SOUTH CAROLINA STATE FIRE

ARFF Training Bulletin

SC Fire Academy Supports Air and Space Expo at Shaw AFB

During the April 2022 Shaw Air and Space Expo, "Thunder Over the Midlands," the South Carolina Fire Academy provided standby operations for Shaw Air Force Base Fire Emergency Services.

The main event featured the United States Air Force's elite aerial demonstration team, the U.S. Air Force Thunderbirds, as well as 15 other performers. The air show provided an up close look at the military, and celebrated significant milestones - from the U.S. Air Force's 75 years of service to Shaw's 80 years in Sumter.

More than 75,000 were in attendance for the weekend event.

Standby operations included a team safety pre-briefing as well as three 12-hour days on the flight line in an immediate response position. In the event of an aircraft crash, a rapid on-scene response could be achieved in minutes, ensuring that flight operations continued uninterrupted.

Shaw Air Force Base Fire Emergency Services command staff recognized the hard work and efforts of South Carolina Fire Academy ARFF Instructors Joe Charleston, Dave Proctor, Matthew Rowlette, and Dave Williams, cementing a partnership as a mutual aid partner.

Find us on social media

Twitter: @SCStateFire @SCStateFM @SCDLLR

Facebook: South Carolina State Fire

Visit us on the web

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

SC Fire Academy Offers Virtual Case Study of Emirates Flight #521 Crash

The South Carolina Fire Academy is hosting a free half-day *virtual* case study presentation of Emirates Flight #521's 2016 crash at Dubai International Airport. This presentation is based on the "Runway Impact During Attempted Go-Around" report published by the General Civil Aviation Authority of the United Arab Emirates, Air Accident Investigation Section. Topics discussed will be relative to the ARFF response, tactical decisions, problems encountered during evacuation, and explosion that killed Airport Civil Defense Firefighter Jason Mohammed Hassan.

Registration Information

Date: Wednesday, Aug. 3, 2022
Time: 1 – 4 p.m.
Virtual event: Attendees will receive an agenda and access link prior to the event.
Registration: 8698-23-001   Click **here** to register.

When completing the registration, you will be prompted to enter the name of your fire department. Click to search and select the appropriate agency. If your agency is not listed, contact **amy.williamson@llr.sc.gov**

Note: Students who are pre-registered, and attend the live workshop, will receive SCFA transcript credit. If you are unable to attend the live event, it will be recorded and posted for viewing at your convenience. However, if viewing the recorded workshop, SCFA transcript credit is not available.

About The Instructor

Jack Kreckie has dedicated more than 40 years to emergency services. He is a retired Deputy Chief / Chief of Operations for Massport Fire Rescue. Jack served as the Global Chief of Aviation Fire Protection for Hostile Environment Services in Perth, Australia, and as the Fire Chief at Komo Airfield in Papua New Guinea's Southern Highlands. He is a past Chairman of the ARFF Working Group and has held the distinction of "ARFF Legend" since 2008.

Jack and Pat Kreckie own and operate ARFF Professional Services, LLC providing ARFF training and consultation services. Since 2009, Jack has worked as an ARFF SME supporting the FAA Airport Technology and ARFF Research Group at the FAA William J. Hughes Technical Center.

Available Basic ARFF Classes

2022 Basic ARFF Classes	
Course Code	**Dates**
3400-23001	August 8-12, 2022
3400-23002	September 26-30, 2022
3400-23003	October 17-21, 2022
3400-23004	December 12-16, 2022

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@llr.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.

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.
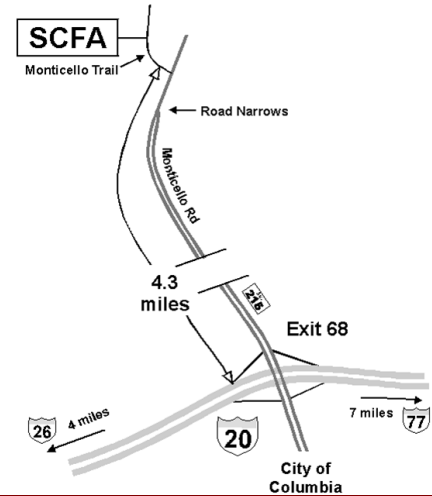
Columbia Campus

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 **here** and enter corporate account #0002765133