

# NEWSLETTER

of the

## BLUE RIDGE MOUNTAIN RESCUE GROUP

A Group of the Appalachian Search and Rescue Conference, Inc.

ASRC & BRMRG 24-Hour Emergency Phone:

(804) 924-7166 (University of Virginia Police)

JANUARY, 1978

### GROUP ROSTER

At the end of this newsletter, you will find a copy of the current Group Roster. Check it for accuracy. If there is an error or omission in your name, address, or phone number, drop a line to Keith Conover (the newsletter and roster coordinator); if you do not agree with your listed status, or wish to change it, contact Brandon Deane (the Group Training Officer).

### CALLOUT ROSTER

The latest callout roster is from October, 1977; check with John Walton, the Operations Officer, if you need a copy. A new callout roster will be available in late January or early February, 1978. Until that time, make the following corrections and additions to the October callout roster:

Under "Skills", add EMT to the following people: Scott Bates, Ben Bush, Debbie Deane, Paul Dubuisson, John Griffiths, David Morrow, David Perlmutter, Will Summers, Kirk Tanner, David Tetta, Betty Thomas, Don Thomason, John Walton, and Paul Borzelleca.

Other corrections are:

Tony Clark: under Phone, add B: 924-0211

Bill Clem: under Phone, add (Page #595). Under Special Equipment add VHF-mob. and VHF-HH.

Keith Conover: under Transport, remove Car-2. Under Special Equipment add Med, 2MHH.

Burt Tarkington: Under Special Equipment, add HF-mob.

The following additions should be made:

Aylward, Susan	977-8272		
Borden, Bob	977-1862	Special Equipment:	winter
Campbell, Keith			
Chapman, Nancy	296-7985	Skills:	EMT
Groat, Jack	977-6332	Transportation:	Car-4
Hays, Chris	295-9028	Skills:	EMT Spec. Equip: Winter
Heilbronner, Fred	977-4756		
Malan, Jack			
Morrison, Dinah		Skills:	RN
Munson, Stuart	295-7355		
Pottenger, Lynn	H: 977-5118	W: 924-5062	Skills: EMT
Stone, David	973-6322	Skills:	MD
Stubbs, Chris	295-9703	Skills:	FTL; EMT; CL; CAP

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This newsletter is published monthly by the Blue Ridge Mountain Rescue Group at the University of Virginia, Charlottesville. Correspondence should be addressed to: Blue Ridge Mountain Rescue Group, ASRC; P. O. Box 440, Newcomb Hall; Charlottesville, VA 22903, or to the Appalachian Search and Rescue Conf., Inc.; 2617 Jefferson Drive; Alexandria, VA 22303.

Under "Associates" make the following changes:  
 Harry Sands: Under Phone, change the extension to 383  
 June Walton: Under Skills, add EMT  
 and add:  
 Surguine, Myssie W: 924-2241 Skills: RN

### PAST HAPPENINGS

The main thrust of training activities during the past fall was to provide instruction in all subjects required for Basic membership. The group sponsored 19 classes and training sessions since September 1, 1977, totalling 3833 manhours of training. 2703 of this was for group members; the remainder was outdoor safety education. Robby Robbins taught a Standard First Aid Course for the University, Keith Conover taught a Basic EMT class for the Group, graduating a class of 25 EMTs December 8th, and Yorke Brown, Keith Conover, and Brandon Deane gave outdoor safety education seminars at the Appalachian Outfitters store in Salem, Virginia.

### EMT TRAINING

1. Continuing education sessions for BRMRG EMTs will be held monthly; this spring, time in the ER is available to Group EMTs as well. Both will count towards EMT recertification. Details will be available at the meeting January 17th. This program is sponsored in coordination with UVA Hospital Emergency Medical Services (EMS).

2. The Group is working towards improving its emergency care capabilities; an important part of this is advanced EMT training. Currently, the Emergency Medicine Committee of the National Association for Search and Rescue is developing a Wilderness Paramedic program. Some of the Committee's work towards a course outline is reproduced in the following pages for your information.

The US Department of Transportation has recently produced a set of standards for EMT-Paramedics, and a set of modular lesson plans. Modules from the program may be taught and evaluated separately. UVA Hospital EMS will be offering a standardized course including modules I, II, III, and V of the Paramedic Program. Several EMTs from the group will probably be starting this class in March. Hopefully, we will be able to add to this another course consisting of additional Paramedic modules (e.g. VIII and IX), and additional specialized training, to result EMT-W1 capability. Pertinent information from the Paramedic program is reproduced below for comparison with the EMT-W outline. If you have any comments, suggestions, or questions, contact Keith Conover.

### THE OUTLINE

With all of that 'introduction' wot's to be taught?? The Outline that follows is set up as a series of modules designed to cover the material suggested by the many letters and guides received. Again, it is 'suggested'. It is a base from which we can develop the EMT-W program. It is NOT engraved in stone! In cases where an item is listed that is also taught in the Basic EMT program the listing does not imply that this will be the same material, but will build on the basic material and present advanced training specific to the wilderness environment. (i.e. "Chest Injury" - for this course that might also include management of the open or tension pneumothorax for extended periods of time - say 72 hours) The proposed modules:

### General Management

- Medical terminology, topography of anatomical structures, definitions
- Total review of basic body systems - encapsulating EMT-A
- W1 - Cardiac Arrest and the American Heart CPR in review
- Respiratory arrest and airway management
- Legal Aspects of emergency care and physician/hospital interfaces

- Shock management over long term management periods (16 basic types)
- Management of fatalities in the wilderness environment
- Records and reporting procedures

### Victim Evaluation

- Use of diagnostic equipment (stethoscope, BP cuff, etc.)
- Managing the unconscious patient
- Total body evaluation - Triage - Vital Signs
- W1 - The rescuer's attitude toward and management of the victim
- Data acquisition from the immediate area and from others with the victim
- Illness indicators and identification - management
- Synergism and Masking as related to long term management

### Victim Management

- Elimination of external problem factors (heat, cold, water)
- Introduction to temperature, fluid, electrolyte management
- W1 - Importance of four-stage approach: evaluate, manage, treat, evacuate
- When to expand management (i.e. reduction of dislocation if arm blue)
- Time frames - to stabilize or evacuate immediately
- Patient packaging - for the type and duration of the evacuation

### Management Techniques

- As approved by a physician and including, but not limited to, suction, reduction of tension pneumothorax, cricothyroidotomy, catheters, etc.
- W1 - Intravenous techniques and injection techniques
- Improvizations based on limited equipment

### Trauma Management

- Chest injury - internal, external
- Abdominal injury - internal, external (i.e. management of ruptured bladder)
- W1 - Head injury - including depressions, subdural hematoma, etc.
- Fractures and bone damage - including cervical and spinal injury
- Skin damage and soft tissue injury
- Long term open wound management

### System Malfunctions

- Cardiac problems - MI, CVA, etc.
- Respiratory problems - including hyperventilation, oxygen deficiency, etc.
- Abdominal Disorders - including illness as well as rupture
- Dyspnea
- Illness - preexisting or environmentally induced
- Circulatory problems
- Infection
- Muscle management - pain, cramps, etc.

## Neurological/Psychological

- Neuroses and psychoses
- Epilepsy and convulsions
- Stress management
- Pain and response to pain
- Levels of consciousness
- Hypertension

## Specific Care

- Management of victims of lightning strike
- Long term burn management
- Poisoning - food poisoning - snakebite - self-induced drug poisoning
- Chemical/Radiological management (i.e. victims of plane crash in back country where aircraft had these items on board)
- Allergy Management
- Diabetic Management
- Communicable Diseases
- Gun shot wound management

## Special Management

- Medications-Drugs-Injectibles -- administration, dosage, effects, side-effects, indicators, contraindications, legal considerations, physician approval
- Field improvisations
- Elaboration of fluid management for long-term operations
- Survival physiology
- Contents of "bash" (first in) and "support" medical packs

## SPECIAL MODULES

The above gives the outline of the general EMT-W course. The material below is to be considered as a start toward special modules of training for particular situations. Many items may be interchanged in the final outline. Remember, this is only preliminary.

### Long Term Evacuation (Over 48 Hours)

- Infection management
- Medication
- Fluid Management
- Extended Rescue Breathing
- Wound Management
- Illness
- Extended techniques for CPR
- Extended use of IV's

### Limited Access (Cave, Rock, Disaster Environment Rescue)

- Victim packaging
- Very restricted gear management (minimal emergency care gear)
- Management while moving
- Victim manipulation (cave or loading into litter on cliff)

### Water

- Immersion
- Drowning
- Hydrothermia
- Resuscitation
- Decompression

### Heat

- Dehydration
- Heat Stroke
- Syncope
- Poisonous snakes, animals
- Exhaustion
- Cramps
- Fatigue
- Solar radiation-eye burns

### Cold

- Hypothermia
- Frostbite
- Chill factors and environment
- How to manage medication and IV's in extreme cold (chill factors of -90° F.)
- Freezing
- Dehydration
- Managing the avalanche victim

### High Altitude

- Pulmonary Edema
- Cerebral Edema
- Environmental - wind - temperature
- Mountain Sickness
- Solar Radiation
- Illness
- Anoxia
- Nutrition management

### Expedition Management

- (easy, just take a doctor along!)
  - Stress-psychological and psychological
  - Wilderness skin diseases
  - Infection management - medications, etc.
  - Illness - including, but not limited to: headache, stomach ache, diarrhea, respiratory, heart and blood vessels, gastrointestinal, abdominal, urinary, nervous system, eye-ear-nose-throat, allergies.
- However, otherwise emphasis on:

### Support Training

Not directly involved in the course, but considered important for the rescuer and must be included somewhere in his training if he is to be effective:

- communications - radio, air-ground, non verbal, codes and terminology
- transportation-helicopter use, litter management, other evacuation modes
- equipment - both for the medical packs and for the individual rescuer
- map and compass - for orientation, to reach the victim and report position
- law enforcement coordination for operational permission
- preplanned means of interfact with hospitals and physicians

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Those are the modules proposed by the committee. Now, we need to see what we can do to evaluate, modify AND implement the concept and the outline.

### 3. The approach to our materials seems to be:

- a. EMT-A Training required
- b. W-1 -- an advanced course of probably 80 hours including our sections on General Management, Victim Evaluation, Victim Management, Management Techniques, and Trauma Management.
- c. W-2 -- covering known materials in the other modules (i.e. training that is currently taught for paramedics and others, but oriented toward the wilderness environment.)
- d. W-3 -- encompassing new material that needs to be developed, or is used in limited areas but might be applied to other areas. Also including the special modules.

What do you think?

Table D1.--Average Hours by Module

Module	Average hours*
I The Emergency Medical Technician	3.0
II Human Systems and Patient Assessment	10.0
III Shock and Fluid Therapy	12.0
IV General Pharmacology	9.0
V Respiratory System	27.0
VI Cardiovascular System	48.0
VII Central Nervous System	12.0
VIII Soft-Tissue Injuries	10.0
IX Musculoskeletal System	10.0
X Medical Emergencies	12.0
XI Obstetric/Gynecologic Emergencies	12.0
XII Pediatrics and Neonatal Transport	8.0
XIII Emergency Care of the Emotionally Disturbed	8.0
XIV Rescue Techniques	(local option)
XV Telemetry and Communications	4.0
Total	185.0

\*Excluding clinical experience.

The required number of hours of clinical experience must also be determined by the State or institution. Such factors as the skills to be mastered by the EMT, patient availability in the clinical areas, and the number of trips of the ambulance provider must be taken into consideration. As a general guideline, the EMT should have adequate exposure to patients in each clinical area so that he can develop skill proficiency. As mentioned previously, the number of hours required for the clinical experience ranges from 16 to 800 hours in other systems. Because of the great variation, no hours are suggested for the clinical experience.

## APPENDIX B

## COURSE GOALS BY MODULE

## Module I: The Emergency Medical Technician--His Role, Responsibilities, and Training

The role of the Emergency Medical Technician (EMT)-Paramedic in the health care delivery system is discussed. The duties and responsibilities of the EMT as well as any legislation affecting his job performance are covered. In addition, the students discuss issues concerning the EMT, including medical ethics and reaction to death and dying.

Upon completion of this module, the student should be able to:

- List three responsibilities of an EMT-Paramedic.
- Recall the laws under which he is permitted to function.
- Recall two examples of how patients and those caring for them react to death and dying.

## Module II: Human Systems and Patient Assessment

This module includes an overview of anatomy and physiology of each system of the body. The use of medical terminology and the construction of medical terms using roots, prefixes, and suffixes also are included. In addition, the modules deal with the procedure for a patient assessment, including the patient's medical history, physical examination, and transfer of collected information to the supervising physician.

Upon completion of this module, the student should be able to:

- Identify the major structures and the primary function for each of the following systems:
  - Musculoskeletal
  - Respiratory
  - Circulatory
  - Nervous
  - Digestive
  - Endocrine
  - Genitourinary
- Define common medical terms, including prefixes and suffixes in English equivalent, and vice versa.

- Demonstrate the procedure for eliciting a medical history.
- Demonstrate the procedure for conducting a physical examination.
- Demonstrate the procedure for the transfer of information to the supervising physician.

### Module III: Shock and Fluid Therapy

Included in this module is a discussion of the fluids and electrolytes in the body, with emphasis being placed on the manifestation of fluid and electrolyte imbalances. The manifestations of dehydration and overhydration are included. The module also deals with the causes, signs, and symptoms of shock, fluid administration through intravenous (IV) techniques, and the application of the Military Anti-Shock Trousers (MAST).

Upon completion of this module, the student should be able to:

- Recall the cause, signs, symptoms, and treatment of dehydration and overhydration and their imbalances.
- Recall the definition, causes, clinical manifestations, and treatment of hypovolemic, cardiogenic, or low-resistance shock.
- Recall the appropriate circumstances for use of colloid versus crystalloid solutions.
- Demonstrate on a fellow student, patient, or manikin the techniques of peripheral venipuncture using an over-the-needle catheter device, straight needle, or intracath.\*
- Calculate rates of IV fluid administration by drops-per-minute technique.
- Demonstrate aseptic technique of drawing blood.

\*Indicates optional skill. The optional skills are included because they have been demonstrated in prehospital care systems as effective in the field when performed by paramedic personnel, but these skills are not necessary to meet the criteria for an EMT-Paramedic as defined by the National Academy of Sciences/National Research Council Task Force on Emergency Medical Technicians.

- Demonstrate on an adult manikin or fellow student the application, inflation, and correct sequence of deflation of the MAST.
- Demonstrate the technique for subclavian and internal jugular intravenous insertion.\*

\*Indicates optional skill.



#### Module IV: General Pharmacology

This module is designed to introduce the student to the general groups of drugs and the classification of each. The module also discusses the kind of information the student should know about each drug; specifically, therapeutic effect, indications, contraindications, correct dosage, and side effects. In addition, the module deals with the calculation of dosages, the use of the metric system, and the administration of drugs through the various routes.

Upon completion of this module, the student should be able to:

- Define the action of an agent given the general group to which it belongs, for example, alpha sympathomimetic agent.
- List the information the EMT should know about each drug.
- State the procedure for verifying medication orders received over the radio from a physician.
- Calculate the volume of fluid to be administered given the dosage required and the concentration of the drug.
- Define the Latin prefixes and units of measurement used in the metric system.
- Convert one unit of measure to another in the metric system, for example, centimeters to meters.
- Calculate the weight in kilograms when given a weight in pounds.
- Demonstrate the technique for drawing up the designated volume of fluid in a syringe from an ampule and a vial.
- Demonstrate the technique for administering drugs using a prepackaged disposable syringe.
- Demonstrate the technique for subcutaneous and intramuscular injection on a fellow student.
- Demonstrate the techniques for the administration of drugs into an IV bottle or through an IV insertion site.

#### Module V: Respiratory System

This module begins with a discussion of the anatomy and physiology of the respiratory system and the assessment of a patient with suspected respiratory distress. Pathophysiology--including respiratory arrest, upper airway obstruction, obstructive airway diseases, toxic inhalations, pulmonary edema, hyperventilation syndrome, pulmonary embolism, and trauma--also is discussed. Techniques of management include oxygen administration, use of adjunctive equipment, direct laryngoscopy, endotracheal intubation, esophageal obturator airway, and suctioning, among others.

Upon completion of this module, the student should be able to:

- Identify each structure in the respiratory system, and list at least one function of each.
- Demonstrate the procedure for the evaluation of a patient with suspected respiratory distress, including the evaluation of hypoxia, pulse, blood pressure, and neck vein distension, inspection of the precordium, and auscultation of lung sounds.
- Recall the probable cause, signs, symptoms, and treatment of the following problems involving the respiratory system:
  - Respiratory depression and respiratory distress
  - Upper airway obstruction
  - Obstructive airway diseases
  - Toxic inhalations
  - Pulmonary edema
  - Hyperventilation syndrome
  - Trauma, including rib fractures, flail chest, traumatic pneumothorax, and hemothorax
  - Pulmonary embolism
- Demonstrate the procedure for the administration of oxygen to a breathing patient using oxygen mask, nasal cannula, and demand-valve unit.
- Demonstrate the use of oropharyngeal and nasopharyngeal airways, pocket mask, bag-valve-mask unit, and demand-valve unit on a nonbreathing patient (manikin).
- Demonstrate proper assembly, cleaning, functioning, and testing of all above equipment.
- Demonstrate the technique of aseptic and atraumatic orotracheal, endotracheal, and tracheotomy suctioning.
- Demonstrate the use of hand-powered or gas-powered nebulizer.
- Demonstrate the technique for direct laryngoscopy.
- Demonstrate the procedure for the insertion of an endotracheal tube in an adult and an infant manikin.
- Demonstrate the technique for the insertion of an esophageal obturator airway.\*
- Demonstrate the technique of cricothyroidotomy on a manikin or animal.\*
- Demonstrate the technique of transtracheal jet insufflation on a manikin or animal.\*
- Demonstrate the technique for using a positive-end expiratory pressure device.\*
- Demonstrate on a manikin or animal the procedure for relieving a tension pneumothorax using a catheter and Heimlich valve.\*

## PAGING SYSTEM

The BRMRG, in order to cut down response time and increase callout effectiveness, will be starting to use a paging system in January. Since the details implimenting such a system has engendered much heated discussion, and a paging system should be of interest to all members, some background material will be presented, followed by a brief discussion and a statement of present plans.

1. The present alerting system works as follows:
  - A. The complainant calls UVA Police
  - B. The UVA PD Dispatcher calls down an Alert Officer list until he contacts an Alert Officer (AO).
  - C. The Alert Officer calls back to the Complainant, and determines the need for a Quick Response Team (QR Team).
  - D. The Alert Officer locates a qualified Quick Response Leader (QRL) and instructs him to assemble a QR Team.
2. The ASRC has a license to operate mobile and hand-held radios on a VHF-FM (Very High Frequency - Frequency Modulation) frequency in the Special Emergency Band (155.160 MHz). West of the Mississippi, this is the Mountain Rescue Association frequency; the National Association for Search and Rescue is pushing to have it reserved as a National Search and Rescue Coordination frequency.
3. Frequencies in the Special Emergency Service were used in the past for hospital paging, and many hospitals still use these frequencies for paging, due to the cost of switching over to present paging frequencies.
4. The Federal Communications Commission (FCC) has ruled that no new paging (defined as one-way transmissions) is allowed on Special Emergency frequencies; and all hospital paging must be off in the next few years.
5. There is a docket pending with the FCC to allow volunteer organizations to use Special Emergency frequencies for paging, but passage may require years, or may never occur, according to the FCC (November, 1977 conversation).
6. The area west of longitude 78°30', passing through the corner of 14th Street and University Avenue, is in a special "quiet zone". New applications for base station licenses must be specially processed by the FCC, and approved by the Navy and National Radio Astronomy Observatory, in Green Bank, WVA. A computer simulation is used to calculate the effects of the specified frequency, antenna, location, and power on installations in WVA. Applications may be refused, or special antenna modifications may be required. The processing is quite lengthy.
7. UVA Police Department is inside the quiet zone; Towers Hospital is not.
8. If an antenna were to be placed on the Towers, the transmitter must be housed nearby.
9. A link between UVA Police and the Towers would require:
  - A. A phone line, rented from CENTEL, or
  - B. At least one more VHF-FM transceiver (2-way radio).
10. Most radios have a bandspread of about 4 to 5 MHz.
11. The Amateur Radio Service (Ham Radio) has a VHF-FM band from 146.0 - 148.0 MHz (the "2 meter" band).

12. The Civil Air Patrol has a VHF-FM set of frequencies: 148.15 MHz for Simplex communications (both radios transmitting and listening on 148.15 MHz) and 143.9 MHz for repeater use (radios transmitting on 143.9 and listening on 148.15 MHz; a repeater listens on 143.9 and automatically rebroadcasts what it hears on 148.15 MHz). Repeaters have the advantage of increasing communications range dramatically, for example, allowing 2 people with 2-watt hand-held radios to talk when the distance is sometimes up to 50 miles. Many Ham radios may be easily modified to handle these CAP frequencies, as they are on either "side" of the 2-meter Ham band; however, Ham radios cannot stretch all the way to 155.16 MHz.

13. Transmitters for commercial bands (including 155.16 MHz) must be "type-accepted" by the FCC; radios for Ham and CAP use need not be type-accepted. Type-acceptance jacks up the price; the commercial version of a \$250 Ham radio costs \$500. Receivers need not be type-accepted.

14. There is a CAP repeater on Buck's Elbow Mountain (near Afton); there is a Ham repeater (146.16 MHz input, 146.76 output) on Carter's Mountain (above Monticello); both cover the Charlottesville area well.

15. One-way transmissions on Ham bands is permitted under certain circumstances:

US Amateur Regulations, Sub-Part 'D'

97.91 One-way communication

...the following kinds of one-way communications, addressed to amateur stations, and authorized .... (a) Emergency communications, including bona-fide emergency drill practice transmissions, ....

16. The Group has the following communications capability as of January, 1978:

155.16 MHz

2 20W mobile radios (ASRC property; one issued to Bill Clem, one to Robby Robbins)

1 2½W hand-held (personal property of Bill Clem)

Ham 2-Meters

2 Basic members with 2M hand-held radios

3 Associate members with mobile and hand-held 2M radios

2 Associate members with mobile 2M radios

2 Basic members will probably be getting Ham licenses soon.

17. Ham radio transmissions must be made by a licensed Ham; anyone authorized by the ASRC may transmit on 155.16.

18. If the Ham repeater is used for paging, excellent coverage is assured; if one of our 20W mobile units is used, coverage will be very marginal unless set up as a base station with a good antenna and antenna location. 'Coverage' refers to how well, if at all, a receiver would receive the signal.

19. If 155.16 MHz were used for paging, receivers could be 'on' all of the time; if the Ham repeater were used, a special "tone squelch" would be needed so as to 'turn on' the receiver only when a tone paging signal was received. It is estimated that the group could build tone-squelch modules for about \$10; commercially installed tone-squelch for the receivers we are considering costs \$60, approximately the cost of the basic receiver.

20. Tone generators known as "touch-tone pads" are widely used by Hams, and are available for about \$30. Many Hams already have them.

21. Paging receivers may be retuned from 155.16 to Ham, and vice-versa: cost is about \$5 - 10 for a new crystal.

### SOME PROPOSED PAGING PLANS

I. System would remain basically the same, but Bill Clem's name would head the Alert Officer list; Bill is renting a pager from the phone company. A call to the phone company paging service by UVA Police would alert Bill; he would go to his car, and use the VHF-FM mobile radio there to page others on 155.16.

II. An antenna (cost \$30 - 100) would be put on the Towers, the radio that Robby has would be put there, and a phone or radio link to the UVA Police Department would be set up. UVA Police would use the radio rather than the Alert Officer list.

III. A radio would be put in the BRMRG locker in Peabody Hall; the first person to be called would go to Peabody and page the others.

IV. BRMRG Hams would head the AO list; one of these AOs would use a hand held or mobile radio and touch-tone pad to initiate the paging. If a BRMRG Ham were not available, a list of local Hams would be available to all members. Any of these Hams could send the signal upon request and proper authorization from a BRMRG member.

### COMPARISONS

Advantages/ Disadvantages	Alternatives			
	I	II	III	IV
Legality of paging	Illegal presently	Illegal presently	Illegal presently	Legal if paging signal is addressed to BRMRG Hams
Coverage	Fair to poor	Good	Fair to poor	Excellent
Associated Legal Problems	None	Must apply for new license	Must apply for new license; long application processing due to quiet zone	None
Who can transmit? (Both equipment & legal constraints)	Bill Clem	UVA Police	Any ASRC member	BRMRG Hams; other Hams if requested
Additional costs (other than pagers)	None for BRMRG; cost of paging service for Bill Clem	Antenna \$30-100 phone link \$20/month <u>or</u> Additional pair of radios \$250 to \$400	Antenna \$30-100	None
Tone squelch required?	No, but useful	No, but useful	No, but useful	Yes
Requirements	Depends on: 1) Bill Clem being in town 2) Bill being near his car 3) Bill paying for	None special	Requires someone to go to locker	Depends on: 1) a Ham being in town, 2) the repeater working

## COMPARISON CHART CONTINUED:

Advantages/ Disadvantages	Alternatives			
	I	II	III	IV
	paging service 4) Bill's car being close to the University			
Additional Pagers	None	Bill Clem's VHF Hand-held could be used as a pager	Same as II	Hand-held Ham radios could double as pagers
Field Use	Pagers could be used to monitor 155.16 in Simplex in field or while driving	Same as I	Same as I	Pagers could be used to monitor CAP & Ham repeaters in field; and to monitor CAP & Ham Simplex in field or while driving

DISCUSSION

The four paging scenarios are obviously just a few, but represent the major viewpoints expressed thus far. The most attractive one is obviously II, as far as function; however, legal and monetary constraints rule this out for the present. Legal constraints and functional considerations rule out I and III, leaving IV the only one of the four presently possible. If and when paging on 155.16 becomes legal, alternative II becomes the most attractive.

The major focus of contention has been 155.16 vs. Ham. Proponents of 155.16 pointed out that this will create a more professional 'appearance' when we talk to organizations such as the Virginia Office of Emergency Services (DES); also, that once using Ham frequencies, it will be difficult to change to 155.16. Proponents of the Ham system point out that 1) it can be implemented as soon as the pagers are ready, with no additional cost; 2) Coverage is excellent; 3) Hams in the community can serve as back-ups if no BRMRG Hams can be located; 4) Four members (two basics, two associates) will have 2-meter hand-held radios, thus effectively doubling the number of members available through the paging system; also, this provides 4 Ham Alert Officers; 5) The conversion to 155.16 of the pagers can be accomplished with ease.

After much (heated) discussion, the decision of the BRMRG Board was 1) to go with Ham paging for now, and 2) to change to 155.16 (probably proposal II) as soon as possible (ie: if and when it becomes legal).

EXPLORER SEARCH AND RESCUE

At the January 17 meeting, the Group will vote as to whether or not to accept sponsorship of an Explorer Search and Rescue (ESAR) post. A group of five prospective Explorers and an official from the local Explorer council met with Brandon Deane, Betty Thomas, and Keith Conover on December 18. Brandon and Betty have agreed to serve as Post Advisors if the Group is willing to sponsor the Post. The Explorers (about ten of them, ranging in age from 14 to 17) would attend Group meetings and training,

but would be responsible for their own organization and governance.

#### DATA COLLECTION PROJECT

Mike Silverstein is coordinating this project. The idea is to compile information regarding search and rescue-related incidents, including:

- caving accidents, searches, and rescues
- rock climbing accidents and rescues
- downed aircraft search missions
- lost person search operations

in Virginia, West Virginia, and Maryland. There are multiple purposes, including:

- establishing and documenting the SAR needs of the region
- providing an estimate of the frequency and geographic distribution of incidents
- document the type of management, and associated outcomes, for different types of incidents
- demonstrating the need for the services of the ASRC and the BRMRG
- providing case histories for use when talking with responsible agencies.

#### CAVING

Cave rescue is one of the most frequent search and rescue problems in the ASRC area. Most cave rescue here is handled through the Cave Rescue Communications Network (CRCN) of the Virginia Region (VAR) of the National Speleological Society (NSS). Calls for assistance are taken by the UVA Police; the police contact one of the CRCN dispatchers, who in turn calls cavers lining in the vicinity of the cave. There is an arrangement with CRCN whereby the BRMRG is supposed to be alerted for all CRCN missions.

In order to augment the Group's cave rescue support capability, two programs will be started. First, members of the Group who are experienced cavers will lead horizontal caving trips for those Group members who are interested; the hope is that some members will take up caving and increase the number of cavers with rescue training. Second, for those professing an active interest in caving, a series of training sessions on vertical caving technique will be offered. Later, sessions on special cave rescue techniques will be offered.

#### CIVIL AIR PATROL GROUND SEARCH AND RESCUE

The Virginia Wing, CAP Ad Hoc Committee on Ground Search and Rescue (GSAR) Committee is conducting a Ground Search and Rescue College in February. The BRMRG has agreed to provide instructors for the College. It should be noted that the Virginia GSAR Committee (on which several BRMRG members have served) is now serving as the nucleus of a National CAP GSAR Committee. Copies of Committee publications are on file in the BRMRG library.

#### NORDIC SKI PATROL

The Group is considering joining the National Ski Patrol System (NSPS). Actually, the Group as such would not join; a Blue Ridge Nordic Ski Patrol (or some such) would exist, with the same membership as the group. An official from the Nordic Division of the NSPS would spend a weekend with interested members--the weekend would include instruction and testing for

certification for Nordic Ski Partolman (or whatever it's called). All additional requirements are covered in Basic Membership in the ASRC. This gives free admission to any X-C ski areas, such as Snowshoe or Canaan Valley, possibly free rentals. The Nordic Ski Patrol handles winter search for the Ski Patrol--another way to get business. Brandon will give a complete report at the meeting 17 January.

#### MOUNTAIN RESCUE ASSOCIATION

The Group, or preferably the entire ASRC, will be joining the MRA in the near future. Membership in this national organization can't help but improve our credentials when we talk to responsible agencies.

#### EQUIPMENT

At last report, the Group has the following new equipment:

- 2 collapsable Thomas half-ring traction splints
- 1 set of extrication tools (lightweight)

Bill Clem is close to completion on two sectioned Stokes Litters he is helping to build for the Group, and Dave Perlmutter has volunteered to finish construction of a respiratory therapy pack, with oxygen, bag mask, suction, etc.

#### COMMITTEE MEETINGS

The Training and Operations Committees will be meeting 16 January; all interested members are welcome.

#### MEETING CHANGE

Due to a conflict with the Civil Air Patrol meetings, there is a strong possibility that the meeting nights will change. Please indicate your preference for meeting nights by filling out the bottom of this page and bringing it to a meeting or mailing it to the Group mailbox (see front of newsletter for BRMRG address).

#### UPCOMING TRAINING


Brandon has the following sessions in store for 1978:


- Winter Travel, overnight (scheduled)
- Winter Survival (to be scheduled)
- "Hard Core Travel" (")
- Tracking (")
- Mission Staff Training (scheduled)
- a simulated mission with the CAP (to be scheduled)
- a simulated mission with just the BRMRG (")
- a joint ASRC simulated mission with Potomac Valley Search and Rescue Group (")
- 4 Vertical Rescue sessions (")
- several horizontal caving trips (")
- some vertical caving practice sessions, above-ground (")
- Nordic Ski Patrol training/certification weekend (")

Day of Week	Monday	Tuesday	Wednesday	Thursday
Good				
Bad				
Terrible				

Name \_\_\_\_\_  
Do you plan to attend the meetings regularly? Yes \_\_\_ No \_\_\_



S	M	T	W	T	F	S
<u>SCHEDULE</u> 	<u>BLUE RIDGE MOUNTAIN RESCUE GROUP, ASRC</u> A unit of the Appalachian Search and Rescue Conference, Inc.	DECEMBER 1977 20 BRMRG MEETING 1930, Room B006 Peabody Hall	21	22	23	24
		MONTICELLO SQDRN, Civil Air Patrol Mtng. 1930 JAG School				
25 Christmas Day	26	27	28	29	30	31
JANUARY 1978 New Year's Day 1	2	3 BRMRG MEETING 1930, Room B006 Peabody Hall. MONTICELLO SQDRN MEETING 1930 JAG School.	4	5	6	7
8	9	10 MONTICELLO SQDRN MEETING, 1930, JAG School. Standard First Aid course starts 0930-1230 Tues.- Thurs. For info: Louise Ward 823-2443	11	12	13	14
15 CAP Ad Hoc Comm. on Ground SAR meeting; 1600, G-5 Univ. Gardens Call Keith at 296-2269 for info	16 BRMRG Operations Comm. meeting 1900 B-6 U. Gdns. BRMRG Training Comm. meeting 2030 G-5 U. Gdns. Both open mtngs.	17 UVA Registration BRMRG MEETING 1930, Room 4-A Newcomb Hall. Training; Caving MONTICELLO SQDRN MEETING 1930, JAG School.	18	19	(Continued on next page)	

S	M	T	W	T	F	S
<u>SCHEDULE</u> 	<u>BLUE RIDGE MOUNTAIN RESCUE GROUP, ASRC</u> A unit of the Appalachian Search and Rescue Conference, Inc.	JANUARY 1978 17 UVA registration <u>BRMRG MEETING</u> 1930 Room 4-A Newcomb Hall Training: Caving CAP Mtng 1930 JAG School	18	19	20	21 <u>BRMRG TRAINING</u> Winter Travel Saturday and Sunday (overnight) Call Brandon for details.
22 <u>(BRMRG TRAINING)</u>	23 Virginia Wing, CAP: Joint Emergency Operations Seminar, Airport Ramada Inn, Richmond.	24 CAP Meeting 1930 JAG School	25	26	27	28 ASRC Board of Directors Meeting (open) Call Yorke for time & place.
29 ASRC Mission Staff Training. 0900, Newcomb Hall; by invitation only.	30	31 <u>BRMRG TRAINING</u> (to be announced) CAP Meeting 1930 JAG School	FEBRUARY 1978 1	2	3	4 Virginia Wing, CAP Ground Search and Rescue College 1st Weekend. Waynesboro.
5(GSAR College)	6	7 <u>BRMRG MEETING</u> 1930 Room 4-A Newcomb Hall Training: Vertical Caving. CAP Meeting 1930 JAG School	8	9	10	11 tentative- Auto extrication for EMT class.
12	13	14 CAP Meeting 1930 JAG School	15	16	17	18 GSAR College 2nd Weekend. Waynesboro/Humpback Mtn.

## BLUE RIDGE MOUNTAIN RESCUE GROUP, ASRC

## Membership Roster December 1977

NAME	STATUS	NEW STATUS*	ADDRESS	PHONE
+AYLWARD, Susan	--		Rt. 1 Box 249 Keswick, VA	22947 977-8272
BATES, Scott	T: 24Jan77		312 14th St. NW #2	22903 977-3320
-BEAUCHAMP, James	--		109-A Woodrow St.	22903 296-9291
BLIZZARD, Caroline	Aux	Aux	167 Chancellor St.	22903 295-6041
-BORDEN, Bob	T: 24Jan77	(Aux)	108 Maury Ave.	22903 977-1862
+BORZELLECA, Paul	T: 24Jan77		517 Rugby Rd.	22903 296-1712
+BROWN, Yorke	B	B	Rt.1 Box 328	22901 295-7794
BUSH, Ben	T: 1Mar77	T	1855 Winston Rd.	22903 295-0038
+CAMPBELL, Keith	--		709 Glenmore Dr., Salem, VA	24153 (703)-389-6691
CHAPMAN, Nancy	--		1411 Virginia Ave.	22903 296-7985
CHASSEN, Susan	Aux	Aux		296-3511
CLARK, Tony	T: 24Jan77	(Aux)	Rt.2 Box 370-A	22901 823-5496
CLEM, Bill	B	(Aux)	P.O. Box 3063	22903 977-4610
+CONOVER, Keith	B	B	G-5 University Gardens	22903 296-2269
-CRAIG, Carol	B	(Moved)		
+DEANE, Brandon	B	B	2306 Price Ave.	22903 295-4364
+DEANE, Debbie	--		2306 Price Ave.	22903 295-4364
DIFAZIO, Cosmo	A	A	2513 Hillwood Pl.	22901 973-5923
DOTSON, Reyd	Aux	Aux		296-3511
+DUBUISSON, Paul	T: 24Jan77		583 Brandon Ave. #501-B	22903 924-6741
FOGELS, Ed	T: 24Jan77	(Aux)	108 Maury Ave.	22903 977-1862
FRANKS, Biff	A	A	272 Colonnade Dr. #12	22901 977-6103
FRANKS, Paula	A	A	272 Colonnade Dr. #12	22901 977-6103
+GORE, Randy	--		110 Emmet, Sta. 1	22904 295-8188
GRIFFITHS, John	T: 24Jan77		749-B Mountainwood Rd.	22901 295-0722
-GROAT, Jack	T: 24Jan77		108 Ivy Dr. #9	22901 977-6332
HAYS, Chris	T: 24Jan77		119 Stratford Ct.	22903 295-9028
-HELLBRONNER, Fred	T: 24Jan77	(Aux)	109 Shamrock Rd.	22903 977-4756
MALAN, Jack	--		1800 JPA #6	22903
+McCABE, George	--		344 Dungleison, Sta. 2	22905 977-4916
-MORRISON, Dinah	--			(703)-456-2471
MORROW, David	--		334 Watson, Sta. 2	22905 977-5846
-MUNSON, Stuart	T: 24Jan77	(Aux)	1830 Carr's Hill Rd.	22903 295-7355
-PARKHURST, Donald	--		517 Rugby Rd.	22903 295-8473

(continues)

(All addresses are Charlottesville, VA unless otherwise noted.)

20  
-2-  
BRMRG ROSTER December 1977

NAME	STATUS	NEW STATUS*	ADDRESS	PHONE
+PERLMUTTER, David	--		16 Lefevre Sta. 1	22904 295-8003
-PHILLIPS, Dan	--		218 Emmet Sta. 1	22904 295-8297
+POTTENGER, Lynn	--		108 Thomas Dr.	22903 977-5118
QUEITZSCH, Bill	T: 24Jan77	(Aux)	108 Maury Ave.	22903 977-1862
QUEITZSCH, Chip	B	(Aux)	2015 Lewis Mtn. Rd.	22903 295-9703
+ROBBINS, Robby	B	B	408 Venable La.	22903 295-9243
SANDS, Harry	A	A	2118 Angus Rd. #6	22901 977-1065
-SHOUP, Carl	--		106 Echols Sta. #1	22904 295-8309
+SILVERSTEIN, Mike	--		718-B Madison Ave.	22903 296-2852
STONE, Dr. David	--		2511 Hillwood Pl.	22903 973-6322
STUBBS, Chris	B	(Aux)	2015 Lewis Mtn..Rd.	22903 295-9703
-SUMMERS, Will	T: 24Jan77	(Aux)		823-2255
SURGUINE, Myssie	--		1302 Preston Ave # 11B	22903
TANNER, Kirk	--		741-E Mountainwood Rd.	22901 977-4405
TARKINGTON, Burt	--		219 Barnsdale Rd.	22901 973-3371
+TETTA, David	--		431 Watson Sta. 2	22905 977-5714
+THOMAS, Betty	B	B	G-5 University Gardens	22903 296-2269
+THOMASON, Don	T: 24Jan77		583 Brandon Ave #501	22903 924-6741
-WAGNER, Steve	T: 24Jan77	(Aux)		823-4091
+WALTON, John	--		B-6 University Gardens	22903 296-8030
+WALTON, June	Aux	Aux	B-6 University Gardens	22903 296-8030

\* NEW STATUS for 1978

NOTES

1. The Training Guide of the Appalachian Search and Rescue Conference requires of each certified member a minimum of 32 hours of training with his Group, of which 8 hours must be search, and 8 hours must be mountain rescue. The BRMRG has decided to make attendance at one search session and one semi-technical evacuation session per year required for active members (except for Associate and Auxiliary members). Members and prospective members who have met this requirement for 1977 have a "+" by their names; the membership status of those who do not will change to Auxiliary unless arrangements are made with the Training Officer. Those with a "-" next to their names are considered inactive and will be dropped from the next callout roster unless special arrangements are made with the Training Officer.
2. Under STATUS, -- = not a Group member; Aux = Auxiliary member; A = Associate member; T = Trainee member; B = Basic member. The date by Trainee members refers to the official date of Trainee status; Trainees have one year from that date in which to become a Basic member, or their status changes to Auxiliary or Associate. Extensions may be granted by the Training Officer. Those not yet formally voted into the Group should consult the Trng. Ofcr.
3. Please note any corrections or additions and send them to Keith Conover.