

***Amateur Radio in the 21st Century:
Issues of Recent Importance to
the American Radio Relay League***

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Introduction

Amateur radio – known as “Ham radio” – is both a service and a hobby. Current rules allow Amateur allocations in 18 bands of the VHF, UHF and high-frequency electromagnetic spectrum for transmission of signals for non-commercial purposes.¹

As a hobby, the practice goes back to the early 20th Century, when radio Amateurs helped to pioneer techniques still in use by commercial and shortwave broadcasters. More recently, Ham radio has been alongside the other “older” technologies in facing rapid technological and sociological transitions. Young people are flocking to newer technologies – from computer-based instant-messaging to cell phones – while the radio community ponders how to reposition itself in the evolving world of digitization, deregulation, and media overabundance.²

While not a “mass” medium, Ham radio is a case in point demonstrating how older communication technologies are adapting to change in the 21st Century.

¹ “What is Amateur Radio?” in the American Radio Relay League Handbook for Radio Amateurs 2001 (ARRL Pubs.: Newington, CT), p. 1.1.

² The gist of dozens of bulletin-board postings at www.qrz.com and www.eham.net confirms an awareness on behalf of the Amateur community that “The Novelty and Excitement of Amateur Radio Is Losing to the Competition,” as it was described in “Ham Radio Online,” <http://www.hamradio-online.com/1997/feb/opinion.html>

The American Radio Relay League (ARRL) represents Ham operators around the world, and acts as an agent to educate people about radio communication. It also helps to define the role of Amateurs in emergency communications, and functions as a political lobby to protect the non-commercial use of the radio spectrum.

ARRL's main monthly periodical, *QST* (Ham lingo for "announcement" or "bulletin"), has been in publication since 1915, and has been a guidepost to the issues which are seen as most salient to radio Amateurs.

The present research is a content analysis of trends posed within the key news columns of *QST* magazine from January, 2000 to August, 2003 (N= 44 issues, roughly 755 individual news items). Which technological, educational, political and sociological issues surface, and how are these topics treated? The answer provides a framework for understanding how this brand of electronic communications is poised for its 21st Century adaptation phase, and may also suggest how radio in general might handle these policy issues over the coming years.

Background

Amateur radio grew quickly in North America at the turn of the 20th Century. The United States government began licensing Amateur radio operators in 1912. By 1914, there were thousands of Amateur radio operators and experimenters in the United States when the American Radio Relay League (ARRL) was formed. Today's ARRL, with approximately 163,000 members, is the largest association of its type in the United States.³

There are more than 680,000 operators in the United States and more than 2.5 million worldwide.⁴ However, the average age of Ham operators is now approximately 60 years old, and an abundant percentage of operators are nearing the end of their lives.⁵ Further, clear trends suggest that only modest numbers of youth are gravitating toward the hobby. Where Hams were once the only people to routinely engage in international communication, anyone with a modern home PC can easily communicate across the globe.

³ "About the ARRL," from organization website, <http://www.arrl.org/aarrl.html>, accessed July 20, 2003. The league has recently been going by the name, "ARRL—the National Association for Amateur Radio."

⁴ "Radio Enthusiasts Join National Association in Record Numbers," http://www.arrl.org/pio/press_releases/enthusiasts.html, Feb. 3, 1997. 2003 estimates by Rick Lindquist (N1RL), *QST* Senior News Editor.

⁵ "Aging Hams: As Amateur Radio Enthusiasts Grow Older, New Technology and Federal Regulations are Changing the Face of their Hobby," *St. Paul Pioneer-Press* (MN), Nov. 2, 1998, p. 1E.

“This is the natural progression of technological changes... Sitting at a radio for hours at a time just does not happen anymore.”⁶

In short, Ham radio in particular and analog radio technologies in general are at a past-peak⁷ stage as communications media. There is a transitional phase which will shortly suggest to what degree they will decline – and adapt – within the modern telecommunications environment. One adaptation indicator is the hobby’s steady progression into newer digital modes.

If the hobby is true to its core value of experimentation and innovation, the future appears somewhat hopeful. Some Amateurs are at the “cutting edge of the art,” working with super high frequencies (SHF) up to 47 THz, approaching the frequency of light.⁸ Other promising ongoing programs include communications with manned space vehicles (such the International Space Station); satellite communication (where orbiting satellites act as RF “repeaters” to bridge great terrestrial distances); and alternative modalities in computer-based digital communications. One example is the evolving sector of “software radio,” which uses radio hardware adaptable to various frequencies and tasks depending upon the software loaded.⁹

Some believe that such initiatives are more likely to gather interest among youth than traditional radio frequency modes.¹⁰ Discussion of such proposals – as well as education programs aimed at teenagers – is expected to surface in the ARRL news columns.

Amateur radio’s role in emergency communications and community service has remained strong,¹¹ and shows signs of renewed vigor in the U.S. since the Sept. 11th, 2001 terrorist attacks. Indeed, “the hobby remains popular because it gives people a chance to make a difference in times of crisis,”¹² to include domestic and overseas natural disasters.¹³

Issues of mobility in communications are forefront as the technology gets smaller and Hams become more versatile. Land, air and space communications are ripe policy areas

⁶ “Promoting Amateur Radio,” Ed Mitchell, KF7VY, <http://hamradio-online.com>, August 23, 1999, accessed July 20, 2003.

⁷ See “Media Literacy 2nd Ed.” by W. James Potter (Sage: Thousand Oaks, CA.) 2001, Chap. 10.

⁸ From personal conversation with William Slayman, KY4NU, 1st District (KY) Emergency Coordinator, Amateur Radio Emergency Service.

⁹ “Linux, Software Radio, and the Radio Amateur,” *QST*, Oct. 2002, pp. 33-35.

¹⁰ “Future Bright, Ham Enthusiasts Say,” *Dayton Daily News* (OH), May 18, 2003, p. B3.

¹¹ “American Radio Relay League Handbook for Radio Amateurs, 2001” (ARRL Pubs.: Newington, CT), p. 1.5.

¹² Beverly Priest, Dayton Amateur Radio Association, as quoted in “Radio Hobby Retains Allure,” *Dayton Daily News* (OH), May 16, 1997, p. 1.B

¹³ “Ham Radio Operators Tune Up for Duty with Overseas Peers,” *Wilmington Morning Star* (NC), June 23, 2002, p. 2B.

for regulatory agencies such as the FCC.¹⁴ A recent survey shows that more than 90 percent of Amateur operators have transmitted from non-fixed locations.¹⁵ It is predicted that issues emerging from mobile communication will show up in the analysis.

Amateurs continue to work to protect the radio frequencies they use. In 1936, former President Herbert Hoover wrote that “the commercial value of these wavelengths is well-recognized and... great pressures were brought to bear to allot them to commercial use.”¹⁶ The competition for these frequencies has become more fierce since then with the burgeoning number of new media applications, and the ARRL is known for its defense of non-commercial spectrum issues.

On these and other issues, what is the path of Amateur radio within its important transitional phase? *QST*'s main monthly printed news column should provide insight. The “Happenings” column is “a reader’s digest of what is on the ARRL website,” according to Senior News Editor Rick Lindquist, and is a snapshot of areas of overall Ham interest.

Method

Each item in the printed *QST* “Happenings” column from January, 2000 to August, 2003 was counted and coded. Some categories were preliminary, and suggested by the background issues. Other classifications were built as necessary into the framework of NEWS CATEGORY; THRUST (or key points within the category); EXAMPLES of the category; SUBTEXT (certain background to assist understanding); and OCCURRENCES (number of times such category appeared). In results, occurrences are noted as frequencies and also as percentages of all news items.

Some news items were very brief (under 50 words), while major articles sometimes reached a few hundred words. Long articles were evaluated to determine the single “major topic” within, which was often indicated by the headline. Perfunctory announcements, such as election notices and officer nominating solicitations ($n = 36$) were excluded from the analysis.

Results

Results are seen in Table 1:

¹⁴ “Communications for a Mobile Society: An Assessment of New Technology,” R. Bowers et al. (Sage: Beverly Hills, CA), 1978.

¹⁵ *CQ: Amateur Radio Communications & Technology*, July, 2003 (CQ Communications: Hicksville, NY), p. 40

¹⁶ In the Preface to “200 Meters & Down: The Story of Amateur Radio” by Clinton DeSoto (ARRL: W.Hartford, CT.), 1936.

News Category	Thrust	Examples	Subtexts	Number of Occurrences (n=)
ARRL Policy; Management Initiatives; Sanctioned Activities	Internal Affairs	Such as assignment to offices; bylaws; self-governance	Election results; administrative revisions; affiliations; board meeting outcomes	66
	Amateur Enforcement Mediation	Policing individual problems; track of lawbreaking	Role in settling disputes among Hams, and between Hams and FCC; arbitration	103
	Youth Education & Recruitment Programs	"The Big Project" to get school kids involved; scholarships	Incorporating Ham radio into educational processes, attempt to guarantee future of the hobby	41
	Emergency Communications and Public Service	Amateur Radio Emergency Service (ARES), Amateur Civil Emergency Services (RACES)	Disaster preparation, news of "Field" activities; training of ARES members; weather-spotting (SKYWARN)	47
	Reaction to Band Threats	Protect against intrusion by business and gov't interests	Redlocation lobbying and political stance; (e.g) AeroAstro and ARRL square off over use of 2300 MHz	14
	Individual Awards, Recognitions & Contests	Instructor of Year Awards; Division service awards; Field Day statistics	Encouragement for high service, years of service; Special Events such as Jamboree on the Air (Scouts)	65
	Global, International or Space Initiatives	Space Station (ARISS), Shuttle Program (SAREX), AMSAT	"Ham radio in Space"; satellite communication with terrestrial contacts; honor to astronauts	57

	Miscellaneous, such as vanity call signs & testing criteria	"Ham exams"; QSL Service; National Traffic System; Experimentation and pioneering	References to sister or colleague agencies which assist Hams; re-reported information from other sources; ARRL job openings	56
FCC News & Federal / International Regulation	Internal Affairs	Such as commissioner assignment to offices	Administrative revisions; Washington appointments to task forces	20
	Enforcement & Regulatory Outcomes	New allocation plans; band restructuring emission limits & interference standards	World Radio Communication Conference (WRC) news; International Amateur Radio Union (IARU)	70
	Commission Politics / Trends	Eye on political leanings and possible future Washington landscapes	"What FCC commissioners say," apart from actual policy	19
	FCC Lobbied by ARRL	FCC reactions to ARRL stances	"ARRL asks FCC to..." (often) limit business or civilian uses of bands; "Friend of FCC advice"	35
	Congressional Actions	Amateur Radio Spectrum Protection Act	"Spectrum-reform bills"; covenant acts that may restrict antenna construction	6
Notable Deaths ("silent keys")	With Special Fanfare	Many column inches or photos included; enhanced personal background	"Early pioneer of radio astronomy dies at 90"; mainly highly accomplished Hams	34
	Standard Obits	Sometimes a brief mention; may be a paragraph	"Community leader"; "Life member"; Hams with distinguished histories	38

Ham Licensing & Operator Requirements	Morse Code Requirement / Licensing Procedure	Rigors of testing Volunteer Examiner policy for those who administer tests	Controversy over Morse code requirement for higher-class licensees; Global debate and comparison of international testing requirements	9
Technology & Technology Industry	New communications technology; companies that manufacture or distribute it	"PLC" – Power Line Communications; Voice-Over Internet; Digital transmission	Insight to applications that may assist or inform Hams about new technology	16
General Miscellaneous Items	All else			23
TOTAL NUMBER OF EVENTS:				719

The greatest proportion of items (a combined 23% of all listings) concerned ARRL business, internal affairs (such as elections, executive committee actions, and news of section elections); as well as articles about how the agency is assisting Amateurs with various problems – sometimes mediating for them in a variety of contexts. Enforcement and mediation issues are a dominant category.

In order of frequency, the following classifications also appeared: Obituaries or reflections on the lives of recently deceased Hams, known in the vernacular as “silent keys”¹⁷ (10%); policy news about the FCC or other governing bodies concerning RF band restructuring, emission limits, interference standards, etc. (10%); Information about individual awards, recognitions and news of over-the-air contesting (9%); information about “Ham radio in space,” such as a program to enhance communication with the international

¹⁷ “Silent key” refers to the operator of a Morse code keyer, or a similar paddle, with which an operator can send code over the airwaves.

space station, as well as AMSAT, which coordinates Amateur use of satellites (8%); and miscellaneous news of concern to ARRL, to which only limited printed lineage was evident, such as notes about the National Traffic System (passing messages through Ham stations), license and testing criteria, and pass-along news from other Amateur agencies (8%).

The following categories each claimed five or six percent of all mentions: News about youth education, such as the ARRL-sponsored “Big Project” to get school kids involved in the hobby; news about emergency communication, most especially updates on Amateur involvement in public service and emergency operation; news about the ARRL’s lobbying of the Federal Communications Commission on behalf of certain Ham interests – noteworthy is the treatment given to Riley Hollingsworth, FCC Special Counsel for Enforcement.

At about three percent of all mentions: Discussion of trends and other insights about the FCC, particularly as they occur in Washington, D.C. or when FCC commissioners are speaking to constituencies around the country; and internal affairs of the FCC, such as commissioner assignments and appointments to task forces.

News items concerning new technologies garnered only two percent of all mentions, but these items normally received a significant write-up. Other sections of *QST* are more devoted to this field than is the “Happenings” column, but breakthroughs in technology – and the goings-on of companies that manufacture and distribute it – are sometimes treated here.

Categories showing fewer mentions than 15 across the 44 printed periodicals include news about how ARRL is responding to potential threats to existing bands used by Amateurs (another issue that is often better covered in other segments of the magazine); and information about the controversy about whether Morse code proficiency should be required of higher-class Amateur licensees. This latter topic is moving toward greater treatment as nations around the world have begun dropping the requirement for code proficiency.

Conclusions

What emerges from the analysis is a synopsis of the ARRL and what it considers important for the future of Amateur radio.

Futurism and Self-Regulation

Data suggest that the league seeks to protect the hobby – and the service – through mindful exploration of communication policies likely to affect radio operators in the future. This extends to the important realm of school liaisons, programs for children, and an investment in space communications. The ARRL is also seen as an instrument of “self-regulation,” where it keeps an eye on Amateur practices, and even helps to police operators

who abuse the system. The association maintains generous dialogue with Washington policymakers, and seems to keep an ear to the tracks for possible trouble. It is a bellwether organization for Hams, quick to point out regulatory and legislative trends which bear watching. And the news columns suggest that the ARRL is highly reactive to policymaking which it believes may harm the interests of radio operators (sometimes called “implied threats” to the service).

Note that this study does not address ARRL’s relationship with its members beyond the “Happenings” column, and does not attempt to measure the efficacy of the organization in member services or in other areas of ARRL practice.

Relative Neutrality

Despite an aggressive stance on legislative and policy issues which it favors – or disfavors – the ARRL “Happenings” column generally remains impartial in areas of open debate among the Amateur community. For example, one controversy of 2003 for radio hobbyists is whether a five-word-per-minute Morse code proficiency should continue to be demonstrated for higher-class FCC Ham licenses; code proficiency of some degree has been in place from the beginning, and ARRL has over the years supported the provision. *QST* has reported upon the issue, but has not become slave to the debate, instead leaving that to the many online bulletin boards for Hams.

Generally, the ARRL is seen in its news columns to be an advocate and booster for the service, but tends not to take sides on many controversial issues within the Amateur community. This degree of relative “objectivity” and impartiality is seen infrequently in publications of its type.

On Older Hams

Roughly 10 percent of all news items concerned the death of a radio Amateur, or someone well-known within Amateur circles. While some deaths were younger people, most were elderly “silent keys.” The frequency of obituaries speaks to a cornerstone challenge facing the hobby – the high median age of those who are involved in it.

QST spearheads efforts to promote programs aimed at children, and the ARRL has placed considerable emphasis and resources toward this goal. A salient push to recruit “young blood” is often noted in the columns, as is news of programs designed to bring radio to the classroom and to reward school teachers for servicing this mission.

*More examples of column topics are included below as an appendix. Thanks to Alice T. Dillon for her work in helping to compile these, and to **QST** Senior News Editor Rick Lindquist for his feedback.*

Appendix:
Random Sample of Headlines and Topics Appearing in QST's
"Happenings" Jan. 2000 – Aug. 2003.

AMATEUR RESTRUCTURING COULD BE CLOSE AT HAND

FCC REVISES CONDUCTED EMISSION LIMITS

FCC ALLOCATES 75 MHZ AT 5.9 GHZ FOR "INTELLIGENT TRANSPORTATION SYSTEM" SERVICES AIMED AT IMPROVING HIGHWAY SAFETY

FCC INTERVENES IN POWER LINE NOISE COMPLAINTS

THE NONPROFIT FOUNDATION FOR AMATEUR RADIO INC., AN ARRL-AFFILIATED FEDERATION OF MORE THAN 75 AMATEUR RADIO CLUBS IN THE WASHINGTON, D.C., AREA--PLANS TO ADMINISTER 73 SCHOLARSHIPS FOR THE 2000-2001 ACADEMIC YEAR TO ASSIST ELIGIBLE RADIO AMATEURS WITH POST-SECONDARY EDUCATION.

ARRL TO SEEK PARTIAL RECONSIDERATION OF THE FCC'S RESTRUCTURING ORDER

PHASE 3D NEXT-GENERATION AMATEUR RADIO SATELLITE HAS BEEN TENTATIVELY SCHEDULED TO LAUNCH IN LATE JULY.

THE FIRST INTERNATIONAL SPACE STATION EXPEDITION CREW AND ITS BACKUP CREW HAVE RECEIVED INITIAL TRAINING ON THE USE OF THE INITIAL US-PROVIDED AMATEUR RADIO GEAR TO BE INSTALLED AS PART OF THE AMATEUR RADIO ON THE INTERNATIONAL SPACE STATION, OR ARISS, EFFORT.

THE US COURT OF APPEALS HAS UPHELD THE FCC'S 1996 RF EXPOSURE REGULATIONS.

AFTER PRODDING BY THE FCC, PACIFIC GAS & ELECTRIC COMPANY SAYS IT'S MAKING HEADWAY IN MITIGATING LONG-STANDING POWER-LINE NOISE COMPLAINTS.

REGULATORY MATTERS TOP ARRL EXECUTIVE COMMITTEE AGENDA

ARRL OFFICIAL OBSERVERS WILL BE ENCOURAGED TO PLAY A MORE REGULAR ROLE IN AMATEUR RADIO ENFORCEMENT, NOW THAT THE FCC HAS ESTABLISHED A CREDIBLE AMATEUR RADIO ENFORCEMENT PRESENCE.

EDUCATION: ARRL PRESIDENT JIM HAYNIE PROPOSES "THE BIG PROJECT." THE CORPORATE-EDUCATION PARTNERSHIP WILL ENCOURAGE SCHOOLS TO INCORPORATE AMATEUR RADIO INTO THEIR CURRICULUM AS A WAY TO ENHANCE KNOWLEDGE OF GEOGRAPHY, MATH, ELECTRICITY AND ELECTRONICS, AND PHYSICS.

THE ARRL HAS LAUNCHED THE DEVELOPMENTAL PHASE OF A CERTIFICATION AND CONTINUING EDUCATION PILOT PROJECT IN EMERGENCY COMMUNICATIONS.

A NEW CHAPTER IN THE HISTORY OF AMATEUR RADIO WILL BEGIN LATER THIS YEAR WHEN HAM GEAR IS INSTALLED ABOARD THE INTERNATIONAL SPACE STATION.

ARRL AND THE NATIONAL ASSOCIATION OF RADIO AND TELECOMMUNICATIONS ENGINEERS INC. HAVE AGREED TO WORK TOGETHER ON MUTUALLY BENEFICIAL PROGRAMS OR EVENTS THAT ARE INTENDED TO FOSTER AND PROMOTE TECHNICAL AWARENESS, EDUCATION, AND ACHIEVEMENT IN AMATEUR AND COMMERCIAL TELECOMMUNICATIONS.

ARRL PRESIDENT JIM HAYNIE SPOKE ABOUT THE NEED FOR AN INTENSIFIED YOUTH-RECRUITMENT CAMPAIGN NOW DUBBED "THE BIG PROJECT." HE REITERATED HIS INTENTION TO RAISE \$1 MILLION IN CORPORATE AND FOUNDATION DONATIONS FOR THE PROJECT THIS YEAR.

AMSAT NOW SAYS THE NEXT-GENERATION AMATEUR RADIO SATELLITE WILL LAUNCH IN SEPTEMBER AT THE EARLIEST.

ARRL SAYS AMATEUR SERVICE IS A "FERTILE TESTING GROUND" FOR SOFTWARE DEFINED RADIO (SDR) TECHNOLOGY AND THAT SDR WOULD BE ESPECIALLY VALUABLE TO FACILITATE DISASTER COMMUNICATIONS.

AS CHIEF OF THE FCC'S OFFICE OF ENGINEERING AND TECHNOLOGY, DALE HATFIELD PREDICTS A BRIGHT FUTURE FOR AMATEUR RADIO. HOWEVER, HE SAYS THAT AMATEURS WILL BE UNDER A CERTAIN AMOUNT OF PRESSURE TO JUSTIFY THEIR FREE USE OF THE RADIO SPECTRUM.

FCC SPECIAL COUNSEL FOR AMATEUR RADIO ENFORCEMENT RILEY HOLLINGSWORTH SAYS HE EXPECTS TO CONTINUE AMATEUR ENFORCEMENT EFFORT AT THE CURRENT PACE DESPITE FEWER COMPLAINTS IN RECENT MONTHS.

FCC HAS LAUNCHED CORES, A COMMISSION REGISTRATION SYSTEM. WHILE THE ACTION HAS FEW IMMEDIATE IMPLICATIONS FOR AMATEUR RADIO LICENSEES, CORES REGISTRATION EVENTUALLY WILL REPLACE UNIVERSAL LICENSING SYSTEM, OR ULS, REGISTRATION.

FEWER THAN ONE-FIFTH OF HAMS ARE ULS-REGISTERED

THE AMATEUR RADIO ON THE INTERNATIONAL SPACE STATION (ISS) WAS DELIVERED TO THE ISS IN SEPTEMBER. THE INITIAL STATION GEAR NOW STOWED ABOARD THE ISS INCLUDES AMATEUR VHF AND UHF HAND-HELD TRANSCEIVERS AS WELL AS A TNC FOR PACKET, A SPECIAL HEADSET AND SIGNED ADAPTER MODULE, AND POWER ADAPTERS AND INTERCONNECTING CABLES.

RF SAFETY RULES ARE NOW IN FORCE FOR ALL AMATEUR RADIO OPERATORS

ARRL HAS ADVISED THE FCC TO PUT ITS ULTRA-WIDEBAND OR UWB TECHNOLOGY PROCEEDING ON HOLD UNTIL MORE EVIDENCE IS AVAILABLE ON UWB'S INTERFERENCE IMPACT.

LOOKING BEYOND ENFORCEMENT, FCC'S SPECIAL COUNSEL FOR AMATEUR RADIO ENFORCEMENT, RILEY HOLLINGSWORTH PROVIDES THESE TEN TIPS FOR A BRIGHTER HAM RADIO FUTURE:

1. BE PROUD OF WHAT YOU HAVE. LET THE PUBLIC KNOW WHAT AMATEUR RADIO IS AND WHY IT'S VALUABLE.
2. OPERATE AS IF THE WHOLE WORLD IS LISTENING. IT IS!
3. TAKE NOTHING FOR GRANTED. BILL GATES CAN'T, AND YOU CAN'T EITHER.
4. YOU'RE AT A CROSSROADS NOW. SEIZE THE MOMENT, AND MAKE SURE THIS YOUR FINEST HOUR.
5. MAKE SURE THAT ON YOUR WATCH, AMATEUR RADIO NEVER BECOMES OBSOLETE.
6. TEACH ALL NEW LICENSEES ALL YOU KNOW. THINK ABOUT THE LEGACY YOU WERE GIVEN AND YOUR DUTY TO PASS IT ON.
7. ENJOY HAM RADIO. CELEBRATE IT. BUT REALIZE IT COMES WITH RESPONSIBILITY. EVERY GIFT OF LASTING VALUE ALWAYS DOES.
8. STAY AWAY FROM ARROGANT, NEGATIVE OPERATORS WHO KNOW ALL THE ANSWERS.
9. NEVER ALLOW AMATEUR RADIO TO BECOME THE AUDIO VERSION OF THE JERRY SPRINGER SHOW.

10. I'M STANDING HERE TALKING ABOUT ENFORCEMENT BECAUSE THE ARRL NEVER GAVE UP (TRYING TO GET THE FCC TO RESUME ENFORCEMENT.) TAKE CARE OF THE ONE VOICE YOU HAVE.

THE ARRL BOARD OF DIRECTORS TO CONSIDER MORSE CODE POLICY REVIEW

ILLINOIS SCHOOL THRILLED BY FIRST ARISS CONTACT: "IT WAS A HISTORIC MOMENT FOR AMATEUR RADIO. SEVERAL HUNDRED YOUNGSTERS, TEACHERS, PARENTS, AND NEWS MEDIA REPRESENTATIVES WERE ON HAND FOR THE FIRST AMATEUR RADIO ON THE INTERNATIONAL SPACE STATION SCHOOL CONTACT."

THE FOUNDATION FOR AMATEUR RADIO, INC., A NON-PROFIT ORGANIZATION WITH HEADQUARTERS IN WASHINGTON, D.C., PLANS TO ADMINISTER 67 SCHOLARSHIPS FOR THE 2001-2002 ACADEMIC YEAR TO ASSIST RADIO AMATEURS.

THE AMATEUR RADIO ON THE INTERNATIONAL SPACE STATION (ARISS) PROGRAM CONTINUED. CREW COMMANDER WILLIAM SHEPHERD SPOKE VIA HAM RADIO WITH STUDENTS AT SEVERAL SCHOOLS.

INTERNATIONAL SPACE STATION CREW HITS THE AIRWAVES EARLY

THE RUSSIAN MIR SPACE STATION WAS BROUGHT DOWN ON MARCH 23 SAFELY AND ACCORDING TO PLAN. OVER ITS 15 YEARS, MIR HOUSED AMATEUR RADIO GEAR AND HOSTED SEVERAL AMATEUR RADIO OPERATORS AS CREW MEMBERS.

FCC HOLDS THE LINE ON AMATEUR RESTRUCTURING

HAM RADIO EXPERIENCES POST-RESTRUCTURING GROWTH SPURT

EDUCATION: ASTRONAUTS ON THE INTERNATIONAL SPACE STATION BEGAN A SERIES OF SUCCESSFUL CONTACTS WITH STUDENTS FOR THE AMATEUR RADIO ON THE INTERNATIONAL SPACE STATION PROGRAM.

ARRL EXECUTIVE COMMITTEE REVIEWS PRELIMINARY 5 MHZ BAND PETITION

ARRL AGAIN ASKS FOR 2300-2305 MHZ PRIMARY STATUS

ARRL KEEPS UP PRESSURE ON ULTRA-WIDEBAND ISSUE

ARRL AND REACT SIGN MEMORANDUM OF UNDERSTANDING. THE AGREEMENT IS INTENDED TO PROMOTE JOINT COORDINATION OF THE RESOURCES BETWEEN ARRL AND REACT AND TO FACILITATE THE FLOW OF INFORMATION TO AND FROM THE PUBLIC DURING EMERGENCIES. WHILE REACT HAS BEEN ASSOCIATED WITH CITIZENS BAND IN THE PAST, THE ORGANIZATION HAS WIDENED ITS FOCUS TO EMBRACE AMATEUR RADIO AND OTHER RADIO SERVICES. ARRL AND REACT SHARE COMMON GOALS IN TERMS OF EMERGENCY COMMUNICATION.

EDUCATION: MEMBERS OF THE ARISS INTERNATIONAL TEAM MET THIS SPRING TO FIRM UP PLANS TO EXPAND HAM RADIO OPERATION FROM SPACE. WITH A SERIES OF SUCCESSFUL ARISS US AND CANADIAN SCHOOL CONTACTS BEHIND THEM, THE ARISS PARTNERS APPOINTED AN ARISS SCHOOL COMMITTEE WITH REPRESENTATIVES FROM THE US, EUROPE, CANADA, JAPAN AND RUSSIA.

EDUCATION: DURING THEIR SOMEWHAT EXTENDED STAY IN SPACE, ISS EXPEDITION 2 CREW MEMBERS JIM VOSS AND SUSAN HELMS HAVE HAD A BUSY TIME PARTICIPATING IN THE AMATEUR RADIO ON THE INTERNATIONAL SPACE STATION (ARISS) PROGRAM. ARISS HAS PUT DOZENS OF YOUNGSTERS IN DIRECT CONTACT WITH THE ISS CREW MEMBERS VIA AMATEUR RADIO.

ARRL PETITIONS FOR NEW 60-METER AMATEUR BAND

ARRL ANNOUNCES AMATEUR RADIO INTERFERENCE ASSESSMENT PROJECT

FCC ACTION PUTS AMATEUR ALLOCATION IN PERIL

EDUCATION: SEVERAL BOY SCOUTS PARTICIPATING IN A BOY SCOUT NATIONAL JAMBOREE GOT TO SPEAK DIRECTLY TO ASTRONAUT SUSAN HELMS ON THE INTERNATIONAL SPACE STATION. THE CONTACT WAS ARRANGED AS PART OF THE AMATEUR RADIO ON THE INTERNATIONAL SPACE STATION PROGRAM.

THE ARRL HAS SUCCESSFULLY "RUN INTERFERENCE" IN SEVERAL RECENT CASES WHERE ELECTRIC UTILITIES WERE ACCUSED OF CAUSING PROBLEMS FOR AMATEURS.

FCC REGISTRATION NUMBER BECOMES MANDATORY IN DECEMBER
IARU ADMINISTRATIVE COUNCIL CALLS FOR END TO MORSE REQUIREMENT

FCC PROPOSES CHANGES TO PART 15 RULES CONCERNING ACCESS TO 425-435 MHZ

FCC STOPS ACCEPTING FILINGS IN ENVELOPES

INTERNATIONAL SPACE STATION CREW CONDUCTS FIRST SCHOOL CONTACTS

THE ARRL AMATEUR RADIO EDUCATION PROJECT IS SEEKING ADDITIONAL PILOT SCHOOLS. IT HAS ALREADY PROVIDED AMATEUR RADIO EQUIPMENT AND RESOURCES TO PILOT SCHOOLS IN TEXAS AND GEORGIA. THE FOUNDATION FOR AMATEUR RADIO, A NON-PROFIT ORGANIZATION HEADQUARTERED IN WASHINGTON, D.C., PLANS TO ADMINISTER 62 SCHOLARSHIPS FOR THE 2002-2003 ACADEMIC YEAR.

FCC SPECIAL COUNSEL FOR AMATEUR RADIO ENFORCEMENT RILEY HOLLINGSWORTH PRAISES THE OVERALL LEVEL OF AMATEUR RADIO COMPLIANCE WITH FCC RULES AS "OUTSTANDING."

COMMENTS ARE DUE FEBRUARY 12, 2002, IN THE FCC NOTICE OF PROPOSED RULE MAKING AND ORDER. THE PROCEEDING DEALS IN PART WITH A POTENTIAL BAND THREAT TO THE POPULAR 70-CM BAND FROM A PART 15 RF IDENTIFICATION DEVICE PROPOSED BY SAVI TECHNOLOGY.

FCC STILL SINGING THE POSTAL BLUES. SINCE OCTOBER 19, THE FCC HAS BEEN URGING EVERYONE TO AVOID USING THE MAILS TO CONDUCT BUSINESS WITH THE AGENCY AND TO USE ELECTRONIC MEANS TO FILE APPLICATIONS OR COMMENTS.

THE AMATEUR RADIO ON THE INTERNATIONAL SPACE STATION (ARISS) SUCCESS STORY CONTINUES

AMATEUR RADIO'S SECONDARY ALLOCATION AT 219-220 MHZ REMAINS INTACT IN THE WAKE OF AN FCC SPECTRUM REALLOCATION OF 216 TO 220 MHZ AND OTHER BANDS.

FCC TO ALLOW HIGHER-POWER PART 15 DEVICES AT 24 GHZ.

ARISS CONTACT MARKS MARCONI ANNIVERSARY. "MARCONI LIKELY WOULD HAVE BEEN BLOWN AWAY WITH ASTONISHMENT IF HE COULD HAVE SEEN YOUNGSTERS ON THE CENTENNIAL OF HIS EPOCHAL ACCOMPLISHMENT SITTING WHERE HE ONCE SAT AND CARRYING ON A RADIO CONVERSATION WITH SOMEONE IN A SPACECRAFT."

THE DAYTON AMATEUR RADIO ASSOCIATION HAS ANNOUNCED THE AVAILABILITY OF SCHOLARSHIPS FOR THE 2002-2003 ACADEMIC YEAR.

AMATEUR RADIO ON THE INTERNATIONAL SPACE STATION GAINED TWO NEW ANTENNAS IN JANUARY, INCLUDING ONE FOR HF—ALTHOUGH THERE'S NO HF GEAR ABOARD THE INTERNATIONAL SPACE STATION AS YET. INSTALLATION OF THE NEW ANTENNAS PAVES THE WAY FOR TWO SEPARATE HAM STATIONS ABOARD THE SPACE STATION AND WILL ALLOW THE CREW TO SET UP HAM RADIO EQUIPMENT IN THEIR LIVING QUARTERS.

THE ARRL HAS ASKED THE FCC TO ELIMINATE THE 80, 40 AND 15-METER NOVICE/TECHNICIAN PLUS SUBBANDS AND REUSE THAT SPECTRUM IN PART TO EXPAND THE PHONE ALLOCATIONS ON 80 AND 40 METERS.

THE FCC HAS REDESIGNED ITS AMATEUR RADIO SERVICE WEB SITE AND CHANGED THE URL. THE UPDATED SITE IS AT WIRELESS.FCC.GOV/SERVICES/AMATEUR/

FCC PROPOSES VANITY FEE INCREASE

IN AN ACTION THAT COULD HAVE IMPLICATIONS FOR AMATEUR RADIO SATELLITES, THE FCC HAS OPENED A PROCEEDING REGARDING ORBITAL DEBRIS.

NASA EXTENDS ALL-HAM INTERNATIONAL SPACE STATION CREW'S DUTY TOUR

THE FCC HAS PROPOSED GOING ALONG IN FULL OR IN PART WITH ARRL REQUESTS TO ALLOCATE A NEW DOMESTIC (US-ONLY), SECONDARY HF BAND AT 5.25 TO 5.4 MHz PLUS A NEW LOW-FREQUENCY AMATEUR "SILVER BAND" AT 136-KHz, AND TO ELEVATE AMATEUR RADIO TO PRIMARY STATUS AT 2400 TO 2402 MHz.

THANKS TO THE GENEROSITY OF THE AMATEUR COMMUNITY, THE ARRL EDUCATION AND TECHNOLOGY PROGRAM "THE BIG PROJECT" BY MID JUNE WAS BETTER THAN TWO THIRDS OF THE WAY TOWARD ITS 2002 PHASE I FUNDING GOAL. THE PROGRAM ALREADY HAS SIGNED ON 18 PILOT SCHOOLS AS WELL AS EIGHT PROGRESS GRANT SCHOOLS.

THE ARRL HAS TOLD THE FCC THAT MARKETPLACE FORCES SHOULD NOT DETERMINE AMATEUR RADIO SPECTRUM ALLOCATIONS AND THAT INTERFERENCE MANAGEMENT IS A TECHNICAL, NOT AN ECONOMIC, ISSUE.

FCC WORLD RADIO-COMMUNICATION CONFERENCE 2003 ADVISORY PANEL RECOMMENDS PHASED-IN WORLDWIDE 7-MHz BAND

ANOTHER ALL-HAM CREW SETTLES IN ABOARD THE INTERNATIONAL SPACE STATION. SCHEDULED AMATEUR RADIO ON THE INTERNATIONAL SPACE STATION (ARISS) SCHOOL CONTACTS RESUMED IN EARLY JULY. A SUCCESSFUL QSO TOOK PLACE JULY 3 BETWEEN US ASTRONAUT PEGGY WHITSON....

THE FCC IS GETTING TOUGHER ON ELECTRIC UTILITIES THAT FAIL TO FIX PROBLEMS CAUSING INTERFERENCE WITH AMATEUR RADIO AND OTHER LICENSED COMMUNICATIONS.

FINAL TWO HAM ANTENNAS WERE INSTALLED OVER THE SUMMER ON THE INTERNATIONAL SPACE STATION. THE INSTALLATION WRAPPED UP WORK THAT BEGAN LAST JANUARY ON ARISS (AMATEUR RADIO ON THE INTERNATIONAL SPACE STATION).

ARRL, IARU CONTINUE TO PUSH FOR LIMITS TO 70-CM SPACEBORNE RADARS.

ARRL RESPONDS TO IMPLIED 222-225 MHz THREAT

FCC OPTS FOR STATUS QUO AT 2300 AND 2305 MHz.

IN A CLASSIC GOOD NEWS-BAD NEWS SCENARIO, THE FCC IN OCTOBER DISMISSED AN ARRL PETITION THAT SOUGHT PRIMARY STATUS FOR AMATEURS AT 2300-2305 MHz. AT THE SAME TIME, THE COMMISSION TURNED DOWN

PETITIONS FROM AEROASTRO AND MICROTRAXE COMMERCIAL INTERESTS THAT HAD HOPED TO SHARE THE SPECTRUM WITH AMATEUR RADIO.

A NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION (NTIA) STUDY SUPPORTS THE ARRL'S POSITION THAT THE FCC WOULD BE MAKING A MISTAKE TO PERMIT SAVI TECHNOLOGY TO DEPLOY RF IDENTIFICATION (RFID) TAG DEVICES AT 433 MHz AT MUCH GREATER DUTY CYCLES THAN CURRENT PART 15 RULES PERMIT FOR SUCH DEVICES. RFID TAGS ARE USED FOR TRACKING SHIPMENTS AND PACKAGES, AMONG OTHER APPLICATIONS.

WRC-03 CONFERENCE PREPARATORY MEETING EXPANDS 40-METER OPTIONS

FIRST TRANSATLANTIC AMATEUR HF DIGITAL VOICE QSO REPORTED

NEW ALL-HAM CREW SETTLES IN ONBOARD INTERNATIONAL SPACE STATION

SIX STUDENTS FROM AROUND THE WORLD ATTENDED THE UNITED STATES TELECOMMUNICATIONS TRAINING INSTITUTE COURSE ON AMATEUR RADIO ADMINISTRATION AT ARRL HEADQUARTERS
 EDUCATION: HOPING THAT HIS DONATION WILL SPUR OTHERS TO CONTRIBUTE TO 'THE BIG PROJECT,' VETERAN ROCK STAR AND WELL-KNOWN AMATEUR JOE WALSH HAS GIVEN IN A MAJOR WAY TO ARRL'S EDUCATION AND TECHNOLOGY FUND. HIS GIFT WILL FUND AN ADDITIONAL EIGHT PILOT SCHOOLS IN THE ARRL EDUCATION AND TECHNOLOGY PROGRAM.

A \$33,000 GRANT FROM HARTFORD, CONNECTICUT-BASED UNITED TECHNOLOGIES CORPORATION ANNOUNCED LAST SPRING HAS FUELED A MORE THAN 20-FOLD INCREASE IN THE NUMBER OF TRAINED AMATEUR RADIO EMERGENCY COMMUNICATORS IN CONNECTICUT.

MEMBERS OF THE AMATEUR RADIO ON THE INTERNATIONAL SPACE STATION (ARISS) MET IN DECEMBER AT THE NASA GODDARD SPACE FLIGHT CENTER. DELEGATES REPRESENTED PARTNER COUNTRIES, INTERNATIONAL AMATEUR RADIO UNION, MEMBER SOCIETIES AND AMSAT ORGANIZATIONS IN EUROPE, JAPAN, CANADA, RUSSIA, AND THE U.S. THE DELEGATES HEARD PROGRESS REPORTS ON VARIOUS ARISS EQUIPMENT PROPOSALS, INCLUDING TIMING FOR CERTIFICATION AND FUTURE DELIVERY.

THE AMATEUR RADIO SPECTRUM PROTECTION ACT, AN ARRL LEGISLATIVE INITIATIVE, HAS AGAIN BEEN INTRODUCED IN THE US HOUSE OF REPRESENTATIVES. HR 713 IS AIMED AT ENSURING THE AVAILABILITY OF SPECTRUM TO AMATEUR RADIO OPERATORS. IT WOULD PROTECT EXISTING AMATEUR RADIO SPECTRUM AGAINST REALLOCATIONS TO OR SHARING WITH OTHER SERVICES UNLESS THE FCC PROVIDES "EQUIVALENT REPLACEMENT SPECTRUM" ELSEWHERE.

THE ARRL SAYS TWO FCC-PROPOSED ACTIONS COULD NEGATIVELY AFFECT AMATEUR RADIO. ONE WOULD SUBSTANTIALLY EXPAND THE GEOGRAPHICAL AREA IN THE US SUBJECT TO POWER LIMITATIONS ON 70 CM. THE OTHER WOULD DEPLOY NATIONAL WEATHER SERVICE WIND-PROFILER RADARS IN THE BAND'S TOP TWO MEGAHERTZ. "THE COMMISSION HAS PROPOSED TWO ACTIONS THAT HAVE A POTENTIALLY SUBSTANTIAL ADVERSE IMPACT ON A LARGE NUMBER OF AMATEUR RADIO OPERATORS IN THIS PROCEEDING."

THE AMATEUR RADIO SPECTRUM PROTECTION ACT HAS BEEN INTRODUCED IN BOTH THE HOUSE AND SENATE. HR 713 AND S 537 ARE AIMED AT ENSURING THE AVAILABILITY OF SPECTRUM TO AMATEUR RADIO OPERATORS.

ANOTHER CONGRESSIONAL ATTEMPT IS UNDERWAY TO PROVIDE RELIEF TO AMATEURS PREVENTED BY PRIVATE DEED COVENANTS, CONDITIONS AND RESTRICTIONS FROM INSTALLING OUTDOOR ANTENNAS. HR 1478 WOULD REQUIRE PRIVATE LAND-USE REGULATORS SUCH AS HOMEOWNERS ASSOCIATIONS TO "REASONABLY ACCOMMODATE"

AMATEUR RADIO ANTENNAS CONSISTENT WITH THE PRB-1 LIMITED FEDERAL PREEMPTION. PRB-1 NOW APPLIES ONLY TO STATES AND MUNICIPALITIES.

THE AMATEUR RADIO SPECTRUM PROTECTION ACT OF 2003 HAS BEEN INTRODUCED IN BOTH CHAMBERS OF CONGRESS.

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