

**Department of Homeland Security  
U.S. Fire Administration  
National Fire Academy**

**Executive Fire Officer Program**

**Operational Policies  
and Procedures**

**Applied Research Guidelines**

**Frequently Asked Questions (FAQs)**

Revised February 1, 2012

**The Executive Fire Officer Program is an initiative of the  
Department of Homeland Security's  
U.S. Fire Administration  
designed to provide senior fire 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)



National Emergency Training Center  
16825 S. Seton Avenue  
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**FEMA**

Dear Executive Fire Officer Program Participant:

Welcome to the 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. If we are to achieve our goals of reducing the fire problem in this country and enhancing the fire service's ability to confront and deal with many issues such as terrorism, your participation is vital. 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 to successfully mitigate the causes and scenarios of fires and other emergencies, including terrorism incidents 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 the EFOP. The intent is to establish a protocol that promotes equity, trust, and a high level of academic standard.

Please refer to page I-1 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 the EFOP.

Dr. Denis Onieal  
Superintendent  
National Fire Academy  
U.S. Fire Administration

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# **I. OPERATIONAL POLICIES AND PROCEDURES**

**Revised**

**February 2012**

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## IMPORTANT REMINDERS FOR THE EXECUTIVE FIRE OFFICER PROGRAM

### APA REMAINS THE EXCLUSIVE STYLE FORMAT

The *Publication Manual of the American Psychological Association* (APA) remains as the exclusive reference for format and writing protocols when completing the Applied Research Project (ARP). **For participants beginning the Executive Fire Officer Program (EFOP) after October 1, 2009, the sixth edition is required. All other EFOP participants will continue to use the fifth edition.**

There are a limited number of exceptions since APA was originally developed for the submission of manuscripts to refereed journals while the APA is uniquely different. These exceptions are as follows:

- A signed Certification Statement by the author.
- Effective March 2008, it is permissible to use a maximum of 300 words for writing the Abstract (APA permits a maximum of 120 words).
- A Table of Contents page is required; APA does not require such.

### APPLIED RESEARCH PRECOURSE

EFOP participants must participate in and complete a *Research Self-Study Course*. The intent of this prerequisite course is to provide information on how to conduct and comply with applied research. *Executive Development* (ED) participants will be provided this information in advance and complete this course at home independently. There will be a required exam with an established minimum proficiency level. This course also will be available to EFOP participants who may wish to use the course as a periodic tool for reinforcement and/or remedial work.

### USFA OPERATIONAL OBJECTIVES AND APPLIED RESEARCH PROJECT TOPICS

EFOP participants are strongly encouraged to select ARP topics/issues that support one or more of the U.S. Fire Administration's (USFA's) strategic goals. The Department of Homeland Security's (DHS's) 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 five strategic goals 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.

## **CERTIFICATION STATEMENT**

A Certification Statement is **required** for insertion within every ARP. This statement is to be signed and inserted immediately following the title page. Please refer to page A-1 for a sample of this form. Only projects that are received with a signed certification statement will be processed. Projects that are received unsigned will be returned for signature and resubmission.

## **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 (SOPs), policy development, evaluation of existing services/procedures, program implementation, surveys, comparative analysis, or experimentation.

## **SURVEYS**

**Performing a survey is not a requirement.** 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 the National Fire Academy (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 EFOP, 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 EFOP Support Voice Mail line by dialing (800) 238-3358, extension 1176, or directly by dialing (301) 447-1176.

## **CLASS/COURSE SCHEDULING**

The following policy regarding scheduling was implemented in February 2008. Please read carefully.

All EFOP participants will be notified of their assigned class offering date in August of each year. This assignment will be for the class beginning in the following fiscal year (the Federal fiscal year begins October 1 and continues through September 30 of the following year). This change will enable you to plan for and schedule your professional and personal commitments accordingly.

Your assignment each year will follow this process: Our Admissions Office will conduct a random selection process in August. Your assignment will recognize the semester that you originally attended (Our fiscal year is divided into two semesters: The first semester is October 1 through March 31 and the second semester is April 1 through September 30.). The reason for this is to allow you the 6 months for completing the Applied Research Project following your course. As an example, if you completed your first EFOP course in November, your second course assignment would be sometime in the first semester of the following fiscal year. First year EFOP students will be randomly assigned within both semesters.

If after receiving your assigned date (or during the period of time upon receiving your letter but before attending your scheduled class date) you decide to request a change of date, the following will apply. The reason for your request must be serious in nature; a written request on organizational or department letterhead must be submitted to the Admissions Office; and the request must be cosigned by your immediate supervisor. Further, if a change is approved by the Admissions Office, you will then enter the random selection process of available dates and you may not request any additional changes within that fiscal year. If you then later opt out of this rescheduled class, your next attendance will be lapsed and scheduled to the following fiscal year. (Note: A repetitive pattern of requesting changes and/or no shows could result in program cancellation.)

## **GRADUATE CERTIFICATE INFORMATION SHEET**

You will receive a Graduate Certificate Information (GCI) green sheet when you attend your final course in the 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 on page A-11 of the Appendix.

## EXECUTIVE FIRE OFFICER PROGRAM DESCRIPTION

The EFOP is an initiative of the DHS's USFA designed to provide senior fire 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 postcourse 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 ARP have been recommended by the American Council of Education (ACE) to receive college-level credit.

The sequencing of the program is as follows (reference flowchart on page I-20).

### FIRST YEAR COURSE

#### *Executive Development (R123)*

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 Leadership, Teams, Change Management, Research, Research Practicum, Change and Creativity, Organizational Culture and Change, Ethics and Change, and Service Quality.

## **SECOND YEAR COURSE**

### ***Executive Analysis of Community Risk Reduction (R274)***

*Executive Analysis of Community Risk Reduction (EACRR)* is a mixture of philosophy and application—the value of the community risk reduction and the process of applying risk reduction to the community. It involves developing partnerships with the community to implement programs, initiatives, and services that prevent and/or mitigate the risk of human made or natural disasters. Traditional fire prevention programs are addressed. There is an extensive precourse assignment where students are required to research the history of fire prevention and its evolution into community risk reduction. Students build a demographic and risk profile of their home community. They examine social, cultural, economic, and environmental trends that impact community risk. The course examines the Executive Fire Officer (EFO) as a community risk-reduction leader, assesses community risk, develops a draft plan for a local risk-reduction initiative, applies change management models, and addresses organizational and community politics. The ultimate goal of the course is to develop fire service leaders who are committed in word and deed to comprehensive multihazard community risk reduction.

## **THIRD YEAR COURSE**

### ***Executive Analysis of Fire Service Operations in Emergency Management (R306)***

*Executive Analysis of Fire Service Operations in Emergency Management (EAFSOEM)* 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, it requires maximum use of the student's time. 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.

## **FOURTH YEAR COURSE**

### ***Executive Leadership (R125)***

The final year EFOP course provides an opportunity to extend the learning experienced in prior courses so that future opportunities to exercise leadership are moved to a practice. Participants are required to share actual contemporary cases which contain adaptive problems. Case studies offer further analysis and application opportunities. A personal plan is created and each participant receives feedback regarding his/her introspection and efforts to strategize post-EFOP experiences. As in ED, participants receive feedback from a similar battery of multirater assessment instruments. A 1-day field trip is offered to the Gettysburg National Military Park where frameworks of leadership presented throughout the EFOP courses and research are discussed, further analyzed, and applied in light of this historic 1863 event.

## **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 Requirements 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 (EMS), 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

All applicants (either for the EFOP Target Audience or the Key Leaders Audience) must have a minimum of a bachelor's degree.

The degree must be awarded from a regionally accredited institution of higher learning.

Conditional consideration: If an applicant projects that she/he will complete his/her degree program within the following year after the date of application, application may still be made. Please note this situation within the application package cover letter. If accepted, final enrollment to EFOP will be made when the applicant submits a copy of her/his diploma certificate upon graduation.

Under no circumstances will the lack of a degree ever be waived for an applicant.

## "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.
- 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 the aforementioned and following selection/application elements before submitting their application package.

## APPLICATION PROCESS

Prospective EFOP candidates must participate within a structured and competitive selection/application process. The initial phase of this process is to submit an NFA General Admission Application Form (Federal Emergency Management Agency (FEMA) Form 119-25-1 (previously FEMA Form 75-5)). This form is to be submitted following the guidelines announced annually in the NFA's *Course Catalog*. 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 15. Applications received after this date will be considered for the following fiscal year. For example, an application received **prior** to June 15, 2012, will be considered for Fiscal Year 2013. An application received **after** June 15, 2012, will be considered for Fiscal Year 2014.

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 the NFA *Course Catalog*) and commitment to complete the entire program, **including the ARP process**. Personal expectations for the program also should 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 ARP process**.
- A résumé 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.
- A secondary application entitled "National Fire Academy Executive Fire Officer Program Application for Admission (FEMA Form 119-25-5 (previously FEMA Form 95-22)). This form can be found within the DHS/FEMA/USFA/NFA Web site at: [www.usfa.dhs.gov/nfa/efop/apply.shtm](http://www.usfa.dhs.gov/nfa/efop/apply.shtm) Please follow the accompanying instructions for completion.

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 nonacceptance into the EFOP.

## **"CONDITIONAL ACCEPTANCE" INTO THE EXECUTIVE FIRE OFFICER PROGRAM**

Individuals who have completed EFOP courses (ED, EACRR, EAFSOEM, and EL) 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-6 must be met. Furthermore, the selection procedures stated within the "Application Process" section beginning on page I-8 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 ARP would 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 present an academic degree credential.)

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 employer, position, or address.**

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, including satisfactory completion of the evaluation plan/curriculum for each course.
- Successful completion of the ARP for each EFOP course according to the ARP 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. FEMA 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.

## CERTIFICATION STATEMENT

A Certification Statement is **required** for insertion within every ARP. This statement is to be signed and inserted immediately following the title page. Please refer to page A-1 for a sample of this form. Only projects that are received with a signed certification statement will be processed. Projects that are received unsigned will be returned for signature and resubmission.

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 ARP 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 ED Program Manager.

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

Reviewers use the "Applied Research Evaluation Form" to critique and evaluate the project. (See Appendix pages A-3 through A-7.)

In the event that an EFOP participant receives a failing grade for an ARP, 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-4 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.
- Requests for extension must be directed to Ms. Angie Krantz at: [angela.krantz@associates.fema.dhs.gov](mailto:angela.krantz@associates.fema.dhs.gov). 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 on changes made after the initial submission of the ARP.

## EXECUTIVE FIRE OFFICER PROGRAM OUTSTANDING APPLIED RESEARCH AWARD

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

1. NFA's Outstanding Applied 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 the EFOP Training Specialist, as well as other USFA staff.
3. The Training Specialist 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 ARPs 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 Project 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 Applied 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 USFA 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 (LRC). Dissemination beyond this is dependent on available funding.
8. Design and reproduction of the Outstanding Applied Research Award certificate is executed by National Emergency Training Center (NETC) Media.
9. The recipients of the Outstanding Applied Research Award are invited to present their papers at the EFOP Graduate Symposium, and may receive recognition from other professional organizations.

Outstanding ARPs for recent years may be downloaded from the USFA's Web site by using this address: [www.usfa.fema.gov](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 LRC.

Projects evaluated at 3.0 or higher, will be archived in their entirety. Projects that are resubmitted following corrections **will not** be archived, regardless of the rating awarded.

**Note:** In recent years, a large number of ARP's have been converted for full "online" access. To access this Web site, go to: [www.usfa.fema.gov/lrc](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-16 and I-17 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

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

DOCUMENT TYPE REPORT  
AUTHOR Senter, Edward L.  
CORPORATE AUTHOR Norfolk Fire and Paramedical Services  
TITLE Improving fire apparatus life span projections in the Norfolk Department of Fire and Paramedical Services Executive Fire Officer Program. Applied Research Project.  
SERIES TITLE  
PUBLISHER National Fire Academy  
PLACE Emmitsburg, MD  
DATE May 1999  
COLLATION 78 P.  
CALL NUMBER 29736  
NOTES Norfolk, VA; Financial Management; Abstracts for EFO papers are written by the author  
SUBJECTS FIRE APPARATUS; LIFE EXPECTANCY  
URL [www.usfa.fema.gov/pdf/efop/efo29736.pdf](http://www.usfa.fema.gov/pdf/efop/efo29736.pdf)  
AVAILABILITY Available on Interlibrary Loan

ABSTRACT Fire apparatus replacement intervals should be based on the estimated effects of variables such as age, use, and maintenance costs on useful life span. The problem was the replacement intervals of the Norfolk Department of Fire and Paramedical (NFPS) were based exclusively on age. The purpose of this research was to examine variables that may affect useful life span, compare planned replacement intervals with projected life spans, examine the replacement practices of other fire departments, and identify steps to improve fire apparatus life span projections.

Descriptive research was used to answer the following questions: 1. What are the ages, mileage totals, unit activity levels, maintenance costs, and performance tests for NFPS apparatus? 2. What is the operating condition and performance level of each fire apparatus in the NFPS fleet, as judged by fire apparatus operators? 3. How do the planned replacement intervals of the NFPS compare to the remaining useful life spans of fire apparatus, as projected by fire apparatus operators? 4. What variables do other local fire departments examine when assessing fire apparatus for replacement?

The procedures used to complete this research consisted of a literature review, a records review, an apparatus survey, and a fire department survey. The results of this research included the substantiation of the research others, the discovery of practices that were incongruent with the recommendations of others, the identification of varied apparatus operating conditions and performance levels, the detection of shortcomings in planned replacement intervals, and the discovery of an objective apparatus assessment process.

The recommendations of this research project included the development of apparatus programs to manage and analyze data, assess operating condition, and test performance. Also included were recommendations to search for alternatives for extending life spans, and to educate other about fire apparatus needs.

## **EXECUTIVE FIRE OFFICER PROGRAM GRADUATE SYMPOSIUM**

EFOP Graduate Symposium is an annual event for alumni. The goals for this 3-day event are to

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

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

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

### **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. Chuck J. Burkell  
(301) 447-1072  
email: [chuck.burkell@fema.dhs.gov](mailto:chuck.burkell@fema.dhs.gov)

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

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

- Supporting responsibility for Outstanding ARP administration, EFOP, and EFOP Graduate Symposium

Ms. Roxane Strayer  
(301) 447-1642  
email: roxane.strayer@fema.dhs.gov

- Administrative support to EFOP including Q123 research precourse and the NFA Online Assessment Instrument for ED and EL

Ms. Angie Krantz  
(301) 447-1176  
email: angela.krantz@associates.fema.dhs.gov

- Supporting responsibility for ARP administration, ARP extensions, EFOP, and EFOP Graduate Symposium

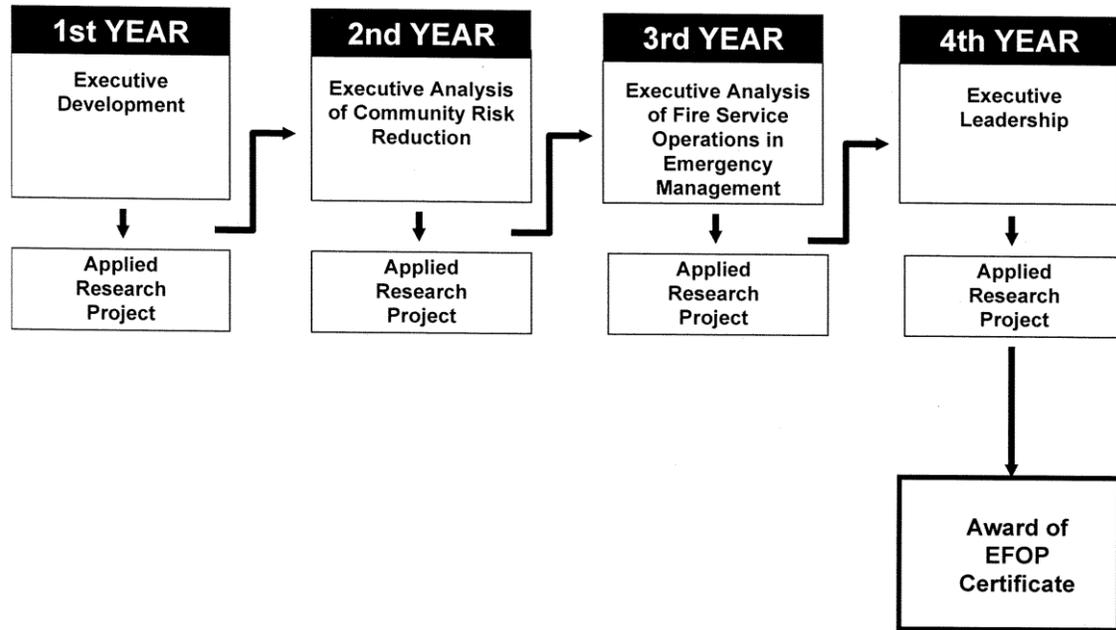
Ms. Mary Marchone  
(301) 447-1476  
email: mary.marchone@fema.dhs.gov

- Curriculum responsibility for EACRR

Mr. Robert Bennett  
(301) 447-1483  
email: robertj.bennett@fema.dhs.gov

- Curriculum responsibility for EAFSOEM

## EXECUTIVE FIRE OFFICER PROGRAM



## **II. APPLIED RESEARCH PROJECT GUIDELINES**

**Revised**

**February 2012**

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**EXECUTIVE FIRE OFFICER PROGRAM--APPLIED RESEARCH PROJECT GUIDELINES**

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## INTRODUCTION

This guide is designed to assist students enrolled in the National Fire Academy's (NFA's) 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 used by those persons responsible for reviewing and evaluating students' proficiency in completing the Applied Research Project (ARP) for EFOP.

Students must complete one ARP for each course in the 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 2.0) overall. **ARPs must receive a passing grade (2.0 or greater) in each section to be considered an acceptable or passing ARP.** Upon successful completion of the fourth ARP, the student will be awarded the EFOP certificate.

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

Those EFOP ARPs that receive a rating of 3.0 or greater will be archived in the National Emergency Training Center's (NETC's) Learning Resource Center (LRC) in their entirety.

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

## WHAT IS AN APPLIED RESEARCH PROJECT?

The ARP 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 ARP in a professional paper format, EFOP students are contributing to the fire service literature.**

## PERSONALLY IDENTIFYING INFORMATION

Do not include personally identifying information (PII) within an ARP. ARPs are considered government documents because they are completed as part of a federally funded and sponsored program. Therefore, due to requirements of the Privacy Act, authors of ARPs are cautioned to ensure that an ARP does not include any PII.

Personal information refers to any item, collection, or grouping of information about an individual or individuals that is maintained by an agency, including, but not limited to, education, financial transactions, medical history, and employment history.

Examples of PII include date(s) of birth, resident mailing addresses, resident telephone numbers, all or portions of Social Security Numbers (SSNs), personal email addresses, zip codes, account numbers, certificate/license numbers, and vehicle identifiers including license numbers. Authors are also cautioned to not include any other unique identifying number(s) or characteristic(s) or any information where it is reasonably foreseeable that the information will be linked with other information to identify the individual(s).

## **SELECTION OF APPLIED RESEARCH TOPICS**

Applied research topics should be selected on the basis of four 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 U.S. Fire Administration (USFA) strategic goals.

Take care 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 the five USFA strategic goals? These goals are as follows:
  - a. Reduce risk at the local level through prevention and mitigation.
  - b. Improve local planning and preparedness.
  - c. Improve the fire and emergency services' capability for response to and recovery from all hazards.
  - d. Improve the fire and emergency services' professional status.

- e. Lead the Nation's fire and emergency services by establishing and sustaining USFA as a dynamic organization.
6. Do you have sufficient time (within the 6-month timeframe) to complete the project?

## RESEARCH PROPOSAL

For each course completed, EFOP participants are provided an Applied Research Project Proposal form (refer to Page A-13 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 to whom NFA will forward the EFOP participant's ARP upon completion.

When the EFOP participant returns to his/her jurisdiction, the research proposal should be completed and forwarded to the assigned evaluator within 2 weeks. The form contains the proposed title, topic, problem statement, purpose, research questions, and research approach. The evaluator will have 2 weeks to 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 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 accomplish the purpose; and the necessary procedures to facilitate achieving the purpose and solving the problem statement.

**REMINDER:** Please submit the completed Applied Research Proposal Form directly (email) to your assigned evaluator. Do not submit to NFA. The completed ARP should be sent directly to NFA, not to the evaluator.

## REPORT FORMAT

### REQUIRED ELEMENTS OF PAPER (IN ORDER)

1. Title Page (separate page). (See sample in APA Manual.)
2. Certification Statement. (See sample on p. A-1.)
3. Abstract (start on a separate page).
4. Table of Contents (start on a separate page).
5. Main body of paper, including the following sections:

- a. Introduction.
  - b. Background and Significance.
  - c. Literature Review.
  - d. Procedures.
  - e. Results.
  - f. Discussion.
  - g. Recommendations.
6. Reference List (start on a separate page). (See sample in APA Manual.)
  7. Appendices (optional).

### 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 30 and 40 pages typed (double-spaced). However, due to the complexity of a research topic, the body of an ARP may be greater than 40 pages typed and considered acceptable. (The body of an ARP does not include the Reference List and appendices.) 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:

- Microsoft Word (preferred format); or
- Word Perfect.

Disk copies should be labeled to include the following information:

- student name;
- ARP title;
- course;
- submission date; and
- word processing format.

## SUBMISSION INFORMATION

ARPs should be submitted to the following address:

National Fire Academy  
16825 South Seton Avenue  
Emmitsburg, MD 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 Applied Research Evaluation Forms in the Appendix pp. A-3 to A-5. **Note:** The sample Applied Research Evaluation Form in the Appendix, page A-3, 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. (Note: This is an exception to APA.)**

### Evaluation Criteria

1. Accurate and self-contained.
2. Primarily written in past tense.
3. Problem statement defined.
4. Purpose statement defined.
5. Research method cited.
6. Research question(s) or hypothesis(es) summarized/paraphrased.

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 ARP 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.) (Do not number or bullet questions (per APA).)

OR

Hypothesis clearly stated (for correlational, causal-comparative, or experimental research only) and appropriate for research method identified.

(Note: To review and determine the type of research you are engaging in, please review "Selecting a Research Methodology," pp. II-12 to II-16.)

## 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 the five USFA strategic goals.

### **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 also may 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 describe clearly 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 (SM) of the *Executive Development* (ED) 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 Applications* 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 ensured 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.

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

1. All of the same points as for historical, descriptive, evaluative, and action research, **plus:**
2. Appropriate statistical analyses selected and justified.
3. Hypothesis clearly stated and variables clearly defined.
4. Statistical significance of results documented.
5. Nonexperimental variables controlled (experimental only).

(Note: To review and determine the type of research you are engaging in, please review "Selecting a Research Methodology," pp. II-12 to II-16.)

## 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 (SOP), 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 also would be appropriate to describe "unexpected" findings, i.e., information derived from the data that 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 described completely.

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. Student's 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, followup/evaluation proposals, etc.

All recommendations should be supported clearly by data presented in the report and should relate specifically 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**

Certain style rules will require access to the *Publication Manual of the American Psychological Association*, 5th or 6th ed.

### **Evaluation Criteria**

1. Correct grammar, punctuation, spelling, sentence structure, and typing/editorial style. (See *Publication Manual of the American Psychological Association*.)
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 *Publication Manual of the American Psychological Association*.)
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.
6. Certification Statement signed and included.

**SELECTING A RESEARCH METHODOLOGY**  
(excerpted from the *Executive Development* course manual)

- 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 (SOPs), 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 that 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 the following:
    - 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.

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

# APPENDIX



**SAMPLE CERTIFICATION STATEMENT**

**CERTIFICATION STATEMENT**

I hereby certify that this paper constitutes my own product, that where the language of others is set forth, quotation marks so indicate, and that appropriate credit is given where I have used the language, ideas, expressions, or writings of another.

Signed: \_\_\_\_\_



**SAMPLE APPLIED RESEARCH EVALUATION FORMS**

(SAMPLE)

ARP Section	Checklist of Criteria for Section	Grading/Evaluation Rubric
<p><b>Abstract</b></p> <p>Grade for the Abstract Section:</p> <hr/> <p>(Whole number only)</p>	<p>_____ Accurate and self contained (300 words or less)</p> <p>_____ Primarily written in past tense</p> <p>_____ Problem statement defined</p> <p>_____ Purpose statement defined</p> <p>_____ Research method defined</p> <p>_____ Research questions or hypothesis summarized or paraphrased</p> <p>_____ Procedures summarized</p> <p>_____ Results summarized</p> <p>_____ Recommendations summarized</p>	<p>4.0 rating – All criteria present</p> <p>3.0 rating – Some deficiency in criteria present</p> <p>2.0 rating – Moderate deficiencies in criteria present, but acceptable</p> <p>1.0 rating – A number of deficiencies to the extent where the Abstract is unacceptable.</p>
ARP Section	Checklist of Criteria for Section	Grading/Evaluation Rubric
<p><b>Introduction</b></p> <p>Grade for the Introduction Section:</p> <hr/> <p>(Whole number only)</p>	<p>_____ Problem statement clearly and precisely defined</p> <p>_____ Purpose statement clearly and precisely defined</p> <p>_____ Specific research method identified</p> <p>_____ Research questions clearly stated (for Historical Descriptive, evaluative, or action research only)</p> <p><b>or</b></p> <p>_____ Hypothesis clearly stated (for correlational, causal-comparative, or experimental research only)</p> <p>_____ Hypothesis appropriate for research method identified</p>	<p>4.0 rating – All criteria present</p> <p>3.0 rating – Some deficiency in criteria present</p> <p>2.0 rating – Moderate deficiencies in criteria present, but acceptable</p> <p>1.0 rating – A number of deficiencies to the extent where the Introduction is unacceptable.</p>
ARP Section	Checklist of Criteria for Section	Grading/Evaluation Rubric
<p><b>Background &amp; Significance</b></p> <p>Grade for the Background &amp; Significance Section:</p> <hr/> <p>(Whole number only)</p>	<p>_____ Clear and complete background analysis of problem provided</p> <p>_____ Sufficient evidence provided to justify study from an organizational perspective, based on past, present, and probable future impact on organizational effectiveness</p> <p>_____ Definite linkage established between the research problem and specific content area(s) of the relevant EFOP course</p> <p>_____ Linkage established between problem and one Of the USFA goals</p>	<p>4.0 rating – All criteria present</p> <p>3.0 rating – Some deficiency in criteria present</p> <p>2.0 rating – Moderate deficiencies in criteria present, but acceptable</p> <p>1.0 rating – A number of deficiencies to the extent where the Background &amp; Significance is unacceptable.</p>

**EXECUTIVE FIRE OFFICER PROGRAM--APPENDIX**

ARP Section	Checklist of Criteria for Section	Grading/Evaluation Rubric
<p><b>Literature Review</b></p> <p>Grade for the Literature Review Section:</p> <hr/> <p>(Whole number only)</p>	<p>_____ Sufficiently comprehensive</p> <p>_____ Findings of others reviewed</p> <p>_____ Summary statements provided on how the findings/observations influenced the project</p> <p>_____ Sources are current</p>	<p>4.0 rating – All criteria present</p> <p>3.0 rating – Some deficiency in criteria present</p> <p>2.0 rating – Moderate deficiencies in criteria present, but acceptable</p> <p>1.0 rating – A number of deficiencies to the extent where the Literature Review is unacceptable.</p>
ARP Section	Checklist of Criteria for Section	Grading/Evaluation Rubric
<p><b>Procedures</b></p> <p>Grade for the Procedures Section:</p> <hr/> <p>(Whole number only)</p>	<p>(For Historical, Descriptive, Evaluative, and Action Research)</p> <p>_____ Procedures sufficiently delineated to permit replication</p> <p>_____ Procedures appropriate to achieve stated purpose</p> <p>_____ For surveys, definition of total population Provided; if used, process for selecting a sample described in detail</p> <p>_____ Limitations noted</p> <p>(For Correlational, Causal-comparative, and Experimental Research) All of the above, plus</p> <p>_____ Appropriate statistical analyses selected and Justified</p> <p>_____ Hypothesis clearly stated and variables clearly defined</p> <p>_____ Nonexperimental variables controlled (experimental only)</p>	<p>4.0 rating – All criteria present</p> <p>3.0 rating – Some deficiency in criteria present</p> <p>2.0 rating – Moderate deficiencies in criteria present, but acceptable</p> <p>1.0 rating – A number of deficiencies to the extent where the Procedures Section is unacceptable.</p>
ARP Section	Checklist of Criteria for Section	Grading/Evaluation Rubric
<p><b>Results</b></p> <p>Grade for the Results Section:</p> <hr/> <p>(Whole number only)</p>	<p>_____ Results/findings clearly and concisely stated in narrative form</p> <p>_____ Detailed results of all procedures provided</p> <p>_____ Specific answers to original research questions Provided or explanation of whether or not original hypothesis was supported by results, as appropriate</p> <p>_____ Comprehensive analysis of data included</p> <p>_____ Tables and/or figures are clearly presented, correctly labeled, and contain appropriate data</p> <p>_____ Final product(s) of action research included as an Appendix</p>	<p>4.0 rating – All criteria present</p> <p>3.0 rating – Some deficiency in criteria present</p> <p>2.0 rating – Moderate deficiencies in criteria present, but acceptable</p> <p>1.0 rating – A number of deficiencies to the extent where the Results Section is unacceptable.</p>

**EXECUTIVE FIRE OFFICER PROGRAM--APPENDIX**

ARP Section	Checklist of Criteria for Section	Grading/Evaluation Rubric
<p><b>Discussion/ Implications</b></p> <p>Grade for the Discussion Section:</p> <hr/> <p>(Whole number only)</p>	<p>_____ The relationship between the study results and the specific findings of others is discussed, using extensive citations from reference documents</p> <p>_____ Author's interpretation of study results is presented</p> <p>_____ Organizational implications of results clearly stated</p>	<p>4.0 rating – All criteria present</p> <p>3.0 rating – Some deficiency in criteria present</p> <p>2.0 rating – Moderate deficiencies in criteria present, but acceptable</p> <p>1.0 rating – A number of deficiencies to the extent where the Discussion Section is unacceptable.</p>
ARP Section	Checklist of Criteria for Section	Grading/Evaluation Rubric
<p><b>Recommendations</b></p> <p>Grade for the Recommendations Section:</p> <hr/> <p>(Whole number only)</p>	<p>_____ Recommendations logically flowed from the results</p> <p>_____ Recommendations were supported by the data collected</p> <p>_____ Recommendations provided for the organization and for future readers</p>	<p>4.0 rating – All criteria present</p> <p>3.0 rating – Some deficiency in criteria present</p> <p>2.0 rating – Moderate deficiencies in criteria present, but acceptable</p> <p>1.0 rating – A number of deficiencies to the extent where the Recommendations Section is unacceptable.</p>
ARP Section	Checklist of Criteria for Section	Grading/Evaluation Rubric
<p><b>Content</b></p> <p>Grade for the Content Section:</p> <hr/> <p>(Whole number only)</p>	<p>(Note: This is not a section of the Project; rather it refers to the technical content of the entire ARP)</p> <p>_____ Theories, principles, and procedures were presented and used properly</p> <p>_____ Information and data is accurate and up-to-date</p>	<p>4.0 rating – All criteria present</p> <p>3.0 rating – Some deficiency in criteria present</p> <p>2.0 rating – Moderate deficiencies in criteria present, but acceptable</p> <p>1.0 rating – A number of deficiencies to the extent where the Content Section is unacceptable.</p>

**EXECUTIVE FIRE OFFICER PROGRAM--APPENDIX**

ARP Section	Checklist of Criteria for Section	Grading/Evaluation Rubric
<p align="center"><b>Writing</b></p> <p>Grade for the Writing Section:</p> <hr/> <p align="center">(Whole number only)</p>	<p><input type="checkbox"/> Correct grammar, punctuation, spelling, sentence structure, and typing/editorial style</p> <p><input type="checkbox"/> All required sections of the ARP included</p> <p><input type="checkbox"/> Reference lists are in-text references documented properly using APA Guidelines</p> <p><input type="checkbox"/> Title reflects nature of study; correct title page format followed</p> <p><input type="checkbox"/> Table of Contents included all major headings; a list of tables provided if more than one used; and Appendices were listed and defined</p> <p><input type="checkbox"/> Certification statement signed and included.</p>	<p>4.0 rating – All criteria present</p> <p>3.0 rating – Some deficiency in criteria present</p> <p>2.0 rating – Moderate deficiencies in criteria present, but acceptable</p> <p>1.0 rating – A number of deficiencies to the extent where the Writing Section is unacceptable.</p>
<p align="center">Summary Score</p>	<p align="center">Determination of Resubmission?</p>	<p align="center">Grade of Record</p>
<p>Total Score: <math>\div 10 =</math></p> <hr/>	<p>Is this review a resubmission?</p> <p>Yes <input type="checkbox"/></p> <p>No <input type="checkbox"/></p> <p>(If checked yes, and the summary score is a minimum of 2.0, then insert 2.0 in grade of record to the right even though the resubmission score may be higher than 2.0.)</p>	<p>Enter the Student's Grade of Record score based on the 4.0 academic scale:</p> <p align="center"><hr/></p>

**Evaluation/Assessment Policy Statement:**

A minimum score of 3.0 shall be required for the National Fire Academy (NFA) to report and recommend transfer credit to regionally accredited graduate-level degree programs. A minimum passing score is 2.0. If the initial evaluation of the ARP results in a score of less than 2.0, the student will have an opportunity (and is required) to make corrections and resubmit. However, the maximum score for this secondary (or greater) review will be a 2.0, and this will become the grade of record. The rationale for this is to provide equity for students who receive a passing grade in the range of 2.0–2.9 (or higher) upon their first submission. Secondary reviews (or greater) are therefore not eligible for transfer credit recommendations from NFA.

**SAMPLE TITLE PAGE**

Impact of a Team-Building 1

Running head: IMPACT OF A TEAM-BUILDING RETREAT

Impact of a Team-Building Retreat

on Top-Management

Bill Smith

Anytown Fire Department, Anytown, Ohio



## SAMPLE REFERENCES

### References

- American Psychological Association (2009). *Publications manual* (6th ed.). Washington, DC: American Psychological Association.
- American Psychological Association (2001). *Publications manual* (5th 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 GRADUATE CERTIFICATE INFORMATION SHEET**

**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:

Graduate's Name: \_\_\_\_\_

Supervisor name and title: _____
Department: _____
Address: _____
City: _____ State: _____ Zip: _____

<b>U.S. Senator(s):</b>
Name: _____
Address: _____
City: _____ State: _____ Zip: _____

<b>U.S. Representative(s):</b>
Name: _____
Address: _____
City: _____ State: _____ Zip: _____

<b>State Governor:</b>
Name: _____
Address: _____
City: _____ State: _____ Zip: _____

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

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



**SAMPLE APPLIED RESEARCH PROJECT PROPOSAL**



United States Fire Administration  
 National Fire Academy  
 Executive Fire Officer Program

Part I – Applied Research Proposal	
EFOP Participant's Name	
Department	
Mailing Address	(Street)
	(City)
	(State)
	(5-Digit Zipcode)
EFOP Course Title	
Dates Attended	(From)(To) (ex: x/xx/xx)
ARP Due Date	(ex: x/xx/xx)
Edition of APA Manual Being Used	
Email Address	
Telephone Number	(ex: xxx-xxx-xxxx)
Fax Number	(ex: xxx-xxx-xxxx)
Assigned Evaluator's Name	
Mailing Address	(Street)
	(City)
	(State)
	(5-Digit Zipcode)
Email Address	
Telephone Number	(ex: xxx-xxx-xxxx)
Fax Number	(ex: xxx-xxx-xxxx)
Title of ARP	
Problem Statement:	
Purpose Statement:	
Research Questions:	
Identify Research Method and Describe Research Approach:	

## **III. FREQUENTLY ASKED QUESTIONS (FAQs)**

**EXECUTIVE FIRE OFFICER PROGRAM--FREQUENTLY ASKED QUESTIONS (FAQs)**

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## FREQUENTLY ASKED QUESTIONS

### **What address do I return my project to?**

Send your completed project (three copies) and a disk to:

National Fire Academy  
16825 South Seton Avenue  
Emmitsburg, MD 21727

Attn: Executive Fire Officer Program Research Project

### **When is my Applied Research Project (ARP) due to the National Fire Academy (NFA)?**

The submission date for the ARP is 6 months after the final class day of the course. For example, if the class ended on Friday, March 30, the ARP would be due to the NFA on September 30.

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

The projects are sent by Priority Mail to evaluators on the Friday of the week they are received. Evaluators have 4–6 weeks to grade the project and return it to the NFA for processing. Please allow for processing time when the 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 the 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 to make copies from the NFA's end. The purpose of the disk or CD-rom is for electronic archiving.

### **Will I receive the evaluated/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. This provision assumes the timely completion and submission of your ARP.

**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 your newly scheduled class date, you will be cancelled from the EFOP.

**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 Ms. Angie Krantz at [angela.krantz@associates.fema.dhs.gov](mailto:angela.krantz@associates.fema.dhs.gov) and a determination as to the granting of the extension and the length of time (if granted) will be made. (See page I-12.)

**Will I be removed from the program if my project is not received?**

Yes. If your project is not received within the required timeframe and if you have not advised the Academy about any mitigating circumstances, you will be removed. You will then have to reapply to EFOP. Should you be reaccepted to the program, you will have a timeframe to complete the required outstanding project before attending the next course, or receiving your graduate certificate.

**Where do I send my project if it requires resubmission work?**

**Do Not** send the project directly to the evaluator who graded your project. Please mail it back to the Academy and we will process your project and send it to the evaluator.

**Do I need to request my Graduate Certificate?**

No. Upon successful completion of your final project, we will initiate the printing of your certificate. Certificates are printed the beginning of each month for the previous month's graduates. The Graduate Certificates are signed by the U.S. Fire Administrator and the Superintendent and then returned to Ms. Angie Krantz for mailing.

A Graduate Certificate Information Sheet will be provided during *Executive Leadership* (EL) (refer to page I-3, Graduate Certificate Information Sheet). Please submit the completed form when you submit your final EFO project. The EFOP Graduate Certificate cannot be mailed unless NFA has received this form properly completed.

**I thought that when I finished the last class, the cancellation policy didn't apply to me?**

Yes, it does. Just because you have completed the four required classes does not mean that you do not have to submit your project within the established timeframe. You will be removed from the program and will have to follow the reapplication process and ARP in order to be considered for graduation from the program.

**When will the projects be available through an "online" service?**

Currently there are thousands of ARPs online. To access this site go to: [www.usfa.fema.gov/lrc](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.

**Can I obtain copies of the Outstanding ARPs?**

Yes. You can download recent Outstanding ARPs from the U.S. Fire Administration's (USFA's) Web site at this address: [www.usfa.fema.gov](http://www.usfa.fema.gov) or you can request that a hard copy be sent to you through the mail.