

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



**Fiscal Year
1998 - 1999**

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

Brian Kester

Members That Left the Team

Dana Campbell – work requirement (ACFR)

John Oprandy – lack of time

TRT Members That Have MRT Certification

Kostas Alibertis

Andrew Baxter

John Burruss

David Hartman

Ty Hoeffler

Mike Johnson

Tim Karr

Kelly Southard

William Spencer

Landon Harris

Brett Henyon

Todd Lucas

Clint Butts

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
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
Kester, Brian	Associate – Support	Seminole Trail Volunteer Fire Dept.
Lucas, Todd	Associate – Medical	Western Albemarle Rescue Squad
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.

- Completed a FF-I course.
- Held a basic & light rescue course.
- Taught a class on medical considerations of technical rescue at the state EMS symposium.
- Conducted an inventory of all TRT equipment and replaced broken/missing equipment.
- Responded to 17 calls (see section on TRT activation's).
- As a team, we acquired or re-certified 23 certifications this year.
- Upgraded the remaining two SCBA airpacks to SABA capability.
- Sent 3 team members to Cincinnati for the CMC shoring class.

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	\$2,300 for upgrade of 2 SCBA's to SABA capability 2,000 for repair/replacement of existing equipment 1,000 for training
1999-2000	200,000 for replacement of tech rescue truck 650 for laser transit 300 3 sets of Ellis Clamps 420 3 new SCUBA bottles 160 medical fanny pack 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 1999.
- Conduct an equipment inventory and repair/replace damaged/missing equipment.
- Conduct a rope rescue II certification course for area personnel.
- Review and update all related SOP's to new NFPA standard for technical rescue.
- Replace all gear bag tags with an updated and heavier duty type.
- Conduct 4 FTX's of the following types:
 - CSR exercise with UVA boiler plant personnel.
 - rope rescue exercise off of a water tower
 - trench rescue exercise with City Gas Dept. personnel.
 - swift water rescue exercise with the CARS WRT
- Bring on 5 new members on the team.
- Drop team members that have not been actively participating.
- Develop a standard way of using fire department aerial apparatus for rope rescue incidents.
- Return to area fire/rescue organizations to refresh them on technical rescue incident first-responder.
- Hold a class on climbing trees/telephone poles for team personnel.

CARS TRT INDIVIDUAL TRAINING HOURS

NAME	HOURS FROM 7-1-98 to 6-30-99
Landon Harris	391
John Burruss	300
Kelly Southard	252
Ben Sojka	232
William Spencer	192
Ty Hoeffler	67
Todd Lucas	67
David Hartman	51
Mike Johnson	40
Kostas Alibertis	35
Clint Butts	27
Andrew Baxter	24
Dayton Haugh	28
Barbi Baxter	0
Brett Henyon	0
Tim Karr	0
Hunter Ware	0
Total Number of Training Hours =	1,706
Average Number of Hours Per Member =	100

TOTAL TRAINING HOURS PER YEAR

YEAR	TOTAL HOURS	AVG HOURS
1994	2,234	90
1995	2,415	101
1996	3,606	157
1997	3,352	167
1998	1,614	85
1999	1,706	100
TOTAL	14,927	117 (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 17 calls were answered. * indicates team was activated by ECC protocol.

10-13-98* Valley Road Ext. for car over the embankment. Arrived and found no access problem.

10-13-98* 310 E. Market St. for car into building. Arrived and found no damage to building.

10-18-98 Raven's Roost in National Park. Rescued heart attack victim from bottom of cliff. Used 3:1 haulback to raise patient to top and turned him over to EMS.

11-1-98* Scottsville for car into building. Ambulance crew arrived and found everyone out of vehicle and minimal damage to building.

1-7-99* Sunset Avenue at County line for car into creek. Arrived and found everyone out of vehicle.

1-7-99* Forest Lakes at 5th lake for ice rescue. Arrived and found bicycle on ice, no apparent victim.

1-8-99* Ivy Landfill for car over the embankment. Arrived and cut hole in fence for access.

1-11-99* Shamrock Road for car into house with victims trapped. Arrived and extricated two live victims from wreckage. Stabilized building until arrival of building department.

1-13-99* Rt 250 at Blue Ridge Builders for car over embankment. Call cancelled by ambulance crew.

2-6-99* Crozet for car into creek. Call cancelled by ambulance crew.

3-28-99* Huntington Road for difficult access. Used stokes and manpower to haul MVA victim $\frac{3}{4}$ mile to roadway.

5-3-99* Joint Security Complex for high-angle rescue. Used construction crane to move injured patient and attendant off of 3rd floor to ambulance.

5-3-99* Dunn Lora Subdivision for car into house. Arrived and checked for victims, none found.

5-3-99* 8th St NE for car into house. FD arrived and cancelled TRT.

6-2-99* 1000 E. Jefferson Street for difficult access. Used stokes to remove electrical shock victim inside house stairwell.

6-22-99 1700 Hydraulic Road for car into building. Arrived and found 4 injured, called engineer to check stability of building.

6-23-99* Dickerson Lane for fall with difficult access. Used stokes to remove patient.

TOTAL NUMBER OF CALLS PER YEAR

Year	# Calls
1998-1999	23
1998-1999	29
1998-1999	17
1998-1999	32
1998-1999	21
1998-1999	17

EQUIPMENT ADDED THIS YEAR

Tree climbing equipment	\$302.00
Modify 2 airpacks to SABA standard	\$1,748.30
1 SCUBA tank	\$140.00
48' 2" webbing	\$13.44
TOTAL	\$2,203.74

TRAINING

- * Sent 3 members to the CMC collapse rescue course in Cincinnati, OH.
- * Sent 2 members to the VAVRS swift water rescue class in Blacksburg, VA.
- * Sent 1 member to the Wilderness Emergency Medical Care course in PA.
- * Sent 4 members to the Lancaster County Fire Expo in Harrisburg, PA.

Total Cost of Acquired Equipment =	\$2,203.74
Total Cost of Training =	924.26
Total Budget =	\$3,128.00

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
1998-1999	3,128.00
TOTAL	73,442.64

(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.