

THE OFFICIAL MONTHLY MAGAZINE OF THE 177th FIGHTER WING

# THE CONTRAL



THE OFFICIAL MONTHLY MAGAZINE OF THE 177th FIGHTER WING

# THE CONTRAIL

APRIL 2014, VOL. 48 NO. 04



## THE CONTRAIL STAFF

177TH FW COMMANDER	COL. KERRY M. GENTRY
PUBLIC AFFAIRS OFFICER	1ST LT. AMANDA BATIZ
PUBLIC AFFAIRS MANAGER	MASTER SGT. ANDREW J. MOSELEY
PHOTOJOURNALIST	TECH. SGT. ANDREW J. MERLOCK
PHOTOJOURNALIST	AIRMAN 1st CLASS SHANE KARP
PHOTOJOURNALIST	AIRMAN AMBER POWELL
EDITOR/BROADCAST JOURNALIST	TECH. SGT. MATT HECHT
AVIATION HISTORIAN	DR. RICHARD PORCELLI

[WWW.177FW.ANG.AF.MIL](http://WWW.177FW.ANG.AF.MIL)

This funded newspaper is an authorized monthly publication for members of the U.S. Military Services. Contents of The Contrail are not necessarily the official view of, or endorsed by, the 177th FW, the U.S. Government, the Department of Defense or the Department of the Air Force. The editorial content is edited, prepared, and provided by the Public Affairs Office of the 177th Fighter Wing. All photographs are Air Force photographs unless otherwise indicated

*On the Cover: Augmented Reality. A U.S. Air Force F-16 Fighting Falcon pilot's helmet with the Helmet Mounted Integrated Targeting (HMIT) system installed sits ready before a flight in the aircrew flight equipment shop of the New Jersey Air National Guard's 177th Fighter Wing surrounded by "augmented reality data." The HMIT is a force multiplier, with a cueing system that allows rapid target acquisition, giving aircrew the ability to acquire targets by looking at them. HMIT is also compatible with existing night vision devices, and supports night operations while retaining full color displays via a high resolution device in front of the pilot's eye. (U.S. Air National Guard photo illustration by Tech. Sgt. Matt Hecht)*

For back issues of The Contrail, and other multimedia products from the 177th Fighter Wing, please visit us at DVIDS!





# Commander's Column

*The following message is from Maj. Gen. Judd H. Lyons, Acting Director, Air National Guard, Lt. Gen. Stanley E. Clarke, III, Director, Air National Guard, and Gen. Frank J. Grass, Chief, National Guard Bureau.*

April marks the Department of Defense's tenth annual observance of Sexual Assault Awareness Month. As we continue to build on existing momentum and efforts to elevate our level of awareness, this is a time for increased collaboration, and a time to reinforce our personal and unit commitments to the elimination of the crime of sexual assault in the military,

The theme this year is "Live Our Values: Step Up to Stop Sexual Assault." Inherent in this theme is the responsibility to adhere to, and internalize, Service values and standards of behavior that define how we treat all members of our military community. Our entire National Guard family—from the most senior leader to the newest member—plays a critical role in upholding our core Values. By stepping up, the National Guard will meet the goal to eliminate the crime of sexual assault and reinforce the values that guarantee a culture of dignity, respect, and trust.



Your personal involvement in state SAAM events will reinforce the message that our Guard Family can solve this problem together.

# LIVE OUR VALUES

# STEP UP TO

# STOP SEXUAL ASSAULT

# BREAKING THROUGH BARRIERS

Story by Airman 1st Class Shane Karp, photos by Airman Amber Powell, 177th Fighter Wing Public Affairs



U.S. Air Force airmen from the New Jersey Air National Guard's 177th Fighter Wing Finance office paint barriers with messages supporting Sexual Assault Awareness Month at Atlantic City Air National Guard base, N.J. on April 3, 2014. (U.S. Air National Guard photo by Airman Amber Powell)



**A**irmen with the 177th Fighter Wing here participated in a barrier painting event on base Thursday to promote putting an end to sexual assault in the military.

Breaking Through the Barriers: *Commit to End Sexual Assault*, was sponsored by the 177th Fighter Wing Sexual Assault Prevention and Response team in recognition of April being National Sexual Assault Awareness Month.

“Every April, as a wing, we come together to do an activity that builds morale and takes a stand against sexual assault,” said Maj. Toni Memmelaar, the sexual assault response coordinator for the wing.

Unit members from shops including hydraulics, public affairs, finance and power production took time to show off their artistic ability by painting road barriers with their interpretation of this year’s theme, “Live Our Values: Step Up to Stop Sexual Assault.”

The completed barriers featured messages promoting the Air Force Core Values, victim advocacy and support, using the wingman concept and putting an end to sexual assault.

Following the event, the barriers will be moved to high-visibility areas throughout the base to further



*Above: U.S. Air Force Senior Airman Robert Hagel and Tech. Sgt David Albert from the New Jersey Air National Guard's 177th Fighter Wing paint a road barrier on April 3, 2014.*

*Left: U.S. Air Force Staff Sgt. Anthony Foster from the New Jersey Air National Guard's 177th Fighter Wing paints "sexual assault" in his crosshairs April 3, 2014 as part of the Breaking Through The Barriers: Commit to End Sexual Assault event. The 177th Civil Engineering Squadron power production shop painted a barrier with a message to end sexual assault in support of Sexual Assault Awareness Month.*

promote awareness, said Memmelaar.

In addition to the barrier painting event, the SAPR team will have an information table set up in the dining hall during April’s drill with free giveaways, as well as a petition that unit members can sign as a proclamation to end sexual assault.

“The significant increase in sexual assault education in the past decade has led to an improved work environment, better team mo-

rale and more time for service members to focus their resources on completing the mission”, said Dr. Andrew Savicky, wing director of psychological health.

Unit members that desire more information on the subject are encouraged to use the Department of Defense’s 24/7 safe helpline by calling 877-995-5247, visiting their webpage at [www.SafeHelpline.org](http://www.SafeHelpline.org) or by contacting Maj. Memmelaar at 609-385-3671. ♡



Selected as the most artistic: The 177th Civil Engineering Squadron power production shop.



Selected as best conveying the 2014 SAPR message: The 177th Fighter Wing Comptroller Flight



# KNOW YOUR VICTIM ADVOCATES

By Maj. Toni Memmelaar, 177th Fighter Wing Sexual Assault Response Coordinator

As of February 2014, more than 28,500 DoD Sexual Assault Response Coordinators (SARCs) and Sexual Assault Prevention and Response Victim Advocates (SAPR VAs) have received Department of Defense Sexual Assault Advocate Certification Program (D-SAACP) Certification. These advocates join a growing field of certified victim advocates who are trained and committed to upholding the highest standards for victim care and privacy.



## *"What is D-SAACP?"*

The D-SAACP standardizes and improves the quality of response to sexual assault victims, recognizes the role of SARCs and SAPR VAs in unit readiness, further engages military leadership in the victim response and recovery process, and communicates to Service members that they have access to professional, trained, and certified SARCs and SAPR VAs. The SARCs and SAPR VAs play a vital role in supporting a victim from reporting through recovery, and proper training and professionalization of their role improves victim care and response.



### **Master Sgt. Christina Vidro, 177th Force Support Squadron**

- 16 years in 177<sup>th</sup> Fighter Wing
- 18 months in the SAPR program

*"I volunteered to be a Victim Advocate because I care a lot about people and wanted to be a part of helping people in need."*



### **Master Sgt. Grant Holway, 177th Aircraft Maintenance Squadron**

- 13 years in the 177<sup>th</sup> Fighter Wing
- 4 years in the SAPR program

*"I volunteered to be a Victim Advocate after listening to a briefing prior to a deployment, and it bothered me that all of the attention was put on recovery and not prevention. I am happy to play a part in making a safer and more enjoyable work environment for my military family."*



### **Tech. Sgt. Luz Rosario, 177th Mission Support Group**

- 7 years in the 177<sup>th</sup> Fighter Wing
- 10 months in the SAPR program

*"I volunteered to be a Victim Advocate to be a part of a team of service members who are passionate, trustworthy, and trained regarding the care and treatment of victims of sexual assault."*



### **Lt. Col. Roxellen Auletto, 177th Medical Group**

- 8 years in the 177<sup>th</sup> Fighter Wing
- 10 years in the SAPR program

*"My previous experience as a Sexual Assault Nurse Examiner (SANE) in Boston, Ma. In the late 1990's set the stage for me as a medical professional and advocate for children, women, and men who have been a victim of sexual assault. Eliciting through histories from patients is critical if we are to provide safe, comprehensive care. Identifying military members who have been victims of sexual assault is the first step towards physical, emotional, and psychological healing. Our mission is compromised if we do not identify and intervene for these victims as we move forward to focus on prevention and bystander (wingman) involvement against sexual assault."*



### **Master Sgt. Luminada Santiago, 177th Fighter Wing Finance**

- 13 years in the 177<sup>th</sup> Fighter Wing
- 10 months in the SAPR program

*"I volunteered to be a Victim Advocate to provide support and information to victims so that they can rebuild their lives."*

**"I volunteered to be a Victim Advocate to be part of a program that provides support to my fellow military members who have been victims of such a horrible crime."**



**Staff Sgt. Patrick Ireland, 177th Civil Engineering Squadron**

- 6 years in the 177<sup>th</sup> Fighter Wing
- 2 years in the SAPR program

*"I like being part of the SAPR program because I can provide victims with essential support, resources and communication at a time that it is needed most."*



**Staff Sgt. Stephen Moore, 177th Logistics Readiness Squadron**

- 4 years in the 177<sup>th</sup> Fighter Wing

*"I volunteered to be a Victim Advocate to be part of a program that provides support to my fellow military members who have been victims of such a horrible crime."*



**Tech. Sgt. Nicole Horn, 177th Maintenance Group**

- 14 years in the 177<sup>th</sup> Fighter Wing
- 3 years in the SAPR program

*"I volunteered to be a Victim Advocate because I enjoy helping and I knew it would provide me an opportunity to help and educate my fellow airmen."*



**Master Sgt. Dorothy Lanthier, 177th Force Support Squadron**

- 16 years in 177<sup>th</sup> Fighter Wing
- 18 months in the SAPR program

*"I volunteered to be able to help my fellow unit members. The SAPR program interested me."*



**Master Sgt. Marie Paggi, 177th Fighter Wing Finance**

- 16.5 years in the 177<sup>th</sup> Fighter Wing
- 2 years in the SAPR program

*"I volunteered to be a Victim Advocate because I wanted to be involved in something meaningful. The training that I have received has given me a better understanding of problems men and women face when coming forward and it has also enabled me to be a better listener to help others in need, in and out of the military."*

**Senior Airman Colleen Shea, 177th Logistics Readiness Squadron**

\* Maternity Leave

**As you walk around the Wing and recognize the Victim Advocates - please take a moment to stop and thank them for their service to such an important program!**



**P**ilots from the 177<sup>th</sup> Fighter Wing here received a new tool for their arsenal.

The Airmen will begin using the Helmet Mounted Integrated Targeting (HMIT) system, a modular add-on for the existing Gentex HGU-55/P Light Weight Helmet.

The HMIT is a high resolution glass eyepiece that is mounted onto the front of the helmet, and displays information and symbology in what is essentially an augmented reality experience. The display technology allows pilots to quickly build a 3D picture of the battle space, with the ability to place data-linked symbols over enemy targets as well as friendly positions.

“Air to ground targeting, slewing the targeting pod to wherever you are looking on the ground, that’s a pretty big enhancer,” said Chief Master Sgt. Jason Gioconda, the non-commissioned officer in charge of the 177<sup>th</sup> Aircrew Flight Equipment shop.

Gioconda also said that the system is lightweight, and completely customizable to each individual pilot.

“The pilots can choose color palettes and layouts prior to the mission. Once we find out who’s flying, we install the modu-

lar HMIT to each pilot’s physical specifications,” said Gioconda. “Sensors in the cockpit as well as in the helmet work together to give the pilots an interactive view of the airspace.”

Several Air National Guard A-10 Thunderbolt II and F-16

Fighting Falcon squadrons have been tapped for the HMIT upgrade. The 177<sup>th</sup> Fighter Wing received their initial HMIT shipment and maintenance training in June 2013, but recently received a second shipment and began pilot upgrade training with the system.

“The advantage of HMIT over other systems in use is that we can see a full color display and retain the use of our night vision goggles for nighttime operations,” said Maj. Tom Still, an F-16 pilot with the 177<sup>th</sup> Fighter Wing. “Other squadrons are limited to monochrome displays, or a separate helmet and NVG system for night ops. With this system, we are saving money by having only one helmet,

and swapping out the HMIT based on mission requirements.”

“The HMIT is a true force multiplier,” said Still. “This technology can help with both missions overseas supporting ground forces, as well as our homeland security operations.”



*U.S. Air Force Senior Airman Eric Halladay inspects an F-16 Fighting Falcon pilot's helmet with the Helmet Mounted Integrated Targeting (HMIT) system installed in the aircrew flight equipment shop of the New Jersey Air National Guard's 177th Fighter Wing on March 25, 2014. Halladay is an Aircrew Flight Equipment specialist with the 177th Fighter Wing, and is from Carteret, N.J.*

## AUGMENTED REALITY

*Story and photos by Tech. Sgt. Matt Hecht, 177th Fighter Wing Public Affairs*



*U.S. Air Force Maj. Jason Halvorsen calibrates his helmet with the Helmet Mounted Integrated Targeting system at the aircrew flight equipment shop of the New Jersey Air National Guard's 177th Fighter Wing on March 25, 2014. The HMIT is a force multiplier, with a cueing system that allows rapid target acquisition, giving aircrew the ability to acquire targets by looking at them. HMIT is also compatible with existing night vision devices, and supports night operations while retaining full color displays via a high resolution device in front of the pilot's eye.*

# RUNNING FOR A CAUSE

STORY AND PHOTOS BY TECH. SGT. MATT HECHT, 177TH FIGHTER WING PUBLIC AFFAIRS



*U.S. Air Force Staff Sgt. Alison Jones (left) and Tech. Sgt. Joseph Iovanisci (right) participate in the Third Annual 24 Hour Run Challenge to honor and remember fallen Tactical Air Control Party airmen here on March 27, 2014. Airmen from the New Jersey Air National Guard's 177th Fighter Wing, as well as civilians from the Federal Aviation Administration participated in the event. The 24 Hour Run Challenge is held at military bases all over the world. Jones and Iovanisci are both assigned to the 227th Air Support Operations Squadron. Jones logged 30 miles during the challenge.*

**A**irmen from 227th Air Support Operations Squadron (ASOS) organized and participated in the third annual 24 Hour Run Challenge here at the 177th Fighter Wing track March 27-28.

The challenge is a worldwide tactical air control party (TACP) event that honors fallen members of the career field, and raises money for aid to TACP members and their families in times of need.

From 12 p.m. on March 27 to 11:59 a.m. on March 28, the 227th ASOS had at least one runner on the track at all times. Other squadrons from the 177th, Federal Aviation Administration employees and unit family members also came out to run for the event.

“The 24 hour challenge is an opportunity to bring together the TACP career field and surrounding community by not only donating funds but by pushing your body to attain an internal achievement,” said Master Sgt. Patrick Donohoe, 227th ASOS operations superintendent.

The 177th put up some impressive numbers, with seven airmen running over 20 miles (with two over 30 and one over 40).

“This was a significant challenge for me that I thought would help simulate the 'marathon experience,’” said Senior Master Sgt. Wayne Miller, 177th Medical Group, who ran for 21 miles.


“What I didn't expect though was the sense of camaraderie that resulted in participating in this event,” continued Miller. “The ASOS folks were accommodating, they made a point to thank everyone that came out, and you could feel the sense of 'team spirit' amongst all of the participants.”

“The event is an honor to take part in because it



reminds you to reflect and support the fallen heroes specifically in the Air Force. I, in particular, am reminded of a friend who was killed in action in August 2012—(TACP) Maj. Walter "Dave" Gray. An event of this nature causes me to reflect on what my family would have to endure the life changing events that they would be suffering through," said Donohoe.

The event had over 140 participants who ran for a total of 902 miles. For more information on the run and the U.S.

Air Force TACP Association, visit <http://usaftacp.org/> 

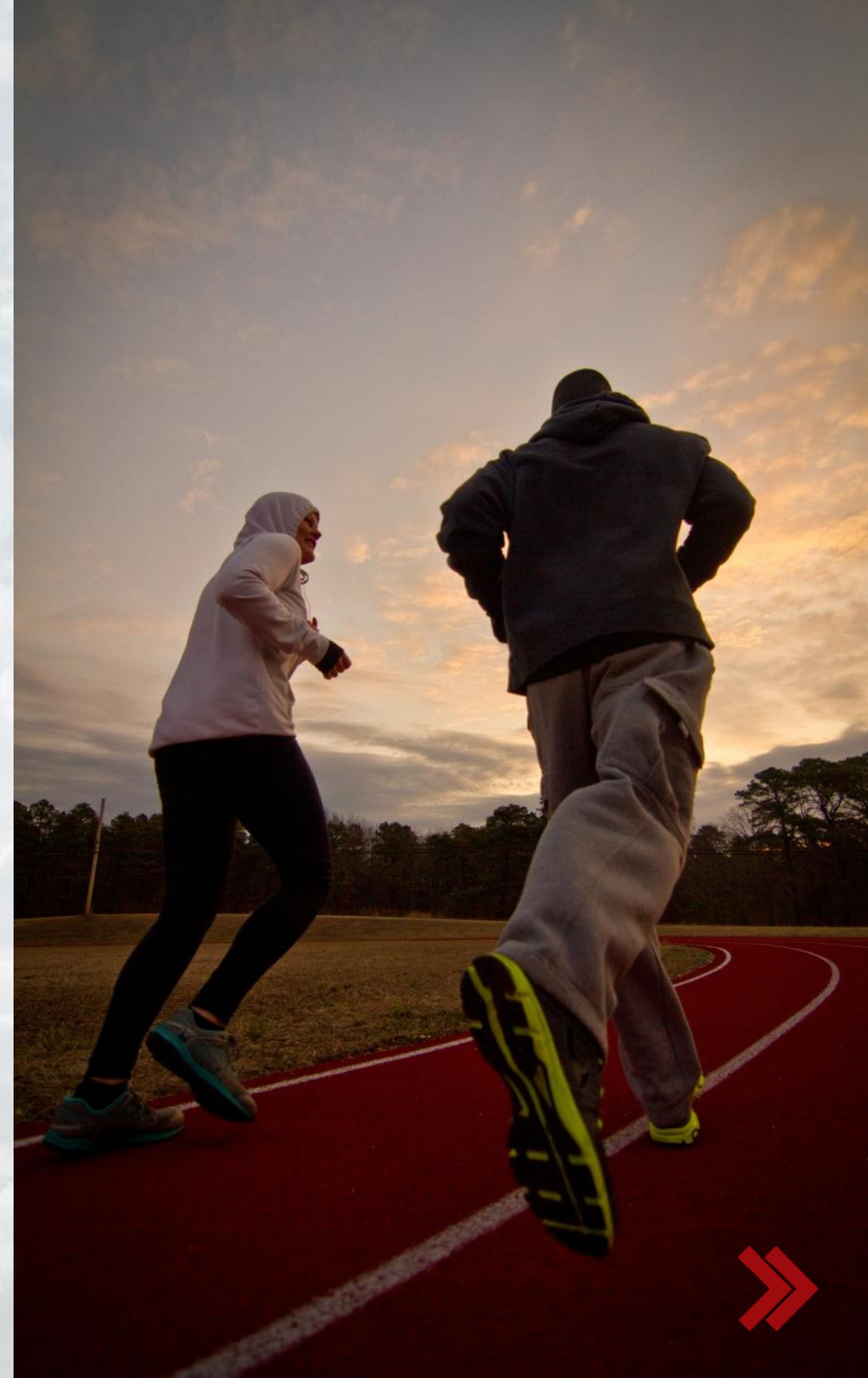
## STATS:

140 PARTICIPANTS RAN 902 MILES

# THAT'S 3,680 LAPS!

## TOP TEN:

CAPT. IVAN CARTAGENA - 177TH FW FINANCE	41.7
AIRMAN 1ST CLASS DAN WEILER - 227TH ASOS	38.5
STAFF SGT. ALLISON JONES - 227TH ASOS	30
MASTER SGT. PATRICK DONOHOE - 227TH ASOS	29
TECH. SGT. SONNY DAGOSTINO - 177TH LRS	26
SENIOR AIRMAN RYAN MULLER - 227TH ASOS	25
SENIOR MASTER SGT. WAYNE MILLER - 177TH MED GRP	21
MRS. DEE ZANIEWSKI - 227TH ASOS SPOUSE	21
1ST. LT. KEITH GIAMBERARDINO - 227TH ASOS	15
SENIOR AIRMAN RYAN FOGARTY - 177TH CES	15



Left: U.S. Air Force Master Sgt. Jeff Lee (left) and Tech. Sgt. Joseph Iovanisci (right) participate in the Third Annual 24 Hour Run Challenge to honor and remember fallen Tactical Air Control Party airmen at Atlantic City Air National Guard Base, N.J., March 27, 2014. Center: U.S. Air Force Tech. Sgt. Sonny Dagostino participates in the Third Annual 24 Hour Run Challenge. Dagostino ran 26.2 miles. Right: U.S. Air Force Master Sgt. Jamie DeCosta (left) and Capt. Ivan Cartagena (right) participate in the Third Annual 24 Hour Run Challenge to honor and remember fallen Tactical Air Control Party airmen at Atlantic City Air National Guard Base, N.J. on March 28, 2014.





*U.S. Air Force Airman 1st Class Daniel Weiler finishes his last lap of the Third Annual 24 Hour Run Challenge to honor and remember fallen Tactical Air Control Party airmen at Atlantic City Air National Guard Base, N.J., March 28, 2014. Airmen from the New Jersey Air National Guard's 177th Fighter Wing, as well as civilians from the Federal Aviation Administration participated in the event. The 24 Hour Run Challenge is held at military bases all over the world. Weiler, a Tactical Air Control Party airman with the 227th Air Support Operations Squadron, finished with 38.5 miles.*

# FINDING

“LITTLE  
*Miss Claire*”



U.S. Air Force F-86E Sabres “Little Miss Claire,” “Valerie Jean,” and “Shake, Rattle & Roll” from the New Jersey Air National Guard’s 119th Fighter Squadron fly in formation over New Jersey in this digital painting. (U.S. Air National Guard digital painting by Tech. Sgt. Matt Hecht)



An undated photo of the F-86E Sabre known affectionately as "Little Miss Claire," named after retired Chief Master Sgt. Jack Nichols' wife. The 119th Fighter Squadron operated out of Newark Airport, N.J. for nine years before heading to McGuire Air Force Base in 1956, where they flew the F-86E. By 1958, the 119th was moved to Atlantic City International Airport, and the 177th Fighter Wing was born. (Courtesy photo)



Retired Chief Master Sgt. Jack Nichols stands next to his F-86E "Little Miss Claire" as a young Tech. Sgt. (Courtesy photo)

The photos of the F-86's were so unique I figured the best place to share them was social media. I could post them on the Wing Facebook page and the 177<sup>th</sup> Alumni page, and maybe start generating some conversations.

I was extremely surprised that within a few hours of posting the images, I received a Facebook message from retired Chief Master Sgt. Jack Nichols.

"That plane was named for my wife Claire!," said Nichols.

After a few e-mails and a phone call later, I found the real Little Miss Claire and her husband living only three miles from the current home of the 177<sup>th</sup> Fighter Wing's 119<sup>th</sup> Fighter Squadron.

Nichols' Air National Guard story began on Nov. 22, 1952, when he and a friend showed up at the 119<sup>th</sup> Air Base Squadron at Newark Airport, N.J. looking for work.

"The Navy recruiter wouldn't take us, so we figured we'd give Newark a try, and they took us," said Nichols. "Back in those days we did basic training right there at Newark, and the tech school was all on-the-job training done by mentors there, all World War II veterans."

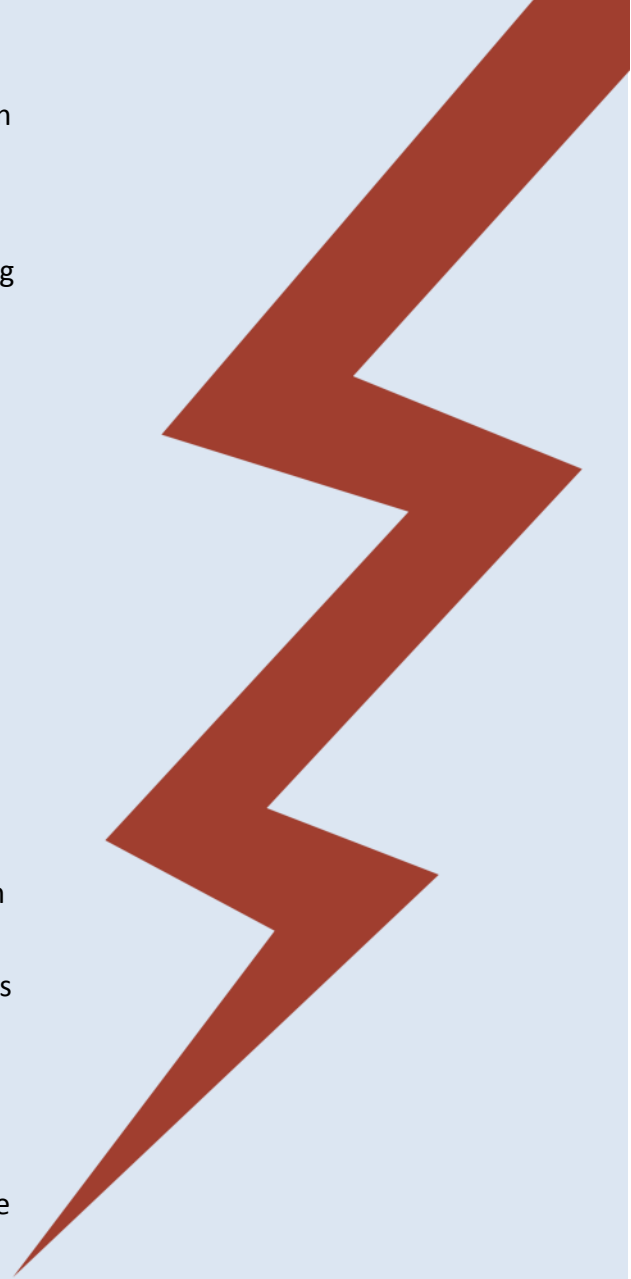
Nichols, who had previously worked at an auto mechanic shop, fit right in as a P-51 Mustang crew chief.

"It was a great plane to work on," he said. "The Rolls Royce engine could be difficult sometimes, but it had a great air-frame."

In 1956 Nichols left Newark for McGuire Air Force Base, following the 119<sup>th</sup> as they switched airfields and aircraft gain-

When the 177<sup>th</sup> Fighter Wing Public Affairs Office received a DVD of old photos, I thought it would be the standard F-106 Delta Dart and F-16 Fighting Falcon shots that we see all the time. Those photos are great, and extremely popular, so I was surprised to open the folders and see a plethora of images that were new to us. P-47 Thunderbolts, P-51 Mustangs, F-86 Sabres, and F-100 Super Sabres, some in full color that we had never seen before. It was a treasure trove of history! What stuck out to me were the F-86 Sabres with amazing lightning paint schemes and something we had never seen on 119<sup>th</sup> Fighter Squadron aircraft – nose art!

Nose art has an amazing place in U.S. Air Force history. It was a way for the pilots and aircrew to personify their aircraft, and it was also a morale booster. The two photos of F-86's with nose art were the "Little Miss Claire," and "Shake, Rattle & Roll."





U.S. Air Force F-86E Sabre 51-2848 escorts Chuck Yeager flying the Bell X-1A during testing as he glides towards Rogers Dry Lake on Dec. 12, 1952. (NASA Photo)

ing the F-86 Sabre. Manufactured by North American Aviation, the U.S. Air Force first flew the F-86 in 1947. They were flown in combat during the Korean War, with 792 MiGs shot down to only 78 Sabres lost. Post-Korean War, many F-86's were sent to Air National Guard units as the active duty Air Force picked up newer aircraft.

Nichols became an F-86 crew chief for the 119<sup>th</sup> at McGuire and married his high school sweetheart, Claire.

It wasn't long after getting the F-86's that a creative crew chief requested to paint nose art on one of the jets.

"One of the crew chiefs, Nick Bongo was his name, he asked the commander for permission to give the planes some nose art, and the commander agreed as long as it was appropriate. Nick designed and painted every plane's nose art by hand. It was a real morale booster! Guys were out their wiping down their aircraft every chance they got."

For Nichols, naming his plane was easy.

"I named the plane after my wife. She's a really special lady, one of a kind" said Nichols. "She thought it was really cool."

"It was so neat having a jet named after me," said Claire Nichols.

While the fate of F-86 "Little Miss Claire," tail number 51-2848 has remained a mystery, some of its history has come to light.

Per an official NASA photo, on Dec. 12, 1953, she was flying at Edwards Air Force Base, Ca., and was being used by the U.S. Air Force and NASA as a chase plane for the X-1A program. The F-86 escorted the X-1A when it was flown Chuck Yeager during a record breaking flight that saw speeds of Mach 2.44.





Retired U.S. Air Force Chief Master Sgt. Jack Nichols (right) and his wife Claire Nichols (left) hold a photo of Jack when he was a crew chief for F-86E Sabre tail number 51-2848, named in honor of his wife, "Little Miss Claire," at their home in Mays Landing, N.J., April 1, 2014. Nichols spent his 40-year career in the New Jersey Air National Guard, starting at Newark Airport, N.J., with the 119th Air Base Squadron working on the P-51 Mustang, and finishing his career with the F-106 Delta Darts of the 177th Fighter Wing. A little-known photo of a New Jersey Air National Guard F-86 Sabre surfaced, and the real "Little Miss Claire" was found to be living less than three miles from the 119th Fighter Squadron's current home at Atlantic City International Airport, N.J. The Nichols will celebrate their 58th wedding anniversary on April 27, 2014. (U.S. Air National Guard photo by Tech. Sgt. Matt Hecht)



**E**arly in the spring of 1950 the Navy signed a contract with McDonnell Aircraft for 14 F2H-2N night fighter versions of the standard F2H-2 Banshee day fighter. This aircraft became the Navy's first jet-powered night fighter. It served exclusively with Atlantic City's Composite Squadron Four [VC-4].

Of the 14 ordered, only 12 were ferried, one a month, from the St. Louis factory to Naval Air Station Atlantic City. (One lost its tail in flight during testing and another ended up with some other Navy test unit.) The delivery schedule was slightly disrupted during the summer of 1950 when a delivery pilot from the Navy's Air Ferry Command made a detour to show off the new jet to a girl friend on route to Atlantic City. A minor mechanical problem caused the aircraft to get stranded, delaying delivery to Atlantic City almost a month. From then on, VC-4 pilots did the ferrying of new aircraft themselves. The fate of the amorous Air Ferry Command pilot is not known.

The -2N was much the same as the day fighter version of the Banshee with a straight wing and two Westinghouse J-34 jet engines of 3,250 pounds thrust each. It was equipped with the same APS-19 radar as used on the piston engine F4U-5N Corsair, but mounted in an elongated nose above its armament of four 20-millimeter cannon. Also like its installation in the Corsair, the radar image tilted on the scope when the aircraft attitude changed in a bank, climb or descent. The unstabilized image made it very difficult to track the target while maneuvering and the jet's high roll rate and closing speed made nighttime intercepts with radar a real challenge.

VC-4 pilots started training on the F2H-2N Night Banshee, including night carrier qualifications on the *USS Franklin D. Roosevelt* in late 1950 and a detachment on the same carrier deployed on a Mediterranean cruise from January to May 1951. VC-4 pilots favored the fact that the Night Banshee carried more fuel and could cruise on one engine, giving it enough range or endurance for combat air patrols over the fleet. While our NATO allies and Communist adversaries were impressed, the Navy admirals and carrier captains were not, feeling that the nighttime threat of the Soviets was minimal and did not warrant a permanent night fighting detachment's disruption to their cyclic operations. As a result, during the *FDR's* Mediterranean cruise, VC-4's Night Banshees averaged only one night landing per month, usually losing out to the hangar deck movie!

# Atlantic City's VC-4 Enters The Jet Age and Returns To The Korean War PART I

Story by Dr. Richard Porcelli

In the final six months of 1950, VC-4 flew more than 13,000 hours from the runways of NAS Atlantic City, suffering three fatal accidents and the death of five squadron personnel. The squadron consisted of 90 officers and 542 enlisted men, with an inventory of 64 Corsairs, 8 Night Banshees and 2 Beechcraft SNB utility aircraft. More jets were on their way to support VC-4's deployments on Korean War, Atlantic and Mediterranean fleet carriers, as well as detachments to augment the Air Force's Eastern Air Defense Force. During that period the squadron, on average, sent detachments on 25 – 30 carrier cruises in a year.

Also during that period, the Navy's and VC-4's transition to jets was gathering steam. From a 10%-90% mix of jets and props at the start of 1951, the ratio would be completely reversed in the favor of jets within less than three years.

The Navy's second jet-powered night fighter was the first built from the start for that role. The Douglas F3D Skyknight was a huge aircraft; it had to be to house a

large radar antenna in the nose and to carry the Westinghouse AN/APQ-35 fire control system. The radar technologies of the 1940s-1950s time period required an exceptionally large antenna dish to acquire target aircraft at the desired 125 mile range. Metal parabolic or "dish" antennas had the benefits of a constant phase surface, reduced beam angles (for more precise detection of targets) and less aerodynamic drag compared to external antenna arrays as used by WWII Luftwaffe and Allied aircraft. However, since the beam angle varies inversely with the dish diameter, large diameters were required. Large dish antenna came with a penalty of a large frontal area with the resulting penalty in aerodynamic drag.

This Skyknight's system was quite advanced for its day, but it still relied on over 300 vacuum tubes with the corresponding weight and cooling requirement burdens. There was also an enormous power requirement for both the radar and for the sophisticated navigational system, which allowed zero visibility landing approaches as well as a state-of-the-art IFF (Identification Friend or Foe) system.

The AN/APQ-35 radar system was much more powerful than the APS-19 and gyro-stabilized as well. The system actually included a combination of three different radars, each performing separate functions: an AN/APS-21 search radar which worked really well, a less effective AN/APG-26 tracking radar, both located in the nose, and an AN/APS-28 tail warning radar – an addition that proved very important in subsequent night-time engagements with MiGs during the Korean War.

Its crew of pilot and radar operator sat side-by-side in a large cockpit that looked more like the Douglas DC-4 airliner of that period than a jet fighter! Interestingly, the Navy relied on enlisted radar operators as crew for the officer pilots. The Skyknight was powered by the two relatively anemic J-34 jet engines, the same that equipped the smaller, lighter F2H Banshee. The large radar nose caused a high drag on the airframe, combined with the low engine thrust, resulting in a very poor climb rate and a top speed of barely 500 knots. Armament was four 22-millimeter cannon mounted in the lower fuselage.

In order to save weight, the Skyknight did not have crew ejector seats, although most new jet fighters of the period did. Instead, an escape slide system was installed. In the event of an inflight emergency the Skyknight crew would first need to pull a lever that jettisoned the aft portion of the escape door and triggered the forward half to act as a wind break. Then the crew would need to unbuckle, pull themselves from their seats with the aid of a vaulting bar mounted atop the tunnel entrance located in the back of the cockpit and slide feet first down an escape tunnel that carried them between the two jet engines in the belly of the aircraft and into the clear. Imagine trying to escape a spinning Skyknight using this system!

It is not surprising that its size, bulbous shape and lack of performance led to unflattering nicknames, including "Whale" and "Willie the Whale" (for obvious reasons) and "Drut" (*turd* spelled backwards). In addition to its performance issues, the complexity of the vacuum tube-based radar system in the days before the invention of the semiconductor, required many maintenance man-hours to keep it operating properly.

Between September and November 1951, VC-4 ran comparison flights, evaluating the F2H-2N





VC-4 F3D-2 Skyknight on the Atlantic City ramp, where today the 177th FW's Vipers sit; note the "NA" tail code of VC-4 aircraft and the large size of "the Whale." (U.S. Navy photo)



A VC-4 Skyknight from Atlantic City lands on the USS Franklin D. Roosevelt during a 1952 Mediterranean cruise. (U.S. Navy photo)



A VC-4 Skyknight from Atlantic City on the USS Franklin D. Roosevelt during a 1952 Mediterranean cruise. (U.S. Navy photo)



Night Banshee vs. the F3D-2 Skyknight, from Atlantic City in darkness and bad weather. Targets for the tests included every aircraft type based at Atlantic City's resident squadrons, plus aircraft from nearby Navy air stations and Air Force bases. In each case the target was positioned offshore opposite Atlantic City, and a F2H-2N and a F3D-2 were scrambled for the intercept. While the F2H-2N Night Banshee had superior performance in the air and could intercept the bogie farther out from Atlantic City, the F3D-2 Skyknight's big dish radar offered better detection and tracking capabilities. The Navy settled on the Skyknight as their next night fighter based on the better radar and fire control system, although as will be seen, that decision was perhaps not the best one. Interestingly the Air Force evaluated the XF3D prototype during testing at Edwards Air Force Base during 1948, but decided instead to rely on the Lockheed F-94 Starfire while the more advanced Northrup F-89 Scorpion was developed.



VC-4 (note the "NA" tail code) F2H-2N Night Banshee during carrier qualifications on USS Franklin D. Roosevelt, late 1950. The "plane guard" helicopter overhead was always in the air during carrier ops. (U.S. Navy photo)

A total of 237 F3D-2, the definitive version, were built. Since its poor performance due to inadequate thrust and high weight made carrier operations difficult, especially if an engine was lost on launch or recovery, most were assigned to land-based Marine night fighter squadrons. The two important Navy operators of the Skyknight were the west coast and east coast night fighter composite squadrons, VC-3 and Atlantic City's VC-4. However, the only carrier deployments were made by detachments from VC-4, most importantly, the Korean War cruise of Detachment 44 aboard *USS Lake Champlain* that lasted from April to December 1953 – a subject to be discussed below.

VC-4 had another very important task, but one that was not talked about. In the late 1940s and early 1950s, while VC-4 was developing the skills and equipment for night and all weather fighting, as well as making the transition to jets, the Navy was fighting the Air Force for a role in nuclear deterrence.

Early nuclear weapons were large and heavy, mandating large bomber aircraft such as the Air Force's Convair B-36 Peacemaker, Boeing B-47 Stratojet and Boeing B-52 Strato-fortress. The Navy initially relied on the normally land-based Lockheed P2V Neptune patrol plane and the North American AJ Savage compound powered (two piston engines and one jet engine) bomber; both proved to be impractical for carrier operations due to their size, especially after the first "supercarrier", *USS United States*, was cancelled by the Department of Defense on the day the keel was laid.

Newer generation nuclear weapons were smaller and in principle could be and in fact were delivered by tactical jets, like the Air Force's Republic F-84F Thunderstreak, North American F-86H Sabre and later, the North American F-100C Super Sabre and Republic F-105 Thunderchief (all these types were ultimately flown from Atlantic City by the 119<sup>th</sup>

Fighter Squadron/177<sup>th</sup> Fighter Wing!).

For this role the Navy again turned to McDonnell Aircraft, this time to produce 25 modified F2H-2B Banshees. The -2B version differed from the standard Banshee by having a strengthened portside weapons pylon capable of carrying the 3,230 pound Mark 8 nuclear bomb. During the summer of 1952 Atlantic City's VC-4 was directed to take on this "special mission" and to train extensively for the likely one-way delivery of "shapes" (the Cold War euphemism for nuclear bombs) to Communist targets in Eastern Europe, Russia or Asia. VC-4 was one of the squadrons selected because of the need to conduct those missions at night and in any weather condition. Thus, in addition to assignment of Corsairs, Night Banshees and Skyknights for the night time and all weather interceptor role, VC-4 provided special weapons qualified F2H-2B teams to carriers assigned to the Navy's Atlantic, Mediterranean and Pacific Fleets.

*To be continued!*

# Around the Wing



## WARREN GROVE CHANGE OF COMMAND



Colonel Bradford Everman (left), 177th Fighter Wing Operations Group Commander passes the guidon to Major John Barrett (right) during a change of command ceremony at the Warren Grove Bombing Range facility in Ocean County, N.J. on Mar. 27, 2014. 177th Fighter Wing and Warren Grove Range personnel, family and friends gather for the ceremony as Lieutenant Colonel Thomas Cleary relinquished command of Detachment 1 of the New Jersey Air National Guard's 177th Fighter Wing to Barrett. (U.S. Air National Guard photo by Master Sgt. Andrew Moseley)

## COL GENTRY HITS 3000 HOURS



Col. Kerry M. Gentry, commander, 177th Fighter Wing hit 3,000 flight hours in the F-16 Fighting Falcon and receives a patch from Lt. Col. Timothy Hassel, 119th Fighter Squadron commander on March 20, 2014. (U.S. Air National Guard photo by Airman 1st Class Shane Karp)

## NORAD CC VISITS WING



From right, Lt. Gen. William H. Etter, Commander of Continental U.S. North American Aerospace Defense Command Region, 1st Air Force, and Staff Sgt. Ben Ellis, crew chief from the New Jersey Air National Guard's 177th Fighter Wing at the Atlantic City Air Guard Base, perform pre-flight checks on April 3, 2014. (U.S. Air National Guard photo by Master Sgt. Andrew J. Moseley)

## FIREFIGHTERS TRAIN AT FAA



A U.S. Air Force fire protection specialist from the New Jersey Air National Guard's 177th Fighter Wing uses a Halligan bar to breach a door during an exercise at the Federal Air Marshal Training Center shoot house, March 11, 2014. The shoot house is located at the Federal Aviation Administration's William J. Hughes Technical Center, N.J. (U.S. Air National Guard photo by Tech. Sgt. Matt Hecht)

## ASSEMBLYMAN TOUR



Col. Kerry M. Gentry, Wing Commander of the 177th Fighter Wing of the New Jersey Air National Guard, looks up at the ground as 2nd Legislative District Assemblyman Vince Mazzeo flies an F-16 simulator at the Atlantic City Air National Guard Base, N.J. on March 26, 2014. (U.S. Air National Guard photo by Master Sgt. Andrew J. Moseley)

For more awards photos, check out the 177th Fighter Wing Facebook page!



# FINAL PHOTO BOMB RUN

+ Video Content

*F-16s Fighting Falcons from the New Jersey Air National Guard's 177th Fighter Wing drop live ordnance at the Barry M. Goldwater range Mar. 6, 2014. The live ordnance included six mk 84 2,000 lb. and two mk 82 500 lb. bombs during a low altitude tactical pass. (U.S. Air National Guard photo illustration, photo by Col. Kerry M. Gentry)*