

# **American Radio Relay League**

## **The Future Mission**

December 12, 2003

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*To serve the public interest of the United States by fostering the art of wireless communications, in all its forms, is to ensure the future of Amateur Radio.*

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## Overview: *the current state of affairs* -

The future, and possibly the continued existence, of Amateur Radio is uncertain. We are currently experiencing a confluence of technical and cultural factors which affect our traditional activities worldwide. Some of these present-day trends make the practice and promulgation of our activities more difficult, while others provide opportunities to secure the future. All of these factors have been in play for many years and have gathered enough momentum at this time to warrant a rethinking of our primary purpose and interests as Amateur Radio enthusiasts. New strategic policy development and direction-finding is needed at this time. A new and better focus which maximizes our cultural relevance will insure our longevity and the personal gratification which we have enjoyed over the past 75 years.

So, what are the primary problems facing the art and practice of Amateur Radio and how can we hitch a ride on some new opportunities?

### The problems -

- There is a decline in the number of practitioners, trending downward to a critical mass below which the Amateur Radio (AR) service may not be sustained. This can be attributed to many factors; an aging population with other interests, more competition for discretionary time, the availability of other means of communications such as the Internet and cell phones, a decline in the level of technical literacy, the rise of more *in vogue* or more useful technologies like personal computers.
- Accompanying the steady decline in our numbers is a reduction in the use of both our reserved and our shared frequency spectrum.
- Along with the decline in numbers all financial aspects of AR worsen. The ARRL is deficit spending at this time and the manufacturers of AR equipment see profits under constant pressure.
- The decline in numbers also reduces political and societal influence.
- There is a declining interest in, and knowledge of, AR among the general population resulting in less overall support. This might in part be attributed to a general decline in the level of technical literacy and the rise of more convenient communications means such as cell phones. The use of wireless technology is now commonplace and no longer has the cachet of being novel, resulting in less recognition.
- In particular, there is less interest among the governmental authorities and politicians who regulate AR. This makes the relationships with all governmental bodies, local and federal, more difficult and less favorable.
- In addition, there is an increasingly hostile regulatory environment focused on restricting the practice of AR. Land use regulations restrict the construction of the antennas necessary for the practice of the art.
- There is constant and increasing pressure to usurp our spectrum for commercial purposes.
- The rise of EMI sources including unlicensed part 15 devices and Broadband Power Line distribution of Internet data continues unabated.
- There is a general perception among emergency service providers, and the public, that

the usefulness of AR is lessened with the advent of new communications technologies.

The possibilities -

- There is more public use of wireless technology and awareness of its societal benefits than ever before, for example cell phones and FRS radios. This results in a favorable view of AR.
- There are more life enhancing wireless products available at low cost to more people than ever before. Some examples are automotive keyless entry systems and Wi-Fi transceivers. Some of these technologies and products themselves can be useful to AR.
- There are growing opportunities for strategic partnering with the commercial communications industry.
- There are growing opportunities for strategic partnering with local and federal government agencies, particularly in activities focused on enhancing homeland security.
- Advances in technology provide new opportunities for the AR community to advance its art and sphere of technical influence.
- As a reservoir of technical talent and expertise, AR enthusiasts are positioned to assist in improving the technical literacy of the general population for the benefit of all. Simply becoming a ham has a tendency to improve one's knowledge and intuition of things technical.
- There is an ongoing need for timely, competent urgent and emergency communications services in times of local need. Some examples are the communications provided during recent forest fires in the western states and the yearly communications service to the New York Marathon.

Amateur Radio: *the purpose* -

So with both the problems and the possibilities in mind, I suggest that there is one central theme which once guided the ARRL and its membership and which should be its focus now as we attempt to insure the future. It is simply put as follows:

***Amateur Radio exists only at the public pleasure and only for the public purpose.***

Fundamentally there is no other reason for Amateur Radio. The context and times have changed but the League focus, hence its mission, must be the same by the following reasoning.

- Whereas, our activities are made possible only by our **privileged use of the publicly owned spectrum** as granted by the United States Government.
- And whereas, the spectrum privilege is **granted only in the public interest**.
- Therefore, to **EXIST** we **must be able and willing to serve** the public interest **by the**

**use of the public resource.**

- So, to **become publically irrelevant is to become extinct** when the spectrum upon which we depend is put to a better and higher use.
- Then, one must conclude that the principal objective of the ARRL, and Amateur Radio advocates everywhere, must be to foster activities **which utilize the resource** in ways which result in **selfless non-profit service to the citizenry of the United States.**
- In addition, the ARRL, as the premier and most influential representative of the Amateur Radio community, is **obliged to facilitate** the interests of its membership when there is **a confluence with the public interest** of the United States.

ARRL: *the mission* -

Many of the current ARRL activities can be justified in the above context and have served well for a long time. But the challenge today is to develop a vision for the future which joins membership interests, present and future, with the mandated public interest in new ways. Or, put differently, we must focus our present and future activities on what is useful and relevant to our society now and in the future. With the notion of relevance in mind I suggest the following mission statement for the ARRL.

The mission of the American Radio Relay League (ARRL) is as follows -

***The ARRL, as a non-profit organization, advances all aspects of the art of wireless communications to serve the public interest of the United States.***

Short version -

***The ARRL advances the art of wireless communications to serve the public interest.***

For example, we believe the public interest, security and welfare of all Americans is best served by our technical and non-technical activities focused in these five areas:

- The ARRL and its members advance the technical art of wireless communications through research, development and experimentation.
- The ARRL fosters general technical literacy among the citizens of the country through education in all aspects of the wireless art.
- ARRL members provide, on a volunteer basis, a wide variety of auxiliary wireless communications services and equipment during times of distress or public need.

- The ARRL and its members create worldwide good will through the promotion and effective use of international wireless communications.
- The ARRL, in order to fulfill its mission, represents Amateur Radio interests in securing and maintaining a favorable governmental regulatory environment at all levels.

How to fulfill the mission: *the basics* -

How does the ARRL further these objectives and fulfill the mission?

1. The ARRL and its members advance the technical art of wireless communications as follows:
  - a. The ARRL lab develops measurement techniques and evaluates technologies.
  - b. ARRL members design equipment, antennas, software and techniques useful in wireless communications. In the tradition of our best national laboratories, these projects push the edge of the technical envelope free from the constraints of the profit-motivated corporate structure.
  - c. The ARRL publication QEX is the technical journal which provides an exchange of technical information and research results.
  - d. ARRL fosters the development and application of new wireless communications technologies, such as software-defined radios, IRLP and Echolink connecting of radios using VOIP methods and Wi-Fi. The skill of EMI troubleshooting is also fostered by research and training.
  - e. The ARRL offers some premium services for professionals to compliment the IEEE wireless technology offerings. I find articles in QEX which I can not find in the popular professional literature which are useful professionally.
2. The ARRL fosters the general technical literacy through education in the wireless art by the following activities:
  - a. ARRL members learn by doing: through personal research, designing and experimenting. A major asset in the personal educational experience is the wide range of frequency spectrum which is available to licensed members.
  - b. ARRL creates many programs to educate teachers and children. They are offered at no expense to groups or schools.
  - c. A program of technical learning is offered in cooperation with the Institute of Electrical and Electronic Engineers (IEEE). The emphasis is on wireless technology with access to the IEEE data base of articles. (Can we collaborate with other institutions in the education effort - DeVry, Universities, Corporations, Schools that offer specialities in RF design - they have the knowledge, we have the spectrum for experimentation?)
  - d. The ARRL provides technical advice on subjects of public concern to government entities, corporations and individuals including such subjects as BPL and optimal use of spectrum.

3. Trained ARRL members provide auxiliary wireless communications services and equipment during times of distress or public need in the following ways:
  - a. The membership of the ARRL are experienced communications operatives who are always available to supplement governmental communications services for police, fire departments and other public safety services.
  - b. Historically, members have shown a willingness to volunteer their time to any extent needed.
  - c. Members also bring to every situation a wide complement of privately owned wireless communications equipment to assist in getting the job done.
  - d. Local clubs and organizations also make available a variety of equipment and resources such as generators and repeaters.
  - e. Hams provide a national network for the distribution of Digital communication modes including Internet access. This system is based on Wi-Fi and other digital standards.
  
4. The ARRL and its members create worldwide good will through the promotion and effective use of international wireless communications in the following ways:
  - a. Members routinely talk around the world by any one of several commonly available means, both wireless and wired. These include direct HF communications, VOIP links on the internet and email. Friends develop, collaborations are fostered, cultural understanding is promoted and visits are exchanged.
  - b. The journals QST and QEX are read worldwide.
  - c. Member organizations promote international meetings and conventions.
  
5. The ARRL, in order to fulfill its mission, secures and maintains a favorable governmental regulatory environment at all levels.
  - a. It builds a strong strategic position and wide recognition a the most credible source of amateur radio information.
  - b. It develops positions on key issues of interest and importance to the members of the AR community.
  - c. It improves the overall image and relevance of AR with the public, especially as the only redundant and failsafe communication system in the country during an emergency.
  - d. It supports a governmental affairs committee that carries out its advocacy strategies and visits Capital Hill once a year.
  - e. It seeks to become the recognized representative body for AR at not only the national but the state and local level as well.
  - f. ARRL is available to governmental agencies for viewpoints, information, and technical advice on proposed legislation and regulations that may affect AR.
  - g. ARRL coordinates strong, proactive, lobbying at the grassroots and local level.
  - h. ARRL represents the interests of AR at international conferences.

Promote the mission: *new ways* -

Currently all the trend lines pertaining to AR are sloping in the negative direction. Some of these factors are the declining ARRL membership, number of licensed amateur radio enthusiasts, amount of frequency spectrum available to hams, amount of interference free spectrum, public interest and governmental awareness. Some if not all of these must be reversed. Here are some things ARRL can do to reverse course.

1. Broaden the appeal of the ARRL -

The ARRL should adopt a policy of inclusion rather than exclusion in relation to the objective of advancing wireless communications in the public interest. Membership in and support of ARRL should not be limited to those who want to talk on the radio and be “hams” in the traditional context. For example, cell phone users have technical needs which could be serviced by ARRL such as antennas, how to get the best RF performance, explanation of the technology and what to expect. The users of the Family Radio Service have similar needs which could be met by assistance from ARRL; represent them with the FCC, training manual, review equipment, how to properly use the equipment, provide a path to become hams, an upgrade path for kids, offer ways to expand coverage to uses of FRS.

Short wave listeners have a historic and an enthusiast’s orientation and could benefit from ARRL membership with equipment reviews and propagation forecasts. All of these categories of wireless users could be accommodated with something like an auxiliary membership. In these cases the educational function of the ARRL would be the primary benefit to prospective members.

In addition, hams now install and operate regional Wi-Fi networks for the distribution of wireless Internet data. ARRL could be on this band wagon with support to hams and non-hams alike in a very technical endeavor. Both RF and computer skills are required to bring up and maintain an 802.11 network. ARRL should also be promoting the use of digital wireless technology such as Echolink and IRLP. As a goal we should develop a nationwide wireless digital backbone to backup the internet.

The general theme is that if prospective members of ARRL subscribe to all or part of the mission by their use of wireless technology, they should be welcomed as part of the supporting cast of players. Membership benefits should be expanded, possibly through collaborations and mergers. There could be an auxiliary type of membership in ARRL for non “radio operator” hams. Survey non-member hams to determine how the organization might better serve them. ARRL could also survey current and past members to determine how to grow and sustain existing membership.

ARRL should become involved in what is hot in wireless today - HDTV (install non-commercial on-channel repeaters), cell phones, cordless phones, baby monitors, GPS, Bluetooth, HomeRF, rfid, keyless entry, hdtv, Wi-Fi, satellite TV, satellite radio, low power broadcast FM,

radio service radio, satellite phones. Which of these could we serve in a non-commercial way? To be into what is hot implies that the ARRL should seek the necessary regulatory permissions from the FCC by arguing that new activities will serve the public interest. This should not be difficult in the public interest context, especially if ARRL activities will also help business. The attitude today at the FCC seems to be one of ask and you shall receive.

2. Promote the broader use of wireless technology -

The wider dissemination of and use of wireless technology inherently increases the level of technical literacy among the general population. This better awareness should help AR.

3. Form alliances -

Other organizations in this country share some aspect of the mission of ARRL. Where there is a confluence of interests, a collaboration might be useful in bringing new membership and extending influence.

4. Use more of our allocated spectrum -

Get transmitters on the air doing useful stuff. The most useful services right now are digital data services such as Wi-Fi. Petition the FCC to allow more digital data networks for ham use in the ham bands. These are automated systems using bandwidth for good purposes.

5. Provide new public services -

Provide Internet access via wireless. Provide television coverage of emergency situations for public service agencies. Provide a publically available wireless consulting service. Free technical advice on a wide variety of topics regarding the use and purchase of wireless devices. Accept donations. Use a hotline. Do a Consumers Reports evaluation of wireless products. Train non licensed folks in the use of wireless technologies for emergency services, like setting up wi-fi systems and using FRS.

6. Promote a robust emergency communications capability -

Amateur Radio should be the premier backup emergency communications system for the country for the following reasons. In times of serious widespread emergencies the currently favored technologies of the service agencies become inoperative or become overloaded. These typically are trunked communications radios at UHF and cell phones. Data services are also vulnerable. When all else fails, fire and police departments immediately fall back to the simplest means of communications, voice transactions. Some significant portion of the amateur system should be independent of the elements which fail in a emergency, such as the power grid, the internet and cell phones. The amateur system should have reliable interconnections possibly over an independent digital network. This is what we are good at and the service for which AR receives the most recognition.

7. Promote the regulations needed to achieve ARRL goals -

Keep the spectrum we now have. Get rulings which allows the change in use of existing spectrum for digital data applications. Get more spectrum for new data and TV applications. Get the FCC to facilitate what we want to do in the public interest. This is the strongest reason for adopting a clear mission focused on the public interest.

8. Establish the ARRL brand identity -

Is the American Radio Relay League still the best name at a time when a broader appeal and understanding of our mission is needed? My main problem is with the word amateur connotation and the notion of a “relay league”? We may be “not for profit” but we are not “amateur.” The dictionary definition indicates the following -

noun - someone who pursues a study or sport as a pastime  
related words - apprentice, learner, prentice

adjective - not befitting a member of a profession: “it was a very unprofessional job”  
amateurish, unprofessional, artless, crude, inexpert, unskilled

ARRL members are certainly those who pursue a study or pastime and learners, but they are generally not “unprofessional,” artless and crude. In fact, most members and people who would be attracted to membership are professionals in something. Everyone wants to aspire to be thought of as “professional” even if you are not. Dispel this notion. The amateur connotation may not be the best these days.

I suggest the following possibilities for a more modern name - American Radio Relay League. American Wireless Association (AWA). Wireless League. American Wireless League. American Wireless Coalition. American Wireless Communications Association. National Wireless Association. The word wireless has a traditional connotation but a new cachet that could have broad appeal and is still an accurate description of the main focus.

The future: *set the stage* -

There are some particularly pressing problems which must be addressed immediately to set the stage for more far reaching changes later. Some of these are -

1. Convince the current membership of AWA of the need for a major change of course. Get consensus and support for the mission to insure the future. This should go far to convince those who are despondent about AR that not all hope is lost.
2. Do what it takes to establish financial stability for the next five years. If necessary, cut services which do not directly serve the mission.
3. Realistically assess the most imminent threats to frequency allocations by commercial

- interests and deal now with those as best we can.
4. Realistically assess the most imminent EMI threats and deal now with those as best we can.
  5. Realistically assess the most imminent regulatory threats and deal now with those as best we can.
  6. Bolster our emergency service capability as a top priority in defense of the homeland.
  7. Immediately establish meaningful alliances with other organizations which have a similar or an overlapping mission.
  8. Develop a better field organization.
  9. Seek outside funding sources now. These could be grants from foundations and governments. You must be able to strongly pitch a mission focused on serving the public.
  10. Get on the digital communications bandwagon NOW. Promote IRLP and Echolink and educate the membership on these types of technologies.
  11. Examine the possibility of petitioning the FCC to allow AR to charge for some services within the non-profit context.

Near term accomplishments: *five years* -

In the near term, the AWA would be successful in its transformation for the future if it could simply set the stage as outlined above while accomplishing a shift in mind-set. The change of directions must occur among the present membership, the staff, and board of directors. It is also essential to establish financial stability at AWA.

Longer range accomplishments: *ten years plus* -

A decade or more from now the American Wireless Association (AWA) should be a known and respected name in a large number of American households as an organization whose identity is one of excellence, independence and public benefit. This perception and respect is similar to that which today is afforded the Consumers Union or the League of Women Voters.

To accomplish such an objective;

1. AWA provides wireless technology-related services to licensed radio hams, as it does today, and also to a wide variety of additional wireless users and enthusiasts.
2. AWA is the legislative and regulatory champion for the interests of radio hams and many other wireless users.
3. AWA, its licensed membership and its non-licensed membership are recognized and sought after as a valuable volunteer emergency communications resource.
4. AWA is financially secure through its support from the membership, alliances, the public, and grants both public and private.