



## ARFF Training Bulletin

Winter/Spring 2022

### SC Fire Academy's ARFF Program: Hands-On and Real-World Training

The South Carolina Fire Academy's Aircraft Rescue Fire-fighting (ARFF) program provides students with hands-on and real-world training to adequately respond and protect lives in the communities they serve, should an incident occur.

This training is accomplished using state-of-the-art props, such as the new fire suppression system built into the Specialized Aircraft Fire Trainer (SAFT). This provides students with an opportunity for realistic training on interior aircraft firefighting operations. The SAFT supports training scenarios for interior firefighting, search and recovery operations, ventilation techniques, and engine/wheel fires.



The Academy's Fuel Spill Burn Trainer (FSBT) provides a driver/operator hands-on experience responding to and operating ARFF apparatus during crash scenarios, including tactical scenario-based communications.

While meeting industry standards outlined by the National Fire Protection Association (NFPA), staff work with agencies around the world creating customized hands-on training scenarios that set personnel up for success.

We welcome the opportunity to create an individualized program specific to your agency's needs.

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South Carolina State Fire

Visit us on the web

<http://statefire.llr.sc.gov>



South Carolina Fire Academy  
Office of the Fire Marshal  
141 Monticello Trail  
Columbia, SC 29203

Joseph Charleston, ARFF Coordinator  
(800) 896-1070  
[SCFA-ARFF@llr.sc.gov](mailto:SCFA-ARFF@llr.sc.gov)

# Available Basic ARFF Classes

2022 Basic ARFF Classes	
Course Code	Dates
3400-22006	January 31-February 4
3400-22007	March 7-March 11
3400-22008	April 11-April 15
3400-22009	May 9-May 13

## Registration Checklist:

- ☐ Complete a South Carolina Fire Academy registration form. If you do not know your FDID, leave it blank.
- ☐ Insert the last five (5) digits of your U.S. Social Security Number (if you have one) in the space labeled "Student ID." If you are from a foreign country, leave it blank.
- ☐ Provide the correct course code and dates at the top of the form. The course code is two series of numbers (i.e. 3400-20001).
- ☐ Indicate if you need to rent bunker gear (additional \$65) for the training program or if you will be bringing your own. Structural gear is acceptable in the ARFF program.
- ☐ Provide the full name, address, contact number, and name of the person or entity who is responsible for course payment. If this information is not provided, registration cannot be processed.
- ☐ Sign the release section and date the form accordingly and have your Chief Officer sign where indicated. If you are self-sponsoring, you do not need to include your Chief Officer's signature.
- ☐ Attach Firefighter II certification. IFSAC or Pro-Board is acceptable. This registration requirement cannot be waived.

**Class Schedule:** Class starts at 8:30 a.m. on the Monday of the training week. Class will be conducted through Friday of the same week until 5 p.m.

**Local Airport:** The local airport is Columbia Metropolitan Airport (CAE). The Academy is at 141 Monticello Trail in Columbia, SC. Make sure you allow time for flights according to the training schedule. The Academy cannot cut a class short nor make accommodations for travel time.

**Proper Attire:** No shorts, flip-flops, tank tops, jeans, or other similar apparel can be worn in class. Be sure you have appropriate clothing such as a station uniform, and casual clothing (pants/collared shirt). No facial hair that interferes with the seal of the SCBA is allowed.

**Payment:** An invoice and confirmation letter will be sent to the student/student's agency. Invoice payment instructions are noted in the confirmation letter. Please make payment by calling Candace Bass at 803-896-9812.

**Contact:**  
**Joseph Charleston, ARFF Coordinator**  
**(800) 896-1070**  
[SCFA-ARFF@lfr.sc.gov](mailto:SCFA-ARFF@lfr.sc.gov)

# ARFF Course Descriptions

**3400 Basic ARFF NFPA 1003** (40 hours): This course provides the firefighter with the knowledge and skills necessary to meet the requirements of NFPA 1003 and FAR 139. The course covers rules and regulations, airport and aircraft familiarization, aircraft safety, tactical operations, ARFF apparatus, fire suppression, extinguishing agents, PPE, rescue, hazardous materials, communications, and incident command. Skills development segments include practical application of fire suppression techniques and strategies involving landing gear fires, engine nacelle fires, APU fires, fires inside the aircraft, extinguishment of flammable liquids, and 3D flowing fuel fires.



In addition, the firefighter learns ARFF apparatus operations and applies tactical techniques for apparatus placement, modulations, turret management, agent conservation, and strategies for protecting aircraft occupants' egress or supporting rescue operations.

**3402 Municipal Fire Department Approach to Aircraft Rescue** (16 hours): This course is designed to expose the firefighter to the unique considerations and hazards associated with responding to an incident involving aircraft or aircraft crashes. Information is provided on a variety of topics including airport familiarization, aircraft construction and terminology, aircraft

hazards, hazardous materials associated with aircraft, FAA requirements when responding to aircraft crashes, incident command considerations, extinguishing agents, and other tactical and strategic operations.

**3405 Specialized Aircraft Fire Trainer (SAFT 4 hours):** This course is an essential part of the Federal Aviation Regulations Part 139 annual live burn refresher training that includes job performance requirements as specified in NFPA 1003, Standard for Airport Firefighter Professional Qualifications, including: fire suppression tactics for aircraft engine nacelle fires, landing gear assembly fires, APU fires, and aircraft interior fires while using ARFF apparatus hand-lines.

**3406 Fuel Spill Burn Trainer (FSBT) ARFF Truck Operations** (4 hours): This course is designed to meet the Federal Aviation Regulations Part 139 annual burn requirement as it pertains to personnel who drive and operate airport firefighting apparatus. It involves detailed instruction in the operation of various types of airport firefighting apparatus and their capabilities, exposes the driver/operator to modulation tactics, crash scene maneuvering, communication protocols, vehicle positioning, extinguishing agent conservation, as well as tactical and strategic considerations concerning crash scene response. The course involves the use of a 13,500 square-foot live burn trainer that simulates flowing and pooled fuel fires potentially found at crash scenes. The FSBT is electronically controlled to simulate small, medium, and large crash site fires and manipulated to mimic effects of appropriate suppression tactics.

**3408 ARFF FAR 139 Refresher SAFT and FSBT** (8 hours): This course is a combination of the 3405 and 3406 courses encompassing aspects of both. It can be customized to suit the training requirements of a specific agency.

**3406 High Reach Extendable Turret (HRET) Training** (2 hours): This short course is designed to expose the ARFF driver/operator to the use and proper deployment of piercing nozzle technology and deployment tactics. The Academy has a piercing prop. It can be automatically adjusted for height and has aircraft window markings to simulate the optimum piercing zone. This course uses Rossenbauer and OshKosh apparatus equipped with HRET piercing nozzles.

**3409 Flammable Liquids** (4 hours): The use of extinguishing agents in combination with water to suppress carbon-based fuel fires is an essential part of the ARFF program's fire suppression training. Aqueous Film Forming Foam (AFFF) is the principle agent used to suppress fires involving aircraft. This course provides the firefighter with practical skills development in the use of AFFF. The firefighter is exposed and required to demonstrate acceptable knowledge and skill in application techniques, foam blanket monitoring, and agent resupply methods as part of the course.

**Customized Training!** The South Carolina Fire Academy can custom design ARFF training programs to meet any airport fire department's requirements. We will design and deliver the most realistic and challenging training course to safely teach firefighters the principles and techniques required to save lives and protect property. Any request for customized training can be scheduled in conjunction with a catalog scheduled training date.

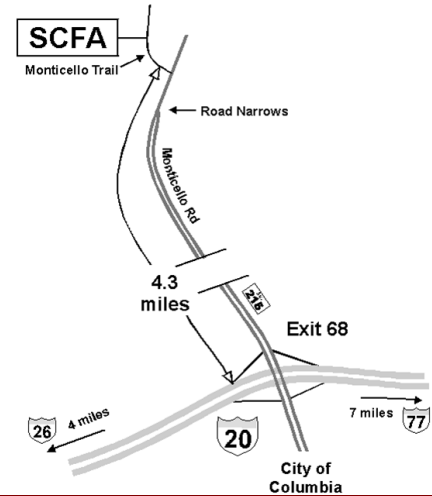


# Columbia Campus

From Interstate 20, take Exit 68 and turn north on Monticello Road (S.C. 215).

Travel about 4.3 miles north to Monticello Trail and turn left. (The road will narrow from four to two lanes about ¼ mile before the turnoff.)

The Fire Academy complex is about ¼ mile down Monticello Trail on the left.



## Academy Accommodations

### SCFA Dormitory

We recently completed a multi-million dollar renovation on our dormitory. The top-to-bottom renovation includes new paved parking areas, a hotel-like reception area, new furnishings, and an expanded weight room/gym area.

**Please note:** Dorm rooms are first come, first served. Single occupancy is \$30/night, double occupancy is \$15/night. Please make your dorm room selection during the registration process.

### DoubleTree by Hilton Columbia

2100 Bush River Road  
Columbia, South Carolina 29210

In the event the State Fire Academy's dormitory is full or unavailable, the DoubleTree by Hilton is less than 10 miles away (15 minutes) from the Academy site.

Their 2022 rate for students attending classes and events at the Academy is \$99 per night, including breakfast, and falls below the GSA reimbursable allowed rate. For stays of five nights or more, the rate is \$89 per night, and includes breakfast for two each morning.

Two ways to make your reservation:

Call: 1-803-731-0300 and mention group: South Carolina State Fire #0002765133; or

Book online using the link below and enter corporate account #0002765133

<http://www.columbiasouthcarolina.doubletree.com/>