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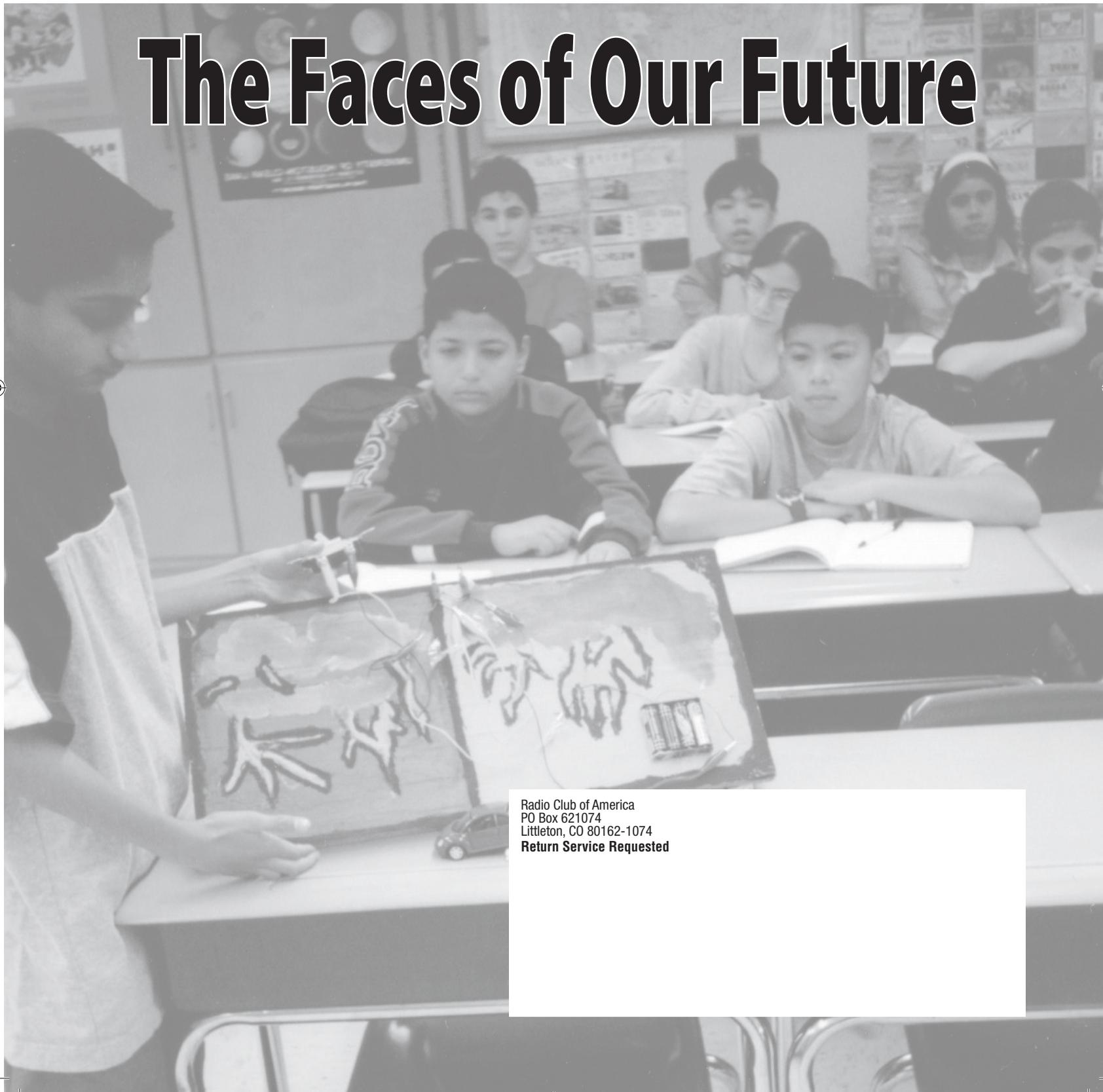


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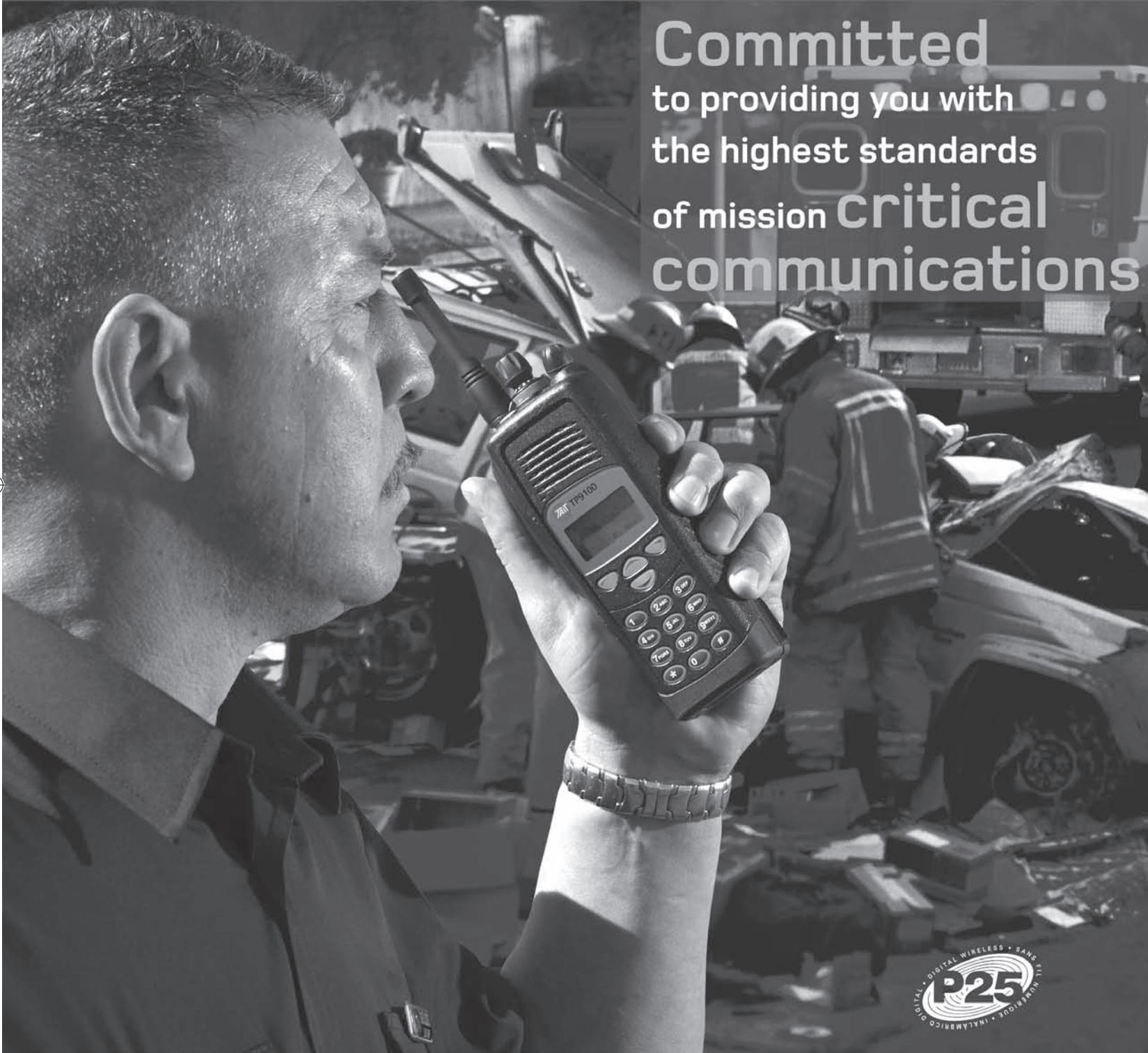


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THE RADIO CLUB OF AMERICA, INC.

Honoring the Past, Committed to the Future

THE PROCEEDINGS - Spring 2009
Volume 83, Number 1

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A Message From Stan

For an organization that has completed its first century, the Radio Club of America is certainly doing some very exciting and innovative things to continue our long history of providing leadership and assistance to the radio communications community.

Whenever I approach someone to become a member of the Radio Club, the first thing they ask me is “What do you do, and why should I become a part of your organization?” My immediate reply is based upon our tagline “Honoring the past, committed to the future.” For the last 100 years, we have chronicled the history of the radio communications industry. This includes all facets of radio communications; avionics, broadcast, cellular, land mobile, maritime, satellite and all other facets, including amateur radio. Radio amateurs have developed and are still developing and experimenting with many of the newer communication modes for both their personal and professional interests. A large number of our membership, including myself, entered the industry due to an interest in communications cultivated by amateur radio. We have not only collected and stored information and artifacts, we share and disseminate it via our publications to all members of the communications community.

Via our scholarship program, we provide scholarships and grants to assist with the continuing education of students in the communications field. In addition, we work to help introduce the world of communications to youngsters both directly and indirectly through grant assistance to other organizations that are pursuing similar goals. In our Centennial year, the club has initiated and funded two new programs. These have been a few years in the planning and have just debuted.

The first is our Youth Program headed by Carole Perry (WB2MGP) (*see her story in this issue*). Carole is a professional educator by trade and was a pioneer in developing school training programs for amateur radio

and radio communications, during her career with the New York City school system. Her goal was and is to spark an interest in amateur radio communications that could lead to an amateur radio license and/or, ultimately, a career in communications. She not only has created lesson plans, but she also trains educators. Donations of amateur radio equipment from individuals and estates as well as manufacturers are supplied to schools that have implemented these programs under the auspices of the Radio Club. At the annual Dayton Hamvention, Carole trains educators and showcases students who have made outstanding achievements during the previous year. The Radio Club supplies honoraria to recognize these kids.

And in addition to primary education, the Radio Club is assisting in continuing education. About five years ago, Carroll Hollingsworth -- a Radio Club director and manufacturer’s representative (D.H. Marketing) in the Southwest -- realized the fact that radio communications equipment and accessories were progressing from analog to digital, and that technicians needed a more comprehensive understanding of digital and internet (IP) protocols. He enlisted the assistance of Rich Biby, another Radio Club director and publisher of *AGL* magazine, not only to assist in developing a course outline but also to implement the training program. The first annual “Digital IP for Radio Professionals” training course was presented to 41 individuals (including yours truly) on April 27 at the Annual Texas APCO conference, under the auspices of Texas APCO and The Radio Club of America. There were positive reviews from all of the participants and, next year, it will be expanded to a two-day course. Subsequently, other chapters and the national APCO office have inquired about doing the training for them, and possibly at the International Conference in Las Vegas later this year.

So to answer the question “What do you do, and why

► *Continued on p. 6*



Centennial Anniversary Celebration

Georgetown University Hotel and Convention Center, Washington, D.C.

Mark your calendars now for Nov. 20-21 and make plans to attend the 100th anniversary celebration of *The Radio Club of America*. The Club has made communications history, and this landmark celebration will be no exception! Join your friends and colleagues for a two-day event that will include includes:

- Cocktail parties
- Technical and non-technical symposiums
- Historic and technology exhibits
- Silent Auction
- Gala Celebration
- Plenty of networking time

The Radio Club of America is the world's first radio communications society. This is a one-time opportunity for you to honor those professionals who came before us while beginning to lay a solid foundation for the future.

Help us make this the best Radio Club event yet! Why not help sponsor the event and support the Club at the same time by purchasing one of the following sponsorships:

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► Continued from p. 4

should I become a part of your organization?" I reference the activities mentioned above as well as the opportunity to network with your peers at our breakfasts, dinners and banquets held throughout the year.

Again, this year we will celebrate our 100th anniversary in Washington, D.C. This is a departure from our last 99 years in New York City and is in response to members who have asked that we consider other venues due to the expense incurred in New York City. This also gives us the opportunity to draw from a wealth of speakers in the capital area plus we will have a small exhibit area to showcase the Radio Club as well as communications during the last century. We may return to New York City next year and possibly alternate locations throughout the country.

Because we are a communications society, please communicate with the Board members and myself concerning our activities. This is your Radio Club, and we want it to work for you and the rest of the communications community.

I look forward to seeing you in our nation's capital the weekend of November 20 for our 100th Anniversary events.

73,



Stan Reubenstein (WA6RNU)

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POINT/COUNTERPOINT



Project 25 Responds to GAO Criticisms

In April, the General Account Office (GAO) released a scathing report criticizing the Project 25 (P25) standards process, along with the Department of Homeland Security (DHS) Safecom program, which has a goal of furthering public-safety communications interoperability. In this interview with *MissionCritical Communications*, Craig Jorgensen, co-chair of the P25 steering committee, responds to the GAO's report findings. *Photo courtesy EFJohnson.*

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October 13-17: 114th Annual IACP Conference, New Orleans, International Association of Chiefs of Police: Susan Brown,

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TOP NEWS

Bay Area Plans Regional Network

Bay Area officials are putting \$32.5 million in Department of Homeland Security (DHS) funding to use for a new communications network that will use 700 MHz and VHF spectrum. *Photo courtesy San Francisco CVB.*

[Full Story](#)



More Headlines

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Reading, 'Riting And Radio

Children are our most valuable natural resource, so don't ever let the "naysayers" convince you not to do everything in your power to make the world a better place for our youth – including amateur-radio classes.

By Carole Perry (WB2MGP)(F)

Back in the late 1970s, when I worked as an executive at an electronics manufacturing company, I used to enjoy listening to the engineers talk on their ham radio during their breaks. When I said, "That looks like fun. Maybe I'll get an FCC license, too," I was told that it *was* fun but that it just wasn't something that women did. So the first of many gauntlets was dropped!



Every term, the students in the ham radio program had to create a project that demonstrated a scientific principle learned in class. This seventh-grader is demonstrating safety measures to be taken while in a house or driving a car during a thunder storm.

I got my FCC license at around the same time the electronics company folded. I happily returned to my first love of teaching. A principal seeking a teacher with innovative ideas asked me to create a pilot program for Intermediate School 72 in Staten Island, N.Y., in the Arts and Technology Department. Once again, lots of folks were there to assure me the curriculum for a ham radio program would never get approved in New York City schools. Once again, "they" were wrong. I wrote the "Introduction to Ham Radio" course, which uses the radio to motivate children in all areas of the school's curricula. This hands-on, high-motivation class was a huge success for 30 years with the 6th, 7th and 8th graders.

I was also told early on that the general ham population would never accept kids being on the air. They would be afraid it would become like citizens' band (CB) radio. However, for 30 years and 15 classes of between 30 and 40 kids in each class every term, getting thousands of students to experience QSOs, participating many years in co-sponsoring the "CQ All Schools" net with Gordon West (WB2NOA)(F), a fellow Radio Club member; and getting hundreds of youngsters licensed, I never experienced anything but an outpouring of support from the ham community. "They" were wrong again.

Ham As A Second Language

In almost every class, there were non-English-speaking children, special-needs students and youngsters with varying levels of abilities. The radio program gave me the ability as a teacher to appeal on some level to all of them. The students were always made to feel that they were part of something very special.

► *Continued on p. 10*

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Carole Perry and some of her seventh-grade students in their in-classroom ham shack. Note the QSL cards on the back wall.



First-grade students (left to right) La Tonya, Daren and Sterling were part of the ham program at Twin Wells Indian School in Holbrook, Ariz. "It was an amazing cultural exchange for all," Carole Perry says. "Gary Ragsdale (KB7PXI) was the enthusiastic teacher who helped organize the activities from the school."



Carole Perry poses with astronaut Jay Apt (N5QWL) at the Johnson Space Center in Houston prior to the launch of the all-ham crew of the space shuttle Atlantis in April 1991. To access some YouTube videos of hams in space, go to <http://www.youtube.com/watch?v=Hf839lfdO90>, <http://www.youtube.com/watch?v=rHvRDLq-swk> or <http://www.youtube.com/watch?v=xU13Iv4nYM>.



Two of Carole Perry's second-graders learned Morse code on custom-made code-practice oscillators. Perry says she taught Morse code on the buddy system so that each student could listen only to the sounds of his or her partner, enabling them to block out the tones of the other 30 children who were "sending code" at the same time. "This is a great way to teach concentration skills," she adds.

► Continued on p. 12

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A group of seventh-graders prepares to demonstrate the code practice oscillator they built themselves.

The appearance of the radio room was different from other classrooms. There were so many QSL cards on the walls that, after a few years, you couldn't see the color of the walls anymore.

Every student came into the program on equal footing. No one knew Morse code or anything about radio before they came to my class. Certainly, no one had ever spoken to astronauts or to a king, and no one had ever spoken live to other school children during an earthquake or hurricane disaster. Everyone felt special because everything we did was special.

Other teachers were invited to work with us. Science and math teachers were happy to coordinate their curricula



A group of Carole's students wait their turn to get on the "CQ All Schools Net," co-hosted by the Radio Club's Gordon West (WB6NOA) (F), that ran two days a week between the West Coast and New York City.

with projects I had my classes doing. Social-studies and foreign-language teachers worked with me to provide enrichment activities in the ham radio classes.

And parents played a part. The reason I always enjoyed the support of our Parent-Teachers Association was because the parents were invited to study along with their children and to try for an FCC license with them. However, the goal of the class was never one of grinding out FCC license holders. Rather, it was to expose the students to the whole world of possibilities that opens up when you contact a new person on the air and to not be intimidated by technology. I will always remember a 6th grader's response to the question I asked about how radio communications can help promote peace in the world. The simple response was, "If we're all on the air talking to each other, we won't be fighting." That says it all!

After 30 years of nothing but positive experiences and memories from the ham radio program, I look back from retirement with the desire to encourage more programs like mine to be put into schools across the country.

The Program Rises Again

Happily, at the Radio Club of America Board of Directors meeting in November 2008, there was enthusiastic support for the goals of the Education Committee. One of the first things we did was to create a "RCA Young Achiever's Award." This award along with its own custom-designed certificate will be presented coupled with a stipend to every youngster who does a presentation at the Dayton HamVention Youth Forum in Ohio every year moving

► Continued on p. 14

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► *Continued from p. 12*

forward. I've also put forth the proposal to four very enthusiastic New York City school principals to select technically talented students to be the recipients of this RCA Youth Award.

In addition, Richard Somers (F), a Radio Club member who serves on the Education Committee, will be helping to identify at-risk high-school students in the Los Angeles inner city schools who are interested in pursuing technical courses, but who can't afford to pay their way. Richard has helped set up scholarship funds for these students who are younger than 18. Richard Biby (M), another Radio Club director who co-chairs the Education Committee with me, will be concentrating his very capable efforts on making sure Continuing Education credits are available at industry shows.

The Club's Education Committee is also interested in assisting schools looking to include radio/technology classes in their curricula by offering radio equipment from an equipment bank set up for this purpose. More information will be made available in future Radio Club publications.

We're all very excited about adding this new approach to recruitment efforts and to supporting young, technically creative and talented students with the help of the Radio Club's incredibly skilled and gifted membership. We



Several years ago, Carole Perry's seventh-grade ham radio students contacted the Sun Valley Indian School on the Navajo Indian Reservation in Sun Valley, Ariz. For months, the students spoke with each other and exchanged boxes of postcards, scrapbooks and photographs. This photo shows two of Carole's students, Robert and Brian.

welcome any volunteers and their suggestions to help make these efforts a huge success. Children are our most valuable natural resource, so don't ever let the "naysayers" convince you not to do everything in your power to make the world a better place for our youth. ■

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Broadcasters Back Mobile DTV, But Will Anyone Buy It?

The first real tests of mobile digital TV are set for this summer, but there still are some who believe no one wants to pay for video on the third screen.

The Open Mobile Video Coalition (OMVC), an alliance of U.S. broadcasters “dedicated to accelerating the development of mobile digital television,” says the first wave of broadcasters that have committed to launching mobile digital television (DTV) services sometime this year.

The OMVC’s goal is to bring mobile television to American consumers, using digital transmission over broadcast TV facilities. According to the group, Washington, D.C. (location of this year’s Radio Club of America Centennial Celebration) will be a product showcase market for mobile DTV technology. In addition, some 70 TV stations nationwide have signed on to deliver live mobile television broadcasts in 28 markets by the end of 2009.

The trial in the greater Washington, D.C., metro market will go live in late summer, allowing broadcasters to showcase and test programming, services and features of the new mobile DTV technology. Fox Television Stations’ WDCA-DT, Gannett Broadcasting’s WUSA-DT, ION Media Networks’ WPXW-DT, NBC Universal’s WRC-DT, PBS’ WHUT-DT and MHz Networks, Sinclair Broadcast Group’s operated WNUV-DT and National Datacast are initial participants.

“The mobile DTV ecosystem we are encouraging brings new opportunities to broadcasters, device manufacturers as well as consumers,” says Brandon Burgess, OMVC president and ION Media Networks Inc. chairman and CEO. Adds Vince Sadusky, president and CEO of LIN TV and an OMVC member, “For a relatively small capital outlay, broadcasters can upgrade their existing transmission infrastructure to offer multiple channels of entertainment, news and public affairs programming. This truly marks a new day in mobile broadcasting.”

According to David Rehr, president and CEO of the National Association of Broadcasters (NAB), “We’re completely impressed by how quickly these television

broadcasters and equipment makers are moving to bring mobile DTV to market. Their combined commitment to moving our industry forward is formidable. The industry is clearly embracing mobile DTV as an exciting next step in the evolution of digital television broadcasting.”

He continues, “Broadcasters should be recognized for seizing an opportunity to provide the entertainment and public service benefits of live, local television coverage to mobile consumers. Consumers want to utilize mobile devices to follow news and sports as well as local, regional and national emergency announcements and other content that they have come to expect from their local television stations. The roll-out of mobile DTV will give them the opportunity to experience all of those benefits.”

Demo-ing The Proposed Standard

In November 2008, the Advanced Television Systems Committee (ATSC) approved the Candidate Standard for Mobile DTV. The Candidate Standard is the result of an intense development effort involving the OMVC and participants from all over the world, and across television and mobile device industries. The standard will be revised as needed after the initial trials and then will be proposed as a final standard by mid-year. “Working together on an exceptionally fast-track schedule, the groups have met every milestone and goal they established,” the OMVC says.

The Candidate Standard reportedly supports over-the-air delivery of digital broadcast content to such next-gen devices as cellphones, laptop computers, handheld PDAs, portable media players and gaming devices. The standard also extends a variety of automotive opportunities, ranging from factory-installed in-vehicle entertainment systems to dealer-installed and aftermarket entertainment systems as well as GPS systems enriched with local-broadcast-receiver capabilities.

► *Continued on p. 26*

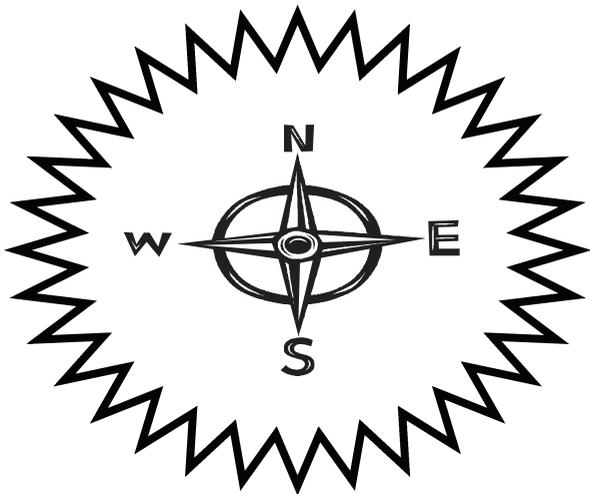
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The 99th Radio Club of America Awards Banquet

Last November's Radio Club of America Awards Banquet, which might have been the last time the annual event will be hosted at the historic New York Athletic Club, was a sell-out event that featured good food, good friends, good conversation, a renown broadcast-industry keynote speaker, and the presentation of the 2008 Club awards followed by the installation of our new Fellows.

As in recent years, the self-deprecating humor of master of ceremonies Robert Schwaninger (F) kicked off the festivities, and he kept the momentum going all night. The special appearance by Brian Williams, the seventh anchor and managing editor of the "NBC Nightly News" who has covered nearly every major breaking news event around the world since joining the network in 1993, was the high point of the evening, and he stepped out of his "serious news" persona to deliver an entertaining look at himself and his career. Following his speech, he was awarded with the Club's Sarnoff Citation. Also keynoting the dinner and receiving the Sarnoff Citation was Dr. Paul Jacobs, president and CEO of Qualcomm, who presented a detailed history of wireless and Qualcomm's place in it.

And then there were the awards, the Fellows Response and more networking as the banquet wound down. And with some excited comments about this year's Centennial Event in Washington, D.C., MC Schwaninger brought our 99th event to a close. ■



After a wonderful dinner and two compelling keynote speeches, incoming Radio Club of America President Stan Reubenstein (left) presented outgoing President Phil Casciano (right) with the Club's prestigious President's Award.

The 2008 Fellows Response

Delivered By Rhett A. Grotzinger (F)

Mr. President, officers and directors of the Club, members and guests, it is truly an honor to stand here tonight and respond on behalf of this year's newly elected fellows of the Radio Club of America.

Radio, and all the technologies that have grown out of it, has and continues to have a dramatic life changing impact on our world. The Radio Club of America provides a unique prism through which we have an opportunity to trace the growth and history of wireless communications, often by spending time in this very room once a year with the people who made that history possible. As we prepare to celebrate the 100th anniversary of the Club, we must also make sure that the future of radio and wireless shines as brightly as our illustrious past. One way we do that is by continuing to encourage young people to learn all they can about radio and electronics and then lead us to new heights in technological innovation.

The Radio Club's scholarship program is an important part of this effort. In addition, each of us individually has the opportunity and, I'd even suggest the responsibility to generate interest in and mentor young people in the radio arts and sciences. One of my mentors was an air-traffic controller and amateur operator who started conducting code classes at my elementary school two days a week after school. He stuck with it, and a number of youngsters, including myself, earned their amateur licenses as a result.

► *Continued on p. 22*



Stepping up to the mic was Ronald J. Jakubowski (Director and Fellow) (left), who was given the President's Award for "his unselfish dedication to the historical preservation of the Radio Club of America" by fellow President's Award winner and outgoing Radio Club President Phil Casciano (right).



Barry M. Farber (left), the 2008 recipient of the Jack Poppele Broadcast Award for his "contributions as an outstanding radio talk-show host," stands with June Poppele (L). Farber has been on the air in New York City, and he is both an author and a language-learning enthusiast. His articles have appeared in the *New York Times*, *Reader's Digest*, the *Washington Post* and the *Saturday Review*.



By the looks of things, Treasurer Emeritus Eric Stoll (F) (left) appears to be enjoying his retirement with outgoing Radio Club President Phil Casciano (right). Stoll tool home a Special Recognition Award in recognition of his 20 years of service as the Club's treasurer.



NBC news anchor and keynote speaker Brian Williams (left) mugs for the camera with Radio Club President Emeritus Mal Gurian (right) after receiving the Sarnoff Award for his "outstanding achievement in the world of communications." Williams' speech was a blend of personal reporting experiences and kudos for broadcasting and the Radio Club of America.



The 2008 Fred M. Link Award went to (left) Michael W. Hunter (F), who shared some time with Radio Club President Emeritus Tony Sabino (right). Hunter was cited for his "substantial contribution to the advancement and development of land mobile radio and communications."

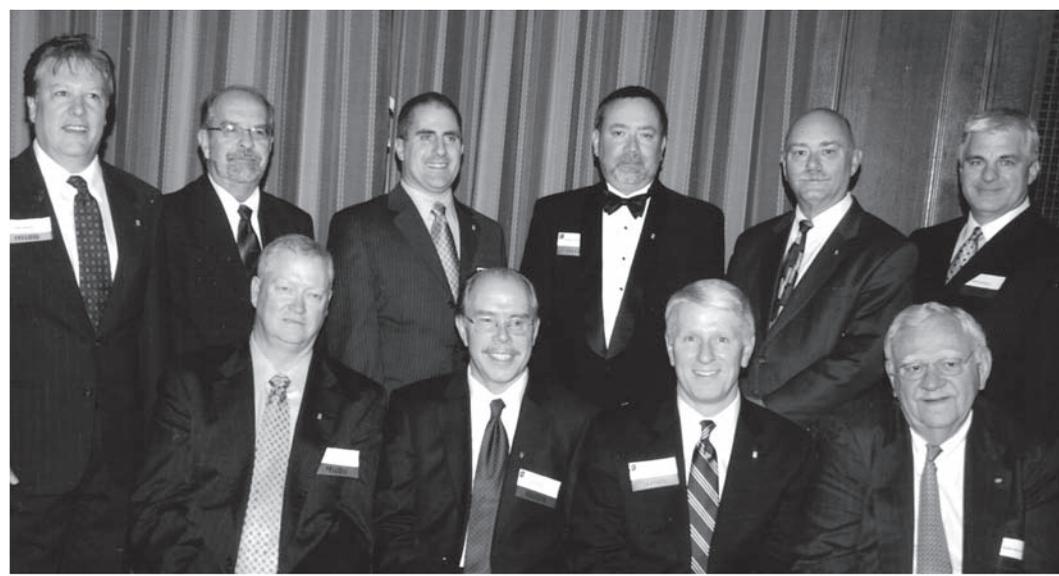
► *Continued from p. 18*

Starting with my building radios from scrounged parts as a kid and the encouragement of numerous folks who helped me with guidance and advice; I wound up enjoying a career as a radio personality, television news anchor at an ABC affiliate and running my own Class C FM radio station. All the while, I spent as much time in the engineering spaces of these stations as I ever did in the studios. That was good preparation for my move from broadcasting into the land mobile side of the business, where I've enjoyed playing an active role in the development of and commercialization of new numerous new technologies.

I'm sure we all have stories like this to share somewhere in our past -- stories about someone who took the time to share a little of themselves and with that investment of their time helped shape who we are today. I remain grateful to all those folks in South Texas who answered a kid's endless questions about electronics and radio, and helped me build those first home brew radios.

In the winter of 2001, I stood at Signal Hill in Newfoundland where, 100 years prior, a fellow named Marconi received the first transatlantic long-distance radio transmission. Today, a museum and some plaques mark the spot where it all happened. I was struck by how far radio had come and wondered if I'd been witness to the greatest period of technological advancement in wireless or whether the best was yet to come. I'm now convinced that we've only scratched the surface and that there are advancements on the horizon that we couldn't think of even a few years ago and still other new technologies that we really have to stretch to begin to imagine. These technologies will be developed by young people who today are in elementary or high school, or perhaps not even born yet. They will bring us the amazing "WOW" technologies of the future, attend this banquet, receive the awards, and thank their peers for the honor and recognition. But they will only do this if we give back some of what has been given to us, and encourage and mentor them. If we do that, it won't be long before we begin to see more young faces joining us in this Club and for our annual banquet. They will be the faces of the future of wireless and of the Radio Club of America, and they will make the next century of the Radio Club of America and of the wireless industry as extraordinary as these first 100 years.

On behalf of the 2008 Fellows, I thank you sincerely for the honor you have bestowed upon us. ■



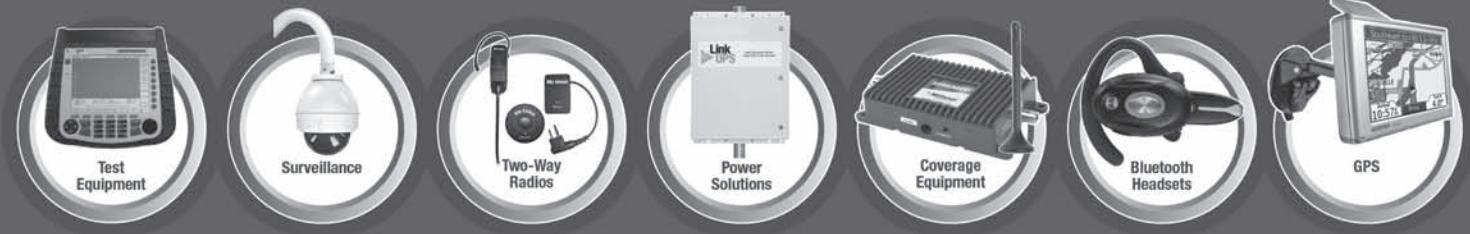
The 2008 Radio Club of America Fellows (Top row): Thomas K. Tolman, Robert E. Hartmann, Douglas A. Sharp, George Heinrichs, Willis T. Carter, Rhett A. Grotzinger (Bottom row): Ron Haraseth, John T. Higgins, David S. Diggs, Walter A. Ullrich Jr.



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One of the evening's keynote speakers, Dr. Paul Jacobs (left), was presented with the Sarnoff Citation by fellow Californian Marty Cooper (F) (right). Jacobs, president and CEO of Qualcomm, was nominated for the award for his "significant contributions to the advancement of electronic communications."



The late Jerry Minter (L) (left), one of the Radio Club's most senior members and a President Emeritus, jokes with Ken Hoagland (F) (right) after accepting the Ralph Batcher Memorial Award for his "significant contribution to the preservation of historical records of the Radio Club of America."

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Lee DeForest Award winner Joe Vestal (M) (left) presses the flesh with Robert McGowan (M) (right) as the banquet began to wind down. The Club cited Vestal for "significant contributions to the advancement of radio communications."



Charles Werner (center), the recipient of the National Public Safety Telecommunications Council's third annual Richard DeMello Award, is surrounded by the Radio Club's Harlin McEwen (F) (left) and Ralph Haller (F) (right). Werner, a career firefighter, serves as chief of the Charlottesville, Va., fire department, and he has a seat on Virginia's Statewide Interoperability Executive Committee.



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► *Continued from p. 16*

To showcase the mobile DTV experience along with the technical feasibility of the ATSC Candidate Standard, the OMVC conducted a live demonstration on the opening day of the CES show earlier this year. The demo involved multiple Las Vegas-based TV stations broadcasting local and national TV programs and music videos along with local sports and public-affairs programming to ATSC-compliant devices manufactured by LG Electronics and Samsung Electronics. The demo used transmission equipment manufactured by Harris Corporation.

“Following a very smooth ATSC mobile DTV standard-setting process, broadcasters are on track to deliver local and national broadcast television to mobile audiences,” says OMVC President Burgess. “The collaboration and dedication among TV broadcasters on this project has been gratifying, enabling us to meet our goal of making mobile broadcast DTV a reality in 2009.”

David Lougee, president of Gannett Broadcasting Group, comments, “Broadcasters recognize the successful launch of mobile DTV will make broadcast TV practically ubiquitous. The beauty of the technology is that all parties involved stand to profit. By establishing the consumer trial and R&D model stations, the broadcast community is essentially sending an invitation to device manufacturers:

Come test prototypes, build out products and get on board this fast-moving value train that is mobile DTV.”

If They Build It, Will Subscribers Come?

Now that the broadcast community seems to be moving ahead full steam when it comes to mobile TV, they had better make it cheap. A survey conducted last year found 65 percent of respondents indicated a willingness to spend time watching an ad if it means the mobile-TV or video content they consume is free or discounted. On the other hand, if mobile TV and video have an incremental cost attached to them, 22 percent said they would prefer a pay-per-use business model, while 13 percent outlined a preference for an additional monthly subscription that would deliver the content without ads.

Two in five people said they had watched TV and video content on their mobile phones, with many regularly using such services. Some 18 percent of those who had tried a mobile-TV and video services watched on a weekly basis, with more than a third watching almost on a daily basis. For subscribers currently using mobile TV and video, the survey said as many as 46 percent had used it at home, an interesting statistic considering most people had several video outlets, including TV and computers. In relation to this, 30 percent

► *Continued on p. 28*

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► Continued from p. 26

said they would “snack on” mobile TV and video, and 28 percent said it was service they use while in transit.

Here are some other interesting findings of the survey:

- >> As many as 33 percent of respondents had watched TV or video on their wireless devices for 60 minutes or longer.
- >> 41 percent of those surveyed would consider the ability to pause and resume content a deciding factor in whether they would watch longer forms of content, such as a full-length movie, on a mobile device.
- >> 72 percent didn't recall having viewed ads on their mobile handsets. More than 50 percent of those who had viewed ads said they were received as SMS/text, and more than 30 percent said they were video ads.

What Cisco Says About Mobile TV

Cisco, which has made no secret it wants to become “the” ubiquitous network provider worldwide (its new tagline is “the connected life”) released a study earlier this year predicting video will be the biggest driver of mobile data between now and 2013. The *Cisco Visual Networking Index (VNI) Global Mobile Data Traffic Forecast Update* is part of the Cisco VNI Forecast, an ongoing initiative to track and forecast the impact of visual networking applications.

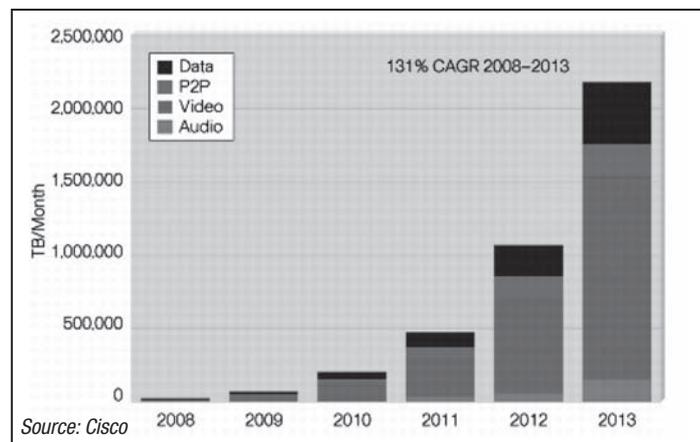
In part, the Cisco VNI says almost 64 percent of the world's mobile traffic will be video by 2013. Mobile video will grow at a CAGR of 150 percent between 2008 and 2013, and mobile video has the highest growth rate of any application category measured within the Cisco VNI Forecast at this time. In addition, Western Europe will

have the most mobile video traffic of all regions in 2013, with mobile video accounting for 73 percent of mobile data traffic in Western Europe.

Application	2008	2009	2010	2011	2012	2013	CAGR (2008-2013)
Mobile Video	13,062	38,681	107,714	274,820	650,310	1,390,548	154%
Mobile Audio	3,612	7,996	16,930	35,486	74,503	154,988	112%
Mobile Data	9,680	22,547	48,984	102,054	217,282	417,847	112%

Source: Cisco

Cisco also predicts overall mobile data traffic will grow to 2 exabytes per month by 2013, and more than 1.4 of those exabytes will be attributable to mobile video traffic.



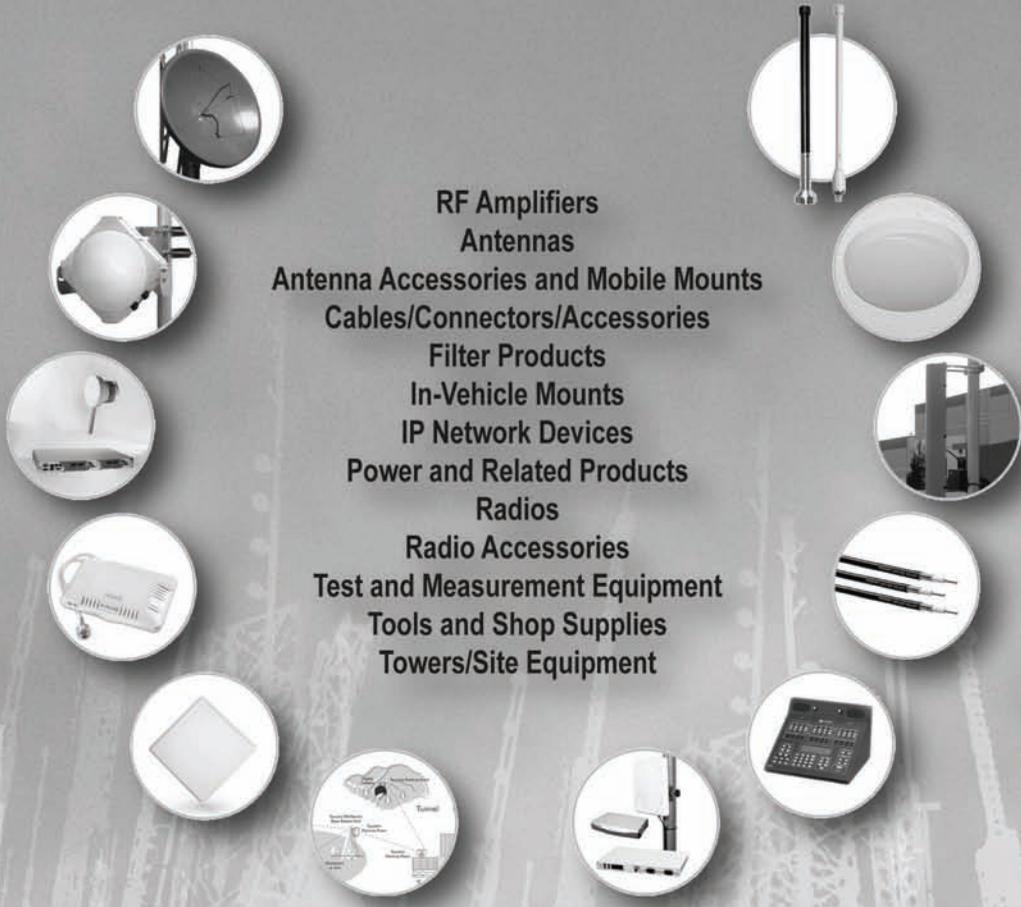
“The next five years are projected to provide unabated mobile video adoption despite the economic downturn. Operators are rolling out increased bandwidth via EDGE, EV-DO, HSDPA and related upgrades,” Cisco adds. “There is a need for backhaul capacity to increase for mobile broadband, data access, and video services to engage the end consumer as well as keep costs in check.” ■

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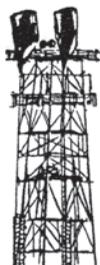
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The Radio Club of America, Inc.
Awards Committee
Major Award Nomination Form

The Club annually grants each of several major awards to members and non-members in recognition of outstanding achievement, and to provide inspiration for many people, both currently and in the future. As a member of the Club, your help in nominating and sponsoring candidates is appreciated. This form is provided to assist you in this process. In order to complete the grant process in time for the annual Awards Banquet in November, the Awards Committee prefers to receive nominations prior to April of the year of the proposed grant.

For each major award, the Awards Committee collects and evaluates all nominations then submits its recommendation to the Board of Directors for final approval by a majority of the Board.

To nominate someone for an award, please **legibly provide the information below** to the Club's Awards Committee in care of the Club's Executive Secretary in any of the following ways:

Fax: (303) 973-1653
E-mail: karen@radioclubofamerica.org
U.S.P.S. mail: PO Box 621074, Littleton, CO 80162-1074

A. Name of RCA award: _____

B. Is Club membership required for this award? _____

C. Full name of candidate: _____

D. Is candidate a member of the Club? _____

E. Proposed citation (between 5 and 25 words), based on why it is felt that this candidate should be considered: (to be published and announced at the presentation of the award)

F. Attach supporting material such as an expanded explanation, a biography, a resume, and any significant published articles: (please list your attachments below)

Sponsor submitting this nomination:

Full name: _____ **Phone number:** _____

E-mail address: _____ **Fax number:** _____

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The mission of The Radio Club of America is to provide a forum for the exchange of knowledge, recognize outstanding achievement, provide financial assistance to deserving students and preserve the history of wireless communications.

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I hereby apply for Regular Retired Student (*please check one*) membership in THE RADIO CLUB OF AMERICA and certify that I meet the requirement for the grade selected. I further agree that, if elected, I will be governed by the Club's Constitution and By-Laws as long as I continue to be a Member.

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The Radio Club of America was founded in 1909 by a group of the industry's pioneers, and is the first active electronics organization in the world. Its roster of members is a worldwide Who's Who that includes many who founded and built the radio industry.

The Club's objectives include promoting cooperation among individuals interested in electronic communications and in preserving its history. The Club administers its own Scholarship Fund to provide educational scholarships from tax-deductible contributions of the Club's members and business organizations.

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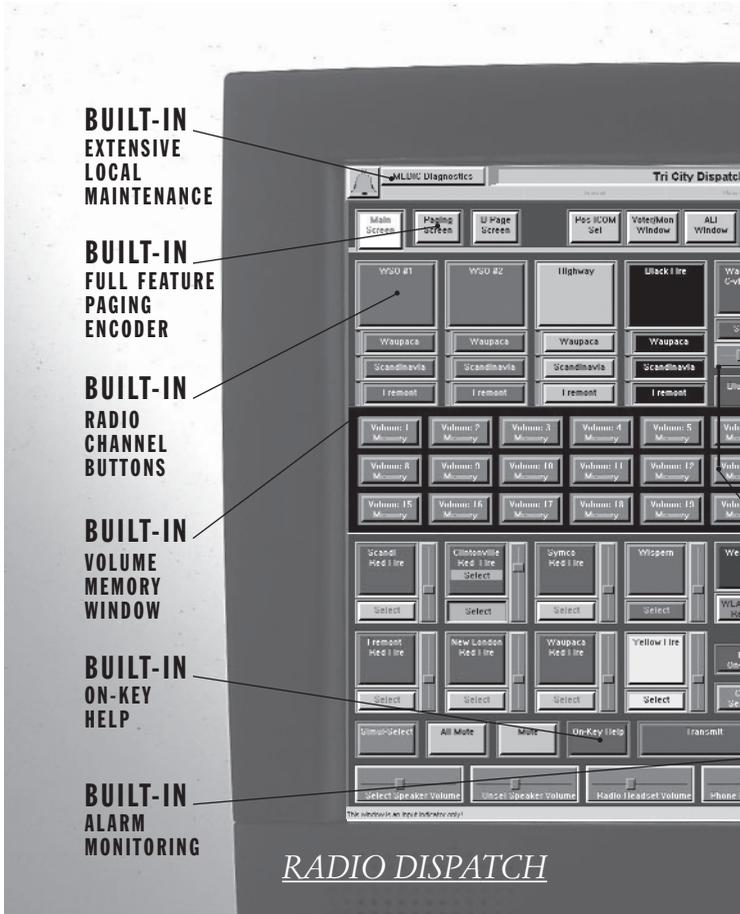
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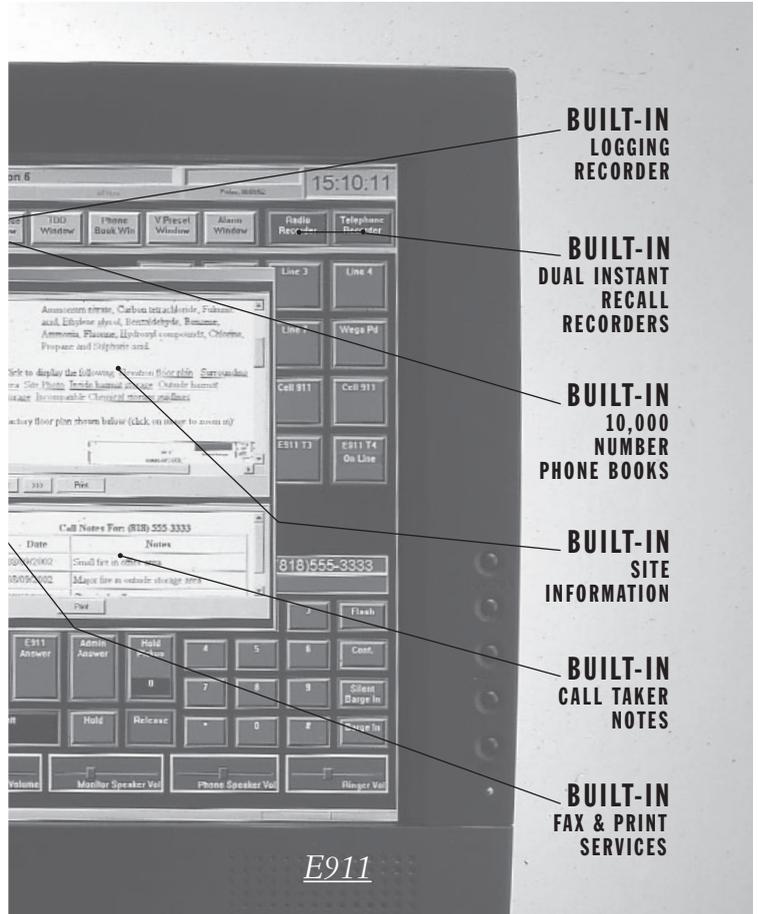
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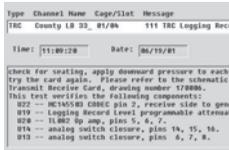
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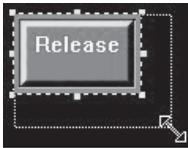
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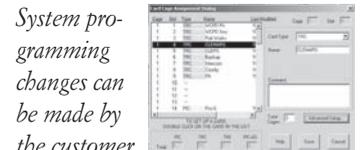
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