

BCFRTA Burn Package

Thank you for scheduling a burn day with the Barnstable County Fire-Rescue Training Academy. Enclosed you will find documents that will make sure your department gets the most out of their time spent at our facility. Please review these documents as they have recently been revised. There are also some forms that need to be filled out and given to our Site Supervisor on the day of your burn. Directions are listed with each item as necessary. If you have any questions, please contact us prior to your scheduled day.

Enclosed in this package you will find the following items:

1. Burn Rate Schedule
2. SOP 1-12 Extreme Weather
3. SOP 2-14 Use of Wheel Chocks with Academy Vehicles
4. SOP 2-99 Use of Burn Building by Fire Departments for Live Fire Training
5. SOP 2-88 Beard Policy
6. SOP 2-03 Drugs & Alcohol
7. Sample Burn Plan

The Fire Fighter I Compliance, Turn-out Gear and Medical forms need to be filled out for the department with a roster of who is attending attached to it, these can be brought on the day of the burn.

Also a burn plan needs to be completed and brought with you on the day of the burn. I have enclosed a prepared burn plan for your use, if you so desire. If you have any questions, please feel free to contact me.

Yours in Service,

Dennis E. Macedo
Program Coordinator

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RENTAL SCHEDULE

Effective 1/1/2012

Facility Rental

**No more than 32 students are allowed during facility rental*

1. Up to 24 students \$1,100.00
 - a. Includes 1 safety officer & 2 support staff
2. 25 to 32 students maximum \$1,350.00
 - b. Includes 1 safety officer & 3 support staff
3. Classroom Only \$300.00

***Rental also include straw and use of cascade system*

Additional Fees;

- Instructor \$300.00
- Support \$250.00
- Use of Engines \$150.00

- Equipment Operator (MA license.) 125.00/hour- 4 hour minimum **Required when utilizing ANY heavy or hydraulic machinery is for programs*
- Equipment Use \$75.00 **Includes but not limited to hand tools, power equipment, etc,*
- Use of Aerial \$350.00 ** Includes Operator*
- Gas Prop. \$500.00

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BARNSTABLE COUNTY FIRE/RESCUE TRAINING ACADEMY STANDARD OPERATING PROCEDURES

SOP # 1-12

Effective Date: 01-26-2012

Revised: 01-23-2012

Title: Environmental Conditions Guide (Extreme Weather)

PURPOSE:

The Barnstable County Fire & Rescue Training Academy (BCFRTA) has implemented a Hydration Policy for the protection of students and instructors. All instructors, training officers, and training facilities will monitor weather conditions for any training session or testing site involving skills training/testing, the use of protective clothing, or any session/site where strenuous work is expected of the students and/or instructors. Environmental conditions have been proven to have a significant impact on an individual's physiological response to physical activity.

SCOPE:

SOP #1-12 covers the use of the Academy by ALL entities utilizing the facility.

This guide addresses extreme heat, extreme cold, and other inclement weather conditions for participants prior to, during, and after the completion of any strenuous practical training evolutions or testing sites; and is to be used as a guide for the Hydration Policy. The Lead Instructor, in conjunction with Assistant Instructors, of the BCFRTA shall

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adjust or postpone related activities as weather conditions warrant. These decisions shall be made in cooperation with the local AHJ.

RESPONSIBILITIES:

All Support Staff, Instructors, and Program Coordinators must be familiar with, understand, and adhere to this SOP at all times.

Any Staff Personnel found to be in violation of this SOP will be subject to disciplinary action as outlined in the **BCFRTA Disciplinary Action Policy**

PROCEDURES:

The Lead Instructor for the BCFRTA is required to adhere to the policy for all courses/classes/sessions/testing sites. However, the BCFRTA policy and subsequent guidelines will not circumvent any locally established policies; as long as those policies are designed to protect the emergency response organization employees and are more stringent than the guidelines/policy of the BCFRTA.

The Heat and Wind Chill Indexes, as developed by the National Weather Service, will be used as the guide for determining extreme heat and cold conditions. Local weather conditions for the class/test site shall be used because conditions can vary greatly over a relatively small geographic area (i.e. information may have come from a source quite some distance from the class/test site)

Extreme Heat Conditions-

- Outside activities requiring physical activity or the use of full protective clothing/equipment (including the use of chemical protective clothing) should not be conducted if the

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heat index has reached 100 degrees Fahrenheit or is expected to reach 100 degrees Fahrenheit.

- When the heat index is between 100°F and 110°F, conditions may be considered dangerous. Any decision by the Lead Instructor to fore go these precautions must be explained to all assisting instructors, the local AHJ, and all students. Parameters must be established for all training/testing, and a safety officer must monitor the operational periods for the students/instructors.
- Full personal protective clothing may create conditions whereas the ambient heat index may have to be increased by an additional 10 degrees Fahrenheit. Other factors such as age and the physical condition may also make an individual more vulnerable to heat conditions and disorders.
- Factors such as time of day, length of activity, type of activity, and the student's direct participation may influence the decision for modification or postponement of the class/course/test.
- Outside training/testing activities that require physical activity or full protective clothing may be conducted, but the following suggestions/examples of such activities must be evaluated in each case. This is only a sampling of all activities that would warrant an evaluation of weather conditions, and some requirements – based on the Hydration Policy.

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1. Live fire training/interior fire attack testing – should be evaluated for each class/course/testing site
2. Activities other than live fire/interior fire attack, where the activities can be safely conducted with reduced protective clothing (i.e. helmet, gloves, and boots/safety shoes)
3. All skills-driven evolutions – an adequate supply of cool drinking water (note – not ‘iced-down’ water), EMS personnel available for monitoring and assistance, and a rehab station established for rest and re-hydration
4. All skills-driven evolutions – strenuous physical activity is monitored and limited to 15-20 minutes of activity
5. Instructors should monitor students to make sure they are not attempting to hyper hydrate (explanation at the end of the Guide) before, during or after a training/testing session. Do not permit excessive water or water/Gatorade combination consumption. Gatorade should be mixed with water to make a 50-50 drink.
6. The following chart, developed by the National Weather Service, will be used as the guide for all decisions.

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National Weather Service – Heat Index

Temperature (°F)

	80	82	84	86	88	90	92	94	96	98	100	102	104	106	108	110
40	80	81	83	85	88	91	94	97	101	105	109	114	119	124	130	136
45	80	82	84	87	89	93	96	100	104	109	114	119	124	130	137	
50	81	83	85	88	91	95	99	103	108	113	118	124	131	137		
55	81	84	86	89	93	97	101	106	112	117	124	130	137			
60	82	84	88	91	95	100	105	110	116	123	129	137				
65	82	85	89	93	98	103	108	114	121	128	136					
70	83	86	90	95	100	105	112	119	126	134						
75	84	88	92	97	103	109	116	124	132							
80	84	89	94	100	106	113	121	129								
85	85	90	96	102	110	117	126	135								
90	86	91	98	105	113	122	131									
95	86	93	100	108	117	127										
100	87	95	103	112	121	132										

Likelihood of Heat Disorders with Prolonged Exposure or Strenuous Activity

■ Caution
 ■ Extreme Caution
 ■ Danger
 ■ Extreme Danger

Extreme Cold Conditions-

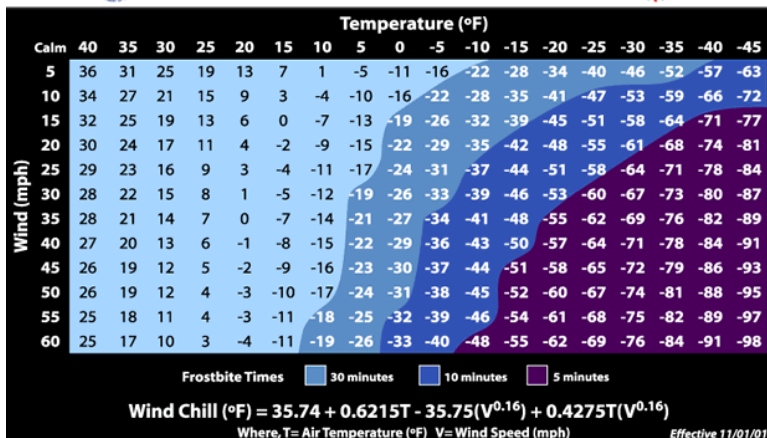
- Depending on the training location, the location’s proximity to wind barriers, and time of day; the wind chill factors may vary as stated on the National Weather Service chart.
- Frostbite is possible at temperatures less than 0°F and temperatures are considered dangerous at 20°F
- Outside training activities or testing stations should not be conducted when the wind chill factor is less than 20°F, unless:
 1. Students are properly dressed for the appropriate cold weather activity
 2. The cold weather will not affect the safe and proper function of tools, equipment, and apparatus

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3. An adequate supply of warm liquids and/or food is available at the training/testing site
4. Strenuous physical activity is monitored and limited to 15 to 20 minutes
5. A heated indoor rehabilitation area is in close proximity to the training/testing site
 - Weather conditions, such as described above, will also produce other conditions that must be monitored. Any of these conditions may influence the decision for modification or postponement of the class/course/test. Such conditions may be freezing moisture creating slick surfaces, visibility because of fog, or freezing moisture on tools, appliances, and apparatus.
 - The following chart, developed by the National Weather Service, will be used as the guide for all decisions.



NWS Windchill Chart



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Other Weather Conditions-

- Other extreme weather conditions must be evaluated before training/testing activities are permitted to begin.
- Based on previously mentioned weather conditions and local observations, in conjunction with local weather reports and the local AHJ; the Lead Instructor may determine if the class/course/test activities must be modified or postponed due to inclement weather conditions.
- Conditions such as the following, but not limited to this list, are:
 1. High winds
 2. Excessive snow or snow cover on the ground
 3. Sleet or ice
 4. Heavy rain or hail
 5. Thunderstorms, including lightning (F-B Method at end of Guide)
 6. Tornado watches, and specifically warnings
 - Instructors should monitor students for inappropriate functions, acts of bravery and belittlement of the Instructor's decision, and improper placement of personnel or individuals in relationship to the weather conditions.
 - Do not permit the Incident Command System structure to be compromised by those who may declare themselves as invincible to any of the weather conditions listed above or what is happening or predicted to happen in the localized area.

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EXPLANATION INFORMATION-

Hyper hydration – Definition:

Water intoxication (also known as **hyper hydration** or **water poisoning**) is a potentially fatal disturbance in brain function that results when the normal balance of electrolytes in the body is pushed outside of safe limits by a very rapid intake of water. Normal, healthy individuals have little to worry about accidentally over-consuming water. Nearly all deaths related to water intoxication in normal individuals have resulted either from water drinking contests, in which individuals attempt to consume several gallons over the course of just a few minutes, or long bouts of intensive exercise during which time electrolytes are not properly replenished, yet massive amounts of fluid are still consumed. *Information from 'Wikipedia'*

Training Division Interpretation:

Hyper hydration is the rapid consumption of an excessive amount of water/fluids with the hope of building up an above-average amount of hydration so the body will function longer and not dehydrate.

Some articles, by the military and numerous sports individualists, refer to athletes and fire fighters as examples of those who have an exceptionally high impact to their systems from strenuous and rigorous work; especially when heat and humidity are involved.

Regardless, this isn't the way to prepare for training or testing. Preparation before the event - the day before or hours before, will produce better results than attempting to accomplish suitable hydration in a matter of minutes.

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Lightning – the FLASH-to-BANG (F-B) Method:

To estimate the distance between you and a lightning flash, use the "Flash to Bang" method: If you observe lightning, count the number of seconds until you hear thunder. Divide the number of seconds by five to get the distance in miles.

Example: If you see lightning and it takes 10 seconds before you hear the thunder, then the lightning is 2 miles away from you (10 divided by 5 = 2 miles).

[table id=2 /] ***Get to a safe location if the time between the lightning flash and the rumble of thunder is 30 seconds or less.***

ENVIRONMENTAL COMPLIANCE AND REVIEW:

Activities subject to environmental review by Director and Staff.

EXCEPTIONS:

Exceptions to this SOP can only be made by the **Director** or in his absence the

Deputy Director

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BARNSTABLE COUNTY FIRE/RESCUE

TRAINING ACADEMY

STANDARD OPERATING PROCEDURES

SOP # 02-14

Effective Date: 01-22-14

Revised: 02-01-2014

Title: Use of Wheel Chocks with Academy Vehicles

PURPOSE:

To establish the practiced of placing wheel chocks to parked academy vehicles while on the drill ground.

SCOPE:

- Due to the recent accident with a cape fire department in the fall of 2013, it has been determined that the practice of placing wheel chocks to stationary academy vehicles needs to be addressed and the operators of academy vehicles need to increase the use of wheel chocks.
- The use of wheel chocks on academy grounds will also be enforced to visiting departments.

RESPONSIBILITIES:

- It is the responsibility of all staff, instructors and program coordinators to understand and comply with this policy.

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- It is the responsibility of all BCFRTA employees to remind and enforce the use of wheel chocks with visiting departments.

PROCEDURES:

- Wheel chocks will be placed to the rear wheels of the following vehicles. Wheel chocks will be placed to the front and rear of the tire without exception.
 - o Engines 823, 4, 44
 - o Ladder 1
 - o MMA Box Truck
 - o Cascade Trailer
 - o Technical Rescue Trailer
- Visiting departments will also place wheel chocks as described above or according to their department policy.
- Wheel chocks may not be necessary with smaller vehicles which have a parking gear. However, it is the operator's responsibility to determine if the placement of a wheel chock will increase safety while operating on the drill ground.
- This policy will also carry to those programs conducted off property.

ENVIRONMENTAL COMPLIANCE AND REVIEW: None

EXCEPTIONS:

There are no exceptions to this policy

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TRAINING ACADEMY

STANDARD OPERATING PROCEDURES

SOP #2-99

Effective Date: 2-1-

99 Revised: 2-12-07

Title: Use of Burn Building by Fire Departments for Live Fire Training

PURPOSE: To ensure a safe and environmentally sound controlled live fire training environment for Cape Departments and off Cape Departments using the burn building.

SCOPE: This SOP covers the use of BCFRTA by departments for all training purposes.

RESPONSIBILITY: County Staff and Department Lead Instructor.

DEFINITION: Live fire training is in itself a dangerous proposition. This S.O.P. relates directly to the safe and efficient training by Departments desiring to use the burn building.

PROCEDURES:

1. DEPARTMENT REQUIREMENT

- a. All training at the BCFRTA is scheduled through the Director or his designee. All training shall be scheduled in advance to ensure no conflicts with usage.
- b. Prior to actual Live Fire Training each participant that will be entering the building shall have completed and signed by the Chief of Department the following:

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Fire Fighter I Compliance Form

Medical Authorization Form

Turnout Gear Compliance Form

c. These shall be given to the Safety Officer/Instructor for verification. Any personnel not in compliance will not be allowed to enter the burn building during live fire evolutions. No one will be allowed to participate in a live fire training evolution which requires them to enter the burn building as part of a training evolution that is not Fire Fighter I Certified or has received training to meet the performance objectives for Fire Fighter I of the following sections of NFPA 1001:

3-3 Safety

3-5 Fire Behavior

3-6 Portable Extinguishers

3-7 Personal Protective Equipment

3-11 Ladders

3-12 Fire Hose, Appliances & Streams

3-16 Overhaul

3-19 Water Supply

3-7 SCBA

d. A Pre-burn plan shall be in writing and given to the County Safety Officer prior to any evolutions beginning. The Safety officer will check the plan to make sure it does not conflict with County Burn Policies. Corrections will be made at this time if deemed necessary.

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e. At this time no foam products or extinguishing agents are to be used at the Academy, due to DEP guidelines. Only water and BC extinguishers are allowed on premises

2. PERSONNEL

a. The County will supply a maximum of three personnel. One Safety Officer and two Staff Personnel. The Safety officer will have a minimum of Fire Instructor I. The Staff personnel will have a minimum of FF I. The Safety officer over sees the operation and can stop any evolution at any time. The Staff personnel will help with air supply, rehab, or any other problems that arise.

b. The Department will supply at least one Lead Instructor with a minimum certification level of Fire Instructor I. If a Department cannot fill the Lead Instructor Position the County will supply one at a cost to the Department of \$300.00 per day.

3. DAY OF BURN

a. Prior to live fire training commencement a pre-burn briefing shall be conducted for all participants including instructional staff, support staff and students. All aspects of the operation(s) are to be explained.

b. A pre-burn safety briefing will be conducted by Academy staff this briefing shall include as a minimum:

- i. Tour of entire Building
- ii. Operation of all types of windows
- iii. Operation of doors
- iv. Locations of exits from each level

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- v. Locations of areas of refuge
 - vi. Locations of Stairwells and ground ladders provided as a means of egress from upper floors.
 - vii. Location of Roof Scuttle Hatches.
 - viii. Roof parapets and hazards posed.
 - ix. Any other issues pertinent to the training to be provided
- c. An Incident Command System will be established and used for the duration of the training period. If a Department does not ordinarily use an Incident Command System the Safety Officer will establish a system using the Barnstable County I.C.S.
 - d. An Accountability System shall be established and used for the duration of the training period. If the Department does not have an existing accountability system the Safety Officer will set up a system using the Fire Academy Tags and status board.
 - e. There will be in place a Rehab Station for the duration of the training period. Adequate time will be given for personnel to hydrate, cool down, etc. depending upon weather condition and the extent of the training evolutions.
4. Department Members under direction of County Staff members shall be responsible for cleaning the building, grounds and any equipment used. All equipment and apparatus used shall be put back into service prior to departure.

ENVIRONMENTAL COMPLIANCE AND REVIEW: Activities subject to environmental review by Director and Staff.

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TRAINING ACADEMY

STANDARD OPERATING PROCEDURES

SOP #2-88

Effective Date: 10-01-88 Revised: 2-12-07

Title: Beard Policy

PURPOSE: To provide for the safety of Students and Personnel during training evolutions that requires the use of SCBA.

SCOPE: This SOP covers the wearing of SCBA by students and staff that have beards.

RESPONSIBILITIES: All Support Staff, Instructors, Program Coordinators and Students must be familiar with, understand, and adhere to this SOP at all times.

PROCEDURES:

1. Any person involved in training evolutions that require them to wear self-contained positive pressure breathing apparatus shall not be allowed to wear a beard. No exceptions will be made.
2. Manufacturers of self contained breathing apparatus and O.S.H.A. regulations recommend that persons wearing beards, sideburns or lengthy hair should not wear self contained breathing apparatus since it may interfere with the proper face piece seal and render the unit ineffective.
3. The Massachusetts Fire Fighting Academy also endorses this same policy.

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4. The following information is taken from N.F.P.A. 1500-1987 Fire Department Occupational and Health Program.

a. Chapter 5, Section 5-3.10* Beards or facial hair that interfere with the face piece seal shall be prohibited for members required to use SCBA.

b. *A-5-3.10: An effective face to face piece seal is extremely important when using SCBA even with positive pressure SCBA any outward leakage will increase the rate of air consumption, reducing time available for use and safe exit.

ENVIRONMENTAL COMPLIANCE AND REVIEW: Activities subject to environmental review by Director and Staff.

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STANDARD OPERATING PROCEDURES

SOP #2-03

Effective Date: 9/14/03 Revised: 2-12-07

Title: Alcohol and drugs

PURPOSE: To provide for an alcohol and drug free site

SCOPE: Covers the use of Alcohol and or drugs at the training facility, a County owned Property

RESPONSIBILITIES: All Support Staff, Instructors, and Program Coordinators must be familiar with, understand, and adhere to this SOP at all times.

Any Staff Personnel, Student and or visitor found to be in violation of this SOP will be subject to **immediate removal from the site**. If a Student is removed, that student's Chief will be notified of his or her removal and the reasons why.

If a Staff member is removed he or she will be subject to disciplinary action as defined in the **BCFRTA Disciplinary Action Policy**

PROCEDURES: The use or consumption of alcohol and or illegal drugs is strictly prohibited

With in the boundaries of the Training facility owned by the County of Barnstable. This includes Staff, Students and visitors to the Training Site. Also, anyone suspected of being under the influence of alcohol or drugs

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at any time while on the site will be subject to immediate removal from the Training Facility.

ENVIRONMENTAL COMPLIANCE AND REVIEW: None

EXCEPTIONS: There will be no exceptions to this provision.

Basic Burn Plan

Safety Briefing & Tour of Building

Evolution #1 – Single fire on second floor

Crew #1 – Fire Attack

Crew #2 – Back up

Crew #3 – Throw Ladders

Crew #4 – Search

Crew #5 - Rehab

Evolution #2 – Single fire on second floor

Crew #2 – Fire Attack

Crew #3 – Back up

Crew #4 – Throw Ladders

Crew #5 – Search

Crew #1 – Rehab

Evolution #3 – Basement Fire (down from second floor into maritime room)

Crew #3 – Fire Attack

Crew #4 – Back up

Crew #5 – Throw Ladders

Crew #1 – Search

Crew #2 – Rehab

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Evolution #4 – Basement fire (down from second floor into maritime room)

- Crew #4 – Fire Attack
- Crew #5 – Back up
- Crew #1 – Throw Ladders
- Crew #2 – Search
- Crew #3 - Rehab

Evolution #5 – Single fires on 1st & 2nd floor (need for backup line)

- Crew #5 – Fire Attack
- Crew #1 – Back up
- Crew #2 – Throw Ladders
- Crew #3 – Search
- Crew #4 - Rehab

Evolution#6 - Single fires on 1st & 2nd floor (need for backup line)

- Crew #5 – Fire Attack
- Crew #1 – Back up
- Crew #2 – Throw Ladders
- Crew #3 – Search
- Crew #4 – Rehab

Clean up of Burn Building

Option of Stopping after evolution #6 depending on time

On site Safety officer to determine further evolutions