Department of Homeland Security

U.S. Fire Administration

National Fire Academy

EXECUTIVE FIRE OFFICER PROGRAM HANDBOOK

Overview

Operational Policies and Procedures

Applied Research Guidelines

Frequently Asked Questions

Nov. 15, 2015

The Department of Homeland Security U.S. Fire Administration's

Executive Fire Officer Program

Provides senior officers and others in key leadership roles with:

- An understanding of:

    - Transforming fire and emergency services organizations from being reactive to proactive, with an emphasis on leadership development, community risk reduction, and emergency incident prevention.
    - 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.

- Enhanced executive-level knowledge, skills, attitudes and abilities necessary to lead these transformations, conduct research, and engage in lifelong learning.

(Revised Statement of Purpose: Oct. 24, 2014)

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 risk in this country and enhancing the fire service's ability to confront and deal with many emerging issues, your participation is vital.

The challenge that we extend to you is a leadership one. It is to lessen, if not prevent, emergency events from occurring, and to 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 the EFOP. The intent is to establish a protocol that promotes equity, trust and a high level of academic standard.

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. Kirby Kiefer
Acting Superintendent
National Fire Academy
U.S. Fire Administration

Table of Contents

EXECUTIVE FIRE OFFICER PROGRAM

The Executive Fire Officer Program (EFOP) provides senior officers and others in key leadership roles with:

- An understanding of:

    - Transforming fire and emergency services organizations from being reactive to proactive, with an emphasis on leadership development, community risk reduction, and emergency incident prevention.
    - 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.

- Enhanced executive-level knowledge, skills, attitudes and abilities necessary to lead these transformations, conduct research, and engage in lifelong learning.

The program contains a diverse executive-level curriculum that includes one 10-day course each year for four years. The program also requires participants to complete four Applied Research Projects (ARPs) that are linked to the curricula and national strategic goals. Participants and their sponsoring organizations must realize that these research projects require time and resources once participants return to their routine workplace.

Each EFOP course and the ARP requirements have been recommended by the American Council on Education (ACE) to receive graduate or upper-division-baccalaureate equivalent course credit.

Executive Fire Officer Program Target Audience

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

Service Requirement

The service requirement addresses one of these ranks or positions within an agency:

- Chief of department or equivalent.
- Those chief officers who report directly to the chief.
- Chief officers or equivalents who head major bureaus or divisions (suppression, prevention, training, Emergency Medical Services (EMS), etc.).
- Chief officers and senior deputies of state governmental fire or EMS organizations (e.g., state fire marshals, state EMS directors, and state directors of fire training).

- Other individuals who are serving in "key" positions of authority or leadership (more information in "'Key Leading' Selection Criteria").

Academic Requirement

The EFOP selection process regarding the academic requirement is now a **two-tiered**, **transcript-based** evaluation process.

Tier 1 applicants are those who possess a minimum of a baccalaureate degree from a nationally or regionally accredited institution recognized by the U.S. Department of Education. Applicants must submit an official transcript.

Credit by Examination or Life Experiences

1. If the applicant's baccalaureate or higher degree includes "credit by examination" and/or "life experiences" course work, the applicant's transcript must document at least 60 college credit hours (or quarter-hour equivalent) from course work **not associated with** "credit by examination" and/or "life experiences" (including credit for nonacademic certificate courses and/or professional certifications).

   a. **No more than** 30 college credit hours (or quarter-hour equivalent) from "credit by examination" (Defense Activity for Non-Traditional Education Support Subject Standardized Test, College Level Examination Program, etc.).

   b. **No more than** 30 college credit hours from "life experiences" (including credit for nonacademic certificate courses and/or professional certifications).

2. Applicants seeking recognition for "credit by examination" and/or "life experiences" course work must include within their application package an official transcript **and** one of the following:

   a. A letter from the degree-granting institution certifying that no more than 30 hours of the college credit (or quarter-hour equivalent) came from "credit by examination" and/or no more than 30 hours of the college credit came from "life experiences" (including credit for nonacademic certificate courses and/or professional certification).

<div align="center">**or**</div>

   b. A copy of the policy of the degree-granting institution indicating that no more than 30 hours of college credit (or quarter-hour equivalent) toward a baccalaureate degree may be gained through "credit by examination" **and** no more than 30 hours of college credit toward a baccalaureate degree may be gained through "life experiences" (including credit for nonacademic certificate courses and/or professional certifications).

Tier 2 applicants are those who possess a bachelor's degree or higher degrees from nationally and/or regionally accredited institutions recognized by the U.S. Department of Education but do not meet the 60/30/30 credit hours distribution.

Applicants who are qualified under Tier 2 with a bachelor's degree or higher degrees from nationally and/or regionally accredited institutions recognized by the U.S. Department of Education yet do not meet the 60/30/30 credit hours distribution as described within Tier 1 will be considered, but categorized as **Tier 2**. Tier 2 applicants will compete for any remaining vacancies after all Tier 1 applicants have been admitted.

The National Fire Academy (NFA) staff may consider additional changes in required documentation necessary to facilitate this modified selection process. If details in the official transcript include the number of credits by examination and life experiences, additional documents may not be required. Other selection criteria (e.g., rank, position, responsibilities) as previously described within "Service Requirement" remain in practice.

The NFA will provide a review of the selection process and relevant criteria to the National Fire Academy Board of Visitors at the end of each fiscal year.

"Key Leading" Selection Criteria

The EFOP is the U.S. Fire Administration's (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 nonexecutive-level applicants who are serving in "key leading" positions will be considered for the EFOP.

For interested applicants who are not in the positions previously described, those who are serving in supervisory level positions (e.g., battalion chief, captain, lieutenant) will also be considered for the EFOP as part of the service requirement **if the applicants can demonstrate having exercised leadership within their organizations or their communities** and are now aspiring to more senior positions of authority within their agency. This audience category is referred to as **Key Leading Candidates**.

Firefighters, firefighter paramedics, engineers, drivers or chauffeurs **will not be considered** as eligible in meeting the EFOP service requirement.

Once the minimum academic requirement has been demonstrated, key leading candidates will be selected on the following criteria:

- A minimum of a baccalaureate degree from a nationally or regionally accredited institution recognized by the U.S. Department of Education.
- Unique leadership or management perspectives that would broaden the diversity of the 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.

Note: Applicants need not possess all of the above; however, the more achievements and criteria presented, the stronger a candidate's application will be considered.

It is expected that the applications for the 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 Admissions Application form (Federal Emergency Management Agency (FEMA) Form 119-25-1). This form can be found within the Department of Homeland Security (DHS)/FEMA/USFA/NFA website at http://www.usfa.fema.gov/training/nfa/programs/efop_apply.html.

This form must be submitted following the guidelines announced annually in the NFA's Course Catalog. On the application form, the candidate should specify "Executive Fire Officer Program" in Block 9a. The application period for the EFOP is open year-round; however, the cutoff date for consideration within the following fiscal year is June 15. The application must be received on or before June 15. Applications received after this date will be placed in the next year's application consideration process. The application must be signed by the individual's chief of department or local government executive official.

In addition to the General Admissions Application, the candidate is required to submit all of the following:

- A **signed** 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**.

- A **signed** 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 applicant to complete the entire program, **including the ARP process**.

- A résumé of professional and personal accomplishments.

- A copy of the sponsoring agency's organizational chart, specifically identifying the position on the chart that the applicant holds.

- The applicant's official transcript from a nationally or regionally accredited institution recognized by the U.S. Department of Education.

- A secondary application titled "National Fire Academy Executive Fire Officer Program Application for Admission" (FEMA Form 119-25-5). This form can be found within the DHS/FEMA/USFA/NFA website at http://www.usfa.fema.gov/training/nfa/programs/efop_apply.html. Please follow its instructions carefully.

- A copy of the course certificate of completion for "Applied Research Self Study" (Q0123), "Data Gathering Instruments to Support Applied Research Projects" (Q0170), and "Designing an Applied Research Project Proposal" (Q0171).

The application forms and accompanying materials will be evaluated by NFA staff for EFOP acceptance. The review process may take until the middle of August. Each applicant will be notified in writing upon his or her acceptance or nonacceptance into the EFOP.

Conditional Acceptance

Individuals who have completed the four EFOP courses in a non-EFOP status may later elect to become a part of the EFOP. Conditional acceptance into the EFOP will be based on the following steps/requirements:

- Applicants who wish to be conditionally accepted will compete in the annual selection process within the entire pool of EFOP applicants. The criteria stated within "Executive Fire Officer Program Target Audience" must be met, and the selection procedures stated within the "Application Process" section will apply.

- For those who receive notification that they are conditionally accepted, an ARP is required for each EFOP course completed as a non-EFOP participant. The conditionally accepted participant will have six months from the date of acceptance to complete the ARP. Those who have to complete two or more ARPs will be granted six months for each ARP that is due.

Non-Executive Fire Officer Program Participant Course Attendance

Non-EFOP participants who meet individual course student criteria can attend EFOP 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, and NFA cannot accept and evaluate ARPs from non-EFOP participants.

Maintaining Eligibility

The NFA is committed to providing outstanding course instruction and research evaluations for our EFOP participants. Course allocations are based on the number of students in the program. Students should be aware or cognizant that a "seat" has been reserved for them each year in the various courses and that contract evaluators have been secured to review their proposals and applied research papers. This NFA commitment is costly but vital to the success of the program. Student commitment to the program is equally important.

If at any time during the four-year period of the EFOP a participant's rank or responsibility is reduced or altered, and the change would remove the participant from program eligibility, then the participant shall be removed from the program. These changes include voluntary or involuntary personnel changes, assignment change, agency change, and leaving the service. 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 the Admissions Office immediately as to any change in employer or position. Failure to do so may result in dismissal from the program.

EFOP participants must also notify the Admissions Office when there is a change in a mailing or email address. Failure to notify can result in a delay in the exchange of time-sensitive information. Participants will be held responsible for any delay encountered (e.g., change in class date, cost of travel arrangements).

Participants must complete all pre-course assignments prior to arriving to class. Failure to complete all pre-course assignments will make them ineligible for attendance and continuation in the EFOP.

Participants who cannot attend a course for which they are scheduled are required to notify the Admissions Office (telephone at 301-447-1035, fax at 301-447-1441, email at netcadmissions@fema.dhs.gov) as soon as possible before the class begins; failure to do so may result in future suspension of eligibility to attend NFA courses.

Program Dismissal and Reinstatement

Failure to maintain program eligibility, violation of student conduct or integrity standards or failure to meet program completion criteria shall result in dismissal from the EFOP. The student's sponsoring agency shall be notified when a student is dismissed.

Any student dismissed from EFOP for failure to maintain program eligibility, violation of student conduct or integrity standards or failure to meet program completion criteria (except for failing to submit an ARP by the required due date or denied ARP extension request) may request reinstatement from the National Fire Academy Superintendent in accordance with the following:

- Request for reinstatement must arrive in writing at the National Fire Academy within fifteen (15) calendar days of the initial dismissal decision. The request and supporting information should be submitted to:

  National Fire Academy Superintendent
  16825 South Seton Ave.
  Emmitsburg, MD 21727

  Or electronically to:
  kirby.kiefer@fema.dhs.gov

- The request should fully explain the student's justification for remaining in the program, and include any supporting documentation and correspondence. The request must be approved and signed by the student's sponsoring agency.

- The respondent has the right to appear in person (at their own expense), have representation of his or her choice and present any witnesses. If the respondent elects this option, notification must be included in the reinstatement request.

- The request will be reviewed by the EFOP program manager and the Chief of the Leadership & Fire Risk Reduction Section. The National Fire Academy Superintendent will render a decision as soon as practicable based on the facts presented by the respondent and staff. The decision will be delivered to the student and the student's sponsoring agency.

The National Fire Academy Superintendent's decision is final.

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.

Sequencing of the Program

First-Year Course: "Executive Development" (R0123)

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-based/observer-based assessment, students learn how to enhance team development and apply action research.

Course areas 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" (R0274)

This course is a mixture of philosophy and application — the value of 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 man-made or natural disasters. Traditional fire prevention programs are addressed.

There is an extensive pre-course 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. Students 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" (R0306)

This course is designed to prepare senior staff officers to better prepare their communities for large-scale, multiagency, all-hazard incidents. In this course, students analyze emergency incidents and identify lessons learned and best practices to better prepare for future incidents. Additionally, students are introduced to emergency management and the workings of an Emergency Operations Center (EOC) as a framework for their analysis. Some of the areas covered in the course are risk assessment, incident documentation, standards and legal mandates, capability assessment, damage assessment, and Multiagency Coordination Systems, including the EOC. Since the subject matter is comprehensive, maximum use of the students' time is required. Throughout the course, students are presented with a series of senior staff-level issues that require extensive analysis. The course is very intense and uses lecture, analysis of documented emergency incidents, after action reports, and student participation using "Ted Talks" as instructional media.

Fourth-Year Course: "Executive Leadership" (R0125)

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 practice.

Participants are required to share contemporary cases that contain adaptive problems. Case studies offer further analysis and application opportunities. A personal plan is created, and each participant receives feedback regarding his or her introspection and efforts to strategize post-EFOP experiences. Participants receive feedback from a battery of multirater assessment instruments.

A one-day Staff Ride is offered to 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.

Class/Course Scheduling

All EFOP participants will be notified in August of their first assigned class offering date. This assignment will be for the class beginning in the following fiscal year (the federal fiscal year begins Oct. 1 and continues through Sept. 30 of the following year). The fiscal year is divided into two semesters: The first semester is Oct. 1 through March 31, and the second semester is April 1 through Sept. 30. First-year EFOP students will be randomly assigned within both semesters. For subsequent years, EFOP students will be assigned a course by the admissions office. Students will continue to attend classes in the same semester as their first course. Example: If someone is selected and attends the R0123 "Executive Development" course in the first semester, then they will only be considered for subsequent courses in the first semester.

EFO students must have successfully completed (e.g., received a passing grade) their ARP for the previous year's class before they can attend the next class. Do not purchase an airplane ticket until you have successfully completed this requirement.

We realize that you are all in the emergency services business and that things happen professionally and personally. We will continue to try to accommodate any requests from EFO students to change their scheduled class dates.

Once assigned, any requests for a change in class dates must be submitted in writing to the EFO program manager. The program manager will approve/disapprove all change requests. A confirmation letter from the student's supervisor or chief may be required.

- If the request is based on an unanticipated local or family event (federal or local disaster, the student was injured in the line of duty, illness, significant family event), additional documentation will be required to support the request. These events are usually last-minute cancellations.

- Students requesting a change will be placed in the next class on a space-available basis. Specific date choices can't be honored because others have already been assigned. Students who request a change based on a documented unanticipated local or family emergency will be given priority. Students who request a change based on their or the department's convenience will be given the lowest priority.

- If there is no space available in the fiscal year, the student will be assigned to the next available class the following fiscal year.

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 in the section titled "Applied Research Guide." (See p. 13.)

The project is due within six months from the last day of the course that was just completed.

Executive Fire Officer Program Support Voice Mail

The EFOP has an EFOP Support Voice Mail line for students' convenience. If students have questions regarding their ARP, the EFOP, course assignments, etc., they may leave a message on the support line, and their calls will be returned as soon as possible. Students may reach the EFOP Support Voice Mail line by dialing 800-238-3358, extension 1176, or contact directly by dialing 301-447-1176.

Program Management

Mr. John Carnegis
EFO Program Manager
301-447-1072
email: john.carnegis@fema.dhs.gov

- Administrative responsibility for EFOP, including oversight of student selection.
- Administrative responsibility for ARPs.
- Administrative responsibility for EFOP Graduate Symposium.
- Supporting responsibility for Outstanding ARP administration, EFOP and EFOP Graduate Symposium.

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

Administrative support to EFOP, including Q0123 research pre-course and the NFA Online Assessment Instrument for "Executive Development" and "Executive Leadership."

Ms. Mary Marchone
Training Specialist – Curriculum Manager – Public Education/Fire Prevention
301-447-1476
email: mary.marchone@fema.dhs.gov

Curriculum responsibility for "Executive Analysis of Community Risk Reduction."

Mr. Robert Bennett
Training Specialist – Incident Management
301-447-1483
email: robertj.bennett@fema.dhs.gov

Curriculum responsibility for "Executive Analysis of Fire Service Operations in Emergency Management."

Mr. Kevin Brame
Training Specialist – Curriculum Manager – Leadership and Executive Development
301-447-1069
email: kevin.brame@fema.dhs.gov

Curriculum responsibility for "Executive Development" and "Executive Leadership."

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

Contract coordinator for ARP administration (processes submissions, extension requests, etc.) and EFOP Graduate Symposium.

Executive Fire Officer Program Flow Chart

EXECUTIVE FIRE OFFICER PROGRAM

1st YEAR	2nd YEAR	3rd YEAR	4th YEAR
"Executive Development"	"Executive Analysis of Community Risk Reduction"	"Executive Analysis of Fire Service Operations in Emergency Management"	"Executive Leadership"
Applied Research Project	Applied Research Project	Applied Research Project	Applied Research Project

Award of EFOP Certificate
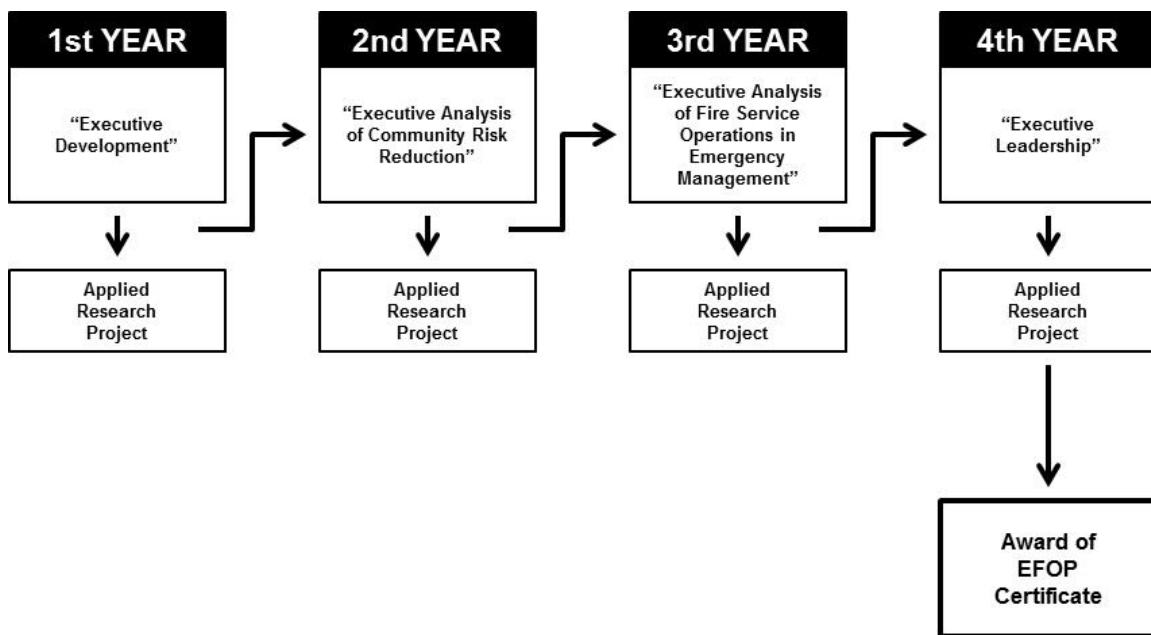
Executive Fire Officer Program Graduate Symposium

The EFOP Graduate Symposium is an annual event for alumni and those EFOP participants who have successfully completed all course and project requirements (pending the final EFOP certificate). The goals for this three-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.
- Officially recognize recent EFOP graduates and research winners.

Participants are required to pay for their own travel costs and meals. NFA provides for 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.

APPLIED RESEARCH GUIDE

This guide is designed to assist students enrolled in the NFA's 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 people responsible for reviewing and evaluating students' proficiency in completing the ARP for the EFOP.

Students must complete one ARP for each course in the EFOP. The reports must be sent to the NFA within six months of completing each course. ARPs must receive a passing grade (2.0 or greater) in each of the 10 sections (abstract, introduction, etc.) of the Applied Research Evaluation Form to be considered. In order for students to continue in the EFOP, projects must receive at least a grade of "C" (score of 2.0) overall. Upon successful completion of the fourth ARP, students will be awarded the EFOP certificate.

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

All ARPs will be submitted electronically to the EFOP contract coordinator (p. 12). Submissions of an ARP that is over 8MB is size should be submitted on a CD-ROM to the EFOP contract coordinator.

What Is an Applied Research Project?

Applied research refers to scientific study and research that seeks to solve practical problems. Applied research is used to understand everyday problems and develop innovative solutions.

The ARP in the EFOP is designed to allow students to investigate a key issue or problem that has been identified as 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 fire service literature.

The EFOP participant is reminded that an ARP that does not contain original research will receive a failing grade. Research is more than reviewing the writings of researchers. While the Literature Review is a required component of an ARP, it 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.

Applied Research Prerequisite

EFOP participants must complete three prerequisite self-study courses on applied research. Participants must print two copies of the certificate of completion when they get to the end of each of the three self-study courses. EFOP participants will need to submit one copy of each certificate of completion on the first day of class. The three mandatory self-study courses listed below are found on NFA Online (http://www.usfa.fema.gov/training/nfa/courses/online.html).

1.   Complete Q0170 "Data Gathering Instruments to Support Applied Research Projects."

2.   Complete Q0171 "Designing an Applied Research Project Proposal."

3.   Complete Q0123 "Applied Research Self-Study" and pass the course exam (minimum score of 70 percent).

U.S. Fire Administration Operational Objectives and Applied Research Project Topics

EFOP participants are strongly encouraged to select ARP topics/issues that support one or more of USFA's strategic goals. 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. The strategic goals were the result of collective input from all of USFA's stakeholder groups and organizations. For more information on USFA's goals, please refer to http://www.usfa.fema.gov/about/strategic/.

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 and/or issue to the EFOP course content.

4.   The relevance of the topic and/or issue to USFA's strategic goals. (Use USFA's website as the primary source when referring to any of the goals.)

Participants should take care to select a topic that can be completed within the six-month time frame.

The following questions should assist participants in selecting their project topic:

- Does the topic relate to the EFOP course that was most recently completed?

- Is the problem that is being investigated currently an issue within the author's organization and/or jurisdiction? Is the topic worth researching? (Will it contribute to solving a problem within the organization and/or jurisdiction?)

- Will it be possible to implement the conclusions and possible solution?

- Are there sufficient data available to do the research?

- Does the topic or issue relate to and support one or more of USFA's five strategic goals? For current goals, refer to http://www.usfa.fema.gov/about/strategic.

- Do you have sufficient time (within the six-month time frame) to complete the project?

Research Proposal

For each course completed, EFOP participants are provided with an Applied Research Project Proposal form (sample on p. 52) while in residence at 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.

The EFOP participant should submit a research proposal to his or her assigned evaluator within two weeks of returning to his or her jurisdiction after attending the EFOP course. The form contains the proposed title, topic, problem statement, purpose, research questions and research approach. The evaluator will have two 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 proposed research design.) 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 following the necessary procedures to facilitate achieving the purpose and solving the problem statement.

Reminder: Please submit the completed Applied Research Project Proposal form directly (via email) to your assigned evaluator. Do not submit the proposal form to NFA. The completed ARP will be sent directly to NFA and not to the evaluator.

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. (See p. 41 for a sample of this form.) Only projects that are received with an original, signed Certification Statement will be processed. A scanned signature page is permitted. Projects that are unsigned when received will be returned for signature and resubmission.

Research Integrity Standards

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

NFA enforces the appropriate standards of conduct for completion of research and the potential penalties for engaging in any unethical behavior. **Plagiarism, falsification and misrepresentation in ARPs will not be tolerated.** 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:

- A return of all money 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.
- A return of the course certificate and (if applicable) the EFOP completion certificate.
- A letter to the current employer, with an accompanying explanation of the violation, stating that the certificate has been revoked.
- A 10-year prohibition on attendance at any residential NFA course.

EFOP participants, graduates and others who discover suspicious work are strongly encouraged to report their findings to the EFO program manager or a curriculum training specialist.

Surveys

Surveys and/or developed interview processes are examples of valid research procedures. The choice of performing a survey process should be made only to support the need to obtain information and data to help answer a research question(s). Performing a survey as part of ARP research is not a requirement.

When performing surveys, students should expect to survey respondents other than those people with whom they studied at the NFA. Normally this sampling approach (other students) is flawed, as it does not represent a valid database from which conclusions can be reliably made. For further guidance, if students decide to employ a survey as part of their research procedures, they are encouraged to consult texts and materials that outline survey research and sampling.

Applied Research Evaluation

Each ARP will be evaluated according to the guidelines established within the "Applied Research Guide" section. ARPs must receive a passing grade (2.0 or greater) **in each section** to be considered acceptable or passing ARPs.

Currently, the projects are evaluated by contract reviewers who are monitored and supervised by the EFO 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 Forms to critique and evaluate the project. (See a sample in the Appendix on p. 42.)

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. Students only have 1 (one) opportunity for a resubmission. Failure to pass the secondary review will result in being removed from the program.

(Detailed information regarding the submission of ARPs to NFA is provided on p. 23 in the "General Submission Considerations for Evaluation" section.)

Applied Research Extension

ARPs are due within six months from the final day of course completion. An extension request must be made prior to the ARP due date. Students who fail to do so will be removed from the program.

A maximum extension of one month may be awarded for completion of the ARP. A decision in response to the participant's request will be forwarded in writing. A reason must be given as to why the extension is being requested. The request must be cosigned by the individual's chief of department or local government executive official. Requests for an extension must be sent to Ms. Angie Krantz (GTI Federal) at angela.krantz@associates.fema.dhs.gov. Ms. Krantz will forward the package to the EFO program manager for his or her approval/disapproval.

Extensions will be granted for unanticipated local or family event (e.g., federal or local disaster, line of duty injury, significant illness or family event) or other unanticipated difficulties. The length of the extension will be based on the student's circumstances and the NFA budgeted contract obligations. If granted, the extension may impact the rescheduling of future classes.

If the ARP has not been received by NFA on the due date, NFA will instruct the Admissions Office to terminate the individual from the EFOP.

If an EFOP participant voluntarily withdraws from the program, readmission to the EFOP requires the following steps in sequence: reapplication, acceptance, and subsequent completion of any outstanding ARP(s). The applicant will not be required to compete with new applications. The re-application period for re-admission to the EFOP extends only for a two-year time period from the date when official notification is received by the EFO program manager.

If an EFOP participant is dismissed from the program for failing to complete the ARP by the required deadline, he or she can reapply to the EFOP. Readmission to the EFOP requires the following steps in sequence: reapplication, acceptance, and subsequent completion of any outstanding ARP(s). The applicant will compete with new applications. The reapplication period for readmission to the EFOP extends only for a two-year time period from the date when official notification of dismissal was signed by the EFO program manager.

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 the EFO program manager. This appeal must be in writing and fully explain the basis of the disagreement. The EFO program manager or his or her 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 p. 36.) In either situation, the grade of record is based on original work and not on changes made after the initial submission of the ARP.

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 receives a passing grade, it will be forwarded to the LRC. Projects evaluated at "B" (score of 3.0) or higher will be archived.

Note: In recent years, a large number of ARPs have been converted for full "online" access. To access this website, go to http://www.usfa.fema.gov/data/library/. To search for papers, select "Special collections" from the selections provided on the Web page.

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. (See p. 21 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 published guide "The National Guide to Educational Credit for Training Programs," now recommends, for credit equivalency, one hour for each ARP successfully completed after Oct. 1, 1995. Successful completion is defined as a "B" (score of 3.0) or greater. Credit is awarded at either the graduate or upper division baccalaureate level.

Sample Learning Resource Center Bibliographic Record

Author(s):	Senter, Edward L.; Norfolk, Fire and Paramedical Services
Description:	**78 p.**
Publication Data:	**Emmitsburg, MD: National Fire Academy. May 1999**
Identifier/s:	Accession No.: 94917/OCLC Record No.: 482866334
Call Number:	**29736**
URL Web File:	www.usfa.fema.gov/pdf/efop/efo29736.pdf
Subjects:	1. FIRE APPARATUS 2. LIFE EXPECTANCY
Summary/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? |
Availability:	Available on Interlibrary Loan
Notes:	Norfolk, VA; Fire Service Financial Management; Abstracts for EFO papers are written by the author.
Copies:	c.1: DOCUMENT ROOM – ROOM 209 [Status: IN]

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 of 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 others about fire apparatus needs.

Personally Identifying Information

Do not include personally identifying information (PII) within an ARP. 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 of birth, resident mailing addresses, resident telephone numbers, all or portions of Social Security Numbers, 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).

ARPs are considered government documents because they are completed as part of a federally funded and sponsored program. Therefore, due to requirements of the Family Educational Rights and Privacy Act (20 United States Code § 1232g; 34 Code of Federal Regulations Part 99), authors of ARPs are cautioned to ensure that an ARP does not include any PII.

American Psychological Association: The Exclusive Style Format

The "Publication Manual of the American Psychological Association, (APA) Sixth Edition" is the exclusive reference for format and writing protocols when completing the ARP.

There are a limited number of exceptions. Students are required to:

- Provide a signed Certification Statement.
- Use a maximum of 300 words for writing the Abstract.
- Provide a Table of Contents.

General Submission Considerations for Evaluation

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. When a student submits an ARP report, NFA expects it to be in **final form**.

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 shall 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.) ARPs are required to be formatted in Microsoft Word.

Submission Information

All ARPs will be submitted electronically to the EFOP contract coordinator (p. 12) on or before the due date. Late submissions will not be accepted.

Electronic submission via email will include the following information:

- Student name.
- ARP title.
- Course.
- Submission date.
- Word processing format.

Submissions of an ARP that is over 8MB is size should be submitted on a CD-ROM to the following address:

> National Fire Academy
> 16825 South Seton Ave.
> Emmitsburg, MD 21727
>
> Attn: Executive Fire Officer Program Research Project

Students are strongly encouraged to use a traceable mailing system (Return Receipt Requested — U.S. Postal Service, FedEx, etc.) and to maintain a backup copy of both paper and CD-ROM. **NFA is not responsible for projects not received on the NETC campus.**

Applied Research Project Evaluation Criteria

Reports will be evaluated on 10 separate components. Each component has specific criteria by which it will be measured. (See a sample of the Applied Research Evaluation Forms in the Appendix, p. 42. **Note:** The sample Applied Research Evaluation Forms in the Appendix are for reference only; actual forms will be attached by NFA to all ARPs when they are forwarded to the evaluator.)

REPORT FORMAT

Required Elements of Paper (in order)

1.   Title Page (separate page). (Refer to sixth edition of the APA manual.)

2.   Certification Statement. (Refer to this handbook's Appendix.)

3.   Abstract (starts on a separate page). (**Note:** While NFA makes an exception to APA and allows a maximum of 300 words, the format must still adhere to APA. Refer to p. 27, sixth edition of the APA manual.)

4.   Table of Contents (starts on a separate page). (**Note:** It should contain any appendices, figures or tables (if more than one is used) in the paper.)

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 (starts on a separate page). (See a sample in the APA manual.)

7.   Appendices.

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.**

Abstract Evaluation Criteria

- Accurate and self-contained.
- Primarily written in past tense.
- Problem statement defined.
- Purpose statement defined.
- Research method cited.
- Research question(s) or hypothesis(es) summarized/paraphrased.
- Procedures summarized.
- Results summarized.
- 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 that was tested.

Introduction Evaluation Criteria

- Problem statement precisely and clearly defined.
- Purpose of the ARP precisely and clearly stated.
- Specific research method used in the study identified.
- Research questions clearly stated (for historical, descriptive, evaluative or action research only). **Refer to APA regarding the formatting of research questions.**

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," p. 32.)

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 that is 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.

Background and Significance Evaluation Criteria

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

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.

Literature Review Evaluation Criteria

- Sufficiently comprehensive.
- Findings of others reviewed.
- Summary statements (concluding summary paragraph(s) at the end of Literature Review) provided on how the findings/observations of others influenced the project.
- Current sources (relative to the problem being investigated).

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 that 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, and 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* (1987) 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, focus groups or observations were used, describe the process in detail: when, how long, purpose, questions asked/information sought, etc. Documentation of each interview, focus group or observation should be in place in an Appendix. 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 and a copy of the collective (total) results of the survey. 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).

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

- Procedures sufficiently and clearly delineated to permit replication.

- Procedures appropriate to achieve the purpose of the study.

- For surveys, definition of total population is included; if used, process for selecting samples is described.

- Limitations of the study should be noted.

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

All of the same points as for historical, descriptive, and evaluative and action research, plus:

- Appropriate statistical analyses selected and justified.
- Hypothesis clearly stated and variables clearly defined.
- Statistical significance of results documented.
- Nonexperimental variables controlled (experimental only).

(**Note:** To review and determine the type of research you are engaging in, please review "Selecting a Research Methodology," p. 32.)

Results

This section should provide a clear and comprehensive narrative description of the findings (the data you collected) 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 procedure also must be provided when answering the appropriate research question.

Action research also requires a final product of some kind; depending on the stated purpose, this may be an SOP, a strategic plan, a new policy, etc. The final product should be generally described in the Results section and documented (Appendix --). The product should also be 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 that highlight important factors.

The results 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.

Results Evaluation Criteria

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

Discussion

In this section, the writer has an opportunity to provide his or her analysis about the study results. Three basic issues should be discussed:

1.   How did the study results compare to the findings of others discussed in the Literature Review? (In doing this analysis, the student is expected to provide actual citations of selected references.)

2.   What is the author's own analysis of the results?

3.   What are the implications of the results for the organization?

Discussion Evaluation Criteria

- Relationship between the study results and specific findings of others discussed using extensive citations from reference documents.
- Student's analysis of the study results presented.
- 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 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.

Recommendations Evaluation Criteria

- Recommendations logically flowed from research findings.

- Recommendations were supported by the data presented.

- Recommendations related to the stated problem and purpose of the study.

- 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.

Content Evaluation Criteria

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

Writing

Certain style rules will require access to the *Publication Manual of the American Psychological Association, Sixth Edition*.

Writing Evaluation Criteria

- Correct grammar, punctuation, spelling, sentence structure and typing/editorial style. (See *Publication Manual of the American Psychological Association*.)

- All required sections of paper included.

- Reference list and in-text references documented properly, using APA guidelines.

- Title reflects nature of the study; correct title page format followed. (See *Publication Manual of the American Psychological Association*.)

- Table of Contents includes all major headings; a list of tables/figures was provided if more than one table/figure was used; Appendices were listed and defined.

- 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 employees do in a typical work 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 decision-making.
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. As a reminder, action research requires that a product must be produced (as a result of conducting the research), and the product should be contained within the ARP, normally as an Appendix item.

     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 students, in a **very rare situation**, choose to limit their research procedures to personal interviews, they must be very careful to ensure an adequate and acceptable research effort. Multiple, well-documented and in-depth interviews would be required. Rationale and justification must be provided in the Procedures section of the report for limiting their study in such a way. **In general, procedures that are limited to interviews**

alone will not be acceptable. (It is recommended that the author receive advance approval from the ARP evaluator if interviews are the sole procedure to be used.)

        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 causal/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* (1987).

Graduate Certificate Information Sheet

Participants will receive a Graduate Certificate Information (GCI) green sheet when they attend their final course in the EFOP, normally "Executive Leadership." It is essential that participants complete and forward the GCI with their final project. If they do not, NFA will not be responsible for the timeliness of transfer of the certificate to them. This information will be provided to the supervisor of choice that a participant specifies for official presentation of his or her graduate certificate. The congressional information will be used to notify members of Congress of the participant's achievement.

If participants do not finish the EFOP with the "Executive Leadership" class, a GCI can be requested, or they will be notified upon the successful completion of that final project. (A sample of the GCI is on p. 50 in the Appendix.)

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:

- 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.

- The review team is comprised of the EFO program managers, as well as other USFA staff.

- The training specialist reviews all ARPs that receive a grade of 4.0 in each course area for one year. In the event that there is no 4.0 paper in a course area, the highest graded paper is reviewed.

- EFOP ARPs completed between Jan. 1 and Dec. 31 in a given year are eligible to be considered for the award.

- ARPs are evaluated by contractors based on the ARP 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.

- 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.

- 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 LRC. Dissemination beyond this is dependent on available funding.

- Design and reproduction of the Outstanding Applied Research Award certificate is executed by the NETC Media Production Center.

- The recipients of the Outstanding Applied Research Award are invited to present their papers at the annual EFOP Graduate Symposium and may receive recognition from other professional organizations.

Outstanding ARPs for recent years may be downloaded from USFA's website at www.usfa.fema.gov by selecting NFA/On-Campus Courses/EFOP, or a hard copy may be requested by contacting NFA.

Frequently Asked Questions

Executive Fire Officer Program

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

No, first-year EFOP students will be randomly assigned within both semesters. For subsequent years, EFOP students will also be assigned to their next class in the sequence. However, students will continue to attend classes in the same semester as their first course. Example: If someone is selected and attends the R0123 "Executive Development" course in the first semester, then they will only be considered for subsequent courses in the first semester.

What if I cannot attend the assigned date?

Any requests for a change in class dates must be submitted in writing to the EFO program manager to the address listed on the next page. The EFO program manager will approve/disapprove all change requests. A confirmation letter from the student's supervisor or chief may be required.

Students requesting a change will be placed in the next class on a space-available basis; specific date choices cannot be honored because others have already been assigned. Students who request a change based on a documented unanticipated local or family emergency will be given priority. Students who request a change based on their own or the department's convenience will be given the lowest priority.

If there is no space available in the fiscal year, the student will be assigned to the next available class the following fiscal year. But, remember, if the project is not completed prior to your newly scheduled class date, you will be cancelled from the EFOP.

Applied Research Projects

To what address do I return my project?

Submit your completed project electronically to the EFOP contract coordinator. ARPs that exceed 8MB should be mailed to:

> National Fire Academy
> 16825 South Seton Ave.
> Emmitsburg, MD 21727
>
> Attn: Executive Fire Officer Program Research Project

When is my ARP due to the NFA?

The submission date for the ARP is six 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 Sept. 30.

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

The projects are electronically transmitted to the evaluators within three days after NFA receives them. Evaluators have four to six 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 two to three months from the time you send it to the NFA.

Will I receive the evaluated/graded project back?

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

Can I request an extension?

You have six 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 explain those in writing to the EFO program manager via Ms. Angie Krantz (GTI Federal) at angela.krantz@associates. fema.dhs.gov. The EFO program manager will determine if an extension is granted and will notify you of the new due date. (See p. 18.)

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

Yes, if your project is not received within the required time frame and if you have not advised the NFA about any mitigating circumstances, you will be removed. You will then have to reapply to the EFOP. Should you be reaccepted to the program, you will have a time frame 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?

Send your project electronically to the EFOP contract coordinator and they will process your ARP 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 at 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 mailed.

A GCI sheet will be provided when you attend your final course in the EFOP, normally "Executive Leadership." (Refer to p. 50.) 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 time frame. You will be removed from the program and will have to follow the reapplication process and ARP guidelines 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 search for projects, please go to http://www.usfa.fema.gov/data/library/ and select "Executive Fire Officer Applied Research Projects." There are several options available for searching.

Can I obtain copies of the Outstanding ARPs?

Yes, you can download recent Outstanding ARPs from USFA's website at http://www.usfa.fema.gov/training/nfa/programs/efop.html. Click the "Applied Research Projects" link, or request that a hard copy be sent to you through the mail.

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: _____

Date: _____

Sample Applied Research Evaluation Forms

(Sample)

ARP Section	Checklist of Criteria for Section	Grading/Evaluation Rubric
Abstract Grade for the Abstract Section: _____ (Whole number only)	_____ Accurate and self-contained (300 words or less) _____ Primarily written in past tense _____ Problem statement defined _____ Purpose statement defined _____ Research method defined _____ Research questions or hypothesis summarized or paraphrased _____ Procedures summarized _____ Results summarized _____ Recommendations summarized	4.0 rating – All criteria present. 3.0 rating – Some deficiency in criteria present. 2.0 rating – Moderate deficiencies in criteria present, but acceptable. 1.0 rating – A number of deficiencies to the extent where the Abstract is unacceptable. 0.0 – Not present.
ARP Section	Checklist of Criteria for Section	Grading/Evaluation Rubric
Introduction Grade for the Introduction Section: _____ (Whole number only)	_____ Problem statement clearly and precisely defined _____ Purpose statement clearly and precisely defined _____ Specific research method identified _____ Research questions 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	4.0 rating – All criteria present. 3.0 rating – Some deficiency in criteria present. 2.0 rating – Moderate deficiencies in criteria present, but acceptable. 1.0 rating – A number of deficiencies to the extent where the Introduction is unacceptable. 0.0 – Not present.

ARP Section	Checklist of Criteria for Section	Grading/Evaluation Rubric
Background and Significance Grade for the Background and Significance Section: _____ (Whole number only)	_____ 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 _____ Definite linkage established between the research problem and specific content area(s) of the relevant EFOP course _____ Linkage established between problem and one of the USFA goals	4.0 rating – All criteria present. 3.0 rating – Some deficiency in criteria present. 2.0 rating – Moderate deficiencies in criteria present, but acceptable. 1.0 rating – A number of deficiencies to the extent where the Background and Significance is unacceptable. 0.0 – Not present.

ARP Section	Checklist of Criteria for Section	Grading/Evaluation Rubric
Literature Review Grade for the Literature Review Section: _____ (Whole number only)	_____ Sufficiently comprehensive _____ Findings of others reviewed _____ Summary statements provided on how the findings/observations influenced the project _____ Sources are current	4.0 rating – All criteria present. 3.0 rating – Some deficiency in criteria present. 2.0 rating – Moderate deficiencies in criteria present, but acceptable. 1.0 rating – A number of deficiencies to the extent where the Literature Review is unacceptable. 0.0 – Not present.

ARP Section	Checklist of Criteria for Section	Grading/Evaluation Rubric
Procedures Grade for the Procedures Section: (Whole number only)	(For 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 (For correlational, causal-comparative and experimental research) All of the above, plus _____ Appropriate statistical analyses selected and justified _____ Hypothesis clearly stated and variables clearly defined _____ Non experimental variables controlled (experimental only)	4.0 rating – All criteria present. 3.0 rating – Some deficiency in criteria present. 2.0 rating – Moderate deficiencies in criteria present, but acceptable. 1.0 rating – A number of deficiencies to the extent where the Procedures Section is unacceptable. 0.0 – Not present.
ARP Section	Checklist of Criteria for Section	Grading/Evaluation Rubric
Results Grade for the Results Section: (Whole number only)	_____ Results/Findings clearly and 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	4.0 rating – All criteria present. 3.0 rating – Some deficiency in criteria present. 2.0 rating – Moderate deficiencies in criteria present, but acceptable. 1.0 rating – A number of deficiencies to the extent where the Results Section is unacceptable. 0.0 – Not present.

ARP Section	Checklist of Criteria for Section	Grading/Evaluation Rubric
Discussion Grade for the Discussion Section: (Whole number only)	_____ The relationship between the study results and the 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	4.0 rating – All criteria present. 3.0 rating – Some deficiency in criteria present. 2.0 rating – Moderate deficiencies in criteria present, but acceptable. 1.0 rating – A number of deficiencies to the extent where the Discussion Section is unacceptable. 0.0 – Not present.
ARP Section	Checklist of Criteria for Section	Grading/Evaluation Rubric
Recommendations Grade for the Recommendations Section: (Whole number only)	_____ Recommendations logically flowed from the results _____ Recommendations were supported by the data collected _____ Recommendations provided for the organization and for future readers	4.0 rating – All criteria present. 3.0 rating – Some deficiency in criteria present. 2.0 rating – Moderate deficiencies in criteria present, but acceptable. 1.0 rating – A number of deficiencies to the extent where the Recommendations Section is unacceptable. 0.0 – Not present.

ARP Section	Checklist of Criteria for Section	Grading/Evaluation Rubric
Content Grade for the Content Section: _____ (Whole number only)	(**Note:** This is not a section of the project; it refers to the technical content of the entire ARP.) _____ Theories, principles and procedures were presented and used properly _____ Information and data is accurate and up to date	4.0 rating – All criteria present. 3.0 rating – Some deficiency in criteria present. 2.0 rating – Moderate deficiencies in criteria present, but acceptable. 1.0 rating – A number of deficiencies to the extent where the Content Section is unacceptable.
ARP Section	Checklist of Criteria for Section	Grading/Evaluation Rubric
Writing Grade for the Writing Section: _____ (Whole number only)	_____ Correct grammar, punctuation, spelling, sentence structure and typing/editorial style _____ All required sections of the ARP included _____ Reference lists are in-text references documented properly using APA sixth edition guidelines _____ Title reflects nature of study; correct NFA title page format followed _____ Table of Contents includes all major headings; a list of tables/figures is provided if more than one is used; and appendices were listed and defined _____ Certification Statement signed and included	4.0 rating – All criteria present. 3.0 rating – Some deficiency in criteria present. 2.0 rating – Moderate deficiencies in criteria present, but acceptable. 1.0 rating – A number of deficiencies to the extent where the Writing Section is unacceptable.

Summary Score	Determination of Resubmission?	Grade of Record
Total Score: ___ ÷ 10 = ___	Is this review a resubmission? Yes _____ No _____ (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.) **Disclaimer**: Please note that your ARP evaluator is under no contractual obligation to provide any additional feedback or communication.	Enter the Student's grade of record score based on the 4.0 academic scale: _____

Evaluation/Assessment Policy Statement

A minimum score of 3.0 shall be required for the NFA to report and recommend transfer credit to regionally accredited graduate-level degree programs. A minimum passing score is 2.0 in each section. 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 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 are therefore not eligible for transfer credit recommendations from NFA. Students only have 1 (one) opportunity for a resubmission. Failure to pass the secondary review will result in being removed from the program.

Sample Title Page

Impact of a Team-Building Retreat

on Top-Management

Bill Smith

Anytown Fire Department, Anytown, Anystate

Sample References

<div align="center">

References

</div>

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

Boyle, M. E. (2008). *Firefighter rehabilitation in the Orange County Fire Authority: Are we meeting the need?* Emmitsburg, MD: National Fire Academy.

Cannon, M. E., Cooke, C. T., & McCarthy, J. S. (2001). Caffeine-induced cardiac arrhythmia: An unrecognized danger of health food products. *Medical Journal of Australia*, *174*, 520-521. Retrieved January 2, 2011 from http://www.mja.com.au/public/issues/174_10_210501/cannon/cannon/html

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

Heifetz, R. A., & Linsky, M. (2002). *Leadership on the line: Staying alive through the dangers of leading.* Boston, MA: Harvard Business School Press.

National Fire Protection Association. (2007). *Standard on fire department occupational safety and health program.* Quincy, MA: Author.

Taylor, D. (n.d.). *The literature review: A few tips on conducting it*. Retrieved from University of Toronto, Health Sciences Writing Centre website: Retrieved from http://www/writing.utoronto.ca/advice/specific-types-of-writing/literature-review

U.S. Fire Administration. (2010). *Executive development* [Student Manual]. Emmitsburg, MD: Author.

Sample Graduate Certificate Information Sheet

<div align="center">

National Fire Academy
Executive Fire Officer Program
Graduate Certificate Information

</div>

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: _____

U.S. Senator(s):

Name: _____

Address: _____

City: _____ State: _____ ZIP: _____

U.S. Representative(s):

Name: _____

Address: _____

City: _____ State: _____ ZIP: _____

State Governor:

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

U.S. 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 ZIP Code)
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 ZIP Code)

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:	

ACRONYMS

Acronyms

ACE	American Council on Education
APA	American Psychological Association
ARPs	Applied Research Projects
CD-ROM	compact disc read-only memory
DHS	Department of Homeland Security
EFO	Executive Fire Officer
EFOP	Executive Fire Officer Program
EMS	Emergency Medical Services
EOC	Emergency Operations Center
FEMA	Federal Emergency Management Agency
GCI	Graduate Certificate Information
LRC	Learning Resource Center
NETC	National Emergency Training Center
NFA	National Fire Academy
PII	personally identifying information
SOPs	standard operating procedures
USFA	U.S. Fire Administration