1: Initial contact and solicitation via email or phone (see attached example)

Step 2: Setting up an interview schedule

Step 3: Send out an informed consent form prior to the interview

Step 4: Conduct an interview (see interview guide)

Step 5: Send the final summary report (for those who checked yes)

KATRINA LESSONS LEARNED STUDY PROJECT DESCRIPTION & INFORMED CONSENT FORM

Project Description

After Hurricane Katrina, government (local, state, and federal) agencies have been developing ways to create an effective emergency management system. The key to an effective emergency management system is the proper management of resources and responsibilities when dealing with all types of emergencies including natural disasters and terrorist attacks. Depending on the nature of the situation, first responders are the first to arrive on a disaster scene and must be equipped to make quick decisions under highly stressful and sometimes physically demanding situations. Often there is very little time to fully contemplate the gravity of the situation or deliberate about what the next move will be.

Our purpose is to ask for your help on an important project being conducted by researchers at the North Carolina Agricultural & Technical State University, on behalf of the U.S. Air Force Research Laboratory (AFRL). The AFRL wants to investigate what lessons we have learned from the significant disasters like Katrina in order to better prepare first responders for unavoidable future disasters. Specifically, the AFRL wants to understand current training environments for the first responders as well as optimal performance environments during their operations. To achieve these goals, the AFRL needs to know what factors help first responders perform and train at their best, and what factors hinder preparation and performance. **This is why we need your help.**

It will take approximately 45 minutes to an hour to complete this interview. *You are under no obligation to be a participant and, if at any time, you do not feel comfortable with the questions being asked you may withdraw from the study without any penalty. All information given will be kept strictly confidential.* Only the primary researchers from the North Carolina Agricultural and Technical State University will have access to the data. Results of the study will be shared with other FR trainers in the future.

Participant Consent

I hereby consent to participate in this research project and have read the above explanation of the purposes, my right to withdraw at any time without penalty, and assurance of the confidential nature of the results. Any additional questions I have about the study can be obtained by contacting the investigative team at the address listed on the questionnaire itself. Questions regarding participant rights in this project can be answered by calling Dr. Yongchul Chung at 336-334-7712 or at the North Carolina A&T State University Division of Research at 336-334-7995.

Participant Signature _____ Date _____

Participant Name (please print) _____

Please send me a summary of the results: ☐ Yes ☐ No

June 28, 2007

Dear First Responder:

Our purpose in writing is to ask for your help on an important project being conducted by researchers at the North Carolina Agricultural & Technical State University, on behalf of the U.S. Air Force Research Laboratory (AFRL). The AFRL wants to investigate what lessons we have learned from the significant disasters like Katrina in order to better prepare first responders for future disasters. Specifically, the AFRL wants to understand current training environments for the first responders as well as optimal performance environments during their operations. To achieve these goals, the AFRL needs to know what factors help first responders perform and train at their best, and what factors hinder preparation and performance. **This is why we need your help.**

Enclosed is a survey we are asking that you complete. In the survey, you are asked to rate the frequencies of performance strategies that may have positively and negatively affected the preparation and performance during your operations. The results will then be used to develop materials to better prepare first responders for the next round natural disasters. **Therefore, your input will have an important impact in helping first responders succeed.**

All of the survey information that we collect will be kept strictly confidential (see the attached participant consent form). Names will only be used to track individuals who have returned surveys and will not be tied to the results in any way.

Finally, we know how busy you are and hate to bother you with this request. You and other first responders are the real experts on this topic and are the only individuals who can provide us with this type of information. **SO PLEASE HELP US! Your knowledge will help future first responders meet their goals by performing optimally at the emergency situations.**

Thanks for your help!!!

Sincerely,

Younho Seong, Ph.D., & Yongchul Chung, Ph.D.
Principal Investigator, Project Director

FR TRAINING PRACTICES INTERVIEW GUIDE

I. General Overview/Background Information

- *Ask the person general information (e.g., the person such as title, years of service, no. of people they are responsible for, etc.).*
- *Also inquire about the nature of the programs at the institute or facility.*

II. Expert's Own Experiences

- *Ask the person about their past experiences as a first responder and the training they had.*
- *How does it compare to what is taking place currently?*
- *Their views on effectiveness of training (past and present).*

III. Current Practices

- *What is the current training protocol?*
- *How effective is it?*
- *What is the curriculum and how is it delivered?*

IV. Excellence among the FR

- *Describe any "champions" in their field.*
- *What characteristics do they possess?*

V. Major Changes after Katrina & Future Training Direction

- *What new training technological innovations are being developed at their institute?*
- *What direction do they see the training going 5, 10 years in the future?*
- *How has 9/11 and/or Katrina affected the direction of the training at this institute?*

APPENDIX B

FR PERFORMANCE STRATEGIES SURVEY

FIRST RESPONDER PERFORMANCE STRATEGIES SURVEY

Each of the following items describes a specific situation that you may encounter in your training and competition. Please rate how frequently these situations apply to you on the following scale:

1 = Never	2 = Rarely	3 = Sometimes	4 = Often	5 = Always
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Please put a circle around your answer.						
		Never			Always	
1.	I set realistic but challenging goals for myself.	1	2	3	4	5
2.	I say things to myself to help my job performance.	1	2	3	4	5
3.	While performing a task, I visualize successful past performance.	1	2	3	4	5
4.	My attention wanders during any type of training.	1	2	3	4	5
5.	I practice using relaxation techniques at work.	1	2	3	4	5
6.	I practice a way to relax.	1	2	3	4	5
7.	During a task, I set specific result goals for myself.	1	2	3	4	5
8.	When the pressure is on during a crisis, I know how to relax.	1	2	3	4	5
9.	My self-talk during an emergency is negative.	1	2	3	4	5
10.	During a task, I don't think about performing much-I just let it happen.	1	2	3	4	5
11.	I perform my job without consciously thinking about it.	1	2	3	4	5
12.	I rehearse tasks in my mind before performing them.	1	2	3	4	5
13.	I can raise my energy level on the job when necessary.	1	2	3	4	5
14.	During a difficult task, I have thoughts of failure.	1	2	3	4	5
15.	I use my time off to work on my relaxation techniques.	1	2	3	4	5
16.	I manage my self-talk effectively during an emergency.	1	2	3	4	5
17.	I am able to relax if I get too nervous in an emergency.	1	2	3	4	5
18.	I visualize my tasks going exactly the way I want it to go.	1	2	3	4	5
19.	I am able to control distracting thoughts when I am working.	1	2	3	4	5
20.	I get frustrated and emotionally upset when work does not go well.	1	2	3	4	5
21.	I have specific cue words or phrases that I say to myself to help my performance during an emergency.	1	2	3	4	5
22.	I evaluate whether I achieved my work goals.	1	2	3	4	5
23.	During training, my movements and skills just seem to flow naturally from one to another.	1	2	3	4	5

1 = Never	2 = Rarely	3 = Sometimes	4 = Often	5 = Always
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		Never			Always	
24.	When I make a mistake at work, I have trouble getting my concentration back on track.	1	2	3	4	5

25.	When I need to, I can relax myself at an emergency in order to get ready to perform.	1	2	3	4	5
26.	I set very specific goals for my tasks.	1	2	3	4	5
27.	I relax myself at practice to get ready.	1	2	3	4	5
28.	I psych myself up during a crisis to get ready to perform.	1	2	3	4	5
29.	During training, I can allow the skill or movement to happen naturally without concentrating on each part of the skill.	1	2	3	4	5
30.	During an emergency, I perform on “automatic pilot.	1	2	3	4	5
31.	When something upsets me during work, my performance suffers.	1	2	3	4	5
32.	I keep thoughts positive during a task.	1	2	3	4	5
33.	I say things to myself to help my on-the-job performance.	1	2	3	4	5
34.	At competitions, I rehearse the feel of my performance in my imagination.	1	2	3	4	5
35.	I practice ways to energize myself.	1	2	3	4	5
36.	I manage my self-talk effectively during a crisis.	1	2	3	4	5
37.	I set goals to help me use training time effectively.	1	2	3	4	5
38.	I have trouble energizing myself if I feel sluggish during training.	1	2	3	4	5
39.	When things are going poorly at work, I stay in control of myself emotionally.	1	2	3	4	5
40.	I do what needs to be done to get psyched up for emergencies.	1	2	3	4	5
41.	During a crisis, I don’t think about performing much- I just let it happen.	1	2	3	4	5
42.	During training, when I visualize my performance, I imagine what it will be like.	1	2	3	4	5
43.	I find it difficult to relax when I am too tense in a crisis.	1	2	3	4	5
44.	I have difficulty increasing my energy level during training.	1	2	3	4	5
45.	During training, I focus my attention effectively.	1	2	3	4	5
46.	I set personal performance goals for my tasks.	1	2	3	4	5
47.	I motivate myself to train through positive self-talk.	1	2	3	4	5

1 = Never	2 = Rarely	3 = Sometimes	4 = Often	5 = Always
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		Never			Always	
48.	During training, I just seem to be in a flow.	1	2	3	4	5
49.	I practice energizing myself during training sessions.	1	2	3	4	5
50.	I have trouble maintaining my concentration during long hours.	1	2	3	4	5
51.	I talk positively to myself to get the most out of training.	1	2	3	4	5
52.	I can increase my energy to just the right level for an emergency.	1	2	3	4	5

53.	I have very specific goals for a task.	1	2	3	4	5
54.	During a crisis, I perform instinctively with little conscious effort.	1	2	3	4	5
55.	I imagine my job routine before I actually do it.	1	2	3	4	5
56.	I imagine screwing up during a crisis.	1	2	3	4	5
57.	I talk positively to myself to get the most out of my job.	1	2	3	4	5
58.	I don't set goals for training, I just go out and do it.	1	2	3	4	5
59.	I rehearse my performance in my mind and at competitions.	1	2	3	4	5
60.	I have trouble controlling my emotions when things are not going well at work.	1	2	3	4	5
61.	When I perform poorly at work, I lose my focus.	1	2	3	4	5
62.	My emotions keep me from performing my best on the job.	1	2	3	4	5
63.	My emotions get out of control under the pressure of competition.	1	2	3	4	5
64.	During training, when I visualize my performance, I imagine watching my actions as if on a video replay.	1	2	3	4	5

APPENDIX C

360 DEGREE FR DEVELOPMENT PLANNING

Phase I: New First Responder Assessment

Phase I: Protocol

The purpose of phase I is to provide new First Responders (FR) opportunities to explore critical skills and behaviors that will make them top performers in their specific job functions. This exploration can be accomplished through the use of several assessment instruments including a career values self-assessment and a 360 feedback tool. As a recommendation, these assessment instruments should be administered to the FR 12 to 18 months within the organization.

Self-Observer assessments will allow the individual and their observers pinpoint areas of developmental improvement thus, encouraging the linkage of behaviors to their specific job function as well as to the needs of the organization. It is highly suggested that the individual share their results with an assigned veteran mentor/coach in their organization. This mentor/coach can assist the new First Responder with developing goals, actions steps in addition to monitoring their process in a personalized developmental plan.

Recommended Phase I Steps

- Step 1: Identification of New First Responder (12-18 months)
- Step 2: Assign Veteran First Responder/Mentor to New First Responder
- Step 3: Provide Self-Assessment Instrument to First Responder
- Step 4: Administer a 360 Feedback Instrument to:
 - New First Responder (12 to 18 months of service)
 - Direct Manager/Supervisor
 - Peers

Career Values Assessment

The purpose of a career values assessment is to help individuals understand the importance of values and the impact they have on the choices he or she may make in life. Values are things strongly connected to and about you. These are things that are most important to you in life and career. As an example, some individuals may value job security, making money, structure and a regular schedule more important than having flexibility, variety, creativity, and independence than others. Being aware of your values can assist you with making important decisions in your life such as career and job choices. Making a career choice based on your values can be better for you than the one's based on other people's recommendations.

Directions: Take a few minutes and assess your personal and career values. Your results are not likely to provide a final career or job choice, but may help you discover more about the values you think are important. This information could be shared with your mentor to assist you with developing a plan that meets your goals, and values as well as your organization.

Name of Participant: _____
Name of Mentor: _____
Date: _____

CAREER VALUES ASSESSMENT

Knowing your values is essential if you are to find the career which suits you best.
This questionnaire will help you identify your personal values.

INSTRUCTIONS: Each numbered item below contains two contrasting statements.
Choose the statement that you feel more accurately describes you. Circle the letter across
from the statement. Circle one letter from each pair, even if you don't like either of them
or like both statements equally. Do not leave any items unanswered, and do not circle
both letters for any pair.

- | | | | |
|---|--|---|---|
| 1. I work as a competition and like to organize myself and others to win.
I like to work on my own projects in an organization. | <table border="1"><tr><td>A</td></tr><tr><td>D</td></tr></table> | A | D |
| A | | | |
| D | | | |
| 2. Work should be balanced by outside interests and relationships.
In order to be successful I must give work precedence over my personal
business. | <table border="1"><tr><td>D</td></tr><tr><td>A</td></tr></table> | D | A |
| D | | | |
| A | | | |
| 3. I take initiative and am a good problem-solver.
The needs of my family are as important as the needs of my work. | <table border="1"><tr><td>A</td></tr><tr><td>D</td></tr></table> | A | D |
| A | | | |
| D | | | |
| 4. I want to be recognized by my organization for hard work, loyalty and
competence.
I like to identify goals and accomplish them in my own way. | <table border="1"><tr><td>B</td></tr><tr><td>C</td></tr></table> | B | C |
| B | | | |
| C | | | |
| 5. I like to work with little supervision.
I like to work with a stable group in a clearly defined role. | <table border="1"><tr><td>C</td></tr><tr><td>B</td></tr></table> | C | B |
| C | | | |
| B | | | |
| 6. My spouse/partner is as important as my career.
My spouse/partner goes "on hold" when I', working on a project. | <table border="1"><tr><td>D</td></tr><tr><td>E</td></tr></table> | D | E |
| D | | | |
| E | | | |
| 7. I enjoy being able to demonstrate my expertise in a special area.
I enjoy leading others and being responsible for the results of a team. | <table border="1"><tr><td>E</td></tr><tr><td>A</td></tr></table> | E | A |
| E | | | |
| A | | | |
| 8. I am experienced, loyal, dedicated and competent.
I am politically astute, a capable administrator and a good leader. | <table border="1"><tr><td>B</td></tr><tr><td>A</td></tr></table> | B | A |
| B | | | |
| A | | | |
| 9. The most important thing to me is freedom.
The most important thing to me is objectivity. | <table border="1"><tr><td>C</td></tr><tr><td>D</td></tr></table> | C | D |
| C | | | |
| D | | | |

I can accurately be described as:

- | | | | |
|--|--|---|---|
| 10. Self-starting
Adaptable | <table border="1"><tr><td>C</td></tr><tr><td>D</td></tr></table> | C | D |
| C | | | |
| D | | | |
| 11. A person who gets excited by challenging work.
A person who works best independently. | <table border="1"><tr><td>E</td></tr><tr><td>C</td></tr></table> | E | C |
| E | | | |
| C | | | |
| 12. Well-balanced but divided.
Adventurous and aggressive. | <table border="1"><tr><td>C</td></tr><tr><td>E</td></tr></table> | C | E |
| C | | | |
| E | | | |
| 13. Steady and persistent.
Self-directed. | <table border="1"><tr><td>B</td></tr><tr><td>C</td></tr></table> | B | C |
| B | | | |
| C | | | |
| 14. Creative and enthusiastic.
Self-reliant and self-contained. | <table border="1"><tr><td>E</td></tr><tr><td>C</td></tr></table> | E | C |
| E | | | |
| C | | | |
| 15. A planner and organizer
An analyst and problem solver | <table border="1"><tr><td>A</td></tr><tr><td>E</td></tr></table> | A | E |
| A | | | |
| E | | | |
| 16. An authority in my field.
A good corporate citizen. | <table border="1"><tr><td>E</td></tr><tr><td>B</td></tr></table> | E | B |
| E | | | |
| B | | | |
| 17. Able to defer my goals to accomplish organizational priorities.
Skilled at finding common ground between my goals and organizational priorities | <table border="1"><tr><td>B</td></tr><tr><td>D</td></tr></table> | B | D |
| B | | | |
| D | | | |
| 18. I want to control my working conditions.
I want time to spend on my family and other interest. | <table border="1"><tr><td>C</td></tr><tr><td>D</td></tr></table> | C | D |
| C | | | |
| D | | | |
| 19. It is important to know that I am secure and accepted
It is important to have a well-rounded personal life. | <table border="1"><tr><td>B</td></tr><tr><td>D</td></tr></table> | B | D |
| B | | | |
| D | | | |
| 20. I prefer a career with many opportunities for advancement.
I prefer challenging tasks and projects | <table border="1"><tr><td>A</td></tr><tr><td>E</td></tr></table> | A | E |
| A | | | |
| E | | | |
| 21. Knowing the right people is critical to career success.
Working in a field that interest me is critical to my career. | <table border="1"><tr><td>A</td></tr><tr><td>C</td></tr></table> | A | C |
| A | | | |
| C | | | |
| 22. I like being in the center of the decision-making process.
I value employment security and a sense of belonging. | <table border="1"><tr><td>A</td></tr><tr><td>B</td></tr></table> | A | B |
| A | | | |
| B | | | |
| 23. I want a position with maximum independence.
I want work that is critical to the success of the organization. | <table border="1"><tr><td>C</td></tr><tr><td>A</td></tr></table> | C | A |
| C | | | |
| A | | | |

-
- | | | | |
|-----|--|---|---|
| 24. | I require balance between work and my private life. | <table border="1"><tr><td>D</td></tr></table> | D |
| D | | | |
| | I require stability, good benefits and recognition for my contributions. | <table border="1"><tr><td>B</td></tr></table> | B |
| B | | | |
| 25. | I would rather be considered an original thinker in my field. | <table border="1"><tr><td>E</td></tr></table> | E |
| E | | | |
| | I would rather be considered competent and dependable. | <table border="1"><tr><td>B</td></tr></table> | B |
| B | | | |
| 26. | My bottom line is security, good benefits and fair treatment. | <table border="1"><tr><td>B</td></tr></table> | B |
| B | | | |
| | My bottom line is career advancement. | <table border="1"><tr><td>A</td></tr></table> | A |
| A | | | |
| 27. | Financial success, power and prestige are important measures of career success. | <table border="1"><tr><td>A</td></tr></table> | A |
| A | | | |
| | Having my work, family and personal development in harmony is my definition of career success. | <table border="1"><tr><td>D</td></tr></table> | D |
| D | | | |
| 28. | I prefer long-term working relationships. | <table border="1"><tr><td>B</td></tr></table> | B |
| B | | | |
| | I prefer working on a project or task force basis. | <table border="1"><tr><td>E</td></tr></table> | E |
| E | | | |
| 29. | Professional development and continuing education are important to me. | <table border="1"><tr><td>E</td></tr></table> | E |
| E | | | |
| | Education and training are tools for achieving greater independence. | <table border="1"><tr><td>C</td></tr></table> | C |
| C | | | |
| 30. | I am constantly seeking equilibrium between my work and my personal life. | <table border="1"><tr><td>D</td></tr></table> | D |
| D | | | |
| | I am constantly seeking new challenges and possibilities. | <table border="1"><tr><td>E</td></tr></table> | E |
| E | | | |

Adapted from Managing the New Careerist: The Diverse Career Success Orientations of Today's Workers, by C. Brooklyn Derr. Copyright 1986 by Jossey-Bass, Inc.

Scoring

Review the questionnaire and add the number of times one of the specific five letters (A-E) were circled. Write the totals in the spaces next to each letter provided below.

A= _____ B= _____ C= _____ D= _____ E= _____

Your combine total (A+B+C+D+E) = should equal 30

After you have written your totals for each letter, plot your scores on the graph below.
The highest peaks indicate your dominant career values.

Career Orientation

		A: Advancement	B: Security	C: Autonomy	D: Balance	E: Challenge
Strong	12					
	11					
	10					
Average	9					
	8					
	7					
	6					
	5					
Weak	4					
	3					
	2					
	1					

Next Step

- **Ask yourself these questions:**

1. Are my values in keeping with my goals? If your goal is to achieve more money or a more responsible position (advancement) and your values indicate a desire for more time to spend with your family (balance), your values are clearly out of sync with your goals. If values and goals aren't compatible, you may need to re-assess who you are and what you really want.
2. Do these dominant career-values (e.g., the values most important to me) exist in this job position?
3. If my career values do not exist in my current job position, is there a way to incorporate them?

- **Share results:**

1. Assigned First Responder Mentor/Coach.
2. Create a developmental plan

360 Feedback Instrument

What is it?

360° feedback instruments are designed to provide a deeper insight into how individuals view themselves as well as how others view their performance. Ultimately, the purpose of this instrument is to aid in reinforcing and accelerating the need for continuous development. The added dimension of 360° is its' ability to compile multiple assessments from co-workers and contrast that data with your own self perceptions. Differences are often found between the perceptions of the individual rater and observers.

What information does it provide?

A good 360° instrument pinpoints which skills, behaviors, or characteristics are most important to a person's job function. It identifies the individual's strengths and deficiencies, and provides information on how others assess the individual's proficiency levels in connection with their job performance. The participant is able to view how the boss, co-workers, and those reporting to him or her (if applicable) view their proficiency and effectiveness.

What is the validity of a 360° instrument?

A 360° feedback instrument should generate "expert" advice based on reliable research and practice, make specific recommendations on what to do, and provide a framework for creating a strong development plan. Research has indicated rating results from self-observer instruments have been found to be consistent (Nilsen, & Campbell, 1993). In addition, any discrepancies found on multirater skill-based instruments were similar to those found on multirater personality-based instruments suggesting accuracy in self-perception is stable (Nilsen, & Campbell, 1993).

FIRST RESPONDER PERFORMANCE STRATEGIES SURVEY

Each of the following items describes a specific situation that you may encounter in your training and competition. Please rate how frequently these situations apply to you on the following scale:

1 = Never 2 = Rarely 3 = Sometimes 4 = Often 5 = Always

Please put a circle around your answer.

Professional Knowledge						
Specific Job Function Knowledge		Never			Always	
1.	Has good understanding of the job.	1	2	3	4	5
2.	Has the technical skill necessary for the job.	1	2	3	4	5
3.	Stays current on new trends and technology in the field.	1	2	3	4	5
Broad Job Knowledge						
4.	Shows mastery of job content;	1	2	3	4	5
5.	Excels at his or her function or professional specialty	1	2	3	4	5
6.	In a new assignment, picks up knowledge and expertise easily; a quick study.	1	2	3	4	5
Seeks Job Knowledge		Never			Always	
7.	Has a solid understanding of the profession including services	1	2	3	4	5
8.	Knows how the various parts of the organization fit together	1	2	3	4	5
9.	Has an understanding of the field that goes beyond his/her own limited area	1	2	3	4	5
Quick Study in Job						
10.	Quickly masters new technical knowledge necessary to do the job	1	2	3	4	5
11.	Masters new work unit knowledge necessary to understand how the business works	1	2	3	4	5
12.	Learns a new skill quickly	1	2	3	4	5

Risk Innovation, Adaptability, Creativity						
Risk taking, Innovation		Never			Always	
13.	Has vision; often brings up ideas potentials and possibilities	1	2	3	4	5
14.	Constantly generates new ideas	1	2	3	4	5
15.	Seizes new opportunities	1	2	3	4	5
Has the Courage to take Risks						
16.	Will persevere in the face of obstacles or criticism when he/she believes what he/she is doing is right	1	2	3	4	5
17.	Acts when others hesitate or just talk	1	2	3	4	5
18.	Takes business risks	1	2	3	4	5
Adaptability		Never			Always	
19.	Adapts to changing conditions	1	2	3	4	5
20.	Anticipates problems and takes preventive action	1	2	3	4	5
21.	Handles multiple priorities/task well	1	2	3	4	5
Adaptability and flexibility*****						
22.	Tries new approaches	1	2	3	4	5
23.	Adjusts to changes in circumstance easily	1	2	3	4	5
24.	Is eager to learn and grow.	1	2	3	4	5

1 = Never

2 = Rarely

3 = Sometimes

4 = Often

5 = Always

Problem Solving and Decision Making						
<i>Problem Solving / Decision Making</i>		Never			Always	
25.	Thinks through problems clearly and logically	1	2	3	4	5
26.	Understands the issues quickly	1	2	3	4	5
27.	Shows good judgment in decision making	1	2	3	4	5
<i>Getting Information, Making Sense of It. Problem Identification</i>						
28.	Is a keen observer of people, events, things	1	2	3	4	5
29.	Defines problems effectively; gets to the heart of a problem	1	2	3	4	5
30.	Spots problems, opportunities, threats, trends early	1	2	3	4	5
<i>Decisiveness</i>		Never			Always	
31.	Can make decisions and take action in a timely fashion	1	2	3	4	5
32.	Does not hesitate when making decisions	1	2	3	4	5
33.	Does not become paralyzed or overwhelmed when facing action.	1	2	3	4	5
<i>Taking Action, Making Decisions following Through</i>						
34.	Action –oriented and decisive; follows through	1	2	3	4	5
35.	Is decisive; doesn't procrastinate on decisions	1	2	3	4	5
36.	Is a troubleshooter; enjoys solving problems	1	2	3	4	5

Building and Maintaining Relationship						
<i>Building Relationships</i>		Never			Always	
37.	When working with peers from other functions or units, gains their cooperation and support	1	2	3	4	5
38.	Is widely counted on by peers	1	2	3	4	5
39.	Gets things done without unnecessary adversarial relationships	1	2	3	4	5
<i>Relationships</i>						
40.	Builds warm, cooperative relationships	1	2	3	4	5
41.	Is readily available to others	1	2	3	4	5
42.	Is competent at dealing with people's feeling	1	2	3	4	5
<i>Managing Conflict, Negotiation</i>		Never			Always	
43.	Effective at managing conflict	1	2	3	4	5
44.	Confronts others skillfully	1	2	3	4	5
45.	Negotiates adeptly with individuals and groups over roles and resources	1	2	3	4	5
<i>Compassion and Sensitivity</i>						
46.	Is sensitive to signs of overwork in others	1	2	3	4	5
47.	Is willing to help an employee with personal problems	1	2	3	4	5
48.	Helps people learn from their mistakes	1	2	3	4	5

1 = Never

2 = Rarely

3 = Sometimes

4 = Often

5 = Always

Drive and Purpose							
<i>Doing whatever it Takes</i>		Never			Always		
49.	Enjoys working hard at his/her job	1	2	3	4	5	
50.	Is prepared to seize opportunities when they arise	1	2	3	4	5	
51.	Is creative or innovative	1	2	3	4	5	
<i>Committed to Making a Differences</i>							
52.	Clearly demonstrates his/her commitment to seeing the unit/division succeed.	1	2	3	4	5	
53.	Tries very hard to have positive impact on the job	1	2	3	4	5	
54.	Is passionate about seeing the unit/division succeed.	1	2	3	4	5	
<i>Motivating Self</i>		Never			Always		
55.	Is self *****	1	2	3	4	5	
56.	Has a strong work ethic	1	2	3	4	5	
57.	Is determined	1	2	3	4	5	
<i>Energy, Drive, Ambition</i>							
58.	Has good initiative; continually reaches for more responsibility	1	2	3	4	5	
59.	Is ambitious; highly motivated to advance his/her career.	1	2	3	4	5	
60.	Is goal directed, persistent; driven to achieve objectives	1	2	3	4	5	

Integrity and Values							
<i>Ethics/Culture</i>		Never			Always		
61.	Is honest and ethical in all dealings	1	2	3	4	5	
62.	Values honesty and integrity	1	2	3	4	5	
63.	Values openness and trust	1	2	3	4	5	
<i>Integrity</i>							
64.	Is willing to admit ignorance	1	2	3	4	5	
65.	Admits mistakes	1	2	3	4	5	
66.	Has integrity; is trustworthy	1	2	3	4	5	
<i>Acts with Integrity</i>		Never			Always		
67.	Be depended on to tell the truth regardless of the circumstances	1	2	3	4	5	
68.	Takes responsibility for his/her actions	1	2	3	4	5	
69.	Is seen by other as an honest person	1	2	3	4	5	
<i>Relationship Building</i>							
70.	Is trustworthy-creates trust in employees	1	2	3	4	5	
71.	Has credibility in the eyes of employees	1	2	3	4	5	
72.	Treats people fairly and with consistency.	1	2	3	4	5	

1 = Never

2 = Rarely

3 = Sometimes

4 = Often

5 = Always

Management of Self						
<i>Straightforwardness and Composure</i>		Never			Always	
72..	Does not blame others or situations for his/her mistakes.	1	2	3	4	5
73.	Remains calm when crises occur.	1	2	3	4	5
75.	Does not become hostile or moody when things are not going his/her way.	1	2	3	4	5
<i>Handling Disequilibrium</i>						
76.	Puts stressful experiences into perspective and does not dwell on them	1	2	3	4	5
77.	Is comfortable depending on others over whom he/she has no control	1	2	3	4	5
78.	Maintains composure under stress.	1	2	3	4	5
<i>Coping with Pressure, Adversity</i>		Never			Always	
79.	Does not blame others or situations for his/her mistakes.	1	2	3	4	5
80.	Remains calm when crises occur.	1	2	3	4	5
81.	Does not become hostile or moody when things are not going his/her way.	1	2	3	4	5
<i>Balance Between Personal Life and Work</i>						
82.	Puts stressful experiences into perspective and does not dwell on them	1	2	3	4	5
83.	Is comfortable depending on others over whom he/she has no control	1	2	3	4	5
84.	Maintains composure under stress.	1	2	3	4	5

Self-Awareness, Development and Learning						
<i>Self-Awareness</i>		Never			Always	
85.	Admits personal mistakes, learns from them, and moves on to correct the situation	1	2	3	4	5
86..	Seeks corrective feedback to improve him/herself	1	2	3	4	5
87.	Sorts out his/her strengths and weaknesses fairly accurately(e.g., knows him/her)	1	2	3	4	5
<i>Self-Management, Self-Insight, Self-Development</i>						
88..	Responds well to new situations that require him/her to stretch and grow	1	2	3	4	5
89.	Learns from own experiences; not set in his/her ways	1	2	3	4	5
90.	Makes needed adjustments in own behavior	1	2	3	4	5
<i>Open to Criticism</i>		Never			Always	
91.	Reacts constructively to criticism	1	2	3	4	5
92.	Does not appear brittle--- as if criticism might cause him/her to break	1	2	3	4	5
93.	Takes criticism well	1	2	3	4	5
<i>Learns from Mistakes</i>						
94.	Can make mid-course corrections	1	2	3	4	5
95.	Is able to change ineffective behavior without being defensive	1	2	3	4	5
96.	Is able to start over after setbacks.	1	2	3	4	5

1 = Never

2 = Rarely

3 = Sometimes

4 = Often

5 = Always

Communication						
Communication		Never			Always	
97.	Is clear about his/her expectations	1	2	3	4	5
98.	Inspires enthusiasm when speaking	1	2	3	4	5
99.	Commands the attention of others when speaking	1	2	3	4	5
Communication Information, ideas		Never			Always	
100	Is adept at disseminating information to others	1	2	3	4	5
101	Makes his or her point effectively to a resistant audience	1	2	3	4	5
102	Is crisp, clear, articulate	1	2	3	4	5
Listening		Never			Always	
103	Listens carefully to other's ideas and suggestions	1	2	3	4	5
104	Shows a willingness to listen and be open to input	1	2	3	4	5
105	Is open to constructive feedback	1	2	3	4	5

Diversity and Differences						
Differences Matter		Never			Always	
106.	Treats people of all backgrounds fairly	1	2	3	4	5
107.	Makes decisions which are fair and unbiased	1	2	3	4	5
108.	Understands and respects cultural, religious, gender and racial differences	1	2	3	4	5
Valuing Diversity		Never			Always	
109.	Keeps own cultural viewpoints in check when interacting with a person from another culture	1	2	3	4	5
110.	Avoids prejudging others	1	2	3	4	5
111.	Effectively communicates with others who differ by gender, ethnic background or nationality	1	2	3	4	5
Adapts to Cultural Differences		Never			Always	
112.	Is sensitive to differences between cultures	1	2	3	4	5
113.	When working with people from other cultures, works hard to understand their perspectives	1	2	3	4	5
114.	Is quick to change his/her behavior to fit with a new cultural environment.	1	2	3	4	5

Phase II Coaching and Developmental Plan of the New First Responders

Purpose:

Recommended Phase II Protocol Steps

Step 1: Veteran and New First Responder discuss results and create developmental plan

Step 2: Mentor and New First Responder monitor and track progress.

First Responder

Development Planning Tools

Development Planning

What It Is? (objectives):

This developmental planning tool helps new First Responders (FR) to link their behaviors to the organizations results. Leaders and mentors within the organization can then use the development plan to help influence the FR's behavior enhancing the organization's results.

A developmental plan is designed to help individual's reflect on feedback and set achievable goals. It can be created that best utilizes the individual's strengths and assist them with determining what actions might be taken to address developmental needs.

What to Do with It?:

This instrument can be used by the FR and their mentors has a planning and tracking tool that can be used to addressing identified improvement areas from various assessment sources. These assessments sources may include self-evaluation instruments (e.g., CAREER VALUES,) or a 360 assessments (e.g., SkillScope)

These assessments will allow the individual FR and other members of their organization pinpoint developmental areas. The resulting identified areas of improvement should then be included in the FR's developmental plan.

First Responder (FR) Developmental Plan (Sample)

FR participant: (John Champ)

Mentor: (Don Veteran) Manager: (Mike Manager)

Start Date: (This is the date you begin working w/ a mentor)

Follow Up Assessment Date: _____

Instructions: Review results of assessments with the First Responder (FR) and select 2 or 3 areas of improvement. Once this process has been completed with the FR identify specific goals and action steps needed to achieve a desired behavior or performance.

Category	Goal	Action Step	Target Date	Expected Outcome
Professional Knowledge				
Risk, Innovation, Adaptability, Creativity				
Problem Solving and Decision Making				
Building and Maintaining Relationship				
Drive and Purpose				
First Responder Comments:				
Coach/Mentor Comments:				

Definition of Terms

Goal: What do you want to achieve (e.g. improve adaptability in critical situations)?
Make goals clear and specific.

Action Steps: What will be done differently that will positively affect the goal? For example, select a role model that can be observed performing the skill in the area of your goal development. Reading/coursework, training and practice can be used in the action steps section as behavior modification techniques.

Target Date: Set a completion date for a specific action step.

Expected Outcome: This section will need to include how goal success will be identified such as “When I achieve this goal, I will know I have been successful because, the difference others will notice in me will be”.

APPENDIX D

SUMMARY OF INTERVIEW WITH DR. GREG DIFRANZA INSTITUTE OF POLICE TECHNOLOGY AND MANAGEMENT (IPTM) JACKSONVILLE, FL

Get general information about the person such as title, years of service, no. of people they are responsible for, etc. Also inquire about the nature of the programs at the institute or facility.

- Police Officer at Sheriff's Office for 20 years. He has been retired for 8 years and now works as the IPTM as the training director.
- He has taught tactical enforcement. Responsible for 50 instructors.
- Classes at the IPTM are advanced officer training for current officers, no police academy training done at this facility
- Classes taught are: Traffic, accident, reconstruction, criminal investigation, and management training
- Officers from all over the US attend the IPTM.
- Classes are also provided internationally; basic information and techniques provided. The difference is use of force based on those countries guidelines.

Ask the person about their past experiences as a first responder and the training they had. How does it compare to what is taking place currently. If they don't have any find out their views and effectiveness of training.

- He began his career in 1978
- Expressed that training does not change quickly. It often takes 4 to 5 years to change curriculums. Does feel that what officers need to know changes more rapidly and the curriculum should change more quickly.
- Training techniques improve based on officers' experiences. Most trainers at IPTM are former police officers.
- Technology – used in the classroom setting for presentations (i.e PowerPoint, video)
 - Technology changes mostly for training done outside the classroom setting
 - In Italy, they use “laser tag” style training
 - Simunisations – a paintball type training using colored soap. It does hurt so the officers can tell when they have been hit.
- The goal of the training is make sure officers know 1st priority is to accomplish the goal. 2nd priority is injuries. Everyone must be of the same mind set.
- There are at least 1000 scenarios developed based on 6 or 7 categories which are varied.
- Officers are asked to play both sides of the situation.
- Officers who have been in similar situations are usually not the participants in that scenario. (Officers may have negative flashbacks)
- Trainers want officers to base their decisions on situation without replicating the same event.
- Officers should adapt their techniques so they will be the most successful.
- Everyone watches the scenarios and then evaluates each other.
- Most scenarios are re-enacted offsite or in a vacant building.

- Scenarios are replicated as often as necessary.

What is the current training protocol? How effective is it? What is the curriculum and how is it delivered?

- Training goals for each week guides the curriculum for that class.
- Training is mixed and hands on.
- Trainers have a vast amount of knowledge.
- There is no virtual reality simulators b/c it is still considered 2 dimensional
- Evaluations for the classes are given at the end of the course for the materials and the instructors. Used for modification of future courses.
- Officers also report back the results of using a particular training technique in real life situations.
- There is no record of comments; techniques are shared by word of mouth.
- Course type depends on if training is all classroom, hands on only or a mix of both.
- In the classroom, training is mostly rules and techniques that can be put into writing. Sometimes the officers watch news stories for discussion (i.e pros and cons).
- Sometimes these news stories become scenarios that the officers recreate offsite.
- Officers in attendance:
 - Narcotics officers (drug agents)
 - Tactical teams – SWAT, ERT, etc...)
 - Patrol officers (including those in marked cars)
 - Detectives
- Tests are no longer administered. Officers are put to the test in real life situations.

Describe any “champions” in their field. What characteristics do they possess?

- A champion police officers knows the following:
 - Knows what works for each person
 - Learns from past experiences
 - Knows how to avoid mistakes
 - Taught to be successful beyond the classroom
- Use a mix of successful officers experiences in training
- General techniques are taught but each officer should tailor the technique and apply it to what they already know.
- Training officers are considered “champions”.
 - Students should model the behavior of their instructors
 - Trainers should show humility and be flexible because nothing is set in stone. Should not teach that there is only one way to do something.
- Officers should go back to their own precincts and show what they have learned.

What new training technological innovations are being developed at their institute? What direction do they see the training going 5, 10 years in the future? How has 9/11 and/or Katrina affected the direction of the training at this institute?

- Training should become more realistic without diminishing the experience such as with a virtual reality experience.
- Need more confrontational skills
- New technologies depend on materials and changes
- New battering ram technology created so that doors for practice can be re-used. Previously, during battering ram training, only one person could test it.
- No changes since 9/11 or Katrina.
 - Magnitude of the situation changes but the tactics remain the same.
 - The environment changes training, so officers must consider how they would deploy in the situation
- Biggest problem in catastrophes is a breakdown in communication (the systems).
- Officers have to train for times when there is no communication available via technology.
- Train officers to take initiative and carried out assignments even when commands are not available.
- Officers are training to use “plain talk” for cross-functional teams who often have different codes. This keeps codes from being misinterpreted.
- Would like to see recruiter training become more like advanced training to reduce the learning curve. Right now recruiter training and advanced training are very different.

APPENDIX E

SUMMARY OF INTERVIEW WITH DR. SERGEANT CHARLES CLUNIE – POLICE OFFICE TRAINING

Get general information about the person such as title, years of service, no. of people they are responsible for, etc. Also inquire about the nature of the programs at the institute or facility.

- Been a trainer for 2 years and a police officer for 19 years
- Director of the program but does not have any people reporting to him
- He is responsible for coordinating the terrorism program, Weapons of Mass destruction (WMD) and the incident command system

Ask the person about their past experiences as a first responder and the training they had. How does it compare to what is taking place currently. If they don't have any find out their views and effectiveness of training.

- Fundamentally the lessons are the same since he began. The changes have not been too drastic or changed very much.
- Training, however, does have to adjust to remain consistent with laws and guidelines.
- Sometimes training philosophies are different.

Example of new technique – internet command systems => more orderly, helps the officers make better decisions. Formalizes information that officers usually do automatically start to finish. “Formalizes instincts”, provides a roadmap

What is the current training protocol? How effective is it? What is the curriculum and how is it delivered?

- Mostly theory and classroom training
- Online training coming in 2007
- Sometimes they have laboratory simulations
 - Command post facility
 - Develop situations for officer to perform
- People trained:
 - Police officers – all must have conceptual knowledge
 - Incident management
 - Middle management
 - Some fire fighters

Describe any “champions” in their field. What characteristics do they possess?

- Does not really see the correlation between athletes and police officers
- Does expect officers to possess:
 - Good judgment
 - Common Sense
 - Good physical condition

What new training technological innovations are being developed at their institute? What direction do they see the training going 5, 10 years in the future? How has 9/11 and/or Katrina affected the direction of the training at this institute?

- Things will change but will not be significant:
 - Radiation meters
 - Better weapons
 - Tasers
- After 9/11 and Katrina:
 - Felt like police have learned lessons and are smarter now
- Miami police having dealt with hurricanes are used to working with no electricity.
 - They have mobile communication
 - Wish they had been better about sharing with NO police about handling the chaos.
 - Incident command systems will teach departments how to share information and will solicit help from experts.

APPENDIX F

**TRANSCRIPT FROM INTERVIEW WITH
DIRECTOR SCHAEFER**

Sherry: First question is, could you just tell me a little bit more about your job title and the nature of what you do?

Director Schaefer: I'm the director of NC Justice Academy. We have two campuses, one in Salemburg and one in Edneyville. I have 112 employees that are committed to providing the best law enforcement training for the men and women, officers, in NC. We do primarily advanced in-service training for all sworn officers, detectives, leaders, managers, supervisors, chiefs, sergeants. We also do training for telecommunicators. We also do training for detention officers and probation, parole. And on our two campuses, we also sponsor training and we let the department of corrections and other law enforcement agencies like wildlife and ALE, NC highway patrol...we let them use our campuses to do their own training.

Sherry: Ok. So for the most part, your academy is for seasoned officers/veterans. You don't do any cadet training?

Director Schaefer: No we don't. We write curricula. We write the basic law enforcement training course materials but we don't do basic academy training because in NC, most of the large departments, Charlotte, Winston, Raleigh, Greensboro, Fayetteville, they have their own academy in-house. And then the community college system, I think there's 55 community colleges across the state that also do basic law enforcement training part of the college mission. So there's plenty of places for people to get basic training. But there's no place to get advanced training so that's kind of where our niche is.

Sherry: OK. And so how long have you been doing this?

Director Schaefer: I've been at the Justice Academy since 1988. I've been the director since April of 2006.

Sherry: April 2006? So that's when you'd say you started your training of other first.

Director Schaefer: Oh no no. I've been training police officers at the Justice academy since 1988. Yeah, I was just promoted to Training manager 10 years later in 1998. I was deputy director and was recently appointed by the attorney general in April to become the director. But I've been a trainer there for almost 20 years.

Sherry: Oh ok. So how long have you been...I'm assuming that you were a former officer, you worked on the police force.

Director Schaefer: Yeah I sure did. I started my career in Dover county as a matter of fact. I was deputy sheriff in Guilford county and then I switched over and was a Greensboro police officer and I actually policed the area where A&T was.

Sherry: Oh ok. I don't know if you've been in this area for awhile but this campus has really grown.

Director Schaefer: I know the campus has gotten a lot bigger and newer buildings and that's good to see good things happen for Greensboro and for the campus. I graduated from Guilford, Guilford College so I spent many many years in Greensboro.

Sherry: Ok. So you know all about this area?

Director Schaefer: I do and we just got at Fayetteville State...I know Chancellor Hackley and he just left you guys and came back to Fayetteville State.

Sherry: Yeah this is his first semester.

Director Schaefer: Yep.

Sherry: Can you kind of describe to me a little bit about your facilities and your institution, the layout.

Director Schaefer: Yeah. We have about 100 acres on each campus. Probably 11 or 12 buildings. We have dormitory facilities for 300 people, a full cafeteria. We're actually set up like a small college campus. I have a gymnasium, I have a video production studio. We make our own movies. I have a bookstore operation and we have 11 classrooms, all state of the art training technology. We have a library that is 6th largest in the world in holding criminal justice material. It's huge. Our library square footage per square footage isn't that huge but what we hold for criminal justice material is incredible. It rivals all the universities.

Director Schaefer: Then my West campus is about 30 miles south of Asheville in a little town called Edneyville in Henderson county. It is about 24 acres and it also has a cafeteria and gymnasium. I only have 72 dorm beds at the West campus. It's considerably smaller but it meets the needs of the officers in the Western part of the state. And my staff goes back and forth between the two campuses taking courses to the different areas of the state.

Sherry: So if you have dorms, it means the programs last for several days or several weeks?

Director Schaefer: Yeah oh yeah. We have courses that run from one day to five weeks. Most of our courses are 3 days to 2 weeks and students will come and live on campus and stay in the dorms and take class. And we do not charge any registration for any of our trainings. So it's all free. Your state tax dollars pay for us. The only thing the agency has to pay is for their officers meals. We don't pay for the officers travel expense. And then the agency has to pay that officer to be gone but we don't charge any type of tuition for training.

Sherry: Ok. That was going to be my next question, who pays for it? But you are located near Raleigh?

Director Schaefer: Yes. The east campus is in a little town called Salemburg and we are 65 miles southeast of Raleigh in Sampson county.

Sherry: Ok. Sampson county? That's where Fayetteville is?

Director Schaefer: No. Fayetteville's in Cumberland county. So we are right next door. The county seat for Sampson is Clinton.

Sherry: Clinton. Ok. As a former police officer or sheriff, can you give me a description of one of the most traumatic things you've ever experienced personally in your career?

Director Schaefer: Yeah, one time I went on a suicide where a man had shot himself in the head and his brain had splattered against the wall behind him. So that was pretty gross.

Sherry: And what was your roll as the officer when you arrived at the scene?

Director Schaefer: I was the first responding officer so the family had found him and had called the police. And I was the first responding officer so you know I got there and of course they were all distraught. I had to go...they showed me inside. And he had been there for probably a day and a half/two days. And the smell of that. You just don't ever forget the smell of it.

Sherry: Right. So how far along in your career were you when this happened?

Director Schaefer: I was with the city police so probably 3 or 4 years.

Sherry: Do you think anything you learned in training prepared you for this or do you think you were prepared for this?

Director Schaefer: You know...I don't know. You know you see a lot of bad stuff on the movies now, violence on movies so it is so much more prevalent than it was back then. So to actually see it first hand, I guess not. You duplicate it. You can't duplicate the smell...and the family. No I don't know if your training could prepare you. How would you prepare somebody for it? I guess you could show them a bunch of gross pictures but you really can't. You have to train them on just being professional.

Director Schaefer: I remember one time I had a reserve officer with me and she had a very sensitive sense of smell. And a couple of times we would go on calls and go into the houses and a lot of the elderly...when the elderly stay inside their houses with their doors and windows closed, their houses have a smell, a really bad odor. And I remember a couple of times going into houses and she'd say "I can't stay in here." And she would step outside and throw up. And it wasn't because of anything gross inside, it was just an overwhelming body odor smell. I really can't describe. I don't know how you prepare people for that.

Director Schaefer: You just know that it's going to be gross. The family expects you to

not...the family expects you to be professional and do your job. So you have to just handle it.

Sherry: So afterwards, was there any type of training that helped you deal with the after effects, like the psychological or emotional part?

Director Schaefer: No they generally don't do...we didn't have any training like that afterwards. The only time officers get trained on stress debriefing is if they are involved in a shooting situation. So I've been on traffic accidents, you know where people have been through the windshield and things like that. I went on a call once where, I just thought about this just now. I was at Moses Cone Hospital and a person was working on the elevator and he slipped and actually got stuck and decapitated between an elevator and a door. And he was just hanging there. It was awful. I didn't get a course...I didn't get a debriefing after that. And that's not routine. That was not a routine thing.

Director Schaefer: As I sit here and think about it. Are you traumatized by it? Yeah, you are but did it affect my work performance and my family life? And did I have all these psycho stress/negative things come from that. No I did not. Had I shot somebody in the line of duty, yes I think I've could. I've seen enough of that with officers to know that pretty debilitating.

Sherry: Okay, and I'm sure what the Air Force is trying to learn from this whole project is how to better...you know first responders are always having to save lives of people their trying to help, whereas in the military they're trying to defeat an enemy. So from their perspective, I think they feel like that's training they can learn from here that will help their soldiers on how to deal with things like that better.

Director Schaefer: Well yeah but you know soldiers and police are alike. Whether you take a life in battle as a soldier or you take one in battle on the streets of Greensboro, taking a life is a different kind of trauma altogether.

Sherry: Right. Right.

Director Schaefer: Not that soldiers don't suffer from seeing their buddy get blown up. We're talking about things that affect lives of somebody close to you. And I don't know what the military does. The military does do quite a bit of shooting trauma training. And in law enforcement, what they do get, a little bit, they do get some training in "if this happens to you, what can you expect and how to prepare yourself for it. More in line, its called stress awareness, more in line with recognizing some cues. If you're starting to lose sleep, if the memory of the situation haunts you and you can't relieve yourself from that it encourages them to get psychological help. But just like military soldiers, the last thing a law enforcement officer is going to do is go tell his chief that he needs psychological help.

Sherry: Right. And I've heard from the other directors/trainers that I've talked to that's one of the things that's real prevalent is that none of the officers want to admit that they need training in this area or help in this area. They just kind of deal with it on their own.

Director Schaefer: And you know what, if you think that's in the law enforcement world or with soldiers, that's not true. Look at the position you're in right now. In your job right now, if you were traumatized by something would you go tell your boss that you need psychological help?

Sherry: No.

Director Schaefer: You see what I'm saying?

Sherry: I would just go do it.

Director Schaefer: You may just go do it. And I think there are a lot of officers that on their own and for their own private reasons take care of the particular things in their lives. I've had some therapy because of some marital issues. So when you recognize that you are in trouble psychologically, I think they're astute enough to go get help. Whether or not they tell their chief, "I don't think I am psychologically fit for duty", they're not going to do that. Why would you do that and put your job on the line? They're not going to do that. It's not going to happen. And it doesn't happen in your world either.

Sherry: Right. That's true.

Director Schaefer: Those guys working on computers at IBM, if one of them feels like he's a little traumatized, he's not going to go tell his boss. So people think that it's just cops that won't come forward. Nobody comes forward and says they're getting ready to have a nervous breakdown. Nobody does it. But what is unique about law enforcement, most agencies' policies allows. Is if they're involved in a typically a shooting situation, they do require that they get psychological counseling. And that is general in many agencies' policies.

Director Schaefer: So if I was involved in a shooting situation, I'd go on administrative leave while the case is being investigated by my agency and the FBI and while I was on administrative leave, they would make arrangements for me to see a counselor. And for many agencies, that's not optional. You're required to go see them. And it's not because they automatically think the officer is crazy, but what they do is when you take away...when you tell that officer it's required, they give him a cover. It says "well I don't have a choice. I'm not crazy but our policy says I got to go so I guess I'll go."

Sherry: Right. And then he can feel free to talk about things that he probably wouldn't normally talk about.

Director Schaefer: Right. Right. So it kind of lets him off the hook. Because if you ask him after he's shot somebody, do you think you need to go see the shrink, he's going to say "oh no, I'm fine, I'm fine." But policy says you're going to go, "Ok, I'll go".

Sherry: Well that's a good way to get around the whole feelings about letting that stuff

out.

Director Schaefer: That's right and it works. More and more agencies, the progressive ones, all the large agencies in NC and really across the country, require it. Some of the smaller ones still leave it optional but they shouldn't leave it optional. Because if you leave it optional, it makes the officer appear to be weak when he needs it.

Sherry: Well that makes sense. As far as your training background, think about the way you were trained and then think about the kind of training that you provide today, can you kind of compare and contrast the two different types of training?

Director Schaefer: Well I think we know more today. Of course we do. The research is there, research on stress...physical hardship that stress causes on your body and we didn't know that back then. I remember in my basic training, Greensboro and Guilford County, we were told it was going to be a stressful job and it could cause marital breakups. It did in my case. And that part hasn't changed over the years cause I still think law enforcement officers have the highest divorce rate I think of any profession because it is so hard on your family.

Director Schaefer: And I don't know how you try to tell a young officer...and they do this in the basic training, how hard it's going to be and what it's going to be on your family. And the family's going to come to graduation and we talk about that at graduation. And there are some agencies that have classes just for families just to educate them on the risk and to understand the complications of this job, yet the divorce rate is still high. So that part hasn't changed over the years, a high divorce rate.

Director Schaefer: But I think we know more. I think the research is better and then I think our generation is a little more enlightened and more accepting of therapy and other alternate forms of medicine like meditation and bio-feedback. All the things that are in the psychological world that can help people, people are more receptive to now than they were 20 years ago. So going to a psychiatrist isn't the crazy thing it was 20 years ago. So I think the social/cultural world has gotten a little more forgiving and acts better. And I think our training has gotten better. Because as culture has made it ok to go to see a psychologist or therapist, the training has done that to. And I think more officers take advantage of it.

Director Schaefer: Chaplains in police departments, and I haven't talked about the role of chaplains. A lot of chaplains become quasi-counselors for a lot of officers and therapy works and in many agencies, they have chaplains that do that now. And that's a good thing. It's another way to give the officers an opportunity to talk with someone.

Sherry: Ok.

Director Schaefer: But the issue is, how can we make training better? How can we do a better job with training? Well there is only so much of this stress stuff you can cram down someone's throat in training. I don't mean to say it like that but that's how the

officer takes it. I am an officer and I have to go through my in service continuing ed every year to and there's only so much...I can just say, we just had a block in our center about stress and wellness and are we going to have another block next year that says if stress because they'll say "look, I know, go see a shrink." So how much can you tell them before they just go "alright I get it, I know..."

Sherry: Well that leads into my next question, at your academy, what are the goals of your training? What are your goals?

Director Schaefer: Well we offer over 100 different courses. Structurally/ organizationally, we have 5 different sections, a legal section, an investigation section, a management section, a tactical section, and we have a section that deals with our mandated commissioned training. And so everybody's goals and course goals are all different actually depending on what their teaching and level of expertise. But I guess as an agency, our goal is to provide the very best current, state of the art training to the men and women we serve and that is part of our mission statement. So we provide a good quality experience on our campus and make sure everybody's comfortable.

Director Schaefer: And one of my own personal goals is to make sure that what we teach, they transfer and take back home and actually apply and help them support their jobs better. We do our own surveying before that happens.

Sherry: Ok. As far as the sequence, they come in and they have to take this course before they take this one and does their rank change after they graduate or pass a class, things like that?

Director Schaefer: Yeah sometimes. We have some classes, primarily in our investigations area that you might have a prerequisite course before you take another course. But most of our courses are really designed...if you go on our web, our course calendars on the web. It's one of the first things and you can click on that and get an idea of the variety. And in our course calendar, we'll tell you what the course goals are and what they're going to learn while they are there. But it's really designed for that officer...for whatever reason, let's just say an officer gets transferred and gets promoted into a detective position.

Director Schaefer: Well detective skills are a lot different than patrol officer skills. So we have a whole menu of courses that person can sign up for and self direct or work with their training officer or chief or whoever helps them make those decisions to take the best course that person needs at that immediate time. So we try to do training that the officers sign up for the stuff they need right then. Or they might take courses in our management that will help them get promoted.

Director Schaefer: We teach first line supervision at the sergeant level or we teach a course called management development. It's a year long training course where the officers come one week a month for a year and that's going to help them become a captain or a chief. So we have some course that officers take to help them get promoted.

We teach general instructor training. We teach officers how to become instructors. That helps officers get promoted. And it also helps them become instructors when they go back home which is why they take the course. So it just varies. We cover just about every aspect of the law enforcement world except arson. We don't teach arson. We used to teach arson but we don't anymore. We don't have a staff instructor in that.

Director Schaefer: We have 32 instructors who specialize in all these faceted parts of the law enforcement. So they're experts in their own right. And we try to teach the expertise of them doing their job. We just launched a new CSI, class 8 forensics...we just launched a new two week course and that's very popular. You have to look at our calendar to see the breadth of what we do. We do a lot of wonderful things.

Sherry: Now what percentage is lecture, what percentage is simulation or on the job type training?

Director Schaefer: I would say probably 50/50 lecture and practical exercise and problem based learning. So for our practical exercise learning we stage a lot of role playing and problems and discussion. We actually don't lecture that much. Maybe 50/50. And we do a lot of face-to-face classroom teaching. We also use blackboard. Do you use any blackboard in your class work?

Sherry: We do.

Director Schaefer: Yeah so we also have courses on blackboard. So we have that medium. We just bought or just getting ready to move into totally online training...We hoping to put some smaller modules just where an officer can go into the portal, click and just take a course independent of anybody. Click through the screens and do it all pretty independently. So we are getting ready to launch our first courses in that area in February. And you know what? Our students prefer it. Like I said we do blackboard training and you probably have an opinion about the convenience of blackboard. But you probably miss the networking that happens in your regular classes.

Director Schaefer: And our students say the same thing. They miss talking to the other officers on the breaks and hearing their stories and making those connections. So that's important to our officers too. I would think that most of our officers prefer our standup traditional combination private lecture course versus the blackboard experience. But the convenience of blackboard certainly has its merits.

Sherry: As a director, how do you determine if what you are doing is effective and ensure that the program is going to be successful? How do you measure it and do you measure it?

Director Schaefer: We do. We do. As a matter of fact, I teach the course "measuring training". We use Kirkpatrick's model and we measure at level 1 with immediate student feedback. The student's evaluate of every aspect of the course before they leave. And we also do Level 2 which is measuring if learning takes place. So we do pre-imposed testing

and have all that data. We are just now measuring over the past two years at Level 3 which is training transfer. I talked about that which is making sure what we are teaching can actually apply in the field. We have a survey instrument out there right now measuring the effectiveness of training transfer.

Director Schaefer: Agency benefits and whether it's worth the cause, we've only broached that on one course so far. It pretty hard to measure that. But we're working on it. Like all people, it's hard to measure training costs. So we're measuring at least level 3.

Sherry: Can you give an example of a success story of when you were training a first responder that came out of your institution and then on the flip side can you give an example of a not-so-successful story that came from your institution?

Director Schaefer: A great story that the Attorney General likes to tell, Mr. Cooper, is last year...well about 3 years ago, we initiated a rapid deployment on an active shooter training because of the Columbine shootings. So we trained about 300 instructors across the state to go home and teach their local officers how to do active shooters. Well, Freddie Pendergraft who is the sheriff in Orange County in the Chapel Hill area, he called and said he would like us personally to train his officers. And so I was actually part of that. And so we spent the whole week training every one of his officers how to respond to an active shooter in a school.

Director Schaefer: Well then last summer, a year ago, he said "You know Peggy you guys haven't been here in 3 years." He said "you need to come back and teach my guys again and do a refresher class." So two of my trainers went back and taught the whole department again. Well low and behold, three weeks after, they had just finish that training, they had an active shooter at Hillsborough High School. And it didn't make a lot of press cause thankfully the bad guy did not kill a kid. What had happen was, he had murdered his father and he came to Hillsborough High School and started to open fire.

Director Schaefer: And the kids were of course running for cover and what have you and some of them were injured and the school resource officer who had just been trained by our staff and the driver's ed teacher was a retired state highway patrol officer who had also received the training took the guy down without incident, without having to kill him. And he was unable to kill anybody. So this is how good this story is, it was actually at the same high school they had conducted their practical exercises at. Now how does that ever happen? So it was a perfect textbook case and anyway, it's a great story and it's a great testimony to my staff and to trainers everywhere because it was so effective. So that's a good story.

Director Schaefer: We have many of those. I just got a letter from an individual from the Durham police department, who had just completed our crime scene investigator CSI course and she said the very first case she worked when she got back home was a murder and she used the skills and the mapping, evidence collection procedures and the analysis she had just learned in training. And they developed this case and they were able to arrest this suspect on the information she was able to get from that crime scene. So that is good.

When we're able to do that kind of training transfer, that's incredible. We have not been sued. I am trying to think of some negative stories...

Sherry: Well that's a good thing.

Director Schaefer: Yeah and part of the reason...and we stand by our training. So let's just say an officer would have performed like we had trained them to do and if they would get sued, we would go to court with them and defend our training. We just haven't had to. And sometimes officers do things...I've not heard of a single officer doing anything I've trained them to do or any of my staff and ever been sued. I give you an example of something that did happen in the Peterson trial, which is a case that happened in Durham a couple of years ago, a very high profile case in the news. This guy Peterson was convicted of pushing his wife down the stairs and he of course said she accidentally fell but the jury actually convicted him of pushing her down the stairs.

Director Schaefer: But in that case, the Durham police officers responded thinking initially it was an accident so they trampled all through the crime scene destroying a lot of the evidence and that violated the principles of evidence collection. And although I don't know if we specifically trained the Durham police officers in that procedure, they used our training material in court to make the officers look bad, the defense did. So our materials got subpoenaed for court. What they did they said, "well material says don't do this, don't do this and you guys did that". You see what I'm saying. So they used our materials against those officers to discredit them which was very sad.

Director Schaefer: And that could happen. I am sure it does happen. When an officer does not perform as it's written then yes our materials could be used against them. But we have never had to go to court and prove that our materials were correct. And I am thankful for that and proud of my staff because we do a good job of following the literature and making sure it is correct. So what we're writing is correct and we've not been sued in that regard. But a lot of officers get in trouble when they don't do what's written and that's in any profession. If doctors don't do what the surgical manual says they get sued.

Sherry: Well if you had to describe a top performer, what kind of characteristics would you say they possess?

Director Schaefer: Training top performer or an officer?

Sherry: In general. I'm assuming that in training...but I guess you can't assume that because they might choke when they get out in the field. I guess somebody that as a trainee and then they go out and become a top performer.

Director Schaefer: Ok. Well let me talk about it from an officer perspective. A stellar officer would be someone that was competent, someone who knew the law and how to apply it. Someone who was compassionate. Someone who was committed to public service. Someone who is unselfish and someone who has courage and integrity. And I

know hundreds of them. Those are the characteristics a good police officer should have. Good writing skills are a must. People don't think you have to write in this job. That's all you do is write.

Director Schaefer: The young people get in this job and think ah, we're going to ride around with blue lights and sirens on...no. And you do, do that true but you spend the rest of the day writing about it.

Sherry: Yeah writing is important. I taught a class last spring semester and I tried to stress to the students how important it is to be able to communicate very well through writing.

Director Schaefer: I'm amazed so many kids graduate from college and still can't write. I'm thinking where did you go to school, you still can't write a complete sentence or stay in the same tense in a paragraph. I'm talking basic grammar. And you know what's worse, Word will tell you it's wrong and they still can't fix it. My gosh we can't dummy it down any more than this. I don't know, it's amazing.

Sherry: But if you think about the first responders that come out of your institution, based on what you just described, do they possess some of the similar characteristics?

Director Schaefer: Yes. I think some of the characteristics you have to be born with. I think you have born with a sense of commitment. The big debated right now is can you teach an officer how to be ethical? Can you teach an officer to have morals and to have values? Where do they get that and do they have to have it before they become police officers? And I don't know that debate but I think you have to role model that from the day they walk through the academy doors. Your institution or your agency has to role model professionalism and competence and intelligence and integrity. You have to role model it the entire time so they know what that standard is. And if you can do that successfully then you're going to produce an officer that believes/adheres to those same commitments and values.

Director Schaefer: And I don't know if that happens universally across the state. There are probably some agencies that don't run their program very disciplined. And there's community colleges that don't have a disciplined program. I mean when you think about a police academy, don't you think about students in uniforms and marching and drills and understanding the chain of command? Isn't that your picture of a police academy?

Sherry: Yes, that's what I would imagine.

Director Schaefer: And I'm not besmirching any community college out there but a lot of them are not that way. It's just kids coming up in jeans and a t-shirt going through a police experience. So when you have a student going through that experience and then they graduate from it then they get hired by maybe Gibsonville police department, there's a small one in your area that might hire a student right out of the community college. They're not getting the same disciplined individual that a Greensboro police department

officer is. I know this because I taught basic training in Greensboro. They run a very very conservative, strict disciplinary academy. And so they're able to instill those values and that commitment and that professionalism from that first day forward.

Director Schaefer: Guilford Tech, and I don't even know if at Guilford Tech, they wear uniforms, and again I am not besmirching the community college. It's a different mission and their training students, the police department is training cops. And they're very serious about that. It's kind of different angle.

Sherry: Ok. Well at your institution are you guys developing any kind of new training technology or have you picked up on any new innovations that's out there?

Director Schaefer: Yeah, we got a couple of good things going. We're branching into our learning management system. So we will be doing more online training which will be good for the officers. Essentially, we'll have about 100 different training sessions that are an hour long that officers can click on for immediate learning. We're excited about that. How to dress for court, something as simple as that. How to, how to, how to of all these little basic things. Then on the use of force side of the house, we're experimenting/working with NIJ on a new taser technology simulator. And then we have that housed in our west campus a couple of weeks ago. And what it does is...are you familiar with the "shoot-don't shoot" scenarios where the big screen television is going on and the officer has to look and make decisions and draws his weapon and shoots a laser and you can actually measure where the officers round goes and whether or not he made a good decision.

Director Schaefer: Well now they have those with tasers. And so some of the technology actually is computer generated so when I am walking through my scenario, I'm looking at the character and when I talk to the character, the character responds back to me directly.

Sherry: Cool.

Director Schaefer: Yes it's very cool. As I'm going through the scenario and issuing my commands and taking control of the situation, and the character bucks up, then I actually get to deploy my taser, I get to see the accuracy of my taser, the affects of my taser on the individual. So that's very cool technology with taser. And eventually I'll be able to test my OC sprayer with it as well as my handgun. To have a simulator that lets me go through all of my use of force weapons that I am testing the officers ability to choose the correct weapon depending on the severity of the case is very important.

Director Schaefer: As you know police are often accused of overreacting in use of force situations. And it's very hard...when an officer...another new line of thinking is trying to do fear management. Because when you are afraid, this is for any person in the world, you're going to take that level of force to overcome your fear. When the public is videotaping it, it makes it look like that officer is using excessive force. But what everyone has to understand is the officer is afraid and that officer is taking the force that in that moment the officer believes is necessary to save his life. So trying to learn a lot

about fear management is an important new direction for us.

Director Schaefer: And then we also have a really cool piece of technology that we're testing, another project for NIJ, is called the virtual response translator - VRT. And it is a device that you put on an earpiece and a mouthpiece and it translates 17 different languages. So you talk into the machine and you might say "Sir I need you to hand me your drivers license and your registration" and if you spoke Spanish, you could program it, click it to Spanish and it would issue those commands in Spanish. And its very cool...especially with our Hispanic population. So I'm excited about that. We tested it at RDU airport, Fayetteville police department, Wall Springs, and we gave the manufacturer a bunch of things that would make the equipment better. It hasn't been tested in the whole country yet, he's just playing with it in NC. So they made the changes to the technology and he's going to come back to us for some more testing.

Director Schaefer: But that will be very good when that goes nationwide. I'm excited that we were the first ones to use it. Because part of the communications issues with officers is talking to all the individuals. And you know Greensboro is a very diverse community. In addition the Hispanics, there is a large Vietnamese contingency. With diverse populations, you can actually do a better job of conversing. And then they've got some technology for detectives. So when your trying to do an investigation with an individual, particularly an Hispanic individual, you can write your question in English and it reads in the monitor in Spanish for the Hispanic individual and they type their answer back in Spanish and it comes to the officer in English. So that technology is available. Hopefully we'll get to use some of that in the next year.

Director Schaefer: Let me see what else we got going. We already use PowerPoint and all of our classrooms are state of the art. You've been a student for a long time, as a student sitting in class you got to have a bunch of bells and whistles to hold anybody's attention anymore.

Sherry: That's true.

Director Schaefer: So as the learning has evolved, clicking on weblinks is an important part of training. That's the newest technology that I'm seeing, that we've been exposed to here lately.

Sherry: Thinking about your institution before 911 and Katrina, have either one of these events affected the directions of your training?

Director Schaefer: Yeah 911 has. We do more incident command training. Of course my folks have done their NIM certification. And we've had the opportunity to apply for more grants, homeland security grants. I'm hoping...here's my long-term vision, I'm hoping to apply for some homeland security money and crime control, Gov. crime commission money. I want to build a new, I call it the SCORE center. It a Strategic Carolina Officer Responder Environment and its going to be about a 25 acre facility with 11 buildings. And what I want to make is a little city that we can play cops and robbers in and disaster

response. A little city that we can stage anything we need to stage.

Director Schaefer: And invite all first responders and I primarily deal with the law enforcement first responders but we're not doing enough training collaboratively still. So the ideal situation is to have this structure and then have local EMS, fire, and police train there together on a disaster. And least get their agency command staff together. It would be hard to get those first responders directly on the street, but we got the right decision makers all together making the right decisions and working together as a team. I used to say when I lived in Greensboro out there by the airport, all that oil, you know those oil drums that are out there. You talk about a major disaster. And I know it's on the target list potentially as a strike. Then you ask yourself, what kind of work has the Greensboro fire and EMS and the airport, because it is so close to it to, what is their strategic response if one of those tankers, or that area gets bombed. What are they going to do?

Director Schaefer: And you have to hope that they've done some preparation for it. I hope they have. I don't know if they have or not. As a citizen, you're a citizen of Greensboro, you would hope they did. My facility will provide that, provide an opportunity for people to meet, network, table talk and actually deploy units to this little mini city. I have to get it funded.

Sherry: How long do you think it would take for all that to become? Like 5, 10 years?

Director Schaefer: I didn't make the expansion budget this year. So I'm hoping to have it all together not next year, but the year after that because it's every other year that we do expansion with the state. So two years from now I can get it funded. I retire in 3 years. My goal is to get it funded.

Sherry: At least you can get it started before you leave.

Director Schaefer: Yep. So it'll probably take about five years to build. In a way we're behind the 8 ball. But so is everybody else, all clamoring for the same dollars. Unfortunately, and you need to know this, you're not going to get any funding until you have a disaster.

Sherry: That's kind of sad.

Director Schaefer: It is very sad. There a lot of, and this is public record, apprehension right now the United States hasn't experiences and IED yet. That's with a car being blown up, driven into a mall. We haven't had anything like that and that's very common in other countries. So that's going to happen in the United States and I predict it's going to happen several times in the next year. So that is our future to training these first responders to respond to an IED situation.

Sherry: What does IED stand for?

Director Schaefer: Improvised Explosive Devices. You know how they'll outfit a car or

some mercenary will blow himself up.

Sherry: OK.

Director Schaefer: Yeah. So all these terrorist attacks that are singularly launched by a terrorist, that's going to happen in the United States in the next year. I can't believe it hasn't happened already. I can't believe that one of these folks hasn't bodied themselves up with munitions and walked into Four Seasons mall and just blow himself up. And what kind of response is that going to take from local law enforcement and are they prepared for that. My guess is no. They're prepared to secure the area as best they can. But the problem with that is, if there's one, there's two. Are there any cars in the parking lot as the officers respond that are also wired? Isn't that scary?

Sherry: Yeah it is.

Director Schaefer: To think that in Four Seasons mall someone could blow up something inside the mall, you'd have this mass of first responders certainly doing their jobs, getting to the mall quickly as possible, going up the parking lot and then have a couple more strategic bombs go off at the time the first responders get there, blowing them up. And why that hasn't happened, I don't know. And yeah, I think it is apart of our responsibility to prepare officers for that reality.

Sherry: Well, that kind of brings me into my next question, what advice would you give to other trainers relative to developing competent first responders?

Director Schaefer: Well to be an expert in this area, you have to read everything that's written about it. And you have to network. You have to know your clients. You have to talk to the chief, you have to talk to his officers. My officers spend a lot of time shadowing officers while their working. So they know exactly what's going on in the field. So I think that's important to do on the job training with the folks that are actually doing that job. And then being a avid reader. You have to know everything that's going on in your area of expertise. And it's a big commitment. Well, look how long it's taking for you to develop the expertise that you're developing. Takes a long time. And how much reading do you do?

Sherry: Uh...exactly.

Director Schaefer: Exactly. That's what my trainers do to be the professionals they are. And I do think we have one of the premiere training academies in the country. And I would put my staff and what they do against anybody in the country. I've been all over the country. I've make national presentations all the time. I see trainers from really all over the world. We really do a phenomenal job. So we're kind of NC best kept secret.

Sherry: Yeah because when I was searching for academies and we've been working on this project since last year, it was just recently where I came across your website. I'm like we have this academy right here in NC, how come I hadn't come across it before?

Director Schaefer: Because nobody knows about it. Now every law enforcement officer in the state knows us and they know of our reputation and they know what we do. And that's really what drives us. And cops in other states and other training academies know us to. In my business, we're very well known. But if you are not a cop, you wouldn't know us. Anyway I'm working on that. Because I think the public needs to know what we do. They need to know that we're apart of making sure that they are protected and served. And our attorney general does a good job of talking about us. We do a lot of the training initiatives of our attorney general. And I tell you what I have worked for four attorney generals and he's absolutely the most driven attorney general I have ever had.

Director Schaefer: His goals every year...we meet as a staff and he's always pushing our law enforcement world forward. And I respect that immensely. In your report do a plug for Roy Cooper. He's an incredibly committed individual.

Sherry: Ok. I sure will. I'll be sure we transcribe his name into our report.

Director Schaefer: And I'm not just saying that because he's my boss, he provides all the resources for us to do what we have to do. He was the one that started the active deployment/active shooter situation across NC. He has done incredible work with cyber sex and protecting youth. And then the whole town sexual predator work that he has done, I can't tell you how many of those guys they've gotten off the street since he's become the attorney general. He got funding for all the DNA lab analyst for the FBI which has been incredible because in addition to convicting people, we actually clear innocent people and that was his direct work. He started the whole meth lab initiation.

Director Schaefer: So he was responsible for the legislation on getting the Sudafed from off the counter to behind the counter to stop the meth lab explosion that was happening in NC. We cut that by 113%, the number of meth labs detected in a single year with that one law. Like I said, I've worked for four attorney generals and this one makes it happen. I'm very proud of him.

Sherry: I just want to thank you so much for letting me take up an hour of your time especially while you're driving.

Director Schaefer: I was just on my way to a sheriff's commission meeting, so this is good.

Sherry: And I appreciate your feedback about the female and rank and we did put that in our survey.

Director Schaefer: Good. I don't know if you'll get a different response or not but you might.

Sherry: You know what? Based on the answers to your questions and based on what I've heard previously, most of it has fallen in line with what the others had to say. I think you

guys are officers of the law and I don't think gender, from that training aspect, I haven't seen anything different.

Director Schaefer: Right. That's cool.

Sherry: That's good.

Director Schaefer: Yeah that is good. Well thank you so much and I wish you luck.

Sherry: Thank you and I'll send you the consent form via email and you can just fax it back to me once you sign it.

APPENDIX G

INTERVIEW WITH BUTCH BEACH DIRECTOR, GEORGIA PUBLIC SAFETY TRAINING CENTER

Sherry: Hello this is Sherry Springs. How are you doing?

Director Beach: I am doing well, I hope you are.

Sherry: I'm doing pretty good. Did you get a chance to get the email I sent you with the questions?

Director Beach: I did.

Sherry: Ok. Good. Before I start, I have to get your permission to conduct this interview, and I will send you a hard copy and if you could just sign it and fax it back to me. I just want to let you know this interview is being recorded to be transcribe later which means you can feel free to expound as much as you want to. (Consent form is read to *Director Beach:*). Can I get your verbal consent?

Director Beach: Certainly.

Sherry: Alright. Good. I kind of want to go through the questions and give you an opportunity to tell me a little about yourself, your job title and what you do at the training institute where you work.

Director Beach: Are we going to hits these bullets as we go or are you looking at a separate sheet?

Sherry: No, I'm looking at the same questions that I sent you.

Director Beach: I can tell you this from the beginning, Currently, I am the Div. public director with the GA public safety training center. And my area of responsibility is the GA police academy. The significance of that is we are a public safety training center and the other half is the fire training center, the GA fire academy here at the complex as well. We train fire fighters and police officers.

Sherry: Oh ok.

Director Beach: Now but my side is strictly law enforcement training. That's what we do. Primarily, my particular focus is advanced specialized training, although we do have a basic training section. The basic law enforcement and mandated training for recruit officers. We do from recruit all the way to career training.

Sherry: Ok.

Director Beach: I have been...when you say how long have you been in this field are we speaking about policing or are we speaking about training?

Sherry: Policing and how long you have been training...

Director Beach: I am just a little over 33 years. 33 years and about 4 months total. Now I have been training either as a service instructor and active...I am a retired police officer. And even while I was active I was training roughly since around 1987. I guess I have been training for 20 years now. But I retired in 1999 and went into fulltime training. So I have training fulltime since 1999.

Sherry: Ok. Did you do the same, before you retired and started into training, did you do the same as police work or did you move around and do different specialized tasks?

Director Beach: Well, I did almost 26 years of almost everything. I was a uniform patrol officer, traffic officer, investigator, administrative, and I was an executive assistant at the chief's office...chief of staff is what it actually was.

Sherry: Ok.

Director Beach: So I guess I have done almost all of it.

Sherry: Ok. So you've got a lot of experience? Now is your training specialized in one area or do you kind of train on all of it?

Director Beach: My training?

Sherry: No the training that you do now at your facility?

Director Beach: The training that we do now is from recruit to full career training. We do basic law enforcement training, we do basic corrections training, we do... by corrections, I mean jail training on a local level. And we do corrections here at our center for the prison system. We do prosecutors, attorneys training and then we do advanced specialized training for criminal investigations, organizational development, drug enforcement training, traffic involvement training, forensic training, and coroners training. We're a full meal deal here.

Sherry: Oh ok. Now do you just train officers in GA or do you have recruits come in from different areas?

Director Beach: Our focus is GA. Now we do occasionally have a few from out of state or out of the country even on occasion. Our federal officers are trained with us but our focus is state and local officers of GA.

Sherry: Ok. So you are just state and local?

Director Beach: Uh uh.

Sherry: Alright. I guess that gave us a little insight about your facility. Are you affiliated with...a lot of the training facilities/academies are associated with universities...

Director Beach: They are across the country but in GA we are not. We are a stand alone

delivery system. We deliver training as per P.O.S.T. rules and P.O.S.T. mandates. GA Peace Officers Standard Training Council. Every state has a peace officer standard training. They have a P.O.S.T of some sort. Now in some areas as I am sure you have already found, they have a POST that is attached to a state law enforcement training and then their junior college system typically will deliver basic law enforcement training and they get advanced specialized where they can. We're complete. We do it all and we don't use the university except we do rent space from the university system on occasion. But they don't deliver training for us, we do our own.

Sherry: Oh ok. Let's move on. Can you give me an idea...I guess you had time to think about one of your most traumatic disasters you experienced personally.

Director Beach: Define disaster for me.

Sherry: Well disaster is in the eyes of the beholder, for some like 911 or Katrina officers involved might say that is the worst disaster they have ever been in, but for you, I don't know if you were involved in anything that serious but something that was serious to you, I guess.

Director Beach: Well, I can say over the years...there are some. you're talking about...obviously Katrina happens once in a lifetime if you were in LA or shipped there and participated in that.

Sherry: Right

Director Beach: And maybe not even once in a lifetime, maybe once in history...something that large or 911. But I was a SWAT commander some 10 or 12 years, its hard to say, probably most would be involved when a police officer is killed. And over those 26 years, we did that 8 times. We had 8 killed.

Sherry: And you were personally at the scene of the incident.

Director Beach: For three of those.

Sherry: Ok. And during that incident...can you describe one of those incidents? What role you played?

Director Beach: Well, one of them, we were working armed robberies, and one the partners stopped the armed robber vehicle and was shot on the traffic stop. And of course I am not right there while he's shot. We did catch the perpetrator a little while later. And he was shot and killed in a shootout in the street in all of about 5 or 6 minutes. That is the one that sticks out, that is the earliest one.

Sherry: How well do you think your training prepared you for handling that kind of casualty?

Director Beach: I'm a tell you...you talk about that one...probably not very well and I'll tell you why. In that day, in GA, there were two things that could happen, you can be hired, in that day and let get me finish cause it is not the same today and I don't want this to be an indictment. But basic training was really not a priority. You could actually be hired and do basic training within 12 months when you started work. So you actually worked a year before you went to basic training. And I'd only been a police officer about 90 days the first time I was involved in any kind of fire fighting and had never been to basic training yet.

Sherry: Wow. So you weren't prepared at all?

Director Beach: No preparation at all. Now when this particular incident happened, I had been on a couple of years and by that time, OJT is what got us through not necessarily training. Today that's not true though. In the state of GA, you have to go to directly to training. You can't work until you've been to training. So what used to be six weeks of lecture is now 10 weeks of combination of lecture and hands on scenario based training. So you actually learn how to do and how to respond. You also learn about where help is after...for post traumatic syndrome and 33 years ago that was unheard of.

Sherry: Well let me ask you this question. Do officers apply for the job and then go to training or do they go to training and then apply for a job?

Director Beach: In our state, that can happen either way. You'll probably find in your research, there are some states that require an officer to already be trained to get a job...100%. It is what is referred to as pre-service. And then there are other states that don't allow pre-service at all before you can get a job. We are what is known as a hybrid. So an agency hires a person and we train them and the agency pays the bill with tax money. If a person chooses, they can come to training on their own and pay their own tuition and then market themselves as "hey I can come work for ya, I'm already trained and you don't have to pay me for 10 weeks or 3 months while I am training. I've already taken care of that." So we allow folks in that are not yet hired and we can't spend state dollars on them, they have to spend their own money to pay tuition and pay their own way. Otherwise we train at no cost to the agency. We pay on state dollars and taxes. Does that make sense?

Sherry: Yes that makes perfect sense.

Director Beach: Training is the same. Students sit side by side, it is just a matter of who's paying the bill.

Sherry: But you are still saying that it is based on the state though, right?

Director Beach: It is. But that is the way we do it in GA. And they do a state mandated curriculum, mandated training. So they can't go to college and come here. Some think if you've been to college that will take care of some of the training, you don't have to do that. We do not recognize that. They go the whole time regardless of what the

background is.

Sherry: So basically when you started out none of the training really helped you deal with what happen. You just basically had to figure out a way to deal with it.

Director Beach: That's right. I say no to that answer for sure.

Sherry: Now the next little area, Development in first responder training, basically what I am trying to get is compare the training that you had when you started to what's being done now and some of the differences. What kind of training did you have and how does it compare to what is going on now?

Director Beach: Well it is a whole lot different. When I went through we had a 6 weeks basic training course that came from lecture of various people. It was just all lecture. Talking head is what we like the training here.

Sherry: So you didn't have any hands on training?

Director Beach: Nothing other than firearms. We went out for firearms qualification. We didn't do any latent print work, we didn't do any traffic stops, we didn't anything full speed hands on, defensive tactics or any of that. Firearms is all. The rest of it is just lecture. Now today, the course is ten weeks long. And we do all of that lecture plus more. But we also have 32 performance tests. They're not cognitive based tests, they're hands on. 32 performance examinations. Of course on those performance exams there are practical exercises that have hands on training practice before their tests and that gives you an idea of the difference. They'll work a full crime scene, traffic stops, vehicle pursuits, emergency vehicle operations, full scale defensive tactics, search warrants, arrest warrants, report writing. All of those things are done in a performance examination so that you see when they leave, they can actually do something.

Sherry: So with you having had all lecture training and now with the hands on simulated training, do you think it has made the officers better in their decision making?

Director Beach: Oh yes. We've got a long ways to go, understand that but we are much better at that today. And one of the things I didn't tell you of course, we have in our curriculum judgmental pistol shooting which is the judgmental use of deadly force with simulators and computers. But we also have scenario based training where we use the new today vs. then...we actually have Simunitions FX markers or Air assault or any of those types of manufactured...We have bullets we can actually shoot at each other through specially designed weapons that are not lethal but it is real live scenario based training.

Sherry: It gets the point across?

Director Beach: It gets the point across today. 33 years ago they didn't have that. And so you'd shoot a blank and if you did anything, you said "bang I got you!" Today we

actually shoot soap bullets at each other. And so we are able to create a more realistic scenario based training. And the closer you come to the real thing the better the training gets.

Sherry: Now do these scenarios come from years of your trainers experience?

Director Beach: That's right. We take them straight out of case studies sometimes and sometimes what we know as a common occurrence. And one of the things we have here in GA, our complex here is a little over 1000 acres so we have a full live firearms training section with the live firehouse. Some people call those Hogan's Alley and they actually shoot live weapons in there. We have what we call a mock village. It has a hotel, mom and pop grocery store, auto repair shop, store front offices, a residence there, a house, a functioning meth lab training unit, it's all fake but it runs and we can do high risk warrant entry there. We can do traffic stops in the village. It's like a little village going on. We can actually put actors in there and it looks like everyday life in small town America. And that's kind of the way we work it. When we want to do building searches, we can actually go to a hotel, what looks like a hotel, and do it live rather than just looking at it on the television or through the computer.

Sherry: It does sound like training has come a long way.

Director Beach: Oh its come a long way. I saw Motorola reel to reel. You probably don't even remember that.

Sherry: Is that when they put the big reels on the projectors?

Director Beach: Yes

Sherry: yeah I remember that in Elementary school

Director Beach: Yeah now when I went to training, that was the audio visual equipment or we had these slide shows, you may remember. Now we still use some 35 mm slides to make points. You might remember the...gosh I don't know how to explain them...it would play the tape and then say "click the next slide" and you'd click the 35 mm along with the audio tape. So you see some of those. It's much different, it's much much different. Much better and getting better.

Sherry: I guess it is good for all those American citizens.

Director Beach: Across the country we are all doing it a lot of different ways but we are doing it much better than we were when I broke in. All of us are.

Sherry: Yeah because I've heard the term, just doing this research, Simunitions, FATS, I think somebody mentioned...

Director Beach: Fire arms simulator. That's one of the things we use. We don't use FATS,

that's a brand name. And Simunitions is a brand name. And that's why I was trying to move away. We buy FX marker ammunition from Simunitions. But probably most people do. And there is another one out there called Aerosol, that sells the same type of thing. FATS, Prism, are all fire arm simulators. We have our own in-house IT folks contractors here that built their own system. But its the same thing. Its based on scenarios that are filmed, imported into the computer and you interact with the screen. Same basic philosophy. Now FATS is a GA company so we had to kind of work around through that. You know that is the way it works.

Sherry: Currently with your training, what are some of the goals for your trainers you set out each day?

Director Beach: Now that is going to depend on the course. Let me tell you what the ultimate goal is. That they would come out a more professional peace officer. Better equipped to meet the needs, better able to defend themselves from the public to stay alive and depending on where we are those goals would be more specific. I mean if you are in a criminal investigation course, obviously we'd want to train them with better techniques in criminal investigation and they're better investigators. But we never overlook the need for service or for ethical conduct in what we do day in and day out and treat the public the way they should be treated and taking the job seriously. That's a lot about our training. It's just being better than we were every day.

Sherry: And you guys take new recruits or just managers like people who want to move up in rank?

Director Beach: Yes we do. All of that. Like I said we have a basic training section that takes recruits for law enforcement, for communications, and for jail. Now we also have supervision training, management training, executive development training, communications skills training, that are all for supervisory/leadership positions both on the fire side and the police side. And then we have terrorism training and that has some management skills training in it as well. Intelligence gathering, Intelligence analysis. We have action reconstruction, drug recognition enforcement training with the traffic folks who do sobriety testing and then on our forensics side, we do blood spatter. We actually have a guys on staff whose been trained at the National Forensics Academy up in TN. We do late print examinations, late print processing, crime scene processing totally, trace evidence, criminal profiling, criminal sexuality. We have behavior profiler on staff.

Sherry: Ok. It seems like you all cover everything. Now everybody comes...cause I know some departments have their own training...

Director Beach: That's right. Now in GA that is permissible. There's 20 hours, a minimum of 20 hours required every year. So some agencies do their own training. They may do that with our POST council approval. But even those who do there own training, for the most part, everybody comes here. We train about 1500 officers a day on site, on the main campus and then we have 7 satellite regional academies...so probably somewhere around 2000 recruits a day. Now that may be the same 2000 that may be here

more than once during the year. But that's about what we do.

Sherry: How long does it last?

Director Beach: It depends on what the course is. A basic law enforcement course is 10 weeks. See most of our classes are 40 hours. But we do some at 16-2/3 days, 16-2/4 days and some more than one week. Our supervision training for example is a 3 week program. Our management level training is a 3 week program. Executive level is another 3 week program. If you make it all the way through that, its 9 weeks advanced training. If you go through the meth lab thing, it another 3 weeks. The first weeks about 50 hours and a little bit shorter the next 2 to get you up to speed. We do some drug ID and marijuana ID so that we train investigators to identify drugs without having to involve the scientists. They actually do their own agent drug testing for marijuana. You can do that at home without having to sent it off to the crime lab. That reduces the crime lab load and it gets you much quicker results. But we have a full forensics lab here so we are able to train that here. It is kind of a unique training center. You won't find many like this in the nation I promise you.

Sherry: Yeah cause you guys seem to do everything.

Director Beach: Our website doesn't do it justice. But we do it all, from the cradle to the grave if you will.

Sherry: So when a new recruit comes in, they're called what?

Director Beach: They are called cadets.

Sherry: They are called cadets and when they graduate, they are?

Director Beach: They are either a deputy, a peace officer or a trooper or a GBI agent or a GA state correctional officer.

Sherry: And GBI stands for?

Director Beach: GA bureau of investigations

Sherry: Oh ok...like a state version of the FBI?

Director Beach: That's correct. Dept. of parole trains here, DNR trains here. Department of Natural Resources when they need their rangers.

Sherry: GA has a lot of mountains and parks?

Director Beach: Mountains, parks, beaches. We have a coastline too.

Sherry: Do you train the coast guards?

Director Beach: No we don't train the coast guard but the DNR has a marine element and they do the fisheries and the wild life stuff. We have two lakes on site that they manage both for training and their biologists and fishers work here too.

Sherry: Now if a person came in and they trained as one thing and then they decided in their career they wanted to become something else do they have to re-train in that area or can they just take a few extra courses? How does that work?

Director Beach: If they come in and they do the basic law enforcement training first then typically all they'll need to do is switch agencies and do whatever in-service that agency requires of them in the position they are taking. There about 3 exceptions. And one is with the correctional officer training, its really not law enforcement training, it is corrections training. They would start over at the beginning and take the entire basic law enforcement training course. If a GBI agent for example wanted to go into regular law enforcement, there is an extra 40 hours of traffic training that he does not take during the investigative training that he would have to go back and pick up. If someone comes in from out of state or a federally retired officer want to work with GA, 200 hours of what they call a compliance course, only 1/2 the basic course but they have to take it to. And its things like GA criminal law and criminal procedure, GA specific stuff. It depends on which agency you are coming from, what the background is and where you want to go.

Sherry: I was just wondering how much more you would have to do to go from one thing to another. Because I know if a person wants to become a detective or SWAT, they would have to...

Director Beach: Now you're into the local. Maybe I didn't explain it. We are not a local police agency. We are a training academy for the state. Those types of promotions from a patrol officer to an investigator to allowed to work in specialty units is a local call. So there is no post requirement that you take any further training in any of those. That's a local decision. Now once the decision is made then we do the training. The folks that want to be investigators usually do complete our investigative training whether it is a crime scene investigator or a criminal investigator. We have separate training protocols. SWAT, we have a protocol for that. And we have for new officers and SWAT training on site. Counter sniper training on site. We do explosives training on site. Post blast to investigation and bomb techs.

Sherry: What percentage is lecture and what percentage is hands-on?

Director Beach: Again, you're going to have to get course specific with me. For instance, we do stress management classes and that's probably is going to be about 80% lecture and 20% doing stuff. But in the basic law enforcement course probably about 1/2 and 1/2. And the post blast investigators course would be 25% lecture and 75% working the hands on crime scene. We'll actually go out and explode a bomb and they'll work the crime scene and reconstruct.

Sherry: Now with the scenario based training do you let the students participate as the actors or do they watch?

Director Beach: We use actors from somewhere else. There is a school of thought out there that students can be the actors. We choose for safety reasons, we believe it is safer to hire actors and we train them and it's well scripted. So we use separate actors.

Sherry: Are they just actors or police officers that want to act?

Director Beach: It could be either or. Some of them are civilians, some of them are actually police officers who just are trainers that scripted up instructors in other fields and they'll run by the script. They are not members of the same class. We don't use students from the same class to do the acting.

Sherry: Any school of thought as to why?

Director Beach: Yeah because it's safer. It is a greater degree of control once you train them up to do what you asked them to do and they'll do it the exact same way every time. If you take the students on an ad hoc basis or whoever shows up today and you take 5 minute training sessions and this is what I want you to do, they may understand it and they may not. You never really know what you have got until it happens.

Sherry: Ok. Now you say whoever shows up...do they have to obtain so many hours, like you hold them accountable or are there mandatory classes or do you have to have so many hours before you graduate?

Director Beach: Alright. Again that is a mixed bag. We, POST, won't allow a person to miss 10% of any course to walk away with POST training and only 5% of the basic course. And that's not necessarily excused. There can be 5% excused absences in the basic course. If you miss more than that for any reason then you are slated to start over again at the beginning. In advanced specialized courses, after basic, then that's 10% but that is on an excused basis. And the reason we have to do that for the most part, say if you've got a 40 hour course, that's 4 hours. Somebody will come in and say I've got a subpoena for court on Wednesday morning, it's going to take a couple of hours. So you know if its only a couple of hours then that's fine. If it goes beyond the 12 o'clock hour then we start over from the beginning next time. Now what I meant by whatever shows up...we don't have control over who actually comes to the course at which time. We advertise and people register by their calendar online so you won't know really until 8 o'clock the first morning whose actually in the seat. So if you wait until then to start training your actors, then we feel like we lose a certain amount of quality control is what it amounts to. We'd rather train our actors before the first day so we know what we got and we're off and running as soon as people get here. And that's not to say that some of the students in that particular course won't act later or have not been actors or role players, what we call them actually is role players, before or after. If they're in that class they won't be of that class. Does that make sense?

Sherry: Yes. How do you guys run your sessions? Like a university is on a semester. Is it every 10 weeks you start over or start different classes at different times?

Director Beach: We like, and sometimes we do it faster than this, We like to start a new one in 12 week rotation. But now at the same academy, we may as many as 3 basic law enforcement training courses run at each time in some areas. But what we like is if you took a string of basic courses across the year through the basic course coordinator to get started, it takes about a week to get ready for one and it takes about a week to close one out. Usually there is about two weeks in between hopefully.

Sherry: Gives them a chance to get everything set up for the next group?

Director Beach: We actually have a course completion package report out that has to go to our folks. It's a course file, it's paper work but it will take sometimes 3 to 4 days to get the paperwork together. It is not extremely difficult, it is just slow coming sometimes. They have what they call a POST form 2 that allows a person in. We have to do a POST form 2 A that says they've graduated. And we have to put documented proof in each file that says they've completed all the tests, 15 written tests and 32 performance examinations. So it's just a matter of putting all that in a stack and getting it a file and make sure it is together and signed and mailed. Now once you do that after 2 or 3 days, it takes you another 2 or 3 days to get your supplies back in order to make sure you have what you need to start the class. So you need a week between the two to get one closed down and the other cranked up and getting it ready to go.

Sherry: So how do you measure success?

Director Beach: There is a lot of ways of looking at it. Here we are actually wrestling with that right now as a matter of fact. Cause what we believe we are probably not measuring as effectively as we would like. Historically we have pass/failure rate has been the avenue of success for our courses based on the number of folks who attend vs the number of folks who fail and whatever the hours of the course are. We have this thing called course hours, student contact hours is what we call them. And we do a more or less. Our quantity is really measure by our student contact hours. So that's the number of students multiplied by the number of hours in the course and we total those at the end of the year. Then we do more or less, do we have more contact with students or less. And then the quality, I guess, is how many failed. And so of course there is two ways of looking at that. We look at it both ways. We have courses where nobody ever fails.

Sherry: And then if one person does, you don't think it's necessarily because the course is bad, right?

Director Beach: No what we think is the course is bad if you don't have somebody failing every once and a while. There should be in a good course, a course that is stretching the majority of the folks, those who don't perform up to speed all the time. At the same time, you shouldn't be failing everybody that comes.

Sherry: Right.

Director Beach: So we look at quality as having an acceptable failure rate.

Sherry: Now these tests of failure, are these written tests or performance tests?

Director Beach: Both. We weight them equally and to be honest with you, if they come to one of our advanced specialized courses, and they fail the written test, then they don't graduate. They don't get credit. If they come to one and they don't pass the performance exam, they don't get credit. So they can pass one and not pass the other and go home empty. In the basic course there is some grace. Because we give 15 and 32, they can actually fail two of the those and we provide an opportunity to retest in those areas. We remediate and then we retest. Its basic training, that's why we are there - to learn. Let's say they don't handle the crime scene search exactly as they should the first time. Then we will go back and tutor them if you will and then allow them to work another scene at a later date. A couple of weeks later maybe or a week later. Now the second time though, if they don't make it then, then they're out. They're out of the whole course.

Sherry: Do they get to come back?

Director Beach: They can come back and start again, yeah. But now the next time, they pay for. The state won't pay for it but once employee or not. But now they get to do that twice. So they could actually remediate twice but then there is no more safety net. Now on the high liability issues, drive and shoot and such, there are no second chances. So if they don't make fire arms qualification they are out of the course in basic training and then they start over. Now obviously in our advanced firearms course, if they don't pass, they don't get credit its only 3 or 4, 5 days or sometimes 2 weeks. Our instructor training course in firearms for hand guns is 2 weeks. So that's our longest one.

Sherry: So do they get a chance to put in so many practice hours before they take the test?

Director Beach: Yes, that's why I was telling you about practical exercises. In performance exams, they have practiced it many times and it depends on where we are. For emergency vehicle operators course, our basic course, we have three graded exercises. Three performance exams and one written exam. And for every one of those 3 exercises, they have probably practiced it, probably 12 or 15 times before they take the first test. And then our remediation is 5 more practice runs before they do the second tests. So they could do it 20 times, on two of the exercises and 15 on the other. So yeah there is a bunch of practice but that is not the training time now that's just practice runs. The training is the training is the training. This is how you do it and do this piece for me. But then we also just let them practice the course. So they get to practice the course 20 times before they actually miss whether its breaking or precision driving or skids.

Director Beach: Firearms is the same way. They do the drills and they train, trigger, control breathing, that sort of thing over and over. But they also shoot the course as many

times as time allows and they have 6 opportunities in basic training to shoot two scores of passing of 80% or greater. So they have six opportunities. Now in an advance course we have a higher standard, they get two. They get one on demand and they don't know when it is coming. Somewhere toward the end of the course, they'll be asked to do that course at that greater level of skill and they pass. If they don't then they practice a little bit more depending on what the skill needed to practice.

Director Beach: The firearms instructor would identify that and practice through that and then they get one more shot. And if they don't make it, then they start over at the beginning or not. It's up to them. But you got to realize that with advanced training, their employment doesn't hang in the balance. If they don't graduate the basic law enforcement training course, then they can't be a police officer. And at the advance level if they fail, they go away and practice and come back. It's about skill building then. So we hold a much tight line there. So you either got the skill or you don't. It's all about survivability and that sort of thing.

Sherry: Do you have an example or story?

Director Beach: Sadly we do have not so successful stories and it depends on which area you are looking at. If you are looking at skills, there are folks who either didn't learn the skills or don't use them and end up hurting themselves or getting hurt or vice versa. For state patrolman, I can think of one just last year. We trained with the state patrol to do this pursuit interventions technique, the PIT move and when he tried to that he ended up on the wrong side of the road and was in a crash and was killed. Now did he do it correctly, I don't know. But obviously it didn't work in that instance. There are officers who are injured because they get lax and complacent.

Director Beach: But now there is also training that is successful. We have a drug bust everyday. I tell you a real success story. We preach in basic training about ballistic wear, ballistic vests, and keeping your head in the game. And a police officer just two week ago was saved by the vests and quick thinking and he was able to return the fire and live from survivor training. And we demonstrate that in our firearms training. you know what the vests will do and what they will stop and what you can trust them with and that sort of thing.

Sherry: Now did this officer contact you guys and say you know I learned this at your course and it saved my life? Is that how you found out about the story?

Director Beach: Well actually no. He teaches for us. He was our instructor in a different area not in firearms. He was our student in firearms and he helps train in our DRE program. And so we knew him obviously very well. And we read the state news, we recognize names. But to be honest, he is one of our regulars. It's kind of an adjunct part-time job for him. We hire guys that have subject matter expertise to supplement our instructors when we need them.

Sherry: They come in and give an extra lecturer?

Director Beach: Well, they're the main lecturer. If it is an area of expertise that we don't have anybody on staff that can go to that level, we'll go to the field and find somebody who has the training and experience and knowledge and can teach as well, we'll bring them in. And of course we do contract and we pay them, but it's not their real full time job. We do a lot of that with cyber crime and computers, intelligence analysts, that sort of thing.

Sherry: Now what do you call the cyber crime stand ins? Is there special title for law enforcement officers who handle that kind of thing?

Director Beach: Yeah, there's not yet. Most of the time it seems the Dept of GA just kind of finds a regular investigator to work the internet crimes or computer crimes. And so there is real need. And they know where to look and how to look. Cause most of them are not truly computer technicians. But we train them up to the point in an application based area they can look at computers and keystrokes and find most of what they want. But it takes a real expert to take hard drives and then move them, re-burn them. Lab technicians they're not, but we train them to know where that is. But most of them are regular detectives, they're not geeks made detectives, they're investigators made to geeks.

Sherry: ok.

Director Beach: That's layman's language but that's the way we go.

Sherry: Ok that makes sense.

Director Beach: Which is not a real strong transition we find cause most good investigators are left brain people and most good computer folks are left brained people too with just a stronger right. But the creativity over there is good but they also think logically because computers work just on logical response. And you will find that most police officers are strong left brained people. And you research I am sure will bring that out to you there. They are kind of black and white folks. It's either legal or not, by the book or not. That kind of thing.

Sherry: That kind of brings me to my next little area about what is a top performer or a person who exhibits excellence and the kind of characteristics they possess?

Director Beach: I think the most successful police officers have two things and I might even stretch that to three. The number one is the ability to critically think, to be able to stay open-minded and see facts and think through them logically, sequentially. Think things through. We live in a very technical world, the law the legal side, plus the evidence gathering. Those who are able to perform best are able to think most critically. They don't jump to conclusions or move too quickly.

Director Beach: It also takes a lot of initiative. If you think about the environment is which police officers work...they're put in a car and given an area of responsibility. It's

not a job where it says you've gotta make this many widgets and turn this many screws today. Your success is based on what you do and how hard you look for what you're doing. Initiative and a good work ethic.

Sherry: Now do you feel like your training and the things you do at your facility help enhance the critical thinking?

Director Beach: Yes it does. We are strong about that. We got a new director in 2003 and we totally swing from the talking head we like to talk about that doesn't let people think and we tell people what they ought to think to scenario based training where it says these are the options and they should at least come to one of these by whatever process. So we don't necessarily beat them up about the process of thinking so much as how did you come to the right conclusion. And sometimes they come to a conclusion we didn't think of. Once they say it and articulate it, we say that's a better conclusion than what we had.

Sherry: Where do you stress this more, which your basic recruits or with your advanced folks?

Director Beach: Now the basic principle we use it. The key word you said is more. In the basic there are some predetermined responses that they have to have. Mainly because they don't know yet. They don't know the technical nuances. But once they become comfortable with that where they start thinking broadly and we encourage them to think more broadly. Thinking out of the box.

Sherry: That makes sense.

Director Beach: Obviously you have to have more guidance at the basic level so they'll know what the parameters are or what they're weighing. In the last decade, ten years or so, great emphasis on professionalism and ethics and those folks who come through that's got a strong value system. So that ethics mean something. If you don't have a value system, teaching ethics really is like throwing hay in the wind or casting your pearls before swine. But the folks that got a good value system, you know honest, hardworking...

Sherry: Want to do the right thing?

Director Beach: Yeah, want to do the right thing. Willing to make sacrifices. Pay the price upfront. But that kind of value system, I don't know how you'll describe that in your writing but you get my drift. And those are the people who make it in this business. Folks who are easily led or easily blown from one day to the other, typically end up in some sort of ethical or moral dilemma that they are not able to stand up to.

Sherry: And eventually that kind of breaks down...

Director Beach: It does. And it usually takes a little while. Across the nation and in GA certainly holding true, the average officer hits that bump for about 7 to 9 years about 27, 28 years old which you would expect them to be at the mature level in their life where

they are most productive but they're not some of them. There is that 3 or 4 percent that just don't make it.

Sherry: I guess that is just like anything, people find out they are not cut out for...

Director Beach: Now that's not the ones I am talking about. There's that class too that work 5, 6, or 7 years and decide I just don't like this or I don't like working nights, I don't like being put at risk. It's too dangerous for me or my family...and I respect all that. Those are upfront decisions that are making it in the best interest of everybody. Cause if they're not committed...to me that's a value to say I was committed, I'm not committed, I'm leaving. See that's the right decision. It's those folks that do wrong things that I am talking about.

Sherry: Ok.

Director Beach: They're there and they say I know the law, I know how to work the system and I can get by with this and I can get by with that and at the very least they start shortchanging themselves and the public and you go from there all the way to criminality. And that's all that decision making process...that value base is what I'm saying. They owe me this, they don't pay me enough, so I'll just steal the stuff or take the graph??? or have fun or use this force or use this power that I have to force people to do what I want them to do. These are some pretty powerful people.

Sherry: Yeah I was interviewing a gentleman yesterday and I mentioned the movie Training Day and he started laughing. Have you seen that movie?

Director Beach: I have not.

Sherry: Denzel Washington was training...

Director Beach: It's on my shelf but I've never watched it.

Sherry: Ok. I'll let you watch it. And he laughed and said that wouldn't happen in real life. Because Denzel was like the worst possible cop ever.

Director Beach: That's right. But you know what, it does happen. I don't know what that one is but we got a story in GA about a guy name Jim Batsell that turns up for murder, robbery. I mean it happens occasionally. Sadly but true.

Sherry: Yeah I believe it.

Director Beach: And when you're holding the power over people's freedom, there's just no room for that. So that's where we are.

Sherry: What kind of future directions do you have for your facility? You got some new technology in the works? New innovations come along?

Director Beach: I don't know if we've got anything earth shattering. We are moving toward internet based training and some with videos and hypothetical stuff there and some lecture based reading, research type training that we can put on the internet. We've been reluctant to do that, it's been a logistical thing not necessarily technology or we don't want to do it. But we're moving that way. You know we have video pod casts. But most of our changes that we see in the next 3 to 5 years is really going to be in delivery style I think. We're toying with the idea of making all of basic training centralized so that it's totally consistent and under one roof. Right now it's under 8 roofs. We have 7 satellite locations. And obviously you've got 7 local flavors and there is no way around that.

Sherry: Right, because everybody's...

Director Beach: Doing it a little bit different. That's right. That's right. And it's not done poorly just different and sometimes that gets us in a little trouble. But that's our focus, it's getting that under control more than technology really.

Sherry: Ok, become more standardized...

Director Beach: Right more standardized and consistent basic training.

Sherry: So how do you think 911 and/or Katrina have affected you guy's approaches to training?

Director Beach: Well now, 911. Let me tell ya one thing. My opinion is this that basic training and training focus, style or delivery of research and development has not changed appreciably because of 911 or Katrina. The focus of ICS training if you just take a very slim, narrow look obviously the need for ICS was brought alive in Katrina.

Sherry: ICS stands for?

Director Beach: Incident Command System. The NIMS training, National Incident Management System training came in the wake of 911 and then of course brought to the forefront with Katrina. In that area the intelligence analyst training, being more aware, target hardening sort of thing, specific issues changed from 911. But the basic business of policing and being prepared is still the same. I hope I am making sense?

Sherry: Yes I have had somebody else say that.

Director Beach: But the reason the NYFD and the NYPD was so successful that morning was preparation and training. And I know you don't hear people talking about 911 as being a success a lot but if you do the numbers, 2683 is a lot of people to die, you know I agree very tragic. But the fact is there were over 50,000 people in those buildings. So somebody saved 47,000 lives. Anytime you can take that kind of unprepared, unwarranted, unknown threat and save 47 or 50, I think you've had a pretty successful day. And I know that is not a popular opinion but that's an old guys way of looking at

things. And they were prepared, they were trained and they were trained well.

Director Beach: So the focus of our training has changed but the style and delivery probably has not changed much as far as the general goals of being prepared and trained to meet a threat. I think the failures in Katrina...this is a personal opinion and if it shows up anywhere...it was more bureaucratic than line level of people being able to do what it is they needed to do.

Sherry: Right.

Director Beach: There were a lot of bureaucratic snafus in Katrina before they turned folks loose. If they had turned General Honoree a loose, it would have been a much different outcome. There's a guy that's prepared and trained and was just held by the reigns and that's what happens. Bureaucracy does that to you sometimes. And we're in that business. We are in a free government. I don't know how you beat that. That's what happen, it was all bureaucracy.

Sherry: Now I read an article that was kind of interesting, and I'd like to get your opinion. I was reading about Katrina about officers who just left. There was one officer in particular and his wife was sick and she needed to get medical attention and as you know all the hospitals were down. Well he just left his job and said I've gotta get my wife to safety. What do you think about that? Do you think training or do you think that's just an emotional thing...

Director Beach: That goes back to what I was speaking about a while ago, that value system and the commitment to the job. In that particular incident that is a tough call. I'd say the guy's got to take care of his wife to be honest with you. But I also know that if that was truly the truth, his buddies would have knew that, they know it's the truth and the job would have gotten done anyway...

Sherry: Cause he was fired. I think the article was about him being fired.

Director Beach: Now I got to tell you, that's probably not the whole truth if we get right down to it, to ethics and investigating. New Orleans had a true corruption problem. I think you saw that with the officers going into Wal-Mart helping themselves. It was on television. I think there were 250 that were A-wall without explanation within day one or two. If you remember the numbers, I am not sure...

Sherry: Yeah I read that.

Director Beach: And of 1000 people that's about 25% of the force that just walked away. Now that's an indicator of the culture that was there before Katrina. Katrina didn't cause that, Katrina just exposed it.

Sherry: That's a good point.

Director Beach: They were not committed before that and in order to have some serious trouble and corruption in the last two decades, not just Katrina...you got police officers ordering hits from the patrol cars, I mean it's a tough day. So you know that little beating, and I say little but I am sure the guy that beat didn't think it was little...but right after Katrina, you remember the two officers that were fired for excessive force on the homeless guy? That's mild compared to some of the things that's happened in New Orleans when you dig in there history. That was a walk in the park.

Sherry: That was just brought out because of that incident?

Director Beach: That's right. And that is probably a good thing that much sunlight was shining on New Orleans. And those 250 that left, they didn't leave because their family needed them. They just left because "that's not why I signed on and I'm not willing to stay here and do this."

Sherry: So when you train now, do you think it would be a good thing to say "ok Katrina may not happen again, maybe that's a once in a lifetime thing, but if it happens, is this something you can handle or are you just going to walk off...Is that something you think you need to train for?

Director Beach: Sure we do. Let me put it in perspective from my way of thinking. We have Katrinas everyday. We are in crisis management, that's what we do for a living. And so if it is one on one, it's a crisis and it's the same as 50000 in Katrina. And that's what's so beautiful about the ICS system, every incident has to be managed and you manage the large ones just like the small ones, just like projects. More people and more deadlines. So the true commitment in the heart of the people is the same. Am I willing to step out and do battle with an armed robber tonight about 3 in the morning or am I able to rescue folks in the middle of a flood?

Director Beach: We had a flood here in '95 in GA where for about 12 to 14 days we were nearly under water. The whole south-side of GA if you can remember back that far. And there's been hurricanes in FL and south FL or if you go up the east coast. Not to the magnitude of Katrina. Let me just draw this out. I know we are running out and you didn't ask for all this.

Sherry: No that's fine...

Director Beach: What is the difference in LA and MS? Now we hear a lot about New Orleans and we hear a lot about LA. But what was the difference in the response outside New Orleans and LA than in MS?

Sherry: Well I don't remember hearing...

Director Beach: You didn't hear anything.

Sherry: Right now that I think about it.

Director Beach: The reason you didn't hear anything is because the folks in MS and the folks in places other than New Orleans responded and responded as they should and things were done and folks were saved or adequately cared for. In New Orleans, they were not. Just keep some critical space in your mind when you look at Katrina and take a good telescopic view or microscopic view even at New Orleans versus of the coastline that was hit with the same Katrina. I know we broke levies and people had more water in New Orleans but look at the infrastructure, look at the government response in New Orleans. Now I am not talking about Feds and State, I'm talking about local government.

Sherry: Right...

Director Beach: Cause I'm going to tell you what you're going to find, and I'll stand by this. The true first response is local. It's always going to be local. And in crisis management, you will succeed or fail at the local level. The feds will be there for support sometimes in a few days to a week. The state will be there in a couple of days in real force unless they have time to gear up and stage ahead of time. But if it happens like a 911, that was a local response. That was New York City. The governor was there the next day and the President's there in about 3 days. You see what I'm saying?

Director Beach: So the Feds come in and that's the way it's suppose to work. The state and the feds are support agents. The local folks have got to be able to respond. In AL, MS, and parts of LA, other than New Orleans, the locals responded and responded well. In New Orleans, they didn't. Bottom line. You got real quiet?

Sherry: No, that just made me think. I've done a lot of previous research with Katrina and you're right, I didn't read a whole lot about lack of response in the states of AL and MS.

Director Beach: You heard about the tragedies and there were folks killed but that happened, Katrina took care of that. What happened after that point? When the weather was such that there could be a response. That's what I'd encourage you to look at. If you go over to Shreveport or you go over to Gulfport, MS, the police officers weren't going home. The firefighters weren't going home. As a matter a fact they were yelling for help, "we need more". But everybody stayed home. And its a real difference, a real difference. You know and this hurricane hit TX too.

Sherry: And Rita hit right after.

Director Beach: You know and the worst thing that happen, we ran out of gas on the interstate. If you remember.

Sherry: Yep, I do. And people were stuck for hours on end.

Director Beach: But it was a well coordinated first response. And not only were they fighting Rita but they were taking care of Katrina refugees.

Sherry: Yeah because it wasn't even that long after Rita came.

Director Beach: Their training was good. You know if you take us nationally, first responder training is good. Is it better now because of what we learned from 911 and what we learned from Katrina, I hope so. We think it is. We believe it is. In closing this thing, I had a unique training experience. I was not up to speed with incident command system training because that's a fire thing and the law enforcement side has not been on that wagon for a long time. And so I wanted to learn from the real guy, so I went up to the National Fire Academy in PA to study for myself. PA is where the National Fire Academy is.

Director Beach: In there, I had the unique pleasure, if you can believe this, there were 6 guys that stood out most prominently. There were two guys who were emergency managers from New Orleans, from LA actually and New Orleans Parrish, right there talking. This was right after Katrina. And one from St. Charles. But the other guys was Battalion chief but he had been a company officer, a lieutenant, on the squad that responded in Oklahoma City, April of 95. So he worked the Oklahoma City bombing directly. And there were two guys from 911 and two from CA that deal with the wildfires. So you get guys that have lived through those experiences and if you can sit and listen to them for a week and just talk about those things primarily after hours sitting under the trees in the shade up there or walking the battlefield of Gettysburg taking a tour or just talking business and it was really a unique experience what they've gone through and learned.

Director Beach: So I can tell you, the mistakes that were made in Katrina, that can be controlled by first responders and folks that are in crisis management, the police, the fire, the EMA folks won't be made again.

Sherry: Well that's good to know.

Director Beach: The operational mistakes and there is always some. I don't know where it came from but has proven to be true in my life, the first casualty of any crisis is the plan.

Sherry: Oh yeah. And that is basically the whole thing with that New Orleans/Katrina thing is the plan.

Director Beach: First off there was not plan. Secondly, when they realized there was no good plan, there was no support and nobody willing to step in and make one. It's all about whose suppose to do this and whose fault is it. And that's not a time for that. Now there's a time to come back and do a debriefing and say " look here, Mr. A you messed up and we need to do this better." But not in the crisis. That's not the time to lay the blame.

Sherry: The victims don't want to hear that you're trying to figure out a plan.

Director Beach: And it ain't about none of their business. Their business is get me some food and some water and get me out of here alive. What you do is you do whatever you got to do to get it done now and then you talk about it. That's right.

Sherry: So if you had to give advice to other trainers, just based on what you've learned and seen, what would you tell them about developing good first responders?

Director Beach: Well, they need to know the basics. They need to understand the honor and the integrity that is needed to do this job. They need to be frank with them. I'll tell you what I do. I tell the recruits, when I address the basic course the first day, I say "How many are here for the money? If you are here for the money and for the benefits, you need to go home now. Because it's never going to be there." And you'll find that historically, nationally, they don't get paid what they're worth. It's all about the heart. And it may sound a little bit hokey to some folks.

Sherry: But that's if you think about teachers...

Director Beach: It's the same thing. They're there because they want to make a difference and this is what its going to cost you. And that's what you decide to do then this is the place for you, if it's not, you need to leave now. It's all about commitment and I preach commitment and integrity. And everything else will spin off of that, everything else is teachable. Every skill is teachable.

Sherry: You can't teach integrity.

Director Beach: Nope. If they got the heart, you can build it. If they don't, it's just not there.

Sherry: So just going back to the reflection question...based on the incident you described with the person being shot, how did you deal with it seeing that you didn't have any kind of training to help you? Do you think your training program would move towards it?

Director Beach: We have. Let me tell you what happen there. He was an older guy, a Vietnam vet, retired first sergeant. So he was kind of the leader of all the young guys anyway. That was handled through peers. I'll be honest with you, the older guys just kind of came together and then you meet after work and over a period of weeks and months of supporting one another. Now that's not the best way to do it. That's not the best way at all. That's the way it worked out there. But since then, the need has been fully documented for a true debriefing of traumatic incidents. They offer support, anonymous support.

Director Beach: Policing office is a very macho profession. I hate to admit that but it really is. So they'll be folks that rather go down the tubes than admit they need help. So if you make it public, that won't work. I went in one police department one time and they had the chaplain's office down the hall from the squad room. So I looked around and said "how many people ever visit that chaplain?" And he said "he don't get much business" and I said "let me ask you why". They got to walk by all their buddies and walk right in there to talk about issues. It ain't going to happen. It's just not going to happen. There's got to be an anonymous way for them to get to where they need to be. I think the

employees assistance program, that's a fairly recent thing. It may not be for you because you're much younger...In the last fifteen years or so, you see employee assistance programs that are anonymous.

Director Beach: Tell me you've got a drug problem and you're protected, you're ok. And we'll deal with it. That didn't exist 30 years ago. They just weren't there. I mean you had to go public and ask for this and ask for that. It just wasn't there. And by the time I retired, in running the Chief's office area, I realized the need for that. We debriefed everything. Every traumatic incident, shooting or not, officer involved shooting or not. And even some instance where...you see, the GA bureau of investigations went through this with our crematorium. I don't if you remember reading about it but in our Walker County about 2 years ago, a guy should have been cremating bodies and was just burying them.

Sherry: Oh yeah, I remember that.

Director Beach: Well the agents who went through that and had a pretty tough time. And the medical examiners had a pretty tough time afterwards. You know 300 bodies and you got all the stress and the pressure. And they were debriefed. And by debrief, I mean they had time to talk it out, talk to counselors, peer counseling or professional counseling. All that's made available to them. And to date, there's been no fallout. Zero.

Sherry: Ok. You mean nobody quit.

Director Beach: That's right. Nobody quit or gave it up or had any mental or emotional issues that's come to light at this point. Now later it might cause it's been only 2 and 1/2 years but I think its been very successful and it was because of all that offer of help and it was genuinely offered but not in a condemning way.

Sherry: Meaning they didn't make them feel bad for needing help?

Director Beach: That's right. Years ago it would have definitely become a signal of weakness to participate in something like that. Today it's considered the thing you need to do and some folks have made it mandatory where everybody goes. So now it's "I didn't choose to go, they made me go." kind of thing, it helps along. So everybody goes, in some instances, whether you need it or not. And then the folks that do need it, don't have to be chastised because they actually went and asked. So things like that are helping. And the realization that police officers are human.

Sherry: Yes. Absolutely.

Director Beach: And it's not robotics we're talking about here.

Sherry: Well, I appreciated your time and I appreciate you giving me a little extra time as well.

Director Beach: Sure.

Sherry: I just want to offer one thing. We are having another part to our study where we'll be sending out these electronic surveys over the internet and if possible could I contact you when we're ready to do that and get some of the trainees to fill out the surveys. They're online and it's not anything paper or anything...

Director Beach: I tell you what we can do. And we'll be happy to. We can ask them if they would like to participate...

Sherry: Right, of course, it's strictly voluntary.

Director Beach: You know I have to do that cause they're captive audience and I can't require it.

Sherry: Right. Absolutely.

Director Beach: That would mess you up anyway. But I would be happy to put it before them. We have computers in our library and we can give them the website and tell them where it is and if they liked to do that, to have at it.

Sherry: Ok.

Director Beach: And we can even encourage them but we can't require it.

Sherry: Right. I understand.

Director Beach: Will it be possible for us to see the results of your study?

Sherry: Absolutely. That was one of the other things that's going to be on the form that I send you to sign...is if you want a copy of the executive summary that we send out once this research is done.

Director Beach: Ok. Sounds good. I'd like to what they've got to say.

Sherry: If you check yes, we'll be sure to get that available to you.

Director Beach: Well I thank you much.

Sherry: Thank you so much and you have a good day.

Director Beach: I hope you do.

Sherry: Bye

Director Beach: Bye

APPENDIX H

INTERVIEW WITH CAPTAIN FRANK STOWE

Sherry: Thank you for taking time out of your day to talk with us about this project. Are there any more questions about it before I go on?

Capt. Stowe: Everything is clear.

Sherry: First thing we want to know, is tell us your job title and a little bit about the nature of the job that you do.

Capt. Stowe: My job title is Captain with the Winston-Salem Fire Department. What I do is I supervise a crew of anywhere from 3+ people at any given time. In the station, the actual crew consists of 3 people but on the scene it could increase on the fire scene. It's my job to direct the fire scene direct all activities here at the station. It's more of a management job than anything else.

Sherry: Ok. And how long have you been a fire fighter?

Capt. Stowe: This is my 20th year.

Sherry: Ok. Have you participated in the training of other fire fighters or a trainer?

Capt. Stowe: Yes. Actually as a captain I am solely responsible for all training of my personnel and any personnel in the department really. That is one of our sole responsibilities, training. We train on a monthly basis and we have to report that training on a monthly basis. We're required a certain amount of hours every year in different areas of training such as fire fighting, medical, HAZMAT. That is required by our department and by the state every year.

Sherry: How many people would you say you have trained since you have started training?

Capt. Stowe: Well, if I could put my finger on it, 54. Because I have been responsible with the last 3 recruits for the department and that's about 54 individuals. If we had to say overall, in the department, we are talking about 100+ people.

Sherry: So that's pretty good experience with the training. Can you tell us just a little bit about this facility and then a little bit about the training facility that you guys use?

Capt. Stowe: This facility is a fire station. It provides all the conveniences of you being at home such as dormitory, refrigerator, stove. Like I said it's just like being at home. We operate out of the station...this particular station houses two trucks, one engine and one truck which is also called a ladder truck or aerial unit. This particular station, we're responsible for the southside of the city. As far as training facilities, we train out of the station and all around the city. We don't have a particular fire training ground that we train at but we train all over the city at different locations.

Sherry: So if you...I've seen videos where they have a building like a simulation where they go. So you don't have anything like that?

Capt. Stowe: Not at this time in Forsyth County we do not. They are currently working on that here in Forsyth County. But to get that type of training we borrow other counties such as Davidson County or Surry County. We use their facilities.

Sherry: So when they come here, they've already had that kind of training?

Capt. Stowe: You mean as far as fire fighters? No any training that we can't provide for them here, we take them to other counties to borrow their facilities.

Sherry: Ok. This question is to get you to think about a traumatic event. So could you tell us ...it probably won't be on the scale of something like Katrina or 911, but the most traumatic type of event that you've experienced in your career.

Capt. Stowe: No it's not on the scale of Katrina or 911 but my most traumatic experience would be...actually there's two, and they both involve children that died in fires. The one event involved 3 children in an apartment building, in an apartment all in the same bedroom. That was the first one. Then the next one involved a child that was inside of a bedroom and an accidental fire happened inside the house. We got the child out, got him to the hospital, he lived for a few days but eventually died. And the family at that time asked myself and crew to be apart of the funeral.

Sherry: So how would you describe the role that played? Was this early in your career or was this later on?

Capt. Stowe: The first one was early in my career with the 3 children. That was within the first 8 years of my career. The last event happened within the last five years since I've been assigned to this particular station.

Sherry: Ok. So what was the role took because you probably had two different roles...

Capt. Stowe: The first role, in the first event, I was not an officer. I had fire fighter status at that time. So I was just a participant in the operation which was being orchestrated by another officer who was in charge at that time. The last event, which happened in the last five years, at this event, I was in charge of the event. So I was in charge of the actual fire ground, people going inside the building. The child was actually handed out to me and I performed the first CPR on the child. I actually picked the child up and took the child to the ambulance and rode in with the child. So the second event I was in charge of the event whereas with the second event I was just being told what to do at that time.

Sherry: Do you think it made a difference? With the first event, you were just following instructions. Do you think there is a difference on how the event impacted you?

Capt. Stowe: No. There was not any difference for the fact that I do have children myself.

I had children during the first event and now of course. It was the same. And it seems that the younger the victims are the more traumatic event is sometimes.

Sherry: Do you think...thinking back to when you were trained, because the first event happened when you were first starting out so training was still kind of fresh for you. So did anything that you learned in training help prepare you for something like that?

Capt. Stowe: The only thing you can be prepared for the actual strategy of the attack of how to get into the house or how to get into the apartment, how to get in to get to the people. I don't think there's any training for that emotional part that you're going to have to go through.

Dr. Seong: Even as of right now?

Capt. Stowe: Even as of right now. There is no training for that emotional stress that you're going to go through in that particular event. Your training is the part where you learn how to suppress the fire, how to get into the door. How to make your way around the dwelling itself. That's where your training comes into effect. That actual trying to get over that feeling that I've just rescued this child and this child has just died, there's not a training for that.

Sherry: After the fact, is there anything that you could have participated in to help you deal with it?

Capt. Stowe: Yes. We do have programs that are in place for those that wish to participate, we do encourage, especially our new fire fighters...we strongly encourage that they attend a session with a trained professional to talk to them about these events. So that it won't have a long term effect in their life.

Sherry: Now one thing that we've been hearing from the police, because I've done most of my interviews with police, is that when traumatic things happen, they hold it in. They don't let anybody know. They go in secret to talk to people. Is it different in fire fighting?

Capt. Stowe: Actually that is a problem with our profession, with the emergency profession, it's a problem. Especially, and I'm just being honest, especially with the men. It's a problem. We tend to believe that we're tough and that we can take it and it's okay. But it's not. Actually I feel that you're being more of a man or woman by saying "hey I need some debriefing. I need to talk to someone." Because what that does for me as your supervisor that means that I still get 100% out of you in a month from now as opposed to seeing you and asking you "what's wrong with you? You've been down a little bit lately. What's going on?" You're actually really being more of a man or a woman by saying I need some help.

Sherry: Now you just answered that from a supervisor perspective. Now before you were a supervisor, did you go to your supervisor and say I need help?

Capt. Stowe: Before I was a supervisor, I played the tough role. I played the role and didn't ask for help and just said "ok, I got this. I can handle it." And it didn't have any kind of a devastating effect on me or my career. It never leaves. I can tell you the exact position that those 3 children, when we walked into the room, the exact position each one of those children were in today.

Dr. Seong: So it was like 13 years ago, 15 some years ago and you remember everything about it?

Capt. Stowe: I'm going to live with that. Yeah. I'm sure I will.

Sherry: Well, that brings me to another question. So if you went into a similar situation, would that memory play a part on how you handle a new situation?

Capt. Stowe: No because we...strategically, no.

Sherry: Because the fire is different?

Capt. Stowe: Every fire is different. We have what we call a tactical operating procedure that we're going to use for every situation. It may be a different fire but we're still going to use the same tactics to address that fire.

Sherry: So what I'm hearing, it's still all about training and not so much about experience? Is that what you're saying?

Capt. Stowe: There's a combination of it. From training you get experience and then from experience you learn how to train. They work hand in hand. A person in recruit school, brand new to the department, we train them. They get some experience with what they're doing. Once they get their experience, they begin to understand the value of training, of doing that same training over and over. The more they repeat that particular training the more experience they have in that particular area. It just all works hand in hand. I've been here 20 years, I can never say I know how to do that and that's the best way to do it. There's no such thing.

Sherry: As far as when you were trained and the way fire fighters are trained now, can you compare and contrast?

Capt. Stowe: Yes, yes. The training then as opposed to the training now and even the training before me, it all has to do with technology and improvement of the safety of your equipment. For instance, 20 years ago we didn't have cameras on the truck that would help you search buildings. So now we do. 20 years ago, we didn't have the same devices on our air packs that we have now. Now it's all about safety. Anytime someone gets hurt in a fire, or there's a death in a fire, there's a good chance that there's going to be something they're going to improve in that technology to help prevent that in the future.

Capt. Stowe: Especially when people get lost in buildings. That's technology that's

always in the working. Nowadays they have technology where they can attach devices to each one of us so if we go down in a building somewhere then they can locate us. And they can be on the outside and just have a machine there, they can push the button to what your number might be and they can find out what your location is in that building. But as with anything, it costs money.

Sherry: And getting lost would have to do with the amount of smoke or something collapses and they can't get to you, things like that? Is that when you'd say a fire fighter gets lost in the building?

Capt. Stowe: Getting lost in a building...when you are in that building, most of the time, it's completely dark. You're operating on feel, you're operating on touching walls. You're operating on the heat that you might feel. Which is also possibly becoming a problem, making the gear better and better and you're not feeling as much heat as you used to. I can bring you in this building, smoke it up, simulate some smoke, I can put you in that closet right there, close the door and it's a good chance you're not going to find your way out of this room.

Capt. Stowe: It's a good chance of that. So that's what happens a lot of times. What happens, the majority of the time, once that person feels like they have been that route, panic sets in. Once that panic sets in, they become disoriented. And once disorientation sets in, we have a problem. We have a problem then. And that's what happens the majority of the time.

Sherry: Ok.

Capt. Stowe: I myself experienced a situation where we were in a basement fighting a fire and we pretty much had the fire under control, we were just doing a search. And one of the people with me basically ran out of air. Low air alarm went off and when your low air alarm goes off, you're not out of air then but it means it's time for you to retreat and get back to change your bottle. And when this happens, we're trained to follow the hose back out. As we were following the hose, at some point the hose had a loop in it. And we followed the loop and we ended back where we were. So we were like "okay, there's a problem here." It was dark of course, so that's when panic set in because his low air alarm was going off and now he was about out of air. And he ran out of air in the basement. And we finally figured out what had happened and we found the stairwell and we got him out.

Capt. Stowe: He had to go to the hospital but everything worked out okay.

Sherry: So if you're on the outside with the device where you can find a fire fighter, what point do you know to find, if they stop communicating?

Capt. Stowe: That's all apart of our TOPS and such. With the equipment that we wear, if you stop for a certain amount of time, your alarm is going to go off. If you're not moving for a certain amount of time, it's going to go off. That signal and a manual signal is different. It's two different sounds. If a fire fighter just goes down and doesn't move,

there's a sound to let us know, ok this person did activate their alarm. We got another person down. There's another sound if we hear it that we know that person is lost and they have activated the alarm but more than likely they have also called a mayday on the radio. And say "mayday, I'm down, I'm lost". So that's also part of the strategy that we use.

Sherry: So when you're training, do you guys train now more for things like that as opposed to when you started training you trained for other stuff. Has the training changed now that you've got the technology?

Capt. Stowe: The training has changed along with the technology yes. As a matter of fact, the last recruit school that we dealt with these recruits came in with more certifications than some the seasoned fire fighters because they're including more certifications in the recruit schools now.

Sherry: So for you as a trainer, what are your primary goals for your trainees?

Capt. Stowe: My primary goal is to teach that person to be a smart fire fighter. Not a hero. That's the one thing that I preach to them. You don't need to be a hero. You just need to be a smart fire fighter. And a smart fire fighter will get their recognition. When I say a smart fire fighter, stick to your training. Don't go outside your training. That's what happens in a lot of cases also. They go outside their training, they try to get this hero thing going. They try to go in alone, they try to go somewhere else in the building that they're not suppose to be as opposed to staying with the team.

Capt. Stowe: So the thing that I really preach to them is to be a smart fire fighter. A fire fighter that uses their training.

Sherry: In being smart, is there ever a time where instincts have to...you've got your training, but then your instinct is telling you "I need to do this." Is that being heroic or is that being smart using your instincts?

Capt. Stowe: Well it depends on your situation. As a fire fighter, policeman whatever the case may be, you really have to think quick. You have to think quick because you don't have many minutes, you have seconds to operate. So you have to think quick. You have to think is this going to save my life or am I going to be a rescuer or am I going to have to be rescued? You have to think about that also because let's say if we have 3 victims in a structure and the structure is pretty much on its way as bad as we would like to dash in there like the movies, and just run through that fire, I have to weigh it, I say "wait a minute, now if we try this, as much as we want to go in and rescue these people, there's no way for us to get in. There's just no way."

Capt. Stowe: Because there's 3 victims in there now. If we go in there's going to be 6 or 7. This other crews are going to have to worry about trying to come get us. So sometimes we have to weigh that. And it can be sad because of the decisions that you have to make.

Sherry: That's kind of what happen with 911. They rushed in...

Capt. Stowe: 911 was unique situation. Those fire fighters, they were in what looked like a rescue situation. That's what they were in. They had no idea as to what was going in that building that was going to eventually make it collapse. That building collapsing was the last thing on they're minds. Cause they had to think about that, they would not have gone in that building. It's just not on your mind that a building such as that, a steel building such as that, is going to collapse the way it did. So people may say what could they have done differently? Personally, I don't see anything they could have done different. Because the situation that was presented to them at the time, seemed to be safe. It seemed to be safe at that time.

Sherry: As far as training protocol, what are fire fighters called when they first start?

Capt. Stowe: They're called recruits.

Sherry: Ok. So what's the sequence and how long, and what are they called after they are finished?

Capt. Stowe: When a person comes to the Winston Salem fire department, they're called a recruit. That process is about 20 weeks. That process here starts out with their EMT training because they have to become certified EMTs before they go into the fire process. So once they go through that EMT process, they start what we call their fire school. And as I said, they're called recruits all throughout their fire school. Once they graduate, their called fire fighters. You may see on television, they're called "probie", they're called "rookie", whatever the case may be but no once they graduate they're fire fighters. Because they receive their NC fire fighter 1 and 2 pin. They're just as certified fire fighter as I am.

Sherry: So what are the...like you're a captain, what are the...

Capt. Stowe: The structure is that you start out as a fire fighter. Once you've been here for 3 years, you're eligible to take the promotional exam to become an engineer. Which pretty much, if you had to put it in the business world, you become an assistant manager and if I'm off then you're in charge. But at that point also, as an engineer, you're specifically in charge of the truck. You drive the truck anytime you're here. You're in charge of that, the apparatus itself. Then after that you become a captain. After you take the promotional exam again, if you're selected you become a captain.

Sherry: So as a captain, you're in charge of?

Capt. Stowe: As a captain, you're in charge of your crew and the truck. You're in charge of the entire truck and all the operations that go on at that fire scene. And the next step is a battalion chief. Now once that battalion chief arrives on the scene, they can say "well I'll take over the scene" or "you can keep it". And after battalion chief, you move into the administrative level which is district chief.

Sherry: Now a battalion chief is over...?

Capt. Stowe: A battalion chief is over a district. In this city we have 3 districts, Districts 1, 2, and 3.

Sherry: So there are 3 battalion chiefs?

Capt. Stowe: 3 battalion chiefs per day.

Sherry: And the district chiefs?

Capt. Stowe: The district chief is over the entire district on an administrative level.

Sherry: Ok.

Capt. Stowe: See now once you leave the battalion chief position...battalion chief down, we call suppression. District chief up, we call administrative. That's where the division is.

Sherry: So, administrative, I'm assuming, they don't go fight fire.

Capt. Stowe: No they do not. They do not go fight fire. They handle things such as the furniture you're sitting in, they make sure that gets purchased. The trucks we drive, they make sure they get purchased. Any kind of disciplinary action, any kind of personnel issues, just the administrative part of the operations.

Sherry: So as a trainer what gives you an idea that I have successfully trained this person and they're ready other than the fact that they get their pin? What tells you "I was a success as a trainer", they passed. Do you wait until they go into action to know if you were a success? How do you gauge?

Capt. Stowe: There's not any point where you can say you've been successfully trained. After 20 years, I can't say that I have been successfully trained because there's always a different way to do anything that I do. I can that a person is doing well or this is a good fire fighter. And I can define a good fire fighter as a person that when they go to the truck, they put their gear on the right way. They fasten their seat belt, they put their air pack on the right way. When they come off the truck they do the things that you ask them to do. When they're at the door about to go in and fight the fire, they have all their gear on the right way. They fight the fire in the pattern that they're suppose to fight it in, whatever pattern you ask them to use in that particular fire.

Capt. Stowe: See that's what a lot of people don't know. They think we just go in there and throw water on the fire, just squirt water. There's different ways to do that. Depending on where you are and what size room you're in. If you're in a confined room, you want a different pattern on you're nozzle that if the fire's down a hallway. There's technique to all of that. But you get in. if I come in and I say give me a fog, that fire

fighters knows how to open it up to that 90 degree fog without me saying, "naw, that's not what I said." They're not confused about it. That's when I can say I've got a good fire fighter.

Sherry: So it's not so much as whether the fire is put out exactly with no casualties, it's were things carried out the right way...

Capt. Stowe: Doing it the right way. When I say doing it the right way, follow protocol fighting your fire. Because some buildings you're going to save and some you're not. If you save it, save it following protocol. If you lose it, lose it following protocol. Because when it is all said and done, when I have to sit in that office and write it up, I have to write down every step that we went through fighting that fire and it needs to be in those steps, the books says we need to go through.

Sherry: So you said a good fire fighter follows protocol. We like to use the word champion for this research. Champion in the sense somebody that goes above and beyond just being a good fire fighter. They're excellent. So what characteristics... well first of all think of someone, I'm sure you had a mentor or somebody you patterned or that you felt like was excellent...

Capt. Stowe: Sure we all do.

Sherry: So what characteristics did they possess as being an excellent fire fighter?

Capt. Stowe: I would have to say they strictly go by the book. They do everything by the book and taught me to do things by the book. Taught me how to get ahead as far as like promotions. Don't come into the station and sit around. Get yourself a book. In other words, now you're a fire fighter, get ready for the next process. Start getting yourself ready. Go to the classes that you need to go to get certifications for the next level. Start working on those things. That's what I would call an excellent fire fighter.

Sherry: So they took initiative?

Capt. Stowe: Initiative, exactly. A person with initiative I can start to call excellent. If you have good initiative. Because when I do your evaluation, a lot of the evaluation is going to be on the fact that I did not have to tell you everyday "do this, do that" You show up at work on time, dressed the right way. Come in and do whatever you were suppose to do that day and even things you weren't asked to do such as pick up books teaching you about inspections. You don't do inspections yet but you want to learn about these things.

Capt. Stowe: So going above and beyond would be starting to learn the next level job if I could put it that way.

Sherry: So just basically, just thinking about your people, do you feel like you have excellent people, are they working on it? Do you see those characteristics?

Capt. Stowe: I see the characteristics in those people, yeah. I see those characteristics in them. Some have been here longer than others. I have one now fresh out of recruit school. I had him all through recruit school and now he's been assigned to my station but he's already showing characteristics of becoming an excellent fire fighter. He's already showing great initiative when he comes to work everyday. I don't have to come in and tell him to check on the truck or make sure you know where all the items are on the truck. I don't have to tell him to clean up the station or tell him to turn the television off and get some books out. I don't have to tell him those things.

Sherry: Do you think that's because he's new and he's still...

Capt. Stowe: I think that's because I taught them that during recruit school. And as I told them during recruit school, if you listen to these things I'm telling you, you will adjust well at your station. So he's just following that. Cause those are the things that I told him about how to adjust in your station. How to live in a fire station. That's something that they have to learn also.

Sherry: Cause you guys are here how many hours a week?

Capt. Stowe: These guys today reported here this morning at 7:30 and they'll get off tomorrow morning at 7:30. So it's a 24 hour day. 10 days a month.

Sherry: So then they come back?

Capt. Stowe: The ones that are working today, they'll work today and they'll come back on Sunday. Then they'll leave Monday morning and they'll come back on Wednesday, they'll work Saturday, then they'll work Monday then they'll work Thursday and then be off for four days. Every 3 weeks, you're off 4 days.

Sherry: Listening to it, it sounds...but then you think about the stress level being here those 24 hours.

Capt. Stowe: Well you think about this. I tell people I work 10 days a month. And they say "is that all you work, is 10 days a month?" I say "yeah I work 10 days a month but I want you to know this, you work a 40 hour week, times 4 is 160 hours. I work those 10 days a month at 24 hours a pop and that's 240 hours. I'm still 80 hours more than you a month that I work." And then say "well, you know you sleep a lot of that." I say "I tell you what then, since you say I sleep a lot of that, let me tell you what my sleep is. My sleep is kind of lying down and trying to guess when the bell might hit. Now if you can call that sleep then I welcome you to try it." At anytime, 2, 3, 4, 5 in the morning boom, you got a bell.

Capt. Stowe: You got to be up, on the truck and at that scene in 4 minutes. At 3 in the morning, out of the bed, on your truck and on your scene in four minutes.

Sherry: And putting your equipment on to?

Capt. Stowe: Yes. See I don't even count that anymore cause that's automatic. It's a thing where I can wake up, and walk into my equipment out of the door. I'm walking and putting it on. So we're talking 4 minutes.

Sherry: I don't think I can get dressed that fast.

Capt. Stowe: You'd be amazed at how fast...now that's not counting the time you called 911, that's from the time the dispatcher gets the call and gives up the alert. We aim at 4 minutes from that time to be on the scene working.

Sherry: Is that why the fire trucks fly down the street?

Capt. Stowe: Actually, a lot of people think that we really really fly. I don't allow and most people don't allow people to drive but so fast. I don't allow to drive but so much over the speed limit if any at all.

Sherry: Because you don't want to have a wreck on the way..

Capt. Stowe: The big thing there is knowing your streets. Just knowing your location in your area. And you get there just as fast, and we have learned this, you get there just as fast doing it that way than speeding, missing turns or missing your stop. And you lessen the possibilities of an accident. You can't expect people to move because you're coming cause a lot of people, they're confused. You got all these lights and noise behind you, you get a little confused on how to move. So we also have to drive with the other drivers in mind also.

Sherry: Is there any kind of new technology being introduced to the fire stations here in Winston? Because there's some out there. Just in my research I've seen some things so I was just wondering.

Capt. Stowe: The thing now that we're dealing with are new type of air packs, new types of gear. Our gear is not as bulky but still just as safe. As far as the new air packs, we're dealing with systems where as to where some of our safety devices we have to look down and try to see where it was now its set up to where it's in our mask with lights that we can see to let us know what's going on. You have to be able to look down and see it. Technology such as that we're dealing with. Other than that, just right off hand, a lot of small stuff.

Capt. Stowe: We looked at something just the other day, a compass that you attach to your gear. You attach the compass to your gear and prior to going in, it has 3 different setting on it. One setting would be the direction of where your point of entry was, the other setting tells you if you are North, South, East, or West, and the other setting is which side of the building you are entering on, side 1, 2, 3, or 4. So with all those settings, that's another thing that they're using to help bring down the amount of people that get

lost in the buildings.

Sherry: So it has a light on it or something?

Capt. Stowe: Yes. There is a light on it.

Sherry: How has 911 or Katrina affected...I know it has an impact...but what do you think about that? How has it changed because you've been a fire fighter before and after...

Capt. Stowe: How has it changed the industry itself? 911 made the biggest change of course. 911 brought about what we call NIMS, National Incident Management System. With 911 what they found out, well it's always been known but never to that level, what they found out was that departments couldn't communicate because what one thing meant here in Winston-Salem, and what it meant in NY was two different things. So what 911 brought about was the National Incident Management System. Where an incident now, fire fighters from all around should be able to communicate the same way. Using the same terminology on the scene.

Capt. Stowe: It's not a thing of your 10-4 is different from their 10-4. Which here 10-4 means "OK." As where their 10-4 may have meant "I'm on the scene".

Dr. Seong: So that is within the fire department only, not across the fire department and the police?

Capt. Stowe: Actually the goal of the entire program is that all of us are on the same page.

Sherry: Did they just get called?

Capt. Stowe: Yeah, all on the same page talking the same way.

Sherry: That was less than 4 minutes. Cause that bell...

Capt. Stowe: They need to be out of here in some seconds. They need to be out of the building in some seconds. Four minutes is to get to the scene.

Sherry: Oh.

Capt. Stowe: Four minutes is to be on scene.

Sherry: Ok because I just heard the bell and then the truck going.

Capt. Stowe: In four minutes I should have a nozzle in my hand or we should be hitting a front door. That's the 4 minutes. Not to leave the building. If it takes you 4 minutes to leave this building, I'm going to fire you.

Capt. Stowe: Each station has their individual what we call "tone". Each station does. So that no one gets confused. We have two companies, a truck company and an engine company. And is one has its own different tone. And then if it's a combination call then it's a combination tone that would go off.

Sherry: As a trainer, what kind of advice you give to other trainers? Maybe they're just starting out in training, to help develop competent fire fighters.

Capt. Stowe: First of all, if you're going to be a trainer, you must...you have to be a person with patience. If you don't have patience you can't train. It's not even possible. Training is almost on the level of having your family. Having your children. It's almost on that level because when a child comes into this world they don't know anything. So it's up to you to teach them. All these things, it's up to you to teach them what's right, what's wrong. How to do this or that. Same thing with the recruit. And their looking at you just like that. I've often told them that, "you all are looking at me like your my children". Cause they are looking at me like how do I do that.

Capt. Stowe: But it's up to you to realize that some are going to get it quicker than others also. And then you have to understand that for some it's just going to almost be impossible for them to get it. But that's the person that you have to really work on. That's your job to make sure they get it. That's your job. So to be a trainer, number 1, you have to have great, great, great patience. You also have to be very understanding that these people are coming into an environment that they don't have the faintest idea about what's going on. They have no idea. You have some guys that come from volunteer stations. They've been doing it for a long time and then you have others such as myself, I came from a career in grocery retail.

Capt. Stowe: I knew nothing about fire fighting. So everything was new to me. And you have to be able to separate those two groups of people. That's where your patience really kicks in. If there is anything else, a good trainer, they have to be a confidential person. Very confidential because they come to you with a lot of problems also. After they get to know you, they trust you. You have to be the kind of person, because they're not going to always talk about fire related things. They talk to you about home, personal stuff in their life, and they trust that you're the figure here that can help them. That can talk to them. So you have to be a very trustworthy person. Very trustworthy. It really does, it gets personal.

Sherry: Well, you guys are living here...

Capt. Stowe: Just in this particular career now, I've watched people children born, go off to college, just in that span. I met the child maybe at three or four years old. These guys here, many of them remember when my son was born. They remember when my daughter was a little girl and now she's graduated college. You really get to know one another. I spent more of my life for the past 20 years at the fire station than I have at home. I tell people sometimes, "I spend more time with you all than I do with my wife." and they say "well how is that?" I say at anytime in a 24 hour period I can tell you exactly where anyone in the station is. I know "Sam's out there in the engine room or Fred, he's

over in the kitchen area. I can tell you that. But in a 24 hour day, I can't tell you exactly where my son is or exactly where my wife might be or where my daughter might be.

Capt. Stowe: I don't spend 24 hours a day with my wife. She's at work or she's here or there and I'm here or there. But I spend a solid 24 with these people here. So we really get to know one another. So it just becomes a thing of its not a friendship, it's more than a friendship. It's beyond friendship, it's an extended family.

Dr. Seong: Being so personal with each other, if anyone has any kind of problems in terms of dealing with a situation, do they usually talk to you about it?

Capt. Stowe: Yes. That's apart of your job as a supervisor. People come to you and they talk to you tell you what things they have going on in their life. Then you take the next step to get them help if they need it.

Dr. Seong: Being in this industry for more than 20 years, have you seen many people not being able to deal with traumatic situations and decide to leave?

Capt. Stowe: Yes. We have had that still happen. People say they just couldn't deal with the stress. And a lot of times this was a combination of the stress of the job and outside or personal event. And the combination of the two just didn't work out.

Dr. Seong: Looking back, hindsight, were there any kind of symptoms you were able to notice, "ok this person is getting down, I should help them." Were there any kind of symptoms?

Capt. Stowe: No not really. As we talked earlier, we can cover up some of that. And the older you are, sometimes the better you cover up because you really know how to hide it. And all of a sudden it just hits and we're like "what? what do you mean? We didn't know you were going through that."

Dr. Seong: You mentioned that those two fire that you personally experienced, let's say I'm a rookie recruit under you and you took me to the fire and it happened that there were children involved. And I got frustrated because this is my first fire ever and this is very traumatic in any sense. And after we got back to the station, I got frustrated and it's difficult for me to deal with this situation and I talk to you but still difficult. What kind of things do you wish could be in some kind of training program that can help me to deal with this kind of situation?

Capt. Stowe: We do have a program in place for that. If an employee gets to a point where they really can't handle it and they really need some help, we do have outside agencies that we have contracted that the employee, they will call, set up an appointment, and go from there.

Dr. Seong: But what I am saying is before it happened, if there were any kind of training program that prepares me to mentally deal with this kind of situation...

Capt. Stowe: I don't believe there is a training program to prepare you for a 10 month old baby that's been burnt to a crisp. There's absolutely not a training program for that. Actually I wouldn't send around flashing pictures to a person of an event like that. I wouldn't call that training. I would call that...I don't know what I would call it. But I wouldn't call it training. You just can't. Now what I tend to do whenever I have events like that, if I have young firefighters with me, I'll say to them "look you want to come on in here with me so we can remove the body. I think it's something you need to see because you may see more of this in your career."

Capt. Stowe: If they say yes, no problem. If they say "not right now captain", I don't have a problem with that either. At some point and time, I'm going to say to them, "look, we had an event like this last year, I'm going to have to insist that you come in and help out." We need to know if you can handle this.

Dr. Seong: If I can sat this, that could be a part of training for the future event?

Capt. Stowe: Yes. Yep you can say that. Just to go back on the last kid that I had, I think he was four or five months old. I still have his baby picture in a picture frame at my house now. The way it was put there, I came home that next day and told my son what had happen and after the funeral they passed out pictures of him. And I came home from the funeral and he saw the program with the picture and he said "Dad, put his picture beside mine." And that's where it is today. So your family gets to share and you try not to take it home. You try your best not to take it home but it gets a little hard sometimes not to take it home with you sometimes.

Capt. Stowe: No matter what happens on your shift, your family expects you to be just dad or husband when you get home no matter what you've gone through. But they know when you need a moment. And the longer you're around, the more they recognize "Dad had this yesterday, let's let him chill" or "we saw this on the news last night and he was there".

Dr. Seong: So you have taken personally those things to home?

Capt. Stowe: Yeah, yeah, yeah

Dr. Seong: And in your perspective family support was one of the greatest...

Capt. Stowe: Yeah, there's times you got to go home and hug your children. And sometimes not even because of a tragedy, but sometimes it's because you get to see how other children live and it's not good. No one is prepared to say "I'm going to have the fire department come to my house tomorrow and I'll be ready." You don't know it's an accident. So you get to go sometimes and see how bad other people are living and it makes you thankful of how your living. And sometimes it's not because of poverty, it's not because of that. People just sometimes don't care about how they live and they don't care about how the children are living.

Dr. Seong: I would imagine that single fire fighters have some difficulties because they don't have family to support them.

Capt. Stowe: And now that you've said that, a lot of times the young single fire fighters are the ones that really attached themselves to people like myself, people who are married and have children. They really attach themselves and almost become like children to you.

Sherry: Well your answer kind of wrapped up my final question, which was how did you personally deal with these traumatic experiences and I guess what I'm hearing is you took some time for yourself, your family kind of helped you...cause you mentioned there's no training to deal with this, so that's how you have had to deal with it.

Capt. Stowe: Right. You rely on your faith, your family, and friends. That's what you rely on.

Dr. Seong: Do you do simple things like hobbies to try to brush it off or try to forget about it?

Capt. Stowe: I don't want to say that I'm some tough guy or anything, I don't have a lot of problems with it at this point. And mainly that's because of my faith. I believe. I pray about what I do and I go through what I go through. I get relief from that also. That's where I get my main relief as a matter of fact. Knowing that I did my best and I didn't short change the people. I did my very best and this was the outcome.

Dr. Seong: So trying to be a role model for other fire fighters to overcome that kind of disaster...

Capt. Stowe: Yes. They're looking at how I'm going to handle something as their leader. And I can't be out there, I don't want to call it "unprofessional", I have to be the one that they can lean on.

Sherry: Alright. I know you said you had to be somewhere at 3 and it looks like you might be a little late but we appreciate your time.

Capt. Stowe: This was interesting.

Sherry: Have you ever been interviewed before?

Capt. Stowe: Yes but not in this capacity. Just for news and for programs...

Dr. Seong: It was excellent. Thank you so much.

Sherry: We appreciate it and we thank you so much.

Capt. Stowe: No problem.

APPENDIX I

INTERVIEW WITH DR. THOMAS STURTERVANT

Tell me about your job and what exactly that you do.

I am a program manager for the emergency training Institute which is a part of the Texas A&M University system. I am in charge of curriculum development, certifications and firefighter training. I have been in the field for over 25 years.

How long have you been training of the firefighters?

In the firefighter service you begin training right in the beginning. The fire service as part of its goal to train each other so in that respect I've been training more than 25. Officially in the higher ranks I believe I started training in the mid-80s.

Tell me about your facility.

We have 138 acre fire training facility. We trained firefighters throughout the state of Texas as well as government agencies, and other agencies across the country and around the world. I think our numbers are around 70,000.

What was the most dramatic disaster that you have experience?

Never had one.

Have you experienced any disasters on the level of 9/11 or the Katrina disaster?

Never have.

Have any of the first responders that you train experienced as a disaster on the scale of 9/11 or Kerry came Katrina?

Oh I believe so but they've never actually talked about it.

What type of training programs that you've experienced or put together that help individuals deal with large-scale disasters?

I have taken over the span of my career several management and tactical training courses that help prepare individuals for such disasters. I have taught and then in the development of a variety of courses that have touched on various aspects of disasters including training that deals with fire risk assessment and rescue which its design had a little bit more built in hands on application. About a couple of years ago I was on a kickoff team for what we called it strike team concept. And what was unique about that was that it was a training designed to show others how to set up a strike team within a state and we operationalize jurisdictions or the level of response. Something beyond a municipal response that require mutual aid, it went beyond that. But, It wasn't as significant because of the mobilization abilities of a federal Team (meaning by the time we would get their with in a 24 hour period most of it would be over. The strike team would be somewhere in the middle we could get their relatively quickly, we had capabilities above mutual aid and

was less capable than the federal teams which had a massive number of people and more structure. I helped develop that curriculum and the concept was to go in and help other states who wanted it and train their people set up the strike teams.

One of the goals of your training that you actually implement?

I'm responsible for all curriculum development here at the center and we have a very broad range of coursework. We have municipal firefighting to industrial to hazmat, two Marine firefighting, Officer development. So we run the gamut but we don't do swift water rescue training and there might be a couple others that we don't do but pretty much what do it all.

What a swift water rescue?

That type of training focuses on certification and competencies directly targeting open water types of rescue.

What is the overall goal that you're looking for your training to achieve a sense of who meet the needs of various firefighter programs?

let me use course 472 to answer that question and in course 472 it has four levels very to strength level's overall goals: 1. Awareness, 2. OPS, 3. Tech., 4 Hazmat.

At the awareness level is recognizing how you make decisions. Ops is learning how to keep everything in it and defensive ops-keeping things from getting worse. Tech-mitigating an issue and hazmat deals with leadership and administration. We do all of that for everybody. Yes we do it we do it for everybody at various levels. If someone comes to me and says they want to be a firefighter we put them in the municipal program. If it's dealing with city development teams management we put them specifically and programs geared towards that. I know that's a broad answer but we you run the gamut we do it all.

What are the current protocols, sequences?

we do about 168 courses that I have all my books and they range from a four hour class to a two hour course to a six-hour course and most of them or 40 hour courses. We have prerequisites for most of the courses. If you want to be a fire officer you have to take a fire to Officer course. If you want to do a management 400 level course you have to do a 300 level course

What type of delivery methods do you conduct your courses? Do you use face-to-face lecture style, self-paced online or simulations ?

I can answer that real easy because we have got a very big effort over the last two years called a CRR-curriculum review and revise process. Our division director required that we review and revise all of our courses over a five-year period and we're two years into this. So as we are reviewing things we have some very specific criteria that we use to

determine what level its act and were going to take it. At a minimum every single course has to have a behavioral object is and we based those behavioral objectives on Bloom's taxonomy. So we ensure that we get the object is where they ought to be by using the right level of blooms in the content will have to follow that so there's a nice alignment of there. And ultimately, we will require a test on everything that we do whether or not it's manipulative skills or written and it is usually both and again that aligns itself of blooms taxonomy. So if we were to say with the fire officer three individual we would be able to develop a budget during the course, we would go over here is how you develop it and the assessments that you use and oddly enough they'll have to develop a budget. Now during that whole process, we really focus on reducing lecturers, because they really don't like talking heads. We do like an adult facilitated learning approach. We have lots and lots of activities. When we train our instructors would tell them you're not the smartest cookie in the classroom that the sum total load those in the classroom are a lot smarter than you are. That being said our lower in classes have a lot more lectures than the higher-level courses.

APPENDIX J

**LIST OF INTERVIEWEES AND RESULTS FROM THE
WEB SURVEY**

No.	Name	Gender	Experience	Field	Trainer experience
1	Captain Terry R. Jones	Male	>20	Police Captain	Yes
2	Brian K. Deaver	Male	>20	Supervisor	Yes
3	Bill Kaiser	Male	10-20	Police Training Specialist	Yes
4*	John Markovic	Male	<1		No
5	R. Grassi	Male	>20	Retired	Yes
6	F. Czarnecki	Male	10-20	emergency physician and police physician	Yes
7	Thomas Popken	Male	>20	Detective	Yes
8	Cliff Gordon	Male	10-20	Manager, Protective Force Operations	Yes
9	Roger Miller	Male	10-20	Tactical Trainer	Yes
10	Luis Taborda	Male	10-20	Supervisor Traffic Homicide (Sgt.)	Yes
11	Peggy Schaefer	Male	>20		Yes
12	Tim Steines	Male	>20		Yes
13	Gregory DiFranza, PhD	Male	>20		Yes

*Interviewee #4 was omitted in the data analysis for the lack of experience as a trainer.

	Questions	Interviewee No	1	2	3	4	5	6	7	8
1	I set realistic but challenging goals for myself.		4	5	4		3	5	5	4
2	I say things to myself to help my job performance.		5	4	3		4	3	5	3
3	While performing a task, I visualize successful past performances.		5	4	3		3	4	5	4
4	<i>My attention wanders during any type of training.</i>		2	2	2		2	3	3	2
5	I practice using relaxation techniques at work.		3	3	2		4	2	3	3
6	I practice a way to relax.		4	3	2		3	5	3	3
7	During a task, I set specific result goals for myself.		4	4	3		3	5	4	5
8	When the pressure is on during a crisis, I know how to relax.		4	3	3		3	4	4	3
9	My self-talk during an emergency is negative.		1	1	2		2	1	1	2
10	<i>During a task, I do not think about my performance much, I just let it happen.</i>		2	4	2		3	2	4	2
11	I perform my job without consciously thinking about it.		3	4	3		3	2	4	3
12	I rehearse tasks in my mind before performing them.		4	4	3		4	5	4	4
13	I can raise my energy level on the job when necessary.		5	5	3		3	5	4	5
14	During a difficult task, I have thoughts of failure.		2	1	3		2	2	2	2
15	I use my time off to work on my relaxation techniques.		4	3	1		3	4	2	3
16	I manage my self-talk effectively during an emergency.		5	5	2		3	5	3	5
17	I am able to relax if I get to nervous in an emergency.		5	5	3		3	5	4	5
18	I visualize my tasks going exactly the way I want it to go.		4	5	2		4	5	4	5
19	I am able to control distracting thoughts when I am working.		4	5	3		3	5	4	4
20	<i>I get frustrated and emotionally upset when work does not go well.</i>		1	2	3		3	1	2	2
21	I have specific cue words or phrases that I say to myself to help my performance during an emergency.		4	4	1		4	3	4	3
22	I evaluate whether I achieved my work goals.		4	4	4		4	5	4	4
23	During training, my movements and skills just seem to flow naturally from one to another.		4	4	4		3	4	3	4
24	<i>When I make a mistake at work, I have trouble getting my concentration back on track.</i>		1	2	3		2	1	2	2
25	When I need to, I can relax myself in an emergency in order to get ready to perform.		5	5	3		3	5	4	5
26	I set very specific goals for my tasks.		3	4	3		3	5	4	3

27	I relax myself to get ready for training.	4	5	2		4	3	4	3
28	I psych myself up during a crisis to get ready to perform.	3	5	4		2	1	3	3
29	During training, I can allow the skill or movement to happen naturally without concentrating on each part of the skill.	2	4	4		3	4	3	4
30	During an emergency, I can perform in an "automatic pilot" mode.	5	4	4		3	3	3	4
31	<i>When something upsets me during work, my performance suffers.</i>	1	2	3		3	1	2	2
32	<i>I keep my thoughts positive during a task.</i>	4	5	3		3	5	4	4
33	I say things to myself to help my on-the-job performance.	5	4	2		4	3	4	3
34	During a task, I rehearse or try to feel my performance in my imagination.	4	3	2		4	1	4	4
35	I practice ways to energize myself.	4	4	3		3	4	3	3
36	I manage my self-talk effectively during a crisis.	5	5	2		3	5	4	4
37	I set goals to help me use training time effectively.	4	5	3		4	5	4	5
38	<i>I have trouble energizing myself if I feel sluggish during training.</i>	2	1	3		3	1	2	2
39	When things are going poorly at work, I stay in control of myself emotionally.	5	5	4		3	5	5	5
40	I do what needs to be done to get psyched up for emergencies.	2	5	4		2	5	4	3
41	During a crisis, I do not think about performing much, I just let it happen.	2	4	3		3	3	4	3
42	During a training exercise, when I visualize my performance, I imagine what it will be like.	5	4	3		4	4	4	4
43	<i>I find it difficult to relax when I am too tense in a crisis.</i>	2	2	3		3	1	2	2
44	<i>I have difficulty increasing my energy level during training.</i>	2	1	2		3	1	2	2
45	During training, I focus my attention effectively.	5	5	4		3	5	4	5
46	I set personal performance goals for my tasks.	4	5	3		3	5	4	4
47	I motivate myself to train through positive self-talk.	4	5	2		4	4	4	4
48	During training, I just seem to be in a flow.	4	5	3		3	4	3	4
49	I practice energizing myself during training sessions.	3	4	2		3	3	3	4
50	<i>I have trouble maintaining my concentration during long hours at work.</i>	1	2	3		3	1	2	2
51	I talk positively to myself to get the most out of training.	4	4	2		4	4	4	3
52	I can increase my energy to just the right level for an emergency.	4	5	3		3	5	3	4
53	I have very specific goals for a task.	4	5	3		3	5	4	4
54	During a crisis, I perform instinctively with little conscious effort.	4	5	4		3	3	4	4

55	I imagine my job routine before I actually do it.	4	4	2		4	4	4	4
56	I imagine messing up during a crisis.	2	1	2		2	1	1	2
57	I talk positively to myself to get the most out of my job.	4	4	2		4	4	4	3
58	<i>I do not set goals for training, I just go out and do it.</i>	2	3	3		2	1	3	2
59	I rehearse my performance in my mind and during actual tasks.	4	3	2		3	3	4	3
60	<i>I have trouble controlling my emotions when things are not going well at work.</i>	1	2	2		3	1	2	2
61	<i>When I perform poorly at work, I lose my focus.</i>	1	2	2		3	1	2	2
62	<i>My emotions keep me from performing my best on the job.</i>	2	1	2		3	1	1	2
63	<i>My emotions get out of control under the pressure of a crisis.</i>	1	1	2		2	1	1	2
64	During training, when I visualize my performance, I imagine watching my actions as if on a video replay.	4	3	2		3	4	4	4

1–Never, 2–Rarely, 3–At times, 4–Often, 5–Always.

Reverse score questions are in italic (14 questions in total).

APPENDIX K

**SCORING METHOD FOR THE TEST OF PERFORMANCE
STRATEGIES (TOPS) QUESTIONNAIRE**

Reverse score items: 4, 20, 24, 31, 32, 38, 43, 44, 50, 58, 60, 61, 62, 63 – 14 questions

1. Practice Strategies (Score range 4 to 20)
 - Goal setting: $1 + 37 + 53 + 58$
 - Emotional control: $20 + 39 + 60 + 61$
 - Automaticity: $10 + 23 + 29 + 48$
 - Relaxation: $5 + 6 + 15 + 27$
 - Self-talk: $2 + 16 + 47 + 54$
 - Imagery: $3 + 12 + 42 + 64$
 - Attentional control: $4 + 19 + 45 + 50$
 - Activation: $35 + 38 + 44 + 49$
2. Competition Strategies (score range 4 to 20)
 - Self-talk: $21 + 33 + 36 + 57$
 - Emotional control: $24 + 31 + 62 + 63$
 - Automaticity: $11 + 30 + 41 + 54$
 - Goal setting: $7 + 22 + 26 + 46$
 - Imagery: $18 + 34 + 55 + 59$
 - Activation: $13 + 28 + 40 + 52$
 - Negative thinking: $9 + 14 + 32 + 56$
 - Relaxation: $8 + 17 + 25 + 43$

APPENDIX L

**A PAPER ABSTRACT SUBMITTED TO ANNUAL
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SOCIETY FOR THE PSYCHOLOGY OF SPORT &
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**Performance excellence among the first responders:
An implication for sport psychology specialist**

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Abstract

Developing excellence among the first responders has much in common with developing excellence in sport. Excellence in first responding operations, just like in sport, requires tremendous mental and physical strength. Like an athlete in highly competitive events, the first responders must decide the best course of action in a high stress environment. More often than not, the first responder must maintain their physical stamina and mental concentration for the extended period of time.

Historically, the field of sport psychology has always maintained an interest in performance excellence, focusing on optimizing the performance of athlete by implementing mental skills training (Miller & Kerr, 2002). As a result, the field has been saturated with theoretical and practical knowledge with regards to developing mentally tough athletes, as well as the mental skills these athletes used to achieve optimal psychological states (Greenleaf, Gould, Dieffenbach, 2001; Williams & Krane, 2001). Based on what has been learned about excellence in the sport context, contemporary sport psychology researchers start to tap into the excellence in other domains, such as performing arts (e.g., Hays, 2002), police (e.g., Le Scanff & Taugis, 2002), military training (e.g., Ross, 2007), and surgical training (e.g., Hauge, 2004).

The present study targeted the first responders (i.e., firefighter, police officer, and EMS personnel) who are responsible for providing first hand aid during the massive disasters. A total of six veteran first responder trainers participated in the interview study. Out of six, three were directors of national police officer training institutes, two were firefighter trainers, one was director of emergency training institute, and one was a detective. During the interview, the participants were asked to describe what it meant to be a champion in their first responding profession and elaborated on how to develop those excellent first responders.

The results showed some clear resemblances as well as unique differences between performance excellence in sport and among the first responders. It was concluded that there are extensive opportunities for sport psychology researchers to contribute to the advancement of first responders training. Finally, the practical implications relative to the unique challenges when transferring sport psychology knowledge to other domains, will be addressed.