



U.S. Fire Administration
National Fire Academy

Executive Fire Officer Program

Operational Policies
and Procedures

Applied Research Guidelines

Revised October 1, 2001

The Executive Fire Officer Program is an initiative of the
United States Fire Administration
designed to provide senior officers and others
in key leadership roles with:

- An understanding of:
 - the need to transform fire and emergency services organizations from being reactive to proactive; with an emphasis on leadership development, prevention, and risk reduction;
 - transforming fire and emergency services organizations to reflect the diversity of America's communities;
 - the value of research and its application to the profession; and
 - the value of lifelong learning.
- Enhanced executive-level knowledge, skills, and abilities necessary to lead these transformations, conduct research, and engage in lifelong learning.

(Revised Statement of Purpose, January 1, 2001)



Federal Emergency Management Agency

United States Fire Administration

National Fire Academy
Emmitsburg, Maryland 21727-8998



Dear Executive Fire Officer Program Participant:

Welcome to the U.S. Fire Administration's National Fire Academy's Executive Fire Officer Program (EFOP). Whether you are new to the program or nearing its completion, your participation is critical to the success of this major U.S. Fire Administration initiative. In light of the events that shocked our nation on September 11, 2001, your leadership within the community that you serve is vitally important. This is the ultimate measure of our program. The challenge that we extend to you is a leadership one. It is to lessen, if not prevent fires from occurring, and successfully mitigate the causes and scenarios of fires and other emergencies that result in so much human suffering and economic loss.

This document attempts to categorize and present both the changes and current policies that govern EFOP. The intent is to establish a protocol that promotes equity, trust, and a high level of academic standard.

Please refer to page I-3 in the Operational Policies and Procedures section, which outlines some important reminders.

I encourage you at any time to tell me if there is some way that we can serve you better. Likewise, if you are satisfied with the program, please communicate this word to others.

I wish you the greatest measure of success within EFOP.

Sincerely,

A handwritten signature in black ink, reading 'Dr. Denis Onieal', is positioned above the printed name.

Dr. Denis Onieal
Superintendent

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OPERATIONAL POLICIES AND PROCEDURES

REVISED

OCTOBER 2001

WHAT IS NEW FOR THE EXECUTIVE FIRE OFFICER PROGRAM IN FISCAL YEAR 2002?

Changes In The EFOP Curriculum:

On September 11, 2001, terrorists using commercial airliners as weapons of mass destruction attacked the United States. The results in terms of loss of life and property are horrific and well-known. Fire service agencies as first responders incurred extreme operating and incident management challenges. The line-of-duty deaths experienced by the Fire Department of New York (FDNY) were unprecedented.

The *Federal Emergency Management Agency's United States Fire Administration* (USFA) deployed a number of personnel to assist in the establishment of a "unified command incident management system" at the World Trade Center (WTC) disaster site. These operations, which are still unfolding, provided and will continue to offer an opportunity to evaluate both existing and potential future curricula that are offered to the nation's fire and emergency services personnel by USFA/National Fire Academy. To those representing USFA who participated in the response to the WTC disaster, the events of September 11, 2001, have indicated that a change is warranted for the Executive Fire Officer Program.

Unified Command:

The experiences of those who participated in *USFA Forward Coordinating Team* at the WTC have reinforced the need for senior fire officers and their responding organizations to be prepared for the implementation and operation of "area or unified command" any time that an emergency incident grows to such a proportion that numerous agencies are involved in the response and mitigation efforts.

Failure to possess and implement these skill sets will have profound implications on the ability of the organization to manage and mitigate the incident successfully. Even small fire service organizations can find themselves either as the host of the incident, or responding to another's jurisdiction. While the WTC incident was unprecedented in so many characteristics, FDNY's resources were taxed to the point where the incident became one of the largest interagency operations in history from an emergency services perspective.

One of the current third-year elective courses is *Executive Analysis of Fire Service Operations in Emergency Management* (EAFSOEM). EAFSOEM contains curriculum dealing with preparing for, responding, managing, and mitigating large-scale incidents using multiagency resources at a strategic level. While some EFOP participants select the EAFSOEM course as their elective, only 25 - 30 percent do so. And beginning in FY03, there will be no elective year whatsoever.

Therefore, a decision to change the EFOP results in the following curriculum structure:

- 1st year: *Executive Development*
- 2nd year: *Executive Analysis of Fire Service Operations in Emergency Management (EAFSOEM)*
- 3rd year: Elective year. (Beginning in FY03, 3rd year participants will be required to participate in a Fire Prevention/Risk Reduction curriculum)
- 4th year: *Executive Leadership*

This change would result in placing EAFSOEM as a core requirement of the four-year EFOP curriculum

Justifications For Change:

- The change recognizes the nature of recent incidents and the need for all fire service organizations to be prepared for multiagency response and participation.
- This change also responds to the strong potential for future terrorist incidents. Even a smaller scale incident would involve a multiagency response due to the nature of the event.
- The *Strategic Management of Change* (SMOC) course currently is scheduled for revision. *Executive Development* (ED) is scheduled for revision during FY02. It is believed that the "change model" contained within SMOC can be taken from the course and included within ED when the revision is conducted.
- The change preserves the new Fire Prevention/Risk Reduction course as a core element of USFA, a result of a decision to change EFOP made in December of 2000.
- The change addresses and supports USFA's operational objectives.

Implementation Plan:

The change would be effective immediately. Those who are scheduled for *Strategic Management of Change* (SMOC) during FY02 will be transferred to offerings of EAFSOEM. SMOC offerings will be deleted from the schedule and replaced with EAFSOEM offerings. A letter explaining the change with justifications will be sent to all EFOP participants. A press release will be created and mailed to all stakeholders and media partners. The final elective year (for third-year participants) will continue as normal during FY02.

EFOP CLASS OF FISCAL YEAR 2005

This year approximately 226 participants will be welcomed to the EFOP. This marks the largest entry class in the history of EFOP since 1985. Also significant is the fact that within this group the first "key-leaders" component has been chosen; individuals who have been recognized for their demonstrated leadership in non-senior fire officer positions. We firmly believe that their participation will strengthen the EFOP process. The "key-leaders" selection component will continue for those who make application for EFOP during FY02. For more information on this please refer to page I-9.

USFA OPERATIONAL OBJECTIVES AND APPLIED RESEARCH PROJECT TOPICS

Beginning this year, EFOP participants will be strongly encouraged to select an Applied Research Project topic/issue that supports one or more United States Fire Administration's (USFA) Operational Objectives. USFA recognizes that in order for it to achieve its strategic objectives successfully, progress must be achieved in many small steps at the local level. These four operational objectives were the result of collective input from all of USFA's stakeholder groups and organizations. For more information on this, please refer to page II-2.

AMERICAN PSYCHOLOGICAL ASSOCIATION STYLE GUIDELINES– NEW EDITION

In July of 2001 the American Psychological Association (APA) published the fifth edition of its *Publication Manual*. Please refer to page II-11 for important information regarding use of both the fourth and fifth editions when completing an Applied Research Project.

IMPORTANT REMINDERS FOR FISCAL YEAR 2002

Reminder Regarding the Definition of Applied Research:

The EFOP participant is reminded that an ARP which does not contain "original research" will receive a failing grade. The Literature Review, while a necessary and required component of an ARP, will not stand alone as the research procedure. The EFOP participant must add to "what other people have already written or said about the research topic" (the Literature Review). These procedures can take the form of new standard operating procedures, policy development, evaluation of existing services/procedures, program implementation, surveys, comparative analysis, or experimentation.

Surveys:

You are not required to perform a survey. Surveys and/or developed interview processes are just one example of a valid research procedure. The choice of performing a survey process should support the need to obtain information and data to help answer a research question(s). When performing this process, the EFOP participant is cautioned regarding the use of surveys when the sample exclusively represents students who were attending NFA concurrently with the participant and/or when the sample selection is based on NFA/EFOP affiliation.

Normally this sampling approach is flawed, as it does not represent a valid database from which conclusions can be reliably made. For further guidance, if you decide to employ a survey as part of your research procedures, the author is encouraged to consult texts and materials that outline survey research and sampling.

EFOP Support Voice Mail:

The EFOP has an EFOP Support Voice Mail line for your convenience. Should you have questions regarding your ARP, the EFO program, course assignments, etc., you may leave a message on the Support Line and your calls will be returned as soon as possible. You may reach the Support Line by dialing 1-800-238-3358, extension 1639, or directly by dialing 1-301-447-1639.

Class/Course Scheduling:

For issues related to the scheduling or date assignment of your course, please contact Admissions. The EFOP program office is unable to alter your assigned class dates. For questions regarding course scheduling and cancellations, please contact the Admissions Office at 1-301-447-1035.

Graduate Certificate Information Sheet:

You will receive a Graduate Certificate Information (GCI) green sheet when you attend your final course in EFOP, normally *Executive Leadership* (EL). It is essential that you complete and forward the GCI with your final project. If you do not, NFA will not be responsible for the timeliness of transfer of the certificate to you. This information will be provided to the Supervisor of choice that you specify for official presentation of your graduate certificate. The Congressional information will be used to notify members of Congress of your achievement at the end of the fiscal year.

Should you not finish the EFOP with the EL class, a GCI can be requested or you will be notified upon the successful completion of that final project. A sample of the GCI is contained within the Applied Research Guidelines, Appendix, page A-6.

EXECUTIVE FIRE OFFICER PROGRAM DESCRIPTION

The Executive Fire Officer Program is an initiative of the United States Fire Administration designed to provide senior officers and others in key leadership roles with an understanding of:

- the need to transform fire and emergency services organizations from being reactive to proactive; with an emphasis on leadership development, prevention, and risk reduction;
- transforming fire and emergency services organizations to reflect the diversity of America's communities;
- the value of research and its application to the profession;
- the value of lifelong learning; and
- Enhanced executive-level knowledge, skills, and abilities necessary to lead these transformations, conduct research, and engage in lifelong learning.

The program contains diverse executive level curricula, one course per year for 4 years. The program also requires a commitment to complete four applied research projects, a post-course activity for each course. The sponsoring organization must realize that these research projects require time and potential resources once the participant returns to the organization.

Each EFOP course and Applied Research Project (ARP) has been recommended by the American Council of Education to receive college level credit.

The sequencing of the program is as follows (reference flowchart on page I-21):

First Year Course:

- *Executive Development*

This course is designed to assist fire service personnel in developing effective management and leadership skills as they make the transition from manager to senior executive.

Through a combination of theory, case study analysis, reflection, introspection, and self/observer-based assessment, students learn how to enhance team development and apply action research.

Course units include working as a team; individual professional development; research; managing creativity; following and leading; labor relations; organizational culture; service quality; ethics; outside perspectives; legal aspects of fire protection; and research project reports.

Second Year Course:

- *Executive Analysis of Fire Service Operations in Emergency Management*

This course is designed to prepare senior staff officers in the administrative functions necessary to manage the operational component of a fire and rescue department effectively. Since the subject matter is comprehensive, maximum utilization of the student's time will be required. Some of the areas covered are risk assessment, incident documentation, media/political considerations, standards, legal mandates, capability assessment, damage assessment, emergency operations, Integrated Emergency Management System (IEMS), Emergency Operations Center (EOC), and emergency information systems.

Throughout the course, students are presented with a series of senior-staff-level issues that require extensive analysis and action. The actions implemented are applied to a mock community in order to evaluate the effectiveness of these decisions relative to the fire and rescue department's operational readiness.

The course is very intense and uses lecture, case study, simulation, scenario, and student participation as instructional media.

Third Year Course:

EFOP participants who began the program during FY01 and FY02 will be required to take a new third-year course. The course, *Leading Risk Reduction In The Community* will focus on senior executive roles and responsibilities relating to prevention, mitigation, and injury prevention. While fire will be a critical focus of the course, other forms of risk and issues will be addressed.

Individuals who will participate in their third year during FY02 will be provided the opportunity to select one of the following courses as an elective:

- *Advanced Leadership Issues in Emergency Medical Services*

This NFA course is designed for upper-management persons who have organizational responsibility for EMS operations in their agency or jurisdiction. Situational, scenario-based instruction is the foundation of this course, with an emphasis on problem-solving and decision-making techniques. Leadership techniques as they relate to establishing and directing EMS work teams are also an important part of this course.

- *Executive Analysis of Fire Service Operations in Emergency Management*

This course is designed to prepare senior staff officers in the administrative functions necessary to manage the operational component of a fire and rescue department effectively. Since the subject matter is comprehensive, maximum utilization of the student's time will be required. Some of the areas covered are risk assessment, incident documentation, media/political considerations, standards, legal mandates, capability assessment, damage assessment, emergency operations, Integrated Emergency Management System (IEMS), Emergency Operations Center (EOC), and emergency information systems.

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The course is very intense and uses lecture, case study, simulation, scenario, and student participation as instructional media.

- *Executive Planning*

This course includes modules on leadership, project management, strategic planning, analysis, acquisition, implementation, and evaluation. These issues prepare the manager of a fire service organization to make decisions regarding the department's future, selecting project teams, current levels of efficiency, successful contracting, implementing projects, and evaluating a completed project. The course uses the purchase of an information system as the scenario to cover these topic areas.

- *Fire Service Financial Management*

This course presents the fundamentals necessary for anyone involved with the fiscal activities of an organization. Once this baseline is established, the course addresses issues regarding planning, developing, presenting, funding, and implementing a budget. Case studies, role-playing, and interactive lecture are used to deliver the course material.

- *Strategic Analysis of Community Risk Reduction*

This course provides senior fire executives with vital information necessary to implement community-wide risk reduction activities. Topics include contemporary approaches that emergency services organizations can successfully utilize to compete for dwindling resources, mechanisms to gather and analyze critical life safety data, proven actions to target community injury reduction, and how to build coalitions to better accomplish the changing mission of the fire and safety services.

The course reflects current trends and practices suitable for immediate use by course participants. It features group activities, evening research, role-playing, and in-depth review of highly successful risk intervention strategies. It examines attitudes and values of senior fire agency executives and their relationship to creative, innovative, and effective fire and injury prevention activities. The course uses case study and research methodology in the educational process.

Fourth Year Course:

- *Executive Leadership*

The concluding course was specifically designed to provide a framework of executive level competencies by focusing primarily on *personal effectiveness* issues and areas.

The curriculum includes self- and observer-based survey assessment instruments, case study analysis, role-playing, and experiential activities. Participants complete a "self assessment and development plan" to create desirable goals in their professional, personal, community, and family life areas.

Course units include leadership; multiple roles; decision skills, influencing, leaders teaching leaders, coaching and mentoring, succession planning, and evaluating.

Each program participant is required to complete an applied research project for each of the four courses as a post-course project. The requirement is explained fully within this document.

EFOP TARGET AUDIENCE

The EFOP target audience is current and emerging executive-level leaders in fire and emergency service organizations. The selection criteria is divided between two requirement areas: Service Requirement and Academic Requirement.

Service Requirements:

- Chief of Department or equivalent.
- Those chief officers who report directly to the fire chief.
- Chief officers or equivalent who head major bureaus or divisions within a fire department, e.g., suppression, prevention, training, emergency medical services, etc.
- Chief officers and senior deputies of State governmental fire organizations, e.g., State Fire Marshals and State Directors of Fire Training.
- Other individuals who are serving in "key leadership" positions. Please refer to "Key Leaders" selection criteria.

Academic Requirement:

- Applicants must have attained an Associate's degree or greater from a regionally accredited institution of higher learning. No exception will be made to this requirement.
- Beginning October 1, 2009 (Fiscal Year 2010), applicants must have attained a minimum of a Bachelor's degree.

"KEY LEADERS" SELECTION CRITERIA

The EFOP is USFA's premier executive education program with a limited capacity of participants each year. The primary audience is executive-level chief officers; however, a limited number of non-executive-level applicants who are serving in "key leadership" positions will be considered for the EFOP. Once the minimum Academic Requirement has been demonstrated, candidates will be selected on the following criteria:

(Note: It is not required that a candidate possess all of the following. However, the more achievements and criteria presented, the stronger a candidate's application will be considered.)

- An advanced academic degree from a regionally accredited college or university.
- Successful completion of the NFA's Leadership Development program **or comparable training.**
- Unique perspectives that would broaden the diversity of EFOP.
- Strength of the department chief's or sponsor's recommendation, commitment to supporting the applicant's participation and description of the applicant's potential impact on the organization.
- Personal accomplishments and significant contributions to the fire and emergency services and/or the community.
- Potential for future impact on the fire service.

It is expected that the applications for these limited number of positions will be very competitive in nature. Applicants are encouraged to carefully review all of aforementioned and following selection/application elements before submitting their application package.

COURSE SCHEDULING

Selected EFOP participants will be scheduled to attend specific course offerings by the Admission's Office. Rescheduling or cancellation requests must be addressed to the Admission's Office in writing.

Even though a participant is scheduled to attend a specific course, final admission to all courses is conditional upon submittal and successful evaluation of the required project.

The Admissions office may be contacted at (301) 447-1035.

APPLICATION PROCESS

Prospective EFOP candidates must participate within a structured and competitive selection/application process. The initial phase in this process is to submit a National Fire Academy General Admission Application Form (FEMA Form 75-5). This form is to be submitted following the guidelines announced annually within the National Fire Academy's *Catalog of Activities*. Within the application, the applicant should specify in Block #9a, "Executive Fire Officer Program." The application period for the EFOP is open year round; however, the cutoff date for consideration within the following fiscal year is June 30. Applications received after this date will be considered for the following fiscal year. For example, an application received prior to June 30, 2002, will be considered for FY03. An application received after June 30, 2002, will be considered for FY04 (Fiscal Year 2004).

Along with submission of the General Admission Application, the candidate is required to submit each of the following:

- A letter from the applicant requesting admission to the EFOP. The letter should specify the applicant's qualifications (reference NFA catalog), and commitment to complete the entire program, including the Applied Research Project process. Personal expectations for the program should also be included.
- A letter of recommendation from the head of the sponsoring organization (Chief of Department, Mayor, City Manager, etc.) indicating the organization's commitment to allow the participant to complete the entire program, including the Applied Research Project process.
- A resume of the applicant.
- A copy of the individual's organizational chart, specifically identifying the position on the chart that the individual holds.
- A photocopy of the applicant's academic degree certificate/diploma.

EFOP candidates who have complied with the EFOP minimum prerequisites will be forwarded a secondary application entitled "National Fire Academy Executive Fire Officer Program Application for Admission" (FEMA Form 95-22, October 94). This form is to be completed following the stated guidelines.

Both application forms, as well as the required accompanying materials, will be evaluated in assessing each applicant's qualifications for EFOP acceptance. Each applicant will be notified in writing as to either acceptance or non-acceptance into the EFOP.

"CONDITIONAL ACCEPTANCE" INTO THE EXECUTIVE FIRE OFFICER PROGRAM

Individuals who have completed EFOP courses (*Executive Development, Strategic Management of Change, and Executive Leadership*) in a non-EFOP status may later elect to become a part of the EFOP process. "Conditional Acceptance" into the EFOP will be based on the following steps/requirements:

- The criteria stated within "Selection Criteria" beginning on page I-9, must be met. Furthermore, the selection procedures stated within "Application Process," beginning on page I-10, will apply. That is, those applicants who wish to be conditionally accepted will compete in the annual selection process within the entire pool of EFOP applicants.
- For those who receive notification that they are conditionally accepted, an Applied Research Project (ARP) will be required for each EFOP course completed as a non-EFOP participant. The conditionally accepted participant will have 6 months from the date of acceptance to complete the ARP. Those who have to complete two or more ARPs, will be granted 6 months for each ARP due.

COMPLETION OF EFOP COURSES BY NON-EFOP PARTICIPANTS

Non-EFOP participants who comply with individual EFOP course prerequisites can attend such courses if space is available. (Non-EFOP participants are not required to have an Associate Degree.)

While these individuals may be completing an EFOP course, they are not considered to be EFOP participants. Therefore, these individuals are not required to complete the ARP, nor can NFA accept and evaluate ARPs from non-EFOP participants.

MAINTAINING ELIGIBILITY

If at any time during the 4-year period of the EFOP a participant's rank or responsibility is reduced or altered, and such change would remove the participant from a "state of eligibility" as stated previously, the participant shall be removed from the program. These changes include personnel changes, change of assignment, and leaving the service.

Unfortunately, this removal from the program is indifferent to whether the change or alteration was voluntary or involuntary on the part of the participant. This provision is necessary to recognize the limited course slots available, and to maximize this limited availability to individuals who meet the established criteria.

EFOP participants are required to notify NFA immediately as to any change in address or position.

Participants who cannot attend a course for which they are scheduled are required to notify the Admissions Office as soon as possible before the class begins; failure to do so may result in future suspension of eligibility to attend NFA courses.

SUCCESSFUL PROGRAM COMPLETION

Successful EFOP completion will be based on the following criteria:

- Compliance with general attendance policies and standards of conduct as established by NFA.
- Successful completion of EFOP courses, to include satisfactory completion of the evaluation plan/curriculum for each course.
- Successful completion of the Applied Research Project for each EFOP course according to the Applied Research Project guidelines.

STANDARDS OF INTEGRITY WITH REGARD TO RESEARCH

Due to a few incidents of plagiarism, falsification, and misrepresentation of submitted ARPs, NFA is required to reinforce the appropriate standards of conduct for completion of research, and the potential penalties for engaging in any unethical behavior. Federal Emergency Management Agency instruction NETC 1100.1, Section 7, Subsection 17, states "Each individual entering the NETC campus shall observe the stated rules and regulations regarding conduct and the completion of academic work. Cheating, plagiarism, or falsification of any type, including misrepresentation, is prohibited."

Individuals who engage in such behavior will be disciplined with one or all of the following actions:

1. A return of all monies expended or reimbursed by the U.S. Government associated with the course to include all travel expenses, room accommodations, books, and an apportionment of the instructor's salary.
2. A return of the course certificate and (if applicable) the EFOP completion certificate.
3. A letter to the current employer that certification has been revoked.
4. A 10-year prohibition on attendance at any residential NFA courses.

EFOP participants, graduates, and others who discover suspicious work are strongly encouraged to report their findings to NFA.

NFA is committed to maintaining and preserving the highest standards of integrity regarding EFOP. Participants and alumni are consequently affected in a most negative way when EFOP is associated with any unethical behavior committed by one of its participants.

APPLIED RESEARCH PROJECT

Individuals enrolled in the EFOP must complete an Applied Research Project for each EFOP course completed.

The specific guidelines for the completion of this project are contained within a document entitled "National Fire Academy Executive Fire Officer Program Applied Research Guidelines." These guidelines have been included within this document (see Table of Contents).

The project is due within 6 months from the last day of the course for which the project is being completed.

APPLIED RESEARCH EVALUATION

Each ARP will be evaluated according to the guidelines established within the document *National Fire Academy Executive Fire Officer Program Applied Research Guidelines*. **ARPs must receive a passing grade (2.0 or greater) in each section to be considered an acceptable or passing ARP.**

Currently, the projects are evaluated by contract reviewers who are monitored and supervised by the Executive Development Program Manager.

Contract reviewers are selected on the basis of their technical knowledge as well as their ability to recognize and evaluate research.

Reviewers will utilize the three-page "Applied Research Evaluation Form" to critique and evaluate the project. (See Appendix, page A-1 through A-3.)

In the event that an EFOP participant receives a failing grade for an applied research project, the participant will have 45 days, commencing upon the participant's receipt of the evaluated research project, to make the required corrections and to perform whatever action is necessary to bring the research to an acceptable standard.

Detailed information regarding submission of ARPs to NFA is provided on page II-3 of the Applied Research Guidelines contained within this booklet.

APPLIED RESEARCH EXTENSION

ARP's are due within 6 months from the final day of course completion.

If the ARP has not been received by NFA on the due date, NFA will instruct Admissions to terminate the individual from the EFOP. The exceptions to this provision are noted as follows:

- Additional time may be granted to a participant in the event of death in his/her immediate family or severe personal illness. An extension of completion time may be requested due to either of these situations.

- Only for unique circumstances of a serious nature would an extension be granted for reasons other than those cited above.
- The request for extension must be directed, in writing, to the Superintendent of the NFA. A reason must be given why the extension is being requested. The request must be cosigned by the individual's chief of department or local government executive official.
- A maximum extension of 1 month may be awarded for completion of the ARP. A decision in response to the participant's request will be forwarded in writing.

If for any reason an EFOP participant drops out or is removed from the program, re-admission to the EFOP would require the following steps in sequence: reapplication, acceptance, and subsequent completion of any outstanding ARP(s).

APPLIED RESEARCH PROJECT GRADE APPEAL

If an EFOP participant disagrees with a grade, the participant first should contact the evaluator to discuss the disagreement. If a compromise cannot be reached between the EFOP participant and the evaluator, the EFOP participant should direct an appeal to Mr. Chuck Burkell. This appeal must be in writing, and fully explain the basis of the disagreement. Mr. Burkell or his representative will research the problem, and will either uphold the evaluator's assessment or elect a course of action to resolve the disagreement.

If an appeal results in a change to the original grade issued by the evaluator, the grade of record shall be the final grade issued. If the appeal results in a final grade of 4.0, then the ARP will be considered for the Outstanding Applied Research Award (see below). In either situation, the grade of record is based on original work, and not changes made after the initial submission of the ARP.

EXECUTIVE FIRE OFFICER PROGRAM OUTSTANDING RESEARCH AWARD

Since 1989, NFA has recognized excellent ARPs completed by EFOP participants. Recipients of this award are asked to present their projects at the EFOP Graduate Symposium. The process of selection and presentation is as follows:

1. NFA's Outstanding Research Award is given annually. Normally, four awards are presented, one award for each year of the program. However, depending on the quality of available 4.0 papers, NFA may elect to present fewer or more than four awards in a given year.
2. The review team is comprised of EFOP program chairs, as well as other U.S. Fire Administration staff.
3. The Program Chair reviews all ARPs that receive a grade of 4.0 in each course area for 1 year. In the event that there is no 4.0 paper in a course area, the highest graded paper is reviewed.

4. EFOP research papers completed between January 1 and December 31 in a given year are eligible to be considered for the award.
5. ARPs are evaluated by contractors based on the Executive Fire Officer Applied Research Guidelines. The evaluators assign grades to the papers. The review team reads the 4.0 papers and, based on their judgment, recommends to the Superintendent the Outstanding Research Awards.
6. The official notification to the award winners comes from the Superintendent by mail. The Chief of department or the local government official receives a copy of the letter. The Federal Emergency Management Agency Office of Public Affairs handles the press announcement.
7. The papers are published by NFA. The printing quality and standard for the reproduction depends on available funding resources. Award-winning papers are distributed to the attendees of the EFOP Graduate Symposium and a copy of each paper is placed in the Learning Resource Center. Dissemination beyond this is dependent on available funding.
8. Design and reproduction of the Outstanding Research Award certificate is executed by National Emergency Training Center (NETC) Media.
9. The recipients of the Outstanding Research Award are invited to present their papers at the EFOP Graduate Symposium.

Outstanding Applied Research projects for recent years may be downloaded from the U.S. Fire Administration's web site by using this address: <http://www.usfa.fema.gov> and selecting the National Fire Academy/On-Campus Courses/Executive Fire Officer Program, or in hardcopy by contacting NFA.

PROGRAM DISMISSAL

As stated previously, failure to maintain eligibility for the program or failure to meet program completion criteria will result in dismissal from the EFOP. Other factors that could lead to dismissal relate primarily to the ARP. As stated in other areas of this document, the ARP is due 6 months following course completion.

Thus, if the completion date precedes the course starting date by even 1 day, the implication is made that:

- the EFOP participant has submitted an ARP for evaluation, or
- the EFOP participant has submitted an ARP; the ARP has received an unsatisfactory evaluation; but the EFOP participant is making corrections to the unsatisfactory ARP.

Failure to have accomplished either activity by the ARP completion date will cancel the participant's eligibility to return for the next course in sequence, and the participant will be dismissed from EFOP.

APPLIED RESEARCH PROJECT ARCHIVING AND DISTRIBUTION

Since NFA is on the threshold of establishing and building upon a major source of research information (*The Applied Research Project Collection*), it may be useful to understand the intended nature of archiving and distributing this information to others.

Once a project is successfully evaluated (receives a passing grade), it will be forwarded to the Learning Resource Center (LRC).

Projects evaluated at 3.0 or higher, will be archived in their entirety. For projects receiving ratings of 2.0 through 2.9, only the abstracts will be archived. Participants who have an interest in these projects may contact the author for more information. Projects that are resubmitted following corrections will not be archived, regardless of the rating awarded.

(Note: During the year 2000, a large number of ARPs were converted for full "on-line" access. To access this Web site, go to <http://www.usfa.fema.gov/lrc>. To search for papers, select "EFO Papers or Abstracts" from the Document Type list found on the Card Catalog search screen.)

An index list will be created indexed by the author's last name. This will allow all of the projects completed by an individual participant to be grouped together. Refer to page I-17 and I-18 for a sample bibliographic record.

EFOP ARPs will be used by the LRC in providing information services to patrons of the LRC.

APPLIED RESEARCH PROJECT COLLEGE CREDIT RECOMMENDATIONS

The American Council on Education (ACE) through its Program on Non-Collegiate Sponsored Instruction (PONSI) reviewed the ARP process in its entirety. ACE, through its published guide *The National Guide to Educational Credit for Training Programs*, now recommends for credit equivalency, 1 hour for each ARP successfully completed after October 1, 1995. Successful completion is defined as a "3.0" or greater score. The level is either graduate or upper division baccalaureate.

Projects that are resubmitted following corrections will not be eligible for credit recommendation, regardless of the rating awarded.

Sample LRC Bibliographic Record

<u>DOCUMENT TYPE</u>	REPORT
<u>AUTHOR</u>	Brown, A. Keith
<u>CORPORATE AUTHOR</u>	Lake Dillon. Fire Authority
<u>TITLE</u>	Structure triage during wildland/urban interface/intermix fires
<u>SERIES TITLE</u>	Executive Fire Officer Program. Applied Research Project.
<u>PUBLISHER</u>	National Fire Academy
<u>PLACE</u>	Emmitsburg, MD
<u>DATE</u>	March 1994
<u>COLLATION</u>	38 P.
<u>LOCATION</u>	CIRCULATION
<u>CALL NUMBER</u>	23788

ABSTRACT

This research project analyzed the factors that influence the survivability of structures located in wildland/urban interface and intermix zones. The purpose of the project was to produce a simple, short checklist fire officers can use to do structure triage during a wildland conflagration. This research employed both historical and action research (a) to identify attributes of land and building that compromise firefighter safety during structure-protection operations, (b) to identify those physical features of a structure and its environs that serve as reliable predictors of structure survivability during wildfire, (c) to assess which survivability predictors are of practical value in performing structure triage, and (d) to develop guidelines that help direct the actions of firefighters undertaking structure protection in scarce-resource situations occasioned by uncontrollable wildland fires.

The principal procedure employed was review of instructional materials and wildfire case studies focusing on structure protection in wildland/urban interface/intermix areas. Data was compiled in table form to facilitate comparison of survivability factors discussed in the literature.

The major findings of this research were that a small number of factors can be utilized to accurately predict structure survivability during wildland fires. Principal among those factors were accessibility, roof construction, defensible space, and slope of adjoining terrain. The research findings were incorporated into a checklist appropriate for field use during structural/wildland fires.

The recommendations resulting from this research included (a) incorporating use of the checklist into operational procedures, (b) training fire officers in the use and limitations of the checklist, (c) providing periodic updates to the checklist, and (d) utilizing the checklist in pre-incident planning to better inform the fire department and property owners of risks associated with building in or near wildlands.

NOTES

Silverthorne, CO: Strategic Analysis of Fire Department Operations

SUBJECTS

RESIDENTIAL BUILDINGS; BUILDING CONSTRUCTION; SIZE UP; SURVIVAL; WILDLAND FIRES; WILDLAND URBAN INTERFACE; CONFLAGRATIONS

EXECUTIVE FIRE OFFICER PROGRAM GRADUATE SYMPOSIUM

EFOP Graduate Symposium is an annual event for alumni. Normally held the weekend following Easter, the 3-day event has the following goals:

- To provide a curriculum extension and update of EFOP.
- To recognize and spotlight outstanding applied research completed by present EFOP participants.
- To provide a forum in which high quality presentations are offered by private and public sector representatives.
- To promote further dialogue between EFOP graduates and USFA/NFA faculty and staff.
- To further facilitate networking between EFOP graduates.
- To officially recognize EFOP graduates and research winners during the EFOP banquet.

Participants are required to pay their own travel costs and meals. NFA provides housing and the program costs. See NFA catalog for symposium dates.

Eligibility to attend the symposium is limited to those EFOP participants who have successfully completed all course and project requirements.

The 14th Executive Fire Officer Program Graduate Symposium is scheduled for April 5-7, 2002.

MANAGEMENT OF THE EXECUTIVE FIRE OFFICER PROGRAM

Since the EFOP participant may have reason to contact one or more NFA faculty members regarding either the ARP or other EFOP questions, the following is a list of faculty with their assigned areas of EFOP responsibility.

Direct Program Responsibility:

Mr. Charles J. Burkell
(301) 447-1072
e-mail: chuck.burkell@fema.gov

- Administrative responsibility for EFOP
- Administrative responsibility for ARPs
- Curriculum responsibility for *Executive Development*, *Executive Leadership*, and *Executive Skills Series* courses
- Administrative responsibility for EFOP Graduate Symposium
- Administrative responsibility for the *Harvard Fellowship Program*

Dr. Burton A. Clark
(301) 447-1069
e-mail: burt.clark@fema.gov

- Supporting responsibility for Outstanding Applied Research Project administration, EFOP, and EFOP Graduate Symposium

Ms. Lee Wren
(301) 447-1176
e-mail: lee.wren@fema.gov

- Supporting responsibility for Applied Research Project administration, EFOP, and EFOP Graduate Symposium

Mr. Robert Murgallis
(301) 447-1347
e-mail: bob.murgallis@fema.gov

- Curriculum responsibility for *Executive Analysis of Fire Service Operations in Emergency Management*

Mr. Jeff T. Dyar
(301) 447-1333
e-mail: jeff.dyar@fema.gov

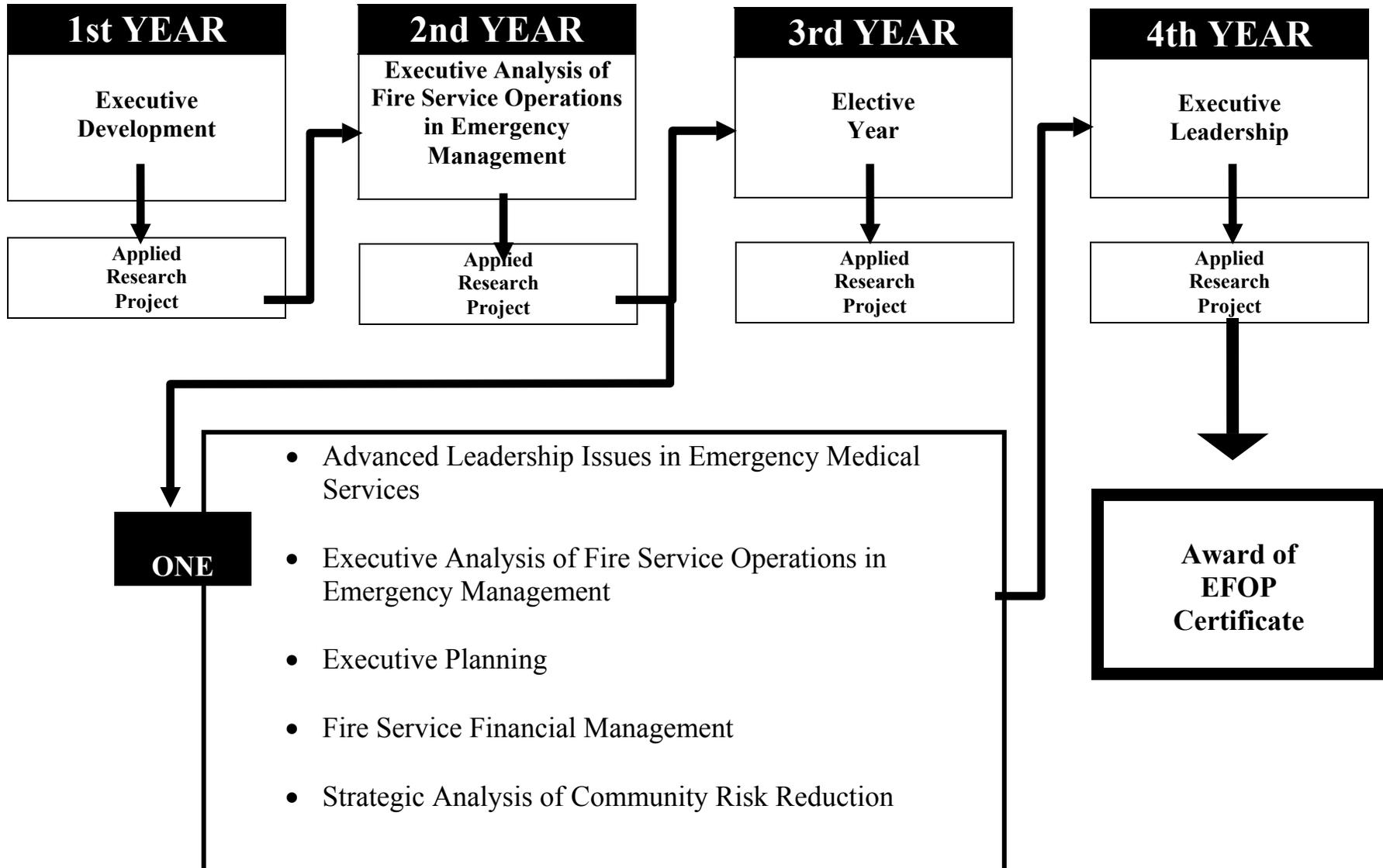
- Curriculum responsibility for *Advanced Leadership Issues in Emergency Medical Services*

Ms. Colleen Heilig
(301) 447-1235
e-mail: colleen.heilig@fema.gov

- Curriculum responsibility for *Executive Planning and Fire Service Financial Management*

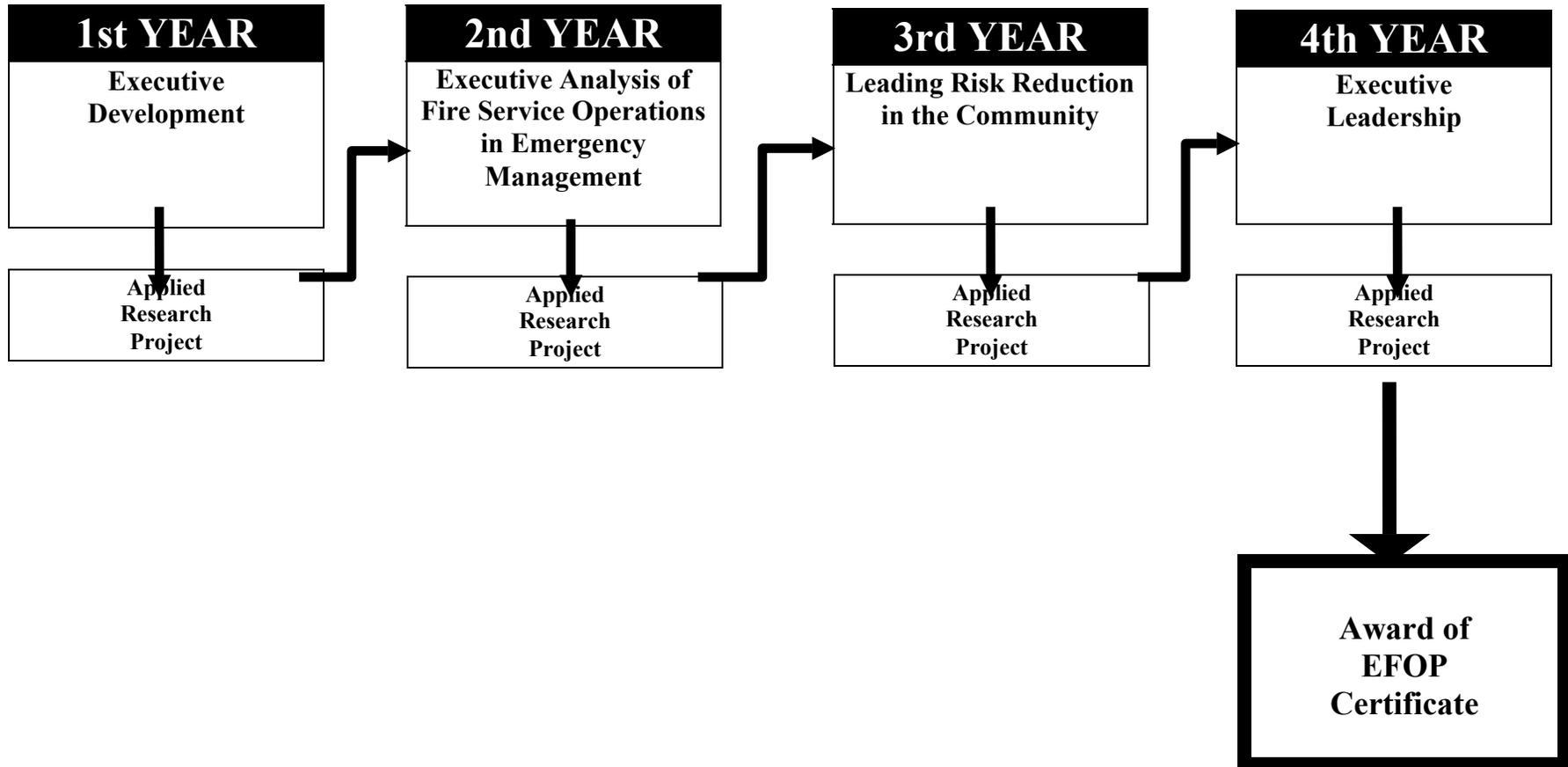
EXECUTIVE FIRE OFFICER PROGRAM

Presently the EFOP curriculum will remain as follows for those currently enrolled (those EFOP participants who began prior to FY01)



EXECUTIVE FIRE OFFICER PROGRAM

*For those participants who were accepted to begin EFOP in FY01,
the curriculum will be as follows:*



***APPLIED
RESEARCH
PROJECT
GUIDELINES***

REVISED

OCTOBER 2001

INTRODUCTION

This guide is designed to assist students enrolled in the National Fire Academy's (NFA) Executive Fire Officer Program (EFOP) in fulfilling the applied research requirements of the program. The primary objective of the guide is to describe what is expected of students as they engage in the research process. In addition, it provides guidelines for students to follow in the preparation of their research paper.

The guide also includes the criteria used in the evaluation of research papers. These criteria are utilized by those persons responsible for reviewing and evaluating students' proficiency in completing the applied research project for EFOP.

Students must complete one Applied Research Project (ARP) for each course in EFOP. The reports must be sent to the NFA within 6 months of completing each course. In order for the student to continue in the EFOP, a project must receive a grade of "C" (score of 2) overall. ARPs for all courses completed after October 1, 1996 **must receive a passing grade (2.0 or greater) in each section to be considered an acceptable or passing ARP.** Upon completion of the final ARP for the *Executive Leadership* course, the student will be awarded the Executive Fire Officer certificate.

Participants are required to submit the ARP in both hard-copy and disk media formats.

Those Executive Fire Officer ARPs which receive a rating of 3.0 or greater, will be archived in the National Emergency Training Center's (NETC) Learning Resource Center in their entirety. For projects receiving a rating of 2.0 up to 3.0, only abstracts will be on file.

Selected examples of completed projects are available by title or area of interest.

WHAT IS AN APPLIED RESEARCH PROJECT?

The applied research project in the EFOP is designed to allow students to investigate a key issue or problem that has been identified as being important to their fire service organization. Upon completing the investigation, students will be able to reach conclusions and offer recommendations that contribute to the improvement of their organization.

Through this process, students have an opportunity to translate what they have learned in each EFOP course into real-world applications. By writing the applied research project in a professional paper format, EFOP students are contributing to the fire service literature.

SELECTION OF APPLIED RESEARCH TOPICS

Please read this section carefully as this represent a change beginning in FY02.

Applied research topics should be selected on the basis of 4 factors:

1. The author's individual interests.
2. The significance or value of the topic and/or issue to the organization.
3. The relationship of the topic or issue to the EFOP course content.

4. The relevance of the topic or issue to United States Fire Administration operational objectives.

Care should be taken to select a topic that can be completed within the 6-month timeframe.

The following questions should assist you in selecting your project topic:

1. Does the topic relate to the EFOP course most recently completed?
2. Is the topic worth researching? (Will it contribute to your organization?)
3. Will it be possible to implement the conclusions and possible solution?
4. Are there sufficient data available to do the research?
5. Does the topic or issue relate to and support one or more of four USFA operational objectives? (These objectives are as follows:)
 - a. Reduce the loss of life from fire in the age group 14 years old and below.
 - b. Reduce the loss of life from fire in the age group 65 years old and above.
 - c. Reduce the loss of life from fire of firefighters.
 - d. To promote within communities a comprehensive, multi-hazard risk-reduction plan led by the fire service organization.
6. Do you have sufficient time (within the 6-month timeframe) to complete the project?

RESEARCH PROPOSAL

Beginning in FY01, EFOP participants are provided a research proposal form (Refer to Page A-7 for sample form) while completing their EFOP course. The form will contain the name and address of a contract evaluator who will be assigned to review the proposal form. The same evaluator will be the individual whom NFA will forward the EFOP participant's ARP to upon completion.

When the EFOP participant returns to his/her jurisdiction, the research proposal should be completed and forwarded to the assigned evaluator within two weeks. The form contains the proposed title, topic, problem statement, purpose, research questions, and research approach. The evaluator will review this information and provide general feedback to the EFOP participant regarding the proposal. (Note: The form will not be graded. Only general feedback will be provided regarding the quality of the research design proposed.) It is not necessary for the EFOP participant to provide a copy of the form to NFA, as the evaluator will submit it when invoicing NFA for this task.

The purpose of this new step is to assist the EFOP participant in a critical phase of the research process: creating a realistic problem statement; matching the problem statement with the purpose; writing research questions that, if answered, will result in data to solve the problem; and the necessary procedures to facilitate achieving the purpose and solving the problem statement.

REMINDER: Please submit the completed Proposal Form directly (e-mail) to your assigned evaluator. Do not submit to NFA. The completed Applied Research Project should be sent directly to NFA, not to the evaluator.

REPORT FORMAT

All reports submitted **must** contain each of the following elements. Failure to include any required element will result in loss of points on final score.

REQUIRED ELEMENTS OF PAPER (IN ORDER)

1. Title Page (separate page).
(See sample in Appendix A-4)
2. Abstract (Start on a separate page).
3. Table of Contents (Start on a separate page).
4. Main body of paper, including the following sections:
 - Introduction
 - Background and Significance
 - Literature Review
 - Procedures
 - Results
 - Discussion
 - Recommendations

Start Introduction on a separate page. **Do not** start any other major headings within the main body of the paper on a separate page, **unless only** the heading or the heading and one subsequent line will fit at the bottom of a page.
5. Reference List [Start on a separate page].
(See sample in Appendix A-5)
6. Appendices (optional)
[Start each on a separate page].

GENERAL SUBMISSION CONSIDERATIONS FOR EVALUATION

When a student submits an ARP report, NFA expects it to be in **final form**; that is, the report will be a finished product. In no instance should a student submit a report that is incomplete, in draft form, or grammatically incorrect.

NFA expects quality performance on the part of EFOP students. The written ARP report should be organized according to the ARP Guidelines. Reports may range normally between 20 and 30 typed pages (double-spaced), excluding reference list and appendices. However, due to the complexity of a research topic, an ARP may be greater than 30 typed pages and considered acceptable. NFA expects students in the EFOP to be capable of expressing themselves in a correct and effective manner. It is important that the papers demonstrate high professional quality because each is a major contribution to fire service literature.

Three hard-copies and a disk copy of the project must be submitted to NFA. **Please do not use permanent binding on your submitted project.** A staple in the upper left corner is sufficient. Disk copies of projects should be formatted in one of the following word processing formats:

- a) Microsoft Word (preferred format)
- b) Word Perfect

Disk copies should be labeled to include the following information:

Student Name
ARP Title
Course
Submission Date
Word processing format

SUBMISSION INFORMATION

ARPs should be submitted to the following address:

National Fire Academy
16825 South Seton Avenue
Emmitsburg, Maryland 21727

ATTN: Executive Fire Officer Program Research Project

Students are strongly encouraged to use a traceable mailing system, i.e., Return Receipt Requested - U.S. Postal Service, FedEx, etc., and to maintain a backup copy of both paper and disk. **The Academy is not responsible for projects not received on the NETC campus.**

SPECIFIC EVALUATION CRITERIA

Reports will be evaluated on 10 separate components. (See sample Evaluation Form in Appendix A-1 through A-3. Note: The sample evaluation form in the Appendix, page A-1, is for reference only; actual forms will be attached by NFA to all ARPs when they are forwarded to the evaluator.) Each component has specific criteria by which it will be measured. When an evaluation component is also a required section of the paper (i.e., the first **eight** components), **no credit** will be given unless a section with that title is included in the paper.

ABSTRACT

Students are required to include an abstract of their project along with the completed report. The abstract should summarize the problem, purpose, research method, research questions or hypothesis, procedures, results, and recommendations of the study. It should not contain more than 300 words.

Evaluation Criteria

1. Accurate and self-contained.
2. Primarily written in past tense.
3. Problem statement defined.
4. Purpose statement defined.
5. Research method defined.
6. Research question(s) or hypothesis(es) defined.
7. Procedures summarized.
8. Results summarized.
9. Recommendations summarized.

INTRODUCTION

This section sets the stage for the research completed by the author. After reading the **Introduction**, the reader should clearly understand the **nature of the problem** which led to the study, the **purpose** of the study, the **research method** chosen (historical, descriptive, evaluative, action, correlational, causal-comparative, or experimental) and the **research questions** addressed or the **hypothesis** which was tested.

Evaluation Criteria

1. Problem statement precisely and clearly defined.
 2. Purpose of the applied research project precisely and clearly stated.
 3. Specific research method used in the study identified.
 4. Research questions clearly stated. (For historical, descriptive, evaluative, or action research only).
- OR:
5. Hypothesis clearly stated (for correlational, causal-comparative, or experimental research only) and appropriate for research method identified.

BACKGROUND AND SIGNIFICANCE

This section is an extension of the introduction wherein the author explains the **background** of the problem being researched; the past, present, and probable future **impact** of the problem on the organization; and how the project is related to the specific EFOP course being completed.

Remember, the research project must investigate a specific problem presently affecting the student's own organization. It is not acceptable to complete a project on some general fire service issue. Thus, this section must explain in considerable detail (1) the seriousness of the problem, (2) the significance of the project to the organization, and (3) which specific EFOP course content area(s) relate to the problem and/or its hopeful resolution.

Evaluation Criteria

1. Clear and complete background analysis of the problem provided.
2. Sufficient evidence provided to justify the study from an organizational perspective, based on past, present, and probable future impact on the organizational effectiveness.
3. Definitive linkage established between the research problem and specific content area(s) of the relevant EFOP course.
4. Established linkage to one of four USFA operational objectives.

LITERATURE REVIEW

This section summarizes critical findings of others who have **published** documents related to the research problem and clearly describes how such information influenced the author's research effort.

If appropriate, this section may also include a summary of any interviews the author conducted with problem-area "experts." Be sure to explain why specific person(s) were selected to interview. As with published material, such summaries should clearly describe how the interview(s) influenced the research project.

Evaluation Criteria

1. Sufficiently comprehensive.
2. Findings of others reviewed.
3. Summary statements (concluding summary paragraph[s] at the end of Literature Review) provided on how the findings/observations of others influenced the project.
4. Current sources.

PROCEDURES

This section explains how the student arrived at the final results of the study. Procedures should be described in sufficient detail to: (1) permit the evaluator to determine whether the researcher has selected and completed procedures which were appropriate for the stated purpose and method; (2) allow interested readers to replicate the project in their own organization; and (3) explain how the researcher arrived at final results.

The general procedures listed in the Student Manual of the *Executive Development* course (Research Module) should provide sufficient guidance on acceptable procedures for those doing historical, descriptive, evaluative, or action research. Individuals who elect to conduct correlational, causal-comparative, or experimental research should consult L.R. Gay's *Educational Research Competencies for Analysis and Application* for guidance on required research procedures.

In any event, the procedures section should clearly describe how the project progressed from beginning to end. (What was done? When? By whom? Who was involved?) If interviews or observations were used, describe the process in detail: when, how long, purpose, questions asked/information sought, etc. If a survey was conducted, explain the purpose and define the audience (number of total population surveyed, number of surveys returned, etc.). Always include a copy of the actual survey as an appendix. If a **sample** was used, provide clear evidence of proper sample selection (appropriate size, random selection, and how you assured that the sample was representative of the total population).

Evaluation Criteria (Historical, Descriptive, Evaluative, and Action Research)

1. Procedures sufficiently and clearly delineated to permit replication.
2. Procedures appropriate to achieve the purpose of the study.
3. For surveys, definition of total population included; if used, process for selecting samples described.
4. Limitations noted.
5. A Definition of Terms section included for any ambiguous concepts.

Evaluation Criteria (Correlational, Causal-Comparative and Experimental Research)

1. All of above, **plus**:
2. Appropriate statistical analyses selected and justified.
3. Hypothesis clearly stated and variables clearly defined.
4. Statistical significance of results documented.
5. Non-experimental variables controlled (experimental only).

(Note: To review and determine the type of research you are engaging in, please review the Appendix "Selecting A Research Methodology.")

RESULTS

This section should provide a clear and comprehensive narrative description of the findings of the study. In a historical, descriptive, evaluative, or action research project, this section would first focus on defining specific answers to each original research question. In a correlational, causal-comparative, or experimental research project, the central focus would be on whether or not the results supported the hypothesis(es) and to what degree.

If the research method was evaluative, final conclusions reached must be clearly defined.

If research procedures included survey(s), interview(s), focus group(s), etc., specific and detailed results of each also must be provided.

Action research also requires a final product of some kind; depending on the stated purpose, this may be a standard operating procedure, a strategic plan, a new policy, etc. The final product should be generally described in this section and included in its entirety as an Appendix.

It would also be appropriate to describe "unexpected" findings, i.e., information derived from the data which was not intentionally sought, but is relevant to the problem. Numerical data should be presented in clearly labeled tables followed by narrative summaries which highlight important factors.

Results and findings must be presented in a logical and objective manner **without personal editorializing**. Generally, all data used to derive the results should be presented in this section, and the process by which the analysis was accomplished should be completely described.

However, when data are particularly long and complex, only the narrative summary should be included in the Results section and detailed descriptions of all data should be placed in an Appendix.

Evaluation Criteria

1. Results/findings clearly and concisely stated in narrative form.
2. Detailed results of all procedures provided.
3. Specific answers to all original research questions provided or explanation of whether or not original hypothesis was supported by results, as appropriate.
4. Comprehensive analysis of the data included.
5. Tables and figures clearly presented and labeled; appropriate data selected for presentation.
6. Final product(s) of action research included as an Appendix.

DISCUSSION

In this section, the writer has an opportunity to provide his/her personal conclusions about the study results. Three basic issues should be discussed. First, how did the study results compare to the findings of others discussed in the literature review? (In doing this comparison, the student is expected to provide actual citations of selected references.) Second, what is the author's own interpretation/evaluation of the results? Third, what are the implications of the results for the organization?

Evaluation Criteria

1. Relationship between the study results and specific findings of others discussed, using extensive citations from reference documents.
2. Students' interpretation of the study results presented.
3. Organizational implications of the study results clearly stated.

RECOMMENDATIONS

This section must include recommendations for the future... What needs to happen next within the organization, based on research results? Recommendations may focus on additional research requirements, suggested program implementation methods, follow-up/evaluation proposals, etc.

All recommendations should be clearly supported by data presented in the report and should specifically relate to the original problem and purpose statements. Explain how each recommendation represents positive change and/or potential improvement within the organization.

Conclude the section with general recommendations for "Future Readers" who may wish to replicate some or all of the study within their own organization.

Evaluation Criteria

1. Recommendations logically flowed from research findings.
2. Recommendations were supported by the data presented.
3. Recommendations related to the stated problem and purpose of the study.
4. Recommendations provided for the student's organization and for future readers.

CONTENT

Accurate information must be presented in terms of theories, principles, and procedures used in the project. EFOP curriculum will be used as the basis for judging content.

Evaluation Criteria

1. Theories, principles, and procedures presented and used properly.
2. Information and data accurate and up-to-date.

WRITING

See Preparing the Final Document (pages II-11 through II-14) for rules regarding typing, layout, writing conventions, and editorial style.

Certain style rules will require access to the *Publication Manual of the American Psychological Association, 5th Edition*. (See pages II-11 through II-14)

Evaluation Criteria

1. Correct grammar, punctuation, spelling, sentence structure and typing/editorial style. (See Preparing the Final Document, pages II-12 and II-13)
2. All required sections of paper included.
3. Reference list and in-text references documented properly, using APA Guidelines.
4. Title reflects nature of the study; correct title page format followed. (See Appendix A-4)
5. Table of Contents includes all major headings; a list of tables was provided if more than one table was used; Appendices were listed and defined.

PREPARING THE FINAL DOCUMENT

PUBLICATION MANUAL OF THE AMERICAN PSYCHOLOGICAL ASSOCIATION

In July of 2001, the American Psychological Association (APA) published a fifth edition of *The Publication Manual*. This replaces the fourth edition.

EFOP students must have access to one of the two versions to meet established requirements for uniform presentation of various elements of the report, such as reference citations, grammar, punctuation, construction of tables, figures, and graphs, and many other editorial style rules.

The fourth edition is no longer available (in print), however NFA will continue to recognize the fourth edition until the fifth edition is fully integrated per the following timetable:

	4th Edition	5th Edition
<i>Executive Development</i> (EFOP entry during FY02)	_____	Required
<i>Executive Analysis of Fire Service Operations in Emergency Management or Strategic Management of Change</i> (EFOP entry during FY01)	Optional	Optional
<i>Elective Year</i> (EFOP entry during FY00)	Optional	Optional
<i>Executive Leadership</i> (EFOP entry during FY99)	Optional	Optional
<p>At the same time, students must recognize that many sections of the manual apply only to individuals who are submitting materials for publication in the APA Journal. Thus, an EFOP student's use of the manual will be limited to very specific sections of the text.</p> <p>The following lists should prove helpful in determining applicability of various parts of the manual when preparing the EFOP Applied Research Project (ARP) report:</p> <p>Expressing Ideas and Reducing Bias in Language</p> <p>This chapter contains very useful pointers for assessing and improving written communication. Specific principles of effective writing are presented in three major areas: Writing Style; Grammar; and Guidelines to Reduce Bias in Language.</p>	Chapter 2 pp. 23 - 60	Chapter 2 pp. 31 - 76

	4th Edition	5th Edition
<p>APA Editorial Style</p> <p>This chapter (or chapters) provides instructions on editorial style, which ensures uniform presentation of various style elements in all ARP reports. This chapter (or chapters) is the most critical source of information within the manual for the EFO student. Failure to follow the conventions described here, particularly in regard to reference citation, will result in an unsatisfactory score on the "writing" element of the report.</p>	<p>Chapter 3 pp. 61 - 234</p>	<p>Chapter 3 pp. 77 - 214</p> <p>Chapter 4 pp. 215 - 281</p>
<p>Non-Applicable Sections of the Manuals:</p> <p>Much of the material in these chapters is in direct conflict with ARP requirements, as described in the EFO Guidelines.</p> <p>The following sections of Chapter 3 also do not apply:</p> <ul style="list-style-type: none"> - Use of italics versus underlining - Headings - Metrication - Statistical and Mathematical copy <p>Note: This material does not apply if you are reporting on Historical, Descriptive, Evaluative, or Action research. It would, however, be applicable to Correlational, Causal-Comparative, or Experimental research reports.</p> <p>Author Note</p>	<p>Chapters 1, 4, 5, 6, & 7 do not apply</p> <p>Appendices A, B, & C also do not apply</p> <p>Section 3.19</p> <p>Sections 3.30 - 3.32</p> <p>Sections 3.50 - 3.52</p> <p>Sections 3.53 - 3.61B</p> <p>Section 3.89</p>	<p>Chapters 1, 5, 6, 7, 8, 9 do not apply</p> <p>Appendices A, B, C, & E also do not apply</p> <p>Section 3.19</p> <p>Sections 3.30 - 3.32</p> <p>Sections 3.50 - 3.52</p> <p>Sections 3.53 - 3.61</p> <p>Section 3.89</p>
<p>Punctuation, Spelling, and Capitalization</p>	<p>Chapter 3 pp. 62 - 70</p>	<p>Chapter 3 pp. 78 - 100</p>

	4 th Edition	5 th Edition
<p>Use of Italics – Since EFO papers are not typeset after submission, italics should be used to designate the title of a book, journal, or newspaper rather than underlining. This applies throughout the paper, including the Reference List.</p> <p>For additional examples of specific uses of italics within the text see APA Manual.</p>	Table 5, Column 2 pp. 81 - 82	pp. 100 - 103 (Note changes from 4 th Edition)
Abbreviations	Chapter 3 pp. 80 - 89	Chapter 3 pp. 103 - 111
Numbers	Chapter 3 pp. 99 - 105	Chapter 3 pp. 122 - 130
Tables, Figures, and Graphs	Chapter 3 pp. 120 - 164	Chapter 3 pp. 147 - 201
<p>Reference Citations in Text</p> <p>This section of the manual provides instructions on in-text citations for materials that are not direct quotes. Direct quotes are treated differently; see separate listing below.</p> <p>References cited in text must appear in the reference list; conversely each entry in the reference list must be cited and discussed within the paper.</p> <p>Any material in your report that is not original must be acknowledged. This includes direct quotes and paraphrased ideas or summaries. The only exception to this rule would be information which is universally considered "common knowledge."</p> <p>Failure to acknowledge any source is plagiarism, which constitutes grounds for dismissal from EFOP. If in doubt, provide a citation!</p>	Chapter 3 pp. 168 - 174	Chapter 3 pp. 207 - 214
Direct quotations within the text	Chapter 3 pp. 95 - 99	Chapter 3 pp. 117 - 122
<p>Reference List – For specific instructions and examples</p> <p>Special section covering legal documents</p>	Chapter 3 pp. 174 - 234 Chapter 3 pp. 223 - 234	Chapter 4 pp. 215 - 281 Appendix D pp. 397 - 410

	4th Edition	5th Edition
<p>When citing EFOP applied research project report(s) (example)</p> <p>NFPA Standards (example)</p> <p>Remember, this is a reference list; only items actually discussed within the paper should be included. You are not developing a bibliography (a generic list of documents related to your topic).</p>	<p>#46 p. 209</p> <p>#48 p. 210</p>	<p>#46 p. 258</p> <p>#48 p. 259</p>
<p>Table of Contents</p> <p>Include all major section headings. Provide a list of tables, if more than one has been presented within the text. List, by title, each Appendix. (See EFOP paper for a good example.)</p> <p>Appendices</p>	<p>Chapter 3 pp. 166 - 167</p>	<p>Chapter 3 pp. 205 - 207</p>

APPENDIX

**Executive Fire Officer
Applied Research Project
Evaluation Form**

(course & date) _____ (date mailed to evaluator)

Title: (project title) _____

Name of Student: _____

Name of Student: _____

National Fire Academy Evaluator: _____

Address: _____

Average Score: _____

CRITERIA	F	D	C	B	A
ABSTRACT	0	1	2	3	4
INTRODUCTION	0	1	2	3	4
BACKGROUND AND SIGNIFICANCE	0	1	2	3	4
LITERATURE REVIEW	0	1	2	3	4
PROCEDURES	0	1	2	3	4
RESULTS	0	1	2	3	4
DISCUSSION	0	1	2	3	4
RECOMMENDATIONS	0	1	2	3	4
CONTENT ACCURACY	0	1	2	3	4
WRITING	0	1	2	3	4

COMMENTS

(SAMPLE)

STUDENT NAME:

ABSTRACT

- _____ Accurate and self-contained.
- _____ Primarily written in past tense.
- _____ Problem statement defined.
- _____ Purpose statement defined.
- _____ Research method defined.
- _____ Research question(s) or hypothesis(es) defined.
- _____ Procedures summarized.
- _____ Results summarized.
- _____ Recommendations summarized.

INTRODUCTION

- _____ Problem statement clearly and precisely defined.
- _____ Purpose precisely and clearly stated.
- _____ Specific research method identified.
- _____ Research question(s) clearly stated (for historical, descriptive, evaluative, or action research only.) or:
- _____ Hypothesis clearly stated (for correlational, causal-comparative, or experimental research only.)
- _____ Hypothesis appropriate for research method identified.

BACKGROUND & SIGNIFICANCE

- _____ Clear and complete background analysis of problem provided.
- _____ Sufficient evidence provided to justify study from an organizational perspective, based on past, present, and probable future impact on organizational effectiveness.
- _____ Definitive linkage established between the research problem and specific content area(s) of the relevant EFOP course.

LITERATURE REVIEW

- _____ Sufficiently comprehensive.
- _____ Findings of others reviewed.
- _____ Summary statements provided on how the findings/observations of others influenced the project.
- _____ Sources are current.

PROCEDURES

(Historical, Descriptive, Evaluative, and Action Research)

- _____ Procedures sufficiently delineated to permit replication.
- _____ Procedures appropriate to achieve stated purpose.
- _____ For surveys, definition of total population provided; if used, process for selecting a sample described in detail.
- _____ Limitations noted.
- _____ Definition of terms section included for any ambiguous concepts.

(Correlational, Causal-Comparative and Experimental Research)

- _____ All of the above, plus:
- _____ Appropriate statistical analyses selected and justified.
- _____ Hypothesis clearly stated and variables clearly defined.
- _____ Statistical significance of results documented.
- _____ Nonexperimental variables controlled (experimental only).

(SAMPLE)

RESULTS

- _____ Results/findings clearly & concisely stated in narrative form.
- _____ Detailed results of all procedures provided.
- _____ Specific answers to original research questions provided or explanation of whether or not original hypothesis was supported by results, as appropriate.
- _____ Comprehensive analysis of data included.
- _____ Tables and/or figures are clearly presented, correctly labeled, and contain appropriate data.
- _____ Final product(s) of action research included as an appendix.

DISCUSSION/IMPLICATIONS

- _____ The relationship between the study results and specific findings of others is discussed, using extensive citations from reference documents.
- _____ Author's interpretation of study results is presented.
- _____ Organizational implications of results clearly stated.

RECOMMENDATIONS

- _____ Recommendations logically flowed from the results.
- _____ Recommendations were supported by the data collected.
- _____ Recommendations related to the stated problem and purpose.
- _____ Recommendations provided for the organization and for future readers.

CONTENT

(Note: This is not a section of the paper; rather it refers to the technical content of the entire paper.)

- _____ Theories, principles, and procedures were presented and used properly.
- _____ Information and data is accurate and up-to-date.

WRITING

- _____ Correct grammar, punctuation, spelling, sentence structure, and typing/editorial style.
- _____ All required sections of paper included.
- _____ Reference lists and in-text references documented properly using APA Guidelines.
- _____ Title reflects nature of study; correct title page format followed.
- _____ Table of Contents included all major headings; a list of tables provided if more than one used; and Appendices were listed and defined.

(SAMPLE)

(SAMPLE TITLE PAGE)

IMPACT OF A TEAM-BUILDING RETREAT ON TOP MANAGEMENT

(COURSE TITLE)

BY: Bill Smith, M.A.
Midwest Fire Department
Midwest, Maine

An applied research project submitted to the National Fire Academy
as part of the Executive Fire Officer Program

January 1997

REFERENCES

American Psychological Association. (1994). *Publications manual (4th ed.)*. Washington, DC: American Psychological Association.

Blair, J. & Czaja, R. (1996). *Designing surveys; A guide to decisions and procedures*. Thousand Oaks, CA: Pine Forge Press.

Gay, L.R. (1987). *Educational research; Competencies for analysis and application. (3rd ed.)*. Columbus, OH: Merrill.

(SAMPLE)

**National Fire Academy
Executive Fire Officer Program
Graduate Certificate Information**

Certificates will be mailed to the supervisor you specify for official presentation upon completion of the EFOP. Your U.S. Senators, Representatives, and Governor will receive notice of your achievement. In order to accomplish this, we require the following information:

Graduates Name: _____

Supervisor(s): Department: _____ Address: _____ City: _____ State: _____ Zip: _____
--

U.S. Senator(s): Address: _____ City: _____ State: _____ Zip: _____
--

U.S. Representative(s): Address: _____ City: _____ State: _____ Zip: _____

State Governor: Address: _____ City: _____ State: _____ Zip: _____

Please send this form to NFA together with your final Applied Research Project.

For additional information, please use the other side of this form.

(SAMPLE)



**United States Fire Administration
National Fire Academy
Executive Fire Officer Program
Applied Research Project Proposal**

EFOP Participant:

Name:
Department:
Address:
City, State, Zip:
Telephone:
Fax:
Email:
Course:

Assigned Evaluator:

Name:
Address:
Address:
City, State, Zip:
Telephone:
Fax:
Email:

Title of Research:

Problem Statement:

Purpose Statement:

Research Questions:

Identify Research Method and Describe Research Approach:

(Use one extra page if necessary)

(SAMPLE)

SELECTING A RESEARCH METHODOLOGY

**(Excepted from the *Executive Development*
course manual)**

SELECTING A RESEARCH METHODOLOGY

- A. Historical research.
1. Definition: studying, understanding, and explaining past events.
 2. Purpose: to explain the present situation and/or to anticipate the future by analyzing the past.
 3. Focuses on understanding how past events/trends have influenced or caused a present situation.
 4. Generally limited to a specific timespan.
 5. Examples of historical research.
 - a. To identify the effects of National Fire Protection Association (NFPA) 1500, *Standard on Fire Department Occupational Safety and Health Program* on the department since its adoption in 1987.
 - b. To define in-service training trends from 1980 to present.
- B. Descriptive research.
1. Definition: determining and reporting the present status of something.
 2. Purpose: to clarify and report the **way things are** at the present time.
 3. Sometimes involves detailed observation of what is happening presently.
 4. More often, involves describing attitudes or opinions.
 5. Examples of descriptive research.
 - a. To describe what firefighters do in a typical 24-hour shift (i.e., percent of day spent on emergency runs, training, inspections, meals, sleeping, physical fitness, report writing, leisure activities, etc.).
 - b. To identify public opinion on an upcoming bond issue.
 - c. To describe employee satisfaction with department management.
- C. Evaluative research.
1. Definition: the systematic process of collecting and analyzing data in order to facilitate decisionmaking.

2. Purpose: to determine whether or not to continue, and/or to identify needed improvements.
 3. Examples of evaluative research.
 - a. To evaluate the effectiveness of recruit training.
 - b. To evaluate the quality of service provided to the community.
- D. Action research.
1. Definition: taking action to **solve** an existing problem and/or to **improve** performance.
 2. Purpose: to apply new information/theories/methodologies to actual organizational problem/need.
 3. Examples of action research.
 - a. To develop an officer training program.
 - b. To develop and implement a strategic marketing plan for the department.

DEFINE AND IMPLEMENT PROCEDURES

- A. Research procedures.
1. Historical research.
 - a. Collect all written documents related to the problem (Standard Operating Procedures (SOP's), policies, regulations, memos, correspondence, reports, records, minutes of meetings, etc.).
 - b. Compile a chronological series of events that led up to present problem.
 - c. Identify factors/effects/causes related to each event and to the present problem.
 - d. Interview and/or survey primary sources who have firsthand knowledge of past events related to the problem.
 - e. Analyze, organize, and synthesize all collected data within the context of your stated purpose and research questions.

- f. Draw conclusions about the past and formulate generalizations about the present and/or future.
2. Descriptive research.
- a. Select subjects to be studied.
 - b. Decide whether or not a sample is necessary. If it is, use appropriate sample selection techniques that ensure random selection of subjects, a sufficiently large sample, and a sample that is representative of the total general population.
 - c. Select technique(s) for collecting required data (survey, personal interviews, and/or personal observations).

Note: Should you, in a very rare situation, choose to limit your research procedures to personal interviews, you must be very careful to ensure an adequate and acceptable research effort. Multiple, indepth interviews would be required. Rationale and justification must be provided in the Procedures section of the report for limiting your study in such a way. **In general, procedures that are limited to interviews alone will not be acceptable.**

- d. Conduct selected data collection activities.
 - e. Organize, analyze, and document collected data in detail.
3. Evaluative research.
- a. Define the parameters of the evaluation study: What exactly do you wish to evaluate?
 - b. Identify specific criteria against which you wish to measure the item being evaluated.
 - What are specific, key indicators of success, effectiveness? What is it supposed to look like if it's working right?
 - Concentrate on defining objective, measurable, meaningful factors.
 - c. Develop a plan for measuring each evaluative criterion objectively and thoroughly.
 - d. Conduct the study; remain objective.

- e. Analyze and evaluate all collected data in order to reach a final evaluative conclusion.
4. Action research.
- a. Recheck problem statement for clarity and comprehensiveness.
 - b. Establish a broad goal: Your purpose statement usually will be an adequate goal statement.
 - c. Conduct a situational analysis to determine
 - Causal/Contributing factors.
 - Existing situational forces likely to assist you in reaching the goal.
 - Existing situational forces likely to impede reaching the goal.
 - d. Define and prioritize strategies.
 - Eliminate casual/contributing factors.
 - Capitalize on helpful forces.
 - Minimize or eliminate impeding forces.
 - e. Set objectives—describe specific, measurable outcomes for each selected strategy.
 - f. Develop step-by-step action plans for accomplishing each objective.
 - g. Implement the plans—monitor your progress to ensure timely completion of the goal.
 - h. Evaluate outcomes.

Note: Students who elect to conduct correlational, causal-comparative, or experimental types of research must follow detailed procedures outlined in Gay's book, *Educational Research: Competencies for Analysis and Application*.

***FREQUENTLY
ASKED
QUESTIONS
(FAQs)***

What address do I return my project to?

Send your completed project (three copies) to:

National Fire Academy
16825 South Seton Avenue
Emmitsburg, Maryland 21727

Attn: Executive Fire Officer Program Research Project

When is my ARP due to NFA?

The submission date for the ARP is six months from the final class day of the course. For example, if the class ended on Friday, March 30, the ARP would be due to NFA on September 30.

How long does it take for my project to be completed?

The projects are sent by Priority Mail to evaluators on the Friday of the week they are received. Evaluators have 4 to 6 weeks to grade the project and return to the Academy for processing. Please allow for processing time when NFA receives the ARP from you and from the evaluator. Under normal conditions, you should receive your evaluated ARP 2-3 months from the time you send it to NFA.

Do I need to send a disk and three hardcopies of my project?

YES. It is not the intention of acquiring the project on disk in order to make copies from the Academy's end. It is our intention in the future that these projects will be available on a bulletin board service or something of that nature.

Will I receive the graded project back?

Yes, you will receive your graded project with evaluator's comments back after processing. A copy of your graded project will be maintained within your file.

Do I have to reapply each year for the next course in the EFOP series?

No, you will be automatically scheduled into your next course. Due to the project requirement, you will be scheduled approximately 1 year from the date of your last course.

What if I cannot attend the assigned date?

You need to write to the Admissions Office requesting a new date. But, remember, if the project is not completed prior to newly scheduled class date, you will be cancelled.

Can I request an extension?

Our extension policy is fairly explicit. You have 6 months from the finish of your course to complete the project. Should you not complete the project in that length of time, you will be removed from the program. If you have extenuating circumstances, you will need to express those in writing to the Superintendent and he will make a determination as to the granting of the extension and the length of time (if granted). See page I-13.