

**Pennsylvania Search and Rescue Council  
Field Team Member Certification Test**

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Name (Print): \_\_\_\_\_

*This is a closed-book exam. There is no time limit. Pick the **single** best answer for each question. For matching questions, use each possible answer once only or not at all, unless otherwise directed. Please sign the pledge at the end when you finish.*

**APPALACHIAN SEARCH & RESCUE CONFERENCE, INC.**  
**FIELD TEAM MEMBER WRITTEN TEST** - BETA VERSION 1.2

**SAR LEGAL ISSUES**

1 *Jurisdiction for a search within a National Park boundary is held by:*

a *state police*

b *DES*

c *National Park Service*

d *Sheriff*

e *all of the above*

2 *The authority for removal of bodies from a military aircraft crash rests with the:*

a *State attorney general*

b *local coroner*

c *military police*

d *surgeon general*

e *none of the above*

3 *The primary function of the Air Force Rescue and Recovery Center (AFRCC) is:*

a *coordinate all inland SAR;*

b *direct military SAR operations;*

c *direct all inland SAR; or*

d *coordinate military SAR operations.*

4 *A Responsible Agent is:*

a *the person by law responsible for SAR in a jurisdiction;*

b the person by custom  
responsible for SAR in a  
jurisdiction;

c the person by default  
responsible for SAR in a  
jurisdiction; or

d the person by appointment  
responsible for SAR in a  
jurisdiction.

5 If an aircraft does not have a  
flight plan, when will a search  
start?

a estimated time of arrival  
plus 1/2 hour;

b estimated time of fuel 1  
exhaustion plus 1 hour; 2

c when reported missing; or  
estimated time of fuel

d exhaustion plus 1/2 hour. 3

6 Which one of the answers below  
is NOT a condition required to  
prove negligence?

a There was a duty to act; b

b There was no breach of duty; c

c The patients condition d  
worsened as a result of care  
of lack of care, or

d Damage occurred. 4

7 Informed consent has two parts  
and they are:

a. the person understands  
the nature of the procedure and  
agrees to having it done;

b. the person  
agrees to having the  
procedure done and has  
the mental capacity to  
make that agreement;

c. the person  
agrees with the  
diagnosis and to the  
treatment; or

d. the person  
understands the nature  
of the procedure and has  
the mental capacity to  
make a judgement.

TRUE or FALSE

The Good Samaritan Law  
is a Federal law  
covering all states.

The Good Samaritan law  
protects emergency care  
providers from:

a negligence

b civil suits

c liability

d traffic violations  
while driving  
emergency vehicles

The parts of negligence  
that must be proven in  
order for a plaintiff to  
successfully sue for  
negligence include:

a defendant had a duty to act  
b defendant failed to provide  
the standard of care  
c actual harm occurred to the  
plaintiff  
d the plaintiff's damages or  
injuries were caused by the  
defendant  
e all of the above.

5 If an EMS provider on a field  
team begins treatment of a  
patient in the field, and later  
turns the patient over to  
another medic of lesser  
training, the initial medic may  
be guilty of:

- a malpractice
- b libel
- c abandonment
- d slander

6 Implied consent:  
a allows treatment of an  
unconscious subject  
b is necessary to treat minors  
c may contribute to negligence  
d is the same as informed  
consent  
e a and d

7 Entry upon private property may  
be justified when:  
a SAR teams have reason to  
believe the subject may have  
crossed the area

b the properties owner  
have marked the area  
as private  
c the local authorities  
have indicated the  
area needs to be  
searched  
d the searchers believe  
life or property may  
be at stake

8 Who has the right to  
declare an individual  
dead in VA, MD, or PA?

- a a police officer
- b a physician
- c may depend on extent  
of damage
- d a and b
- e b and c

9 TRUE or FALSE  
10 The good samaritan law  
protects emergency care  
providers from  
negligence.

11 During a search you come  
across a subject who is  
unconscious. Which of  
the following types of  
consent can you legally  
assume in order to treat  
the subject?

- a expressed consent

b implied consent 2 At what air temperature  
c informed consent could hypothermia **not**  
d parental consent occur?  
e two consenting adults a 20 degrees Fahrenheit  
12 When a SAR person encounters a b 40 degrees Fahrenheit  
crime scene they must: c 60 degrees Fahrenheit  
a keep all others away from it, d 80 degrees Fahrenheit  
using force if necessary. e none of the above  
b leave it undisturbed if at 3 Signs of hypothermia  
all possible. include:  
c determine the status of any a shivering, dark  
victims only after law urine, rash  
enforcement personnel have b blurred vision,  
checked for clues. stumbling, reduced  
d all of the above sensory perception  
13 The \_\_\_\_\_ is c frozen extremities,  
responsible at the national reduced level  
level for land-SAR. of consciousness,  
14 The \_\_\_\_\_ is d slurred speech  
responsible in the United States shivering, slurred  
for maritime-SAR. speech, stumbling

**MEDICAL-TRAVEL-SURVIVAL**

1 When you sleep on a cold Match the best alpha response  
surface, without adequate to the following 4  
insulation between yourself and items  
the surface, a primary method of A profuse sweating  
heat loss will be: B low body temp  
a radiation C high blood pressure  
b conduction D loss of ability to sweat  
c convection E frozen tissue  
d respiration 23 \_\_\_\_\_ Frostbite  
e all of the above 24 \_\_\_\_\_ Hypothermia  
25 \_\_\_\_\_ Heat Stroke  
26 \_\_\_\_\_ Heat Exhaustion

- 27 TRUE or FALSE b You will dehydrate if  
1 Severely hypothermic patients you don't eat.  
should be moved very gently. c You need constant
- 28 TRUE or FALSE energy and eating  
1 Assume you find a person who is small amounts of food  
injured and, then after constantly assures a  
initiating treatment, can you steady energy supply.  
leave the person alone because d You do not have to  
you have been ordered to return eat constantly. This  
to base? is an old wives tale.
- 29 TRUE or FALSE e. There won't be any food  
1 If a person is obviously in need left at base, base  
of medical care (say the person twinkees eat  
is bleeding profusely), yet the everything in sight.  
person refuses to be treated, 1 TRUE or FALSE  
can you force the individual to During a field task  
accept medical care? I should drink water
- 30 TRUE or FALSE even when I'm not  
To keep your body from thirsty.  
cooling you need to keep your 1 I feel a hot spot on my  
energy level up, eat high left foot. I should:  
calorie foods, and expend lots a stop and put moleskin  
of energy through hard work. on it.
- 31 TRUE or FALSE b stop and change  
1 It is advisable to thaw a frost socks.  
bitten foot before attempting to c press on, this is not  
walk out of the wilderness. a problem
- 2 Why is it important for you to d none of the above  
eat constantly while performing  
a search task?
- a You won't get food ate any 1 ASRC minimum personal  
other time. equipment includes:

**CLOTHING AND EQUIPMENT**

- a 48 hours food, trash bags, VHF radio  
wearer comfortable, yet not sweating, during exercise
- b 2 light sources, whistle, compass  
d none of the above
- c 20' of 1" webbing, fire source, day pack  
40 When exposed to cold conditions, it is important to:
- d knife, tent, appropriate clothing  
a dress in layers
- e b and d  
b avoid sweating
- 2 TRUE or FALSE  
c avoid drinking water
- 3 Carabiners should be kept lightly oiled so that they will work well.  
d maintain homeostasis  
e all except c  
2 Down filled clothing or sleeping bags loose their insulating value when the down becomes wet, this can be corrected by:
- 4 TRUE or FALSE
- 5 Synthetic fibers commonly used in outdoor clothing tend to wick water rather than absorb water.
- 38 TRUE or FALSE
- 1 Waterproof garments that prevent rain from reaching the wearer will keep the wearer dry.  
a using a polypropelene liner next to your skin to wick moisture away
- 39 "Dressing Cold" means:  
a wearing enough layers of clothing to keep you from getting cold when not exercising  
b treating the down with silicone to prevent "wetting"  
c covering the bag with a waterproof tarp
- b wearing minimal amounts of clothing during training missions to build up the bodies tolerance to cold  
d. none of the above
- c wearing layers of clothing of sufficient warmth to make the  
1 Wool is considered a very good fiber for construction of wilderness clothing because it:

a wicks moisture well  
b is naturally homeostatic  
c can absorb considerable water  
d and maintain insulating value  
e its natural oils keep the  
wearer's skin from drying out  
none of the above

TRUE or FALSE

Cloth with a good tight  
weave will provide greater  
insulating value than loose  
woven cloth of the same weave,  
especially when covered with a  
waterproof/windproof shell.

TRUE or FALSE

Covering the head is rarely a  
good idea in cold weather, as  
the body may "overheat" the head  
in its attempt to keep the rest  
of the body warm, thus leading  
to elevated temperature in the  
cerebrum and eventual loss of  
consciousness.

Of the following types of  
fabrics, which should not be  
worn next to the skin?

- a capilene
- b cotton
- c polypropelene
- d thermax

It is 35 degrees Fahrenheit and  
you are given a field task. You  
put on your down parka over the

uniform shirt you have  
been wearing at base.

You are now:

- a properly equipped for  
the task providing it  
doesn't rain
- b at risk of becoming  
hypothermic during  
the task
- c going to get yelled  
at by Peter McCabe
- d all of the above
- e b and c only

What does WWW stand for?

- a wear warm wool
- b wool wears warmer
- c warm wearing wool
- d warm when wet

Sleeping bags should  
incorporate materials  
that:

- a retain insulating  
value when wet
- b repel moisture
- c "breath"
- d all of the above
- e none of the above

List 2 warm-when-wet  
materials

1 \_\_\_\_\_  
Why is layering better than one  
heavy jacket?

- b side
- c front
- d uphill

1 List 5 essential items that  
could always be in your 24-hour  
search pack.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- 2 When approaching a  
downed aircraft to check  
for survivors, you  
should approach from:
  - a uphill, upwind
  - b downhill, upwind
  - c uphill, downwind
  - d downhill, downwind

1 In selecting personal equipment,  
what are useful selection  
principles?

- a. quality, price,  
versatility;
- b. price, function,  
versatility;
- c. function, quality,  
price, versatility; or
- d. versatility, price,  
function, weight

- 1 What should be taken  
into account when  
setting up an LZ?
  - a size of the  
helicopter
  - b wind strength and  
direction
  - c terrain conditions
  - d all of the above
  - e none of the above

**AIR OPERATIONS**

1 After a helicopter pilot has  
made eye contact and given the  
OK to approach, you should  
approach the helicopter from:  
a behind

- 2 You arrive on the scene  
of an aircraft search  
and find the pilot  
decapitated. After  
you've regained your  
composure, you radio  
base, secure the net,  
and report a find of  
what type?
  - a status 1
  - b status 2
  - c status 3

- d gross and dead
- 3 What electronic device may be used by searchers on an aircraft search?
- a flagging tape  
b ELT  
c DF  
d none of the above
- 4 When approaching a helicopter one should:
- a approach from the rear  
b wear a baseball cap to protect the head  
c establish eye contact with the pilot  
d jump and touch the rotor disk
- 5 In a downed aircraft search, who should approach the scene?
- a IC and Ops officer  
b FTL and radio operator  
c FTL and medic  
d Medic and CAP officer  
e Surgeon general
- 6 What is the standard size of an LZ?  
\_\_\_\_\_

**COMMUNICATIONS**

- 1 What should be the first message to radio in to base when a search team finds a subject?
- a "Base this is \_\_\_\_\_. We have located the subject."  
b \_\_\_\_\_  
c \_\_\_\_\_  
d \_\_\_\_\_
- b. "Base this is \_\_\_\_\_. We have a status \_\_\_\_\_ find."  
c. "Base this is \_\_\_\_\_. Clear the net."  
d. "We found him!"
- 1 When answering yes over the radio, the correct term is:  
a yes  
b affirmative  
c correct  
d uh-huh
- 2 What is the ASRC radio identifier?  
a AK81924  
b KA91842  
c KA81942  
d AK18924  
e none of the above
- 3 Which term indicates you have completed your radio conversation but will continue to monitor your radio?  
a out  
b over  
c clear  
d 10-4

- 4 Spell out the following letters d IC  
using the phonetic alphabet 3 The ASRC is a recognized  
(i.e., Y = YANKEE) SAR resource of which  
agency?
- X H a VaDES  
R I b County Sheriffs  
A K association  
Y E c BOD  
M R d RACES  
T W 4 What is an interview  
O task?  
S U a interrogating an  
individual so as to  
get the information  
you want from him  
describing the  
subject and asking if  
they've seen him/her  
asking persons within  
the search area if  
they've noticed  
anything out of the  
ordinary
- 1 You are out in the field on a b  
search task and can not receive  
or transmit. What can you do to c  
improve communications?
- OPERATIONS**
- 1 Which three positions should be d  
filled on every team? all of the above
- a FTL, medic, FTM  
b FTM, medic, radio operator 5 List the 4 key staff  
c Ops, plans, IC positions in the  
d FTL, medic, radio operator Incident Command System  
(ICS).
- 2 The title of the person in  
charge of managing an ASRC  
search is: \_\_\_\_\_
- a Ops officer  
b Responsible Agent  
c ICS

- 
- 
- 
- 1 List 4 human resources available for search and rescue operations. 1 What resource typically has a higher POD?
- 
- a Helicopter
- b Grid Searcher
- 2 Define the Mattson Consensus Method
- 
- 1 As a Field Team Member, your job when interacting with the family is as a/an: 1 As an FTM, if you notice that the FTL is doing a rotten job, compromising the safety of the field team; you should:
- a listener
- b informant
- c interrogator
- a in front of everyone, demand the FTL step down.
- 1 In 25 words or less, describe the ASRC call-out mechanism. b make suggestions as to how the job might be done.
- c completely ignore the problem.
- 1 Define an ASRC Field Team d demand the radio, and then call base to explain your concerns.
- 1 Define Status 1, 2, and 3.
-

- e wait until you return to base 2 The incident command  
and then to the FTL's boss. system designates five  
2 If the Press were to approach positions from which all  
you asking questions about the incident functions are  
search's progress, how would you conducted.  
respond? 3 TRUE or FALSE  
4 ICS is composed of  
functions, rather than  
1 How do trailing/tracking dogs people.  
differ from air- scenting dogs? 5 What is the function of  
the...  
a Field Team Leader  
1 When working with an air- a Communications  
scenting dog, who is usually in Officer  
charge of the team? a Rescue Specialist  
a Evac Team  
**MANAGEMENT** a Personnel Officer  
1 The incident command system is  
not designed to:  
a. facilitate a manageable  
span of control  
b. allow SAR groups to 1 When you report to an  
keep track of resources in the incident base, you sign  
field in at:  
c. be easily expanded a. Plans;  
using modular organization a Operations;  
d. include a search b Logistics; or  
operation plan c Finance.  
e. support integrated 2 When your team is ready  
communications. to go into the field,  
1 TRUE or FALSE

who will give your team its task assignment?

- a. Plans;
- Operations;
- Logistics; or
- Finance.

You've gotten your TAF and need a radio, where do you go?

- a. Plans;
- Operations;
- Logistics; or
- Finance.

You return from your task.

Someone from \_\_\_\_\_ will debrief your team leader.

- a. Plans;
- Operations;
- Logistics; or
- Finance.

Which incident command section determines what strategies and tactics will be used in a search?

- a. Plans;
- Operations;
- Logistics; or
- Finance.

There are 5 principle reasons that the Incident Command system works as a management system in emergency operations. Which of

the following is NOT one of them.

- a. Common terminology;
- single command source;
- common structure; or
- common use of ten signals

**ROPE AND RESCUE**

1 Who is responsible for supervising roped travel?

- a. Field Team Leader;
- Medic;
- Radio Operator; or
- Rescue Specialist

2 As a field team member would you normally be a part of a technical rescue team?

- a. Yes
- b. No

3 When preparing to rappell, you should call what to the belayer before touching the rope?

- a. on belay
- b. rappelling
- c. on rope
- d. belay on

4 Which of the following is not  
generally used for rappelling?

Static:

a Gibbs

Dynamic:

b Figure 8

c Carabiner

1

TRUE or FALSE

d harness

2

"Kernmantle" is a name

e leather gloves

given to the type of

5 When using semi-tech to ascend a  
hill, the uphill rope handler  
becomes:

rope that is made with a  
woven outer core and  
continuous inner fibers.

a litter captain

3

Knots in a rope reduce

b downhill rope handler

the strength of the rope

c belayer

by:

d. not necessary

a. 25%

1 What type of rope is preferred  
by most rescue groups for rescue  
work?

a

50%

a dynamic kernmantle

b

75%

b laid hemp

c

100%

c kevlar braided

1

The square knot is used

d static kernmantle

to:

a. join two ropes  
of the same size;

1 List 3 types of RESCUE teams and  
how they are used

a

join two ropes of

\_\_\_\_\_

b

make a stopper knot

\_\_\_\_\_

at the end of a rope;

\_\_\_\_\_

c

climb up a rope.

1 Distinguish between Static and  
Dynamic Rope and a typical  
situation when each type is  
used.

2

The Figure-Eight knot is  
used to:

a

climb up a rope;

- b join two ropes of the same size;  
c join two ropes of different sizes; or  
d make a stopper knot at the end of a rope.
- 3 The fisherman's knot is:  
a a permanent knot;  
a used just for webbing;  
b used for climbing a rope; or  
c an easy knot to remove.
- 2 When climbing rock or ice, you should use a:  
a dynamic rope;  
b static rope;  
c both dynamic and static; or  
d neither type of rope.
- 3 TRUE or FALSE  
4 "Stacking" is a term used for piling rope in a random fashion so that it plays out easily.
- 1 A hoist wire from a helicopter can become highly charged with static electricity. Therefore:  
a make sure you ground the wire with a grounding wire.  
b allow the wire to touch the ground before you handle it.  
c grab the wire and hold it firmly.
- d ask the helicopter to land to discharge the static electricity.
- SEARCH**
- 1 When should attraction searching not be used?  
a when attraction is likely to lead the subject to a hazard.  
b when subject is evasive  
c in severely cold weather  
d in mountainous areas  
e. both a & b
- 112 A clue is flagged with:  
a 1 flag  
b 2 flags  
c 3 flags  
d 4 flags
- 2 Interior boundaries (ie. temporary) are flagged with:  
a 1 flag  
b 2 flags  
c 3 flags  
d toilet paper
- 3 Attraction is a search technique that may employ:  
a whistling  
b fires  
c pheromone

- d yelling c done only on linear  
e all except c features
- 115 In SAR, containment may include: d a quick search for a  
a patrolling roads and trails responsive subject or  
to keep subject from leaving obvious clues  
search area 119 When lost in the woods,  
b using your skills to keep it is best to:  
dangerous substances from a remain where you are  
leaking from downed aircraft b move quickly before  
c using string or flagging tape night fall  
to physically blockade the c keep moving until you  
area find a landmark  
d all of the above d quickly begin a  
e a and c only search for food
- 116 A sweep search is: 2 Which of the following  
a another name for grid search resources might be used  
b a type of hasty search in a search?  
c a loose line search a Pizza Hut  
d used to clean up base after a b Fire Dept. Volunteers  
search c Rescue Squad
- 117 Cutting for sign is: Volunteers  
a a quick search, generally d Dogs East  
across the subject's e all of the above  
suspected line of travel, 121 What is P.O.D.  
looking for signs of passage a Probable Order of  
b synonymous with tracking Detection  
c done only by dog teams b Personal Odor  
d not used is SAR Detection
- 118 A hasty search is: c Probability of  
a a fast search done only by Detection  
the police d Poor, Old, and Dead  
b a form of sweep search 2 What does the "STOP"  
employing containment mnemonic stand for?

S  
T  
O  
P

5

List 3 examples of  
containment.

a.

\_\_\_\_\_

b.

\_\_\_\_\_

c.

\_\_\_\_\_

1 Define POA and what it means

1 Define POD and what it means

1 On any SAR incident, every one  
should always be concerned about  
\_\_\_\_\_, both for  
themselves and for the other  
emergency providers.

2 Search is a classic  
\_\_\_\_\_, where we search  
for \_\_\_\_\_, not the  
\_\_\_\_\_.

3 When you first find a clue  
indicating the missing person  
was truly once at your present  
location, list at least 4  
concerns you should have:

a \_\_\_\_\_  
b \_\_\_\_\_  
c \_\_\_\_\_  
d \_\_\_\_\_

4 Give 2 examples of attraction  
you could use while on a field  
team.

a \_\_\_\_\_  
b \_\_\_\_\_

1

Which search task  
generates a higher POD?

a

SweepLine

2

All things being equal,  
which task takes longer  
to perform?

a

SweepLine

3

A scratch search task  
contains about \_\_\_\_\_ to  
\_\_\_\_\_ field team  
members, and is usually  
assigned to search a  
\_\_\_\_\_ feature.

4

Mantrackers can do which  
of the following most  
efficiently:

a

gross clue detection;

b

string line

c

placement;

c

attraction; or

d

aging sign

- 5 In the first phase of a missing person search, which is the primary tactic?
- a containment and attraction, 2 TRUE or FALSE  
b line search and containment; An orienteering path  
c hasty search and containment; is best planned  
or forwards, going from the  
d locale search and hasty starting point to the  
search. ending point.
- 6 TRUE FALSE 1 A circle contains \_\_\_\_\_  
degrees.  
Successful missions are 1 degree = \_\_\_\_\_  
suspended, unsuccessful missions minutes of arc.  
are closed. 1 minute of arc =  
\_\_\_\_\_ seconds of arc.
- MAP/COMPASS & LAND NAVIGATION**
- 1 One of the many techniques of orienteering is to "Aim Off." 1 Write a single sentence  
Which of the following definition for:  
definitions best fits? AIMING  
OFF is the process of: Latitude  
a accounting for the difference Longitude  
between true and magnetic Declination  
north.  
b setting your compass dial to Given you are on a  
aim off your present location 1 mountain and you sight a  
when determining the direct downed aircraft with a  
path to the next point. bearing of 168 degrees  
c using the local terrain magnetic, what is the  
features to help guide you as reciprocal magnetic  
you follow your compass bearing? \_\_\_\_\_  
bearing.  
d purposely introducing an 2 Given that you are in  
error in your direction of Maine with a declination  
travel in order to minimize of 22 degrees west, what

is the reciprocal true bearing?

\_\_\_\_\_ What was the original true bearing? \_\_\_\_\_

Using map Bravo, write down the proper ASRC grid coordinates for the following points:

- a \_\_\_\_\_
- b \_\_\_\_\_
- c. \_\_\_\_\_
- a \_\_\_\_\_
- b \_\_\_\_\_

For the standard topo map (7.5 x 7.5 minute quadrangle, what is the distance between the ASRC coordinates A1523 and A1533?

\_\_\_\_\_ Using map Alpha, identify the objects depicted by the map symbols at locations:

- a \_\_\_\_\_
- b \_\_\_\_\_
- c \_\_\_\_\_
- d \_\_\_\_\_
- e \_\_\_\_\_
- f \_\_\_\_\_
- g \_\_\_\_\_
- h \_\_\_\_\_
- i \_\_\_\_\_
- j \_\_\_\_\_

You are on map Alpha in the following assigned area:

Your Altimeter reads 2200 feet.

You are on a fire road.

You see Greenwood Hollow to the south.

You determine you are at the following ASRC coordinate:

\_\_\_\_\_

146 Define collecting feature.

On a 1:12000 scale map, 1 inch = \_\_\_\_\_ feet, and 1 cm = \_\_\_\_\_ meters.

You are on a compass course and come up to a lake. In the space below, show how you might move around a lake that is between you and the next orienteering point (indicate where you would have to pace off your route):

What is the latitude of the North Pole?

- a 90 degrees North
- b 180 degrees North
- c 0 degrees North

d           90 degrees South

2           What is the longitude of the  
Greenwich Observatory in  
England?

a           90 degrees West

b           0 degrees East

c           0 degrees South

d           90 degrees East

3           What is the phonetic code name  
for the Greenwich Observatory in  
England?

---

1           What time is it in ASRC-land,  
when someone says it's 0500  
hours (Greenwich) time.

---

1           What is the latitude of the  
equator at the prime meridian?

a           90 degrees North

b           180 degrees North

c           0 degrees North

d           90 degrees South