

MEMORANDUM

TO: ROBERT COOKE, VPFS
FROM: NTRG
DATE: October 31, 2007
RE: FINAL REPORT

On behalf of the NTRG, I am pleased to report that we have concluded our deliberations, and report to you as follows.:

The NTRG consisted of the following members;

Robert Boyd, VE3SV	Jeff Dovyak, VE4MBQ
David Drinnan, VE9FK	Eric Jacksch, VE3XEJ
Glenn Killam, VE3GNA	Don Mackinnon, VE4DJ, Chair
Pierre Mainville, VA3PM	Forbes Purcell, VE6FMP
Lance Peterson, VE3LP	Monte Simpson, K2MLS
Tim Smith, VE3HCB	Ian Snow, VA3QT

The terms of reference were set out in your e-mail of August 18, 2006, and August 28, 2006. To better manage the course of our deliberations we created two sub-committees, Governance, Leadership and Relations with Served Agencies (the "Governance Sub-Committee"), and Training (the "Training Sub-Committee"):

(a) Governance Sub-Committee

Jeff Dovyak, VE4MBQ
Pierre Mainville, VA3PM, Sub-Committee Chair
Ian Snow, VA3QT

(b) Training Sub-Committee

Robert Boyd, VE3SV
David Drinnan, VE9FK, Sub-Committee Chair
Eric Jacksch, VE3XEJ
Glenn Killam, VE3GNA
Forbes Purcell, VE6FMP
Lance Peterson, VE3LP
Monte Simpson, K2MLS
Tim Smith, VE3HCB

Interim NTRG reports were submitted previously. Our Memorandum of October 15, 2006 (a copy of which is attached for reference to Schedule A) set out responses to questions that shaped much of our discussion.

The following form part of this report:

- (a) Schedule A (attached) is the final report of the Governance Sub-Committee, "Governing the Amateur radio Emergency Service – Adapting to the Future;" and
- (b) Schedule B is the updated Training Manual prepared by the Training Sub-Committee (it is too large to transmit by e-mail, but can be found on Dave Drinnan's site at:
http://www.drinnan.com/ntrg/ARES_TRAINING_MANUAL_preliminary_v0710.6-071031.pdf

Each of the above referenced documents was submitted by the respective sub-committee and reviewed by the NTRG as a whole. Any further recommendations or changes were then considered and incorporated.

The deliberations of the NTRG as well as those of the two sub-committees were consensus driven, and I am pleased to say that all of the aforementioned NTRG members continued to actively participate in our deliberations for the entire length of the project. Although it is fair to say that everyone contributed individually to our reports, I respectfully believe that these materials are all the better because the NTRG as a team was stronger than any one individual.

The results of those deliberations and our subsequent interim and final reports, to the extent that they represent a valuable contribution to RAC, ARES and the members of our fraternity are the consequence of their hard work. I have personally enjoyed working with each and every member, and was honoured to serve as a member of this team of knowledgeable, enthusiastic hams. As editor, I bear sole responsibility for any errors or omissions.

All of which is respectfully submitted,

Don Mackinnon, VE4DJ
NTRG Chair

**SCHEDULE A
TO REPORT OF THE NATIONAL TRAINING RESOURCE GROUP**

**GOVERNING THE AMATEUR RADIO EMERGENCY SERVICE
– ADAPTING TO THE FUTURE**

**A Report by the
Governance, Leadership and Relations with Served Agencies
Sub Committee of the
National Training Resource Group**

I. EXECUTIVE SUMMARY

Even though they share common amateur radio training, structure and governance model, extraordinary differences exist in ARES in Canada from one Section to another. In some jurisdictions, ARES is well integrated into the emergency management matrix. In others, ARES is not seen as a significant participant, and is therefore not included in existing emergency plans, perhaps other than in a casual mention as a “last ditch” resource.

Without the participation of representatives from each Section, we were constrained from specific examination of personnel or served agency issues. Nevertheless, we were able to draw general conclusions and identify suggestions for further study and discussion by the ARES leadership in the Sections.

In Schedule B to the NTRG Report the committee separately presented recommendations concerning training content.

Set out herein is our observations and initial recommendations to better establish organizational continuity from Section to Section; and, raise some issues that might better be discussed by the ARES leadership representing all of the Canadian Sections.

(a) Recommendations for Immediate Action:

1. Adopt a modernized RAC Emergency Coordinator’s Manual that includes additional items and material relevant to a post 9/11, post-Katrina environment. This includes, but is not restricted to, the addition of materials on the Incident Command System now in use in most jurisdictions in North America (Schedule B). As well, we have included below a process for the continuing evolution of these materials.

2. Create the position of National Emergency Coordinator (“NEC”). The NEC reports to the VPFS, and would:

- (a) be responsible for the development of relationships with the headquarters of national agencies including Public Safety Canada, the Red Cross and Salvation Army;
- (b) facilitate cooperation and regular information sharing between Section Emergency Coordinators;

- (c) advise on the continuing evolution of policies, national training standards and qualification profiles for ARES leadership positions; and
- (d) assist with coordination of large scale, multi-jurisdictional events.

3. Create a standing national ARES executive committee on emergency management to be chaired by the NEC and made up of the SECs from each Section. This committee and any required sub-committees would be responsible for providing advice and recommendations to the NEC on emergency management issues, including:

- (a) any issues arising out of the SECs' relationships with the regional offices of national agencies such as Public Safety Canada, the Red Cross and the Salvation Army;
- (b) cooperation and regular information sharing between Section Emergency Coordinators;
- (c) continuing evolution of policies, national training standards and qualification profiles for ARES leadership positions; and
- (d) coordination of large scale, multi-jurisdictional events.

4. Provide for formal recognition of such assistants as may be reasonably required and appointed by each officer to fulfill the function of his or her office, with such appointments to be for an indefinite term not to exceed the remaining term of their principal.

(b) Items for Further Discussion:

There are additional items that we have not included in our recommendations. Our major concern is that we believe that there should be additional discussion among senior ARES leadership. These are items that could be dealt with in the proposed standing executive committee, and include:

1. Increase term for ARES officers from 2 to 5 years, renewable annually thereafter.
2. ECs, DECAs and SECs to have additional qualifications, including management or professional experience, or progressive ARES experience, and completion of RAC Emergency Coordinator's Course (or undertake to do so within 6 months of appointment); and, where available, other appropriate courses in emergency management and incident command.
3. SECs to be appointed by NEC on recommendation of SM rather than by SM.
4. SECs to report to NEC through standing executive committee.
5. DECAs and ECs to be appointed by SECs, and assistants to ECs, DECAs, SECs to be appointed by applicable officer, i.e. ECs, etc.
6. In due course ARES to become a separate not-for-profit or charitable operating agency of RAC reporting to the Board through the VPFS.
7. NTS to be dissolved, and regional, national and international nets as may be required to assist served agencies be coordinated by ECs, DECAs and SECs in case of local or regional nets, and NEC in case of national and international nets and integrated within ARES.

II. INTRODUCTION

In August 2006, Bob Cooke (VE3BDB) the Vice-President of Field Services commissioned a National Training Review Group (NTRG) “to research, formulate and facilitate a comprehensive, consistent and uniform training strategy that is viable and realistic, which will serve as a standard procedure guide (or guides) for the ARES/NTS operations in Canada.” To better focus on the issues faced by ARES and the NTS, various fundamental questions were posed by the NTRG Chair and comprehensively considered by the NTRG. A summary of the results is set out in our Memorandum dated October 15, 2006 (attached for reference hereto).

As a consequence of the responses to those questions and on further inquiry it became apparent that even though they shared common amateur radio training, structure and governance model, extraordinary differences existed in ARES in Canada from one Section to another, particularly with respect to the relationships with their respective served agencies.

In some jurisdictions, ARES was well integrated into the emergency management matrix, whereas in others ARES was not seen as a significant participant, and was generally not included in existing emergency plans, except perhaps in a casual mention as a last-ditch resource.

Training (or lack thereof) alone clearly did not account for the disparity, and it follows that training alone will not remedy the situation. Significant effort must be made to improve ARES leadership and build more sophisticated professional relationships with other emergency management participants. This will allow ARES to be better promoted as an effective emergency resource.

To address this issue the NTRG Chair struck a Governance, Leadership and Relations with Served Agencies Sub-Committee (or “Governance Sub-committee”) with a mandate to make “suggestions to enhance ARES capacity to provide effective service to our served agencies from the point of view of our organizational structure and leadership, with a specific focus on national minimum training requirements, and enhanced leadership training. The NTRG members appointed to the governance sub-committee were chair Pierre Mainville (VA3PM) and members Jeffrey Dovyak (VE4MBQ) and Ian Snow (VA3QT), all of whom have significant experience in the Field Service and with ARES.

(a) Additional Training and Standards:

Some elements in the amateur radio community believe that ARES must “professionalize” if it is to remain a useful component of the emergency management matrix, while other elements passively resist any attempt to impose additional training and standards.

“Professionalization” has its virtues, but it takes a commitment that most amateurs are unable or unwilling to accept unless it forms part of their former or current careers. That is not intended as a criticism, merely a realistic observation.

However, the *laissez-faire* approach that mere certification will suffice is also problematic.

Neither the training necessary to basic and advanced certification, nor casual participation in radio nets, prepares an operator to function reliably and competently in a complex emergency environment. It probably never really did, but a generation ago many Canadian amateurs had wartime experience that may have better prepared them to function in a high stress emergency environment. Today, further training and experience are required particularly by those who serve in ARES leadership positions.

For ARES to be effective it must have a dedicated cadre of reliable, capable volunteers. Appearance and perception go “hand in hand.” We have all seen caricatures of some volunteers who arrive with multiple radios, cell phones, flashlights, etc. on their belts or with vehicles festooned with multiple, redundant antennae, flashing beacons or excessive signage. Numbers are important, but a single “loose cannon,” the so-called rogue volunteer, can do more harm (particularly during the early stages in relationship building) than dozens of competent operators, so some care must be taken in the selection of ARES members.

First responders and emergency managers have little patience for so-called “wannabees,” particularly those who appear ridiculous. Again, this is particularly important for those in leadership positions who are in frequent contact with other emergency managers.

Too frequently ARES leaders are willing, dedicated volunteers, but not experienced managers. The selection and training of ARES leadership is not keeping pace with the requirements of the increasingly sophisticated emergency management environment.

To be effective a manager must be able to lead within his own organization, as well as relate to other managers and superiors both in his organization and in other organizations with which his organization interoperates, including served agencies. Managing volunteers has special challenges, and some managers are more gifted at this than others, but it is really the management of relationships with other responders and our served agencies that we speak of.

Our most senior representatives, the ECs, DECs and SECs must be perceived as competent managers and partners in the emergency management process. If they are not, emergency managers will be reluctant to include ARES in their plans. Therefore, selection and retention of qualified ECs, DECs, and SECs should be a major priority.

Most important, ARES must accept accountability for its internal responsibilities for assessing and adapting to change. In that regard, a “council” composed of the SEC’s would serve as a focal point for developing policy advice and coordinate the activities of standing working groups whose role is to develop the operating doctrine, procedures manuals and training programs needed to maintain ARES as a viable source of auxiliary communications in time of emergency and natural disaster.

(b) Evolution of Complex Telecommunications and Served Agency Issues:

ARES won’t be included as a real participant if served agency management doesn’t believe that there is a potential for telecommunications disruption, or that responders’ ordinary resources will be sufficient in all foreseeable circumstances.

Not too many years ago, most telecommunications systems in use in public safety were very simple commercial systems that allowed only local communications. Regional telecommunications systems were fairly rare, usually operated only by large provincial police services, e.g. OPP, RCMP, or by provincial utilities, railways and occasionally by other large government departments, e.g. highways and transportation.

At that time ARES represented a level of capability beyond what the majority of two-way radio users were familiar with, but now the proliferation of cellular telephone, Blackberries, facsimile, data, e-mail, internet, multiple-user public safety trunked systems, etc. have made our systems seem much less sophisticated.

Additionally, the ability to collate, integrate, and share information between widely dispersed locations has resulted in an environment where first responders and emergency managers have become adept at exploiting commercial communication methodologies in the performance of their daily jobs. They have become “operators” and may not see the relevance of the traditional ARES response to their operations.

This has led some (including other hams) to question the need for an amateur radio option, but they fail to understand that complexity does not necessarily ensure survivability.

Centrally complex telecommunications systems have vulnerabilities that can be difficult and very expensive to harden, or repair or replace in a disaster. As these systems are generally reliable in everyday operation, many public safety users do not experience frequent system failures and assume a resiliency that may not exist, particularly in an environment that does not experience frequent disasters. Moreover, commercial service providers are often reluctant to provide information that might suggest or identify system vulnerabilities. A failure of one technological component can have immediate, and widespread effect on all the others, particularly where different communications resources may be dependent on a common “pipe”, e.g. buried fibre optic cable carrying landline, cellular, facsimile, two-way radio, e-mail, internet, and pagers.

Vulnerabilities, which appears obvious to us, may not be so obvious to persons who don't really know how the technology works. Just as we can “fall in love” with our favourite radios or modes and lose sight of their shortcomings, first responders can be beguiled by feature rich technologies and assume continued reliability in extreme circumstances. Time and time again, such systems have failed during a major event and too often the affected agencies did not anticipate the failure. The vast majority of first responders are barely appliance operators, frequently know little about the more esoteric operating features of their own telecommunications equipment, and have no effective plan B in the event of failure. Therefore, part of the equation involves the competence of served agency management and their own lack of training (or of imagination).

In most jurisdictions in Canada interoperability is in its infancy, and fraught with both technical and organizational impediments, that are difficult to overcome during routine operations, and impossible to effectively implement in a disaster.

Well-trained, experienced ARES members can play an important role in training first responders;

but, if ARES personnel are seen as untrained in emergency management, or seen as unnecessary in the face of redundant, sophisticated regional telecommunications systems, we are not likely to be included in the planning process. If not included at the planning stage, we will not be utilized except in a last resort, in which case training opportunities will not be provided, leading to further lack of acceptance. So the spiral continues, until we arrive at the point where ARES may cease to be considered a relevant participant.

To avoid this downward spiral our personnel must be well trained and knowledgeable, and our emergency coordinators must be able to competently relate to other public safety managers and discuss telecommunications issues. Training must extend beyond basic two-way radio operation to include technologies such as ATV and data modes, as well as an understanding of emergency management principals sufficient to allow effective integration with other participants. ARES emergency coordinators must be experienced managers, who remain in place for a more extended period than is currently the case, and are able to effectively contribute to planning and preparation as well as to the response.

III. DISCUSSION OF RECOMMENDATIONS FOR IMMEDIATE ACTION

1. Adopt a modernized RAC Emergency Coordinator's Manual that includes additional items and material relevant to a post 9/11, post-Katrina environment. This would include adding materials on the Incident Command System now in use in most jurisdictions in North America, and include a process for the continuing evolution of these materials.

Please see proposed RAC Training Materials - Schedule B to the NTRG Final Report.

2. Create the position of National Emergency Coordinator ("NEC"). The NEC reports to the VPFS, and would:

- (a) be responsible for the development of relationships with the headquarters of national agencies including Public Safety Canada, the Red Cross and Salvation Army;**
- (b) facilitate cooperation and regular information sharing between Section Emergency Coordinators;**
- (c) advise on the continuing evolution of policies, national training standards and qualification profiles for ARES leadership positions; and**
- (d) assist with coordination of large scale, multi-jurisdictional events.**

Until recently, emergency management was essentially considered a local government function dependent on mutual aid and in certain circumstances Provincial assistance for multi-jurisdictional co-ordination, specialized functions, and financial assistance. Federal involvement (other than the provincial policing function provided by RCMP) was limited to provision of specialized functions, financial assistance through the federal/provincial disaster financial assistance program, and the occasional use of military resources.

However, the examples of the recent tsunami, Katrina, the ongoing threats of terrorism and of a pandemic, have raised concerns of the possibility of a large disaster. This has led to increased

involvement of the Government of Canada. The differences in ARES from Section to Section has become more apparent as Public Safety Canada regional offices compare notes, and the absence of national ARES coordination has not allowed us to develop a national strategy.

So, although the local control and mutual aid paradigm ought to remain our predominant focus, we ought to also develop an improved capacity to respond to large events that have a national impact. To that end we recommend the creation of the position of National Emergency Coordinator, who would report to the VPFS.

The NEC should have significant professional or senior management experience, as well as emergency management training, be based in or near to the Capital Region and appointed for an initial period of 5 years. Thereafter (on the recommendation of the VPFS), the Board may extend such appointment annually.

3. Create a standing national ARES executive committee on emergency management to be chaired by the NEC and made up of the SECs from each Section. This committee and any required sub-committees would be responsible for providing advice and recommendations to the NEC on emergency management issues, including:

- (a) any issues arising out of the SECs' relationships with the regional offices of national agencies such as Public Safety Canada, the Red Cross and the Salvation Army;**
- (b) cooperation and regular information sharing between Section Emergency Coordinators;**
- (c) continuing evolution of policies, national training standards and qualification profiles for ARES leadership positions; and**
- (d) coordination of large scale, multi-jurisdictional events.**

ARES may be defined as the emergency public service arm of Radio Amateurs of Canada ("RAC"), and in the US, the Amateur Radio Relay League ("ARRL"). Its purpose is to advance the public interest and that of amateur radio by providing a volunteer emergency telecommunications service to federal, provincial (state), municipal or other local government departments and agencies, designated non-government organizations ("NGOs") and critical public utilities during an emergency or disaster, including necessary training and incidental activities.

Although its purpose may be well defined, it is left to section leadership, or more likely the individual ARES units or affiliated clubs to determine how this purpose will be achieved in practice. While there is much to be said for a grass-roots, bottom up approach the "up" part seems to be missing, or in other words there is often little communication or discussion of locally developed initiatives or policy. As a result, little continuity exists from group to group or from Section to Section. Groups can become isolated, in which case they seldom share either their ideas, or a sense of common purpose that usually defines a well-led organization.

Until recently RAC seemed only marginally interested in the development of ARES, and even today provides only modest support. In fairness, it is likely that neither RAC nor the ARRL

wanted to be seen to be imposing a “top down” regime and we would like to be very clear that the NTRG is not proposing a centrally managed “top down” approach. Rather we are proposing better flow of information both vertically and laterally, a means of providing better continuity from Section to Section and a point of contact for the headquarters of national served agencies.

Major weaknesses in the ARES organization include the lack of a formal process that systematically integrates input from the field, assesses the impact of external change drivers, responds with recommendations for changes in governing RAC policies, and oversees a continuous quality improvement program to keep ARES-specific documents and the training program ahead of the change curve. This process must be national in scope, but it is an internal ARES task. It has been suggested that in some Sections groups have been obstructed in their efforts to modernize to meet the needs of their served agencies, largely by leaders selected on the basis of a narrow set of operating skills or on the basis of personal relationships. There has been a significant evolution in first responder and emergency management, and ARES has not kept pace.

A new national committee composed of the SECs and chaired by the NEC would provide a focal point, providing policy advice to the RAC Board through the VPFS and strategic guidance aimed at bringing the sections to a common operating standard, and conversely a means of communicating national standards and other relevant information back to their Sections.

4. Provide for formal recognition of such assistants as may be reasonably required and appointed by each officer to fulfill the function of his or her office, with such appointments to be for an indefinite term not to exceed the remaining term of their principal.

At present, there is no formal means of appointing assistants, nor is any recognition provided. The existing ARES structure within the Sections, i.e. Section Emergency Coordinator, District Emergency Coordinator and Emergency Coordinator ought to be supplemented by permitting one or more assistants to these positions formally recognized by appointment. The formal recognition of assistants has a number of attractions including ICS function specialization and span of control issues, and for succession planning.

It is not intended that a large infrastructure be created, simply a mechanism that will allow our volunteer leadership a formal means of appointing assistants to assist them to better fulfill their duties.

IV. DISCUSSION OF OTHER, ADDITIONAL ITEMS

On reflection, we had some concern that the composition of the NTRG did not contain sufficient numbers of current ARES leadership from the Sections. While we do not believe that this presented a significant difficulty in respect of our recommendations, more contentious issues, such as the points that follow, and even though we reached a consensus, might benefit from a broader discussion which would include all SECs and other leaders in the Sections.

1. Increase term for ARES officers from 2 to 5 years, renewable annually thereafter.

The current term of office as well as recruiting and appointment criteria require a comprehensive review. Five-year terms, selection criteria that include post secondary school education and/or professional certification, and managerial experience incorporating analysis and strategic planning should be considered.

We have examined ARES from both an ARRL and RAC perspective; however, it is intended that our comments concerning the ARRL be only intended to provide context and historical background. While there are very significant similarities between American and Canadian societies, there are also significant constitutional, political and other societal differences that impact and the recommendations, which we have made, are not intended as a criticism or for that matter recommendations that translate well in an American context.

Clearly ARES and NTS in Canada were modeled after the ARRL versions. The sub-committee conducted a comparison of the RAC and ARRL terms of reference for Directors and FS elected and appointed positions. This step quantified the organizational and leadership characteristics of the current RAC FS and its former “parent,” the ARRL FS. In fact, as it relates to ARES and the NTS, there are few differences between the US and Canadian versions. Therein may lie some of the difficulties faced by ARES in some Canadian Sections.

It must be understood that there are valued traditions in the US that are not those of Canada and *visa versa*, one of which is the degree to which participatory democracy and party politics impacts the federal, state and municipal civil services. It does not require a degree in comparative government to discern that elections are a common feature in US politics – the increasingly continuous election cycle. Not only are federal, state and municipal representatives elected in the US, so are many government functionaries, particularly at a state and local level. As well, changes in government wherein the party in power is replaced frequently results in wholesale changes in civil service management.

Not so in Canada. In Canada a change in the governing party does not result in wholesale changes in the civil service at any level of government, nor are functionaries elected. As a result, the civil service and emergency management components are extremely stable, frequently populated by persons who have been in those positions for lengthily periods.

The constant change of ARES representatives in some jurisdictions, many of who have limited emergency management experience, does nothing to instill the familiarity and confidence necessary to establish strong, professional relationships. Although it is necessary to balance the burden placed on volunteers with the need to develop sufficient familiarity and expertise, two years is not a sufficient period. It is therefore critical to ensure that persons in ARES leadership positions remain in place for a more extended period of time, e.g. 5 years rather than 2; and be replaced on the basis of an appropriate succession plan.

- 2. ECs, DECs and SECs to have additional qualifications, including management or professional experience, or progressive ARES experience, and completion of RAC Emergency Coordinator’s Course (or undertake to do so within 6 months of appointment); and, where available, other appropriate courses in emergency management and incident command.**

The sub-committee examined other changes that have taken place within the traditional served agencies that may be affecting ARES relationship with them. While there are a host of issues specific to a particular agency, there are two major, universal issues that we believe to be factors.

The first of these is the significant increase in the level of education and training that first responders and emergency management has when compared to their counterparts of perhaps thirty years ago. The educational background and training of law enforcement personnel, fire, EMS, and emergency managers has increased substantially.

Although amateur radio operators have always presented a broad range of education and training, this extended range means that our served agencies can't easily determine the training and comparative abilities of the personnel we provide, and while the same observation could be made about any group of responders, it's fair to say that at least when it comes to training almost all police share a common training base as do fire and EMS personnel. In some provinces, such as Manitoba ARES personnel have access to all of the same emergency management courses that fire, police, EMS and provincial and community emergency managers do, and also participate in training other responders, but that is not always the case. Clearly when ARES personnel are known to other emergency management actors and share common training in emergency management the level of acceptance and integration is much higher.

Leadership stability within the section ARES structure is of vital importance. This will only increase as the community emergency management teams develop and mature. To be successful in this professional peer group setting, ECs will need a comparable background of education, analytical skills, and experience in a planning environment. Nowhere will this be truer than at the DEC and SEC levels as these positions will interface with senior levels of government and department/ministry levels of bureaucracy.

It is therefore critical to ensure that persons in ARES leadership positions where possible, be appointed to their positions based on appropriate emergency management as well as amateur radio qualifications. A corollary to a more robust leadership selection process is a formal succession plan with an associated professional development program designed to create the next generation of leadership.

One of the least well-understood factors is the rapidly changing relationship between the ARES EC and the emergency management structure in the host community. Today the EC will likely have to interact with professional police, fire, EMS or other emergency managers in a fairly complex environment in which responsibilities are pre-determined and the subject of various response plans. There may be formal agreements between the ARES group and the municipality, and when called out respond to one or more operational authorities depending on the plan and which response agency is designated as the lead agency. In most jurisdictions operationally these relationships are part of the Incident Management and Incident Command Systems, and apply to all agencies and non-government organizations. Understanding these command and control relationships and where ARES fits is today critical knowledge for ARES members, particularly those functioning in an EOC or on-site, and those in leadership positions.

If we are honest with ourselves we must acknowledge that it is no longer acceptable to appoint an EC and leave him or her to "carry on". For an ARES group to be accepted as credible by the

other components of the modern community emergency response the ARES member will be required to demonstrate a certified body of knowledge and skills. These accreditations must be recognized and transportable across municipal jurisdictions. Groups will not only need standardized training programs they will need “train the trainer” support and mentoring. There are recognized methodologies for creating this type of training structure and developing the cyclical review and development process that keeps the training valid. Underpinning all such efforts is senior management vision, commitment, and resources.

- 3. SECs to be appointed by NEC on recommendation of SM.**
- 4. SECs to report to NEC through standing executive committee.**
- 5. DEC and EC to be appointed by SECs, and assistants to ECs, DEC, SEC to be appointed by applicable officer, i.e. EC, etc.**

An examination of the RAC and ARRL Field Services at the section level showed a reasonably flat administrative hierarchy that is for the most part appropriate in the circumstances. The job terms of reference are adequate and accord the appointments appropriate independence and authority of accomplish their responsibilities. There are some important differences at the Section Manager level. In the ARRL the Section Manager has section administrative and policy development responsibilities, with formal liaison responsibilities codified in the ARRL Director’s terms of reference.

In Canada the Section Manager’s role has been limited exclusively to the Field Service and raises the possibility that elected officers without any requisite training or experience in emergency management may negatively intrude either into ARES relationship with its served agencies, or into an actual operation. Again the idea of someone holding elected office becoming involved in operational activity may be more acceptable to US agencies who are comfortable with elected sheriffs and emergency managers, but not to Canadian agencies who tend to favour the introduction of professional management between the political leadership and the operational staff and are generally uncomfortable with such intrusions.

- 6. ARES to become a separate not-for-profit or charitable operating agency of RAC reporting to the Board through the VPFS.**

Similar to the ARRL, Radio Amateurs of Canada serves several roles. It is the organized Amateur Radio community’s official representative to the Government of Canada and to several international organizations, all of which have control or influence over the management of the radio frequency spectrum. This role is crucially important, and even a cursory review of published RAC minutes and reports will demonstrate that it consumes a significant portion of the efforts of RAC headquarters staff and volunteer leadership.

A second role, which is arguably better understood by the greater amateur radio community, is that encompassed under the head “membership services” such as publishing *The Canadian Amateur*, operating the QSL bureaus, the recent introduction of liability insurance, youth and licensing programs, and production of relevant publications.

A third role, and the one with which the NTRG is most concerned, is the provision of a public service, the *raison d’être* of the Field Service. This has always been interpreted by the Amateur

Radio fraternity as the *quid pro quo* for the extensive radio frequency allocation assigned to it, and in the face of demands by industry for increased spectrum, may be the only remaining public policy justification for maintaining our existing spectrum.

Notwithstanding its critical importance, the level of RAC headquarters commitment to the Field Service has historically been much less than that given to the lobby and member services roles. Nowhere is that more apparent than in the comparative lack of financial resources allocated to the Field Service - a situation also found in the ARRL. President Earle Smith, VE6NM, recognized this disparity when he spoke at a September 2005 meeting of ARES Ontario DECs and ECs. Allocating appropriate financial resources is a necessary step to creating a strong Field Service but one that will be difficult to achieve without additional sources of revenue.

Although the difficulties are understood, a means must be found to provide ARES at a section level with sufficient financial support to meet modest administrative costs, e.g. photocopying, postage, telephone (listing and long distance), supportive advertising (e.g. listing in local ham radio publications), and reimbursement of some travel expenses.

The ability to modernize the FS and ARES in particular will remain extremely limited unless realistic funding to cover training development and delivery costs is found. Given the current level of RAC membership, the ability of the sponsor to meet this challenge will remain limited, at least in the critical near term.

Federal and provincial grants are available to community groups but in virtually all cases those groups must have some form of legal identity to be eligible. In more recent times municipalities have begun to provide resources but inevitably that carries with it the view that municipality has increased prerogatives over the management and control of the local ARES group. Whatever the solution, however “radical” the end choice may appear to some RAC members, choices must be taken as a prerequisite to instituting a viable renewal program. A wholly owned, incorporated, “non government organization” subsidiary of RAC is one option. This is a sponsor-level issue.

7. NTS to be dissolved, and regional, national and international nets as may be required to assist served agencies be coordinated by SEC in case of regional nets, and NEC in case of national and international nets, within the ARES organization.

NTS represents something of a conundrum. No member of the NTRG expressed confidence that NTS represented a continuing viable resource; however, one has to examine the history of public service telecommunications service technology to understand why the role of NTS has arguably been diminished. Just as the case with commercial telegraph services, the wide availability of facsimile and email has had an impact on routine NTS traffic volumes. That raises the question whether NTS remains relevant in the 21st Century?

The National Traffic System (“NTS”) is a voluntary public service provided in Canada through RAC, and in the US, through the ARRL, for the purpose of transmitting formal, written messages similar to a telegram over amateur radio facilities. NTS messages are subject to the amateur radio service content restrictions.

The NTS was created at a time when telephones were not in most households, and when long-

distance telephone communication was very expensive. None of the modern communications tools generally available in North America existed, i.e. facsimile, e-mail, text messaging, internet chat, etc., and the simple fact of the matter is that the NTS, at least in its current form, may have outlived its original purpose.

In most Canadian jurisdictions NTS currently plays no role whatever in emergency management. Pre-Katrina, most disasters in North America were typically local or intra-provincial (state) events, dealt with by local authorities using mutual aid and limited provincial and federal assistance. Other than health and welfare traffic, most command and control, logistics and tactical telecommunications was local or intra-provincial (not long-haul, inter-provincial, or international). The tsunami and Katrina events were disasters of such magnitude that the local control/mutual aid paradigm has come into question. More to the point these events demonstrated a need for HF regional or long-haul capacity (particularly using digital modes for traffic volume and accuracy).

While Canada has been fortunate not to have experienced a disaster of this magnitude, any of these events could take place, as could any number of lesser, but still significant events. The question is whether inter-provincial telecommunications service is best “handled” through NTS or whether it would be better served by a national ARES coordinating (and operational) capacity?

What we propose is that, while acknowledging the need to maintain expertise in third party traffic handling, the NTS function be integrated with ARES for the purpose of providing a regional and national infrastructure to move information in and out of an affected area on behalf of our served agencies. In the US MARS is stepping into this area; however, we believe that a blended ARES/NTS approach would work better in Canada and would prevent a dilution of the amateur radio “brand.”

V. CONCLUSIONS

In conclusion, additional training and management experience is required for ARES leaders if they are to be able to develop and maintain successful professional relationships with the representatives of our served agencies. The training obtained during certification is not sufficient, nor is mere participation in regular nets. Additional training must be balanced with the realities of volunteerism; however, ARES members must have sufficient training to allow them to be effective.

The creation of the NEC is intended to provide a point of contact between ARES and the headquarters of its nationally served agencies, particularly Public Safety Canada, whereas the SECs will remain the primary contact at the regional offices.

We have advocated a balanced approach, where ARES remains focused on the local EC and ARES group or affiliated club, but with improvements in its central management, information flow and policy development through the national executive committee chaired by the NEC and made up of the SECs from each Section.

In order to assist ARES leaders we have recommended that they be permitted to appoint their own assistants.

Finally, there are a number of issues which we discussed, and drew certain preliminary conclusions, but which we came to believe requires additional discussion and input from the Section leadership for each Section. Accordingly, we have not advocated the immediate adoption of these recommendations, but believe that they should be considered.

Respectfully submitted

Date: October 31, 2007

Governance Sub-Committee

Pierre Mainville, VA3PM (Chair)
Jeffery J. Dovyak, VE4MBQ
Ian R. Snow, VA3QT

MEMORANDUM

TO: NTR Group Members
FROM: Don Mackinnon, VE4DJ
DATE: October 15, 2006
SUBJECT: Initial Discussion

Based upon the initial responses and discussion I have taken the liberty of summarizing the information provided by NTR Group members, as well as some of my own comments and observations which I am now circulating for the purpose of obtaining any further comments and consensus.

Please advise of agreement and any suggested changes, additions or alterations:

1. What are the intended roles of ARES and of the NTS?

(a) ARES

The Amateur Radio Emergency Service {"ARES"} is the emergency public service arm of Radio Amateurs of Canada ("RAC"), and in the US, the Amateur Radio Relay League ("ARRL"). Its purpose is to advance the public interest and that of amateur radio by providing a volunteer emergency telecommunications service to federal, provincial (state), municipal or other local government departments and agencies, designated non-government organizations ("NGOs") and critical public utilities during an emergency or disaster, including necessary training and incidental activities.

(b) NTS

National Traffic System ("NTS") is a voluntary public service provided in Canada through RAC, and in the US, through the ARRL, for the purpose of transmitting formal, written messages similar to a telegram over amateur radio facilities. NTS messages are subject to the amateur radio service content restrictions.

2. Do ARES and NTS in their current form adequately fulfill those intended roles?

(a) ARES

The answer to this question is very complex and dependent on the jurisdiction involved. At present there is no effective means of quantitatively measuring the adequacy of ARES service provision. Whether a valid qualitative assessment can be made is also debatable;

however, there are some factors that can be examined, some of which are objective, but most of which are subjective and not easily tested.

Within Canada, there are some Sections, notably Manitoba, in which ARES has well established, long-standing relationships with Federal and Provincial departments and agencies, plays specific roles and is formally recognized in the written emergency plans of these departments and agencies, and is well integrated into the emergency management environment. In that jurisdiction ARES members have broad access to no-cost training which, in the area of emergency management, is identical to the training provided to first responding agencies such as police, fire and EMS. In turn ARES contributes to the training environment by providing instructors and presenters in a variety of courses and conferences sponsored by the Manitoba Emergency Measures Organization (“MEMO”), including a joint MEMO/ARESMB course on Emergency Telecommunications which is provided to government officials and responders, and a Basic Amateur Radio certification course provided to the same target group.

At a local level ARES also has well established relationships with the City of Winnipeg, the City of Selkirk, and a number of smaller municipalities. The major difficulty extant at a local level is the shortage of qualified amateur radio operators, or in some cases the complete absence of amateur radio operators in certain areas. In Manitoba the development of the Emergency Radio Telecommunications System (“ERTS”) a joint development of Industry Canada (“IC”), MEMO, ARESMB, the Department of Aboriginal and Northern Affairs, and the Assembly of Manitoba Chiefs (First Nations) is being implemented in isolated communities not currently serviced by cellular telephone, FleetNet or amateur radio as a partial solution to that problem.

However, in some other Sections, ARES is not well integrated into the emergency management environment. Access to training is very limited both in terms of access and cost, and amateur radio is at best an afterthought. In such circumstances, it would be difficult to describe ARES as having fulfilled its role, even though dedicated ARES leaders and members stand ready to do so.

In those sections where ARES is not well integrated into the emergency management environment there are two issues that need to be explored. The first is relationship development, and the second is the development of operational capacity that includes organization, training and experience. Neither will be achievable without the other.

(b) NTS

NTS represents something of a conundrum. No member of the NTRG expressed confidence that NTS represented a continuing viable resource; however, one has to examine the history of public service telecommunications service technology to understand why the role of NTS has arguably been diminished. Just as the case with commercial telegraph services, the wide availability of facsimile and email has had an impact on routine NTS traffic volumes. That raises the question whether NTS remains relevant in the 21st Century?

In most Canadian jurisdictions NTS plays no role whatever in emergency management. Pre-Katrina, most disasters in North America were typically local or intra-provincial (state) events, dealt with by local authorities using mutual aid and limited provincial and federal assistance. Other than health and welfare traffic, most command and control, logistics and tactical telecommunications was local or intra-provincial (not long-haul, inter-provincial, or international). The tsunami and Katrina events were disasters of such magnitude that the local control/mutual aid paradigm has come into question. More to the point these events demonstrated a need for HF regional or long-haul capacity (particularly using digital modes for traffic volume and accuracy).

While Canada has been fortunate not to have experienced a disaster of this magnitude, any of these events could take place, as could any number of lesser, but still significant events. The question is whether inter-provincial telecommunications service is best “handled” through NTS or whether it would be better served by a national ARES coordinating (and operational) capacity?

3. Do these intended roles adequately fulfill the modern need(s) of our served agencies?

(a) ARES

In 1979 Southern Manitoba suffered a significant flood which required the closure of the same ring-dyke protected communities affected by the so-called Great 1997 Red River Flood. In 1979 there was no cellular telephone network in Manitoba, no 800 MHz trunked radio system (“FleetNet”), and with the exception of the RCMP, Conservation, Highways and Manitoba Telephone System (who had wide area VHF linked-repeater systems), almost no regional telecommunications capacity other than POTS. Existing VHF systems were not well-protected against floodwaters (power supply was particularly vulnerable). There was no facsimile or email generally available other than CPIC. All fire communication was limited to local repeater or simplex – no regional capacity. Military telecommunications was largely what we would consider to be “vintage.” The amateur radio VHF system of inter-linked repeaters was at least as sophisticated as most of the public service radio systems then in place.

In 1997 the 800 MHz trunked FleetNet system was newly operational (at a cost of approximately \$55 million) and was in use by RCMP, Manitoba Highways and MTS. Other agencies, including MEMO had limited implementation. Several cellular telephone providers had networks in the affected area. Facsimile now existed as was widespread email use. All that is still true today, with the addition of satellite telephone, mobile data terminals, Wi-Fi and cellular based e-mail and Internet access, VoIP and other complex peripheral equipment.

The picture set out above is not much different in most parts of Southern Canada. Telecommunications systems capable of providing wide-area regional service are much more available. These systems are sophisticated and both centrally and peripherally

much more complex than the radio systems used 25 years ago. That is not to say that they don't present problems, including vulnerability, and repair and replacement issues.

While there are cutting-edge amateur radio technologies those in current, wide-spread use are, with the exception of APCO 25, D-Star, WinLink 2000, IRLP and EchoLink systems, politely described as “long-established technologies”. For the most part ARES uses centrally simple technologies that are resilient or that can be “easily” repaired or replaced. Unfortunately, as modern public safety systems develop in complexity and feature sets, all too often our capability is perceived as barely adequate and fosters the view that amateur radio is really a last-ditch service, and that amateur radio operators truly are a last in – first out resource.

When combined with limited training and experience in an emergency management environment, amateur radio operators have limited utility. This results in a cycle leading to still less training and experience. Of course there will inevitably come a time when “all else [really] does fail” but by then we run the risk of being incapable of providing significant assistance. Meaningful training is a must have to operate effectively in an emergency management environment, and that includes familiarity with the emergency management system(s) in use in the jurisdictions in which ARES members function, now usually either Site Management or ICS, including EOC operations. While there are circumstances where an amateur without additional emergency management training can be used effectively, it is becoming increasingly difficult to find such assignments and most are either as assistants, or on the periphery of an event.

In some jurisdictions, amateur radio can in some circumstances broaden its role to provide additional specialized services (added value) not ordinarily available to our served agencies, e.g. ATV, interoperability, telecommunications training, consultancy.

(c) NTS

In the ordinary course NTS in its current form does not have served agencies *per se*.

4. If they do, what could ARES and NTS do to enhance their performance?

(a) ARES

Continuing training and practice to the point where ARES members can easily integrate into the emergency management environment ought to be an objective. Obviously there is a balance to be made between achieving competency and over-burdening volunteers, but volunteers who are not willing to train and practice to the point where they achieve a sufficient measure of competency is problematic. Ideally we should be unconsciously competent in our routine functions and use of our equipment, and appropriately analytical in problem resolution.

Some members of the Group have commented on the need to train in the ICS, so that they

can understand the emergency management environment in which they are operating. ICS is increasingly the legal and practical standard used for emergency management in the US and in many jurisdictions in Canada (including Manitoba). Certainly a working familiarity with the emergency management system used in your jurisdiction and in the jurisdictions that you might be called upon to provide mutual aid is a reasonable requirement and a measure of competency. As an aside, ICS is a very straightforward and easily understood system that can be made to appear unnecessarily complex and even intimidating; however, at its core ICS is an effective, scalable system intended to increase responder safety, keep span of control within useful limits, improve coordination, and efficacy.

Other members have suggested that ARES members should be prepared to perform other functions as may be requested by served agencies. This is an area that needs to be discussed in greater detail. While there is some basis to the observation that ARES members could be used in circumstances where they are not occupied with telecommunications functions, there are potential difficulties to using ARES personnel in other functions. Again, a healthy debate may be useful.

5. If they do not, what should we be doing to fulfill those needs?

(a) ARES

Persons in leadership positions within ARES ought to be able to function at a management or supervisory level in an emergency management environment. To do that effectively significant training and experience is required that would be difficult to obtain entirely within a volunteer setting. However, many amateurs have occupational or professional experience that is either directly relevant, or that can be drawn on along with appropriate training to better fulfill such positions. Critical thinking and analytical skills, self-discipline, time and project management are part of the basic requirements of all traditional professions, the sciences and many para-professions and skilled trades, as is experience in managing others. While ARES personnel with command, managerial or supervisory experience in the military, police, fire or EMS may have an advantage in developing a relationship with emergency management officials, other experiences can be equally useful

However, some significant consideration needs to be made when appointing persons to senior positions within ARES. Selection and retention of qualified ECs, DECAs, and SECAs should be a major priority. All too often ARES leadership is not capable of professionally relating to senior management and supervisory staff of served agencies. That has nothing to do with the fact that we are not paid, but it has everything to do with the fact that ARES leaders often lack the necessary training, experience and management skills to perform at a satisfactory level. A similar problem can exist at the operational level. While simple message handling skills ought not to be an issue, our pre-occupation with arcane message forms designed for long-haul telegraphy in what is usually a tactical environment is an issue. Similarly a narrow focus on telecommunication without a passing familiarity with the roles of other responders renders us less useful to those

responders, and ill equipped to relate to them.

Conversely, the vast majority of first responders are barely appliance operators, frequently know little about the more esoteric operating features of their own telecommunications equipment, and have no effective plan B in the event of failure (mostly because they never expect that failure will occur). In most jurisdictions in Canada interoperability is in its infancy, and fraught with both technical and organizational impediments, that are difficult to overcome during routine operations, and impossible to effectively implement in a disaster. Well trained, experienced ARES members can play a leadership role in training first responders.

(b) NTS

The usefulness of NTS needs to be debated.

6. What are the main activities currently fulfilled by ARES and NTS?

(a) ARES

ARES activities flow from the purpose set out in Item 1, *supra*. which is set out here for reference purposes:

The Amateur Radio Emergency Service (“ARES”) is the emergency public service arm of Radio Amateurs of Canada (“RAC”), and in the US, the Amateur Radio Relay League (“ARRL”). Its purpose is to advance the public interest and that of amateur radio by providing a volunteer emergency telecommunications service to federal, provincial (state), municipal or other local government departments and agencies, designated non-government organizations (“NGOs”) and critical public utilities during an emergency or disaster, including necessary training and incidental activities.

The activities themselves can be quite varied, but all revolve around certain basic telecommunications functions falling under four categories:

- (i) Mitigation of Telecommunications Failure
- (ii) Provision or Enhancement of Command and Control, Tactical and Logistics Nets
- (iii) Interoperability
- (iv) Health and Welfare

Mitigation of telecommunications failure is the basis of the theme “when all else fails” and is that last ditch role that amateur radio has traditionally been relied on to provide. In many jurisdictions this and health and welfare telecommunications represent amateur radio’s only roles.

Provision or enhancement of command and control, tactical and logistics nets are a less

common, but often performed service provided by ARES, sometimes in circumstances where other telecommunications methods have failed, but also in circumstances where a served agency (particularly one that ordinarily does not use two-way radio) requires same.

Unlike the US where the plethora of agencies, closely situated jurisdictions, and private sector responders have necessitated some level of interoperability (though with mixed results), Canada has been slower to adopt inter-operative telecommunications technologies. Responding agencies frequently lack the technical means to telecommunicate with one another; and, even where they do, often don't train or practice doing it, with the result that they are reluctant to implement such activity during an already chaotic event. ARES in some jurisdictions provides such inter-organizational communications, usually at a command and control level, but occasionally at a tactical or logistics level.

Health and welfare is another traditional role of amateur radio, particularly in support of the Red Cross, Salvation Army and other NGOs. Unlike the US where the Red Cross has legislative authority to provide lead ESS function during a disaster, in most if not all Canadian jurisdictions, that role is occupied by Provincial departments and agencies, with the Red Cross providing a supporting role along with the Salvation Army, and other NGOs or church-based agencies.

(b) NTS

The role of NTS is described in Item 1 as well, as follows:

National Traffic System (“NTS”) is a voluntary public service provided in Canada through RAC, and in the US, through the ARRL, for the purpose of transmitting formal, written messages similar to a telegram over amateur radio facilities. NTS messages are subject to the amateur radio service content restrictions.

NTS uses an expanding set of local, regional, national and international nets to pass formal, written traffic using voice, CW and data-modes. In some respects it is ideally suited for health and welfare traffic, but it's typically not well-integrated with ARES or with potential served agency clients, and may have limited utility.

7. Are there any other or additional activities that ARES and NTS could or should be prepared to participate in to further our intended or modern roles?

(a) ARES

In most jurisdictions ARES has insufficient numbers of trained, physically fit members to broadly expand its operational role. Some amateurs are not prepared for reasons of ill-health, age or other commitments to devote any time to training and practice. Many are prepared to “help out” but are not prepared to take any training or attend exercises or

other practice beyond participating in their favourite nets. In this day and age, that limits their usefulness. Still others, fortunately not many, don't appreciate the link between amateur radio as a hobby, and its public service aspects, including the pressures placed on amateur frequencies by business, industry and government interests looking for additional spectrum. Finally, there are small numbers that see amateur radio as incapable of providing assistance and won't participate.

Fortunately, there remain those amateurs who are dedicated to the public service aspects of our hobby and willingly participate in ARES. The question is what else could these hams be reasonably encouraged to do without over-extending ARES operational capacity and increasing the possibility of "volunteer fatigue" or burnout, and the concomitant loss of these valuable people.

In Manitoba ARES executive members (our executive consists of SEC and DEC's with the SM as an ex-officio member) have provided "consulting services" to various served agencies, including the development of the above-mentioned ERTS system. Another activity is in regard to emergency telecommunications training provided to first responders, community leaders, etc. through joint MEMO/ARESMB course, and ERTS course for control operators and community leaders (primarily First Nations and surrounding communities).

(b) NTS

NTS requires further consideration.

8. Does amateur radio licensure or certification provide sufficient knowledge to allow effective participation at an entry level in ARES or NTS? If not, in what ways is it deficient?

(a) ARES

Amateur radio certification requires little, if any, actual operator training or knowledge of emergency telecommunications, it is currently focused on the regulatory environment and bands available to amateur radio, and on the technical aspects of radio, feed line and antenna construction. While these are necessary elements, they do not truly prepare one to participate as a telecommunicator in an emergency or disaster. In the basic amateur radio course that ARES provides to government officials, we include information on radio operation and emergency telecommunications that is not dealt with in the IC exam.

The shortage of trained personnel has required the use of "walk-ons" volunteers who are not ordinarily ARES members during large events, and many of these walk-ons are useful and effective in selected roles, but even though these persons may not be regular ARES members they often have some additional experience and practice in public events.

(b) NTS

Message handling and the NTS are not taught or examined in the IC certification process, and therefore, it would not be sufficient.

9. If you identified a deficiency in question 8, would the content of the existing RAC course be sufficient to permit effective participation at an entry level in ARES or NTS? If not, in broad terms what additional information ought to be included (entry level)?

(a) ARES

The existing RAC course would generally be sufficient to allow some measure of effective participation at an entry level. Other courses have been identified as being better in certain respects. It requires modernization and revision.

(b) NTS

The existing RAC course would generally be sufficient to allow some measure of effective participation at an entry level.

10. With respect to questions 8 and 9, same question but at AEC and EC level?

The existing RAC course would generally be sufficient to allow some measure of effective participation, but there are deficiencies which might not prepare the AEC or EC to relate to other responders and served agencies. As well, it contains information which is no longer accurate. It requires modernization and revision.

See Item 5(a)

11. With respect to questions 8 and 9, same question but at a DEC level?

While the existing RAC course provides useful information, it is unlikely that a DEC armed only with the information contained in the existing RAC course would be able to function effectively. The DEC is a senior management position that requires skills that are not easily acquired in a short course or even several short courses. Much depends on the role that the DEC performs in a specific jurisdiction, but there isn't sufficient information to allow the DEC to relate to other responders and served agencies at the regional level. As well, it contains information which is no longer accurate. It requires modernization and revision.

See Item 5(a)

12. With respect to questions 8 and 9, same question but at a SEC level?

While the existing RAC course provides useful information, it is unlikely that a SEC armed only with the information contained in the existing RAC course would be able to

function effectively. The SEC is a senior management position that requires skills that are not easily acquired in a short course or even several short courses.

See Item 5(a).

13. In the 1950's and 1960's the emergency management paradigm was essentially a "top down" civil defense approach, but in the 1970's there was a shift to a local control paradigm. Following Katrina there has been some discussion as to whether the local control paradigm works effectively. Is there a role for a "National ARES" or at least a "National ARES Coordinator or NEC." Comments?

NTS is largely viewed as an ineffective means of providing inter-provincial or national coordination, yet large events have shown the need for inter-state mutual aid and a national response in the event of large inter-state events.

Moreover, in Canada the disaster response is essentially a provincial responsibility with actual operational activity primarily delegated to local government under provincial legislation. There is no actual equivalent to FEMA in Canada – PSEPC has a national security focus and little operational capacity. But, post 9/11 the federal government has taken steps to increase its operational role under a state security rubric, and post-Katrina has sought a greater coordinating role and has put forward certain initiatives within its Constitutional mandate – for example new common search and rescue VHF frequencies, focus on telecommunications interoperability, changes in DND domestic response structure. In our relationships with federal departments such as PSEPC and DND and with large NGOs such as Red Cross, there may be a need to coordinate at a national level.

The major difficulty of such national coordination is the need to recognize that resources are essentially local assets which are little disposed to "top down" governance, and resistant to "distant" management. These are quite different than coordination of inter-provincial mutual aid, and resource supply, e.g. coordination of donated equipment such as occurred in US after Katrina.

End.