

## DAVIS RESCUE PLATFORM

By Bill Davis, Rescue 3 Instructor Trainer

### Introduction

I would like to introduce the Davis Rescue Platform, as it has come to be known. The system uses some type of inflatable watercraft, bridging and a tether line. It can be used in a variety of situations to affect a rescue by creating a working platform and a bridge to reach your victim or victims. This system provides an invaluable tool for professional rescuers, river guides and recreational boaters. I have been working on the development of the system for over two years. It has been tested in a variety of conditions and with different components. The system has been deployed not only in swift currents but has been placed into a hole, and with much success. I invite everyone to work with the system and provide me with any feedback, pictures or recommendations.



### Features & Benefits

- The most important feature of the system is that it keeps all rescuers out of the water, as well as the victims after contact is made.
- It creates a working platform closer to your victim from which rescue personnel can perform with the tools necessary to complete the task (i.e.: extrication equipment for a vehicle in the water or cutting / sawing tools needed to clear a strainer from an entrapment situation).
- The system is fairly simple to deploy and can be easily moved up or down stream as needed.
- The system can be used by accessing only one side of the river, as opposed to having to access both sides of the river with traditional boat tether and Tyrolean boat on tether systems.
- The system provides a bridge to move rescue personnel, victims and equipment back and forth between the shore and the platform.
- The system can be moved into operating position with the rescuers already in the boat or they can use the bridge to reach the platform after it is in place.

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# CHANGES TO RESCUE 3 CURRICULUM

Over the past couple of years the Instructor Trainers and Preceptors in conjunction with the staff at Rescue 3 have been working on modifications to Rescue 3's water and rope training program. The following information is a synopsis of some of the changes that are being made. As an ACTIVE Rescue 3 Instructor, it is important for you to be aware of these changes. In addition to the information in this article and the one following by Keith Gillespie, Rescue 3 Corporate will be holding Regional Meetings to help ensure understanding of these revisions. (See the separate flyer containing details on those meetings.)

Rescue 3's water and rope training program is still the basic curriculum that has been in place with various updates for the past 26 years. Now modifications have been made to more fully meet the needs of the two basic groups who comprise the majority of those we train: emergency service rescuers and water professionals.

For ease of understanding we will call the emergency service personnel who have an interest in the NFPA standards, the NFPA group. We will call the water professionals and other groups that are not required or interested in meeting the NFPA standards, the Non-NFPA group. See the chart below for which courses fit into each category.

At this time the changes have been completed for the SRT1 course. There is a new manual and skill sheet.



**Instructor Trainer/Preceptor's Meeting  
Oct. 2004 in Elk Grove, CA**

The SRTA will have a new skill sheet by May 2005 and a new manual by July 2005.

The article by Keith Gillespie (also in this newsletter) will help explain the changes in the SRT1 and SRTA. There is also a list of dates and locations for Regional Meetings to be held spring and summer 2005.

Please note that the manuals and skill sheets for the other courses have not changed at this time. The Whitewater Rescue Technician is currently being revised by a committee of IT/IPs. Also the Whitewater Rescue Technician 2\* being written and may be taught using the Swiftwater Rescue Technician Advanced manual until the manual is available.

## **NFPA COURSES:**

- Awareness: Water & Rope
- Basic Water First Responder (AWR+ for flat water)
- Operations: Swiftwater First Responder
- Technical Rope Rescue: Operations
- Swiftwater Rescue Technician Unit 1
- Swiftwater Rescue Technician Advanced
- Technical Rope Rescue: Technician Level
- Swiftwater Rescue Boat Operator: Motorized
- Ice Rescue Technician
- Professional Qualifications Workshop: Rope
- Professional Qualifications Workshop: Water & Rope

## **NON-NFPA COURSES:**

- Swiftwater First Responder
- Whitewater Rescue Technician
- Whitewater Rescue Technician 2\*

# An Overview of NFPA Program Revisions

By Keith Gillespie, Rescue 3 Instructor Preceptor

Recently, Rescue 3's corporate office has begun to make changes to the Water and Rope Rescue programs. So far, the Swiftwater Rescue Technician Unit 1 skill sheet and manual has been revised and updated and the SRTA skill sheet and manual are in the process of being revised as well. The following article explains the reasoning behind these modifications, as well as a brief overview of what has changed.

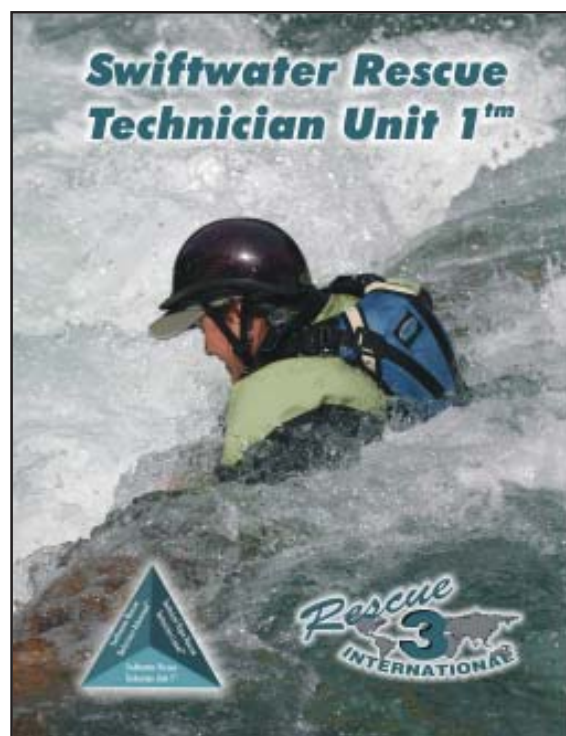
Since Rescue 3 began in 1979 our program has developed independently of anyone else, eventually becoming the standard in the rescue industry. At the time the NFPA announced their new standards affecting water and rope, Rescue 3's program had already been in place for 20 years. While it wasn't surprising how easily Rescue 3's program fit with NFPA 1670, there were still quite a few adjustments that had to be made. One of the biggest challenges we faced came to light when Rescue 3 began matching NFPA section numbers to our existing program. What we found was that both Operations and Technician level skills were dispersed throughout the SRT1 and SRTA program

At the 2003 Instructor Trainer/Instructor Preceptor meeting a committee was formed to tackle this dilemma. The committee focused mainly on the SRT1 and SRTA skill sheets since it was decided that skills sheets are really what determines what is taught in the class. After reviewing the skills sheets, the committee came to the decision to split the current SRT programs into 2 tracks, the traditional non-NFPA track and an NFPA focused track. The non-NFPA track will stay largely the same with the WRT comprising its core while adding the new WRT2. The NFPA track, however, will be reorganized so that the classes are more in line with NFPA's Awareness, Operations and Technician levels. The goal was to move Technician level skills out of the SRT1 and into the SRTA class.

The new SRT1 skill sheet now has Awareness and Operations level skills. Technician level skills that were moved out of the SRT1 will now appear on the SRTA skill sheet. One exception is that "go" contact rescue,

which is a Technician level skill, is still to be taught in the SRT1. This is because we felt obligated to teach this skill in the SRT1 where we have traditionally taught it. From experience, the committee decided that people will go in after a victim if other Operations level skills fail (such as reach and shore based skills). Boat unwrapping was another skill which some of the IT/IPs felt should be left in the SRT1 since the NFPA considers personnel in a boat to be Operational level. It was felt that boat unwrapping skills might be necessary for self-rescue. Thus providing rescuers with the training to safely perform those skills during the SRT1 course seemed like the best option.

Please remember, these changes do not exclude anyone from teaching some of the traditional SRT1 skills. The class can still be customized to fit each audience. In order to facilitate this, additional spaces have been added to the bottom of the skill sheet. The only stipulation is that all core material must be covered as well. Remember that on the skill sheets the core curriculum is denoted in bold print.



**New SRTU1 Cover**

# Corporate Office Contacts

In the past few months the corporate office has gone through quite a few personnel changes. The following is a list of who does what in the office, along with their e-mail addresses.

## Rescue 3 Personnel

### Gaile

- Title: Training Coordinator
- In charge of
  - Host agency program
  - Class bids
  - Program questions
  - Overseeing program development
- E-mail address: [gaile@rescue3.com](mailto:gaile@rescue3.com)



### Erin

- Title: Domestic Instructor Coordinator
- In charge of
  - US instructors
  - Class records
  - Class orders
  - Shipping & receiving class materials
- E-mail address: [erin@rescue3.com](mailto:erin@rescue3.com)



## Both Rescue 3 and Rescue Source

### Mike

- Title: President, Rescue 3 International and The Rescue Source
- In charge of
  - New products
  - Technical questions
- E-mail address:



### Judy

- Title: Chief Financial Officer
- In charge of
  - Internal accounting
  - Internal operations
- E-mail address: [judy@rescue3.com](mailto:judy@rescue3.com)

[mike@rescue3.com](mailto:mike@rescue3.com)

### Jenny

- Title: Director of Sales, Marketing and Foreign Markets
- Job duties
  - Foreign Instructor Coordinator
  - Advertising
  - Publications
  - Newsletter & Website
  - Rescue 3 class schedule
- E-mail Address: [jenny@rescue3.com](mailto:jenny@rescue3.com)



### Kelly

- Title: Accounts Receivable
- In charge of
  - Handling funds from those who owe us money
  - Invoicing and collections
  - Third party billing
- Other job duties
  - Customer service
  - Order processing
  - Shipping/Receiving
- E-mail address: [kelly@rescuesource.com](mailto:kelly@rescuesource.com)



### Paula

- Title: Accounts Payable
- In charge of
  - Payment of funds to companies & individuals that we owe
  - Approving credit applications
  - Bookkeeping
- E-mail address: [paula@rescue3.com](mailto:paula@rescue3.com)



## Our newest employees:

### Amy W.

- **Class Records Coordinator**

### Dannisha

- **Rescue Source Customer Service Representative**

## Rescue Source Personnel

### Jolene

- Title: Government Contract Specialist
- In charge of
  - Government bids
  - Quotes
  - Equipment sales
- Other job duties
  - Customer service
  - Order processing
  - Shipping/Receiving
- E-mail address: jolene@rescuesource.com



### Katie

- Title: Purchasing Agent
- In charge of
  - Purchasing
- Other job duties
  - Customer service
  - Order processing
  - Shipping/Receiving
- E-mail address: katie@rescuesource.com



## Part Time Support Staff

### Amy L.

- Title: Production
- Duties
  - Produces manuals
  - Boxes training packets
  - Backup on phones



Others: Alex, Desi, Lois, Marie, and Stephanie also contribute in various ways to Rescue 3 and The Rescue Source. They work part time, part of the year or substitute when needed to help the company meet the needs of our instructors and customers.

*Continued from page 3*

Another change to both the SRT1 and SRTA skills sheets is that they will also have some additional columns. One new column lists what NFPA level each skill falls under. This will help both the student and instructor understand whether a skill is an Awareness, Operations or Technician level skill according to NFPA 1670. We now also have both NFPA 1670 and NFPA 1006 numbers referenced on the skill sheets. However, since there are sometimes multiple numbers for each skill we choose the number that most closely fit each skill. This helped us to keep the skill sheet from becoming pages long.

Also, to keep the skill sheet from being too cluttered, the columns have been rearranged. The reference columns were moved to the right hand side and the date and initial columns were moved to the left next to the skill descriptions. This should help with readability, as well as assisting both the student and instructor in keeping the paperwork neat and legible.

So far, the SRT1 manual has changed to accommodate the new skill sheets and the SRTA manual is due to be rewritten later this year. The skills that moved from the SRT1 skill sheet to the SRTA have also been moved in the manual. The only deletion from any of

the manuals has been the section on throw bagging twice in twenty seconds. The committee felt this was an unreasonable task to place on students. Everything else will be somewhere in one of the manuals.

These changes are the result of many debates and hard decisions by both the committee and the IT/IPs present at the 2003 and 2004 IT/IP meeting. While we recognize that everyone has different needs, this project was focused specifically on providing the best NFPA compliant program for water out there. We feel that we have achieved that goal. Feel free to contact Gaile or Mike at Rescue 3 Corporate Office, Phil Turnbull at [turnbull7551@hotmail.com](mailto:turnbull7551@hotmail.com), or Keith Gillespie at [gillespieclan@netzero.com](mailto:gillespieclan@netzero.com).

### Examples of Changes in the SRT1 Manual and Skill Sheet

- Moved from the SRT1 manual to SRTA
  - Line crossing
  - Pig Rig
  - Low head dam
- Added to the SRT1 manual
  - Water forces table
  - Cinch line section
- Deleted
  - Throw bagging twice in 20 seconds

## Boat Types

Inflatable watercrafts work the best and in more extreme conditions. Inflatable Rescue Boats (IRB's), commercial quality rafts, catarafts, and inflatable kayaks can all be used as a stable platform.

While a raft works extremely well, rescuers need to be reminded that standing in the boat will result in additional load on the upstream tether. Standing on a soft floor creates protrusions or berms underneath the boat resulting in added drag. Therefore, rescuers need to immediately sit and scoot around on the pontoons, keeping floor contact to a minimum. For this reason, the IRB is a good choice for this system. It offers all the benefits of an inflatable along with a rigid floor to help eliminate the added drag from standing in the boat. Rescuers can freely move about in the boat with little affect on the upstream tether.

Rigid hull (i.e.: v-hull, flat bottom) boats can work, but only in calm or very, very slow moving water. The problem with these types of crafts is that when the boat begins to yaw left or right it is at this point that you will lose control in swifter currents. The current will grab the hull and push it in the direction of the yaw. This could have disastrous effects.

## Bridging

The bridging would typically be achieved with some type of ladder (see fig 1). Lumber, logs, oars, poles or a variety of other objects / materials could also be used to bridge. With a little creativity and secure, skillful lashings you can build a bridge that will work in a pinch.

Ladders seem to work the best, as they're strong, readily available and easy to deploy. A variety of ladder types have been tested and could be used. However, ladders meeting NFPA and OSHA specifications are

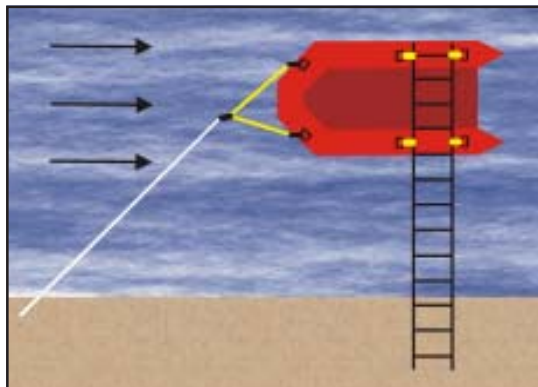


Figure 1

recommended. While ladders, are not designed to be used in this manner, they will work. It should be noted, however, that this type of use would most likely void any warranty by the manufacturer. Lumber or additional supports can be secured along the beams if necessary to add stability. The system has been tested with up to a two-section 24 ft. extension ladder and with much success. Extending your work area 24 ft. out into the current is a considerable distance. The system has also been tested with single ladders and roof ladders. Plans to test a three-section extension ladder are underway.

## Tether Lines

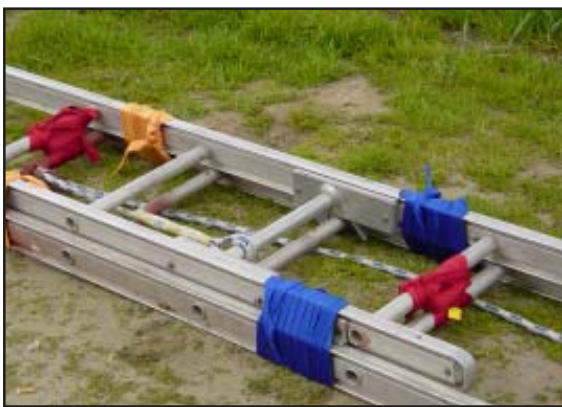


A tether line is necessary to help hold the system in place against the force of the current. Without the tether line this force would push the platform downstream. With the bridge secured at the shoreline this would create a pendulum and the platform will swing to shore. However, there is a high risk here. During the pendulum when the boat is swung sideways into the current the force could conceivably cause the boat to swamp and/or result in a loss of control of the system. In a calmer current you can probably get away with swinging the boat to shore. However, it is best advised to keep good control with the tether line to keep the bow directly into the current at all times and to pull the platform directly back to shore with the bridge.

## Rigging

The system is completely assembled on shore and then moved into position in the water.

When using an extension ladder, extend the sections all the way apart and then slide them back in 2 rungs. Begin securing the ladder with 1" tubular webbing at 6 different points. Secure 2 sets of rungs first using a round lashing with wraps and fraps. Next you will want to secure the beams at 4 different points (see illustration). The bridge is now ready to secure to the platform.



The ladder or bridge should be installed approximately two-thirds of the way back from the bow, toward the rear or stern of the boat. All weight and activity should be kept toward the rear of the boat. Attaching the bridge, in this case a ladder, to the raft or platform can be done with 1" tubular webbing, cam-straps or rope. However done, it must be completely secure. In other words, the raft and bridge must be one solid piece with no loose play between the two. The ladder can be attached several different ways or a combination thereof. Some creativity may be necessary to achieve a secure connection between the bridge and platform.



Use whatever handles or D-rings that may be available closest to the attachment point. If the boat has multiple thwarts, lay the ladder across the thwart closest to the stern and attach to the thwart.

Another method we tried on a boat with no usable attachment points was to lay the ladder across the boat with the end of the ladder overhanging about 1 foot. Using two 20 ft. pieces of webbing, we attached a piece of webbing to each overhanging beam of the ladder and ran it crisscrossed underneath the boat and attached it to the ladder beams on the other side. After the attachment was made, we slightly inflated the chambers a little more to make the attachment tighter. This seemed to work quite well.

The ideal attachment would consist of pre-installed D-rings on each side of the boat where you could lay the

ladder across the boat, between the D-rings, and secure the ladder with cam-straps or webbing to the D's.

### Deployment

After assembly of all the system components, it can be moved into position out into the water. Position two rescuers on the upstream tether and two at the end of the bridge / ladder. Move the platform straight out into the water to the desired position, keeping the bow directly into the current. As mentioned, you can move the platform into position with rescuers already in the craft or they can use the bridge once the system is in place. Two rescuers should be assigned to tend the bridge at shore to keep it secure and to be ready to immediately pull in the system if any problems develop.

Rescuers on the platform should work from midpoint to the rear of the boat (astern). It is extremely important to keep weight out of the front of the boat. The last thing you want to do is bury the bow of the boat and start swamping. This would obviously have disastrous effects. The bow must be able to plain freely above the surface. Try to keep the number of personnel in the boat at any one time to a minimum.

One rescuer with a body belay and a backup rescuer are usually sufficient to handle the tether. This will allow the flexibility of moving the system up or down stream. In some situations you may want to consider running your upstream belay line through an anchored friction devise or munter hitch.

### Disclaimer

It is the user's responsibility to use safety-tested equipment, utilize adequate safety procedures, and obtain and maintain proper training when participating in technical rescues. This system should be thoroughly practiced and tested before it is implemented in an actual rescue. It should only be used by individuals and/or organizations that have participated in professional training from recognized courses teaching rope rescue, swiftwater rescue and rescue boat handling. Wantu Enterprises or its principals are not responsible for accidents and/or injury that result from improper use of this system.

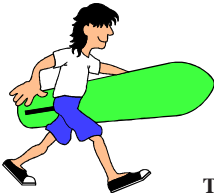


## **RESCUE 3 INTERNATIONAL**

PO BOX 519

ELK GROVE, CA 95759-0519

## **Surfin' the Web**



- ◆ The National Center for Disease Control's website is an excellent source for drowning statistics. It features an interactive map that shows the number of drowning deaths per state and county. For the map choose "Injury Map" and then "Drowning". To find other interesting information on drowning, use the "Health Topics A-Z" and look under "Water Related Injuries". Visit their website at [www.cdc.gov/scientific.htm](http://www.cdc.gov/scientific.htm).

The Rescuer provides these links for your information only and by doing such implies no endorsement of these sites, the material they contain, or the organizations they are sponsored by.

## **Calendar**

- ◆ **April 14-16, 2005:** FDIC East, Indianapolis, Indiana.
- ◆ **May 25-28, 2005:** NASAR Conference, Oakland, CA
- ◆ **May 24, 2005:** First Annual Water Rescue Summit, Oakland, CA
- ◆ **June 6-8, 2005:** FDIC West, Los Angeles, CA