

Department of Homeland Security

U.S. Fire Administration

National Fire Academy

EXECUTIVE FIRE OFFICER PROGRAM HANDBOOK

Program Overview

Applicant Information

Applied Research Guidelines

Updated: April 2018



FEMA

Dear Executive Fire Officer Program Participant:

Welcome to the Executive Fire Officer (EFO) Program. 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 EFO Program. 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 to others.

I wish you the greatest measure of success within the EFO Program.

A handwritten signature in blue ink that reads "Tonya L. Hoover".

Tonya Hoover
Superintendent
National Fire Academy
U.S. Fire Administration

Table of Contents

Executive Fire Officer Program 7

 Executive Fire Officer Program Target Audience 7

 Service Requirement 7

 Academic Requirement 8

 Credit by Examination or Life Experiences 8

 “Key Leading” Selection Criteria 8

 Application Process 9

 Non-Executive Fire Officer Program Participant Course Attendance 10

Maintaining Eligibility 10

 Change in Affiliation 10

 Change of Address or Email Address 11

Program Dismissal and Reinstatement 11

Sequencing of the Program 12

 First-Year Course: “Executive Development” (R0123) 12

 Second-Year Course: “Executive Analysis of Community Risk Reduction”
 (R0274) 13

 Third-Year Course: “Executive Analysis of Fire Service Operations in
 Emergency Management” (R0306) 13

 Fourth-Year Course: “Executive Leadership” (R0125) 13

Class/Course Scheduling 14

 Course Rescheduling/Changes 14

Executive Fire Officer Program Support Voice Mail 15

Successful Program Completion 15

EFO Program Points of Contact	15
Executive Fire Officer Program Graduate Symposium	16
Applied Research Guide	17
What is an Applied Research Project?.....	17
U.S. Fire Administration Operational Objectives and Applied Research Project Topics	18
Selection of Applied Research Topics	18
Research Proposal.....	19
Certification Statement	19
Research Integrity Standards	20
Surveys.....	20
Applied Research Evaluation.....	21
Applied Research Extension.....	21
EFO Program Re-admission	21
Applied Research Project Grade Appeal	22
Applied Research Project — National Emergency Training Center Library.....	22
Applied Research Project College Credit Recommendations	22
Personally Identifying Information.....	23
American Psychological Association: The Exclusive Style Format.....	23
General Submission Considerations for Evaluation	23
Submission Information.....	24
Applied Research Project Evaluation Criteria	24
Report Format	24
Required Elements of Paper (in order)	24

Abstract.....	25
Abstract Evaluation Criteria	25
Introduction.....	26
Introduction Evaluation Criteria	26
Background and Significance	26
Background and Significance Evaluation Criteria.....	26
Literature Review.....	27
Literature Review Evaluation Criteria	27
Procedures.....	27
Procedures Evaluation Criteria (Historical, Descriptive, Evaluative and Action Research).....	28
Procedures Evaluation Criteria (Correlational, Causal-Comparative and Experimental Research)	28
Results.....	28
Results Evaluation Criteria	29
Discussion.....	29
Discussion Evaluation Criteria	29
Recommendations.....	29
Recommendations Evaluation Criteria	30
Content.....	30
Content Evaluation Criteria	30
Writing	30
Writing Evaluation Criteria.....	30

Selecting a Research Methodology.....	31
Define and Implement Procedures.....	32
Graduate Certificate Information Sheet.....	33
Executive Fire Officer Program Outstanding Applied Research Award.....	34
Appendix.....	35
Sample Certification Statement.....	36
Sample Applied Research Evaluation Forms.....	37
Evaluation/Assessment Policy Statement.....	42
Sample Title Page.....	43
Sample References.....	44
Sample Graduate Certificate Information Sheet.....	45
Sample Applied Research Project Proposal.....	46
Acronyms.....	47

EXECUTIVE FIRE OFFICER PROGRAM

The National Fire Academy's (NFA) Executive Fire Officer (EFO) Program provides senior fire officers with a broad perspective on various facets of fire and emergency services administration. The courses and accompanying research examine how to exercise leadership when dealing with difficult or unique problems within communities.

The EFO Program provides senior officers and others in key leadership roles with the following:

- An understanding of each:
 - Changing 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.
- Enhanced executive-level knowledge, skills, attitudes and abilities necessary to lead these transformations, conduct research, and engage in lifelong learning.

As an EFO Program student, you will enhance your professional development through a series of four two-week courses of instruction taken over a four-year period. Each course and their associated Applied Research Project (ARP) requirements have been recommended by the American Council on Education (ACE) to receive graduate or upper-division baccalaureate-equivalent course credit. Students must complete an ARP that relates to their organization within six months after the completion of each of the four courses.

Executive Fire Officer Program Target Audience

The EFO Program 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.
- 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 EFO Program 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.**

Tier 2 applicants are those who possess a baccalaureate 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.

Credit by Examination or Life Experiences

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).

No more than 30 college credit hours (or quarter-hour equivalent) from “credit by examination” or from “life experiences” (this includes Defense Activity for Non-Traditional Education Support Subject Standardized Tests, College-Level Examination Program, credit for nonacademic certificate courses and/or professional certifications). This must be verified by the degree granting institution.

“Key Leading” Selection Criteria

The EFO Program 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 EFO Program.

Applicants who are serving in supervisory level positions (e.g., battalion chief, captain and lieutenant) will also be considered for the EFO Program, provided they can demonstrate having exercised leadership within their organizations and are aspiring to move into senior positions of authority within their agency. This must be verified and supported within their letter of support by their chief or agency head. 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 EFO Program 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 EFO Program.
- 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 or EMS service.

Application Process

The application period for the EFO Program 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. EFO Program candidates will participate within a structured and competitive selection/application process.

The candidate is required to submit all of the following:

- A **signed** letter from the applicant requesting admission to the EFO Program. The letter should specify the applicant's qualifications 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 that the applicant holds.
- The applicant's official transcript from a nationally or regionally accredited institution recognized by the U.S. Department of Education.

- The NFA application titled “National Fire Academy Executive Fire Officer Program Application for Admission” (Federal Emergency Management Agency (FEMA) Form 119-25-5). **On the application form, the candidate should specify “Executive Fire Officer Program” in Block 9a.** The application form can be found within the DHS/FEMA/USFA/NFA website at https://www.usfa.fema.gov/training/nfa/programs/efop_apply.html. **The application must be signed by the individual’s chief of department or local government executive official.**
- 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 three mandatory self-study courses listed are found on NFA Online at <https://www.usfa.fema.gov/training/nfa/courses/online.html>.

The application forms and accompanying materials will be evaluated by the NFA staff for acceptance into the EFO Program. Each applicant will be notified in writing upon their acceptance or non-acceptance into the EFO Program by the end of August.

Non-Executive Fire Officer Program Participant Course Attendance

Only those accepted into the EFO Program are authorized to attend courses within the program. Non-EFO Program applicants will not be considered.

Maintaining Eligibility

The NFA is committed to providing outstanding course instruction and research evaluations for our EFO Program participants. Students should be aware that a “seat” has been reserved for them each year in the various courses and that 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 EFO Program a participant’s rank or responsibility is reduced or altered, it could result in the removal of the participant 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.

Change in Affiliation

Participants are required to notify the EFO Program Manager, Mr. John Carnegis, immediately as to any change in employer or position. Failure to do so may result in dismissal from the program.

Maintaining enrollment requires the following items when notification is made:

- Cover letter from the applicant notifying the NFA of the change.
- Revised NFA application, signed by the chief or agency head.
- A letter by the Chief of Department/Agency Head supporting the student's continued enrollment.
- Copy of the department's organizational chart.

In some cases, the applicants might be required to resubmit and update their essay questions to reflect their new position or role. The program manager will advise if this is required.

All information should be emailed to the EFO Program Manager, Mr. John Carnegis, at john.carnegis@fema.dhs.gov.

Change of Address or Email Address

EFO Program participants must also notify the Admissions Office and program manager 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).

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 EFO Program. The student's sponsoring agency shall be notified when a student is dismissed.

Any student dismissed from the EFO Program 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 a denied ARP extension request) may request reinstatement from the NFA Superintendent in accordance with the following:

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

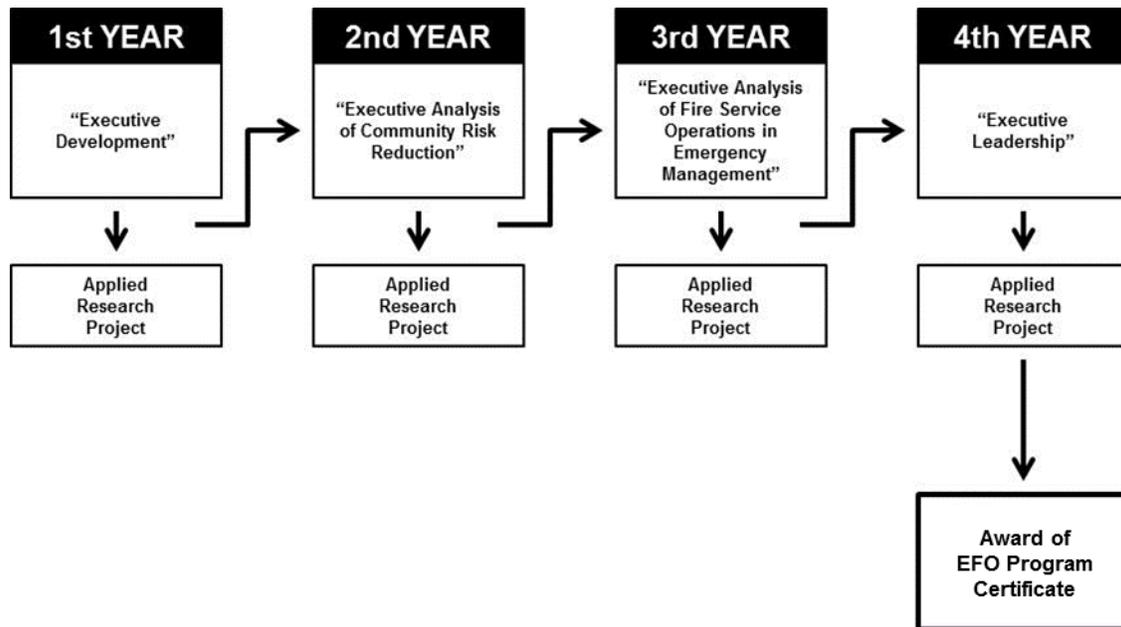
National Fire Academy Superintendent
16825 South Seton Ave.
Emmitsburg, MD 21727

- The request should fully explain the student's justification for remaining in the program, and should 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 EFO program manager and the chief of the Leadership and Fire Risk Reduction Branch. The NFA Superintendent will render a decision as soon as practical 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 NFA Superintendent’s decision is final.

Sequencing of the Program

Executive Fire Officer Program Flow Chart



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 EFO 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 how to apply 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.

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 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 help senior staff officers better prepare their communities for large-scale, multiagency, all-hazard incidents. In this course, students analyze emergency incidents, as well as 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 EFO Program 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-EFO Program 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 EFO Program are discussed, further analyzed, and applied in light of this historic 1863 event.

Class/Course Scheduling

All EFO Program participants will be notified by the Admissions Office of their assigned class 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 EFO Program students will be randomly assigned within both semesters. For subsequent years, EFO Program students will be assigned a course by the Admissions Office. Students will continue to attend classes in the same semester as their first course.

EFO Program students must have successfully completed (i.e., 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.

Course Rescheduling/Changes

The NFA recognizes that you are involved as emergency responders and that things happen professionally and personally. We will continue to try to accommodate any requests from EFO Program students to adjust their scheduled class dates.

Participants who cannot attend a course for which they are scheduled are required to notify the Admissions Office (telephone: 301-447-1035; email: netcadmissions@fema.dhs.gov and crystal.arnold@fema.dhs.gov) before the class begins. Failure to do so could result in suspension of eligibility to attend NFA courses.

Any additional change requests must be submitted in writing to the EFO program manager. The program manager will approve/disapprove all change requests. A letter from the student's supervisor or chief may be required.

- If the request is based on an unanticipated local or family event (e.g., federal or local disaster, the student was injured in the line of duty, illness, significant family event), additional documentation may be required to support the request.
- Students requesting a change will be placed in the next class on a space-available basis. In some cases 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.
- If there is no space available in the fiscal year, the student will be assigned to the next available class the following fiscal year.

Executive Fire Officer Program Support Voice Mail

EFO Program Support Voice Mail line affords students support in matters concerning questions with their ARP, the EFO Program, course assignments, etc., students may leave a message on the support line, and calls will be returned as soon as possible. Students may reach the EFO Program Support Voice Mail line by dialing 800-238-3358, extension 1176, or 301-447-1176.

Successful Program Completion

Successful EFO Program completion will be based on the following criteria:

- Compliance with general attendance policies and standards of conduct as established by the NFA.
- Successful completion of EFO Program courses, including satisfactory completion of the evaluation plan/curriculum for each course.
- Successful completion of the ARP for each EFO Program course according to the ARP guidelines.

EFO Program Points of Contact

Administrative responsibility for EFO Program and ARPs, including oversight of student selection. Supporting responsibility for EFO Program and Graduate Symposium:

Mr. John Carnegis, Program Manager
Phone: 301-447-1072
Email: john.carnegis@fema.dhs.gov

Curriculum responsibility for “Executive Development” and “Executive Leadership”:

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

Administrative support to the EFO Program, including the Q0123 “Applied Research Self Study” pre-course and the NFA Online Assessment Instrument for “Executive Development” and “Executive Leadership”:

Ms. Tina Crevier, Program Support Specialist
Phone: 301-447-1107
Email: tina.crevier@fema.dhs.gov

Curriculum responsibility for “Executive Analysis of Community Risk Reduction”:

TBD, Training Specialist, Curriculum Manager – Fire Prevention: Management/Public Education

Curriculum responsibility for “Executive Analysis of Fire Service Operations in Emergency Management”:

Mr. Richard Sexton, Training Specialist – Incident Management

Phone: 301-447-7687

Email: richard.sexton@fema.dhs.gov

Course scheduling:

Ms. Crystal Arnold

Phone: 301-447-1524

Email: crystal.arnold@fema.dhs.gov

Contract coordinator for ARP processes — submissions, extension requests, etc.:

Ms. Angie Krantz (Dextera/ZAI, Inc.)

Phone: 301-447-1176

Email: angela.krantz@associates.fema.dhs.gov

Executive Fire Officer Program Graduate Symposium

The EFO Program Graduate Symposium (R0120) is an annual event for alumni and EFO Program participants. While the symposium is open to all fire service leaders and related professions, priority in housing is given to EFO Program alumni. Current EFO Program students are encouraged to attend, and all fire service executives are welcome to bring their government management colleagues. Registration is open for R0120. General attendees: Please remember that there is no travel stipend for this course, though lodging is available. People staying in on-campus housing are required to purchase a meal ticket for the duration of their stay. Dates can be found on the NFA website

The goals for this event are as follows:

- Provide a curriculum extension and update of the EFO Program.
- Recognize and spotlight outstanding applied research completed by present EFO Program participants.
- Provide a forum in which high-quality presentations are offered by private and public sector representatives.

- Promote further dialogue between EFO Program graduates and USFA/NFA faculty and staff.
- Further facilitate networking between EFO Program graduates and leaders in the fire and EMS profession.
- Officially recognize recent EFO Program graduates and research winners.

APPLIED RESEARCH GUIDE

This guide is designed to assist students enrolled in the NFA's EFO Program 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 your assigned evaluator for reviewing and evaluating students' proficiency in completing the ARPs for the EFO Program.

Students must complete one ARP for each course in the EFO Program. 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 EFO Program, 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 EFO Program certificate.

Those EFO Program 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) Library.

All ARPs will be submitted electronically to the EFO Program contract coordinator (Page 16). Submissions of an ARP that is over 8MB in size should be submitted on a CD-ROM or flash-drive.

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 ARPs in the EFO Program are 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 EFO Program course into real-world applications. By writing the ARP in a professional paper format, EFO Program students are contributing to fire service literature.

The EFO Program participant is reminded that an ARP that does not contain original research will receive a failing grade. Research is more than reviewing researcher's writings. While the Literature Review is a required component of an ARP, it will not stand alone as the research procedure. The EFO Program 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.

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

EFO Program participants are strongly encouraged to select ARP topics/issues that support one or more of the USFA's strategic goals. The Department of Homeland Security'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 the USFA's stakeholder groups and organizations. For more information on the USFA's goals, please refer to https://www.usfa.fema.gov/downloads/pdf/publications/strategic_plan_2014-2018.pdf.

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

Participants should be careful 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 EFO Program 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 the USFA's five strategic goals? For current goals, refer to https://www.usfa.fema.gov/downloads/pdf/publications/strategic_plan_2014-2018.pdf.
- Do you have sufficient time (within the six-month time frame) to complete the project?

Research Proposal

For each course completed, EFO Program participants are provided with an Applied Research Project Proposal form (sample on Page 46) while in residence at their EFO Program course. The form will contain the name and email address of a contract evaluator who will be assigned to review the proposal form. The same evaluator will be the individual to whom the NFA will forward the EFO Program participant's ARP upon completion.

The EFO Program 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 EFO Program 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 EFO Program 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 EFO Program participant to provide a copy of the form to the NFA, as the evaluator will submit it when invoicing the NFA for this task.

The purpose of this step is to assist the EFO Program 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: Your completed ARP must be sent directly to the 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 Page 36 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

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

The 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.”

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 EFO Program 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.

EFO Program 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 the 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 Page 37.)

In the event that an EFO Program 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 one opportunity for a re-submission. Failure to pass the secondary review will result in being removed from the program.

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 completing 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 at angela.krantz@associates.fema.dhs.gov.

The request will be forwarded to the EFO program manager for approval/disapproval.

Extensions will be granted for unanticipated local or family events (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. If granted, the extension may impact rescheduling future classes.

If the student’s ARP has not been received by the NFA on its due date, the NFA will instruct the Admissions Office to terminate the individual from the EFO Program.

EFO Program Re-admission

If an EFO Program participant officially withdraws from the program, re-admission to the EFO Program requires the following steps in sequence:

1. Submitting a new NFA application.
2. Letter of support for re-admission from the chief of department or agency head.
3. Applicant cover letter requesting re-admission, outlining any reasons/explanations for what caused their initial withdrawal.
4. Completing any outstanding ARP(s).

The applicant will not be required to compete with new applications. The re-application period for re-admission to the EFO Program extends only for a two-year time period from the date when official notification is made by the EFO program manager.

If an EFO Program participant is dismissed from the program for failing to complete the ARP by the required deadline, they must reapply to the EFO Program, completing an entirely new application.

Applied Research Project Grade Appeal

If an EFO Program participant disagrees with a grade, **the participant should first contact the evaluator to discuss the disagreement.** If a compromise cannot be reached between the EFO Program participant and the evaluator, the EFO Program 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 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. 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 — National Emergency Training Center Library

Once a project receives a passing grade, it will be forwarded to the NETC Library. Projects evaluated at a score of "B" (3.0) or higher will be converted to "online" access. Access can be found at <https://www.usfa.fema.gov/data/library/collections/efop.html>.

Applied Research Project College Credit Recommendations

For credit equivalency through "The National Guide to Educational Credit for Training Programs," ACE now recommends one hour for each ARP successfully completed. Successful completion is defined as a score of "B" (3.0) or greater. Credit is awarded at either the graduate or upper-division baccalaureate level.

Personally Identifiable Information

Do not include personally identifiable 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, residential mailing addresses, residential telephone numbers, all or portions of Social Security Numbers, personal email addresses, ZIP codes, account numbers, certificate/license numbers, and vehicle identifiers, including license plate 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 do the following:

- 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

The NFA expects students in the EFO Program 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, the 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 or with any editorial/tracking markings.

The written ARP report shall be organized according to the ARP guidelines. Reports may normally range between 30 and 40 typed pages (double-spaced). However, due to the complexity of a research topic, the body of an ARP may be greater than 40 typed pages. That is 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 EFO Program contract coordinator (Page 16) 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. PDF will not be accepted.

Submissions of an ARP that is over 8MB in size should be submitted on a CD-ROM or thumb drive 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 their paper and CD-ROM. **The 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 (Page 37). **Note:** The sample Applied Research Evaluation Forms in the appendix are for reference only; actual forms will be attached by the 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 the sixth edition of the APA manual.)
2. Certification Statement. (Refer to this handbook's appendix.)

3. Abstract (starts on a separate page). **Note:** While the NFA makes an exception to APA and allows a maximum of 300 words, the format must still adhere to APA. Refer to Page 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 that 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 the research method identified.
- Hypothesis appropriate for research method identified.

Note: To review and determine the type of research you are engaging in, please review “Selecting a Research Methodology,” Page 31.

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 EFO Program 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 EFO Program 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 link established between the research problem and specific content area(s) of the relevant EFO Program course.
- Established link to one of the USFA's five strategic goals (found on the USFA's website).

Literature Review

This section summarizes critical findings from others who have published documents related to the research problem, and it 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 permit the evaluator to determine whether the researcher has selected and completed procedures that were appropriate for the stated purpose and method; to allow interested readers to replicate the project in their own organization; and to explain how the researcher arrived at the 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, 12th edition" (2017) 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 for historical, descriptive, evaluative and action research, plus the following:

- 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,” Page 31.)

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 must also 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. The product should also be included in its entirety as an appendix.

It would also 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 as 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. EFO Program 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

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" (2017).

Graduate Certificate Information Sheet

Participants will receive a Graduate Certificate Information sheet after they submit their final paper. This information will be provided to the supervisor that a participant specifies for official presentation of their graduate certificate. The congressional information will be used to notify members of Congress of the participant's achievement.

EXECUTIVE FIRE OFFICER PROGRAM OUTSTANDING APPLIED RESEARCH AWARD

Since 1989, the NFA has recognized excellent ARPs completed by EFO Program participants. Recipients of this award are asked to present their papers at the EFO Program 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, the NFA may elect to present fewer or more than four awards in a given year.
- 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.
- EFO Program 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 the Outstanding Applied Research Awards to the Superintendent.
- 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.
- 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 EFO Program Graduate Symposium and may receive recognition from other professional organizations.

Outstanding ARPs for recent years may be downloaded from the USFA's website at <https://www.usfa.fema.gov/> by selecting NFA/On-Campus Courses/EFOP.

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

ARP Section	Checklist of Criteria for Section	Grading/Evaluation Rubric
<p>Abstract</p> <p>Grade for the Abstract Section:</p> <hr/> <p>(Whole number only)</p>	<p>_____ Accurate and self-contained (300 words or less).</p> <p>_____ Primarily written in past tense.</p> <p>_____ Problem statement defined.</p> <p>_____ Purpose statement defined.</p> <p>_____ Research method defined.</p> <p>_____ Research questions or hypothesis summarized or paraphrased.</p> <p>_____ Procedures summarized.</p> <p>_____ Results summarized.</p> <p>_____ Recommendations summarized.</p>	<p>4.0 rating – All criteria present.</p> <p>3.0 rating – Some deficiency in criteria present.</p> <p>2.0 rating – Moderate deficiencies in criteria present, but acceptable.</p> <p>1.0 rating – A number of deficiencies to the extent where the Abstract section is unacceptable.</p> <p>0.0 rating – No criteria present.</p>
ARP Section	Checklist of Criteria for Section	Grading/Evaluation Rubric
<p>Introduction</p> <p>Grade for the Introduction Section:</p> <hr/> <p>(Whole number only)</p>	<p>_____ Problem statement clearly and precisely defined.</p> <p>_____ Purpose statement clearly and precisely defined.</p> <p>_____ Specific research method identified.</p> <p>_____ Research questions clearly stated (for historical, descriptive, evaluative or action research only).</p> <p align="center">or</p> <p>_____ Hypothesis clearly stated (for correlational, causal-comparative or experimental research only).</p> <p>_____ Hypothesis appropriate for research method identified.</p>	<p>4.0 rating – All criteria present.</p> <p>3.0 rating – Some deficiency in criteria present.</p> <p>2.0 rating – Moderate deficiencies in criteria present, but acceptable.</p> <p>1.0 rating – A number of deficiencies to the extent where the Introduction section is unacceptable.</p> <p>0.0 rating – No criteria present.</p>

EXECUTIVE FIRE OFFICER PROGRAM HANDBOOK

ARP Section	Checklist of Criteria for Section	Grading/Evaluation Rubric
<p>Background and Significance</p> <p>Grade for the Background and Significance Section:</p> <hr/> <p>(Whole number only)</p>	<p>_____ Clear and complete background analysis of problem provided.</p> <p>_____ Sufficient evidence provided to justify study from an organizational perspective, based on past, present and probable future impact on organizational effectiveness.</p> <p>_____ Definite link established between the research problem and specific content area(s) of the relevant EFO Program course.</p> <p>_____ Link established between problem and one of the USFA goals.</p>	<p>4.0 rating – All criteria present.</p> <p>3.0 rating – Some deficiency in criteria present.</p> <p>2.0 rating – Moderate deficiencies in criteria present, but acceptable.</p> <p>1.0 rating – A number of deficiencies to the extent where the Background and Significance section is unacceptable.</p> <p>0.0 rating – No criteria present.</p>
ARP Section	Checklist of Criteria for Section	Grading/Evaluation Rubric
<p>Literature Review</p> <p>Grade for the Literature Review Section:</p> <hr/> <p>(Whole number only)</p>	<p>_____ Sufficiently comprehensive.</p> <p>_____ Findings of others reviewed.</p> <p>_____ Summary statements provided on how the findings/observations influenced the project.</p> <p>_____ Sources are current.</p>	<p>4.0 rating – All criteria present.</p> <p>3.0 rating – Some deficiency in criteria present.</p> <p>2.0 rating – Moderate deficiencies in criteria present, but acceptable.</p> <p>1.0 rating – A number of deficiencies to the extent where the Literature Review section is unacceptable.</p> <p>0.0 rating – No criteria present.</p>

EXECUTIVE FIRE OFFICER PROGRAM HANDBOOK

ARP Section	Checklist of Criteria for Section	Grading/Evaluation Rubric
<p>Procedures</p> <p>Grade for the Procedures Section:</p> <hr/> <p>(Whole number only)</p>	<p>(For historical, descriptive, evaluative and action research.)</p> <p>_____ Procedures sufficiently delineated to permit replication.</p> <p>_____ Procedures appropriate to achieve stated purpose.</p> <p>_____ For surveys, definition of total population provided; if used, process for selecting a sample described in detail.</p> <p>_____ Limitations noted.</p> <p>(For correlational, causal-comparative and experimental research) All of the above, plus the following:</p> <p>_____ Appropriate statistical analyses selected and justified.</p> <p>_____ Hypothesis clearly stated and variables clearly defined.</p> <p>_____ Statistical significance of results documented.</p> <p>_____ Nonexperimental variables controlled (experimental only).</p>	<p>4.0 rating – All criteria present.</p> <p>3.0 rating – Some deficiency in criteria present.</p> <p>2.0 rating – Moderate deficiencies in criteria present, but acceptable.</p> <p>1.0 rating – A number of deficiencies to the extent where the Procedures section is unacceptable.</p> <p>0.0 rating – No criteria present.</p>
ARP Section	Checklist of Criteria for Section	Grading/Evaluation Rubric
<p>Results</p> <p>Grade for the Results Section:</p> <hr/> <p>(Whole number only)</p>	<p>_____ Results/Findings clearly and concisely stated in narrative form.</p> <p>_____ Detailed results of all procedures provided.</p> <p>_____ Specific answers to original research questions provided, or explanation of whether or not original hypothesis was supported by results, as appropriate.</p> <p>_____ Comprehensive analysis of data included.</p> <p>_____ Tables and/or figures clearly presented, correctly labeled, and contain appropriate data.</p> <p>_____ Final product(s) of action research included as an appendix.</p>	<p>4.0 rating – All criteria present.</p> <p>3.0 rating – Some deficiency in criteria present.</p> <p>2.0 rating – Moderate deficiencies in criteria present, but acceptable.</p> <p>1.0 rating – A number of deficiencies to the extent where the Results section is unacceptable.</p> <p>0.0 rating – No criteria present.</p>

EXECUTIVE FIRE OFFICER PROGRAM HANDBOOK

ARP Section	Checklist of Criteria for Section	Grading/Evaluation Rubric
<p align="center">Discussion</p> <p>Grade for the Discussion Section:</p> <hr/> <p align="center">(Whole number only)</p>	<p>_____ The relationship between the study results and the specific findings of others is discussed, using extensive citations from reference documents.</p> <p>_____ Author's interpretation of study results is presented.</p> <p>_____ Organizational implications of results clearly stated.</p>	<p>4.0 rating – All criteria present.</p> <p>3.0 rating – Some deficiency in criteria present.</p> <p>2.0 rating – Moderate deficiencies in criteria present, but acceptable.</p> <p>1.0 rating – A number of deficiencies to the extent where the Discussion section is unacceptable.</p> <p>0.0 rating – No criteria present.</p>
ARP Section	Checklist of Criteria for Section	Grading/Evaluation Rubric
<p align="center">Recommendations</p> <p>Grade for the Recommendations Section:</p> <hr/> <p align="center">(Whole number only)</p>	<p>_____ Recommendations logically flowed from the results.</p> <p>_____ Recommendations were supported by the data collected.</p> <p>_____ Recommendations related to the stated problem and purpose of the study.</p> <p>_____ Recommendations provided for the organization and for future readers.</p>	<p>4.0 rating – All criteria present.</p> <p>3.0 rating – Some deficiency in criteria present.</p> <p>2.0 rating – Moderate deficiencies in criteria present, but acceptable.</p> <p>1.0 rating – A number of deficiencies to the extent where the Recommendations section is unacceptable.</p> <p>0.0 rating – No criteria present.</p>

EXECUTIVE FIRE OFFICER PROGRAM HANDBOOK

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

Summary Score	Determination of Resubmission?	Grade of Record
<p>Total Score: _____ ÷ 10 =</p> <hr style="border: 1px solid black;"/>	<p>Is this review a resubmission?</p> <p style="text-align: center;">Yes _____</p> <p style="text-align: center;">No _____</p> <p>(If checked yes, and the summary score is a minimum of 2.0, then insert 2.0 in grade of record to the right, even though the resubmission score may be higher than 2.0.)</p> <p>Disclaimer: Please note that your ARP evaluator is under no contractual obligation to provide any additional feedback or communication.</p>	<p>Enter the student's grade of record score based on the 4.0 academic scale:</p> <p style="text-align: center;">_____</p>

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

Sample Title Page

Running head: IMPACT OF A TEAM-BUILDING RETREAT

1

Impact of a Team-Building Retreat

on Top-Management

Bill Smith

Any town Fire Department, Any town, Any state

Sample References

References

- 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

NATIONAL FIRE ACADEMY
Executive Fire Officer Program
Graduate Certificate Information

Certificates will be mailed to the supervisor **you specify** for official presentation upon completion of the EFO Program. 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	
EFO Program Participant’s Name	
Department	
Email Address	
EFO Program Course Title	
Dates Attended	(From)(To) (ex: x/xx/xx)
ARP Due Date	(ex: x/xx/xx)
Email Address	
Telephone Number	(ex: xxx-xxx-xxxx)
Assigned Evaluator’s Name	
Email Address Mailing Address	
Telephone 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
ARP	Applied Research Project
EFO	Executive Fire Officer
EMS	Emergency Medical Services
EOC	Emergency Operations Center
FEMA	Federal Emergency Management Agency
NETC	National Emergency Training Center
NFA	National Fire Academy
PII	personally identifiable information
SOPs	standard operating procedures
USFA	U.S. Fire Administration