

A large, semi-transparent crest of the 12th Flying Training Wing is centered behind the text. The crest features a yellow shield with a blue cross. In the center of the cross is a torch with a red and orange flame. Below the shield is a yellow banner with blue text that reads "12TH FLYING TRAINING WING".

**COMBAT SYSTEMS OFFICER TRAINING  
GRADUATION CEREMONY**

Monday, June 16, 2025  
National Naval Air Museum  
Naval Air Station Pensacola, FL

# SEQUENCE OF EVENTS

ENTRANCE OF OFFICIAL PARTY

PRESENTATION OF THE COLORS  
*Eglin Honor Guard*

NATIONAL ANTHEM  
*2d Lt Micah Swedeen*  
*479th Student Training Squadron*

INVOCATION  
Command Chaplain CDR Jeremy Selitto, USN

NARRATOR  
*Captain John Gluszek*  
*451st Flying Training Squadron*

OPENING REMARKS  
*Colonel Shane Muscato*  
*Commander, 479th Flying Training Group*

GUEST SPEAKER  
*Colonel Larry Fenner Jr.*  
*Commander, 350th Spectrum Warfare Wing*

PRESENTATION OF  
AERONAUTICAL ORDERS AND WINGS

AWARDS

AIR FORCE SONG

DEPARTURE OF OFFICIAL PARTY

# **OFFICIAL PARTY**

**COL SHANE P. MUSCATO**

COMMANDER,

479TH FLYING TRAINING GROUP

**COL LARRY FENNER JR.**

COMMANDER,

350TH SPECTRUM WARFARE WING



## **Colonel Shane P. Muscato**

Colonel Shane P. Muscato is the Commander of the 479th Flying Training Group at Pensacola Naval Air Station, FL. The Group includes four squadrons, 500 personnel and 45 T-6 Texan II and T-1A Jayhawk aircraft and trains over 300 Combat Systems Officers each year for the U.S. Air Force, Air Force Reserve Command and Air National Guard. Additionally, the Group supports over 1,500 Air Force personnel in the Pensacola, FL area.



Prior to joining the 479 FTG, Colonel Muscato was the Division Chief for the Special Operations Forces and Personnel Recovery Capability Development Team as a member of Air Force Futures, Headquarters United States Air Force at the Pentagon, Arlington, VA. As the leader of this team, he directed the establishment of requirements for the special operations and personnel recovery formations of the Air Force to meet future operational needs. Furthermore, his team conducted wargaming and analysis of these future capabilities and provided updates to the Air Force's future force design to enable affordable, timely, and accurate effects in future conflicts.

Colonel Muscato was commissioned via the United States Air Force Officer Training School, Maxwell Air Force Base, AL. He is a master navigator with over 3,100 hours. He has deployed in support of numerous operations including ENDURING FREEDOM, IRAQI FREEDOM, NEW DAWN, FREEDOM'S SENTINEL and INHERENT RESOLVE. Colonel Muscato has commanded at the squadron level, expeditionary squadron level, and as the Combined Joint Special Operations Air Component-Afghanistan Deputy Commander.

## **Colonel Larry Fenner Jr.**

Colonel Larry Fenner Jr. is the Commander, 350th Spectrum Warfare Wing, Eglin AFB, Florida. The 350 SWW's primary mission is to provide rapid electronic combat power to Commanders during peacetime, through crisis and in war. Colonel Fenner advises the USAF Warfare Center Commander and Department of the Air Force senior leaders on the integration of technology, policy, and operations enabling forces to attain Spectrum Warfare superiority. As the Air Force's newest Wing, the 350 SWW will grow to support 2300 military and civilian personnel across ten units at three locations throughout the United States.



Colonel Fenner received his commission in 2000 through the Reserve Officer Training Corps program at the University of Illinois Urbana-Champaign. He has served as Vice Commander, 36th Wing, within the United States Indo-Pacific Command and Air Force Global Strike Command as Chief of Bomber Requirements. He flew joint operational combat missions in Afghanistan and Iraq supporting Operations SOUTHERN WATCH, ENDURING FREEDOM, and IRAQI FREEDOM and served as the Joint Air Component Coordination Element Director for Operation INHERENT RESOLVE.

Colonel Fenner is a Master Navigator with 900 combat hours and more than 2,900 flight hours.

⌘

⌘



## Squadron Commanders

### 479 STUS

Lt Col Austin Lohman

### 479SS

Lt Col Michael Matchett

### 455 FTS

Lt Col Benjamin Hoffman

### 451 FTS

Lt Col Joshua Lancaster



## Graduate Flight Commanders

Capt Laird  
Capt MacDonald  
Capt Mims  
Capt Morehead  
Capt Sostre  
Capt Trammell  
Capt Wade  
Capt Wortman  
Capt Drake  
Capt Irvin  
Capt Nguyen  
Capt Bullotta





### **2d Lt Nathan D. Borges**

Hometown	Marlborough, MA
Aircraft	B-52, WSO
Assignment	Barksdale AFB, LA



### **2d Lt William D. Cameron**

Hometown	Chesapeake, VA
Aircraft	AC-130J, CSO
Assignment	Kirtland AFB, NM



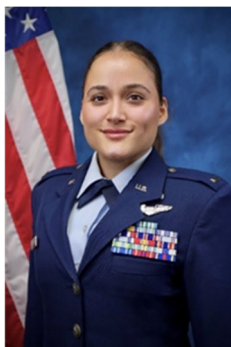
### **2d Lt Garrett Camp**

Hometown	Queensbury, NY
Aircraft	LC-130H, Nav
Assignment	Stratton ANGB, New York



### **2d Lt Aaron A. Carranza**

Hometown	Los Angeles, CA
Aircraft	F-15E, WSO
Assignment	Seymour-Johnson AFB, NC



### **2d Lt Alanis Delgado Cruzado**

Hometown	Mayagüez, Puerto Rico
Aircraft	RC-135, EWO
Assignment	Offutt AFB, NE



### **2d Lt Robert W. Denny**

Hometown	Horsham, PA
Aircraft	RC-135, EWO
Assignment	Offutt AFB, NE



### **2d Lt Jacob W. Elwell**

Hometown	Leonardtown, MD
Aircraft	F-15E, WSO
Assignment	Seymour-Johnson AFB, NC



### **Capt Henry J. Gilchrist**

Hometown	Bellevue, WA
Aircraft	F-15E, WSO
Assignment	Seymour-Johnson AFB, NC



### **2d Lt Ryan M. Grimes**

Hometown	Woodsville, NH
Aircraft	C-130H, Nav
Assignment	Cheyenne ANGB, WY



### **2d Lt Kaleb M. Heuer**

Hometown	Two Rivers, WI
Aircraft	MC-130J, CSO
Assignment	Kirtland AFB, NM



### **2d Lt Christopher R. Jannell**

Hometown	Orange, VA
Aircraft	B-52, WSO
Assignment	Barksdale AFB, LA



### **2d Lt Samantha M. A. Kanish**

Hometown	Avella, PA
Aircraft	C-130H, Nav
Assignment	Youngstown Air Reserve Station, OH



### **2d Lt Isaac A. Kisling**

Hometown	Elkton, VA
Aircraft	F-15E, WSO
Assignment	Seymour Johnson AFB, NC



### **2d Lt Zebedee V. Kumley**

Hometown	Snohomish, WA
Aircraft	B-52, WSO
Assignment	Barksdale AFB, LA



### **1st Lt Elizabeth R. Lamey**

Hometown	Bentonville, AR
Aircraft	RC-135, EWO
Assignment	Offutt AFB, NE



**2d Lt Katherine L. Markovich**

Hometown	Peoria Heights, IL
Aircraft	F-15E, WSO
Assignment	Seymour-Johnson AFB, NC



**2d Lt Manu S. Mathew**

Hometown	Ellicott City, MD
Aircraft	MC-130J, CSO
Assignment	Kirtland AFB, New Mexico



**2d Lt Chloe K. Mitchell**

Hometown	Akwesasne, NY
Aircraft	F-15E, WSO
Assignment	Seymour-Johnson AFB, NC



**1st Lt Kyle A. Mott**

Hometown	Batavia, NY
Aircraft	B-1B, WSO
Assignment	Dyess AFB, TX



**2d Lt Peter T. Olberding**

Hometown	Tucson, AZ
Aircraft	F-15E, WSO
Assignment	Seymour-Johnson AFB, NC



### **2d Lt Christian M. Rapetti**

Hometown	Hattiesburg, MS
Aircraft	B-52, WSO
Assignment	Barksdale AFB, LA



### **2d Lt Michael T. A. Sabett**

Hometown	Gaithersburg, MD
Aircraft	MPRIS, EWO
Assignment	Beale AFB, CA



### **2d Lt Andrew J. Storer**

Hometown	St. Louis, MO
Aircraft	AC-130J, CSO
Assignment	Kirtland AFB, NM



### **2d Lt Landon T. Viera**

Hometown	Las Cruces, NM
Aircraft	RQ-170, EWO
Assignment	Creech AFB, NV



### **2d Lt Ty D. N. Wilkinson**

Hometown	Davis, CA
Aircraft	MC-130J, SO
Assignment	Kirtland AFB, NM

## **Outstanding Instructors**

CSO Fundamentals Instructor	Capt Samuel Morehead
Tactical Fundamentals Instructor	Maj Sarah Brandt
Electronic Warfare Support	Capt Jonathan Mims
Suppression of Enemy Air Defenses	Capt Nicholas Ronci
Advanced Navigation Instructor	Maj Victoria Taylor
DTD Sensor Operation Instructor	Capt Jacob Western
T-96 Simulator Instructor (CSI)	Mr. Charles Cambers
T-6 Simulator (CSI)	Mr. David Wooten
T-1 MTR WSO Instructor	Maj Dylan Lecce
T-1 MTR EWO Instructor	Capt Jacob Western
T-1 DT WSO Instructor	Maj Garrett Mack
T-1 DT SO Instructor	Maj Kevin Warmington
T-1 Fighter Employment	Maj Addison Fisher
T-1 Bomber Employment Instructor	Capt Conner Goulet
T--1 Fighter Intercept Instructor	Capt Brandon Mule
T-1 Visual Low Level Instructor	Lt Col Caleb Smith
T-1 Instructor Pilot	Mr. Gregory Keesler
T-6 Instrument Instructor Pilot	Maj Forrest Whitfield
T-6 Navigation Instructor Pilot	Maj Dan Derby/Maj Kirk Burns
T-6 Formation Instructor Pilot	Capt Paul Mueller
Active Duty Academic Instructor	Capt Jacob Western
Civilian Academic Instructor (CAI)	Ms. Cynthia Curry
Active Duty Intel Instructor	SSgt Hanna Wingett

# History of the 479th Flying Training Group

The 479th Flying Training Group (FTG) traces in lineage to World War II. In September 1943, Lt Col Leo Dusard was tasked with standing up a new fighter group. He began by selecting key personnel from the 329th Fighter Group (FG), and on October 15th the 479 FG was activated at Grand Central Air Terminal in California.

Following the reassignment of Lt Col Dusard, Lt Col Kyle Riddle took the reins of the 479 FG and quickly deployed the group to Europe. On April 16th 1944, 145 officers and 910 enlisted members deployed to Wattisham Royal Air Station near the village of Ipswich, England.

Only 11 days after arriving in Wattisham, the 479 FG participated in its first combat mission. Maj John H. Lowell led 34 P-38F *Lightnings* on a sweep over Holland and Belgium. On May 31st 1944, Capt Frank Keller of the 435th Fighter Squadron (FS) recorded the group's first kill by destroying a Junkers Ju-88 *Zerstorer* on the ground near Humfeld, France. Then, on July 29th, Capt Arthur Jeffrey made history as the first pilot to shoot down a rocket-propelled aircraft, a Messerschmitt Me-163 *Komet*, over Germany. On Thanksgiving Day 1945, the 479 FG boarded the *USS Enterprise* to return home to the United States. Upon return, the 479 FG was deactivated on December 1st 1945 at Camp Kilmer.

After World War II, the 479 FG was activated and deactivated several times:

- December 1952, 479th Fighter-Bomber Group, George AFB, California, North American P-51 *Mustang*.
- June 1953, 479th Fighter-Bomber Group, North American F-86F *Sabre*
- June 1954, 479th Fighter-Bomber Group, F-100A *Super Sabre*
- October 1957, group deactivated
- 26 July 1991, 479th Fighter Group, Holloman AFB, New Mexico, AT-38 *Talon*
- November 1991, group deactivated
- November 1998, 479th Flying Training Group, Moody AFB, Georgia, AT-38C & T-6A *Texan II*
- 21 June 2007, group deactivated

Finally, on October 2nd, 2009, the 479 FTG was activated at NAS Pensacola, Florida, under the Command of Col Travis A. Willis. The unit's mission is to train the Air Force's next generation aviator, the Combat Systems Officer (CSO). The 479th uses the T-6A *Texan II* and the T-1A *Jayhawk* to this end.

\* The group's three fighter squadrons (434th, 435th, and 436th) aircraft didn't have cowling colored markings like other Eight Air Force fighter groups. Rather, the *479th Lightnings* were distinguished only by their colored tail rudders.

# **The Evolution of the Combat Systems Officer**

Combat Systems Officers (CSO) can follow their roots back to the advent of multi-crew bi-planes in WWI. During this time, CSOs fulfilled multiple roles to include navigators, observers, ordnance delivery, and intelligence gatherers on enemy positions across Europe. For many years, their duties on aircraft were not well defined. It wasn't until the historic "Southern Cross" flight across the Pacific Ocean in May of 1928 that the navigator's mission really began to take form.

Fourteen years after the historic "Southern Cross" flight, the United States entered World War II. In many World War II aircraft, to include the mighty B-26 flown by our 451st Bomber Squadron (BS) and 455th BS, the cockpit was designed for two crew members. As was typical with these aircraft, one seat was assigned to the navigator. In addition to navigation duties, the navigator also had bombardier responsibilities. This led to the affectionate term "bombigator", referring to this multi-purpose crew position.

After WWII, CSO aircrew duties were expanded to maximize U.S. Air Force aircraft combat capabilities. Vietnam-era aircraft and tactics paved the way for the three distinct aircrew roles CSOs perform today. These specialties include Weapon Systems Officer (specializing in weapons employment), Electronic Warfare Officer (expert in electromagnetic spectrum exploitation), and Panel Navigator (expert in aircraft positioning, time control, and orchestrating airdrop). Since their inception, these three separate aircrew specialties have sustained the U.S. Air Force's air superiority around the world. From OPERATION DESERT STORM, to OPERATION ALLIED FORCE, to OPERATION ENDURING FREEDOM, to OPERATION IRAQI FREEDOM, CSOs have been the backbone of the US Military's operational successes.

Today, the Combat Systems Officer title designates an aviator that is trained to perform duties either as an Electronic Warfare Officer, Weapon Systems Officer, or a Panel Navigator. And while the crew position's duties and name may have transformed over the years, its fundamental role to the lasting success of the United States Air Force has not. The demand for CSOs will only continue to grow in the 21st century as our nation upholds its global commitments and remains postured to defend our interests around the world.

As trained experts, Combat Systems Officers graduates project airpower in the interests of the United States in the following aircraft: AC-130J, B-1B, B-52, C-130H, EA-18G, EC-130, F-15E, HC-130J, MC-130J, RC-135, RQ-170, and U-28 aircraft.

# ***The Air Force Song***

*by Robert Crawford*

*Off we go into the wild blue yonder,*

*Climbing high into the sun;*

*Here they come zooming to meet our thunder,*

*At 'em now, Give 'em the gun! (Give 'em the  
gun!)*

*Down we dive, spouting our flame from under,*

*Off with one helluva roar!*

*We live in fame or go down in flame. Hey!*

*Nothing'll stop the U.S. Air Force!*



*For photos of today's events... Find us on Facebook!*

*<http://www.facebook.com/479FTG>*