

JUNE 1983
~~October 1982~~

I. Survival and Wilderness Travel

1. Which of the following is least likely to be a cause of outdoor death in the eastern US?
 - a. inadequate wind and rain protection
 - b. bad judgement in making the decision to continue a climb or hike instead of turning back in the face of worsening weather
 - c. cotton blue jeans
 - d. inadequate supplies of survival food

2. Munchies for on the trail should:
 - a. have lots of sugar and starch (carbohydrates) to provide quick energy.
 - b. have only a little fat to avoid difficulty in digestion.
 - c. both a and b are true

3. It is a clear, still night and you must bivouac out with just your daypack. All other things being equal, will you sleep warmer out in the open field or under the edge of the trees?
 - a. You'll be warmer in the open away from the cooling effect of evaporation from the trees.
 - b. You'll be warmer with the trees above you to block radiation heat loss.
 - c. It doesn't make a bit of difference.

4. Alcohol taken orally causes vasodilation (increased blood flow) to the skin, causing a feeling of a warm flush, but thereby increases heat loss and predisposes to hypothermia.
 - a. true
 - b. false

5. Lithium and nickel-cadmium dry cell batteries are far superior to carbon-zinc dry cell batteries in their performance in the cold.
 - a. true
 - b. false

6. As you are driving to a mission, you hear that a cold front is approaching from the west. You go out in the field expecting:
 - a. a long period of lowering cloud cover associated with steady rain and then gradual clearing.
 - b. sudden storms and heavy winds followed by clearing and possibly some strong winds.
 - c. Santa Claus, and maybe a few reindeer.

7. Any bite by a wild mammal (e.g. raccoon) needs to be treated by a doctor because of the danger(s) of:
 - a. infection at the wound site.
 - b. tetanus.
 - c. rabies.
 - d. all of the above are true

8. The major treatment for vomiting and diarrhea in the field (better in the field than in the tent) is fluid replacement.
 - a. true
 - b. false

9. Rapid rewarming of a person who has been hypothermic for a long period may cause sudden death of the person.
 - a. true
 - b. false
 - c. true, but very rarely

10. You are out with some of your friends on a late fall hike and you notice that one of your friends is withdrawing from the conversation, lagging behind, and has dropped his water bottle without knowing it. Although he isn't shivering when your group stops for a rest, you suspect that all the partying he did the night before the hike might have made him a little susceptible to hypothermia, so you:
 - a. put some extra warm dry clothes on him.
 - b. cajole him into eating some candy for energy.
 - c. persuade him to drink some water or Gatorade because he might be a bit dehydrated which also predisposes to hypothermia.
 - d. slow down the pace and pick a closer campsite than planned.
 - e. you should do all of the above

11. Heat exhaustion is characterized by pale skin, rapid pulse, and sometimes nausea. It is a more-or-less normal response to overexertion in a hot environment, and can be cured by elevating the feet, rest in the shade, and Gatorade or a similar fluid to drink, in the vast majority of cases.
 - a. true
 - b. false

12. The extreme pain of blood under pressure under a fingernail after a crush injury (=a subungual hematoma) may be greatly relieved (and should be) by drilling or burning a hole through the fingernail to let the blood out.
 - a. true
 - b. false

13. Minor wounds in the field may be adequately treated on a temporary basis by applying iodine tincture or merthiolate into and around the wound and applying a sterile dressing.
 - a. true
 - b. false

14. Proper treatment for a badly sprained ankle in the field include
 - a. elevation.
 - b. ice or cold packs for 24 hours (but avoiding frostbite).
 - c. an elastic bandage around the ankle (taking care to not impair circulation.
 - d. aspirin to reduce pain and swelling.
 - e. all of the above are appropriate

II. Land Navigation

1-10: Identify and describe the features circled on Figure 1:

<u>Question</u>	<u>Grid Coordinates</u>	<u>Feature (Be Specific)</u>
1.	C0804	_____
2.	C0028	_____
3. (WATER FEATURE)	C3507	_____
4. (WATER FEATURE)	C4007	_____
5. (ALSO AT C0158)	C0251	_____
6. (RED DASHED LINE)	C0348	_____
7.	C0540	_____
8. (MARKS IN RIVER )	C0847	_____
9.	C3912	_____
10.	C2035	_____

For questions 11-15, refer to Figure 2, which is a reduction of a 7.5 minute series 1:24000 topographic map with just the black and blue overprint, and Figure 3, which is a portion of a Virginia Aeronautical Chart.

11. What is the magnitude and direction of the magnetic declination on Figure 2 (as of 1972)?
12. What is the next 7.5 minute quad SE of the one shown in Fig. 2?
13. You are at South River Picnic Area (bottom right of Fig. 2). What is your latitude and longitude, to the nearest minute?

Latitude

Longitude
14. What UMS grid is South River Picnic Area found in?
15. What is the magnetic bearing off the Montebello VOR to the South River Picnic Area? (TO THE NEAREST 5 DEGREES)

Off the Gordonsville VOR? (TO THE NEAREST 5 DEGREES)
16. It's lunchtime. You're facing into the sun, which means you're basically facing _____ (compass direction) and your shadow points:

C1423

17. You are at ~~(4523)~~ on Figure 1, and you receive a message to proceed to C1707 to meet with Team Foxtrot which just made a find. Plot on the map a good route to ensure you find Team Foxtrot with as little difficulty as possible. If you use any of the following, mark the corresponding letters on the map next to where you used it.

- A. Coarse Orienteering
- B. Fine Orienteering
- C. Catching Features
- D. Aiming Off
- E. ATTACK POINT(S)

18. You are standing at Edinburg Gap (Fig. 1). What is the true bearing to the stream intersection at C2714? The magnetic bearing?

True Bearing:

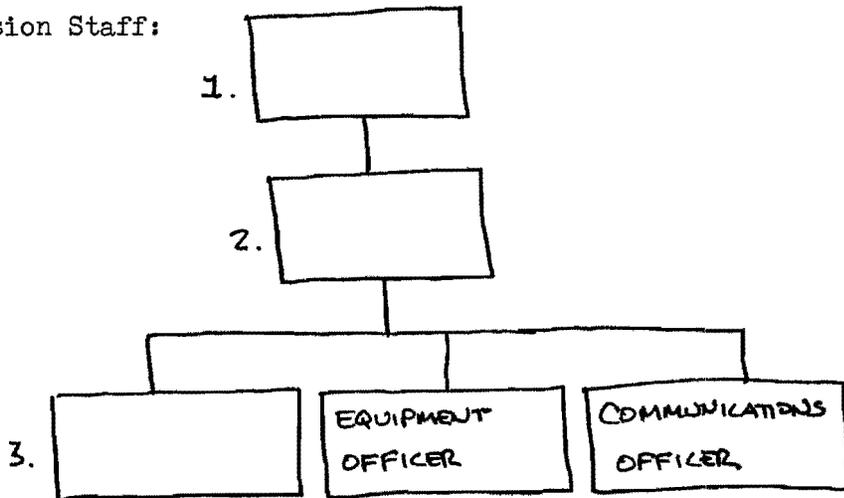
Magnetic Bearing

19. You find yourself somewhere along the ridge of Powell Mtn. You can see the gravel pit outside Edinburg at about 290° magnetic. What is your approximate location in ASRC grid coordinates?

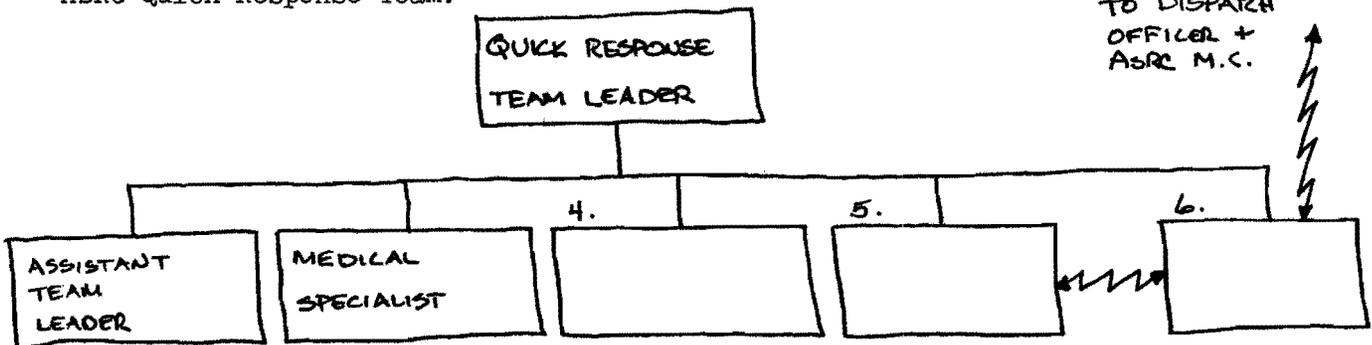
III. Search

1-6: fill in the name of the position; do not use abbreviations.

ASRC Mission Staff:



ASRC Quick Response Team:



JAGGED LINES ARE COMMUNICATIONS LINKS.

7. _____ flag(s) are used to mark temporary line search boundaries, and _____ flag(s) are used to mark clues.
8. To help preserve night vision, one may place a _____ (color) filter over one's headlight.
9. Most enlightened searchers would agree that scratch and wide-spaced line searching are more efficient use of searcher-hours than close-spaced for finding a responsive victim. Is wide-spaced line search also more efficient than close-spaced in finding clues randomly distributed throughout an area? Efficiency in this case means clues found per searcher-hour of search time, not including transportation or organization time for the teams.
10. The ASRC defines two types of line search, grid and contour. Which is more appropriate for flat terrain, and which for hilly or mountainous terrain?
- Flat:
- Hilly or mountainous:
11. Refer to Figure 2. You are the ASRC MC for a mission where you are assisting the CAP MC by running a night ELT search on a wintry night. You are sitting in Gene's van freezing your _____ (s) off, and the following fixes come in over the radio:
- | <u>Tm. location</u> | <u>True bearing</u> |
|--|---------------------|
| ALFA: South River Picnic Area | 347° |
| CHARLIE: US 340 1 mile N of
US 33 (just N of Elkton) | 45° |
| FOXTROT: Comertown (jct. 602 &
603 near town of Shenandoah) | 120° |
- If these are accurate, where is the crash site?
12. When may you approach a helicopter which still has its rotors turning?
13. In general, who is in charge of a lost person search within a National Forest in Virginia?
14. The USAF ARRS RCC at Scott AFB has responsibility and authority for all inland downed aircraft search in the US. True or false?

15. In Virginia, you are protected from (^{CIRCLE ONE} civil, criminal, or both?) prosecution by the Good Samaritan Law if the following two conditions hold:

1. aid is given in good faith

2. (Fill in)

16-18: In approximately one sentence, describe or define the following legal concepts:

16. Standard of Care:

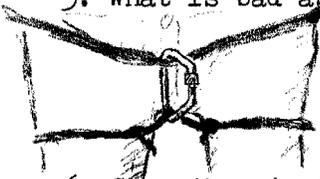
17. Abandonment:

18. Implied Consent:

IV. Mountain Rescue

1. Why should one not use a single locking carabiner clipped into a nylon seat sling for a carabiner wrap rappel?
2. Describe the primary uses of "static" and "dynamic" ropes and give a brand name example of each.
3. What advantage, important in mountain rescue work, does a laid rope have over a braided kernmantel rope?
4. What general class of chemicals is most damaging to nylon ropes?

5. What is bad about the illustrated method of a seat harness tie-in? (WILL NOT BE GRADED)



6. Give the standard ASRC commands for non-technical evacs:

litter captain wants two more bearers to take over on the litter:

two new bearers have ahold of litter; front bearers may peel off:

back litter bearers may peel off and proceed to front of litter in preparation to ladder the litter:

lift up the litter:

7. Why do we not ever run patient tie-ins around the outer litter rail?
8. In the space below, sketch how you would set up a brute force hauling system. Pretend that the paper is a hillside and draw in some trees for anchors. Label appropriately.

NOTES - ① ORIGINAL MAPS WILL BE AVAILABLE AT THE PRACTICAL TEST;
YOU ARE FREE TO CONSULT YOUR OWN ORIGINAL QUOTE IF
YOU HAVE ONE.

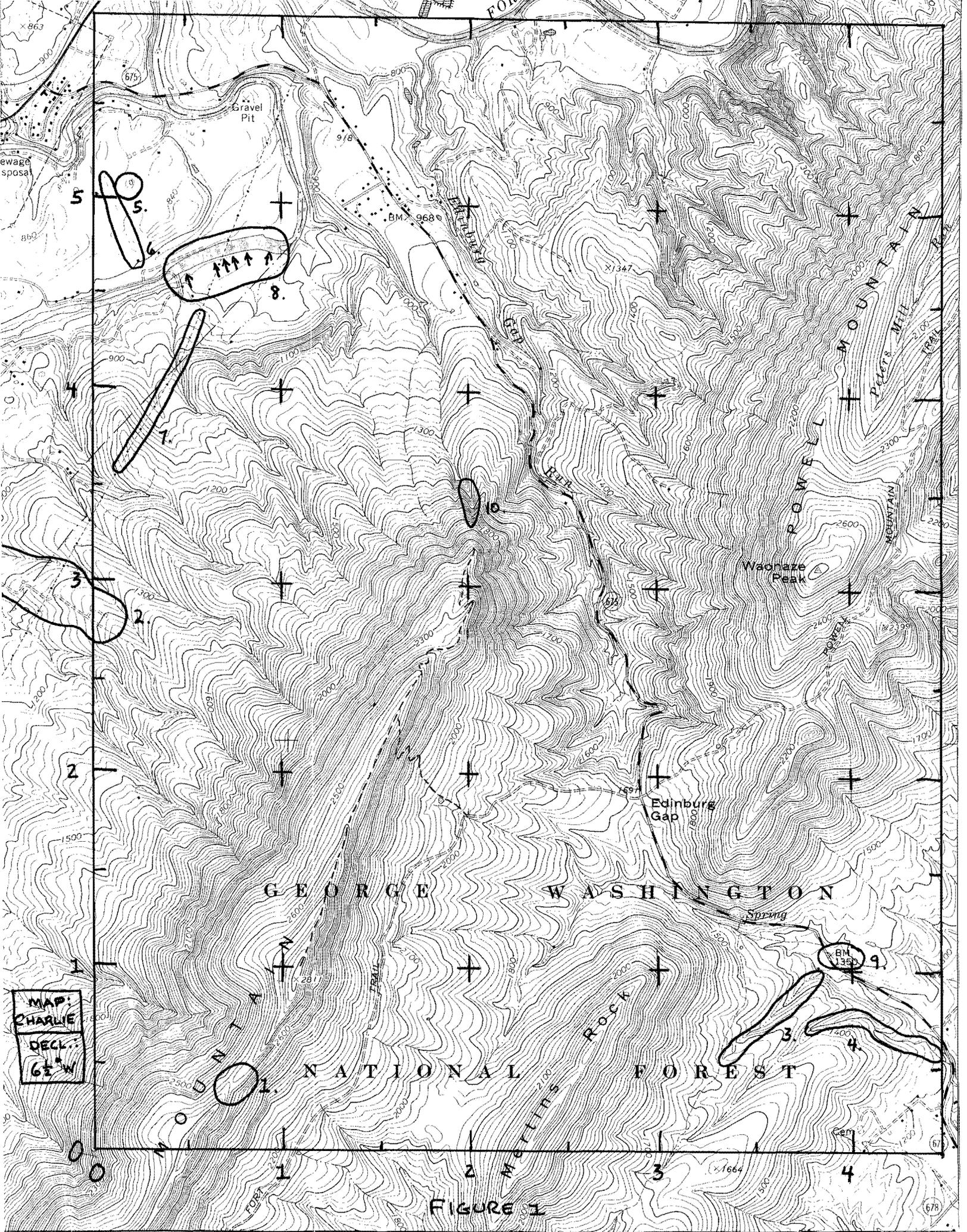
② NO TIME LIMIT

③ YOU MAY USE A PROTRACTOR + RULER

④ FEEL FREE TO QUALIFY YOUR ANSWERS WITH WRITE-IN
COMMENTS.

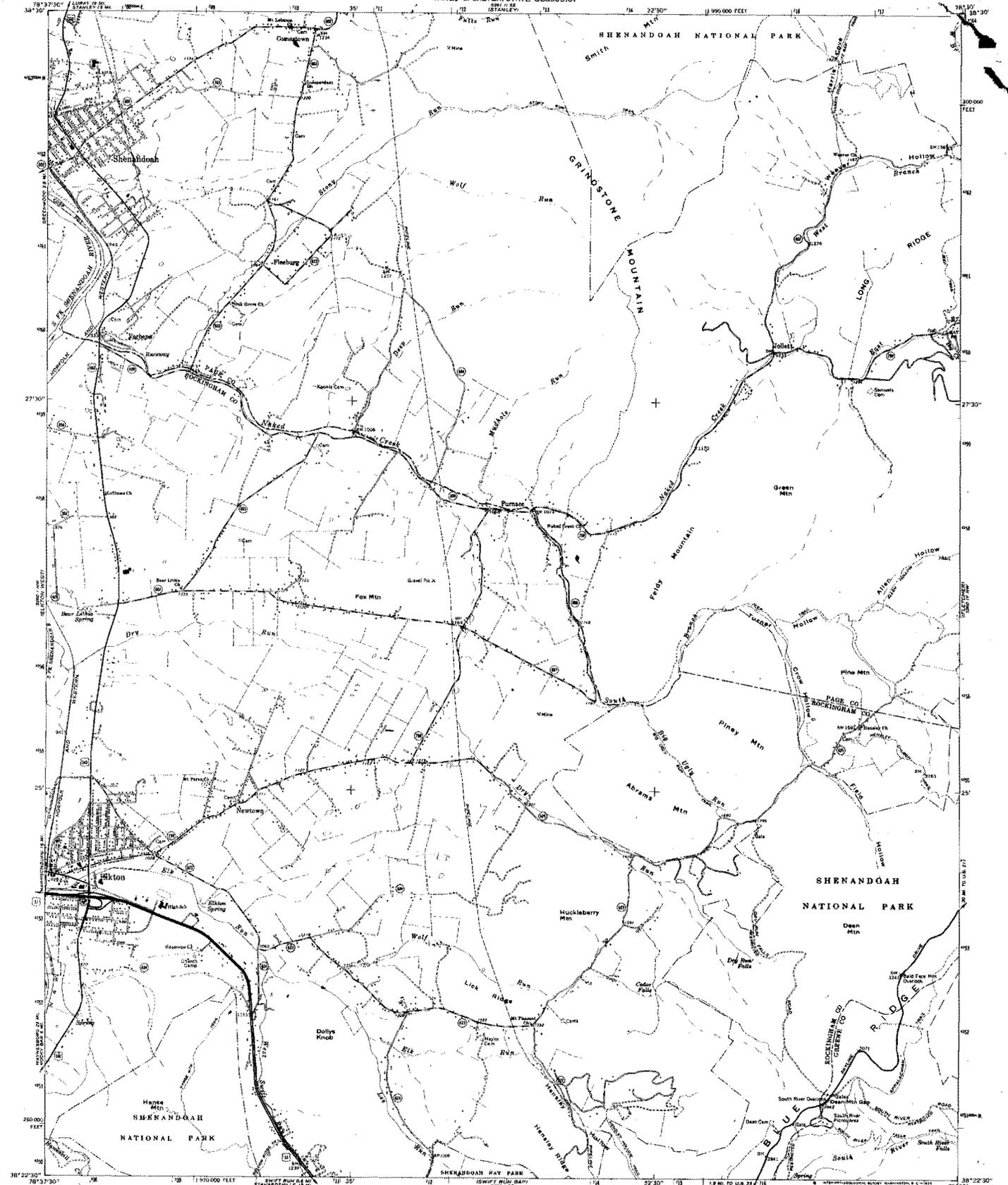
ON MY HONOR, I HAVE NEITHER GIVEN NOR RECEIVED AID
OF THIS EXAM.

(SIGN)

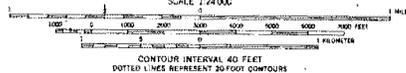


MAP: CHARLIE
DECK: 6 1/2 W

FIGURE 1



Mapped, edited, and published by the Geological Survey
Control by USGS and USDAOs
Topography by photogrammetric methods from aerial
photographs taken 1963. Field checked 1965
Geographic projection, 1927 North American datum
10,000-foot grid based on Virginia coordinate system, north zone
1000-meter Universal Transverse Mercator grid files,
zone 17, shown in blue
Fine red dashed lines indicate selected fence and field lines where
generally visible on aerial photographs. This information is unchecked
Revisions shown in purple compiled in cooperation with
Commonwealth of Virginia agencies from aerial photographs
taken 1972. This information not field checked



ROAD CLASSIFICATION
Heavy-duty ——— Light-duty - - - - -
Medium-duty ——— Unimproved dirt
U.S. Route ○ State Route ○

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY, WASHINGTON, D.C. 20542
AND VIRGINIA DIVISION OF MINERAL RESOURCES, CHARLOTTESVILLE, VIRGINIA 22903
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

ELKTON EAST, VA.
N3822.5-W7830.7.5
1965
PHOTOENHANCED 1972
AND 5301 17E-5325EN 1984

FIGURE 2
1

PLEASE ALSO
ADD P. 44 OF
MODULE II AS
THE 3RD MAP ~~FOR~~
FOR THIS TEST.

THANKS.