

**ARRL Virginia Section ARES®
Emergency Operations Plan**



ARRL Virginia Section ARES® Emergency Operations Plan

Introduction

This operations plan is intended to outline the framework within which the Virginia Section of the American Radio Relay League (ARRL) shall operate during an emergency situation. During such a situation the emergency communications arm of the organization the Amateur Radio Emergency Service ® (ARES®) is the lead element for all disaster response.

In recognition of efforts of served agency and US Department of Homeland Security requirements this plan shall be based upon the principles outlined in the National Incident Management System (NIMS), specifically its Incident Command System (ICS) structure. As an operational element within the ARRL Field Service the Virginia Section Plan shall incorporate all the duties and responsibilities outlined within the organization into the NIMS/ICS structure.

ARES® may get activated for a variety of reasons. This document recognizes this by calling activations Auxiliary Communications instead of Emergency Communications. ARES® and National Traffic System (NTS) assets may be used for exercises, public service events, or assisting other auxiliary communications groups such as SATERN, MARS, SKYWARN, Southern Baptist Relief, or RACES.

This plan is current as of January 2016 and should be reviewed, updated and trained upon annually. Additionally it shall be briefed to and incorporated into training with served agencies as the situation merits.

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1. This document is intended to be an operations plan for the Virginia Section of the ARRL. As such the document has been developed following conventional planning process used by first responder agencies and the NIMS. It also incorporates responsibilities, positions and obligations as outlined in the ARRL Public Service Communications Manual.
2. The main body of this document, called the Basic Plan, describes the general components of the operations plan, an organizational structure to help amateur radio volunteers understand how their efforts relate to those of others, and a time schedule for the completion of necessary steps.
3. The appendices contain the details organized by functional area. These appendices are available on a need-to-know basis.
4. This document should be reviewed and updated annually to meet the needs of the Virginia Section of the ARRL and the associated served agencies.
5. For additional information about appropriate use this document please contact:
 - a. Section Manager
 - b. Section Emergency Coordinator
 - c. Section Traffic Manager

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I. Purpose and Scope

This plan describes operations conducted by the Virginia Section of the ARRL ARES® in support of served agencies and other amateur radio groups for the purpose of emergency communications. It explains the communications networks operations and capabilities, and the functional command structure, to include liaison with both served agencies and other emergency communications groups.

The plan incorporates both the ARES® and National Traffic System (NTS) functions of the ARRL Field Service. It focuses on operations at the section-wide level and provides the basis for plan, policy, and procedure development by Emergency Coordinators (ECs) and Net Managers (NMs).

II. Objectives

The following are the objectives of the Virginia Section while operating as an auxiliary communications support element:

1. Provide sustainable and professional communications support to all served agencies and auxiliary communications groups that request assistance.
2. Hold all amateur radio operations to the same standard set forth by served agencies by conducting all operations within a NIMS/ICS compliant environment.
3. Provide timely and appropriate communications support to all served agencies and auxiliary communications groups that request assistance.
4. Identify and coordinate with served agencies and auxiliary communications groups on support requirements and coordination mechanisms during pre-incident planning.

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III. Applicability of the FCC Rules

All ham radio operators and the operations assigned to them must comply with the rules and regulations outlined in 47 CFR Part 97. Therefore, all ham radio operators must refuse any communications request that does not comply with these rules and regulations at their own discretion in their role as the licensee and control operator of a transmitter operating under the *Amateur Radio Service*.

Although some operating modes are not easily or often monitored, amateur operators must remember that encoding messages for the purpose of obscuring their meanings is generally prohibited. (*47 CFR 97.113 (a)(4)*)

Tactical call signs, as permitted under 47 CFR 97.119, reflecting an operator's function, location or other unique factor will be used during activations. However, operators must still identify at the end of each communication, and at least once every 10 minutes during communication using their FCC issued call sign.

For the purposes of this document the term RACES (Radio Amateur Civil Emergency Service) operators shall mean amateur licensees registered with the Commonwealth and local/or government civil defense authorities per *FCC 47 CFR 97.407* and per Commonwealth or local government statute as operating in the *RACES Service*. It does not include independent entities using the term RACES as part of their name, unless registered with the Commonwealth and or local authorities, as noted above. Those groups not meeting the criteria shall be referenced by their full name and it shall be noted that they are a club, association, individual or other entity not affiliated with the legally recognized service. It shall be the policy of the Virginia Section not to deny access to ARES® or NTS nets or infrastructure those members of non-ARES® or non-NTS groups in so far as they act in accordance with all FCC rules and comply with the general standards of *47 CFR 97.101*.

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IV. Other Operational Authorities

The ARRL Field Organization which includes the Virginia Section is recognized and defined under the Rules and Regulations of the ARRL Articles of Association, By-Laws Section 30. The management of the Virginia Section is empowered under the Rules and Regulations of the ARRL Field Organization (Rev. 5 Jan 2002).

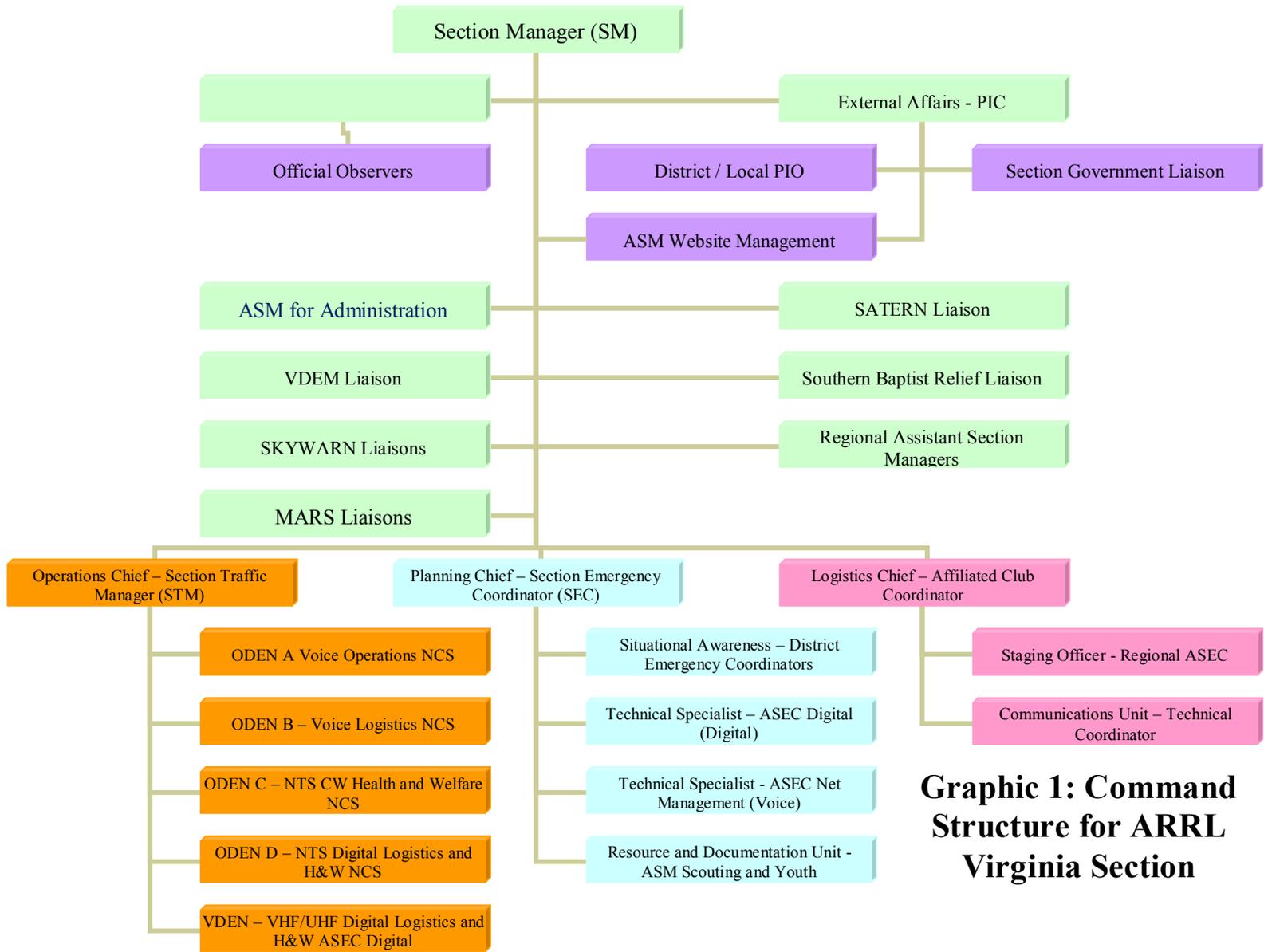
The ARES® and NTS functions of the ARRL operate through principals originating in the 1930's. These principles are outlined in the ARRL Public Service Communications Manual (PSCM) and guide.

V. Command Structure

To integrate ARES® operations into those of served agencies the roles and responsibilities of ARES® at the section, district and local levels shall be organized according to ICS. Section leadership shall establish Command and General staff scaled to the situation. Graphic 1 shows the basic positions and their relationships.

This document does not detail job descriptions for day-to-day operations; it focuses on roles and responsibilities undertaken during auxiliary communications activation.

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Graphic 1: Command Structure for ARRL Virginia Section

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Roles and Responsibilities

The **Command Staff** will be comprised of the Section Manager (SM), Regional Assistant Section Managers (Regional ASM), Official Observer Coordinator (OOC), Official Observers (OOs), Public Information Coordinator (PIC), Local/District Public Information Officers (PIOs), State Government Liaison (SGL), Assistant Section Manager Website Management (Webmaster), Military Affiliated Radio Service (MARS) Liaison, Salvation Army Tactical Emergency Response Network (SATERN) Liaison, Virginia Department of Emergency Management (VDEM) Liaison, Southern Baptist Relief (Southern Baptists) Liaison, and SKYWARN Liaisons.

The **Section Manager (SM)** has overall responsibility for all ARES® and NTS activities in the section. He or she shall be responsible for coordinating, prioritizing and executing all operations required to support served agency requests in the section. He or she shall also be responsible for all liaison and coordination with other sections of the ARRL, the ARRL Roanoke Division Director, and the ARRL national headquarters. This includes submitting all paperwork and handling all inquiries from the ARRL.

The **Regional Assistant Section Managers (Regional ASM)** are the primary liaison between the SM and the region of the Commonwealth to which they are assigned. They are responsible to keep the SM informed of all events on the ground and to ensure the smooth flow of information between the leadership and District Emergency Coordinators (DEC).

The **Official Observer Coordinator (OOC)** is responsible for identifying, documenting and coordinating with the local FCC Field Office regarding violations of FCC Rules and Regulations through a network of **Official Observers (OOs)** throughout the section. During activation the OOC shall collect information on activities requiring FCC enforcement and liaison with appropriate FCC officials on these problems through pre-established reporting mechanisms. He or she shall also advise the SM on all matters involving FCC Rules and Regulations related to the activation.

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The OOC shall also coordinate with the Operations, Planning and Logistics Chiefs to identify of frequencies that may require protection through communications emergency declarations by the FCC.

The **External Affairs Section** is led by the **Public Information Coordinator (PIC)**. The PIC is responsible to coordinate the flow of all information about the event with the media and general public and coordinate with any State or Federal Joint Information Center (JIC) established within the section. He or she shall also coordinate the activities of **Local/District Public Information Officers (PIOs), and the Assistant Section Manager Website Management (Webmaster) and State Government Liaison (SGL)**. Through the PIOs, Webmaster and SGL the PIC shall collect and disseminate information as necessary regarding ARES® and NTS activities within the section. All information shall be coordinated and cleared by both the SM and any served agencies prior to public release. All information shall also be coordinated with the ARRL national headquarters PIO as necessary.

Liaisons shall be appointed by the SM, as needed, to maintain communications and coordination with primary served and associated agencies or groups. These liaisons may be either an ARES® designated liaison to the agency or group or a member of that agency or group tasked to coordinate with ARES® or NTS. The primary liaisons are listed below. Other liaisons may be established as needed.

The **Military Affiliate Radio Service (MARS) Liaison** shall be responsible for all coordination between MARS services and ARES®/NTS, as needed. This coordination may involve, but is not limited to, health and welfare message handling or support for MARS Homeland Security mission assignments.

The **Salvation Army Tactical Emergency Response Network (SATERN) Liaison** shall be responsible to coordinate between SATERN and ARES®/NTS as needed. This shall include coordinating frequency assignments, supplying additional operators or equipment, and integration into existing networks in support of local or State multi-agency coordination centers.

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The **Virginia Department of Emergency Management (VDEM) Liaison** shall be the appointed by VDEM and shall be the primary point of contact between the Section and Commonwealth. Responsibilities include coordinating the activation of any nets and the provision of additional operators as needed. Formal notification of any State policy or decisions shall be made through this liaison. All coordination between ARES®/NTS and VDEM that is not otherwise dictated by other channels shall be done through the VDEM Liaison.

The **Southern Baptist Relief (Southern Baptists) Liaison** shall be responsible to coordinate between the Southern Baptists and ARES®/NTS as needed. This shall include coordinating frequency assignments, supplying additional operators or equipment, and integration into existing networks in support of local or State multi-agency coordination centers.

The **SKYWARN® Liaisons** shall be responsible for all coordination of amateur radio activities between ARES®/NTS and the four National Weather Service offices serving the section (Morristown, TN; Blacksburg, VA; Sterling, VA; Wakefield, VA). In the event of weather related activation, resources for severe weather spotting as well as support of other served agencies may require significant coordination. SKYWARN® Liaisons will advise the section of National Weather Service priorities and coordinate with the section to ensure the flow of information from ARES®/NTS nets to National Weather Service offices.

The **General Staff** shall consist of an Operations Section, Planning Section and Logistics Section and their composite parts. The Finance/Administration Section shall be incorporated into the Planning Section.

Operations Section: The Operations Section shall be led by the **Section Traffic Manager (STM)** or his or her assistant. The STM shall determine which nets should be operational at the section level to meet operational requirements. There are four primary nets in the Virginia Section. These comprise Old Dominion Emergency Net as ODEN/A, ODEN/B, ODEN/C, and ODEN/D. Each net shall be run by a Net Control and liaisons

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shall be established from each of these nets to the others as needed. Local and District nets shall assign liaisons to these nets to provide or receive information for the served agency.

ODEN/A: ODEN/A is a high frequency (HF) voice net on 40m or 80m LSB. This net is the primary tactical voice net for the section and shall operate as a directed net. The NCS shall determine on which band to activate depending on atmospheric conditions.

ODEN/B: ODEN/B is a high frequency (HF) voice net on 40m or 80m LSB. This net is the primary logistical voice net for the section and shall operate as a directed net. Logistical requests that are short enough to be provided via voice shall be handled on this net. This net may also serve as a back-up net to handle overflow traffic from ODEN/A or to handle specific group traffic such as regional coordination within the section. The NCS shall determine which band to activate on depending on atmospheric conditions.

ODEN/C: ODEN/C is an HF net operated on 40m or 80m CW. This net is the secondary health and welfare (H&W) NTS net for the section and shall operate as a directed net. This net operates under the guidelines for each cycle of the NTS and provides liaison among NTS nets, both within and outside of the Section. Liaison shall be established with local outlets for H&W traffic. The NCS shall determine which band to activate on depending on atmospheric conditions.

ODEN/D: ODEN/D is an HF digital net operated on 40m or 80m. This net is the primary H&W and logistical net and shall operate as a directed net. All logistical requests that are too long and/or detailed to be handled by voice shall be coordinated through this net. As the situation merits NTS H&W traffic shall be handled here. Liaison to ODEN/C to handle H&W and to the Virginia Digital Emergency Net (VDEN) shall be established to move traffic that is otherwise not able to be serviced by this net.

VDEN: VDEN is a very high frequency (VHF) and ultra-high frequency (UHF) net operated on 2m and 70cm digital modes. This net is the primary packet and Winlink 2000 (WL2K) network for the section and provides digital communications between local and

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state amateur radio operators. Situation Reports, ICS Forms and other documentation along with coordination among section officials will be handled here. Should the VHF/UHF packet network fail ODEN/D or WL2K will be used to augment this network. This is an undirected net and is always active.

Each of the nets should have liaisons serving either a local ARES® group, a local NTS net or an ARES® district to move information. The Operations Section Chief shall ensure that all nets are properly staffed and functioning to meet the needs of the situation and, through consultation with the net controls and personal observation, ensure that all nets are operating within all relevant FCC rules and regulations.

Planning Section: The Planning Section shall be run by the Section Emergency Coordinator (SEC). Prior to activation, the SEC shall be responsible for reviewing and maintaining all plans, policies and procedures and working with local ECs to ensure that their local plans, policies and procedures are aligned with those of the section. During activation he or she is responsible for ensuring the completion of all relevant ICS forms based on the guidance from the SM and STM, and for tracking the disposition and effective utilization of all deployed resources.

Situational Awareness Unit: The Situational Awareness Unit shall be staffed by the **District Emergency Coordinators (DECs)** throughout the section. They are responsible for collecting information from the field, keeping the SEC aware of all ARES® and NTS activity in the section and to passing information between the section and local ECs in a timely manner.

Technical Specialists: Two technical specialists, the **Assistant Section Emergency Coordinator Digital Operations (ASEC Digital)** and the **Assistant Section Emergency Coordinator Net Management (ASEC Nets)**, work with the Planning Section Chief to ensure that resource needs are identified and met for all net planning. During an activation these perform operational roles for nets under the Operations Section.

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Resource and Documentation Unit (RDU): This unit is responsible for tracking the utilization of resources in the section and informing the Logistics Section of anticipated unmet resource needs. The RDU is also responsible for collecting all information needed to file situation reports and post-activation forms with the ARRL and will assist the SEC in developing the after-action report.

Logistics Section: The Logistics Section is led by the Affiliated Club Coordinator. He or she is charged with recruiting and assigning resources from within the section, or advising the SM that resources from outside the section are needed, to meet the requirements of the Operations Section.

Staging Area Officer: When resources from outside of the section are utilized, a Regional Staging Area will be established. The **Regional ASEC** is responsible for this staging area. At this location, resources from outside the Virginia Section will check-in and receive general briefing regarding locations and frequencies, subject to updates at local staging areas. During demobilization, the regional staging area is also responsible to account for all resources that initially mobilized through it.

Communications Unit: The Communications Unit is led by the **Section Technical Coordinator**. This coordinator will be a resource for served agencies, groups working with ARES® and ARES® field units to help troubleshoot problems. Frequency conflicts, interoperability problems, and inquiries from served agencies or other auxiliary communications groups are handled by this individual. Prior to any activation the ASEC Digital and ASEC Net Management will ensure the Technical Coordinator is fully briefed on potential scope of the ARES® response. Prior to any activation, the Technical Coordinator should identify and develop relationships with his or her counterparts in served agencies and other auxiliary communications groups to proactively identify potential challenges and solutions.

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VI. Concept of Operations

ARES® and NTS operations in the Virginia Section will be tailored to the missions requested from served agencies in the role of auxiliary operations support. Auxiliary operations are defined “as any operation that requires the utilization of non-commercial communications circuits to provide support to any served agency operations.” This may include emergency operations during a disaster response or other non-disaster activations for prevention, recovery, mitigation or training activities. All activations are local. Therefore, the primary responsibilities for Section leadership are:

- 1) To provide strategic coordination and logistical support to local emergency coordinators during an activation. This includes prioritizing resource allocations and facilitating information flow among local, district, section and national leadership as needed.
- 2) To act as a liaison to Commonwealth-level leadership of affiliated groups and served agencies to coordinate communications support in accordance with national or section level plans, policies, and procedures.

The Section Manager (SM) will have overall responsibility for all ARES® and NTS operations within the section. In accordance with ICS scalability concepts, the SM will activate those components of the section leadership required to accomplish the mission. This includes adding liaison positions and other resources as needed.

Section leaders are spread throughout the Commonwealth. Therefore command shall be conducted virtually through voice or digital communications networks rather than at a central, physical location.

Pre-Activation: All plans, policies, and procedures shall be developed, maintained, and practiced on a regular basis, prior to any ARES® activation. This plan shall be exercised during the annual Section Emergency Test and updated as needed based on the lessons learned during the exercise. All Memorandums of Understanding and Statements of

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Understanding shall be reviewed annually by section officials and reaffirmed, updated, or otherwise renewed with served agencies as needed.

Activation: All coordination among Virginia Section leadership shall be conducted virtually. This coordination shall take place on the most effective communications available.

On the air operations (nets) will be conducted using voice, CW, or other digital modes. Tactical communications that (a) do not require a written reply and (b) are appropriate in an unsecured environment will be conducted using FM or SSB voice. Formal logistical requests, situation reports, health and welfare communications and transfer of other written documents will be conducted using digital modes. CW will be used as a backup for health and welfare messages and other low priority traffic that cannot be handled by other modes.

Nets will run continuously or until directed otherwise by the Section Manager. Liaisons for served agencies shall be established at the section or local level by ARES® or the served agency, dependent upon their organizational structure and needs. NTS shall establish liaisons to all regional and national level nets as required to support mission.

Activation may be initiated by local, section, state or national level officials within the ARRL or upon request from served agencies. Upon activation, local ECs shall notify their District Emergency Coordinator (DEC) within two hours with an initial situation report. This initial report shall be supplemented per local operating procedures as the incident progresses. The DEC shall notify the Section Emergency Coordinator (SEC) within two hours and all supplemental situation reports shall be forwarded with two hours of receipt. The SEC shall notify the SM within two hours and maintain situational awareness as information becomes available. If at any point an official cannot be reached notification shall be made to the next higher element in the ARES® organization.

The SM shall notify the ARRL Roanoke Division Director; the ARRL Emergency Preparedness, Response and Communications Director; and the ARRL Public

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Information Officer of the activation within two hours of receipt of information. Reports to the national level shall include an overview of events on the ground, unmet resource needs within the Section, and public information activities. Reports shall also detail which served agencies have requested support, what level of support has been requested and how that request has been fulfilled. Coordination between the SM and ARRL national leadership shall be ongoing, as required by the situation. External assistance, if needed, shall be provided accordance with the ARES® Mutual Assistance Team (ARESMAT) plans.

Post Activation: Demobilization shall commence when the SM is notified that ARES® and NTS operations are no longer required. All ARES® and NTS operators shall be instructed to demobilize via the existing communications networks. Through their ECs, DEC shall solicit feedback regarding operations from individual ARES® and NTS participants. This feedback shall be forwarded to the SEC for incorporation into a formal after-action report (AAR) submitted to the ARRL Emergency Preparedness, Response and Communications Director for review and action.

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VII. Continuity of Operations

The Virginia Section is led by the Section Manager (SM). For continuity, the SM shall be succeeded by the ASM for Administration, followed by or the Regional ASMs.

In the event that the leadership of the section is not able to fulfill their duties, their pre-designated deputies shall assume those responsibilities. If these deputies are unable to perform, then the Roanoke Division Director shall become acting Section Manager until the elected leadership can resume operations or until elections can be held. If the SEC and his or her deputies are not able to continue operations then an appointee of the Roanoke Division Director shall assume that role. All other leadership and coordination positions shall be reconstituted from existing field organization resources.

VIII. Activation Procedures

Local Activation: Upon notification that ARES® support is needed local ARES® ECs will activate according to local procedure. The Local EC shall notify the DEC of the activation of their ARES® unit. They shall include in the report:

- Who activated them
- What the activation is for
- Which agencies are being supported
- What is the estimated length of the activation
- What type of support is being provided (voice, data, local repeater, regional in section/regional out of section)

This information should be provided to the DEC within two hours of activation.

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Commonwealth to Section: When a served agency or affiliated group at the Commonwealth level notifies the SM that activation may be needed, the SM will activate an appropriate level of the leadership. Based upon the requirements of support identified by the served agency an ARES® Incident Action Plan shall be developed and appropriate DEC's and EC's shall be notified of their activation. This process shall take place within eight hours of request by the served agency or within a time outlined by prior agreement.

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**Function
Specific
Appendices**

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Appendix A: ODEN Net Operations

I. Summary

This appendix reviews ARES® and NTS net operations in the Virginia Section. The Old Dominion Emergency Net (ODEN) is a Virginia Section ARES® and RACES, statewide, communications network consisting of one or more discrete HF nets. ODEN exists to provide auxiliary communications for Section activities in support of served agencies and affiliated groups.

II. Nets

Nets shall be known by the name **Old Dominion Emergency Net (ODEN)**.

ODEN A shall be the primary voice operations net charged with facilitating liaison between Section and State entities with district and local nets. It shall also facilitate liaison between local areas and within or between districts as needed.

ODEN B shall be the primary voice logistics net charged with handling Section and State logistical coordination over long distances and facilitating contact for these purposes with district and local nets. It may also facilitate logistical coordination between local areas and within or between districts as needed. This net shall also be a secondary operations net designated with facilitating hospital and public health or other communications as needed.

ODEN C shall be the primary CW health and welfare net charged with handling all routine and health and welfare NTS traffic into and out of the section.

ODEN D shall be the secondary logistics and health and welfare NTS net charged with handling all formal logistical reports, lengthy situation reports that are too long for servicing on voice, and handling any health and welfare or routine traffic not handled by ODEN C. Currently, PSK-31 is the most common data mode used.

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III. Schedule

ODEN A/B: During activation these nets shall run continuously as needed until the end of the activation. The Operations Chief shall ensure all Net Managers have coordinated coverage for net control stations. Each NCS schedule shall be communicated to the Operations Chief showing coverage for each operational period. Any shortages in the schedule shall be filled through coordination by Net Managers or the Logistics Section, if required.

ODEN C/D: During activation these nets shall run according to the NTS cycle until the end of the activation. ODEN C shall operate CW and ODEN D shall operate using a digital mode. Should the situation merit, ODEN D, will remain active 24 hours a day to facilitate the transmission of formal logistical requests and situation reports. ODEN D will also act as the back-up for VDEN should the network encounter failures.

Once the situation has reached a point where section wide voice nets are no longer needed or the Section Manager has been notified ARES® and NTS support is no longer required he/she will notify the Operations Section Chief that all nets may secure. The Operations Section Chief shall ensure notification to all section wide net managers, controls and participants as well as district and local nets are notified of this decision and at what time it takes effect.

IV. Frequencies

Each net has at least a primary and a secondary frequency, with others having a tertiary frequency. Should a net control find that propagation or interference requires the net to move he/she may execute a move to a more appropriate frequency. Changes in net frequencies should be communicated to the Operations Section Chief in a timely manner.

All net frequencies are listed on the Section Net ICS 205 in Appendix C.

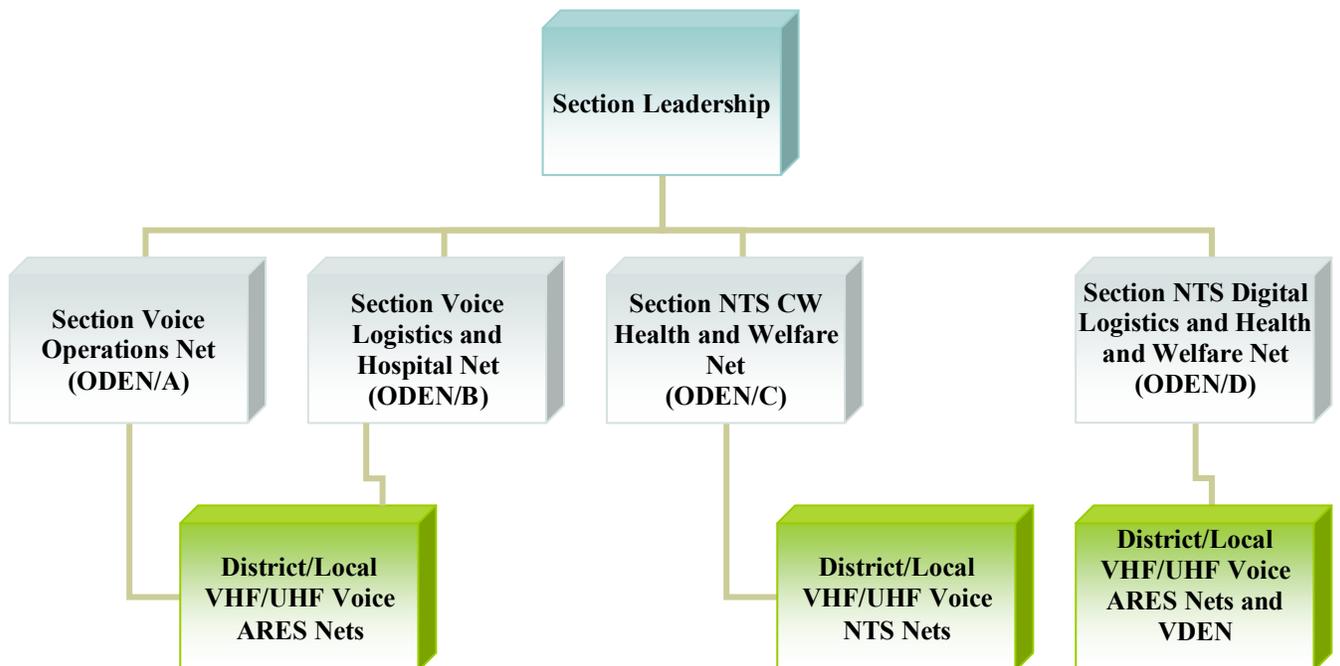
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V. Procedures

All nets shall operate following the FCC Rules and common Directed and Undirected Net procedures. If a Net Control places a net in an Undirected Mode stations shall keep all non-emergency communications transmissions to a minimum and move off frequency once contact is made. During a Directed Net all stations shall route all traffic through the Net Control. Net Controls will follow good net management techniques in pairing off stations and moving them to another frequency to move traffic so as to keep the primary net frequency clear.

Liaisons from district and/or local level nets shall be established and maintained for the duration of that activation for each net. These individuals will be responsible for ensuring the movement of information from the net to local outlets and vice versa as needed.

VI. Information Flow



Graphic 2: Net Structure

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Above is a graphic outlining the relationships between all nets. Liaisons between the nets shall be established and maintained to ensure information flow as needed. The Section Manager may activate, at his/her discretion, a conference call or an Echolink or IRLP conference node for coordination between section leaders and others invited to attend. Decisions that need be communicated from this conference call should be pushed back down through the nets to ensure it reaches all levels of the section. Information requests should be serviced similarly with information flowing back to the section manager as needed through the network.

Information will move from local area nets to district level nets and, if necessary section levels nets to provide information as needed. On voice this means liaisons would be established between local V/UHF voice nets and communicated to ODEN A or B if the traffic is ARES® related or ODEN C or D if the traffic is health and welfare related. If the information at the local level is of a lengthy nature or requires the transfer of files then liaisons will use VDEN, WINLINK or ODEN D to move the information from the locality to the intended recipient.

VII. Message Format

There are two primary message formats that shall be used on most nets: NTS Message format and ICS-213 format. Messages shall not be reformatted once they have been sent into the ARES® or NTS system for servicing.

NTS Format: NTS format shall only be used for those messages being sent as either routine (non-emergency related) or health and welfare traffic. Messages in this format will receive the lowest priority during any emergency activation.

ICS-213: ICS-213 and related forms are required for use by most served agencies. These forms shall be used for all non-health and welfare formal traffic and originated by served agency representatives only. When at all possible, long traffic – those messages more than 30 words in length – should be sent via ODEN D or VDEN.

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Other formats: At times served agencies or other auxiliary communications groups will ask ARES® and NTS to service messages for them in their format. This format should be respected and not changed during servicing and passed with all other traffic of a similar priority.

VIII. Interference Issues

During net operations there may be interference issues experienced. If the interference is not of a purposeful nature designed to cause the net harmful interference then working with the operator and the section Technical Coordinator to solve the problem is the suggested course of action.

If the interference is of a nature that is clearly purposeful and designed to prevent auxiliary communications operations then coordination with the section Official Observer Coordinator or Official Observers should be undertaken to resolve the issue or collect enough information for referral to the local FCC Field Office for remedy.

In order to prevent unintentional interference the Section Manger shall notify the ARRL HQ of times and net frequencies on HF once they have been established. This will allow ARRL HQ to broadcast a bulletin via the internet and W1AW asking all amateurs to stay clear of these frequencies. In some extreme instances the FCC may issue a communications emergency and designate certain frequencies off limits to non-emergency traffic.

Requesting this level of activity should be a last resort with information coordinated by the Official Observer Coordinator on why this should be undertaken by the FCC.

IX. More Information

ARES® - Virginia: <http://www.aresracesofva.org>

NTS - Virginia: <http://www.aresracesofva.org/index.php/national-traffic-system>

ODEN: <http://www.aresracesofva.org/index.php/oden-hf-nets>

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VLEN: <http://www.vden.org>

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Appendix B: VDEN and Digital Net Operations

I. Summary

This appendix reviews various digital modes and their use during auxiliary communications events. The digital network within the section shall focus on the VDEN packet/Winlink network and the ODEN D, PSK-31 and/or Olivia network.

II. Digital Policy and Concept of Operations

In the Virginia Section digital communications modes shall be the primary mode used to provide situation reports and logistical requests to Section Leadership and served agency command centers and to handle low priority NTS traffic when ODEN C cannot. Within the section digital communications will be done via Packet or Winlink on V/UHF with ODEN D as a back-up on HF. For communications with ARRL HQ and areas outside of the section this shall be done using Winlink.

Information transmitted by VDEN that cannot be serviced for any reason shall be serviced using ODEN D. Liaisons shall monitor the network and provide support to the voice and Morse Code nets (ODEN A, B, C) as requested by the Operations Section Chief.

III. Virginia Digital Emergency Network

Virginia Digital Emergency Network is a VHF/UHF packet network that spans the section and provides packet connection from local EOCs to the VDEM EOC. This is an undirected network that forwards formal messages in a manner similar to e-mail to local BBS. The Assistant Section Emergency Coordinator – Digital shall be responsible for coordinating this network.

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Map 1: VDEN Network

The VDEN network has the ability to handle Winlink formatted text messages similar to using a Winlink Telpac node. It will not support file attachments. Nodes on this network are easily reachable from all parts of the section using a 50w FM radio and a J-pole and will provide basic packet capabilities as needed.

IV. ODEN D

ODEN D is an HF digital network of operators within the section that primarily handle NTS related traffic. In the event that VDEN is not operational for an area ODEN D shall operate as its back-up and handle traffic as needed. The primary mode of operation shall be on USB, Olivia (4-tone, 500Hz, +1300 Hz offset), PSK-31, MSFK-16 or RTTY may also be used.

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V. Winlink

Winlink is a series of protocols that work together to form a network that provides and RF bridge which transports SMTP style e-mail messages. This allows users unfamiliar with packet or those requiring the ability to transfer files and outlet when the internet is not working. Elements of this network will allow local VHF/UHF users to send an e-mail from the impacted area out to unaffected internet users or other RF based users utilizing common e-mail programs.

In the Section this protocol will be used as a back-up for communicating with the ARRL National HQ and providing support to those agencies and affiliated groups that may have the capability.

VI. More Information

V DEN/Packet: <http://www.vden.org>

ODEN D: <http://www.aresracesofva.org/index.php/oden-hf-nets>

Winlink: <http://www.winlink.org>

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Appendix C: Section Communications Plan

I. Summary

This appendix outlines operating frequencies for the section nets and what modes/uses each net has on an ICS-205.

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INCIDENT RADIO COMMUNICATIONS PLAN		1. Incident Name VA Section Net Frequencies		2. Date/Time Prepared 1/6/2016		3. Operational Period Date/Time	
4. Basic Radio Channel Utilization							
Radio Type/Cache	Channel	Function	Frequency/Tone	Assignment		Remarks	
LSB	ODEN A	Primary Voice Ops	3947 KHz	Primary Voice Operations Net			
LSB	ODEN A	Secondary Voice Ops	7240Khz	Secondary Voice Operations Net			
LSB	ODEN B	Primary Voice Logistics	3943KHz	Primary Logistics and Hospital/Public Health Voice Net			
LSB	ODEN B	Secondary Voice Logistics	7248KHz	Secondary Logistics and Hospital/ Public Health Voice Net			
CW	ODEN C	Primary CW	3578.5 KHz	Primary NTS CW Health and Welfare Net			
CW	ODEN C	Secondary CW	7050 KHz	Secondary NTS CW Health and Welfare Net			
USB	ODEN D	Primary Digital	3578.5 KHz +1300hz audio offset	Primary Digital Logistics and Health and Welfare Net		Primary mode is OLIVIA (USB, 4 Tones, Bandwidth 500, & 1300 Hz offset). Alternate modes could include PSK31, MFSK16, RTTY.	

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INCIDENT RADIO COMMUNICATIONS PLAN		1. Incident Name VA Section Net Frequencies		2. Date/Time Prepared 1/6/2016		3. Operational Period Date/Time	
4. Basic Radio Channel Utilization							
Radio Type/Cache	Channel	Function	Frequency/Tone	Assignment	Remarks		
USB	ODEN D	Secondary Digital	7050 KHz +1300 Hz audio offset	Secondary Digital Logistics and Health and Welfare Net	Primary mode is OLIVIA (USB, 4 Tones, Bandwidth 500, & 1300 Hz offset). Alternate modes could include PSK31, MFSK16, RTTY.		
USB	ODEN D	Tertiary Digital	7050 KHz +1300 Hz audio offset	Tertiary Digital Logistics and Health and Welfare Net			
FM	VDEN	Primary User Frequency	145.730 MHz	VDEN Packet section wide Packet Frequency	May also be used by Winlink Telpac Nodes		
FM	VDEN	UHF High Speed Backbone	441.050 MHz	VDEN Packet section wide UHF high speed backbone link			
FM	VDEN	UHF Low Speed Backbone	446.075 MHz	VDEN Packet section wide UHF low speed backbone link			
FM	Command	Primary Command	TBD	Command and Coordination for all Section Leadership	IRLP or Echolink		
5. Prepared by (Communications Unit)							

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Appendix D: External Affairs

I. Summary

This appendix outlines external affairs operations and how Virginia Section will work with other groups and agencies in dealing with the media.

II. Components

Public Information Coordinator: The section PIC shall be the lead for all external affairs activities in the section during auxiliary communications activation. He or she shall be responsible for all coordination between the section and ARRL HQ PIO and coordinating all external affairs efforts in the section.

Public Information Officers: PIOs are District or local appointees responsible for handling tactical level external relations. They will provide the PIC with information on media or external agency requests for information, provide “ground truth” as to what is officially being reported as occurring locally, and liaise with local media outlets on issues relating to amateur radio.

State Government Liaison: The SGL shall be responsible for being the liaison to any State Joint Information Center and handling all legislative and governmental issues relevant to the activation.

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Assistant Section Manager Website Management: The ASM Website Management shall provide accurate and up to date information via internet updates and email distribution lists on amateur radio activities and official announcements as directed by the Public Information Coordinator.

III. Concept of Operations

During activation public affairs personnel will have two primary customers of their information: amateur radio operators in the section and other amateur radio operators from outside the section or non-amateur radio operators. As such the external affairs function will be critical in maintaining a flow of accurate and timely information on amateur radio activities as they pertain to the activation.

The Section PIC shall be responsible for coordinating all external affairs activities. This shall include developing and sending to the Section Manager for approval press releases and FAQs for distribution to media and local PIOs. These FAQs and press releases shall be based on information gathered by local PIOs involved with the activation. Furthermore, the SGL shall be assigned to the State Joint Information Center (JIC) as an SME on amateur radio and conducting liaison between the section and state external affairs officials.

During an activation that involves a Commonwealth JIC all information releases shall be sent to the SGL for clearance through the Commonwealth JIC before release. During all activations the ARRL Media Relations/PIO official at ARRL National HQ shall be CC'ed on all releases. In the event of an incident requiring a significant activation utilizing resources from outside the section, requiring activation of a

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FEMA JIC or amounting to an event of national significance per US DHS, the ARRL Media Relations/PIO shall be at the FEMA JIC and consulted on any information releases related to amateur radio. He/she may require additional local PIO support from the section which shall be coordinated through the Section PIC.

In order to disseminate the information the ASM Website Management shall develop and maintain an electronic mailing list and web page. The electronic mailing list shall incorporate local, state and national media agencies and outlets and shall be used to disseminate press releases and FAQs on amateur radio activities related to the activation. The Webpage shall contain the same information as well as information targeting amateur radio operators and briefing them on what they should do in response to the activation.

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Appendix E: Maps

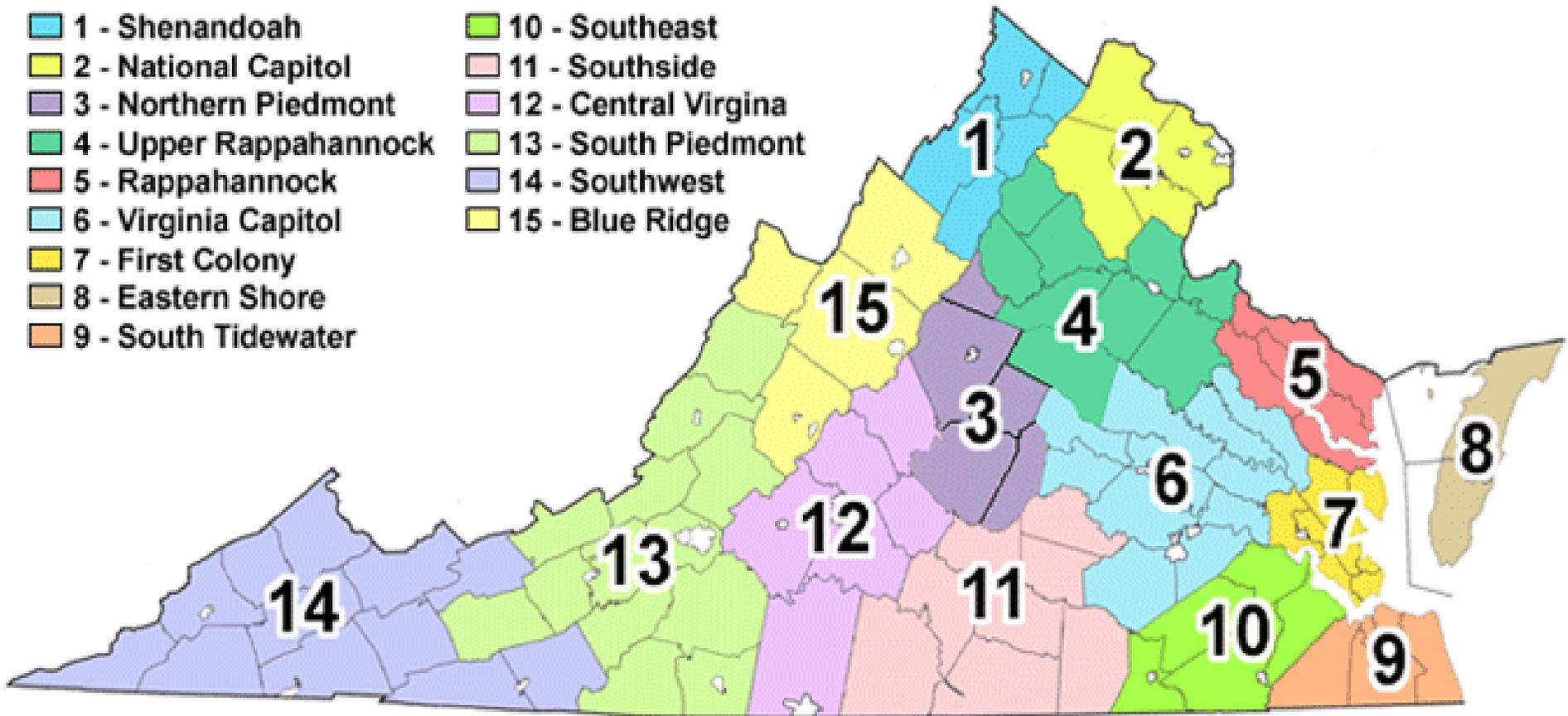
This appendix contains reference maps of the Virginia Section.

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Virginia Emergency Districts

- 1 - Shenandoah
- 2 - National Capitol
- 3 - Northern Piedmont
- 4 - Upper Rappahannock
- 5 - Rappahannock
- 6 - Virginia Capitol
- 7 - First Colony
- 8 - Eastern Shore
- 9 - South Tidewater

- 10 - Southeast
- 11 - Southside
- 12 - Central Virginia
- 13 - South Piedmont
- 14 - Southwest
- 15 - Blue Ridge



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Commonwealth of Virginia Political Map

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Appendix F: ARES Web Links

ARRL Home page: <http://www.arrl.org>

EOP (this document): http://www.aresracesofva.org/images/pdf_files/EOP.pdf

ARES – Virginia Section website home page: <http://www.aresva.us>

MOU- ARES & VDEM (scanned copy – signed):

http://aresracesofva.org/images/stories/pdfs/vdem_ares_mou_3_july_2008.pdf

MOU - ARES & VDEM (clean copy – unsigned):

http://aresracesofva.org/images/stories/pdfs/2008_mou_ares-final_july_3_2008--unsigned.pdf

ARES Manual – Latest ARRL version:

<http://www.arrl.org/files/file/Public%20Service/ARES/ARESmanual2015.pdf>