Board of Visitors for the National Fire Academy Fiscal Year 2020 Annual Report Aug. 31, 2020

Meeting Schedule
Dec. 18, 2019
March 5, 2020
June 9, 2020
Aug. 31, 2020

The U.S. Fire Administration's (USFA's) Board of Visitors for the National Fire Academy (NFA) (Board) reviewed the NFA in three areas of responsibility and submits the following report for Fiscal Year (FY) 2020.

An examination of National Fire Academy programs to determine whether these programs further the basic missions which are approved by the Administrator, Federal Emergency Management Agency

The NFA continues to be a mission-critical organizational unit within the Department of Homeland Security (DHS)/Federal Emergency Management Agency (FEMA). It directly supports FEMA's USFA mission to support citizens and first responders to ensure that, as a nation, we work together to build, sustain and improve our capability to prepare for, protect against, respond to, recover from and mitigate all hazards.

The NFA provides training to tens of thousands of career and volunteer fire service personnel each year, primarily through classes delivered on its Emmitsburg, Maryland, campus and through partnerships that enable two- and six-day classes to be offered around the nation with state and metropolitan fire training organizations. The COVID-19 global pandemic has had a significant impact on the NFA's ability to deliver training opportunities. This has resulted in the cancellation of hundreds of classes in both Emmitsburg and around the nation.

NFA staff has worked with its FEMA training partners to create robust guidelines through which training delivery will be managed. These guidelines include reduced campus population; social distancing; changes to the NFA's heating, ventilating, and air conditioning (HVAC) systems, especially in air exchange; student temperature checks; increased sanitation practices; and changes to on-campus food service. The NFA staff monitors community health guidance and best practices in Frederick County, Maryland, and neighboring Adams County, Pennsylvania, which is just across the border. Similar considerations have been implemented by the NFA on delivery of regional and state classes to ensure adherence to health guidelines for the safety and health of students and instructors.

While in-person, on-campus delivery classes have been on pause, staff has used the time to diligently develop new offerings, implement new and upgraded technology, provide quality control and updates to existing offerings, and enhance outreach and communication across all programs. They have continued to contract with subject matter experts to ensure that courses are

current and relevant. The work of NFA staff is commendable as it works to embrace technology to meet the needs of the fire service during the COVID-19 pandemic. While technology does provide additional opportunities, it cannot replicate the student-instructor and student-student interactions that take place on the NFA campus and during in-person regional classes. It is important to recognize that career and volunteer fire service personnel in many portions of our country do not have the ability to take advantage of NFA distance-learning opportunities — especially those in tribal and rural communities — because of a lack of digital infrastructure and connectivity.

The work being done, and the interest from fire service personnel across the nation, shows the success of both the Managing Officer Program and the Executive Fire Officer (EFO) Program. The Board commends NFA staff for successfully transitioning both legacy and new students into the EFO Program. In FY 2019 and 2020, the legacy EFO Program was being phased out and replaced by the new EFO Program. Most of the students that were accepted into the FY 2020 Managing Officer Program offerings were moved to FY 2021 due to the COVID-19 pandemic and on-campus classes being cancelled.

Table 1: Executive Fire Officer and Managing Officer Program Application Data

	Executive Fire Officer Program			Managing Officer Program			
	Applied	Admitted	Admit %	Applied	Admitted	Admit %	
FY 2017	268	163	60.8	218	153	70.1	
FY 2018	298	189	63.4	240	153	63.8	
FY 2019	252	37	14.7	229	129	56.3	
FY 2020	145	0	0	267	85	31.8	
FY 2021	232	174	75.0	209	172	82.3	
Total	1,195	563	213.9	1,163	692	304.3	
Average	239	141	59.0	233	138	59.2	

The National Fire Incident Reporting System (NFIRS) under the National Fire Programs Division at USFA has been working with the NFA to offer NFIRS training for end users. This program focuses on how agencies can access their own data through the data warehouse to receive timely information. This group is also working with the International Association of Fire Chiefs (IAFC) on regional training deliveries. Currently, NFIRS captures data on more than 29 million incidents a year.

To address COVID-19 issues specifically related to fire service incident response, the National Fire Data Center (NFDC) NFIRS team quickly created its first-ever special study dashboard to capture data. The NFIRS COVID-19 Special Study has reported 1.8 million incidents. The NFIRS COVID-19 Special Study dashboard notes 408,739 fire service personnel responses to confirmed or suspected COVID-19 instances as of Sept. 8, 2020.

NFIRS Modernization 10 is looking to be implemented in October 2020. It will enhance the user's experience with the system both on data entry and retrieval. New client-based web tools will allow for more access to data at time of entry.

Work is underway to create a standalone approach, which means NFIRS would no longer rely on data from other sources.

The NFDC has completed a new report, "Emergency Services Ergonomics and Wellness," which replaces a decade-old USFA ergonomics report. It provides the results of a research project conducted through a partnership between USFA and the International Fire Service Training Association at Oklahoma State University. This document covers both the concepts of ergonomics and wellness to enhance making the work environment healthy, safe and productive for the firefighter and emergency responder.

An update of "America Burning" is underway with the IAFC. This process involved bringing together a broad base of both fire service and non-fire service constituents to ensure that all aspects are considered. "America Burning Wildland Urban Interface" is about to begin with a specific look at the national fire service issue. The Board is supportive of the enhanced emphasis on wildland urban interface to include the pursuit of funded positions, development of an additional training curriculum and enhanced delivery.

The NFA continues to play a vital role by serving as a single point of contact for national, state, local, tribal and territorial fire and emergency medical services (EMS) stakeholder groups by soliciting their input on course development, delivery and outreach. The NFA also supports federal partners, including the Department of Justice/Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF); Department of Defense (DoD); Department of State; and other components. In addition to its federal partners, the NFA continues to work closely with all major fire and emergency services stakeholders.

National Fire Academy Overview

Resident classes are reserved for those requiring high-level discussion/interaction, specialized simulation or modeling capabilities, close supervision and counsel, or the introduction of new subject areas. The demand for these successful programs has created a backlog of students requesting admission. This has been compounded by COVID-19. The NFA continues to leverage its resources through delivery of regional and state courses through its partnerships with state and local training providers and a growing number of online distance-learning courses.

Work recently completed by NFA staff to update fire prevention, community risk reduction, fire and arson investigation, and EMS classes is greatly appreciated as it shows the diverse work done by career and volunteer fire personnel around the country and, equally important, the diverse portfolio of classes offered, developed and managed by the NFA. The Board recognizes that there is a current backlog of students needing to attend training at the NFA. Specific concerns are identified in Command and Control, Leadership, and Fire and Arson Investigation.

The Board also understands and is concerned that NFA staff does not have access to sufficient classroom and lodging facilities and appropriate funding to alleviate the backlog.

Table 2: Fiscal Year 2020 Course Backlog

FY 2020 course backlog	
Command and Control Decision-Making at Multiple Alarm Incidents (R0297)	31
Command and Control of Incident Operations (R0312)	82
Fire and Emergency Services Training Program Management (R0445)	26
Fire Investigation: Essentials (R0772)	258
Fire Investigation: Electrical Systems (R0776)	62

The partnership with the ATF and the NFA to train fire and arson investigators is to be applauded. Because of attrition of fire investigators around the country due to retirement, this program has a significant backlog of students that needs to be addressed. This will require additional funds to be allocated for burn cells, additional classrooms, lodging, course and instructor costs, and student stipends for travel. The Board recommends that NFA staff explore partnerships which could allow fire investigator training to be offered off campus.

The following chart reflects the student completions in each of the course delivery areas. Data for 2020 will be available after Dec. 1.

Table 3: Course Delivery Student Completions

	2017	2018	Change %	2019	Change %
NFA-sponsored resident	6,107	6,547	7.2	6,036	-7.8
NFA-sponsored nonresident	5,409	5,712	5.6	5,029	-12.0
State sponsored	25,835	23,265	-9.9	21,094	-9.3
State approved	9,362	8,802	-6.0	8,527	-3.1
Colleges/universities	5,537	5,449	-1.6	4,924	-9.6
Online self-study	50,523	52,168	3.3	50,759	-2.7
Total	102,773	101,943	-0.8	96,369	-5.7

Note: From mid-December 2018 through the end of January 2019, the campus was shut down for resident classes due to a lack of funding and staff being furloughed.

The NFA staff continues to pursue new applications for technology in course delivery, administration and information dissemination. The NFA continues to add courses to the materials download feature, giving state fire training agencies and contract instructors direct access to NFA two- and six-day course materials. This provides users with real-time access to NFA course materials. Currently, 60 courses are available that state fire training offices can download. Access to these course materials is also available to state EMS organizations.

The NFA awards Continuing Education Units for all NFA courses through the International Association of Continuing Education and Training (IACET). This year, the NFA has been recognized as its own IACET-accredited provider. This is extremely beneficial to a growing number of NFA students who are required to meet continuing education requirements for certification. In addition, the NFA is a "Preferred Provider" with the International Code Council (ICC). This program recognizes and promotes ICC-approved educational opportunities as they relate to codes, standards, building construction and other subject areas.

The American Council on Education (ACE) will conduct a review of 21 NFA courses in November 2020. Eight of these courses are new, and 13 are being reviewed by ACE for the three-year re-review requirement. The ACE review process provides an independent and objective third-party assessment of the NFA's academic quality, as well as a tangible benefit for students who can use the credits to pursue higher education through other academic institutions.

The NFA continued a systematic study of its resident courses with students and their supervisors to determine long-term training effectiveness. During FY 2020, 788 students and 609 supervisors responded to the Long-Term Evaluation. As with previous years' responses, students indicated that they were able to transfer the training skills and learning to their jobs, and supervisors reported improved performance. The data show:

Table 4: Long-Term Evaluation Results

Long-term evaluation reporting elements	2017	2018	2019	2020
Students reporting they were able to apply NFA training at home	96.4%	91.0%	94.3%	93.9%
Students reporting NFA training improved their job performance	96.6%	97.1%	96.3%	96.4%
Students reporting they shared NFA training with their peers	99.0%	97.9%	95.1%	97.2%
Students reporting they conducted formal courses with NFA material	26.6%	24.8%	23.6%	24.2%
Students reporting they established new policies and procedures based on NFA training	69.3%	77.1%	72.5%	70.8%
Supervisors reporting improved performance from NFA training	85.5%	90.9%	89.4%	92.3%
Supervisors reporting improved departmental performance	88.4%	91.1%	86.9%	91.4%
Supervisors who say they will recommend NFA training to others	95.7%	97.4%	96.4%	96.9%
Supervisors reporting NFA benefits outweigh costs	99.2%	94.7%	92.4%	95.2%

Note: Data reported was derived from NFA Long-Term Evaluation Forms sent to both students and their supervisors four to six months after the NFA training class ended.

An examination of the physical plant of the National Fire Academy to determine the adequacy of the facilities

The size, age and scope of the National Emergency Training Center (NETC) campus facility continues to offer both challenges and opportunities. The historic nature of many of the NFA buildings also needs to be noted due to the complexity this adds to the ongoing maintenance and repair work done on campus. On behalf of students and other stakeholders, the Board appreciates the tremendous support FEMA has provided to address capital improvement and maintenance issues on campus. We applaud the continued outstanding work of the NETC Management, Operations and Support Services (MOSS) Division to manage the physical plant and numerous activities held on campus each year.

While much progress has been made, particularly relating to Americans with Disabilities Act compliance and energy efficiency, deferred maintenance continues to be a critical issue. There continues to be a significant deferred maintenance need at the NETC. Replacement of aging roofs and HVAC systems on campus is greatly appreciated and long overdue. The HVAC and roof replacement schedule, as proposed by NETC's MOSS, needs to be completed in a timely manner. The Board recommends that FEMA establishes an additional annual \$5 million deferred maintenance allocation for the NETC campus. The Board commends FEMA and NETC staff in their ongoing efforts to upgrade and maintain the aging physical infrastructure.

The replacement of the 21-year-old fire alarm and detection system on the entire campus needs to be a priority not just for life safety reasons but also because the USFA should be the role model for the nation in the fire prevention arena. To date, campus fire alarm upgrades have been completed in seven buildings. A contract has been awarded for five additional buildings to have new fire alarm systems installed and should be completed before the end of the year.

Campus facilities include the library and the Publications Center, which continue to provide essential support for NFA students. However, there remains a long-documented need to expand the NETC facilities to accommodate the addition of 300 students per semester. While the NETC maintains one of the highest utilization rates in the DHS, additional classroom, lodging and support space is required for the NFA to continue fully supporting the broader DHS/FEMA mission.

The NETC campus also needs a state-of-the-art physical fitness, health and wellness center for use by students, instructors and staff so the NFA can lead the fire service by example as it does in so many other areas.

The NETC's MOSS team should request additional funds specifically to address aging driveway and parking surfaces throughout the campus. Frequent rain showers in the region, and snow and ice in the winter months, clearly show the stagnation of water and the impact poorly paved areas have on the safety of staff and students who walk and drive on these surfaces.

Installation of solar panels on appropriate campus facilities should continue along with the replacement of lighting fixtures with energy-efficient (i.e., light-emitting diode (LED)) solutions. Installation of solar panels has been completed on five buildings. A contract for Building S will

be awarded this year for a total of six buildings on campus with panels. While the goal of all buildings having solar panels would be the desired outcome of the Board, we realize that this is not realistic nor possible because of the historic preservation constraints many of the structures on campus are governed by. The Board commends MOSS staff for its ongoing efforts to seek energy-efficient options across the campus.

The Board is pleased to see the redesign of the main entrance area completed to enhance the safety and security of staff and students. The work done by NETC's MOSS and NFA staff to create a secure and professional appearance while preserving the historic trees along the main entryway is appreciated.

The Board was appreciative of the long-standing efforts to create and implement an online admissions application process. This system is currently being used by Emergency Management Institute students with NFA students to follow in the next semester. The ultimate goal is to be a paperless system.

Of most concern during the Board's annual meeting was in the area of information technology (IT) and systems. The NFA needs better technology for a robust, academically sound and secure online learning platform. Simply stated, the staff at the NFA are very limited in the ways they can communicate with students and support off-campus programs. Specifically, the NETC needs enhancements to the campus-wide wireless system to include unrestricted Wi-Fi, file-sharing capabilities and access to information via cloud-based solutions.

To meet current technology requirements, the NFA needs to continue to upgrade the classroom environment. Although there have been recent improvements, students and Board members experience issues with internet connectivity and campus-wide access. As an example, the DHS/FEMA firewall prevents access to many sites necessary for research, collaboration and data storage.

While the Board understands the complex nature and importance of information security and the need for DHS/FEMA to protect the work of full-time staff and various assets, there is an immediate and business need for the NFA to be able to communicate with students off campus. In comparison, the DoD has figured out a way for military service academies to conduct their educational programs for the men and women attending these institutions using current technology without impacting IT security. We ask that DHS/FEMA gives the IT needs of the USFA and NFA the same attention so that they can accomplish their mission of serving fire service personnel across the country. The Board recommends appropriate funding and DHS/FEMA IT staff support to improve internet and data access on and off campus, and the campus IT infrastructure to support the growing number of courses that are delivered to complete the FEMA mission.

With the growth and importance of IT, the Board once again recommends that the NFA and USFA seek a full-time Chief Information Officer and create a branch to oversee and manage all enterprise functions. The Board appreciates the time and attention given to the needs of the NFA campus and students by the FEMA Chief Information Office to this important matter.

An examination of the funding levels for National Fire Academy programs

The USFA and the NFA continue to demonstrate commendable stewardship with respect to fiscal responsibility. While the operational budget has remained relatively stable, inflation results in higher costs for operations. It is imperative that the NFA receive an increase in funding to maintain its mission and the expected role it plays within DHS/FEMA. This need is even more paramount due to the backlog and the need for training through the NFA.

The USFA bears the cost of NETC maintenance. Appropriate cost sharing needs to be addressed by FEMA.

The NFA is unique in the federal government because its specific mission is to train state, local, tribal and territorial first responders and their leaders, not primarily federal employees. A reduction in resident classes at the NFA would result in a degradation of incident management capabilities, community risk reduction, hazardous materials response, and arson detection and prosecution.

While there is a cost to both on-campus and off-campus training, it is important to recognize that every emergency and disaster starts locally. To the extent that a community has a well-trained, well-led cadre of first responders, that emergency stays local. If it is poorly handled, or if it is so large that the local forces are overwhelmed, it may trigger a state and federal response. It is in the interest of both DHS and FEMA to try to keep local emergencies local. As of Sept. 30, 2019, there were 28,428,813 total incidents reported to NFIRS from 24,102 fire departments for 2018, and there were 98 presidentially declared major disasters reported in 2020 per FEMA (https://www.fema.gov/disasters/year?field dv2 declaration type value=DR).

While training has a cost, the lack of training is even more expensive in terms of life loss (both civilian and firefighter), property damage, litigation, economic impact and societal effects. According to the USFA data, in calendar year 2018, there were 84 on-duty firefighter fatalities and 3,655 civilian fatalities (https://www.usfa.fema.gov/data/statistics/). In calendar year 2019, there were 62 on-duty firefighter fatalities. The National Fire Protection Association estimated that there were 58,250 firefighter injuries in calendar year 2018. Reports from the National Institute of Occupational Safety and Health state that some of these deaths and injuries could have been averted through training. Above all else, the NFA was created to prevent those tragedies. The Board continues to recommend an emphasis on firefighter health and safety as a part of the overall training mission which the NFA has proactively embraced with the recruitment of a new training specialist to oversee its new firefighter health and safety curriculum area. The recently offered pilot classes have all been well received and show the benefits of the currency and relevancy of the responder health and safety curriculum.

Throughout FY 2020, visionary leadership was provided by U.S. Fire Administrator Chief G. Keith Bryant and Deputy Fire Administrator Dr. Denis Onieal. Chief Tonya Hoover, NFA Superintendent, now in her fourth year, is actively involved with the Board to ensure the timely and relevant delivery of effective training and educational courses by well-qualified instructors. The Board is honored to collaborate on the implementation of the superintendent's vision for the

future. Finally, the Board would like to thank the dedicated and passionate staff of the NFA, National Fire Programs Division and MOSS, who are responsible for the USFA's success.

The Board has concerns regarding the delays that have been experienced with the vetting and approval process for new Board members and those who are seeking renewal. These delays will impact the ability for the Board to carryout future tasks and board meetings. This is noted not as a criticism of the USFA or NFA, but as a concern regarding the length of the federal process.

The Board would like to recognize and thank three talented individuals who have spent many decades serving the nation's fire service who have retired or will be retiring from the USFA over the next few months: Ms. Terry Gladhill, Branch Chief for Training, Administration, Planning and Analysis Branch; Deputy NFA Superintendent Dr. Kirby Kiefer; and Deputy U.S. Fire Administrator and former NFA Superintendent Dr. Onieal. All three have made a lifetime of friends and, more importantly, have made a significant impact on the training and education of career and volunteer firefighters from around the country and around the world.

The Board also thanks outgoing Chair Mr. Andrew Pantelis, Vice Chair Mr. Eriks Gabliks and Mr. George Stapleton for their outstanding leadership and service to the Board.

The Board applauds the USFA for 46 years of dedicated service to the nation's fire service.

Fiscal Year 2020 Board of Visitors

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