ARECC Level II study guide

1-1 Which individual is the key ARES team leader on the county level?

A. ☐ The SEC.

B. ☐ **The EC**.

C. ☐ The DEC.

D. ☐ The ASEC.

1-2 Which of the following is true of the SEC?

A. ☐ The SEC develops local communication plans for ECs.

B. ☐ In time of emergency, the SEC coordinates the response of a field team.

C. ☐ The SEC acts as the initial NCS for the Section nets.

D. ☐ **There is only one SEC for each Section.**

1-3 Which ARRL official has full authority to make EC appointments?

A. ☐ DEC

B. ☐ SEC

C. ☐ **SM**

D. ☐ OES

1-4 How often should the EC hold training and discussion meetings with his team?

A. ☐ At least weekly.

B. ☐ At least monthly.

C. ☐ **Often enough to meet the training and operational needs of the group.**

D. ☐ Once a year, just before the annual SET.

1-5 Which are the minimum qualifications for the SEC, the DEC, and the EC?

A. ☐ Appointment by the Section Manager.

B. ☐ General or Extra Class license and full ARRL membership.

C. ☐ **Technician (or above) license and full ARRL membership**.

D. ☐ Demonstrated management and leadership skills.

2-1 Which of the following does the number of ARES staff members required to provide effective leadership most depend on?

A. **The number and size of cities as well as the number of served agencies in the area.**

B. The managerial expertise of the Section officials.

C. The number of Amateur Radio operators available.

D. The legal requirements for non-profit, volunteer organizations.

2-2 Which of the following describes the recommended 'span of control'?

A. **One supervisor with three to seven subordinates.**

B. One supervisor with seven to ten subordinates.

C. One supervisor with ten to fifteen subordinates.

D. One supervisor and three to five subordinates.

2-3 During a disaster, which of the following positions is responsible for providing information on the Amateur Radio contribution to the relief effort?

A. The Section Manager.

B. The Public Information Coordinator.

C. **The Public Information Officer.**

D. The Official Bulletin Station.

2-4 For which of the following Section staff and support positions is an additional test and certification required?

A. AEC.

B. STM.

C. OBS.

D. **OO**. (Official Observer)

2-5 During disasters, which is the primary function of ARRL Headquarters?

A. Provide administrative support to the ARRL Field Organization.

B. Provide administrative support to RACES, SKYWARN, and the Military Affiliate Radio Systems (MARS).

C. ☐ Publish materials and collect dues.

D. ☐ **Serve as an information clearinghouse.**

3-1 Which of the following requires no NCS to control net operations?

A. ☐ **An Open Net.**

B. ☐ A Directed Net.

C. ☐ An NTS Net.

D. ☐ A Health and Welfare Net.

3-2 Which of the following is true of Directed Nets?

A. ☐ There is minimal direction from a Net Control Station.

B. ☐ There is no clearly assigned mission.

C. ☐ They serve only as Liaison Nets.

D. ☐ **They are used when the volume of traffic is too great to be handled on a first-come, first-served basis**.

3-3 Who is responsible for ensuring a smooth flow of traffic within and between nets?

A. ☐ The Official Observer.

B. ☐ **The Net Manager**.

C. ☐ The Liaison Station.

D. ☐ The NTS Emergency Coordinator.

3-4 Which type of net would handle non-formal communications for a served agency?

A. ☐ Health and Welfare Net.

B. ☐ **Tactical Net.**

C. ☐ Resource Net.

D. ☐ Traffic Net.

3-5 Which of the following statements is true?

A. ☐ **Resource Nets are used to assign operators as they arrive on scene.**

B. ☐ Health and Welfare Nets operate only on HF bands.

C. ☐ Traffic Nets handle both formal and informal messages.

D. ☐ Tactical Nets handle only formatted, written messages.

4-1. Which is the primary purpose of a "standby" NCS in an informal net?

A. ☐ To make certain that the informal sharing of information flows smoothly.

B. ☐ To encourage others to join in the informal conversations.

C. ☐ **To upgrade the net to formal status if it becomes necessary**.

D. ☐ To acquire monthly service points.

4-2 The NCS operator is responsible for which of the following?

A. ☐ Being in charge of the overall communication effort.

B. ☐ **Being in charge of the net during his shift.**

C. ☐ Being in charge of net operations beyond his net and shift.

D. ☐ Being in charge of frequencies, schedules and recruiting.

4-3 Which is least desirable time to train new operators?

A. ☐ **During an emergency**.

B. ☐ During a tabletop exercise.

C. ☐ During a public service event.

D. ☐ During a regularly scheduled training event.

4-4 Which best describes the primary mission of the NCS operator?

A. ☐ To train net operators.

B. ☐ To understand the Incident Command System (ICS).

C. ☐ **To help the net move as much traffic as possible in the least amount of time, accurately and effectively.**

D. ☐ To tune out all distractions and to focus on the job at hand in an often noisy and chaotic environment.

4-5 Which of the following **does not** represent 'the right stuff' to become a good NCS operator?

A. ☐ The ability to handle mental and physical stress for long periods.

B. ☐ The ability to write legibly.

C. ☐ **The willingness to serve as NCS operator despite lack of fluency in the language.**

D. ☐ Above average operating skills.

5-1 Which of the following statements is true?

A. ☐ The NCS should ask for check-ins immediately before reading the opening script.

B. ☐ The NCS should ask for check-ins just before reading the closing script.

C. ☐ **The NCS should ask for check-ins immediately after reading the opening script and periodically thereafter**.

D. ☐ The NCS should ask for check-ins every ten minutes during the operation of the net.

5-2 In which order should messages be handled during an emergency?

A. ☐ Routine, Health & Welfare, Priority, Emergency.

B. ☐ **Emergency, Priority, Health & Welfare**.

C. ☐ Emergency, Health & Welfare, Priority, Routine.

D. ☐ Health & Welfare, Emergency, Priority.

5-3 Which of the following should the NCS **not** expect of trained net members?

A. ☐ To ask the NCS for permission to call another station.

B. ☐ To answer promptly when called by the NCS.

C. ☐ To follow established net protocols.

D. ☐ **To rely exclusively on FCC call signs during net operations.**

5-4 Which of the following are appropriate to use in an emergency phone net?

A. ☐   Plain English and 10-Codes

B. ☐   **Plain English and prowords**

C. ☐   Q-signals and prowords

D. ☐   Q-Signals and 10-Codes.

5-5 Which is the best way to enlist the cooperation of the net?

A. ☐   Immediately criticize net operators who make a mistake so that other operators will learn from the error.

B. ☐   Issue an order demanding the cooperation of all net operators.

C. ☐   Explain **what you are doing in a calm and straightforward manner.**

D. ☐   Immediately expel operators from the net who do not follow net protocol.

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6-1 What are the requirements and qualifications of the ARRL Net Manager position?

A. ☐   There are no specific requirements or qualifications for the position.

B. ☐   **Amateur Radio license; full ARRL membership; and any appropriate local or Section qualifications**.

C. ☐   An Amateur Extra Class license; and the approval of ARRL Headquarters.

D. ☐   The approval of the Section Traffic Manager.

6-2 Which statement best describes the Section Net Manager's job?

A. ☐   Coordinate public information in the Section.

B. ☐   Provide technical information to members of ARES and/or NTS.

C. ☐   Appoint the local Emergency Coordinators.

D. ☐   **Coordinate and supervise traffic handling and net activities in the Section.**

6-3 Which factor does NOT affect the number of Net Managers appointed in each Section?

A. ☐   The Section's geographical size.

B. ☐   The number of nets operating in the Section.

C. ☐   Other factors having to do with the way the Section is organized.

D. ☐   The **number of ARES operators in the Section**.

6-4 Who appoints the NTS Net Manager?

A. ☐   **Section Manager**.

B. ☐   Division Director.

C. ☐   ARRL Headquarters staff.

D. ☐   Local EC.

6-5 To whom does the Section Net Manager report?

A. ☐   The Division Director is responsible for supervising all Field Organization activity.

B. ☐   The ARRL HQ staff is responsible for supervising all Field Organization activity.

C. ☐   **Section NMs work under the STM and/or SEC, guided by a coordinated Section traffic or ARES communications plan**.

D. ☐   ARES National Traffic Manager.

7-1 Which of the following statements about the National Traffic System is true?

A. ☐   It is highly reliant upon CW.

B. ☐   It was designed within the last 25 years.

C. ☐   Each net within the System is an independent, "stand alone" entity.

D. ☐   **It is a unique system for efficiently handling messages.**

7-2 The Area Nets include which of the following?

A. ☐　The Eastern, the Central, the Canadian and the Pacific.

B. ☐　The Eastern, the Central, the Mountain and the Pacific.

C. ☐　The Central, the Mountain and the Canadian.

D. ☐　**The Eastern, the Central and the Pacific.**

7-3 Which is the purpose of a "hotline circuit"?

A. ☐　To move a modest amount of routine traffic between two locations in small town.

B. ☐　To move a moderate amount of traffic between two served agencies across the country.

C. ☐　**To move a high volume of traffic between two locations during a disaster.**

D. ☐　To move a high volume of holiday traffic across the country.

7-4 Which of the following statements is true?

A. ☐　NTS was designed to compete with independent traffic networks.

B. ☐　**NTS generally encompasses five different levels of operation**.

C. ☐　Section nets exclusively handle traffic between Local and Regional nets.

D. ☐　Regional Nets exclusively handle traffic among Sections within their Region.

7-5 Who may participate in an NTS Section net?

A. ☐　**Any properly licensed Amateur**.

B. ☐　Only registered net members.

C. ☐　Hams with traffic for other Sections.

D. ☐　Members of the TCC.Bottom of Form

8-1 Priority should be given to which kinds of messages in a disaster area?

A. ☐ **Messages coming out of the disaster area**.

B. ☐ Inquiries from relatives going into the disaster area.

C. ☐ Fatality reports.

D. ☐ Routine messages.

8-2 What organization has official responsibility for the health and welfare traffic function in a disaster situation?

A. ☐ Federal Emergency Management Agency.

B. ☐ American Radio Relay League.

C. ☐ Salvation Army.

D. ☐ **American Red Cross.**

8-3 Which is the first choice of the Red Cross for handling Welfare Information messages?

A. ☐ Local Amateur Radio Operators.

B. ☐ **Its own normal communication channels**.

C. ☐ REACT.

D. ☐ RACES.

8-4 During times of high traffic volume, which of the following modes is least preferred?

A. ☐ Amtor.

B. ☐ Packet.

C. ☐ **CW**.

D. ☐ Fax.

8-5 Which of the following statements is **false**?

A. ☐ **NTS is dedicated only to communications during disasters on behalf of ARES.**

B. ☐ When a disaster occurs, NTS may be asked to handle Welfare Information messages for the Red Cross.

C. ☐ NTS nets handle welfare messages under the guidance of the Red Cross.

D. ☐ Under conditions of extremely heavy traffic, "hot line" circuits may handle messages between two points.

9-1 When is the best time to recruit volunteers?

A. ☐ **In advance of need**.

B. ☐ Shortly after a disaster has struck.

C. ☐ During a disaster.

D. ☐ At the conclusion of a disaster.

9-2 When is the best time to provide feedback to volunteers?

A. ☐ Only after the event.

B. ☐ Only during the event.

C. ☐ Before and after the event.

D. ☐ **During and after the event.**

9-3 Which is the best rule about feedback to volunteers?

A. ☐ Always delay feedback until you have had time to consider the entire event.

B. ☐ Provide negative feedback to individuals immediately and in blunt terms to forestall any future errors.

C. ☐ Praise everything the volunteer does including the smallest detail.

D. ☐ **Praise individuals rather than a group.**

9-4 Which is the best way to make volunteer assignments?

A. ☐ Define each task in general terms.

B. ☐ **Be specific; break larger units of work into smaller tasks**.

C. ☐ Point to the duty station; wish the volunteer luck and check back in 6-8 hours.

D. ☐ Recruit a large number of volunteers; define the general goal and then let the volunteers sort out the tasks and assignments.

9-5 Which of the following is **not** a good means for recruiting volunteers?

A. Making announcements at local radio clubs.

B. Posting a notice on the bulletin board of a local ham radio store.

C. **Interrupting other nets to seek volunteers**.

D. Making announcements at Amateur Radio license classes.

10-1 Regarding ARES net operations, which of the following statements is true?

A. Breaks in NCS coverage never occur.

B. Breaks in NCS coverage are a trivial occurrence.

C. **Breaks in NCS coverage are not a trivial occurrence**.

D. There is no known way to deal with breaks in NCS coverage.

10-2 Which should be your first reaction to an upset net participant?

A. Terminate the participant immediately. You don't have time for it.

B. Turn the net over to someone else who is liked by the participant.

C. **Don't respond instantly. Take a deep breath and think your response through**.

D. Overwhelm the participant with the brilliance of your argument and the force of your conviction.

10-3 How often should the NCS operator turn over duties to another NCS operator?

A. Every hour.

B. **Every two or three hours**.

C. Every eight hours.

D. At the end of each twelve-hour shift.

10-4 Which of the following is NOT needed by the NCS when turning over control of the net?

A. A list of outstanding messages.

B. The status of open inquiries.

C. A log of traffic.

D. **A copy of Robert's Rules of Order.**

10-5 If the primary NCS leaves the air for any reason, which action should the backup NCS take?

A. ☐ Continue with the ongoing flow of traffic.

B. ☐ Attempt to determine the reason for the NCS leaving the air.

C. ☐ **Announce that he is the new NCS, and put out a call for emergency traffic**.

D. ☐ Introduce himself and describe his Amateur Radio qualifications and experience.

11-1 How much time should an instructor spend preparing for class?

A. ☐ About 30 minutes preparation time for every hour of class time.

B. ☐ About one hour of preparation time for every hour of class time.

C. ☐ **At least two hours of preparation time for every hour of class time.**

D. ☐ At least eight hours of preparation time for every hour of class time.

11-2 What does the text say about instructional handouts?

A. ☐ They are of little value.

B. ☐ They detract from the overall presentation.

C. ☐ **They help the student retain information and are a good place to make notes.**

D. ☐ They help the student by providing a place to doodle during lectures.

11-3 How should highly technical information be presented?

A. ☐ Quickly, as it is often dry and students can lose interest.

B. ☐ **More slowly than simpler material**.

C. ☐ At the same speed as simpler material.

D. ☐ Technical information should not be presented in emcomm training sessions.

11-4 How should examples be used to illustrate points in your lesson?

A. ☐ Seldom.

B. ☐ More than basic lesson material.

C. □ **Where necessary to illustrate a point**.

D. □ During non-technical presentations only.

11-5 Which of the following is a key rule for effective instructors?

A. □ Vary the subject matter to include non-related topics to maintain interest.

B. □ Avoid using graphics or examples in their lessons.

C. □ Use graphics and examples solely to avoid the pitfall of dry lecturing.

D. □ **Stick mainly to the subject of the lesson.**

12-1 Which of the following is NOT essential to obtain when registering "walk in" volunteers?

A. □ Name.

B. □ Address.

C. □ **Marital Status.**

D. □ Class of license.

12-2 Which of the following is true?

A. □ All emcomm team members are automatically covered by State Worker's Compensation insurance when on duty.

B. □ Emcomm team members are never covered by State Worker's Compensation insurance when on duty.

C. □ **Some emcomm team members may be covered by State Worker's Compensation insurance when on duty**.

D. □ All emcomm team members are entitled to low-cost Workers Compensation insurance.

12-3 Which method is a good way to "break in" a new volunteer?

A. □ Give him some brief, rapid-fire instructions, then see how he performs.

B. □ **Have him operate alongside a more experienced operator**.

C. □ Give him a key assignment and evaluate his performance at the conclusion of the event.

D. □ Put him together with another new volunteer and have them figure things out as they go along.

12-4 Which action should the intake coordinator take when a new volunteer arrives?

A. ☐   Give them any available job that needs to be filled.

B. ☐   Tell them to go home.

C. ☐   **Interview them to determine their skills and suitability**.

D. ☐   Hold them in reserve until a "relief" opening occurs.

12-5 Which person is responsible for expedient training of walk-in volunteers?

A. ☐   The EC.

B. ☐   The DEC.

C. ☐   **The intake coordinator**.

D. ☐   The NCS operator.

13-1 Which is the essential function of the Emergency Manager during an emergency?

A. ☐   To ask a neighboring county to provide additional EMT's and vehicles.

B. ☐   To call on the county sheriff to provide officers to augment the local police force.

C. ☐   To provide a meeting place for the ARES unit in the Emergency Operations Center.

D. ☐   **To manage resources during an emergency**.

13-2 Which of the following does an agency manager NOT need to know about an emcomm group?

A. ☐   The name of the leader of the group.

B. ☐   The limitations of the group.

C. ☐   The capabilities of the group.

D. ☐   **The ambitions of the group.**

13-3 Which is the best way to deal with competition between emcomm groups?

A. ☐   Engage in cutthroat competition.

B. ☐   Handle differences by letting egos and personalities predominate.

C. ☐ **Coordinate the missions of the two groups**.

D. ☐ Break off and set up another amateur group.

13-4 Which is the purpose of the national-level memoranda of understanding?

A. ☐ Provide a detailed local operational plan for ARES groups serving a particular agency.

B. ☐ **Encourage mutual recognition, cooperation, and coordination with the subject agency.**

C. ☐ Obligate a local ARES unit so that it must serve a particular agency, and meet all of its needs.

D. ☐ Ensure the proper operation of the National Traffic System.

13-5 What should a public safety agency have before a local ARES group commits to provide service to that agency?

A. ☐ A general outline of what Amateur Radio can do for it.

B. ☐ A good sense of the internal politics of the agency.

C. ☐ An internal ARES plan that is not to be shared with outside agencies.

D. ☐ **A detailed MOU developed with agency managers that sets forth precisely what each organization can expect during an operation**.

14-1 Who usually activates a Rapid Response Team?

A. ☐ The county sheriff.

B. ☐ The city's director of emergency operations.

C. ☐ **The EC, the DEC or the SEC**.

D. ☐ Rapid Response Teams usually self-activate.

14-2 The ARES PIO might be associated with which of the following?

A. ☐ The Level I RRT.

B. ☐ **The Level II RRT**.

C. ☐ The served agency.

D. ☐ The local newspaper.

14-3 What is the recommended minimum level of training for anyone serving as NCS on a Level I Rapid Response Team?

A. ☐ A bachelor's degree.

B. ☐ A high school diploma.

C. ☐ **ARECC Level II certification**.

D. ☐ ARECC Level I certification.

14-4 How are Level I RRT members usually notified of activation?

A. ☐ **Telephone and pagers**.

B. ☐ RRT members usually self-activate.

C. ☐ E-Mail.

D. ☐ NTS messages.

14-5 What forms of identification should Rapid Response Team members carry?

A. ☐ Driver's license and certificate of insurance.

B. ☐ Birth Certificate or Passport.

C. ☐ **FCC license, driver's license and ARES, RACES and served agency IDs.**

D. ☐ Credit card with photo and check guarantee card

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15-1 When is the Hurricane Watch Net normally activated?

A. ☐ Every morning at 1000 UTC during hurricane season only.

B. ☐ **When a hurricane is within 300 miles of making landfall**.

C. ☐ When a tropical storm approaches a populated land mass.

D. ☐ When a tropical wave develops west of Africa.

15-2 Who should check in to the Hurricane Watch Net an hour before a hurricane makes landfall?

A. ☐ All amateurs should check in.

B. ☐ Amateurs with weather stations only.

C. ☐ Only those stations on the net roster.

D. ☐ **Only amateurs in the affected area, or amateurs with important information that would be needed by the net or the National Hurricane Center.**

15-3 Does a station have to be located in a hurricane area to be a member?

A. ☐ Yes, the net is made up solely of stations in hurricane areas.

B. ☐ There is no membership in the Hurricane Watch Net. Anybody can check in at any time.

C. ☐ No. The net has a need for stations in Canada and on the west coast that can control the net as propagation shifts to the north and to the west.

D. ☐ **No. The net sometimes has a need for stations in the Midwest and west coast that can control the net as propagation shifts to the west.**

15-4 Which answer best describes the four step method to describe severe weather?

A. ☐ Who, What, When, Why.

B. ☐ **What, Where, When, Details**.

C. ☐ What, Where, Why, General Comments.

D. ☐ What, When, Why, Where.

15-5 Skywarn participants would generally report which of the following?

A. ☐ Fog.

B. ☐ Humidity.

C. ☐ Temperature.

D. ☐ **Hail.**

16-1 Which of the following is **not** critical to designing a successful exercise?

A. ☐ The goals of the exercise must be clearly articulated.

B. ☐ The right type of exercise must be designed.

C. ☐ Feedback on exercise performance must be promptly given to all participants.

D. ☐ **Participants must be permitted to correct their own tests.**

16-2 Which of the following categories of exercises provides the most immediate feedback to participants?

A. ☐ **Table top**.

B. ☐ Functional.

C. ☐ Full-Scale.

D. ☐ SET.

16-3 In debriefing an exercise, which of the following should emcomm leaders avoid?

A. ☐ Taking into account feedback from all participants.

B. ☐ Comparing the groups actual performance with the goals of the exercise.

C. ☐ **Discussing people, not actions**.

D. ☐ Creating an "action list" of specific changes to be shared with the entire group.

16-4 How should feedback be presented to the participants?

A. ☐ **In a positive, timely manner**.

B. ☐ Employing the psychological technique known as "classical conditioning."

C. ☐ Criticism should be directed at participants' personally and in front of everybody else.

D. ☐ During the exercise itself by the exercise coordinator.

16-5 Developing a means for assessing the results of an exercise is associated with which design element?

A. ☐ Scenario evolution.

B. ☐ Network design.

C. ☐ Asset assignment.

D. ☐ **Measurement and evaluation.**

17-1 When is the national ARRL Simulated Emergency TEST (SET) usually conducted nationally?

A. ☐ On selected weekdays during October.

B. ☐ **On a selected weekend in October**.

C. ☐   On a selected weekend between September and November.

D. ☐   On selected weekdays between September and November.

17-2 Which of the following **is not** a general goal of the SET?

A. ☐   To discover the strengths and weaknesses of ARES, NTS, RACES, and other groups providing emergency radio services.

B. ☐   To test the full range of emcomm systems under realistic conditions.

C. ☐   To provide a public demonstration to served agencies.

D. ☐   **To test the capabilities of CB, FRS and GMRS operators under emergency conditions.**

17-3 Which of the following is **not** a main function of NTS in the SET?

A. ☐   Tying together the various nets in an affected area.

B. ☐   Moving messages into the affected area.

C. ☐   Moving messages out of the affected area.

D. ☐   **Linking NTS to FEMA.**

17-4Which of the following words must be included in every test message during the SET?

A. ☐   Break! Break! Break!

B. ☐   Mayday!

C. ☐   "For Real" or "For Sure"

D. ☐   **"Drill," Exercise," or "Simulated."**

17-5 Which of the following should a SET debriefing not include?

A. ☐   Identification of efforts that worked as intended.

B. ☐   Identification of efforts that did not work as intended.

C. ☐   Recommendations for changes to plans and additional training.

D. ☐   **Public humiliation of participants who made errors.**

18-1 Which of the following applies to public service events, but not emergency operations?

A. ☐ Technical challenges arise.

B. ☐ Not everything is predictable.

C. ☐ Problems occur in "real time" and must be solved as they happen.

D. ☐ **Logistics and personnel schedules can be arranged in advance.**

18-2 Which of the following represents a <u>similarity</u> between public service events and emergency operations?

A. ☐ **Network designs can be planned and tested in advance**.

B. ☐ You can put the event on your calendar in advance.

C. ☐ Logistic problems can be solved before the event.

D. ☐ Personnel can be scheduled for in advance.

18-3 Before integrating emcomm training objectives into a public service event, what must first be accomplished?

A. ☐ Portable and mobile equipment must be tested.

B. ☐ **The needs of the served agency must be met**.

C. ☐ The use of Amateur Television (ATV) and Automatic Packet Reporting System (APRS) must be explored.

D. ☐ Different modes of primary and backup communication must be considered.

18-4 Which of the following is true of parades?

A. ☐ They do not vary in their complexity.

B. ☐ Radio traffic in support of parades is nearly always formal.

C. ☐ Only fixed, rather than mobile, operating stations are appropriate.

D. ☐ **Longer routes in difficult areas may require the use of repeaters.**

18-1 Which of the following is true of marathons, fun runs and bike-a-thons?

A. ☐ They never require more than one net.

B. ☐ They never require the use of repeaters.

C. ☐ Every competitor must be tracked.

D. ☐ **They may require roving stations.**

19-1 Which of the following describes the "maximum usable frequency"?

A. ☐ The highest frequency your equipment will operate on.

B. ☐ **The highest frequency that will be reflected off the ionosphere**.

C. ☐ The highest frequency that can be reflected by the clouds.

D. ☐ The maximum safe frequency for the antenna's height.

19-2 Which of the following statements is **NOT** true of NVIS antennaes?

A. ☐ A NVIS antenna radiates signals upward.

B. ☐ NVIS antennaes are used by the military services.

C. ☐ **The NVIS antenna consists of a dipole located one-half wavelength above the ground.**

D. ☐ Propagation from an NVIS antenna can be improved by means of a counterpoise.

19-3 On which of the following bands does an NVIS antenna work best?

A. ☐ 23-cm, 33-cm and 70-cm bands.

B. ☐ 2-meter, 6-meter and 10-meter bands.

C. ☐ 15-meter, 17-meter and 20-meter bands.

D. ☐ **30-meter, 40-meter, 60-meter, 80-meter and 160-meter bands.**

19-4 Which of the following statements best describes the relationship between the Solar Flux Index (SFI) and the Maximum Usable Frequency (MUF)?

A. ☐ **The lower the SFI, the lower the MUF**.

B. ☐ The lower the SFI, the higher the MUF.

C. ☐ The higher the SFI, the lower the MUF.

D. ☐ There is no relationship between SFI and MUF.

19-5 Which is the best location for a long wire NVIS antenna's counterpoise?

A. ☐ **On the ground directly beneath the antenna.**

B. ☐ On the ground at right angles to the antenna.

C. ☐ Above and slightly to the right of the antenna.

D. ☐ A counterpoise should never be used with an NVIS antenna.