

THE INFO AGE MARCONIGRAPH

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Historic Camp Evans Program Honored at InfoAge

John T. Cervini – AOC Garden State Chapter

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On Friday, July 29, 2016, 70 plus people arrived at InfoAge to celebrate the 45th anniversary of the inauguration of the Guardrail program. Guardrail is the Army's premier airborne Signals Intelligence System that has been providing key military information to the battlespace commander for more than four decades.

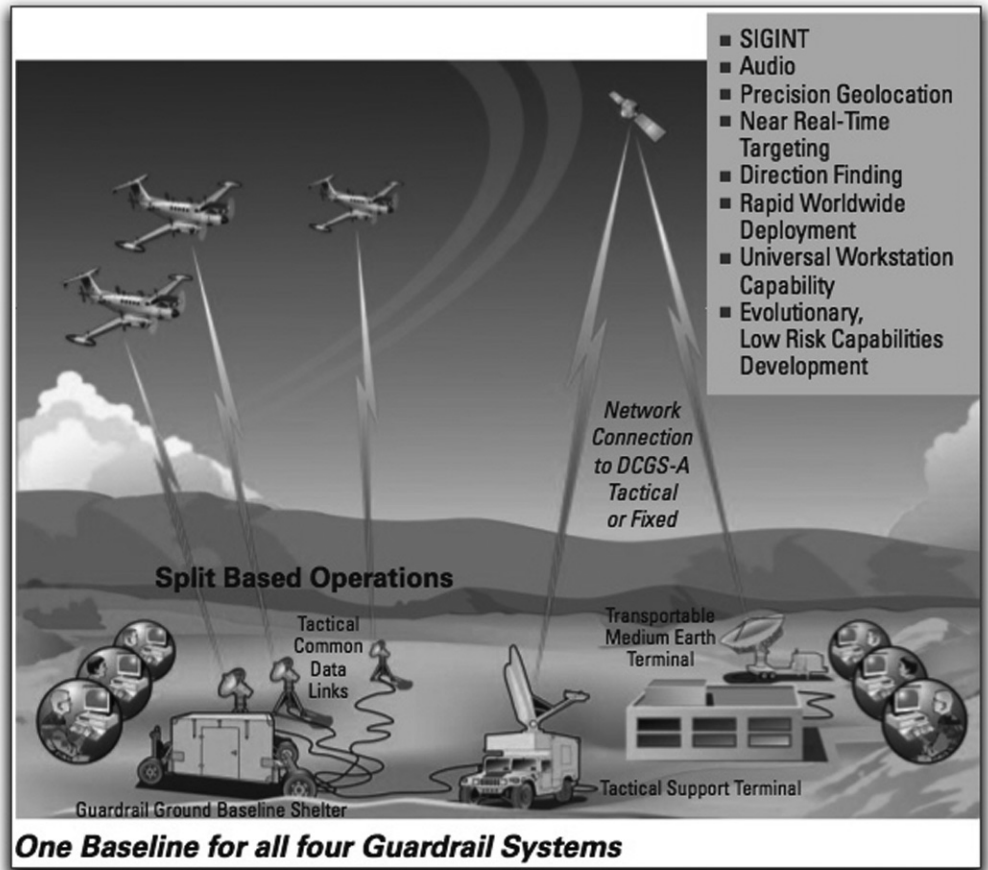
The Guardrail System consists of one or more aircraft, air and/or ground relay equipment, and a ground processing

facility. Multiple state of the art sophisticated sensors intercept, identify, locate and disseminate detailed information for a broad range of emitters at standoff distances. There have been nine versions of the Guardrail system, all successfully developed and fielded via what is known as Pre-Planned Product Improvement (P3I). World-wide deployments have been to Germany, Korea, OEF/OIF, and other areas subjects of higher classification. The



Left: Guardrail Evolution

Right: Early Guardrail Development Concept..



45th anniversary and reunion is a tribute to all the dedicated military, civilian, and industry personnel who dedicated their careers to creating and maintaining one of the most successful Department of Defense programs, despite its incredible sophistication.



Guardrail Deployment

The InfoAge event consisted of prominent individuals associated with the Guardrail program, and a number of featured speakers. John Cervini, a member of the InfoAge Board of Trustees, and Vice President of the AOC Garden State Chapter, kicked off the proceedings with an overview of the InfoAge facility and its historical significance. He was followed by Army Col.

Thomas Gloor, the current Project Manager for Sensors – Aerial Intelligence. Col. Gloor highlighted many of the Guardrail innovative “firsts”, such as: the first aerial tactical system that was fully remote; the first airborne collection system that used multiple aircraft critical to rapid location of threat signals; the first airborne system to successfully implement precision emitter location; and the first system to utilize wideband microwave data links to handle the prodigious amounts of data from the sensors.



Col. Thomas Gloor briefing at Guardrail 45th anniversary

Next, Herman Redd, long associated with the program gave a Guardrail System description and briefed the Concept of Operations (CONOPS). Herman was followed



by Michael Gourges (COL Ret.) who described the early years of Guardrail. Then, Bob Pitman (COL Ret.) then gave a fascinating presentation on the Operational Intelligence Ground station (OGS), and its dramatic reduction in Operational and Maintenance costs. As a result, the latest version of the Guardrail system could be deployed in remote and also complex urban terrain, such as Kandahar and unnamed Forward Operating Bases (FOBs).

John Thomas (MG Ret.) gave an historical perspective of Guardrail deployment and operation during his tenure with the program. He said he was proud of all those who had been part of the effort to successfully transition the upgraded capabilities to meet the emerging threat environment. Jeffrey Chiem, the Associate Product Manager (APM) for Guardrail Common Sensor, the current version of the program, then discussed the future direction of the program. He also gave a top level review of what he called the technical “game changers” of Guardrail that significantly affected airborne Signals Intelligence capabilities in a dramatically positive way, and he outlined what he called the next generation technical evolutionary pathway for the program.

The audience was then honored to have Henry Muller, a former Neptune and Allenwood NJ resident, address them. Henry is now the Director of the Communications and Electronics Research and Development Center, formerly at Fort Monmouth, and currently at Aberdeen Proving Grounds, MD.

Henry gave a presentation of some of the technical improvements transitioned to Guardrail with the help of Government engineers, working closely with their counterparts in industry, and in the Army. Carlos Collat (COL Ret.) then emphasized how that cooperation was absolutely necessary for the program to achieve the success it has. He honored all those connected in a slide with their names and portraits, a fitting tribute to all.

In his presentation, Mike Gourges told us that the Army had undertaken a Case Study of the Guardrail program for lessons learned that could be applied to other DoD complex “Battlespace Automated Systems”. Upon review, it was wonderful to see the study acknowledge the efforts of many of those who were in attendance; Chuck Dubusky, Joe Matava and George Morris; as well as Steve Pizzo, Dave Swainston (ESL). The results of the Case Study speak for themselves and are quoted below;

“The historical development of the Guardrail program summarized in this case suggests that this evolution of advanced airborne communications and electronic intelligence systems represented one of the most successful defense systems developed during the last third of the twentieth century. Based on measures of program cost, schedule, and technical performance, the sequence of Guardrail systems was exceptional.”

InfoAge Expands to Include Spaceflight Public Lecture Series

Mike Ruane

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The TOROS Dish Antenna

Emphasizing its position in science and space education, the InfoAge Science and History Museum in Wall, NJ is announcing a monthly series of public lectures on spaceflight. Led by Frank O'Brien, Solar System Ambassador for NASA's Jet Propulsion Laboratory (JPL), the talks will focus on current topics in NASA's exploration of space, from the discoveries of the Hubble Space Telescope to human spaceflight and the plans for a mission to Mars.

"NASA's missions over the last 50 years has inspired a new generation of scientists, engineers and researchers", O'Brien said. "Every aspect of modern life has been influenced by NASA's work"

The first lecture, "Living in Space: Life on the International Space Station" will be presented on Sunday, June 26th at 2:00pm. During its 15 years in

orbit, The Space Station has hosted dozens of crews rotating every six months. While exhilarating, an assignment to the space station is a combination hard work and dealing with a multitude of issues: cultural, physical and psychological. O'Brien's talk will detail the lessons learned on board the station and how it applies to a voyage to Mars.

"Frank O'Brien has been a volunteer at InfoAge for over a decade and he is expanding his role of education and public outreach for NASA." said Mike Ruane, Board Chairman of InfoAge. "Our mission is to preserve, educate and honor scientific innovation and history to inspire new generations of thinkers, dreamers and visionaries. We know Frank's programs will inspire people – especially children – to learn and appreciate the technology used to allow humankind to begin its reach to the stars."

Lectures will be held at the InfoAge Space Exploration Center (ISEC) in the Project Diana site at 2201 Marconi Rd, Wall on the last Sunday of the month at 2:00. The lecture will be followed by a demonstration of the 60' TIROS satellite tracking dish and its reach into space. The interactive demonstrations may include seeing radio waves from the center of the Milky Way 25,000 light years away, searching for a pulsar, or bouncing a signal off the moon like the original Project Diana 70 years ago.



Professor Dan Marlow at the controls of the dish antenna.

Fred Carl, the InfoAge Chief Operations Officer, said, "Frank O'Brien is an author and subject matter expert who regularly speaks at conferences in Princeton and Washington DC. He also is a guest speaker at NASA training conferences. Audiences love his dynamic and insightful style."

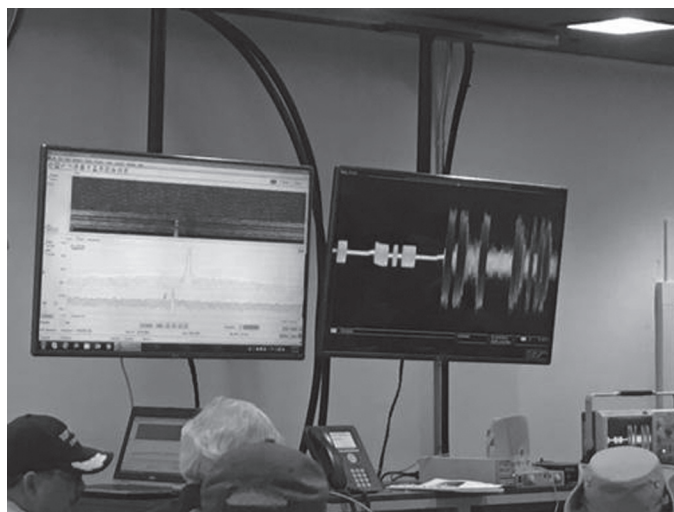


Author Frank O'Brien

The lecture and demonstration is open to the public, and younger folks are especially encouraged to attend. Light refreshments will be provided. Admission is \$10 and includes admission to all InfoAge Science History Museum attractions and exhibits.



A crowd gathers in the space exploration center.



Flat screen monitors display signal information.

Future programs will include: A Journey through Space: NASA's missions through the Solar System; A tale of two (dwarf) planets: Pluto and Ceres; 50 years of Martian Invasions!; NASA's Time Machine: The Hubble Space Telescope; Roving on Mars: The Voyage of Curiosity; Mission to Planet Earth: Studying our Pale Blue Dot; The Brightest Star in the Sky: The Sun; Orion: NASA's Next Generation Spacecraft; The exploration of the Moon continues!; Commercial Crew: NASA is Not the Only Ride to Space!; and Catching a Comet: Europe's Rosetta Mission. The program schedule will be announced on InfoAge's website shortly.



Swan Song

Dan Lieb

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It has been an honor and a privilege putting together these first ten years of newsletters for InfoAge. I started out just trying to create something to keep supporters up-to-date, but it quickly turned into something more, far more. The newsletter has been more like a journal of what we do here and what we have preserved, not only regarding physical items we've saved and conserved and put on display, but history, as well. We have done our research and published our findings here in what is more like "National Geographic" than a newsletter.

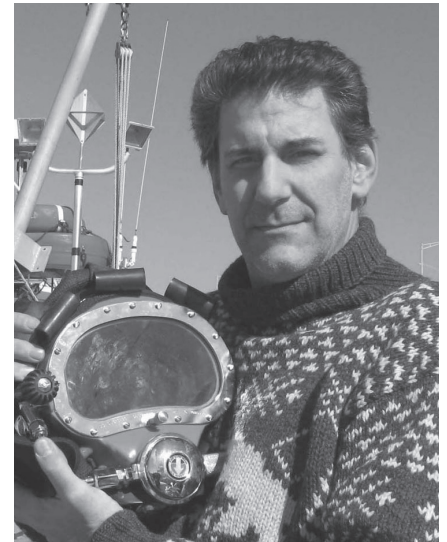
Gloria Kudrick, InfoAge's administrative assistant, will now handle putting the newsletter together and getting it published. She will be requesting member organizations put together articles about themselves, InfoAge, and the rich history we all seek to preserve so our supporters can learn about what's new here at our science center, and what their fellow members are up to.

It is the desire of InfoAge's Board of Trustees that she continue what I have begun and will continue to produce three issues a year. It's also important that members that

cannot get down here to volunteer write articles, as well. Some of you are members of InfoAge because you like what we're about. Others joined because they worked here, or know of someone that did. It's just as important for those of you who can are able to write about these experiences, record your memories, and help us round out the history of Camp Evans.

InfoAge, all my best wishes for continued success. Fred, thanks for the opportunity to volunteer.

In your service,
Dan Lieb



The Arts Project Room
At
InfoAge

InfoAge would like to announce a new addition to the Museum, The Arts Project Room. This growing group of artists is hosting new art classes, workshops and a host of other events for both adults and children all year round. Check their schedule on our website or at The Arts Project Room at InfoAge on Facebook.

Camp Evans: The Untold Story

InfoAge is proud to sponsor the book, “Camp Evans: The Untold Story,” in recognition of the significant contributions made by men and women, both military, civilian, and contractors who served at Camp Evans, Wall Township, New Jersey and who left a legacy of innovation that had enabled and continues to enable our Armed Forces.

The InfoAge Science History Learning Center and Museum at Camp Evans is a focal point for the preservation and interpretation of New Jersey’s rich communications, computer, and electronics history, providing a specialized learning center for all visitors. The area is especially significant in history, serving as the site of the Marconi Wireless Telegraph Company of America. During World War I the Navy operated the station under the authority of the Radio Act of 1912. The message announcing that World War I had ended and the Armistice had been signed was received at the Marconi Station and retransmitted to Washington.

Camp Evans’ U.S. Army Signal Corps provided America’s first World War II radar systems. In 1946, Camp Evans under Project Diana opened the “space age” by reflecting radar signals off the moon. During the 1950s, innovative and far reaching technologies were developed at Camp Evans.

It is appropriate that InfoAge, as a science and technology learning center, has its start at such an historic location. The intent of InfoAge is to provide visitors a dynamic and evolving interactive atmosphere, rich in specialized history, technologies, and basic science, and similarly, to invoke an appreciation for the vital contributions of the many engineers and scientists who developed the technology.

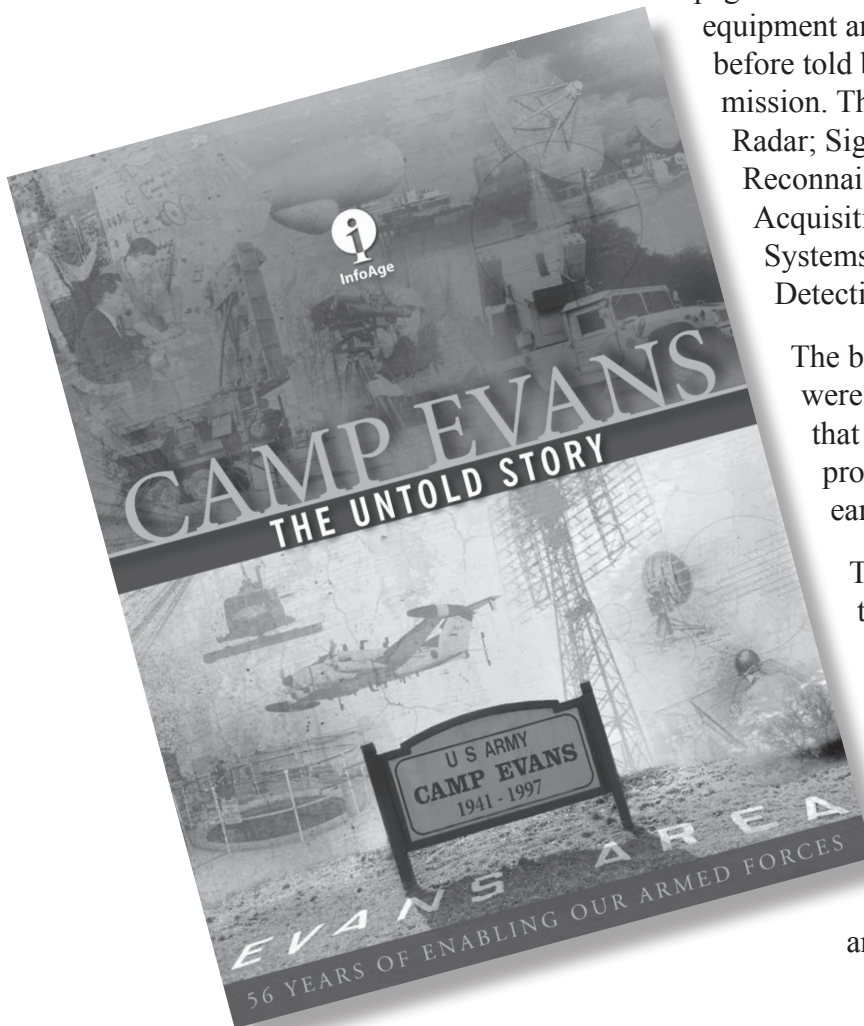
We ask that you consider purchasing this important book which captures the tremendous heritage of technological innovation at this historic site.

“Camp Evans: The Untold Story” has over 200 pages and 100s of photographs showing the actual equipment and technology developed in a story never before told because of the classified nature of the mission. The breadth of the work described covers Radar; Signals Intelligence; Electronic Warfare; Reconnaissance and Surveillance Sensors; Target Acquisition Systems; Identification Friend or Foe Systems; Unattended Sensor Systems; Radiation Detection Systems; and Meteorology Systems.

The broad spectrum of accomplishments were achieved with an assembled workforce that was considered the best in the country, providing products that were the “eyes and ears” on the battlefield.

The legacy of Camp Evans will live on in the hearts and minds of those who helped make that history. Their contributions will hopefully be better appreciated by having been recounted in this book.

To order your copy of “Camp Evans: The Untold Story,” contact InfoAge at 732-280-3000, or contact us via e-mail at rfginc@optonline.net and an order form will be forwarded.





InfoAge

Science/History Center
at Camp Evans, Wall, NJ

InfoAge Science History Learning Center and Museum
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The Newsletter of InfoAge Inside this issue...

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Save The Dates

Radio Night

Every Thursday Night - 6:30PM-8:30PM
2300 Marconi Road
6:30PM-8:30PM

VCF Technical Repair Workshop

2201 Marconi Road
September 17-18

"Spaceflight" Lecture Series

Last Sunday of each month at 2PM
2201 Marconi Road

Camp Evans Base Of Terror!

Fridays and Saturdays in October
2201 Marconi Road
6:30PM-11:00PM

Exploring the Andrea Doria

2300 Marconi Road
October 8 - 8PM-10:30PM

Jamboree On The Air

2300 Marconi Road
October 15-16

Radio Repair Clinic

2201 Marconi Road
8:00AM-4:00PM

InfoAge Holiday Spectacular

2201 Marconi Road
December 3, 4, 10, 11, 17, 18
Noon to 5PM

*For more information about these events, such as admission costs and times,
call 732-280-3000 or visit us online at www.infoage.org.*

The Information Age Learning Center (InfoAge) received a General Operating Support grant from the New Jersey Historical Commission, a division of the Department of State.