



ILLINOIS FIRE CHIEFS ASSOCIATION

Dedicated to excellence in the Fire Service

Post Office Box 7 • Skokie, Illinois 60076-0007 Phone (847) 966-0732 • 1-800-662-0732 • FAX (847) 966-0782 Website: www: Illinoisfirechiefs.org

November 9, 2009

Gary Kistner, Program Coordinator
Off Campus Academic Programs
Southern Illinois University Carbondale
1365 Douglas Drive
Carbondale IL 62901

Dear Program Coordinator Kistner:

On behalf of the Illinois Fire Chiefs Association, I am very pleased to provide this letter of support in the development of the *Master's of Science in Fire Service* and *Homeland Security Management*. Further, we are in support of the practicum exercise which would require the students to contact and work with a unit of local government which will enable them to apply what they have learned while in class.

Over the years, the Illinois Fire Chiefs Association, along with other emergency service organizations, have benefited from the training and education that the Southern Illinois University has provided. It is essential that the members of emergency services in Illinois continue in that vein of receiving the best education possible to enhance their abilities in the arena of public safety. The proposed program will be a huge benefit to the current and future emergency service personnel as we move forward in addressing our global issues in Homeland Security.

Our Association wishes to acknowledge full support of the Master's of Science in Fire Service and Homeland Security Management.

Sincerely,

Robert M. Buhs

Hart M. Balu

Executive Director, Illinois Fire Chiefs Association

cc: IFCA Presidents

Attach Son Control

National Professional Development Matrix Supervisory Fire Officer (FO I) Fire Prevention Officer

	,		•
1037	SFO-10 Understanding and implementing the basic principles of health, fitness and wellness.	Personal Health and Wellness (A)	
1031		Basic Computer Applications (A)	
1035, 1037	SFO-08 Understanding and using the basics of mathermatical models; elementary concepts of probability and simulation; emphasts on business applications.	Beginning and Intermediate Algebra (A).	
1031, 1037	SFO-07 Understanding basic principles of social groups, forces, structures, processes, institutions, and events.	Introduction to Sociology (A), Community Risk Reduction anf the Fire (Service (FBC)	
1035, 1037	SFO-06 Understanding basic principles of areas of psychology; physiology, cognition, motivation, learning, intelligence, personality, and mental health.	General Psychology I (A)	
1033, 1037	ISFO-05 Understanding basic principles of ingeneral chemistry including the metric system theory and structure.	Chemistry (A)	ALSRHMI (R247), CER (R233)
	SFO-04 Understanding about ecosystem construction and destruction, energy production and use and waste generation and disposal.	Biology or Physical Science (A)	
1021, 1031, 1033, 1087, 1041	ISFO-03 Ability to write accurate and clear 11 jetters, memos, technical reports and business communications.	Business or Written Communications (A)	FSC (R107)
1021, 1033, 1035, 1037, 1041	SFO-02 Understanding and using basic interpersonal, group and public communication skills.	Public Speaking or Oral Communications (A)	FSC (R107)
1031, 1035, 1037	SFO-01 Ability to write detailed prose: 1	English Composition (A)	FSC (R107)
Superior Palaring NEPA Standards 3		Section (Constitution of the Constitution of t	NEA Courses AGERecommendations
	Spiring Statement of the statement of th	Equation	

Supervisorye Officer (FO I) Fire Prevention Officer

nost	Education & A. S.		ompetendras Standards
	A COLLEGE CONTROL OF THE COLLEGE CONTROL OF THE COLLEGE CONTROL OF THE COLLEGE		
CASELLA SELLA SELL	American Government (A) Political and Legal Foundations of Fire Protection (FBC)	SFO-11 Understanding the basic concepts of government at the federal, State, and local levels.	
ED (R123), EL (R125), TPM (R342), CLTO !Human Resource Management (A) (Personnel Management for the Fire (R315) (FBC)	Service	ISFO-12 Understanding functional areas of 1021 human resource management and laws; job lanalysis, testing; performing interviewing, selection, training and performance evaluation.	1021
	Fire Behavior & Combustion (A) Fire Dynamics (FBC) Fire Investigation & Analysis (FBC)	SFO-13 Understanding basic theories and incendiary fundamentals of how and why fires start, spread and are controlled.	1001,1033, 1035
PRI (R 102)	Building Construction (A)	ISFO-14 Understanding the components of building construction related to fire and life safety; including inspections, pre-incident planning and emergency operations.	1001, 1021, 1031, 1033, 1035, 1037
	Fire Administration I (A) Fire and Emergency Services Administration (FBC)	SFO-15 Understanding and performing basic responsibilities of company officers including supervision, delegation, problem solving, decision-making, communications and leadership.	
Benchmark: Associates in Fire Science, Fire Administration, or Fire Technology			

1/9/08

National Professional Development Matrix Managing Fire Officer (FO II) Fire Prevention Officer

	ED (R123), OTP (R331)				_		FSC (R107)		NFA Courses - AGE/Recommendations	Edit
	Fire Service Management (A) Fire and Emergency Services Administration (FBC) Political and Legal Foundations of Fire Protection (FB) Law (A)	Public Finance (A) IBudgeting (A)	Report Writing (A)	Ethics and Values in the Workplace (A) MFO-05 Understanding ethical issues; Personnel Management for the Fire Service including whistle blowing, discrimination, (FBC) social responsibility, honesty in the workplace, and setting appropriate lworkplace standards.	Critical Reasoning (A) Research MFO-04 Understanding and using (A) Applications of Fire methods for critical analysis of arguer Research (FBC) Analytical in Approaches to Public Fire Protection (FBC) scientific reasoning, and argument Structure.	;U.S. Government (A)	Public Speaking (A) Communication (A)	English Composition (A) Statistics (A) Analytical Approaches to Public Fire Protection (FBC)	Secondarios (Some Secondarios	Educations - A Service Control of the Control of th
MFO-09 Understanding the basic legal laystem structures and content as they jaffect local government and employers.	IMFO-08 Understanding the basic principles i 1037 of organization and management as applied to fire service agencies; apply theories to management problems.	MFO-07 Understanding accounting linformation as part of the control, planning, and decision-making processes.	IMFO-06 Understanding and demonstrating 11035, 1037 analysis, research, problem solving, organization, and expression of ideas in typical staff reports.	MFO-05 Understanding ethical issues; including whistle blowing, discrimination, social responsibility, honesty in the workplace, and setting appropriate workplace standards.	MFO-04 Understanding and using basic methods for critical analysis of arguments; including inductive and statistical inference, scientific reasoning, and argument structure.	IMFO-03 Understanding American political philosophy, social justice, and systems of American politics.	Orali MFO-02 Understanding and practicing interpersonal communication skills II; including perception, listening, and conflict resolution.	JMFO-01 Understanding and using statistical, 1031, 1035, 1037 data for basic descriptive measures, statistical inference and forecasting.	Fire Office (Pre-english Company)	alphaethae
1031, 1037	11037	1021, 1035, 1037	1035, 1037		1031, 1033, 1037		1033, 1037, 1041	1031, 1035, 1037	de orice atting NEP ASSIA datas	encies & Sandards

1/9/06							
·							
				IFire Protection Systems and Structures (FBC)	Prevention and Education (A) Fire Prevention Organization and Management (FBC)	Planning (A) Fire and Emergency Services Administration (FBC)	
			MFQ-13 Understanding the theory and principles for the use of water in fire suppression activities; includes hydraulic principles.	IMFO-12 Understanding the basic design and operation of fire detection, alarm, and suppression systems.	Fire MFO-11 Understanding the basic nent iphilosophy, organization, and operation of fire and injury prevention programs.	MFO-10 Understano using the principles and techniques for effective project planning.	
			1031, 1033	1031, 1033, 1035	1031, 1035, 1037	11035, 1037	
·)	 ·)

National Professional Development Matrix Administrative Fire Officer (FO III) Fire Prevention Officer

1/9/06

Administrative r... Officer (FO III) Fire Prevention Officer

1001		٠.	Benchmark: Bachelor's in Fire Science, Fire Administration, Fire Technology, or Social Sciences
	AFO-12 Develop skills for moral decision- making in professional life; explore styles of moral reasoning based on the differing premises of duty and ethics.	Professional Ethics (B) Decision Making (B)	-
1037	and	Organizational Development or Behavior	ED (R123), EL (R125). OTP (R331)
1021, 1035, 1037	AFO-10 Understand the principles of budgeting, financial reporting, and management in governmental organizations; emphases in the use of financial data in planning, control and decision making.	Managerial Budgeting and Accounting (B) Financial Management (B) Advanced Fire Administration (FBC) Fire and Emergency Services Administration (FBC)	FSFM (R333)
021, 1031, 1037	AFO-09 Understand and function effectively 1021, 1031, 1037, in the legal, political, and social aspects of government's role in public safety; including the legal system, department operations, personnel issues, and legislation.	Political and Legal Foundations of Fire Protection (FBC)	
1035, 1037	AFO-08 Understand the tools and techniques of rational decision-making in fire departments; including data statistics, probability, decision analysis, modeling, cost-benefit analysis and linear programming.	Statistics (B) Analytical Approaches to Public Fire Protection (FBC)	A COLUMN AND THE PROPERTY OF T
STATE OF THE STATE		A COURT OF THE STATE OF THE STA	NEW COURSES A VOICE RECOMMENDATION OF THE PROPERTY OF THE PROP
	Scionard Incompany of the Company of		Educatio

1/9/06

National Professional Development Matrix Executive Fire Officer (FO IV) Fire Prevention Officer

EL (R125)					NEA Courses - AGE Recommendations	NEgu
Public Policy (G)/Management of Policy Process (G)	Public Finance (G) Financial Management in the Public Sector (G)	Decision Making for Public Managers (G)	Public Management II (G)	Public Management I (G)	STOOMER COURSES (TESTED)	<u> Education</u>
EFO.05 Understands the issues involved in 1035, 1037 the implementation of public policy and programs; the institutional and political constraints on policy making and the skills needed to address them.	Public Finance (G) Financial Management in the Public Sector (accounting and financial management in the Public Sector (accounting and financial management in the public sector, includes fund accounting, (G) (G) (The public sector, includes fund accounting, international sector, includes fund accounting, international sector, includes fund accounting, international sector, including and including and including international sector (accounting).	EFO-03 Understands decision making from normalive, prescriptive, and descriptive perspectives; individual decision-making and organizational decision practice; decision analysis.	EFO-02 Understands organizational design, 1097 personnel, and management in mission-drive organizations; includes organizational idesign, networks, service delivery, managing for performance, and ethical leadership	EFO-01 Understands organizational life land key challenges/opportunities of managing public organizations; organizational mission, values, communication, culture, policy process, legislative-executive relations, and media relations	THE OHIGEN PRIVATE OF COMPANY OF THE PRIVATE OF THE	eginperencies Standards
1035, 1037			1097	1031, 1037	All Andrews (All A	s.Siannards

						NFACCOURSES ACE RECOMMENDATION	
Program Management or Evaluation (G)	(Advanced Organizational Behavior (G) Organizational Development in Public Agencies (G)	Mediation & Negotiation (G)	Ethics in Public Administration (G) Ethics and Public Policy (G)	Legal Aspects of Public Administration (G) Public Administrative Law (G)	Executive Leadership (G)		ledučatione van de
EFO.41 Understands theory, practice, and politics of program evaluation; from simple freedback mechanisms to evaluation of large-scale programs.	IEFO10 Understands theories and models of behavioral science in organizational diagnosis and development (OD); review of the OD approach; diagnosis. Problem confrontation, and team building.	EFO.09 Understands possibilities offered by mediation and negotiations techniques to resolve disputes and disagreements over public-policy issues.	EFO-08 Understands moral issues in public 1021 life; integration of moral concerns into public discussion resulting in good policy without polarization.	EFO-07 Understands the legal framework of administrative action; constitutional requirements; operation of the administrative process; and judicial review of administrative activity.	EFO.06 Understands the nature of public sector executive life; the function of leadership in implementing and changing policy; leadership styles, the relation of leadership to its constituencies.	The Office Indiana Compared in the Compared in	
1021, 1035, 1037			1021			one jating NEP A Standards See	es Standards

1/9/0

Executive Fir....Jfficer (FO IV) Fire Prevention Officer

Benchmark: Master's of Public Administration - Business Administration		LOFP (R823), EMS:MCHR (R149)		NITA COURSES AGERGEORISHER GROWN	E-0
	Quantitative Analysis (G)	Strategic Planning or Plan Implementation (G)	Strategic Planning (G)	E SONIE GUN SI JESTE BECHNING COUSE TEBOLS 18 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Education
•	EFO-14 Understands how to formulate research questions, conduct research, and lassess statistical tools or research methods to answer different types of policy or management questions.	EFO-13 Understands theory, practice, and politics of developing and carrying out an implementation plan for an organizational strategic plan.	EFO-12 Understands theory, practice, and joulitics of developing an organizational strategic plan; incorporating multiple, diverse stakeholders.	Eritionicalitievenionicompetencies	Competencia
	1035	1035	1037	Gorrelanng NEPA Standards	A Competence Standards (1997)

National Professional Development Matrix Fire Prevention Officer

	Fire investigation and Analysis (FBC)	Education Republication Republication NEAlbourses Acenegimmendation NEAlbourses Acenegimm
ADMIN Understanding a large record	INV-01 Understanding the concepts and 1037 components of investigations related to fire land life safety.	Complete picks Standards A Gong beta picks Standards The part of the standards of the sta

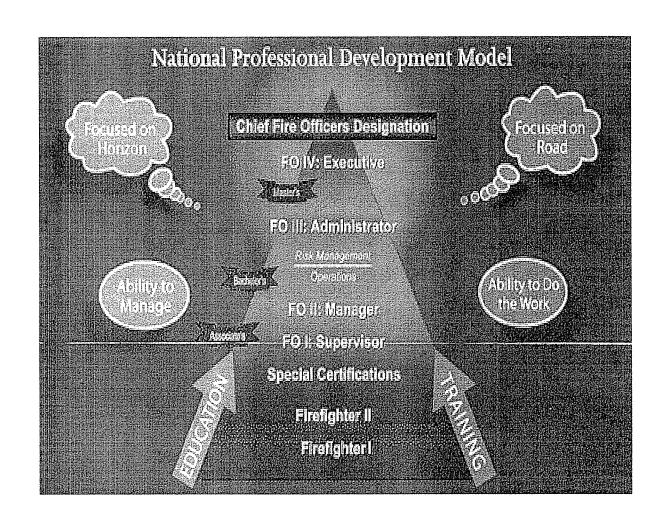
: -

))

~)

PFP:SS PRI SACRR STICO TOSD TPM FSC FSCD FSFM HMIM HMOSP IDFSO ITCT LA LCFP LCFR LCFP LCFP MEMS MEPP MEMS MIFPP NFA NFIRS PM EPBD ERT:IM EMS:SO EFO DFLSS EAFSOEM CLTO CM:ASA CCFDOMAI CCFDONMD ASOM EMS:MCHR ALSRHMI ALIEMS CCFDOTH Hazardous Materials Incident Management (B, G)
Hazardous Materials Operating Site Practices (B)
Interpersonal Dynamics for Fire Service Organizations (B)
Interviewing-Interrogation Techniques and Courtroom Testimony (A, B)
Leadership and Admininstration Chemistry for Emergency Response (A)
Challenges for Local Training Officers (A, B)
Code Management: A Systems Approach (B, G) Plans Review For Inspectors (A, B)
Strategic Analysis of Community Risk Reduction (A, B)
Strategy and Tactics for Initial Company Operations (A)
Training Operations in Small Departments (A)
Training Program Management (A, B) Leading Community Fire Prevention (A, B)
Leading Community Risk Reduction (A, B)
Management for Karon Prevention and Control (A, B)
Management of Emergency Medical Services (A, B)
Management of Fire Prevention Programs (A, B)
National Fire Academy Executive Leadership (B, G)
EMS: Management of Community Health Risks (A, B)
Emergency Medical Service: Special Operations (A, B)
Executive Planning (B) Command and Control of Fire Department Operations at Multi-Alarm Incidents (A, B)
Command and Control of Fire Department Operations at Natural and Man-Made Disasters (A, B)
Command and Control of Fire Department Operations at Target Hazards (A, B)
Community Education Leadership (A, B) Fire Inspection Principles (A, B)
Fire Service Communication (A, B) Fire Arson investigation (A, B) FESHE Baccalaureate Curriculum Evaluating Performance-Based Designs (A, B) Emergency Response to Terrorism:Incident Management Executive Development (B, G) Developing Fire and Life Safety Strategies (B) Executive Analysis of Fire Service Operations in Emergency Management (B, G) Advanced Life Support Response to Hazardous Materials Incidents (A, B) Advanced Leadership in EMS (B, G) National Fire Incident Reporting System Program Management (A, B). Executive Fire Officer Advanced Safety Operations and Management (A, B) Principles of Fire Protection: Structures and Systems (A, B) Organizational Theory in Practice (B) Fire Service Financial Management (B, G) Fire Service Course Design (B, G)

)



Professional Status: The Future of Fire Service Training and Education

PART ONE - INTRODUCTION

This is the first in a series of articles about professional status for the Fire and Emergency Services through a common system of training and education. Subsequent articles will discuss Training and Education, A Model for Training and Education; Independent Assessment of Skills and Reciprocity; and, The Future — Where We Go From Here.

In his 1994 Master's Degree Thesis, Chief Ronny Coleman quoted Sir Eyre Massey-Shaw, the Fire Chief of the London Fire Brigade in 1873. When speaking of the people in the fire service 130 years ago, he said, "...that the business [fire], if properly studied and understood, is worth being regarded as a profession."

Think about this – you are the fire chief in your community, and your son or daughter expresses a desire to become a physician. They ask if you know what training and education they need. "Sure," you say, "four years of college, four years of medical school, internship, residency, pass the medical boards." "How about an attorney?" "A little different" you say, "Four years of college, three years of law school, pass the Bar exam." And then another of your children asks, "Mom / Dad, I want to be the fire chief, just like you. What do I need to do?"

That's not as easy to answer. It varies from place to place, depending upon the organization, the structure of the department and the governing agency. The process isn't the same wherever you go; frequently it is a slow and uneven process, or one solely based on popularity. Too often, the process frustrates talented men and women; we lose our best and brightest. These are the very people who epitomize the word 'professional' – the ones who have the aptitude and drive to help the department face new challenges.

Professional status is a term that has been bandied about in the Fire and Emergency Services for years. What constitutes "professional" status is in the eye of the beholder. Were we to look at a 'professional' independent of the fire service, to some, it means the performance of a series of skills in a manner that is far above average. To others, a professional is associated with performing skills "full-time," that is to say, for a living. Many feel that the distinguishing characteristics of a profession are years of formal education, approval of an accrediting board and continuing education requirements. More than likely, it is the last statement with which most would agree.

Massey-Shaw, E., Fire Protection, A Complete Manual Of The Organization, Machinery, Discipline and General Workings Of The Fire Brigade Of London. C & E Leighton, 1876, p. xiii. From Coleman, Ronny J., The Evolution of California Fire Service Training and Education, California State University, Long Beach, Master's Degree Thesis, May 1994, p. 27.

Definitions aside, it is the walk down the main street in any city or town in America that demonstrates who in the community is professional. The physicians and nurses, the architects and engineers, the attorneys and the accountants are among the top professions in any community. What makes them so?

Each has a unique set of knowledge and skills that are independent of a particular organization or place; they are 'portable,' skills and held in equal regard no matter where the person practices. In the process of becoming a professional, there is an accredited and independent testing process that assures competency to the public. Professionals are associated with others in their profession through some formal organization; they typically put service to others as more important than profit; and they assume responsibility for their professional acts. Typically, their profession has some continuing education requirements, and the work is client centered.

Interestingly enough, the Fire and Emergency Services have most of those things. In theory (although not perhaps in current practice), providing emergency services is a 'portable' skill; many professionals move from department to department, from state to state. We have independent testing and assurance of competencies, e.g., NFPA Standards, certification; and in some cases, requirements for continuing education. The Fire and Emergency Services has several professional organizations, and the services delivered are certainly client centered. Profit just isn't in the lexicon; all we concern ourselves with is people.

Then why aren't we given the professional status of physicians and nurses, architects and engineers, and attorneys and accountants? Well, those professions have some things that the Fire and Emergency Services do not yet have; there are a few more steps.

Those six professions (and the others like them) have other substantive tenets; principal among them is a universally recognized system to acquire the knowledge and skills to practice. Their systems of acquiring knowledge are reciprocal among all states. When physicians or lawyers or nurses move from state to state, they may have to present their credentials to the professional board in their new state. They may have to take an exam, or perhaps take some refresher courses – but they don't have to go back to school to learn the basics all over again. You can learn surgery in Texas, and operate in Minnesota. You can attend law school in Massachusetts and appear in court in Washington. You can learn electrical engineering in Montana and design computers in Silicon Valley in California.

But if you are a fire officer, with up-to-date professional training, and you decide to "practice" your profession in another state, you may have to go back to rookie school. That's right, rookie school – learning about classes of fire, types of extinguishers, coupling hose and raising ladders.

It's no one's fault. Right now, there is no one universally recognized and reciprocal system to acquire the knowledge and skills required in the Fire and Emergency Services. None. It's the largest hurdle associated with professional status that we have yet to overcome. It isn't the only thing – but it is the most significant one right now. The remaining issues will be tackled. It has happened in other professions.

It is interesting to see where our current 'professions' were one hundred years ago. Most people probably don't realize that medical education was haphazard in this country until 1910. In the late 1700's, most physicians apprenticed, and a few attended medical schools in Europe. In the 1800's there were many 'for-profit' schools of medicine in the U.S. that were of questionable quality. It wasn't until 1910 that Abraham Flexner, the American education reformer, wrote Medical Education in the United States and Canada. He exposed the inadequacies of most of these private medical schools. Subsequently, the American Medical Association and the Association of American Medical Colleges established standards for course content, qualifications of teachers, laboratory facilities, affiliation with teaching

hospitals, and licensing of practitioners that survive to this day. Many people also don't realize that although Abraham Lincoln was a lawyer, he never went to law school; he apprenticed. Law schools began in this country about 1875. Less than 100 years ago, babies were born at home, delivered by midwives; and some dental care was provided by barbers (yes, barbers!) called "Sanitaries."

Professions have been specialized too. Fifty years ago, pediatricians removed tonsils in their office; today surgeons do this in hospitals. Forty years ago, most nurses were "R.N.'s" with diplomas from three-year nursing schools. Today, higher educated nurses are called Nurse Practitioners, and can diagnose illness, order medical testing and prescribe drugs. Attorneys have specialized practices too – corporate, civil, criminal, personnel and a host of others. This increased specialization is a natural outgrowth of the complexity and increased requirements of practice. Are the Fire and Emergency Services becoming specialized? You bet. The principal responsibility of the fire and emergency profession is the reduction of community risk – public education, fire prevention, code enforcement, and health and accident risk reduction.

When those prevention activities fail, what once was the fire department is now the emergency response of first and last resort. Citizens know that if they call you, they are going to hear sirens in a few short minutes. You're first on the scene of everything from a heart attack to a car accident, from a hazardous materials release to a trench rescue. Fire, earthquake, flood, hurricane, emergency birth, airplane crash, train derailment or terrorist event; all anyone need do is dial 9-1-1. They're expecting you.

² "Medical Education," Microsoft® Encarta® Online Encyclopedia 2000 http://encarta.msn.com © 1997-2000 Microsoft Corporation. All rights reserved

Twenty or thirty years ago, the foundations for professional status for the Fire and Emergency services were laid. Performance standards were established. Colleges and universities recognized the need for formal education and began degree programs. Fire departments began to require certifications, and many began to require degrees or advanced degrees for hiring or promotion. Uncommon thirty years ago, but quite common today, is the hiring of people with professional training and education from outside the organization (instead of through the ranks) to come in to run it. That's the evidence that we're ready to make the next move up the ladder of professions.

One of the principal challenges we have is that aspiring fire service professionals are staggered by the number of independent systems of training and education. There is no 'one way' for the student to determine which is the most appropriate training and/or education. There's no 'one-way' to become the chief. The problem is exacerbated by the reality that there is little chance that one system will recognize that student's performance in another system. Moving from fire department to fire department (or even more difficult – from a fire department in one state to a fire department in another), training or education already received may not be recognized.

The Fire and Emergency Services today is assuredly further along the path to professional status than those in medicine and law were one hundred years ago. We have a body of knowledge, we have standards and we have processes to assure competency (available through the International Fire Service Accreditation Congress (IFSAC) and the National Board on Fire Service Professional Qualifications (NBFSPQ or ProBoard). We have places to acquire professional knowledge, but right now, they are locally based – they aren't a part of a system that everyone recognizes. The missing link is a nationally recognized, reciprocal system of training and education. The good news is that we have all the parts; nothing has to be invented or established. These parts just need to be integrated:

• Training systems (available through local, State and the National Fire Academy).

- Education systems (available through 2-year, 4-year, graduate and National Fire Academy).
- Independent Assessment of Skills (IFSAC and ProBoard).
- Reciprocity among systems of training and education.

<u>PART TWO – TRAINING AND EDUCATION</u>
This is the second in a series of articles about professional status for the Fire and Emergency Services through a system of training and education. In Part One, the need for a system of training for the fire and emergency professional was discussed, and the challenges with our current separate systems were identified. Comparisons among other professions (Medicine, Law, Nursing etc.) and the Fire and Emergency Services were examined. Part Two will discuss the Training and Education systems available to the fire service today - local, state and national programs and the way they compliment and supplement each other.

Training

Efficient training systems are those that identify what they do well and take advantage of the strengths and opportunities provided by other systems to supplement their efforts. Inefficient systems are those that try to be all things to all people, and in doing so, squander resources. The good news is that - as a system of training - fire training is pretty efficient.

The current roles of local, state and national emergency services training generally establish the boundaries for each to prevent costly duplication. Locally, larger departments are capable of training their own people to certain levels of competency. Smaller departments will either seek training from a larger organization, work with other small departments to combine training resources, or seek training from another government agency - either the county or the state training system. Depending on the size of the organization and its needs, local training tends more towards recruit, refresher and 'hands-on' training.

State training organizations generally attempt to provide training that is not available locally - ranging from basic recruit training to courses for chief fire officers, from hazardous materials awareness to firefighting strategies at petroleum facilities, and from farm rescue to wildland firefighting. State training organizations vary in their size and capacity, from a few people to a complex, university based system.

At the national level, each State Fire Training System works with the United States Fire Administration's National Fire Academy (USFA/NFA) to deliver USFA/NFA curriculum. The USFA/NFA develops and delivers the kinds of training that aren't available at the local or state level. Community Risk Reduction, Public Education, Codes and Standards, Detection and Suppression Systems, Executive Development, Terrorism, Command and Control of Incidents, Strategic Planning, Information Systems and Budgeting are among the USFA/NFA's curriculum areas.

This system isn't something that is planned for the future - this is the system as it exists today.

At the national level, most of you would probably be surprised to learn that the USFA/NFA does the least amount of training on its Emmitsburg campus - about 8,000 students per year. Most of our training occurs off-campus through the cooperative efforts of State and Metropolitan sized fire training organizations. In 2002, The USFA/NFA trained over 87,000 Fire and Emergency Services personnel in off-campus course deliveries, self-study courses, CD based simulation training and other alternative deliveries through its virtual campus (see http://www.training.fema.gov). Six-day and two-day USFA/NFA courses are provided to individuals locally through the cooperation of individual state training systems. Each year, the USFA/NFA provides nine two-day courses to every State. The State selects the nine courses from a menu of thirty-seven courses, and tells the USFA/NFA where they'd like the courses delivered. The course materials and instructors are provided at no cost to the State.

Through the organization of State training systems and metropolitan-size fire departments (called the Training Resource and Data Exchange network - TRADE), the USFA/NFA also provides the instructors, course materials, site support, assistance, and a small student stipend for the delivery of 3 six-day courses in each of the ten federal regions. The States and metros in that region select the courses from a menu of twelve, and decide the locations for delivery. Again, the USFA/NFA provides the upfront costs for materials, instructors and facility rental if appropriate. On some selected new two-day courses, and others that have been field tested, the USFA/NFA will provide Train-the Trainer courses, providing all course materials and student manuals for local delivery. These are available through individual state training systems.

Information about any of the USFA/NFA programs mentioned above can be found in our catalog or on our web page: http://www.usfa.fema.gov/dhtml/fire-service/nfa.cfm

Education

Locally, many colleges and universities provide two and four-year degree programs in fire science and/or administration. Over the past several years, a few Master's degree programs have emerged. For those who, for reasons of proximity or time, are unable to attend a local college, the USFA/NFA works with seven schools throughout the country to provide four-year degrees via the Degrees at a Distance Program; there are no resident course requirements for these courses.

Those who have attended two and four-year programs (currently there are 222 two-year and 26

four-year programs in the US) are usually people who are "in-service," that is to say, are going to school part-time and working a full-time job. These individuals may be career or volunteer, but most don't enjoy the luxury of full-time academia – it is a considerable sacrifice to them and their families.

The titles of "fire" degrees vary – from Fire Technology all the way to Public Administration with a concentration in Fire Administration. Some degrees are called Fire Science, Fire Administration or Fire Department Management, but the disparity creates misunderstanding among employers and other schools of higher education. Everyone understands what a Medical, Law or Nursing degree means. Few understand what a "Fire" degree means. This makes it difficult for other schools and employers to assess the education or skill of prospective students or employees. Hence, transfers of credits between schools (and true professional salaries) are elusive.

Since 1986, the USFA/NFA has been administering the Degrees at a Distance Program in cooperation with seven universities around the country. These "DDP Schools" use distance-learning technologies to permit students to earn their bachelor degrees. The program enrolls about 1000 students from all over the country, with approximately 100 students graduating each year. These schools use standardized courses (including course title), syllabi, and content provided by the USFA/NFA.

Over the past four years, the USFA/NFA has sought to expand these kinds of educational opportunities for degree seeking students, while at the same time seeking to strengthen the meaning and understanding of the value of the degree through its Fire and Emergency Services Higher Education (FESHE) initiative.

Working with over 100 two and four-year colleges, the FESHE National Fire Science Curriculum Committee curriculum committee has developed a model core and non-core curriculum, courses, syllabi and content for associate and bachelor degree programs. It is a *model*, not a requirement; but the work has established a direction for college programs that establishes a base for the transferability of credits (you don't have to start all over again), and ease of understanding as to what a "Fire" degree means. Many current college programs have committed to following the model as revisions in their programs are made.

Sturtevant, Thomas B. "A Study of Undergraduate Fire Service Degree Programs in the United States – Fall 2000," Doctoral Dissertation, University of Tennessee, Knoxville, May, 2001.

See the USFA/NFA web page http://www.usfa.fema.gov/fire-service/nfa/higher-ed/he.shtm for more information

From an education point of view, model course descriptions, courses, syllabi and content increases the understanding of what a "Fire" degree means for students, schools and employers. It creates an atmosphere in which schools will be more comfortable accepting transfer credits from other degree programs, and encourages the writing of new textbooks specifically for college courses. As more Fire Science Associate Degree Programs adopt these model courses, we will see future leaders of the fire service having had the same courses and content as part of their professional development and credentialing... just like doctors, lawyers, nurses and other professions.

What is even more critical to the process is textbooks. All textbook publishers in the fire field have been invited to participate in the FESHE conferences and workshops. Some have already agreed to write textbooks to conform to the new model curricula and others have expressed interest in doing so. Following the model curricula gives publishers the guidance and structure to develop their texts, and the larger audiences that will purchase them.

Recently, the USFA/NFA has agreed to release its thirteen courses in the DDP program to other four-year college degree programs. The requirement for the release is that the college sign an agreement with the State Fire training system in their state. If it does, the USFA/NFA will release the thirteen third and fourth year fire college courses to the bachelor degree program. Although not required, we encourage both partners to agree that the college will accept certain certifications for college credit, and that State Fire Training systems will accept some college credit toward certification requirements.

To further encourage that effort, representatives of State fire training systems convened in Emmitsburg to "crosswalk" the thirteen DDP courses to the ProQual standards. Both the colleges and the State fire training systems now have a basis to exchange that credit.

PART THREE - A MODEL FOR TRAINING AND EDUCATION

This is the third in a series of articles about professional status for the Fire and Emergency Services through a system of training and education. In Part One, the need for a system of training for the fire and emergency professional was discussed, and the challenges with our current separate systems were identified. Comparisons among other professions (Medicine, Law, Nursing etc.) and the Fire and Emergency Services were examined. Part Two discussed the Training and Education systems available to the fire service today – local, state and national programs and the way they compliment and supplement each other. Part Three will discuss the Fire and Emergency Services Higher Education effort (FESHE), the development of model two and four-year degree curricula, syllabi and content, and the release of the thirteen USFA/NFA courses into four-year bachelor degree programs.

What follows is a discussion about what many national fire service leaders believe should be the future direction of professional development for the fire and emergency services. This document should serve as a starting point for discussions between State fire service training, certification, and higher education leaders, fire science coordinators and their advisory committees, fire academy instructors and their students, fire chiefs and their staffs, and any others who have an interest in fire service professional development.

The Problem: A Fragmented System of Professional Development Have you or someone you know:

- taken fire science courses at a two-year college;
- taken courses at State and local fire training academies and through the National Fire Academy (NFA);
- · achieved various levels of certification;

AND

• all combined, these achievements are "all over the map", meaning none of them evolved in a coherent and planned way?

Most firefighters and officers have earned college credits and training certificates since their first day in the fire service. However, this professional development is usually uncoordinated and fragmented, resulting in duplications of effort and inefficiencies for students. Lack of coordination between fire-related training, higher education, and certification contributes to this problem.

Collaboration and coordination is needed between all service providers responsible for fire and emergency services' professional development. Each has a major role to play. This report presents the recommendations that have evolved over the past four annual Fire and Emergency Services Higher Education (FESHE) conferences. Combined, these products and outcomes represent a new strategic approach to professional development. They will help move the fire and emergency services from a technical occupation to a full-fledged profession similar to physicians, nurses, lawyers, and architects, who, unlike

fire service personnel, have common course requirements within their respective degree programs.

There are several major tenets on which a "profession" is built, including reciprocity for practicing in different States (with an exam), universally accepted standards of practice, and a professional development model, among others. The work accomplished during the FESHE conferences addresses one tenet--professional development.

The Role of FESHE Conferences

The U.S. Fire Administration (USFA) hosts the annual FESHE conference on its campus in Emmitsburg, Maryland. These conferences are a combination of presentations, problem solving, and consensus-building sessions which result in higher education-related products or recommendations for national adoption.

At the 2000 conference, two panel discussions were conducted. The first panel included fire service leaders representing national fire service organizations, and the second was comprised of State directors of fire service training. Both panels raised issues that formed the basis for these national recommendations, including the need for:

- degree programs that teach critical thinking skills by requiring significant numbers of general education, rather than mostly fire science, courses;
- appropriate recognition of certification for academic credit and vice versa;
- associate degree programs that are transferable to baccalaureate programs;
- a model fire science curriculum at the associate level that universally standardizes what students learn and facilitates the application of these courses towards certification goals; and
- collaboration between fire service certification and training agencies and academic fire programs.

Fire and Emergency Services Professional Development Model

The professional development model is one product finalized at the 2002 FESHE IV conference. It is **not** a promotion model addressing credentials; rather, it is an experience-based model that recommends an efficient path for fire service professional development supported by collaboration between fire-related training, higher education, and certification providers. The model recommends what these providers' respective roles should be and how they should coordinate their programs.

Firefighter I Firefighter II Special Certifications Fire Officer I: Supervisor(Single Company)Fire Officer III: Administrative(Staff Position)Fire Officer IV: Executive Fire

Officer II: Manager(Multi--Station/Company) EDUCATION TRAINING Operations Risk Managemen Ability to do the work Bachelors Associates Masters Ability to Manage Focused on Road Focused on Horizon National Professional Development Model June 2002

Suggested Roles and Responsibilities						
Training		Higher	Education			
Learning Outcomes	Provide practical applic give them the 'the work'', usin competency-ba approaches.	'ability to do ng skills- or	Provide graduates with cognitive skills that give them the "ability to manage."			
Firefighter I and II; Special Certification, and Fire Officer I - IV	Deliver directly suppor and II, special and Fire Office standards, as a	certifications, er I-IV	Provide "officer development" and deliver courses that address Fire Officer I - IV certification. At the executive officer's level, a master's degree in public administration (or related disciplines) and applied training in strategic policymaking are desirable professional preparations.			
Risk- Management Oriented	Direct all relevant and applicable curricula towards "risk management" because the fire service's response and mitigation missions have expanded greatly over the years to include all disasters, natural and manmade. Address "all hazards" rather than solely fire-related incidents. This coordination of training and higher education provides a professional development path for transforming chief fire officers into "all-risk managers."					
Standards "Crosswalks"	the fire science those in the me associate cours NFA standards baccalaureate http://www.us. training, highe collaborate to	Certification agencies identify the standards addressed by the fire science courses offered within their States, particularly those in the model curricula. Fire science publishers for the model associate courses identify standards addressed in their textbooks. NFA standards "crosswalks" for its resident, field, and baccalaureate courses are available on the USFA web page http://www.usfa.fema.gov/fire-service/nfa-abt7.cfm. Fire-related training, higher education, and certification service providers collaborate to promote students' eligibility to apply academic credits toward appropriate standards and vice versa.				

Model Curriculum Associate Degree Programs Another result of the 2000 FESHE conference was the model fire science associate degree curriculum. The FESHE attendees identified six core associate-level courses in the model curriculum, including:

- Building Construction for Fire Protection
- Fire Behavior and Combustion
- Fire Prevention
- Fire Protection Hydraulics and Water Supply
- Fire Protection Systems
- Principles of Emergency Services

In 2001, the National Fire Science Curriculum Committee (NFSCC) was formed to develop standard titles, descriptions, outcomes, and outlines for each of the six core courses. In 2002, the FESHE IV conference attendees approved the model courses and outlines. The major publishers of fire-related textbooks are committed to writing texts for some, or all, of these courses.

It was recommended that all fire science associate degree programs require these courses as the "theoretical core" on which their major is based. The course outlines address the need for a uniformity of curriculum and content among the fire science courses within the United States' two-year programs. Many schools already offer these courses in their programs, while others are in the process of adopting them. Once adopted, these model courses address the need for problem-free student transfers between schools. Likewise, they promote crosswalks for those who apply their academic coursework toward satisfaction of the national qualification standards necessary for firefighter certifications and degrees.

The committee also developed similar outlines for other courses that are commonly offered in fire science programs. If a school offers any of these "non-core" courses, it is suggested these outlines be adopted, as well. The non-core courses are:

- Fire Administration I
- · Occupational Health and Safety
- · Legal Aspects
- Hazardous Materials Chemistry
- · Strategy and Tactics
- Fire Investigation I
- Fire Investigation II

Baccalaureate Degree Programs

At FESHE IV, NFA announced it would release its 13-course upper-level Degrees at a Distance Program (DDP) curriculum to accredited baccalaureate degree programs which have signed agreements with their State's fire service training agency. DDP will remain as NFA's delivery system for the 13 courses; however, release to other schools enables the formation of model curriculum at this level. The courses are:

- · Advanced Fire Administration
- Analytical Approaches to Public Fire Protection
- Applications of Fire Research
- · Community and the Fire Threat
- · Disaster and Fire Defense Planning
- Fire Dynamics

- Fire Prevention Organization and Management
- Fire Protection Structures and Systems Design
- Fire-Related Human Behavior
- Incendiary Fire Analysis and Investigation
- Managerial Issues in Hazardous Materials
- Personnel Management for the Fire Service
- Political and Legal Foundations of Fire Protection

A National System for Fire-Related Higher Education

With model lower-level (associate) curriculum outlines developed and established upper-level (baccalaureate) courses available, the major components are in place to move towards a national system for fire-related higher education.

Most core and non-core courses line up with baccalaureate courses of similar content, thus preparing associate degree graduates for their bachelor degree studies.

Lower-level Course

Fire Behavior & Combustion Fire Prevention

Fire Protection Hydraulics and Water Supply/Fire Protection Systems Hazardous Materials Chemistry

Strategy and Tactics

Fire Administration I Legal Aspects

Fire Investigation I & II

Corresponding Upper-level

Course

Fire Dynamics

Fire Prevention Organization

& Management

Fire Protection Structures

and Systems Design

Managerial Issues in

Hazardous Materials

Disaster and Fire Defense

Planning

Advanced Fire Administration

Political and Legal Foundations of

Fire Protection

Incendiary Fire Analysis and

Investigation

This national system for fire-related higher education is important because, as with other professions, a theoretical core of academic courses should be a prerequisite for entering these fields. As more schools adopt these curricula, the fire and emergency services moves towards becoming a full-fledged profession. National Model for

Fire-Related Higher EducationAssociatesBaccalaureate (DDP)Non-Core CoursesLahmCFI--IS&TFA-IOHSFI--IIAAPFPCFTFRHBCore

Coursespesfh&wsbcfpfpsfb&cfpomfpssdfdafrplffpmihmifaidfdpafapmfs

A Call For Collaboration

There are no easy paths to uniting the "big three" of the fire and emergency services professional development system. The relationships between the providers of training, certification, and higher education are varied across the country. In most States, levels of cooperation among the three range from excellent to nonexistent.

Some exceptional State models of cooperation do exist, however, including California and Oregon. The models' similarities demonstrate that:

• partnerships can solve training, education, and turf battles by bringing together stakeholders in some formal or informal organization or consortium; and

• through cooperation, a professional development delivery system that works for the State can be created and maintained.

Who are the stakeholders from which this leadership must emanate? They are the State offices responsible for fire service training and certification, the fire-related degree programs, and the State organizations representing fire chiefs, firefighters, volunteers, instructors, and other vital constituencies. We need many leaders at all levels. At the Federal level, the USFA can bring the national stakeholders together to build momentum for this effort. An effective model for a State professional development "summit" was presented at the FESHE IV conference. It provides a plan of action for Washington State, including stakeholder involvement and consensus strategies. What might be the elements of a State professional development plan? In addition to spelling out who should be responsible for learning at each level of certification, it recommends:

- the extent to which certifications should be granted academic credit;
- the extent to which academic credit should be accepted towards satisfaction of standards;
- the numbers and types of fire-related and general education courses; and
- the types of degrees--Associate of Arts/Associate of Science transferable to baccalaureate programs versus terminal or nontransferable degrees.

Only the State and local leaders can make this happen. We urge you to contact the fire and emergency services leaders in your State and urge them to begin the difficult path of transforming this Nation's fire service's professional development into a national system.

PART FOUR - COMBINING THE SYSTEMS: INDEPENDENT ASSESSMENT OF SKILLS / RECIPROCITY

This is the fourth in a series of articles about professional status for the Fire and Emergency Services through a system of training and education. In Part One, the need for a system of training for the fire and emergency professional was discussed, and the challenges with our current separate systems were identified. Comparisons among other professions (Medicine, Law, Nursing etc.) and the Fire and Emergency Services were examined. Part Two discussed the Training and Education systems available to the fire service today – local, state and national programs and the way they compliment and supplement each other. Part Three discussed the Fire and Emergency Services Higher Education effort (FESHE), the development of model two and four-year degree curricula, syllabi and content, and the release of the thirteen USFA/NFA courses into four-year bachelor degree programs. Part Four will discuss the Independent Assessment of Skills and Reciprocity.

Currently, the principal parts of a system of professional development exist. Each local, State, higher education and federal training organization, in their own way, has been working toward the same goal – the training and education of the men and women in the Fire and Emergency Services toward professional status.

The most practical approach to accomplishing the next step – assembling the training and education into one professional and reciprocal system – is a voluntary one. It should be a cooperative effort that will provide benefits to both the training and education systems and the students they serve. It is what other professions have done in the past. It is what the Fire and Emergency Services need to do now.

Independent Assessment of Skills

Part of that system must include some process by which individuals are certified as competent to practice. Assessment of knowledge, skills and abilities is completed after a particular course of study. In the medical profession, the State Medical Association may be the agency, not the medical school. In most states, attorneys must "pass the Bar" to qualify to practice law, and the "Bar Exam" is independent of the law school. Nursing, engineering, architecture and accounting are other examples of professions with certifying agencies that are independent of the professional school. The assessment of individual knowledge, skills and abilities in every profession is independent of the school. Fortunately for us, the fire service already has certifying agencies, the International Fire Service Accreditation Congress (IFSAC) and the National Board on Fire Service Professional Qualifications (NBFSPQ or ProBoard). Certifications are awarded to individuals because they have demonstrated competency, and the certifying agency assures that competency to the public. The more familiar certifications to those in the Fire and Emergency Services are Firefighter I, II, III; Fire Officer I, II, III, IV; and Fire Instructor I, II. Other professional associations offer certification in other related fields - fire investigation, fire inspector and emergency medical technician are but a few. Another important part of the equation is the Committee on Professional Development in the International Association of Fire Chiefs (IAFC). Committee members are representatives of the professional practitioners. For years, the IAFC has worked on a number of initiatives to credential fire chiefs (the Chief Fire Officer Designation - CFOD) and fire departments (Commission on Fire Accreditation International - CFAI) to recognize personal and organizational achievement, and assure some level of competency to the public.

Reciprocity

With the descriptions of the systems that the fire service enjoys - training education and independent assessment, the next logical step is to combine these parts into <u>one system</u> of professional development for the fire service that is universally recognized and reciprocal.

The first step was to strengthen reciprocity by having all of the State fire training systems participate as full partners in the USFA/NFA system of training and education. Full partner means more than what they and we are currently doing; it means that your state training system is the USFA/NFA in your state. As such, they are required to hire USFA/NFA instructors to teach our courses, issue our certificates, and register the students they train in our student database. When a student takes four USFA/NFA courses in one state, and three in another, there will be one central place that the student can go for the transcripts of that training. The USFA/NFA is the catalyst and the repository.

States may now deliver six-day or two-day NFA courses, and three of our most popular two-week residential courses: Fire / Arson Investigation, Interpersonal Dynamics in Fire Service Organizations and Strategic Management of Change. These courses are in addition to the current deliveries already available to them in our six and two day programs. This program is called Enfranchisement. States are the NFA in their state; therefore, they may hire our instructors to teach our courses. Each State is eligible to apply for a \$25,000 grant to deliver these extra courses.

Beginning in 2000, State Training Systems were authorized to deliver USFA/NFA courses. Many of these courses currently have college credit award recommendations associated with them. To maintain that credit recommendation, the American Council on Education annually reviews our courses, methodologies and instructor qualifications. In order to sustain the credit recommendations, States are required to deliver USFA/NFA courses using NFA qualified instructors.

This is a very important point. State fire training systems may deliver NFA courses. It then follows that State fire training systems must also *accept* the training people received from the NFA in either our resident or field courses. That is one of the foundations of reciprocity. If you take an NFA course anywhere in the country, it is accepted anywhere in the country.

Moreover, through the great work of the North American Fire Training Directors Association (NAFTD), all of the NFA courses have been "cross-walked" to the ProQual standards. This was an NAFTD peer review, not something decided in an ivory tower. Now, a student who takes an NFA course gets two "professional status" benefits – college credit, and some of the elements required for professional certification.

Endorsing State Developed Courses into the National Fire Academy Curriculum

The second way to strengthen reciprocity is to recognize that State fire training systems have developed courses that meet very high quality standards, and at the same time, meet local need. Throughout the nation, there are needs for professional training that are not national in scope. For example, the New York City Fire Department may need a course on subway fires. The State of Kansas may have need for a farm rescue course. It's pretty obvious that FDNY will probably never need a farm rescue course, and it will be a while before the State of Kansas has its own subway system. There has got to be a way to meet those needs.

Again, working with the State fire training systems, the USFA/NFA not only addressed a way that individual regions can meet their needs, but has done it in a way that also strengthens reciprocity. The USFA/NFA has given State training systems a way to include their top-level courses into the national curriculum. To accomplish this, we've formed a partnership with the State Training directors and agreed upon the criteria and standards for selection and approval of these courses. If the course meets the criteria, then it becomes a part of the national curriculum. These state developed courses, which are peer-reviewed and approved, are called Endorsed courses. Students who pass an Endorsed course may receive USFA/NFA certificates and be registered in our database. One of the key benefits is that an Endorsed course is taught by local instructors.

A third way to strengthen reciprocity and increase the number of courses delivered is to give States the opportunity to deliver train-the-trainer courses for any of the thirty-seven two-day Direct Delivery USFA/NFA courses. Those local trainers, working through the State system, may issue our certificates and register their students in our database. States may issue NFA certificates on any of the 34 NFA hand-off courses delivered by local instructors when they register the student in our database.

States may deliver any of these courses - USFA/NFA developed courses (enfranchised), or approved state courses (endorsed) at a state training facility, a regional training facility, a college or university, or a local fire department – it is their choice.

To give the State training systems the opportunity to deliver this increased training, each has the opportunity to apply for a \$25,000 grant for the sole purpose of delivering these above mentioned courses.

What are the benefits of a common system of training and education and reciprocity to the fire and emergency services?

The foremost benefit to the Fire and Emergency Services is that it is the next logical step in establishing the professional status of the men and women in the Fire and Emergency Services. There is already a recognized body of professional knowledge. We now are beginning a universal system that allows everyone equal access to that professional knowledge.

The second principal benefit is that more people can now participate in USFA/NFA courses. We know that everyone cannot attend our classes in Emmitsburg. Enfranchisement permits States to deliver our courses locally at local training sites, using our instructors, with full college credit recommendation.

The third benefit is the reduction in course development costs. Currently, fire departments fifty miles away from each other are spending time, effort and money to develop the very same course. They have no idea that someone so close is working just as hard, spending just as much money and facing the same development obstacles they are. With an endorsement system available, departments can contact the state to find out what courses are already available before

they decide to begin developing a course. No training system in this country has all of the people and money they need to develop courses – this solves a lot of those development problems.

The fourth benefit is reciprocity. Each State is now a part of a national system, empowered to issue USFA/NFA certificates for training and education provided. It therefore logically follows that States would accept certificates as evidence of training received in some other jurisdiction. Those basics are already built into the system; it simply saves training time and money. No one has to repeat a course because they moved; no department has to re-train a person in courses they've already had. It is similar to the status enjoyed by physicians, nurses, attorneys, engineers, architects, accountants and others.

The fifth benefit is that it increases the number of training courses available to State and local training systems, either through Enfranchisement, Endorsement or increased Train-the-Trainer courses.

The sixth benefit is that colleges and universities are a part of the system, building an environment which colleges can award credit for certification received, and that State fire training systems may accept some college credit toward certification requirements. Following the model curriculum, students should be able to transfer college credit between systems, and employers would have a firm understanding of the knowledge, skills and abilities of those who hold degrees in the fire field.

The seventh benefit is that the training and education model follows a logical sequence, endorsed by the International Association of Fire Chiefs Professional Development Committee's Officer Development Handbook.

What are the challenges?

The State Fire Training Directors and the USFA/NFA staff have worked diligently for three years on this concept, overcoming obstacles, negotiating agreements, and identifying improvements. With the concept approved and endorsed by the National Fire Academy Board of Visitors, and the Co-Chair representatives of the State and Local fire training group (TRADE), the initial phases of the program have begun.

In 2000, states were notified that \$25,000 grants which could be used to deliver USFA/NFA courses were available, and since then all have applied and used those funds. The program allowing State Training Systems to deliver USFA/NFA developed courses (Enfranchisement) was also begun in 2000, and on the same day, the agreement that established the criteria and process to endorse state courses into the national curricula was announced. All of the funding and administrative pieces are in place.

Our next challenge is one of participation and cooperation – encouraging local training systems and colleges to cooperate and participate in the system. That is what we need all of you to help us do.

PART FIVE: THE FUTURE: WHERE WE GO FROM HERE

This is the fifth in a series of articles about professional status for the Fire and Emergency Services through a system of training and education. In Part One, the need for a system of training for the fire and emergency professional was discussed, and the challenges with our current separate systems were identified. Comparisons among other professions (Medicine, Law, Nursing etc.) and the Fire and Emergency Services were examined. Part Two discussed the Training and Education systems available to the fire service today – local, state and national programs and the way they compliment and supplement each other. Part Three discussed the Fire and Emergency Services Higher Education effort (FESHE), the development of model two and four-year degree curricula, syllabi and content, and the release of the thirteen USFA/NFA courses into four-year bachelor degree programs. Part Four discussed the Independent Assessment of Skills and Reciprocity. Part Five discusses the future.

Any trip, from a leisurely drive to a cross-country begins with "where you are." You can't go anywhere, or find any place, unless you know where you are.

Rather than try to describe the future, it might be helpful to describe how the system of training and education helps individuals at particular times in their Fire and Emergency Services career – determine where they are.

Understand that each of us has our own goals and ambitions. These articles may have described your situation, or someone you know. There is no "one best way;" each of us must decide for ourselves the paths we choose to take. These examples are meant to expose some of the potential opportunities for someone in the Fire and Emergency Services; but it may not suit a specific individual's needs.

Right now, when someone begins a career in the Fire and Emergency Services, they are faced with professional development choices that have consequences that the individual may not fully appreciate. In some cases, some particular aspect of their job influences the individual; in others, a colleague, close friend or officer may influence them. In any event, the individual has several paths to choose from; but in many cases, they may see only one or two. One path leads toward training and certification in particular disciplines. Of course, the one that is familiar to all is Firefighter I, II and III. Other disciplines in the training and certification include inspection, training, fire officer and a host of others. Depending upon the level of certification desired, these certifications can take a long time to complete. Depending upon the department and the personnel selection system, these certifications may lead to promotion to a higher rank.

Another path leads toward a degree - Associate, Bachelor and graduate. This path involves years of college coursework, research and writing. Formal academic pursuits typically occur outside the fire department on the student's own time and often at his or her own cost. Like certification, education may or may not increase the likelihood of promotion, depending upon the department's personnel practices.

A third path deals solely with the department's promotion practices. An individual seeks whichever path leads to promotion and decides that whatever the pursuit, the outcome must achieve advancement. In most departments, this involves some form of competitive examination, from multiple-choice questions to an assessment center. Any of these promotion processes may include an interview with the Chief, City Manager or Mayor.

Up until now, these paths were viewed as mutually exclusive, that is to say, an individual chose one over the others in order to achieve his or her goal. With a system of training and education, this isn't the case.

With an agreement between a State Fire Training system and a college in their state, as a firefighter moves through the certification processes, there is an opportunity to receive some college credit for certification (and the training behind that certification). Again, depending upon the agreement between the State Fire Training system and a college, a student who takes a college course may receive some credit towards certification. As an example, if someone took a Management 101 course in college, they may receive some credit toward certification in Fire Officer I. Since State Fire training systems may issue National Fire Academy certificates for the NFA courses they deliver, it follows that they must also accept them. It doesn't make much sense to award something if you don't accept it. This is

follows that they must also accept them. It doesn't make much sense to award something if you don't accept it. This i one step toward reciprocity. Hopefully, before long, all States will accept certification awarded by another state as many do now.

At the national level, and in cooperation with the American Council on Education, most of the National Fire Academy courses receive college credit recommendation. It is up to the local college as to whether they accept this recommendation, but most do. On the certification side, a panel of State and local fire academy representatives convened in Emmitsburg to "cross-walk" the NFA courses with the applicable standards. You can go to our web site, http://www.usfa.fema.gov/dhtml/fire-service/nfa-abt7.cfm to review the crosswalks. Look at a course and you'll find the standards it meets. Type in a standard and it will identify which NFA courses include that standard. It is up to the local jurisdiction as to whether they choose to accept this, but it is a fully peer-reviewed process accepted by many. With model degree programs and syllabi developed by the Fire and Emergency Services Higher Education (FESHE) initiative, students will have more opportunity to transfer model course credits between colleges. Once established, employers will have a better understanding of the education underlying the degree.

With concurrence by the International Association of Fire Chiefs Professional Development Committee, this same training and education path is the one they've chosen to be used for chief fire officer development.

Simply stated, we already have a common system for certification, a common system for education, and the ability to have them work together toward one integrated system that leads to professional status. It is a path one can identify and choose to follow. No one must chose between one path and another. They are complimentary.

There is an already established system to assess competency and assure competence to the public – IFSAC and ProBoard.

The Future

This series of articles began with the observation that most of us can answer the question, "How do you become a physician, a nurse, an attorney, an engineer or an accountant?" For perhaps the first time, we'll soon have the one answer to the question, "How do you become a fire chief?"

As we continue on this path well traveled by other professions, other elements of professionalism will emerge. One is a research journal, refereed by peer scholars. Another will probably be some level of continuing education requirements. But the final step, the end of the road, the time at which we will become a profession like all the others will be the time that a professional (career or volunteer) firefighter or officer can have his or her professional status rescinded independent of the employer. That's when you'll know. That's when the light goes on.

The path isn't easy, and it won't be quick enough for some. To achieve the professional status enjoyed by others, we must do more than demand it. The path taken by the other professions is the model that we must follow. It works. The time is right. The agreements have been made. The elements and systems are aligned; it is up to us to control and advance this profession of ours. No one but Shakespeare could have said it better:

There is a tide in the affairs of men
Which, taken at the flood, leads on to fortune;
Omitted, all the voyage of their life
Is bound in shallows and in miseries.
On such a sea are we now afloat,
And we must take the current when it serves,

Or lose our ventures.

Julius Caesar, IV, iii, 217. Brutus to Cassius arguing that the enemy should be met at Phillipi.

FREQUENTLY ASKED QUESTIONS

1. What happens if my organization, department or college won't participate?

You have several options. One is to have them read this article. If anyone of them would like additional information. they may contact their State Fire training system. The program is voluntary; no one will be coerced into participation. However, the benefits far outweigh the costs.

2. Is the USFA/NFA trying to establish national standards?

No. The fire service professional standards are already established. This is a complimentary, organized system to deliver training and education that has reciprocity as its foundation and professional status as its goal.

3. What about colleges and universities? How do they fit into the system?

Colleges and State Fire service training systems are among the critical elements of professional education. In June, 2002 over 100 representatives from colleges across the nation convened in Emmitsburg to develop a model curriculum for fire science programs. The USFA/NFA has been working with these schools of higher education to encourage them to:

- · Develop a model curriculum
- Seek ways, when and where appropriate, to award college credit for certification training.
- Seek partnerships with State training systems to explore ways for State training systems to include college courses as part of certification requirements.
- 4. What about the IFSAC and ProBoard?

Nothing in this plan changes what these organizations do; in fact, this process actually strengthens their standing. With a national, reciprocal system of training and education, these organizations become the outside agency that assures standards competency; the medical, law or nursing board (if you will) for the Fire and Emergency Services.

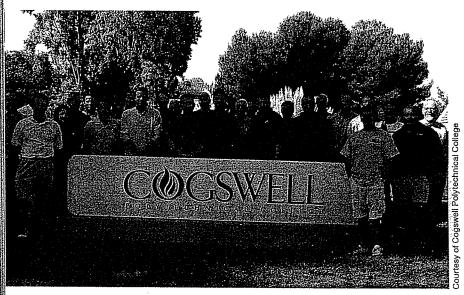
HIGHER EDUCATION >>>

By YOUNES MOURCHID, Ph.D.

The Fire Service and Higher Education:

Occupation vs. Profession

The Fire Service Has Evolved From an Occupation Into a Profession That Demands Complex Skills, Abilities and Knowledge Acquired in Academic Settings



Fire science students from Arizona, California and Nevada may enroll in a residency program at Cogswell Polytechnical College, where they take a concentrated course for full credit in a face-to-face classroom setting with other students and a faculty member.

YOUNES MOURCHID, Ph.D., is an associate professor and director of the Degrees at a Distance Program in fire science at Cogswell Polytechnical College in Sunnyvale, CA. He earned a double master's degree in applied linguistics and speech communication at Southern Illinois University and a Ph.D. in international development education at the University of Southern California. Prior to joining Cogswell, he was coordinator/director of tutoring services at Diablo Valley College and an adjunct faculty member at the University of California.

owadays in the annals of academia and in the wards of professional schools, there is a commotion about the concept of lifelong learning and adult education in designing program curricula and in defining degree requirements. The former is generally defined as the process of acquiring knowledge or skills throughout life via education, training, work and general life experiences. The latter is generally defined as the art and science of teaching adult learners, also known as andragogy.

Much of what the fire service relies on in terms of knowledge derives from experience, not empirical research conducted by trained scientists in academic settings. We often hear fire service personnel saying in response to a complex problem, "This is how we do it around here." Lately, however, the fire service has evolved from an occupation into a profession; a discipline that demands more complexity in the skills, ability and knowledge acquired in academic and formal training settings.

We all know of someone who has taken fire science courses at a two-year college; taken courses at state and local fire training academies and through the National Fire Academy (NFA); and

140 Firehouse

www.Firehouse.com

April 2006

A call is sounding for collaboration and coordination among all providers of fire and emergency service professional development.

achieved various levels of certification. However, these combined achievements have not evolved in a coherent and planned path. The professional development inherent in these combined achievements is usually uncoordinated and fragmented, resulting in duplications of effort and inefficiencies for students. Although the fire service offers

numerous certifications, education and training entities, not all of them collaborate with one another. Most fire service agencies adhere to the same standards of the National Fire Protection Association (NFPA), but their application of the standards varies, as funding and local politics vary.

As a result, a call is sounding for collaboration and coordination among all providers of fire and emergency service professional development. There are major tenets upon which a "profession" is founded, including reciprocity for practicing in different states, universally accepted standards of practice and a professional development model. The work accomplished during the NFA's Fire and Emergency Services Higher Education (FESHE) Conferences is one of the first responses to the call for the fire and emergency services to transition to a Professional Development Model.

One entity that maintains a commitment to unifying the fire profession training and higher education component is the National Fire Academy. The NFA's Degrees at a Distance Program (DDP) is a testament to the exact unified baccalaureate curriculum that the fire service needs. The program is an avenue for fire professionals to take college courses that can be used toward a bachelor's degree with a concentration in the areas of fire administration or fire prevention technology. The program is offered through a national network of four-year colleges and universities.

The DDP program has recently been incorporated into the Professional Development Model of FESHE Conferences. In the spirit of acknowledging the need for research and in-depth academic training, participants in the 2005 FESHE conference resolved that the creation of a doctoral degree infrastructure holds the promise to increase the professionalism of the fire service discipline and improve the quality of life both nationally and internationally. This is a further indication that the fire service is metamorphosing from an occupation into a profession.



University of La Verne

Public Servants -The Stewards of Our Nation's Future

The University of La Verne's Bachelor of Science Public Administration degree focuses on the skills needed to translate the goals of citizens and elected officials into plans of action that will help to improve our lives and communities. Public Administration is the degree of choice for many of those in law enforcement and public safety careers.

- Accelerated 10-Week Terms
- AA Degree Not Required to Begin the Bachelor's Programs

Classes Available Online Or at the Following Campuses:

- · Central Campus La Verne
- Central Coast Regional Campus San Luis Obispo
- Inland Empire Regional Campus Rancho Cucamonga
- Orange County Regional Campus Garden Grove
- •San Fernando Valley Regional Campus Burbank
- Ventura County Regional Campus Santa Barbara & Oxnard

University of La Verne 800.695.4858

Visit us online at: www.ulv.edu/cbpm/bpa

Accredited by the Western Association of Schools and Colleges (WASC)

Knowledge * Service * Vision

The creation of a doctoral degree infrastructure holds the promise to increase the professionalism of the fire service.

Cogswell Polytechnical College in Sunnyvale, CA, is a DDP consortium school, which ratified the FESHE 2005 Fire Service Studies Doctoral Degree Infrastructure Resolution. The DDP has been at Cogswell College since 1981. It was designed to give fire service personnel a platform to complete a bachelor of science degree in fire science with a concentration in fire administration or fire prevention technology through distance learning. Courses are delivered via distance or in a residency format. In a resident program, students from the three states Cogswell serves - Arizona, California and Nevada – may take a concentrated course for full credit in a classroom setting with other students

and a faculty member face-to-face. This format, besides the low tuition and fees, distinguishes Cogswell from other colleges and universities that offer a bachelor of science degree in fire science administration.

The fire science curriculum at Cogswell maintains high academic standards while addressing the practical problems of the fire service. More than just overviews and surveys, fire science courses teach applied critical thinking skills designed to provide students with ways to analyze and influence approaches to community-based problem solving. The faculty members at Cogswell have a wealth of experience in their specific fields and many are execu-

tive fire officers. Faculty members hold graduate degrees and some have written textbooks in their areas of expertise.

Recently, Cogswell acted on its value of teamwork and community service and joined the Sakai ETUDES-NG Alliance administered by Foothill College to take advantage of the course management system "Easy To Use Distance Education System." Now, Cogswell students and faculty are in a position to use the latest technology developed to serve the goals and principles of distance adult education. In addition, Cogswell faculty and the recently appointed DDP director have made substantial contributions to the revisions of baccalaureate courses led by the NFA.

Cogswell Polytechnical College has made significant strides and contributions to the fire service ongoing transition from an occupation to a profession. Alumni of Cogswell hold strategic positions in the fire service and are thus leading and contributing to this timely transition.



Secure Your Future in Emergency Services

You already have experience. It's time to earn your college degree. At Empire State College, we offer individualized, cutting-edge degrees in emergency management and fire service administration. You'll use a combination of your experience and training with our accredited online courses to create a program that fits your needs. It's time for action. Get started today.

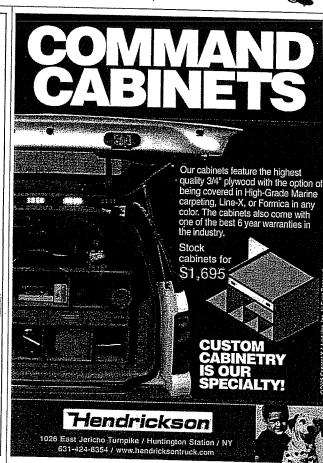
Questions? Call or e-mail now to join our next telephone information session.

800 847-3000 ext. 2300 e-mail: cdl@esc.edu

Register, apply or sample a web course online at www.esc.edu/EM



STATE UNIVERSITY OF NEW YORK



Indicate 177 on Reader Service Card

Indicate 178 on Reader Service Card

HIGHER EDUCATION FOR THE FIRE SERVICE >>>

By HARRY R. CARTER, Ph.D., MIFireE



Mai Higher Hearing Career The Strike Career

5 Fire Service Leaders Recount Personal Experiences

or far too many people in the fire service, the educational process stops when they complete Firefighter I training. In many instances, they move into fire stations in their communities and begin doing the same things over and over again. They make no effort to gather knowledge in a systematic fashion. Maybe they read and learn just enough to be promoted to a higher rank. This is the fire service within which I have spent the majority of my time in career, volunteer and military units.

On the other hand, a great part of my career has been spent in pursuit of knowledge. Why? The reasons are both personal and professional. My parents raised me to value the pursuit of knowledge. Early failures in my college career focused me to keep pushing on toward my degrees. I also discovered early that there was a lot more to learn than the prescribed courses in firefighting and apparatus operations.

An inquisitive mind is the key to learning. I have long believed that we do not go to school in pursuit of grades. We go to acquire new knowledge. Far too many among us in the fire service see the world of higher education as a place with a beginning, a middle and an end. These folks see the receipt of the degree as the be all and end all of their educational career. That is sad indeed.

As new knowledge is acquired, new questions should begin to flood the mind of the learner. Each new fact should create many more questions. Perhaps the one thing which has impressed me the most about my journey through the world of education is that just when you think you know it all, you discover how little you really know. Another door opens and a new journey begins.

Many times during my career with the Newark, NJ, Fire Department, I was-called on to handle unique and challenging assignments: I am not sure whether my educational background equipped me to answer the questions I continually faced. What I am sure of is that my education experiences equipped me with the skills to ask good questions and do proper research. Trust me when I tell you that those were skills not available within the standard fire department drill-ground manuals.

DR. HARRY R. CARTER, PH.D., CFO, MIFireE, is a *Firehouse®* contributing editor. A municipal fire protection consultant based in Adelphia, NJ, he is the former president of the International Society of Fire Service Instructors. Dr. Carter is a past chief and active life member of the Adelphia Fire Company, Currently chairman of the Board of Fire Commissioners for Howell Township District 2, he retired from the Newark, NJ, Fire Department in 1999 as a battalion commander. He also served as chief of training and commander of the "large and the American Branch of the Institution of the American Branch of the Institution of

dent of the American Branch of the Institution of Engineers (MIFireE). He recently published *Living* My Dream: Dr. Harry Garter's 2006 FIRE Act Road Trip, which was also the subject of a Firehouse.com blog. He may be contacted at drharrycarter@optonline.net.



The (fire service) world needs to change and it is the function of higher education, particularly at the doctoral level, to advance the body of knowledge by using research studies.

-Dr. Harry R. Carter

I see the need to create a new level of educational opportunities within the fire service. Much of what we do in every aspect of our field of endeavor is based on anecdotal experiences. We do things which have been done in a particular way because that's the way it has always been done. The world needs to change and it is the function of higher education, particularly at the doctoral level, to advance the body of knowledge—using research studies. We need to ate more solid knowledge on which to build the future structure we call the American fire service.

Firehouse* Magazine has asked me to poll some of my friends in the fire service world about their educational experiences. To create a level playing field, I asked each of them to respond to a common set of questions. The questions may seem simple, but they serve as the starting point for each person to describe personal experiences in the world of higher education. I hope that you enjoy the way in which my friends have shared their thoughts with you. Let me begin with the questions:

- 1. Why did you pursue degrees to support your career in the fire service?
- 2. Did the additional knowledge and skills learned in college or university make a difference in your career?
- 3. What do you see in the future?

KEN FOLISI is a retired battalion chief with the Lisle-Woodridge Fire District in Lisle, IL. He currently serves as a faculty member in the bachelor's degree program in fire service administration at Lewis University in Romeoville, IL.

Intering the fire service in 1979, I was fortunate to be associated with a very progressive department and a training officer who instilled in me the understanding that to be a professional in the fire service takes constant learning to be the best you can be, not just for individual gain, but also for those you serve with and for because others depend on your abilities. Training, education and experience must all come together in a professional

way in the fire service.

Higher education can have great impact in professional life. Education will not make you a professional. If, however, you choose to use what you have learned to make yourself a better professional, then the benefits of higher education will become evident. In my case, I was fortunate to have a wonderful fire service career for more than 25 years. During my career, I used what I learned in attaining associate's, bachelor's and master's degrees. The education helped me do well in assessment-type promotional exams for lieutenant, captain and battalion chief. My higher education helped me form my leadership style and gave me the needed skills to manage my job responsibilities far beyond what I would have been capable of without the higher education. My higher education, along with training and experience, gave me the tools I needed to help build a rewarding fire service career.

The future of the fire service will be driven by even higher demands for service and higher professional standards. I am sure the fire service profession will continue to grow in professional stature through higher education because that education is what provides more and more of the tools necessary to fulfill the fire service mission.

MIKE WIEDER is assistant director of Fire Protection Publications in Stillwater, OK.

started my fire service career as a 16-year-old junior firefighter. As I neared graduation from high school, there was an expectation from my family that I would go to college. I looked for ways to combine that expectation with my interest in the fire service. I got little help from high school guidance counselors, as they were clueless about the fire service (other than that it was all volunteer in that region) or fire-related degree options. Fortunately, the chief of the Pennsburg, PA, Fire Company, to which I belonged, was a wonderful man named Jack Mensch. He was active in countylevel fire service activities and he took me and my parents to meet the director of the Montgomery County Fire Academy at that time, Jack McElfish. Jack did a wonderful job of selling me on that path and highlighting some of the available programs.



y higher education helped me form my leadership style and gave me the needed skills to manage my job responsibilities far beyond what I would have been capable of without the higher education.

—Ken Folisi



Later thousands of firefighters, written 30 books, been named the national fire instructor of the year, served as an officer in national fire service organizations, served as chair of an NFPA committee and countless other privileges. NONE of this would have been possible without the education

I received and the contacts I made as a result of that education.

Mike Wieder

I then started my educational pursuit by getting an AAS (associate in applied science) in fire technology at Northampton Community College in Bethlehem, PA. I knew that an AAS degree alone would probably not get me too far toward a career. While at NCC, the instructor of our Suppression Systems class was a gentleman by the name of John Uliana, who at the time served as head of fire and safety for the Bethlehem Steel Corporation. John was a 1951 graduate of the School of Fire Protection at Oklahoma State University. He steered me toward that direc-

tion and the rest is history.

In my case, my education made all the difference. While a student at OSU, I was hired to be a research technician at IFSTA/FPP. As I neared graduation they made me an offer to stay as an editor and I have now been there over 22 years. This has allowed me career opportunities that I could have never imagined when I was mowing ball fields at the local school district and waiting for my fire pager to go off in Pennsburg. I have taught thousands of firefighters, written 30 books, been named the national fire instructor

of the year, served as an officer in national fire service organizations, served as chair of an NFPA committee, and countless other privileges. *None* of this would have been possible without the education I received and the contacts I made as a result of that education.

In the future, I see that virtually any career in the fire service or fire industry will require at least a bachelor's degree of some type. As competition for career firefighter jobs increases, a college degree and EMT or EMT-P certification will be required to get hired by a career fire department. The degree does not necessarily have to be a fire-oriented degree. People seeking promotion to higher ranks in the fire service will benefit from management, public administration and business administration degrees.

I also hope that the work of the folks at the U.S. Fire Administration (USFA) on the Fire and Emergency Services Higher Education (FESHE) Initiative will promote expanded and improved opportunities for fire and safety-oriented degree programs in the U.S. We cannot consider ourselves a true profession until all of the required components are in place. This includes outstanding degree programs through the doctorate level, academic journals, outstanding texts, qualified professors and the other hallmarks of a true profession.

COLUMBIA SOUTHERN UNIVERSITY

ONLINE LEARNING

A.A.S. in Fire Science • B.S. in Fire Science • B.S. in Occupational Safety and Health (concentration in Fire Safety)



ORANGE BEACH ALABAMA 36561

ECT MORE.

HAS YOUR FIRE DEPARTMENT BECOME A LEARNING PARTNER?

VISIT US ONLINE FOR A COMPLETE LIST OF LEARNING PARTNERS.

BENEFITS INCLUDE:

Your firemen receive 10% Tuition Discount Per Course

Application Fee Waived

Completely Online

Start Classes Anytime

No Obligation to Enroll-

Text Books Included



LEARNING PARTNERS RECEIVE A TUITION DISCOUNT. E-mail learningpartners@columbiasoutherm.edu for details about becoming a Learning Partner.

www.columbiasouthem.edu/firescience • 800.977.8449 code 6018

Indicate 166 on Reader Service Card

DR. DENIS ONIEAL is superintendent of the National Fire Academy in Emmitsburg, MD.

was fortunate to be in a very busy station where there were a number of young veterans. They were all going to school on the G.I. Bill. I was working a part-time job driving tractor-trailers in New York City. It didn't require too much math to figure out that I was taking home the same amount of money going to school (tax free) as driving a truck (taxable), so I signed up. When school started, it was terrific. We had great professors and classmates, some of whom are lifelong friends. It is amazing to me where many of them wound up in their careers. Just about every one of them became tops in their field.

Did my education make a difference? Of course it did! Not so much that you had all the answers, but rather the firm understanding that you don't have all the answers, but know where and how to look them up. There is also a lot to be said about your peer group, your classmates, who then become lifeong friends, and many times resources. I'm the luckiest fellow you ever met — school made the difference for me.

I see that two things are going to occur in the future. The first is that the fire service will begin to enter "professional" status as opposed to the "occupational" status. That means that there will be more and more requirements for both education and training for positions in the fire departments. We're seeing a little of it now, degree requirements for officers; EFO or CFOD requirements to become department chiefs, certification for different responsibilities. Once professional status is conferred (a long story - see my series of articles titled "Professional Status: The Future of Fire Service Training and Education" in Firehouse", August to December 2003), the next phase will be specialization - different career paths within the fire service, i.e., prevention, training, operations, logistics. This is the very same path that medicine, law, nursing, teaching, engineering and others have taken. We won't see it in the next few years, but certainly within the next 10 or 15 years. Those entering e fire service have the opportunity to lake sure they are in the right place at the right time with the right skills if they begin preparing now.



id my education make a difference? Of course it did! Not so much that you had all the answers, but rather the firm understanding that you DON'T have all the answers, but know where and how to look them up.

-Dr. Denis Onieal

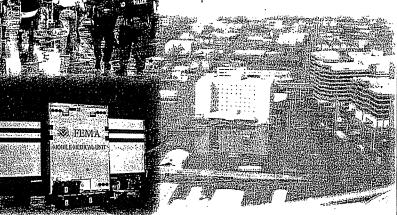
Emergency Management

your Passion. your Credentials. your Career.

Earn college credits in the FEMA-Emergency Management Institute

Independent Study Courses

- Earn an associate's degree in Emergency Management
- Take general education, elective and FEMA/EMI courses
- Launch your EM career or gain a promotion



For details call 301.471.0400 or email emergmgt@frederick.edu



Your First Choice for Higher Education



Live the revered profession that we so yearn to be, then we need to have professional, well-educated leaders in the top positions.

FIRE CHIEF RICHARD GASSAWAY of Roseville, MN, is a doctoral candidate at Capella University in Minneapolis.

realized early on that to be an effective leader, in any profession, requires a foundation of education coupled with experience. There are some things we can learn in the streets and other things that need to be more formally taught. I pursued my bachelor's degree to acquire the foundational knowledge for how to run the business of the fire department. My master's degree allowed me to apply many advanced business school principles in a real-world setting. While the former have allowed me to acquire and apply business knowledge, my doctoral program has allowed me to create business knowledge, contributing in ways that advance under-



standing of understudied issues.

Did my education make a difference in my career? Absolutely. My education (again, coupled with experience) has opened doors of opportunity for me that would have never been possible otherwise. For example, armed with a master's degree and 10 years of experience in the fire service, I was able to secure my first full-time fire service position, a fire chief. I was 28 years old and I know my education played a key role in opening up that opportunity.

I think the future can be predicted by seeing how the past has played out. When I entered the fire service in 1979, there were very few fire service ads seeking educated leaders. Over time, that has evolved. First there were associate degree (or equivalent) requirements. Then we started to see bachelor degrees required (or strongly preferred). Then more cities set Executive Fire Officer (from the National Fire Academy) as a requirement (or preferred). Now, it's not uncommon to see bachelor degrees as the minimum requirement and master's degrees preferred. If we are going to advance to the revered profession that we so yearn to be,

then we need to have professional, welleducated leaders in the top positions. Our public safety partners on the police side have known this for years.

As far as fire service leaders becoming doctors, I think those who do that are answering a higher calling to contribute beyond their own career aspirations. Doctoral-degreed fire service leaders can contribute significantly to the betterment of the fire service by teaching, writing, consulting and researching. I do not see the day when municipalities will desire, nor recognize the benefit of, doctoral-degreed leaders.

DR. BURTON CLARK is program chair at the National Fire Academy.

I moved to the world of higher education because there was more to learn than the fire department officers or training academy instructors could teach me. Education has played a great part in my career. By understanding the theory behind what I was doing, I was better able to adjust my practice to meet new and unusual situations. In addition, the quality of my work increased because I had a deeper understanding of how fire service doctrine was made and applied.

In the future, I envision a fire service studies doctoral degree infrastructure being created so the discipline can take the next step to becoming a true profession. We need to create a deeper and wider pool of research upon which to build out future fire service.

Please note that I am still learning. I am about to begin serving on my seventh doctoral dissertation committee. The higher education journey never ends and it is a wonderful ride.



Ligreat part in my career.

By understanding the theory behind what I was doing; I was better able to adjust my practice to meet new and unusual situations.

—Dr. Burton Clark

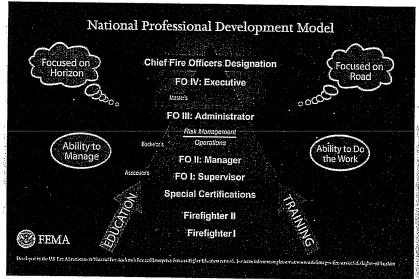
Where Public Safety Policy **Meets Higher Education**

merican higher education has been recently in the midst of one of the most exciting and yet challenging periods in its history. Earning a college degree is climbing toward a universal expectation. At the same time, postsecondary education faces serious fiscal constraints and the urgency to reform its curricula and approach to elearning and teaching. All of this is happening at a time of unprecedented international competition in knowledge-based economies increasingly focused on intellectual capital.

According to data recently released by the Organization for Economic Cooperation and Development (OECD), the United States has slipped from first to seventh among industrialized nations in postsecondary attainment among 25 to 34 year olds. If there was ever a time for elected officials, educators, and the public to be focused on education beyond high school, it is now.

The history of the United States provides for ample evidence that the federal and state governments recognized they have a stake in public higher education. The government recognized that learning how to do things in engineering, in agriculture and in other areas in public institutions of higher education and the passing of this knowledge along to the public deserved federal financial and policy support. The Morrill Acts of 1862 and 1890 and other subsequent legislation such as the Smith-Lever Act and the Land-grant Act are convincing evidence of more than one hundred years of federal interest in cooperative efforts with the individual states in public higher education. Sometimes these have been combined efforts, sometimes unilateral. The idea that the benefits of education do not accrue solely to the individual recipient but to society as well is generally accepted, certainly by institutions of public higher education. The idea that democracy thrives in the environment of an enlightened electorate has been part of our heritage.

YOUNES MOURCHID, Ph.D., is an associate professor. and the director of the Degrees at a Distance Program (DDP) - Fire Science at Cogswell Polytechnical College in



With that as a background we can now proceed from the philosophical discussion of the symbiotic relationship between higher education and public policy to the discussion of a concrete case where such relationship plays out. It might be profitable to ask ourselves two elemental questions as a starting point of discussion:

1. Can higher education institutions influence public policy?

2. How does public policy in-kind influence higher education?

The Fire and Emergency Services Higher Education Consortium (FESHE) is a nascent body in the field of higher education; a field deemed the catalyst for moving the fire service from an occupation to a profession by operating on the basis of an elaborate National Professional Development Model which combines parallel and balanced tracks of training and higher

www.Firehouse.com

education to live up to the primary mission of the fire and emergency services.

The FESHE National Professional Development Model has been borrowed and even copied by many state fire marshal offices and institutions of higher education around the country for the purpose of reforming and revamping their training and education plans. As a case in point, the California State Fire Marshal Office recently completed its Strategic Plan known as Blue Print 2020, California State Fire Training and Education Plan 2008. The FESHE National Professional Development Model is incorporated in the plan as an elemental strategic goal and action item.

The plan Blue Print 2020 is a major shift in planning, as retired State Fire Marshal and chair of the State Training and Education Advisory Committee (STEAC) Ronny

92 Firehouse

November 2008

accou not h and to

m

fii ar fo

in in Tr

ed

Ca tic

sir

foi of

fuı Pr.

an od

and

pai

mc

to :

fire

wai

erfi

and

tage mu

ily

pos

202

vari

guic

spec

the-

colla

volv

four

the]

Cali

fire

trair

(Blu

Chie

relat

ers it

stake

fessio

terna

speci

mine

Blue

Novemi

>>> HIGHER EDUCATION FOR THE FIRE SERVICE

Coleman comments, "The plan is a stop to master planning and the start of strategic planning." Chief Coleman continues, "The first attempt to create a plan for the training and education for fire protection in California was during the 1930s and various individuals and groups created plans in the intervening years. The current State Fire Training model dates back to 1971."

The circumstances that have instigated the need for reform and change in the California State Fire Training and Education resemble the variables which compel similar public safety organization to reform. Chief Mike Richwine, division chief of State Fire Training (SFT), elaborates further on these circumstances: "Blue Print 2020 arose from a need to update antiquated curricula and delivery methods as major shifts have taken place in fire and emergency services that changed the paradigm for training and education."

Chief Coleman affirms: "The 1971 model became obsolete and eventually led to system-wide failure. Many other states' fire service training programs moved forward while California's languished. Powerful shifts are occurring in our society and we must move quickly to take advantage of them. Now individuals have communications tools and information readily available, which open up enormous possibilities."

The second novelty of Blue Print 2020 is that its inception process involved various stakeholders and its lessons and guidelines were not limited to one or two specific organizations: "...the plan is for the whole fire service community and a collaboration of stakeholders has been involved in its development from the very foundation. The stakeholders come from the local, state, and federal fire service in California as well as career and volunteer fire fighters, fire chiefs, organized labor, training officers, and community college" (Blue Print 2020, page 4). In the words of Chief Coleman, "the plan seeks to build relationships and alliances with stakeholders in the public and private sectors."

On a collaboration platform, various stakeholders with the mediation of a professional consultant firm conducted an internal needs analysis and identified eight specific areas where improvement is imminent. These areas include, as outlined in Blue Print 2020 p.5, the following themes:

• Quality Control - There is a lack of accountability in the field and SFT does not have the staff to monitor instructors and training programs statewide.

• Data Management – Student, instructor and class information is stored in software that was not designed to hold the volume of data that SFT collects.

• Outdated Curriculum – The volume of courses offered through SFT is difficult to update and maintain as the information in each program changes.

 Certification – Security of certification exams is consistently breached. Many current certification standards are not competency based.

• Continuing Education – There is no requirement for firefighters, fire officers, chief officers or instructors to maintain their skill and knowledge through a comprehensive continuing education program.

 Professional Development - There is an increased demand and expectation for professional development training to meet the challenges of today.

• Lack of Innovation – The SFT system is unresponsive to change and does not utilize technology to its fullest advantage. Many SFT business processes can and should be automated.

• Understaffing – At a time when there are more people than ever relying on the system, SFT's inability to maintain a responsive level of staffing limits its ability for curriculum development, field review, and research and development of new programs.

These contingencies are not limited to the context of California, but are nationwide areas of concern and drivers for change and reform. However, the plan underlines the specificity and uniqueness of California situation: "...California is a large state both geographically and demographically. This fact makes it very difficult to develop consensus about the direction SFT should be taking. At the same time, there are national initiatives that threaten the California program but also show the way to take advantage of what others have done..." (Blue Print 2020, page 5).

As a response to the aforementioned challenges, Blue Print 2020 devised five strategic goals and actions plans in page 8 of the plan as follows:

1. Quality Improvement - Ensure the highest levels of service and quality by im-



ging peri-

ime, post-

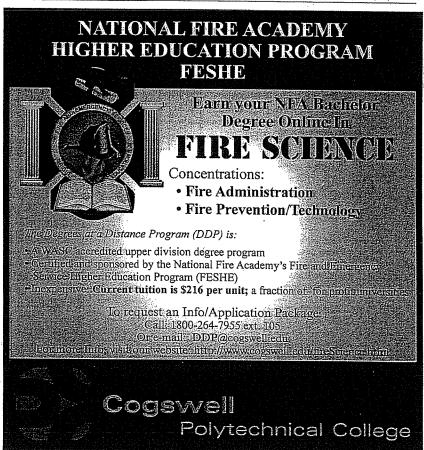
proach to

in knowl-

imary misservices; Professional n borrowed te fire mari of higher try for therevamping 1 plans. As: a State Fire mpleted its Print 2020; and Educaational Prolis incorpoital strategic

a hand shift Fire Marshall and Educa-EAC) Ronny

ovember 2008



Indicate 154 on Reader Service Card

November 2008

Firehouse 93

www.Firehouse.com

plementing an oversight program that ensures the qualifications, currency and accountability of all instructors and curriculum.

2. National Professional Development Model – Participate in the FESHE National Model of fire service training and education that includes an integrated, competency-based system of fire and emergency services professional development and an integrated system of higher education from a two-year associate degree to doctoral degrees.

3. Capstone Testing – Administer a comprehensive evaluation tool after a candidate completes all the requirements and applies for a position certificate. Capstone testing would replace the current system of administering a written certification exam at the end of each course in the certification track.

4. State Fire Training Business Processes and Training Delivery – Utilize a computer-aided training and education delivery system that includes appropriate distance learning and educational material, and the ability for participants to track and access completed training and certification records.

5. California Public Safety Institute – Create a unified system that integrates all public safety training and education toward a common mission. The crown jewel of this initiative is the envisioned all-risk California Public Safety Institute (a California equivalent of the federal National Emergency Training Center).

Of preponderant relevance to this discussion is goal and action item two: the National Professional Development Model shown on page 92. The model was developed by the National Fire

Academy and Fire and Emergency Higher Education Consortium to serve as a national model of fire service training and education around the country. The model is credited for helping move the fire and emergency services from an occupation to a profession and standardize higher education curricula.

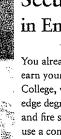
The application of the model is expected to result in walk trained and academically educated fire and emergency services. The SFT intends to enter into partnerships with other states local sure national recognition of educational achievement and resulting certification. In this regard, the SFT intends to form a partnership with like-minded national programs and create a common platform whereby accreditation follows national standards and national recognition and equivalency is attained. Plan Blue 2012 asserts, however, that "SFT will continue to be a leader the innovation and development of standards, curricula, and techniques particularly in those aspects of training unique to definition (page 11).

Chief Richwine elaborates further on the significance of the lowing the National Professional Development Model: "The model will help us meet our strategic plan to professionalize the fine service in California, create a paradigm shift and a generational turn-over, and produce more educated personnel with more mechanical aptitudes and analytical competencies."

The FESHE National Professional Development Model of service training and education can then be seen as a nexus line ing and cementing efforts between public safety policy and erators of higher education in California. Both Chiefs Go and Richwine see the State Training and Education Advisor Committee as "a policy maker..." The National Fire Academy also sees its charge as a training and education policy maker the institutions of higher education: community colleges and bat calaureate Degree at a Distance universities and colleges around the country which offer the FESHE curriculum are willings committed participants in the FESHE National Professional D velopment Model of fire service training and education and thu have stake in such public safety policy. These higher education institutions participate at the level of providing valuable feet back and the services of subject matter experts back to political makers as to how the model plays out in practice and reality

The workings and the expected dynamics of this parine ship are then evidence that higher education institutions have a streak of influence in the direction of public safety polic ciprocally, public policy making symbiotically has implicating for higher education policy recommendation and implement tation. To implement Blue Print 2020's certain goals, espe goal and action two "FESHE National Professional Develo ment Model of fire service training and education", the Calif nia State Training & Education Advisory Committee (Siles) will have to enroll and work closely with the 20-plus commit nity colleges in California which offer an associate FESHE grees and the one provider of the upper-division baccalaureate FESHE degree, Cogswell College. In kind, these colleges in behooved to align their strategic short and long term planning and processes with the recommendations made by Blue Rin 2020. It is in this fashion that the vision Chief Coleman templates of "building and sustaining strategic alliances" come to fruition and the fire and emergency services in Gall fornia will thrive and be prepared to meet the challenges offit 21st century and thus globalization.

A full copy of Blue Print 2020 is available at the website http://osfm.fire.ca.gov/training/pdf/BP2020finaldraft0108



Secure Your Future in Emergency Services

You already have experience. It's time to earn your college degree. At Empire State College, we offer individualized, cutting-edge degrees in emergency management and fire service administration. You'll use a combination of your experience and training with our accredited online courses to create a degree program that fits your needs. It's time for action.

Questions? Call or e-mail now to join our next telephone information session.

800 847-3000 ext. 2300 e-mail: cdl@esc.edu

Register, apply or sample a web course online at www.esc.edu/EM



STATE UNIVERSITY OF NEW YORK

Indicate 155 on Reader Service Card

Fire Service and Homeland Security Management Curriculum SubCommittee

Dr. Mark Rivero

Las Vegas Fire Department, NV

Dr. Anthony Rogers

Veteran's Administration

San Antonio TX

Chief Don Doro (Advisory

Committee)

Milwaukee Fire Department, WI

Chief James Broman (Advisory

Committee)

Lacy Fire Department, WA

Mr. Dale Ritzel (Ret.)

SIUC Health Ed

Mr. John Davey

SIUC Architecture

Dr. Charles Ruffner

SIUC Forestry

This subcommittee is comprised of full time faculty from SIUC, Adjunct Faculty from FSM and FSM Advisory members.



MEMORANDUM

DATE:

February 28, 2007

TO:

Paul Sarvela, Dean

College of Applied Sciences and Art

FROM:

David Carlson, Dean

Library Affair

RE:

Access to Library Databases

At the request of Gary Kistner, Program Coordinator, Fire Service Management, I am writing to confirm that registered SIUC students in the Fire Service program will have offsite access to Library electronic databases and full text resources. As you know, most of our journal-based literature is now provided electronically rather than in print format, so this access will provide substantial access to library resources.

When a student accesses a library-provided database from a non-campus IP address, they will be presented with a validation screen from our proxy server. The server will request that the student input their student ID number. When a valid student ID number is provided, the student will have full and complete access to library databases and resources. Please note that because this authorization works through the student ID number it is essential that anyone in this program be a registered student. Our proxy database of valid IDs is populated by synchronization with the Office of the Registrar so official registration as a student is critical to the process.

A detailed analysis of specific journal holdings on a title by title basis would be difficult to achieve and even more difficult to assess our resources based on such a particular listing. Moreover, the topics in this area of study, such as fire service, homeland security, terrorism, and occupational safety and health issues touch many different disciplines and would therefore cover a wide range of different journals and databases at Morris. Nonetheless, let me try to be specific with some information as may be reflective of Library resources in this area.

The Library has an electronic journal identification tool which can be browsed by topic. Under the category of "Engineering" and the subcategory "Fire Fighting and Safety

¹ There are a few exceptions. For example, a small number of databases are limited to physical on-site usage, but these are very few in number and none are in the Fire Service Management area specifically.

Engineering," 25 journals are listed with full text online through Morris Library resources. These 25 journals are:

Air safety week	Air transport world
Annual report (of the Australian Maritime	Chilton's industrial safety & hygiene news
Safety Authority)	
Consulting-specifying engineer	Control magazine
Disaster prevention and management	Ergonomics
Fire and materials	Fire chief
Fire engineering	Fire management notes
Fire technology	Flame retardancy news
IIE solutions	International fire and security product news
Journal of the society for radiological	Magazine (of the European Agency for
protection	Safety and Health at Work)
Minnesota fire chief	NFPA journal (National Fire Protection
	Association)
Occupational health and safety	Professional safety
Propellants, explosives, pyrotechnics	Safety management
Safety science monitor	

Some of the key journals listed here are Fire Chief, Fire Engineering, NFPA Journal, and Occupational Safety and Health.

Many other related areas are also listed in the journal identification tool. For example, the category "Environmental Sciences," subcategory "Ecotoxicology" lists 28 journals, the subcategory "Natural Disasters and Industrial Accidents" lists a total of 36 journals, and in the category of "Social Sciences," subcategory "Foreign Policy, Defense and Internal Security," a total of 216 journals are listed.

For monographs (books), students may search the Library's online catalog, SIUCat, freely and determine our holdings. Using the same interface, they may also search the I-Share catalog and determine the holdings of all CARLI libraries. Through CARLI, the I-Share catalog includes the holdings of most of the libraries, public and private, in Illinois including the UIUC, UIC, and ISU catalogs, to name a few. Any books needed by a student, whether in I-Share or not, may be requested through Morris Library's Interlibrary Loan online request system. Once requested and received, the requested volume will be delivered to the student by Morris Library at the appropriate off-campus location.

An assessment of the book/monograph collection is also difficult but some analysis of the LC subject headings is instructive. For example, subject headings related to fire are reported in the online catalog, as follows:

LC Subject Heading	Number Titles Listed in SIUCat
Fire	20
Fire behavior	1
Fire blight	7
Fire ecology	20 .
Fire extinction	32
Fire fighters	9
Fire investigation—case studies	66
Fire management—United States	22
Fire—mathematical models	6
Fire prevention	41
Fire prevention—law and legislation—United	16
States	
Fire prevention—research	13
Fire prevention—United States	31
Fire testing	26

Many of these subject headings have extensive subject division analysis. For example, the subject heading "Fire Prevention" has more than 80 different LC subject divisions, such as "Study and Teaching," "Research," and "Equipment and Supplies" to name a few. Each of these subject heading divisions includes at least one title at Morris Library (and many include several titles).

In addition to the fire service area, there are numerous journals and articles available for Homeland Security and Emergency Management available through various trade journals and the Department of Homeland Security.

If you need any further information, please let me know.

Thank you.

DC:emw

cc: Gary Kistner, Visiting Assistant Professor, ASA Off-Campus Academic Programs

MASTER OF SCIENCE IN FIRE SERVICE AND HOMELAND SECURITY FACULTY LIST

ON-CAMPUS FACULTY

Name/Rank/Program

Gary Kistner, FSM Program Coordinator Director, Graduate Studies, FSHSM

Dr. Dale Ritzel Professor Emeritus

Health Education and Development

Dr. Brian Rice Instructor

Health Education and Development

Dr. Charles Ruffner Associate Professor

Forestry

Dr. Nancy Martin Assistant Professor Information Systems Technology

Dr. John Legier Assistant Professor

Technical Resource Management

Degree/Institution/Date

Master of Science, Technology Education Eastern Illinois University, 1986

Ph.D., Health Education

Southern Illinois University, 1970

Master of Science, Health Education Southern Illinois University, 1996

Ph.D., Forestry

Pennsylvania State University, 1999

Ph.D., Business Administration Southern Illinois University, 2006

Ph.D., Education

Southern Illinois University, 2007

ADJUNCT FACULTY

Name/Rank/Program

NAME

James Aire Fire Chief Barrington IL

Les Balsiger Director, Student Services

Division of Distance Education Laramie Community College

Degree/Institution/Date

DEGREE

Bachelor of Science, Fire Service Mgt Southern Illinois University, 1984 Master of Arts, Public Administration Governor's State University, 1987

Bachelor of Science, Liberal Studies Eastern Oregon University, 2001

Juris Doctorate

Gonzaga University School of Law, 2004

James Bendinelli

Retired Fire Chief, BP Oil

Gary IN

Bachelor of Science, Fire Service Mgt Southern Illinois University, 1986 Master of Arts, Public Administration Governors State University, 1993

Bruce Bernstein Fire Investigator

Probe Inc.

Skokie IL

Bachelor of Science, Fire Service Mgt Southern Illinois University, 1988

Juris Doctor

Chicago Kent College of Law, 1998

Gregory C. Berk

Fire Chief Wheaton IL Bachelor of Arts

Northern Illinois University, 1970 Master of Arts, Public Administration Governors State University, 1989

Kevin Brame Deputy Fire Chief North Las Vegas NV Bachelor of Vocational Education Cal State Long Beach, 1986

Master of Art, Organizational Leadership

Chapman University, 1998

Monika Byrd

Director, Leadership Develop

Phi Theta Kappa

Bachelor of Science Beloit College, 1985

Master of Art

University of Louisiana, Lafayette, 1989

Stephanie Davidson

Fiscal Analyst

Henderson Fire Dept

Henderson NV

Bachelor of Science, Business Management

University of Phoenix, 2004

Masters of Business Administration

University of Phoenix, 2006

Christopher Drews Firefighter/Paramedic

Addison IL

Bachelor of Science, Fire Service Mgt Southern Illinois University, 2002 Master of Arts, Public Administration Governor's State University, 2003

Gregory Favre

Firefighter/Paramedic St. Louis Fire Dept.

St. Louis MO

Bachelor of Science, Crisis & Disaster Mgt

University of Central Missouri, 2008

Master of Science, Emergency Services Mgt

George Washington University, 2009

Kurt Glosser

Bachelor of Science, Technical Education

Fire Service Education Specialist Eastern Illinois University, 2001

Illinois Fire Service Institute

Champaign IL

Master of Education, 2004

University of Illinois at Urbana-Champaign

Thomas J. Hardin Bachelor of Science, Fire Service Mgt

Fire Inspector

Crystal Lake IL

Master of Public Administration
Governor State University

Kasthuri Henry Master of Business Administration Accounts Manager Indiana State University, 1997

AON Corporation PhD, Finance (ABD)
Chicago IL Walden University, 2009

Perry Howard Bachelor of Science, Fire Service Mgt
Fire Lieutenant Southern Illinois University, 1998
Arlington Heights IL Master of Business Administration
Keller Graduate School, 2000

Spencer Kimura Bachelor of Science, Fire Service Mgt
Battalion Chief Southern Illinois University, 1995

Glenview Fire Dept Master of Science, Managerial Leadership

Glenview IL National Louis University, 1999

Michael Kopp Bachelor of Science, Fire Service Mgt
Fire Chief Southern Illinois University, 1992
Elmhurst IL Master of Public Administration
University of Illinois, 1996

Lindsay M. Laycoax
Retired, Chief Administrator
Oak Forest IL
Bachelor of Science, Fire Service Mgt
Southern Illinois University, 2005
Master of Public Administration
Governor State University, 2007

Paul Machen Bachelor of Science, Fire Service Mgt
Dean, Student Services Southern Illinois University, 1993

St. Phillips College Master of Business, Managerial Leadership

San Antonio TX City University, 1998 Retired, USAF PhD, Adult Education Kansas State, 2009

Paul Mackin Bachelor of Science, Fire Science Mgt

Lieutenant Southern Illinois University
North Palos Fire Prot. District Master of Public Administration
Palos Hills IL Governor State University

Aaron Marjala Bachelor of Science, Fire Service Mgt
Firefighter Southern Illinois University, 2003
North Shore Fire Dept. Master's of Science, Management

North Shore Fire Dept. Master's of Science, Management Cardinal Stritch University, 2005

Debra Mertz Associate Dean, Business

Stevens-Henager College

Salt Lake City UT

Bachelor of Science, Fire & Safety Eng.

University of Cincinnati, 1997 Master of Business Administration

University of Phoenix, 1999

PhD, Management Organizational Ldrshp

University of Phoenix, 2003

Alan Otto

Retired, Fire Chief

Normal IL

Bachelor of Science, Safety Illinois State University

Master of Science, Management University of St. Francis, 2006

Steve Palmieri

North Central College, 1994

Bachelor of Arts, Organizational Comm

Master of Business Administration North Central University, 1999

James Rearden Executive Director

IL MABAS

Bachelor of Science, Fire Service Mgt

Southern Illinois University Master of Public Administration Western Michigan University, 1987

Mark Rivero Lieutenant

Las Vegas Fire Dept Las Vegas NV

Bachelor of Science, Physical Education University of Nevada Las Vegas, 1979

Master of Arts, Education

University of New Mexico, 1985 Ed.D, Educational Leadership

University of Nevada Las Vegas, 2004

Anthony Rogers Retired, Fire Chief McAllen Fire Dept McAllen TX

Bachelor of Business Administration University of Texas, San Antonio, 1994 Master of Business Administration Our Lady of Lakes University, 1997

PhD., Leadership

Our Lady of Lakes University, 2001

Daniel Ryan

Administrator, United Food and North Central College

Commercial Workers Union Chicago IL

Bachelor of Arts, Political Science

Master of Public Administration Roosevelt University, 1978

William Schultz **Battalion Chief** Wheaton IL

Bachelor of Science, Fire Service Mgt Southern Illinois University, 1992 Master of Public Administration Governors State University, 1999

Paul Snodgrass Firefighter/Paramedic

Sarasota County Fire Dept

Sarasota FL

Bachelor of Arts, Political Science

Augsburg College, 1977

Master of Arts, Adult Education University of Phoenix, 2006

Edward Stewart Chief Safety Specialist

VIA Metropolitan Transit

San Antonio TX Retired, USAF Bachelor of Science, Career Occupations

Wayland Baptist University, 2001 Master of Science, Education

American Intercontinental University, 2004

PhD, Educational Leadership University of Phoenix (4th year)

David Tomlinson Fire Engineer

Champaign Fire Dept Champaign IL Bachelor of Science, Fire Service Mgt

Southern Illinois University Master of Science, Technology Eastern Illinois University

Lorenzo Vazquez Commander

Human Resources Division

Chicago Fire Dept

Chicago IL

Bachelor of Science, Fire Service Mgt Southern Illinois University, 2002 Master of Public Safety Administration

Lewis University, 2003 PhD, Business Administration Argosy University (ABD)

Matthew Weber Fire Chief Litchfield IL

Bachelor of Science, Fire Science Mgt Southern Illinois University, 1994 Master of Arts, Public Administration Governor State University, 1998

James Wenzel Fire Chief Klamath Falls Klamath Falls OR Bachelor of Science, Fire Science University of Maryland, 2000 Master of Science, Education University of Wyoming, 2004 PhD, Education (ABD) University of Wyoming

Gregory West

Associate Dean, Fire and EMS Waukesha Technical College

Waukesha WI

Bachelor of Science, Industrial Engineering

Marquette University, 1996

Bachelor of Science, Fire Service Mgt Southern Illinois University, 1998

Juris Doctorate,

Concord Law School, 2006

Fred Wilson Professor

Angelo State University

San Angelo TX

Bachelor of Arts, Physics/Mathematics

Murray State, 1959 PhD., Physics

University of Kansas, 1964