

**Annual Report
For the
Charlottesville-Albemarle
Rescue Squad
Technical Rescue Team**



**Fiscal Year
1997 - 1998**

Technical Rescue can be defined as any operation involving extremely high risk for the rescuer with little probability for victim survivability. Because of the high risk involved, special training, tools, and techniques have been developed to help accomplish the rescue while minimizing the risk to the rescuers and maximizing the chance of survivability of the victim.

Five years ago, the Charlottesville-Albemarle Rescue Squad decided to develop and maintain a special rescue team strictly for the purpose of technical rescues. Other local emergency response agencies were queried for anyone who wished to participate on this new team, and these new members were added as associate-support members. An accounting of available equipment was made, a set of SOP's was written, and a request for equipment was made to the CARS Board of Directors. Since that time, the CARS Technical Rescue Team has evolved into a well equipped and trained group of rescuers who have shown their advanced capabilities time and time again rescuing victims while themselves not suffering a single reportable injury.

The one problem with having a responsibility for mitigation of technical rescue type calls is the lack of such calls. Having a technical rescue team is expensive to say the least. The lack of calls means it is difficult to justify the high cost, let alone maintaining a high degree of proficiency that is required. Technical rescue calls are rare, but when they do occur, having the capability more than pays for itself in terms of safety for the rescuers. The only way to overcome this situation is to train, and train a lot. Each year, the team has shown its cost effectiveness by increasing the total number of training hours per person. This increase in training keeps our personnel and equipment in a 100% state of readiness.

With the completion of our building collapse class held in the Fall of 1996, we are proud to say that the technical rescue team is now fully functional and prepared to handle almost any type of technical rescue situation with state of the art training and equipment. To show just how far CARS has come with our rescue capability, the following chart shows squad wide technical rescue trained personnel in 1993 in comparison to the personnel trained in 1997:

Specialty	1993		1997		% increase
	# People	% of squad	# People	% of squad	
Building Collapse	3	2.5%	24	20.0%	800%
Confined Space	7	5.8%	26	21.7%	371%
Trench	12	10.0%	28	23.3%	233%
Vertical/Rope	17	14.2%	37	30.8%	218%

This report is prepared each year to show the CARS Board of Directors what we have done and what we plan on doing. Hopefully, this report shows that the vast amount of money that has been invested in our technical rescue capability is well spent. Each class we teach not only improves our skills, but also shows us what equipment works well and what equipment we need to improve performance and decrease the time required to mitigate an incident. One thing we have learned is that time is very much of the essence. If the rescue takes a long time, it makes us all look bad and our reputation as a rescue squad suffers. We cannot afford to make mistakes to learn from, we must do it right the first time and do it fast.

MEMBERSHIP REQUIREMENTS OF THE CARS TRT

VA EMT-B certification.	120 hrs.
Rope Rescue I certification.	16 hrs.
Rope Rescue II certification.	32 hrs.
Rope Rescue III certification.	24 hrs.
Trench Collapse Rescue certification.	16 hrs.
Confined Space Rescue certification.	16 hrs.
Building Collapse Rescue certification.	24 hrs.
Fire-fighter I or Basic/Light Rescue certification.	60 hrs.
Self-contained Breathing Apparatus (SCBA) and Supplied Air Breathing Apparatus training.	8 hrs.
Integrated Incident Command training.	16 hrs.
Hazardous Materials Awareness certification	8 hrs.
Any 1 other Heavy/Tactical Rescue (HTR) certification, (i.e., vehicle extrication, cave rescue, swift water rescue, farm vehicle extrication, heavy rescue, etc.)	16 hrs.
Total Number of Certification Hours =	356 hrs.

It is felt that every member of the TRT should obtain all the above certification levels and be proficient in all aspects in technical rescue. Any team member can fill the roll of incident commander of a technical rescue incident. There is no provision for support personnel since they would only serve a limited function.

In addition to the above required certifications, team members must attend 2 of 4 yearly field training exercises (FTX's), attend team meetings which are held the second Sunday of every even month, and maintain a minimum of 36 hours of continuing education hours, (or required training hours), per fiscal year.

In order to join the CARS TRT, the following requirements must be met:

- Must have at least 2 years of emergency service experience.
- Must have current EMT-B certification.
- Must have obtained certification in at least 3 HTR modules.
- Pass a background check and be accepted into CARS membership by the CARS Board of Directors.

Once accepted into membership, a TRT member is given the following:

- A pair of coveralls.
- CARS TRT pager (if available) or reed conversion for FD pager.
- CARS TRT ID card
- CARS TRT Team Information Manual

Other personal equipment such as helmets, gloves, eye protection, etc. are provided to the team as a whole and is carried on responding apparatus. The only thing a new member need provide is protective footwear and desire to train.

MEMBER INFORMATION

New Members Added

None.

Members That Left the Team

Wayne Perry – lack of time

TRT Members That Have MRT Certification

Andrew Baxter
John Burruss
David Hartman
Ty Hoeffler
Mike Johnson
Tim Karr
Kelly Southard
William Spencer
Landon Harris
Brett Henyon
Todd Lucas
Kostas Alibertis
Clint Butts
Dana Campbell
Ben Sojka

(Master Rescue Technician is awarded to anyone who has completed all 12 required certifications.)

Current TRT Members

Alibertis, Kostas	Associate – Medical	Western Albemarle Rescue Squad
Baxter, Andrew	Associate – Support	Henrico Fire Department
Baxter, Barbi	Associate - Support	
Burruss, John	Active Life	Charlottesville Fire Department
Butts, Clint	Active	UVA Environmental Health & Safety
Campbell, Dana	Associate – Support	Albemarle County Fire & Rescue
Harris, Landon	Active Reserve Life	Chesterfield County Fire Department
Hartman, David	Associate – Support	Charlottesville Fire Department
Haugh, Dayton	Active Life	
Henyon, Brett	Active	
Hoeffler, Ty	Active	
Johnson, Mike	Associate – Support	Charlottesville Fire Department
Karr, Tim	Associate – Support	Charlottesville Fire Department
Lucas, Todd	Associate – Medical	Western Albemarle Rescue Squad
Oprandy, John	Associate – Support	Charlottesville Fire Department
Sojka, Ben	Active	Charlottesville Fire Department
Southard, Kelly	Associate – Support	Orange County Rescue Squad
Spencer, William	Active Life	
Ware, Hunter	Active Reserve Life	

ACCOMPLISHMENTS IN PAST YEAR

The following is a list of major accomplishments we have accomplished as a team in the past fiscal year.

- Held a trench rescue course for re-certification of TRT members. (FTX Winter 98)
- Held a skills drill review of equipment and procedures for team members. (FTX Fall 98)
- Held a swift water rescue training exercise. (FTX Summer 98)
- Held a confined space rescue course for re-certification of TRT personnel. (FTX Spring 98)
- Held a confined space rescue course for employees of GE Faunc.
- Held a basic & light rescue course.
- Taught a class on medical considerations of technical rescue at a national EMS symposium.
- Acquired coins for team members that have the CARS and TRT logos.
- Conducted an inventory of all TRT equipment and replaced broken/missing equipment.
- Took Support 143 & Collapse Trailer to the Winchester Fire Parade and won 1st place.
- Initiated a re-certification program for HTR classes.
- Responded to 21 calls (see section on TRT activation's).
- As a team, we acquired or re-certified 29 certifications this year.

HISTORY OF THE BUDGET

Fiscal Year	Amount & Purpose
1993 - 1994	\$3,500 for acquisition of rope equipment.
1994 - 1995	\$10,000 for acquisition of technical rescue equipment.
1995 - 1996	\$10,000 for acquisition of technical rescue equipment. 5,600 for replacement of diesel generator for Support 143
1996 - 1997	\$6,000 for building collapse class 5,000 for confined space rescue communications system 3,000 for replacement of air monitor 2,000 for acquisition of technical rescue equipment 2,000 for repair/replacement of existing equipment 1,000 for training
1997 - 1998	\$10,000 for acquisition of technical rescue equipment 2,000 for repair/replacement of existing equipment 1,000 for training
1998 – 1999	\$6,000 for a concrete building collapse course (must be repaid) 2,300 for upgrade of 2 SCBA's to SABA capability 2,000 for repair/replacement of existing equipment 1,000 for training

FUND RAISING EVENTS

Date	Organization	Event	Money Raised
9-3-94	Sam's Club	Burgers for Bucks	\$4,000
7-1-95	Sam's Club	Burgers for Bucks	4,700
7-1-95	Sprint-Centel	Burgers for Bucks	2,000
9-2-95	Sam's Club	Burgers for Bucks	2,200
3-16-96	Rotary Club	Bowl-A-Thon	14,200
6-29-96	Sam's Club	Burgers for Bucks	5,000

(Because of the problems associated with getting the money from Sam's Club, we will probably not do anymore fund raising events with them.)

GOALS FOR THE COMING YEAR

- Conduct a concrete building collapse certification class in the Fall of 1998.
- Conduct an equipment inventory and repair/replace damaged/missing equipment.
- Conduct a rope rescue I certification course for area personnel.
- Review and update all related SOP's.
- Replace all gear bag tags with an updated and heavier duty type.
- Send 3 people to the CMC building collapse and shoring school in Cincinnati.
- Conduct 4 FTX's of the following types:
 - CSR Exercise at Con-Agra with their rescue personnel
 - rope rescue exercise off of a water tower
 - building collapse exercise at UVA Bryant Hall
 - swift water rescue exercise with the CARS WRT
- Draw up plans for the replacement of Support 143.
- Bring on 5 new members on the team.
- Drop team members that have not been actively participating.
- Hold a rope rescue exercise for GE Faunc rescue team personnel.
- Develop a standard way of using fire department aerial apparatus for rope rescue incidents.
- Teach medical aspects of technical rescue at the statewide EMS symposium.
- Return to area fire/rescue organizations to refresh them on technical rescue incident first-responder

CARS TRT INDIVIDUAL TRAINING HOURS

NAME	HOURS FROM 7-1-97 to 6-30-98
John Burruss	292
Kelly Southard	258
William Spencer	176
Ty Hoeffler	136
Todd Lucas	121
Landon Harris	97
Brett Henyon	68
Benjamin Sojka	63
Dana Campbell	60
Andrew Baxter	59
Kostas Alibertis	47
Clinton Butts	47
David Hartman	43
Mike Johnson	41
Barbi Baxter	38
Dayton Haugh	29
Tim Karr	16
Hunter Ware	9
John Oprandy	3
Total Number of Training Hours =	1,614
Average Number of Hours Per Member =	85

TOTAL TRAINING HOURS PER YEAR

YEAR	TOTAL HOURS	AVG HOURS
1994	2234	90
1995	2415	101
1996	3606	157
1997	3352	167
1998	1614	85
TOTAL	13,221	120 (avg)

TECHNICAL RESCUE TEAM ACTIVATION'S

This is a list of calls the CARS TRT has been sent on with a brief description of the date, location, dispatch information & what occurred. A total of 21 calls were answered.

7-5-97* 1900 Jefferson Park Avenue, dump truck into building. Arrived and found no injuries.

7-14-97* I-64 at MM 124 car over embankment with access problem. Arrived and found everyone out of vehicle and TRT not needed.

7-14-97* Hydraulic Rd at Tom Powell Exxon, car into building. FD arrived and found minor damage.

8-24-97* UVA Hospital for patient who fell off of roof, access problem. Arrived and found interior access to roof where priority IV patient was located.

10-4-97 Ragazzis Restaurant on Rt. 29 North car into building, car entered building and narrowly missed patron. No Injuries.

10-14-97* 12th Street NW, building collapse. Arrived and found no injuries. Determined building was unstable and called for City engineers.

10-17-97* Tom Powell's Exxon on Rt. 29, car into building. No injuries on arrival.

10-29-97* 1536 Virginia Ave building collapse, roofers dropped building materials into house, striking victim. No TRT services required.

10-30-97* Rt. 29 & Airport Rd, car into building, no injuries on arrival.

11-1-97* Elsom Street for car into a building, bystanders removed patient before arrival of CARS. Patient was severely injured.

11-2-97 Lambeth Field Apts. stairway collapse, no one injured.

1-10-98* 1701 Emmet St at the Exxon station for a car into the building. Removed victims from inside the building, no injuries.

2-6-98* Rt. 29 south near Coveseville for car into a creek w/ access problem. Arrived and found no access problem, placed in-service.

2-9-98 Crozet for car into building. FD arrived and found no injuries.

3-5-98* Rt. 20 N for car over embankment, arrived and used rope to pull unhurt victim up hill.

3-18-98* Rt. 250 for car in the water, divers searched car and found nothing.

3-26-98* Chesapeake St for a drowning. Person was out of the water on arrival.

4-8-98* Rt. 643 at Rock Quarry. 25 yo male was rock climbing and fell 15' into quarry. Team was deployed and used skree evac carry to move patient to ambulance. Total time was 3 hours.

6-9-98* Rt. 29S at Covesville, MVA off road down embankment. No service required.

6-12-98* River Road at VFW, building collapse. One person was killed, 2 injured. Rescued 2 from building, recovered one body.

6-16-98* Valley Road Ext. for vehicle in water, people trapped. Arrived and found person out of car.

*TRT was activated by ECC.

TOTAL NUMBER OF CALLS PER YEAR

Year	# Calls
1993-1994	23
1994-1995	29
1995-1996	17
1996-1997	32
1997-1998	21

EQUIPMENT ADDED THIS YEAR

12' heavy-duty rescue tripod
2 - MSA SABA sets
6 - heavy-duty custom built containers for CSR gear
additional line for 2 SABA air lines to reach from 150' to 200'
1 - CSR ventilation fan
2 - 10' sections of Con-space communications wire
1 - 2" double pulley
1 - RSI Haul Safe pulley
2 - Class II Harnesses & spreader bar
1 - Paslode nail gun & extra battery
6 - rain jackets for personal packs
8 - pair Nomex gloves
1 - K-1200 saw & various blades
1 - confined space rescue stoke litter
1 - saddle vent for CSR fan
1 - manhole guard

TRAINING

- * Sent I team member to the First Due Technical Rescue Conference in Virginia Beach.
- * Provided rooms for trench class instructors.
- * Purchased a Rescue Systems I training package from the National Fire Academy.

Total Cost of Acquired Equipment =	\$9,751.50
Total Cost of Training =	924.26
 Total Budget =	 \$10,675.76

AMOUNT OF EQUIPMENT ACQUIRED PER YEAR

Year	Amount
1993-1994	3,500.00
1994-1995	12,760.64
1995-1996	28,993.22
1996-1997	14,385.02
1997-1998	10,675.76
 TOTAL	 70,314.64

(This represents the amount of money actually spent by CARS in addition to outside funds received, (i.e., Bowl-A-Thon, collapse school, etc.). Not included in the above is cost of the truck and trailer received in the 94-96 budget year.