

VIRGINIA WING, CIVIL AIR PATROL
AD HOC COMMITTEE ON GROUND SEARCH AND RESCUE

LEVEL II TEST

INSTRUCTIONS

1. Do not write in this booklet.
2. Record your answers on the answer sheet provided. Put your name and the number of the test on the answer sheet.
3. This is a closed-book test based on the current standards and references in the Virginia Wing Ground Search and Rescue Program. Please do not discuss details of the test.
4. The test consists of 90 multiple choice questions on 13 pages. Please check before you start to make sure you have a complete test. For each question, one and only one answer is considered correct. If you are in doubt as to the correct answer, eliminate those that are obviously false, and choose the best answer from the remaining ones.
5. This is not a timed test; however, you should be able to finish within one hour.

THIS TEST IS NOT TO BE DUPLICATED BELOW THE WING LEVEL.

See the Virginia Wing Ground Search and Rescue Program for information concerning the administration of this test.

1. In figure 1, the missing title is:
 - a. Water Operations.
 - b. Communications.
 - c. Legal.
 - d. Information.

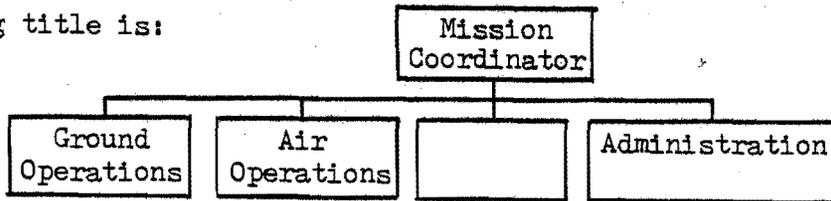


fig. 1

2. Which of the following is not part of the duties of the Ground Operations Staff?
 - a. assessment of ground search and rescue (GSAR) resources
 - b. assignment of teams to individual tasks
 - c. determination of ground search strategy
 - d. checking out and briefing teams prior to departure
3. Which of the following is not a reason for restricting Level I members from participation in "field" SAR activities (that is, away from roads and civilization)?
 - a. the personal safety of Level I members
 - b. the possibility of a lost Level I member requiring the diversion of resources into an additional search mission
 - c. the state Good Samaritan Law
 - d. the dangers posed to victims and team-mates by team members with insufficient training and experience
4. Since the National Search and Rescue Plan assigns responsibility for all inland SAR to the Air Force, and since the CAP works at the direction of the Air Force, a CAP Mission Coordinator has authority over and above a county Sheriff in the handling of events at a plane crash site.
 - a. True
 - b. False
5. In a National Park, the Park Superintendent has authority for SAR missions; in a National Forest, this authority rests with:
 - a. the Forest Supervisor.
 - b. the U.S. Air Force.
 - c. the U.S. Department of Agriculture.
 - d. the appropriate county Sheriff.
6. For this question, choose the appropriate answer to fill in the blank in figure 2.
 - a. USAF--ARRS
 - b. county Sheriff.
 - c. State Governor
 - d. U.S. Air Force Reserve Region

TYPE OF MISSION	AGENCY AUTHORIZING C.A.P. INVOLVEMENT
REDCAP (Search and Rescue Mission) SARCAP (practice mission) natural disaster relief	Aerospace Rescue and Recovery Service (ARRS) Wing Headquarters _____

fig. 2

7. The most likely task for a ground team during a natural disaster mission is:
 - a. lost person search.
 - b. damage assessment.
 - c. interrogation.
 - d. containment.

8. Which of the following is forbidden to CAP ground teams?
 - a. entry upon private property
 - b. assistance to law enforcement agencies in the apprehension of a criminal
 - c. administration of first aid and movement of injured victims at a crash site without authorization from the county Coroner
 - d. use of air-to-ground signals, except in an extreme emergency

9. CAP Ground Search and Rescue teams and personnel may provide emergency services at fairs, races, etc.
 - a. True
 - b. False

10. The Virginia Good Samaritan Law provides that all persons rendering first aid are immune from civil prosecution:
 - a. under all conditions.
 - b. if the person rendering aid is an EMT, RN, or MD.
 - c. if the first aid is given in good faith.
 - d. if the first aid is given in good faith, and without compensation (except for the salaries of public service workers.)

11. What is the proper order of nuclear blast effects?
 - a. blast, shock, thermal
 - b. thermal, blast, shock
 - c. shock, blast, thermal
 - d. none of the above

12. What are the three basic principles for protection from radiation?
 - a. concrete, earth, lead
 - b. distance, concrete, lead
 - c. shielding, distance, time
 - d. time, distance, depth

13. For question 13, select the proper answer to fill in the blank in figure 3.
 - a. Electrical
 - b. Phosphorus
 - c. Flammable Gases
 - d. Flammable Powders

THE CLASSES OF FIRE

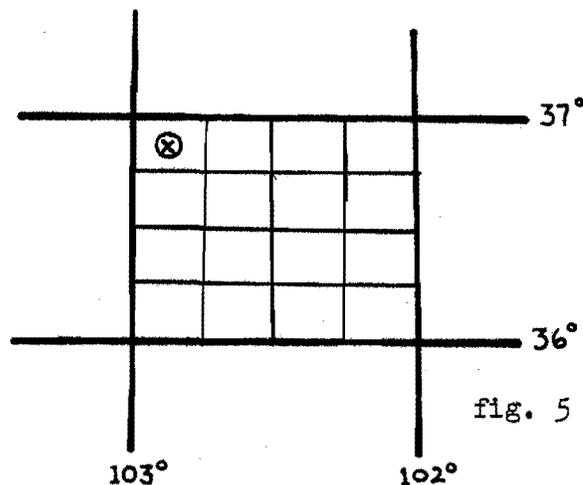
Letter	Type of fire	Example
A	Ordinary Combustibles	wood, paper
B	Flammable Liquids	gasoline
C		
D	Metals	magnesium

fig. 3

14. If you are fighting a fire with a fire extinguisher, you should aim:
- into the smoke.
 - at the sides of the fire container.
 - at the base of the fire.
 - none of the above.
15. The classes of fire extinguishers are:
- A,B,C,D.
 - A,B,C.
 - 1,2,3,4.
 - 1,2,3.
16. Most aircraft have the following major fire hazards:
- alcohol, gas, hydraulic fluid.
 - fuel, hydraulic fluid, upholstery.
 - fuel, battery, upholstery.
 - fuel, oil, battery, hydraulic fluid, upholstery.
17. For this question, choose the answer that puts the following stages of the extrication process in the proper chronological order.
- Gain access
 - Control hazards
 - Administer emergency care
 - Disentanglement
- 1,2,3,4
 - 2,1,3,4
 - 1,3,4,2
 - none of the above
18. The panel signal shown (fig. 4) means:
- all well.
 - indicate direction I am to proceed.
 - need medical supplies.
 - need medical aid.
- The image shows two vertical black bars of equal height and width, positioned side-by-side. This is a standard aviation panel signal for 'need medical aid'.
- fig. 4
19. Radio batteries are _____ efficient in colder weather.
- more
 - less
20. If a helicopter is to be used for evacuation:
- it is preferable to use a hoist.
 - it is preferable to have the helicopter land and load the victim(s) on the ground.
 - both of the above are of equal preference.
21. When a sling hoist is to be used: (from a helicopter)
- it must be stabilized by the use of a rope.
 - it must be allowed to touch the ground before use.
 - it must be grabbed before it touches ground.
22. In general, one should approach a helicopter:
- from behind.
 - from 90° to either side.
 - from within 45° of the front.

23. All of the following should be avoided when selecting and preparing a helispot except:
- an approach or take-off with a headwind.
 - power lines.
 - tall trees next to the helispot.
 - an approach or take-off with a tailwind.
24. You can live _____ without air, _____ without shelter (in strenuous conditions), _____ without food, and _____ without water.
- 3 minutes, 3 hours, 3 weeks, 3 days
 - 3 minutes, 3 days, 3 weeks, 3 hours
 - 3 hours, 3 minutes, 3 hours, 3 weeks
 - 3 minutes, 3 days, 3 days, 3 days
25. Incomplete combustion in a confined area can result in poisonous, deadly:
- nitrogen.
 - methane.
 - soot.
 - carbon monoxide.
26. Fatigue is a buildup of waste products; energy level refers to the amount of energy available for work. The two are related but not the same.
- True
 - False
27. In a hot environment, you should ration your water, not your sweat.
- True
 - False
28. Hypothermia is a cooling of the body core.
- True
 - False
29. Rubbing snow on frostbite is the best treatment.
- True
 - False
30. Dehydration can be a severe problem in winter, due to the low absolute humidity of the air.
- True
 - False
31. Dizziness, weakness, tunnel vision, and dark urine indicate:
- frostbite.
 - heatstroke.
 - dehydration.
 - diabetic coma.
32. Of the following, the most serious is:
- heatstroke.
 - heat exhaustion.
 - dehydration.
 - heat cramps.

33. The "Three Ws", the three highest clothing priorities for cold-weather protection from the environmental stresses of wind and wetness, include all of the following except:
- a. Wool.
 - b. Well-ventilated.
 - c. Windproof.
 - d. Waterproof.
34. Which of the following is not a correct statement of a winter danger?
- a. Alcohol: predisposes the body to hypothermia.
 - b. Tobacco: predisposes the body to frostbite.
 - c. Aspirin: predisposes the body to hypothermia.
 - d. Carbon Monoxide: predisposes the body to frostbite.
35. Hypothermia, and a condition like frostbite known as "trench foot" or "immersion foot", may both occur at temperatures well above freezing. (e.g. 5°C)
- a. True
 - b. False
36. Heatstroke is characterized by:
- a. dry, pale skin; fast pulse; and restlessness.
 - b. hot, dry skin, often red; and high body temperature.
 - c. fast breathing and pulse; and sweating.
37. Which of the following is not an important principle in dressing for outdoor work in cold weather?
- a. dress in layers
 - b. ventilate and keep from overheating
 - c. in general, wear wool instead of cotton
 - d. always wear a waterproof outer shell
38. Modern goose down sleeping bags do not require additional insulation under them at night.
- a. True
 - b. False
39. Alkaline batteries perform better in cold than regular carbon-zinc type batteries.
- a. True
 - b. False
40. Refer to figure 5. The proper location for ⊗ according to the Standardized Latitude--Longitude Grid System is:
- a. 37/103 DD
 - b. 103/36 AA
 - c. 36/102 DD
 - d. 36/102 AA



FOR QUESTIONS 41-44, REFER TO FIGURE 6. PICK THE LETTER OF THE PROPER DESCRIPTION WITH THE NUMBER OF THE SYMBOL IN FIGURE 6.

41. _____

- a. fair-weather (dirt) road
- b. trail
- c. perennial stream
- d. intermittent stream

42. _____

- a. church
- b. churchyard
- c. cemetery
- d. parking lot

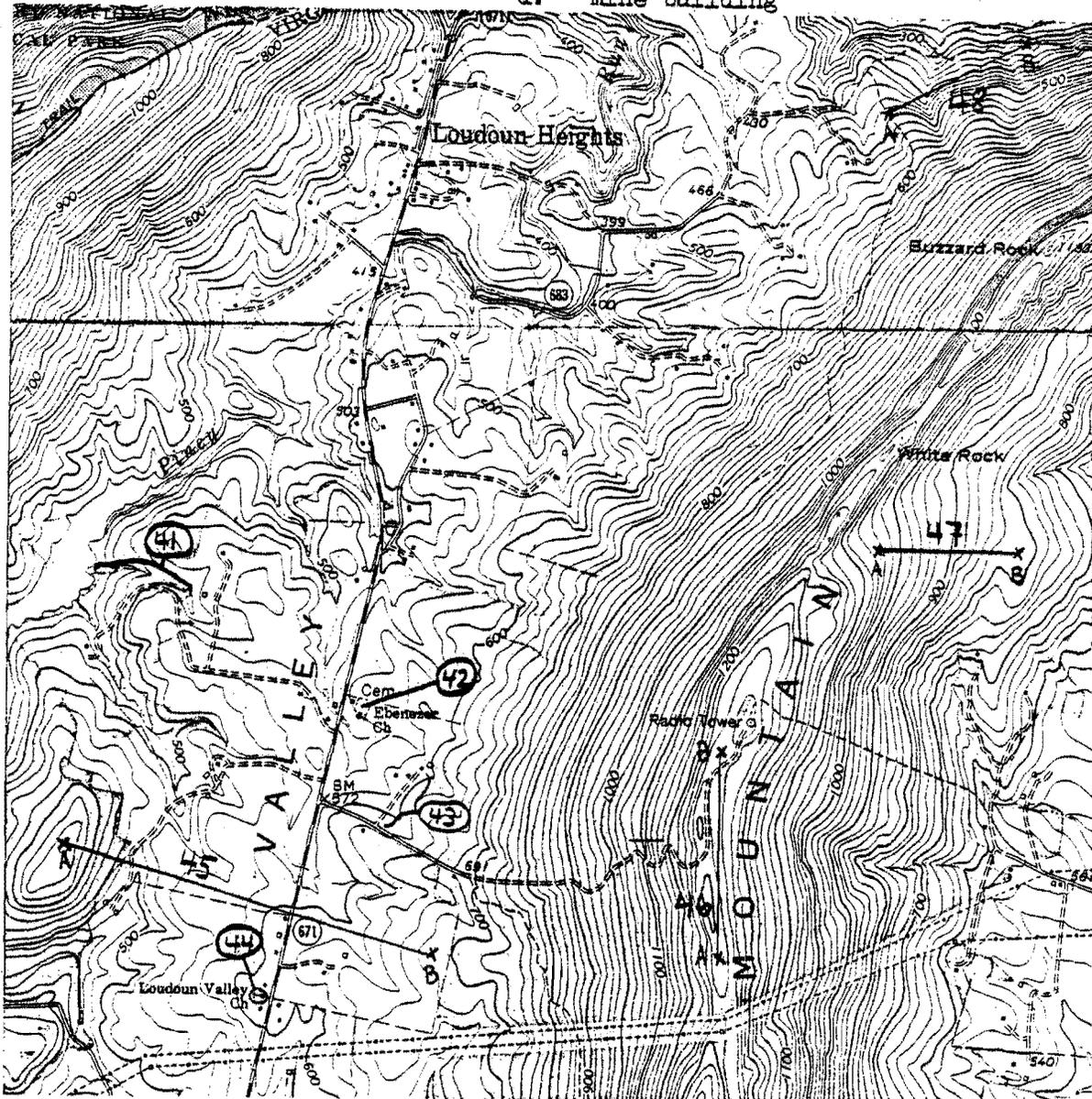
43. _____

- a. fair-weather (dirt) road
- b. jeep trail
- c. maintained trail
- d. runway

44. _____

- a. church
- b. school
- c. dwelling
- d. mine building

fig. 6



FOR QUESTIONS 45-48, REFER AGAIN TO FIGURE 6 (ON THE PREVIOUS PAGE). ANSWER ACCORDING TO THE FOLLOWING:

- a. A is higher than B
- b. B is higher than A
- c. A and B are at the same elevation
- d. can't tell from available information

45. _____

46. _____

47. _____

48. _____

FOR QUESTIONS 49-52, REFER TO FIGURE 7. MATCH ONE LETTER TO EACH NUMBER.

49. _____

50. _____

51. _____

52. _____

- a. attack point
- b. catching feature
- c. aiming off
- d. northing lines

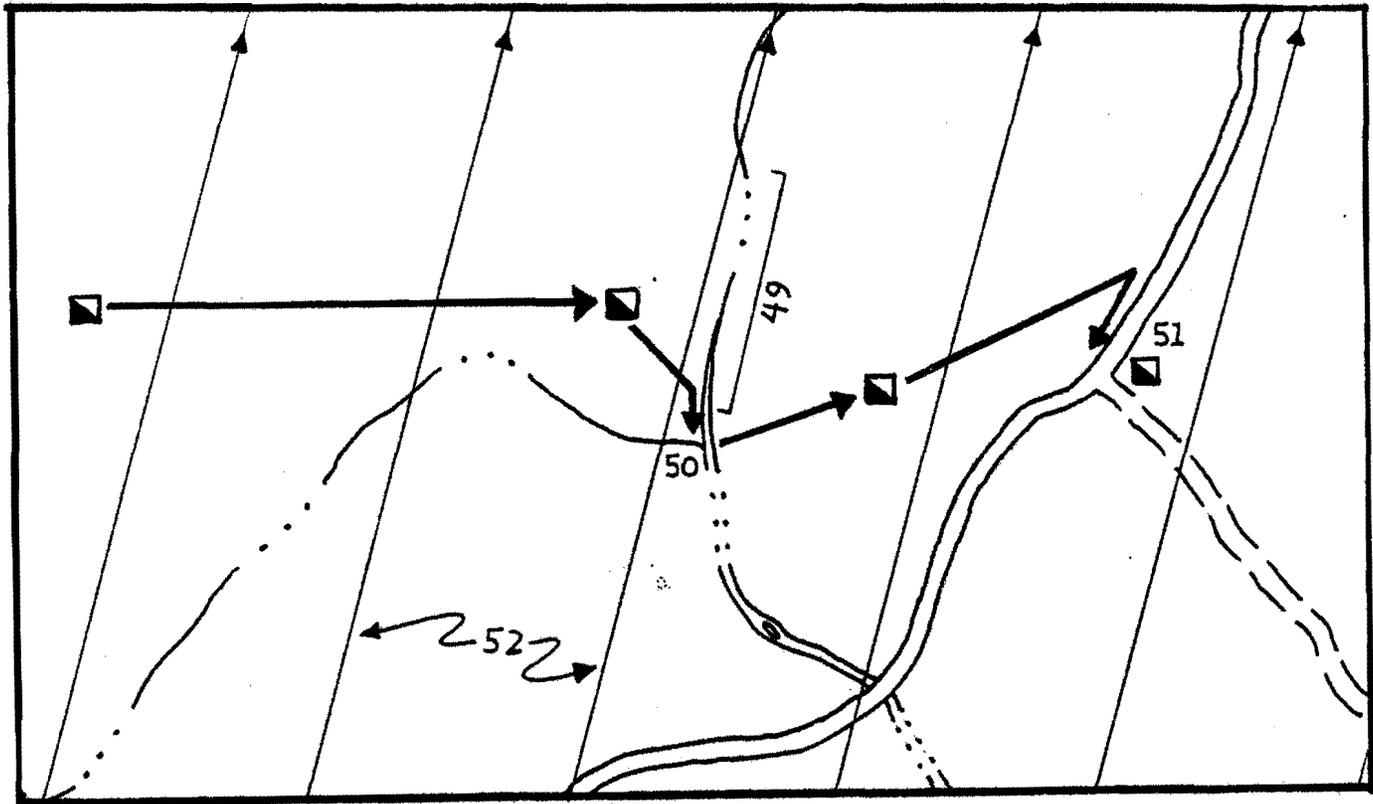


fig. 7

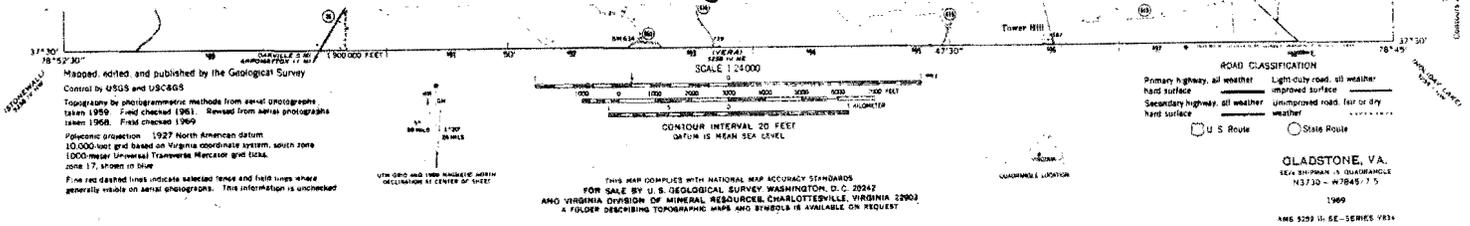


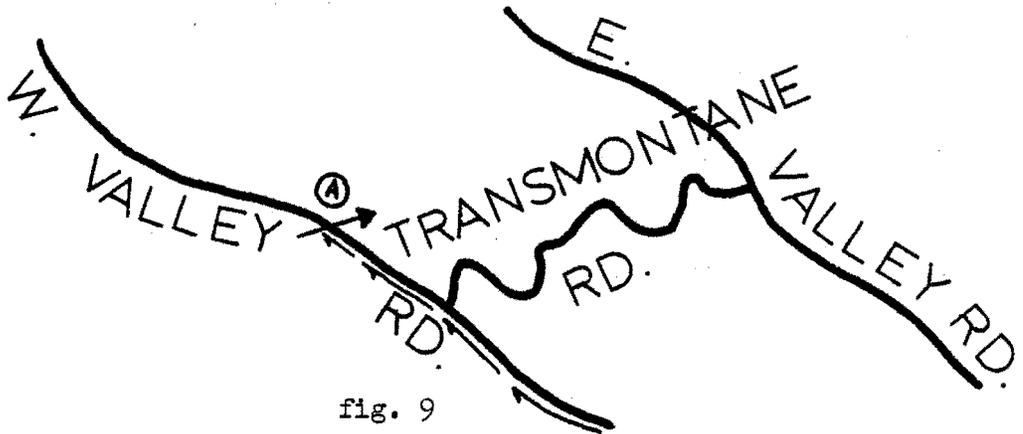
fig. 8

FOR QUESTIONS 53-57, REFER TO FIGURE 8 (ON THE PREVIOUS PAGE).

53. The declination on this map is:
- 5° West
 - 5° East
 - 6°20' West
 - 6°20' East
54. This quadrangle covers an area:
- 7.5' x 7.5'.
 - 20 km. x 30 km.
 - 440 acres.
 - 15' x 15'.
55. The elevation difference between any two brown lines on this map is:
- 1/24000 mile.
 - 20 meters.
 - 20 feet.
 - 40 feet.
56. The quadrangle southeast of this one is:
- can't tell.
 - Vera.
 - Shipman.
 - Holiday Lake.
57. The information is _____ years old as of 1978.
- 9 years
 - 51 years
 - 19 years
 - none of the above
58. Standard search strategy for downed aircraft usually involves early searching of both the flight path and high-risk areas (e.g. mountains, intersection of the flight path with a squall line, etc.)
- True
 - False
59. Standard lost person search strategy often requires containment tasks, in order to keep the search area small.
- True
 - False
60. During the initial stages of a lost person search, it is better to send out small teams of well-trained searchers, rather than large teams of many lesser-trained searchers; this is due in part to the danger of clue destruction.
- True
 - False
61. The decision as to the significance and interpretation of a lead or clue is the prerogative of:
- the team leader.
 - the Mission Coordinator.
 - Scott AFB.
 - none of the above.

62. Interrogation search refers to:
- a. the questioning of people who call in clues to mission base.
 - b. the questioning of all people who pass by a road- or trail-block.
 - c. search using an ELT locator.
 - d. the questioning of people at selected houses, stores, etc. in a given area.

63. Refer to figure 9. Assume that you are traveling along West Valley Road as shown. Your assignment is to search properly a grid which includes all area shown in fig. 9. You come across a person at point (A) who saw a low-flying plane crossing the valley towards the east as shown, at about the proper time yesterday. After calling in the lead to Mission Base, you would:
- a. continue north on West Valley Road.
 - b. go back and search carefully along Transmontane Road and north along East Valley Road.
 - c. nothing; ask for specific new instructions from the Mission Coordinator.
 - d. start at point A and strike off into the woods on foot.



64. Which of the following is an example of good questioning technique?
- a. "Hello. I'm Lt. Snoot of the Civil Air Patrol. We're looking for a red-and-white plane, which has been missing since yesterday. Have you seen or heard anything unusual lately?"
 - b. "Hi. We're looking for a plane that crashed yesterday. Do you know of anything that might help us in finding it?"
 - c. "Hello. I'm Lt. Snoot of the Civil Air Patrol. We're searching for a plane that was believed to be flying low in this area last afternoon. Did you see or hear anything unusual about that time?"
 - d. "Hello. I'm Lt. Snoot of the Civil Air Patrol. We're searching for an airplane that has been reported missing. Have you seen or heard anything unusual in the last couple of days?"
65. Visual clues such as buzzards, clipped trees, and breaks in vegetation cover are often the only clues to mark a crash site.
- a. True
 - b. False.
66. "Containment task" refers to:
- a. patrolling an area so as to keep the search area small.
 - b. searching the perimeter of each individual search grid.
 - c. roping off a crash site.
 - d. establishing road blocks so as to seal off an area of high radiation.

FOR QUESTIONS 67-70, MATCH THE LETTER OF THE APPROPRIATE DEFINITION TO THE NUMBER OF THE SEARCH TASK TYPE.

- 67. Scratch _____
 - 68. Survey _____
 - 69. Sweep _____
 - 70. Line _____
- a. a quick search of a small area or linear feature by a small team
 - b. a saturation search of a large area by a large team
 - c. a quick, wide-spaced search of an area by a small team

FOR QUESTIONS 71-74, MATCH THE LETTER OF THE APPROPRIATE STATEMENT WITH THE NUMBER OF THE SEARCH TASK TYPE.

- 71. Interrogation
 - 72. Visual
 - 73. Electronic
 - 74. Locale
- a. CAP Form 106 used for recording data
 - b. detailed search of a high probability area on foot
 - c. sometimes misleading due to reflections
 - d. clues are usually not those expected by untrained searchers

75. Tracking dogs:
- a. are invariably German Shepherds.
 - b. require an uncontaminated scent "key". (e.g. item of victim's clothes.)
 - c. are less widely found than search dogs.
 - d. follow any airborne scent.

76. Search dogs:
- a. are usually bloodhounds.
 - b. require an uncontaminated scent "key".
 - c. are more widely found than tracking dogs.
 - d. follow any airborne scent.

77. Step-by-step man trackers:
- a. have a low, but substantial, find rate.
 - b. never leave a track until they find the next.
 - c. cannot work at night.
 - d. can only track in deserts and similar areas.

78. Scratch searching is a type of saturation searching.
- a. True
 - b. False

79. Two primary methods for line searching are countour searching and grid searching.
- a. True
 - b. False

80. Containment is an important aspect of:
- a. lost person search.
 - b. downed aircraft search.
 - c. radiological monitoring and decontamination.
 - d. crash site management.

81. Flags (pieces of plastic or paper or plastic tape) are used in lost person searches. Clues are marked by ___ flags; temporary flagging between sweeps of a line search and, if used, along a scratch search, consists of ___ flags; and ___ flags are used to mark search area boundaries (especially during a line search).
- three; two; one
 - one; two; three
 - two; one; three
 - three; one; two
82. Of the following, which is not an established procedure for interrogation tasks?
- fully identify yourself
 - provide detailed information about the aircraft
 - get the name, phone, and address of the witness
 - record and report any leads you get
83. A large rock falls on a rope. The rope is pull-tested by 6 heavy men, and does not break. The rope is safe for use.
- True
 - False
84. It is important to keep carabiner hinges well lubricated, so they will work smoothly.
- True
 - False
85. Stepping on a rope causes invisible damage by grinding grit into the fibers.
- True
 - False
86. Of the knots listed below, the one most appropriate for forming a loop on the end of a line is the:
- bowline.
 - prusik.
 - overhand.
 - water knot.
87. A semi-technical evacuation is:
- carrying a litter over level or gently sloping terrain.
 - the fireman's carry.
 - carrying a litter over steep terrain.
 - bringing a litter down a vertical cliff face.
88. How does one place a rope on the ground so that it will pay out freely?
- coiling
 - stacking randomly
 - stacking in neat figure 8s
89. The proper call to request a belayer to take up slack in a rope is:
- Up Rope!
 - Slack!
 - Take in!
 - Forward!

90. The preparatory call, given by the litter captain, to ask for relief for the litter team, is:
- a. Relief!
 - b. Ladder!
 - c. Prepare to Relieve!
 - d. Ready to Rotate!

CHECK TO MAKE SURE YOU HAVE PUT DOWN AN ANSWER FOR EACH QUESTION BEFORE TURNING IN YOUR PAPER.