A Brief History of United States Naval Cryptology

References:

- U.S. Naval Cryptologic Veterans Association
- Station HYPO

Command History Timeline

- 1916 Navy Code and Signal (OP-20G) established
- 1922 OP-20G established until after WWII
- 1924-1935- Naval cryptology service is operational
- 1935 Naval Security Group established
- 1945 Naval Cryptologic organization renamed to Communications Supplementary Activities
- 1948 Cryptologic officer designators and enlisted Communication Technician (CT) Ratings established
- 1949 Armed Forces Security Agency (AFSA) created
- 1950 Title "Naval Security Group" was adopted as the official name
- 1952 NSA created from the AFSA
- 1956 Naval Security Group Headquarters Activity established

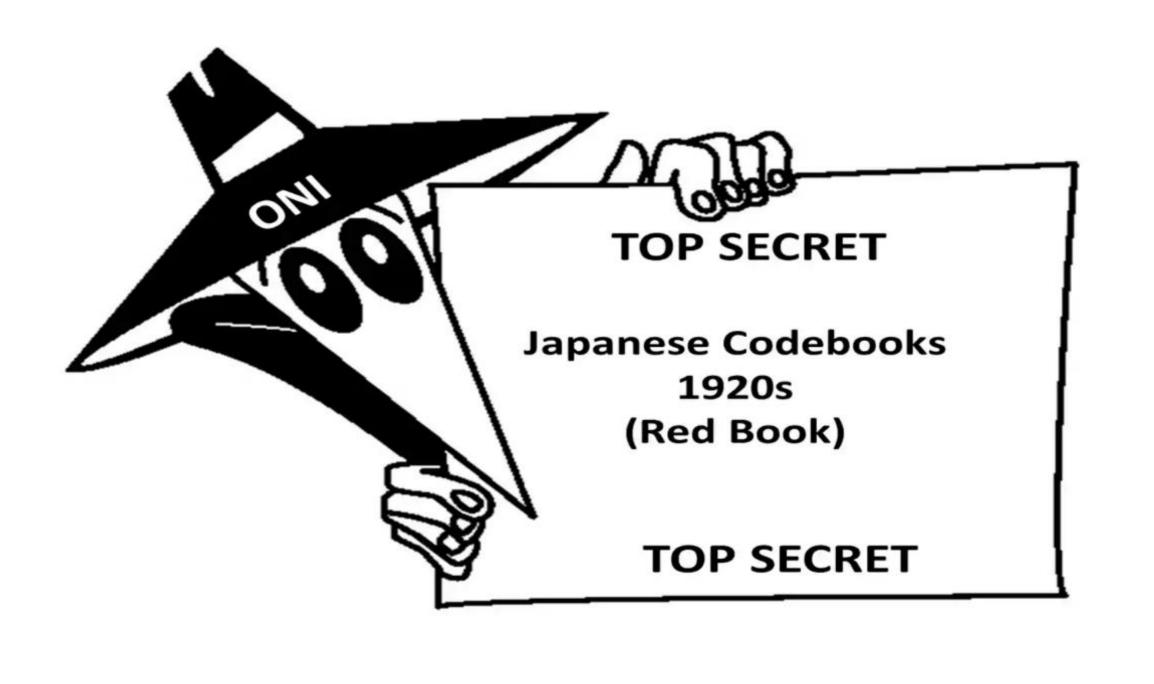
Command History Timeline (con't)

- 1961 Redesignated the Naval Security Group Headquarters under the Director, Naval Security Group
- 1968 NSG Command was established with a flag officer
- 1976 Communication Technician (CT) Ratings renamed to Cryptologic Technician Ratings (CT)
- 1991 Communications Special Signals job moved from CTT to CTR
- 1995 CNSG HQ from Nebraska Ave to Fort Meade, MD
- 2002 Naval Network Warfare Command (NETWARCOM) established
- 2003 EW Ratting merged into the CTT Rating
- 2004 CTN Rating established
- 2005 NSG disestablished and realigned under NETWARCOM

Command History Timeline (con't)

- 2005 NSGA command names changed to NIOCs
- 2005 Cryptologic Officer designators changed to Information Warfare Officer
- 2006 CTO Rating merged into the IT Rating
- 2006 CTA Rating merged into the YN Rating
- 2010 U.S. Fleet Cyber Command/U.S. Tenth Fleet established
- 2010 Cyber Warrant Officer established
- 2016 IW Officer designators changed to Cryptologic Warfare Officer
- 2021 Maritime Space Officer (MSO) (1850) officer designator established
- 2023 CTN rating changed to Cyber Warfare Technician (CWT)
- 2023 Maritime Cyber Warfare Officer (MCWO) (1880) officer designator established

Pre WWII And The Grand Maneuvers



On The Roof Gang (OTRG) Nucleus of Our Community!



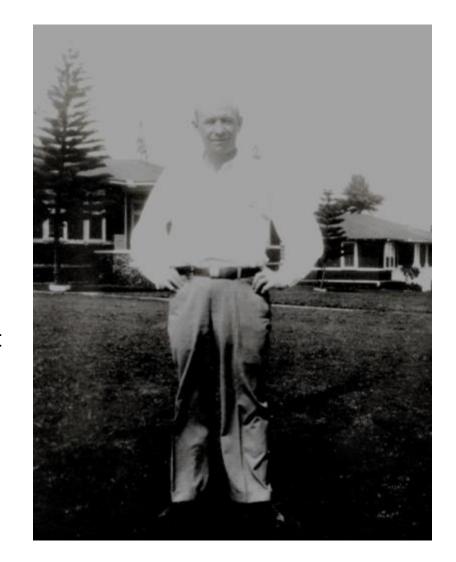
Chief Radiomen Kidder and Japanese Alphabet (Katakana)

RMC Kidder served on board several Asiatic Fleet ships and shore commands.

Kidder began to recognize non-English strong transmissions in the AOR. The transmissions sounded like Morse code but contained characters none of the radio operators knew.

By 1921, Kidder, with the help of the Japanese wife of a friend, taught himself Japanese alphabet (Kata Kana) and the basics of the Japanese language.

Kidder began to pass his intercepts to his commanders, who realized the value of his work and relayed it back to HQ Naval Communications Department in Washington, DC.

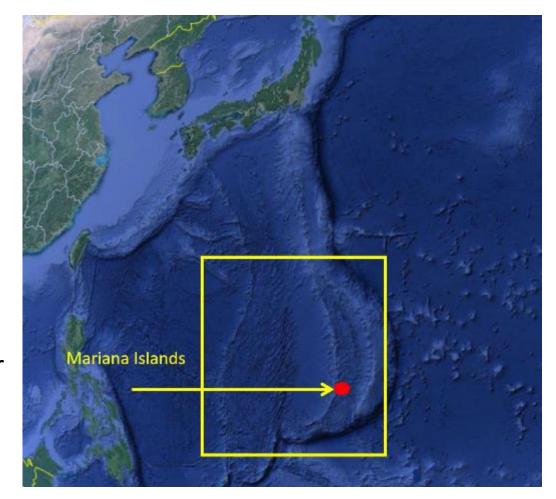


Annual Fleet / Grand Maneuvers

In 1927, the analysis of Kidder intercepts discovered Japanese Navy began annual maneuvers with at least part of their fleet in in the South Pacific near the Mariana Island.

Every third year starting in 1930 the Japanese would conduct "Grand Maneuvers," involving all most of their combatants. The last one Grand Maneuver was conducted in 1939.

These fleet exercises drove U.S. Navy requirement for trained radio intercept operators in Japanese Katakana communications.



Captain Laurence F. Safford American Naval Officer and Cryptanalyst

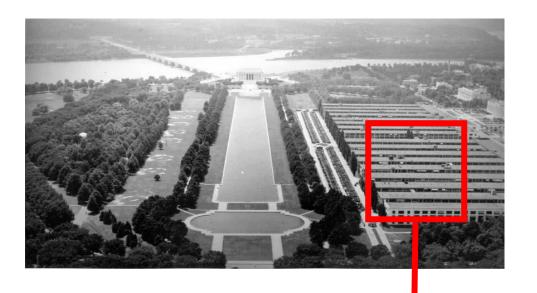
LT Laurence Safford, assigned to OP-20G, established a formal course to train Radiomen in Japanese Katakana Morse code communication.

The course also included radio theory, traffic analysis and the basic principles of cryptanalysis.

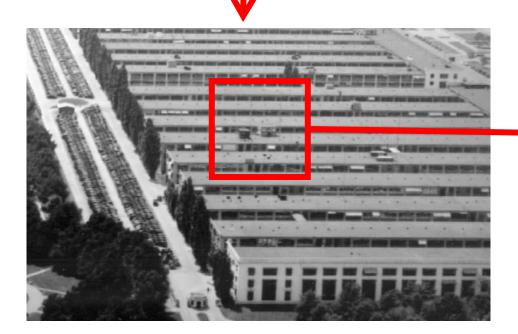
Safford also recruited and trained naval officers to stand desk at OP-20G (Code and Cyber) to break Japanese messages.



On The Roof



To protect sources and methods, formal training was developed and implemented in a specially constructed blockhouse on the roof of the old man Navy building In Washington, D.C.





On The Roof Gang (OTRG) - Schoolhouse

Training was conducted between 1928 and 1941.

25 classes, graduating 176 operators (150 Navy and 26 Marines)

The first class seven student finished out of twenty. All seven were sent to Guam to Open that station in 1929

Two classes, 5 and 15, were made up entirely of U.S. Marines

The forerunners of the U.S. Naval Communications Intelligence efforts



Navy Department Building (center) is where the OTRG classroom was located, circa 1933-34

LT Joseph Wenger and the Japanese Naval OOB

LT Joseph Wenger, Asiatic Fleet Intelligence Officer, conducted Traffic Analysis (TA) on the 1933 Grand Maneuvers. This analysis took about six months.

Wenger discovered the Japanese Naval OOB and produced a 115-page report with considerable detail.

This was the first time OOB was discovered using TA.

His report also revealed the Japanese were aware of American intercept activity and had taken new Communications Security precautions.

All the intercepted communications was provided the radio intercepted operators, later to be known as on the Roof-Gang.



LT Joseph Wenger, pictured as a CAPT

On the Rood Gang Primary Instructors



RMC Harry Kidder
Self taught KataKana
The first OTRG instructor
Responsible for instructing
Class #1, #2, #3, #11, #12, #13



RMC Walter McGregor OTRG #7 (1932) Next to RMC Kidder, McGregor taught the greatest number of OTRG classes #16, #17, #18, #19 and #20

Connection to Corry Station

176 (150 Navy and 26 Marines)

The first class seven student finished out of twenty. All seven were sent to Guam to open that station in 1929

Two classes, 5 and 15, were made up entirely of U.S. Marines

The forerunners of the U.S. Naval Communications Intelligence efforts

Corry Station:

Bldg 511: Kidder Hall (OTRG)

Bldg 512: Gunn Hall (OTRG)

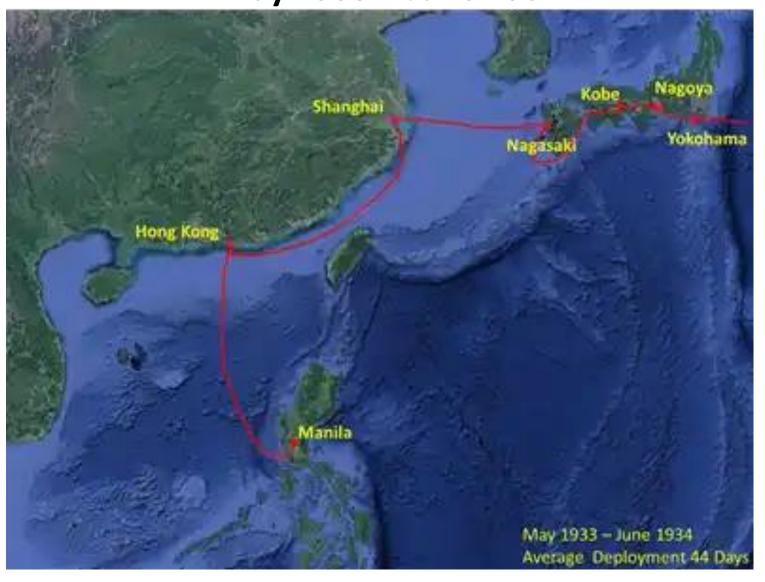
Bldg 513: Daniels Hall (OTRG)

Bldg 514: McGregor Hall (OTRG)

Bldg 3744: Carmichael Hall (OTRG)



Shipboard Radio Intelligence Mission: May 1933 – June 1934



Radio Intelligence Personnel Evacuated from Corregidor via Submarines



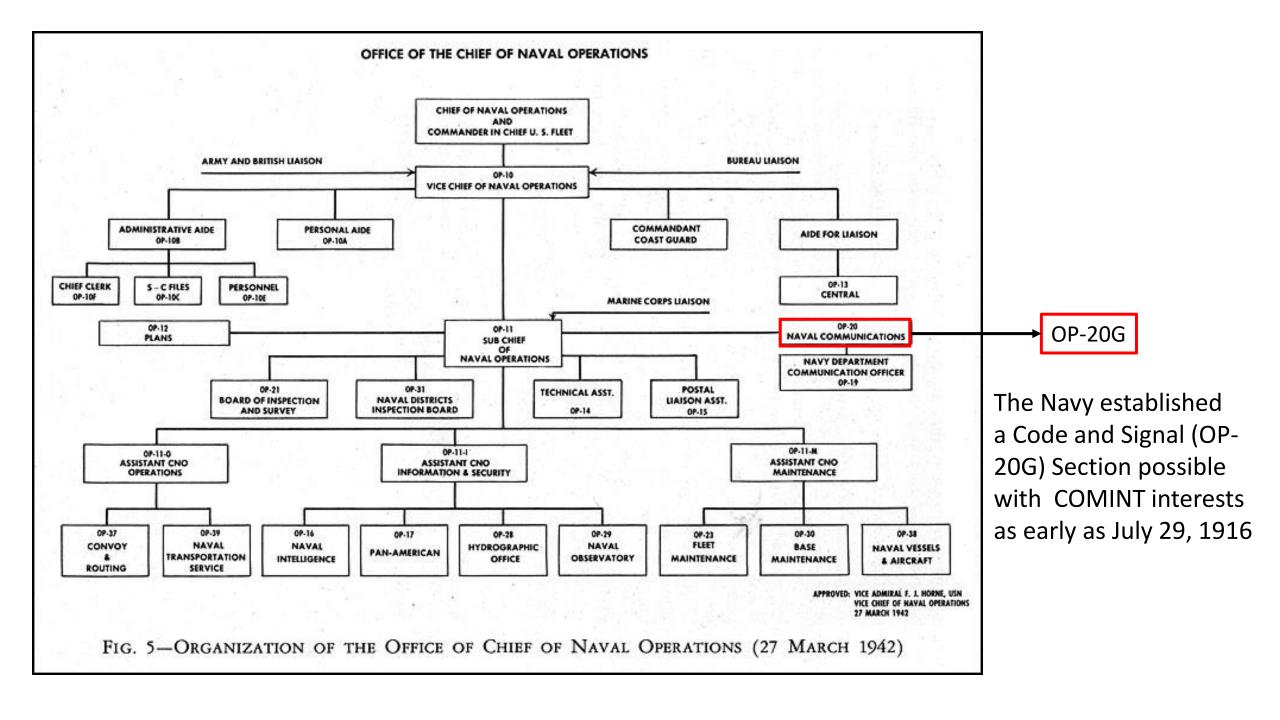
Japanese soldiers take down the American flag at the Old Spanish flagpole on Corregidor Island.



USS Seadragon (SS-194)



USS SNAPPER (SS 185)



Agnes Meyer Driscoll American Cryptanalyst WWI and WWII July 24, 1889 – September 16, 1971

Assigned to OP-20G

In her thirty year career broke:
Japanese Navy manal codes
Reb Book Codes, 1920s
Blue Book Codes, 1930s
Made critical inroads into JN-25 Operational Codes, 1940s

1935, led attack on the Japanese M-1 cipher machine

Early in WWII, part of the U.S. Navy's effort against the German naval Enigma machine



Captain Joseph John Rochefort American Naval Officer and Cryptanalyst May 12, 1900 – July 20, 1976

A major figure in the United States Navy's cryptographic and intelligence operations from 1925 to 1946, Particularly in the Battle of Midway

Expert Japanese linguist and Cryptanalyst Between WWI and WWII

In early 1941, sent to Hawaii to assume OIC of Station HYPO, Pearl Harbor



Rear Admiral Joseph N. Wenger American Naval Officer and Cryptanalyst June 7, 1901 – September 2, 1970

Played a leading role in the development of both the NSG Command and NSA.

One of the most influential figures in American Cryptologic history.

Considered the "Father of Traffic Analysis."

Among the first to recognize the need for centralization within the naval Communication Intelligence (COMINT) establishment.

1949, served as Deputy Direct for COMINT, AFSA and in 1952 became Vice Director of NSA



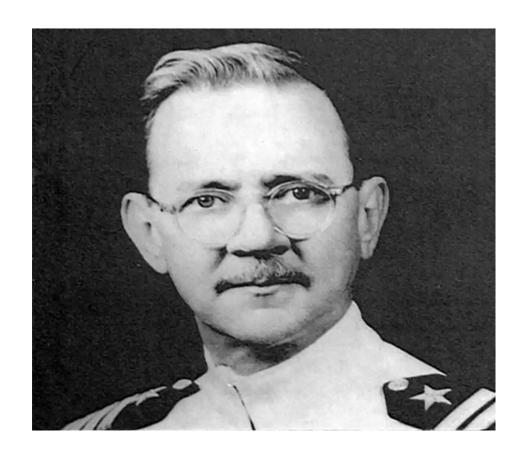
CAPT Thomas H Dyer American Naval Officer and Cryptanalyst "Father of Machine Cryptanalysis"

Directly involved with the interception, decryption and reporting that provided essential elements of information for:

- Battle of Coral Sea
- Battle of Midway
- Shootdown of Fleet Admiral Yamamoto

Post WWII became one of the three primary cryptanalytic trainers for both AFSA and NSA.

Established NSA's college and National Cryptologic School courses for employees.



WWII

Attack on Pearl Harbor December 7, 1941

Morning of December 7, 1941, , U.S. Navy communications station intercepted a message sent by the Japanese government to the Japanese embassy Washington.

Last in a series of 14 messages that had been sent over the previous 18 hours.

Messages were decrypted by a PURPLE analogue machine at OP-20G and translated into English





Doolittle Raid April 18, 1942

16 B-25 bombers lunched from USS Hornet, 700 miles from Japan based on COMINT.

TF encountered several picket boats.

USS Enterprise Intercept Unit: LT Slonim – Language Officer RM1C Howard Cain Intercept Operator RM1C Willie Wesper Intercept Operator RM1C Roy Lehman Intercept Operator RM2C Ray Rundle Intercept Operator

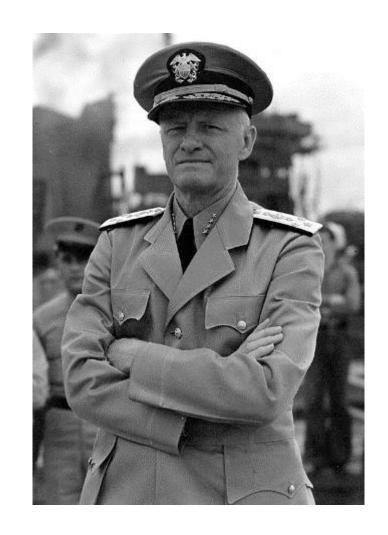




Why Did Adm Nimitz Trust Radio Intelligence?

Examples of Radio Intelligence success:

- January, 1942 First IJN man of war (submarine) attacked and sank
- February 1, 1942 Battle of the Marshals and Gilbert Islands. U.S. Force encountered little resistance by IJN
- April 18, 1942 Doolittle Raid launched early, 700 miles from Japan
- May 4-8, 1942 Battle of Coral Sea IJN needed Port Moresby



Battle of Midway Island June 4-7, 1942

Turning point in the Pacific.

Station HYPO identified Japanese war plans by breaking JN-25(b) code, but could not confirm the identify of AF.

Marines of Midway sent a plaintext message requesting a water barge.

Two day later, JN-25 message was decoded stating AF is short on water, confirming AF was Midway.



The USS Yorktown is hit on the port side by a torpedo launched from a plane off the Japanese aircraft carrier Hiryu during the Battle of Midway on June 4, 1942.

Shoot-down of Fleet Admiral Yamamoto April 18, 1943

On April 14, 1943, Station HYPO decrypted a message containing specific details regarding Yamamoto's tour, including arrival and departure times and locations.









Colonel Rex t. Barber led the mission to shoot down Admiral Yamamoto's aircraft.

WWII Intelligence Failures

Army and Navy COMINT had no central control

- Disorganized
- Technical efforts were either missed or manpower was wasted
- Little to no communication between services
- No coordination
- Power grabs

Post WWII:

May 20, 1949, Armed Forces Security Agency (AFSA) was created COMINT responsibilities moved to Arlington Hall (Army) COMSEC responsibilities move to Nebraska Ave (Navy)

Radio Intelligence (COMINT) Organizations

			During WWII			
Navy OP-20G	Army Signal Intel	FBI	FCC	OSS (CIA)	Office of Censorship	Bletchley Park
			After WWII			
Navy OP-20G	Army ASA	FBI	Air Force USAF Security Service			CGHQ

Both Arm and Navy began WWII in temporary spaces located on the National mall in Washington DC and moved to Arlington Hall and Nebraska Ave respectively.

USAFSS started in Arlington Hall, but moved to Brooks AFB near San Antonio in 1949

Korean War AFSA Intelligence Failures

- Failed to predict North Korean invasion of South Korea
- No Korean Linguist
- No technical data
- Lack of COMINT central control

October 24, 1952, the National Security Agency (NSA) was created by President Truman, memorandum was Top Secret.

Since then NSA is the executive agent for all COMINT (SIGINT) for the nation.

Cold War and Vietnam



First Submarine Direct support Operator August, 1949 USS Cochino (SS 345)



CTC Harris Monroe "Red" Austin

CT3 Edward J. Purcell, USN June 23, 1930 – April 8, 1950

AT1 Frank L. Beckman
AL3 Joseph J. Bourassa
ENS Tommy L. Burgess
AD 1 Joseph H. Danens
LT John H. Fette
CT3 Edward J. Purcell
LTJG Robert D. Reynolds
AN Joseph N. Rinnier
LT Howard W. Seeschaf
AD 1 Jack W. Thomas



CT3 Edward Purcell





^{*} First shootdown of the Cold war

First DESOTO Operation - April, 1962



USS DeHaven (DD 727)

DeHaven Special Operations off Tsingtao (DESOTO)

Note: Tsingto, China is located in the Yellow Sea

Gulf of Token Incident DESOTO mission



USS Maddox (DD 731)



USS Turner Joy (DD 951)



VQ-1 and VQ-2 Vietnam





Carrier based EA-3B and land based EC-121 and EA-3B aircraft providing I&W to strike aircraft over Vietnam.

NSGA Kamiseya, Japan Fire September 24, 1965

Below are the names of the 12 men who lost their life during the tunnel fire:

CTSA Roger "W" Alex CTSA William E. Briley CTSN Wilford D. Cordell CTSN Dennis e. Etzwieler CT3 Archie R. Garofalo CTSA John D. House

LCPL Richard E. McKown LTjg Ernest D. Moody SGT Paul C. Rodrigues CT3 Wayne E. Tower CTSN James K. Whitman CT3 Gregory S. Williams



General Alfred M. Gray, USMC American U.S. Marine Officer and Cryptanalyst June 22, 1928 – Marc 20, 2024

"Cryptologic Warrior"

SIGINT experience of WWII and Korean War restructured USMC cryptologic operations and develop doctrines for SIGINT to support combat units.

Establishment of two units (Europe and Pacific) that formed the nucleus of what is known today as the Marine Cryptologic Support Battalion.

In 1962, lead first Marine Corps ground SIGINT unit to deploy to South Vietnam



Capt James W. Ayers, USMC October 31, 1934 – May 26, 1967

Capt James Ayers, on his third tour to Vietnam, was killed in action on May 26, 1967 during Operation Union II.

He was serving as the Communications Platoon Commander, Headquarters and Service Company, Third Battalion, Fifth Marine Regiment, First Marine Division in Quang Tin, Republic of Vietnam.

Capt Ayers was the first Commanding Officer of Company K, Marine Support Battalion NCTC Corry Station, Pensacola





USS Tanner (AGS 15) 1962

DIRSUP Cryptologists and nuclear scientists aboard USS Tanner monitored Soviet nuclear activities. Novaya Zemlya served as one of the USSR's two primary nuclear test sites, facilitating both air drops and underground testing.





Technical Research Ships (AGTR) – 1960s



USS Oxford (AGTR 1)

USS Jamestown (AGTR 3)





USS Belmont (AGTR 4)



USS Liberty (AGTR 5)

Technical Research Ships (AGTR) – 1960s



USS Banner (AGER 1)



USS Pueblo (AGER 2)



USS Palm Beach (AGER 3)

Other SIGINT Ships, 1960s



USS Atakapa (ATF 149)



USNS Sgt. Joseph E. Muller

USS Liberty (AGTR 5) Incident – June 8, 1967

The USS Liberty incident was an attack on a United States Navy technical research ship, by Israeli Air Force jet fighter aircraft and Israeli Navy motor torpedo boats, on 8 June 1967, during the Six-Day War.



USS Liberty (AGTR 5) Incident – June 8, 1967

The names of the 34 men who gave their lives:

CT3 William B. Allenbaugh, USN

LCDR Philip M. Armstrong, Jr. USN

SN Gary R. Blanchard, USN

Allen M. Blue, NSA Civilian (CT2 Reserve)

SN Francis Brown, USN

CT2 Ronnie J. Campbell, USN

CT3 Jerry L. Converse, USN

CT2 Robert B. Eisenberg, USN

CT3 Jerry L. Goss, USN

CTI Curtis A. Graves, USN (Corry Station barracks 1090)

CTSN Lawrence P. Hayden, USN

CTI Warren E. Hersey, USN

CTSN Alan Higgins, USN

SN Carl L. Hoar, USN

CT2 Richard W. Keene, Jr., USN

CTSN James L. Lenau, USN

CTC Raymond E. Linn, USN



CTI James M. Lupton, USN
CT3 Duane R. Marggraf, USN
CTSN David W. Marlborough, USN
CT2 Anthony P. Mendle, USN
CTSN Carl C. Nygren, USN
LT James C. Pierce, USN
ICFN David Skolak, USN
CTI John C. Smith, Jr., USN

CTC Melvin D. Smith, USN (Corry Station barracks 1082)

PC2 John C. Spicher, USN GMG3 Alexander N. Thompson, Jr., USN

CT3 Thomas R. Thornton, USN

CT3 Philippe C. Tiedtke, USN

LT Stephen S. Toth, USN

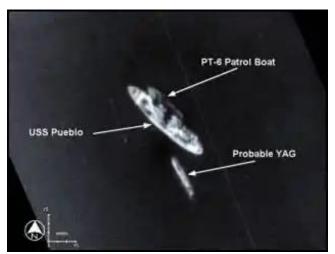
CTI Frederick J. Walton, USN

Sgt Jack L. Raper, USMC

Cpl Edward E. Rehmeyer, USMC

USS Pueblo (AGTR 2) Incident – January 22, 1968











EC-121 BEGGER SHADOW Incident – April 15, 1969





EC-121 BEGGER SHADOW Incident – April 15, 1969

Six and one half hours into the mission, two MIG-21s aircraft from North Korea veered towards the SOJ and headed for the EC-121.

Within 15 minutes, the MIGs and the EC-121 intersected and shot the aircraft down.

The attack was at approximately 80 miles from the North Korean coast.

The date was the birthday of Kim Il-Sung and news of the shoot-down added to the birthday celebrations for the North Korean people.

It is unclear whether the incident was planned for this date.



EC-121 BEGGER SHADOW Incident – April 15, 1969

ADR2 Louis F Balderman, USN
AT1 Stephen C Chartier, USN
AT1 Bernie J Colgin, USN
ADR1Ballard F Connors, Jr, USN
CT3Gary R DuCharme, USN
LT John N Dzema, USN
LT Dennis B Gleason, USN
ATN3Gene K Graham, USN
AEC LaVerne A Greiner, USN
ATR2 Dennis J Horrigan, USN

ATN2 Richard H Kincaid, USN
SSGT Hugh M Lynch, USMC
ADRC Marshall H McNamara, USN
ATR2 Timothy H McNeil, USN
CT3 John A Miller, USN
LCDR James H Overstreet, USN (Pilot)
LT Peter P Perrottey, USN
CT1 John H Potts, USN
AMS3Richard T Prindle, USN
CTC Frederick A. Randall, USN

LTJG Joseph R Ribar, USN
AT1James Leroy Roach, USN
LT John H Singer, USN
CTC Richard E Smith, USN
CT3Philip D Sundby, USN
AT1Richard E Sweeney, USN
LTJG Robert J Sykora, USN
LT Robert F Taylor, USN
CT2 Stephen J Tesmer, USN
ATN3 David M Willis, USN
LTJG Norman E. Wilkerson, USN

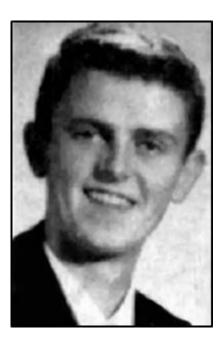
MGySgy Edward R. Storm and CTC Robert S. Gates December 28, 1969

While assigned to Detachment Naval Communication facility in Thuan, both med died when the CH46 they were flying in crashed in Quang Nam Province Vietnam.

Note: CTC Gates is the only Navy Cryptologist whose name is on the Vietnam Memorial Wall.

MGySgt Storm was one of 10 U.S. Marines assigned to the 1st Radio Battalion that was KIA in Vietnam.





MGySgy Storm



Quang Nam Province

USMC 1st Radio Battalion Vietnam, KIA

Name	Date KIA	Age	
Capt James Westley Ayers	May 26, 1967	32	1st USMC CO Corry Station
CPL Stephen Lee Traughber	Sep 10, 1967	21	Bldg 1084 at Corry Station named
SSGT Alfred T. Dwyer	Jan 30, 1968	32	
LCPL Larry Allan Jones	Apr 24, 1968	19	
CPL Walter James Dancer	May 3, 1968	22	
CPL William Ivan Inman	May 3, 1968	22	
SGT Paul Jay Kingery	May 13,, 1968	22	
MGySgt Edward Reynold Storm	Dec 28, 1969	39	
SGT Larry Wade Duke	Mar 10, 1970	22	
SGT Robert Hrisoulis	Jan 21, 1971	20	

USNS Wheeling (T-AGM 8) Operation Hulu Hoop 1971 and 1972

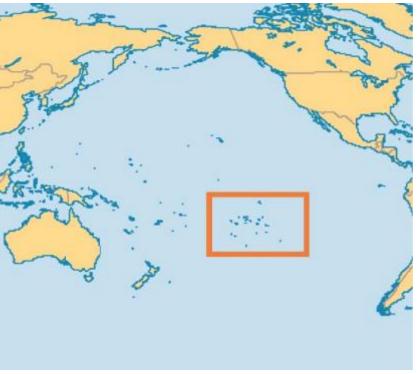
DIRSUP Cryptologists and nuclear scientists aboard USNS Wheeling monitored French nuclear testing in Mururoa, French Polynesian. Also collected was radar intelligence, photo intelligence, and scientific measurements intelligence.

DIRSUP team reported SIGINT Daily SITREPs to CINCPACFLT, Director of the Defense Nuclear Agency, and Henry Kissinger at the White House.



USNS Wheeling (T-AGM 8)



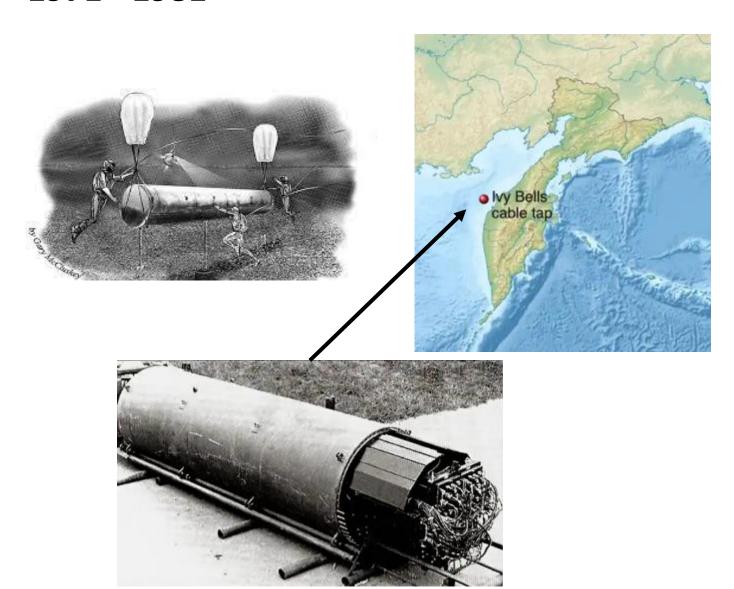


Mururoa Atoll, French Polynesian

Operation Ivy Bells 1971 - 1981



USS Halibut (SSGN 587)



Direct Support AN/SSQ-70 Operational Intelligence Collection System (OICs) SIGINT vans mounted on destroyers during the 1970s





Direct Support QUIC Van – 1960s – 1980s





QUIC (for Quick Intercept Capability) van was developed from a standard M109 series military equipment van, originally designed to fit on a military 2.5 ton truck (commonly known as a deuce and a half, or 6×6).

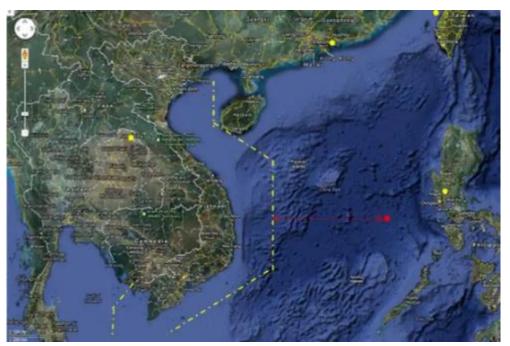
Remembering RG-407 C-2A December 12, 1971

The Crew killed

Rank Name Age Squadron Home of Record LT Vetal C. LaMountain 28 VRC-50 Elmont, NY LTjg Gale V. Woolsey 24 VRC-50 Edwards, IL ABH3 Richard C. Gaynor 21 VRC-50 Oak View, CA AN James M. VanBussum 22 VRC-50 Owensboro, KY

The Cryptologists killed

Rank Name Age PERMDUSTA Home of Record
CTOC Donald E. Dickerson 34 NCS San Miguel Chowchilla, CA
CTR1 Walter R. Woods 25 NCS San Miguel Long Beach, CA
CTM2 Gregory K. Zeller 23 NCS San Miguel Pasadena, CA
CTO3 James M. Coon 20 NCS San Miguel Van Wert, OH
CTOSN Stephen H. Elliott 21 NCS San Miguel Rock Island, IL
CTISN John R. Deremigio 25 NSGA Misawa Logansport, IN





NSGA Sabana Seca Puerto Rico Attack December 3, 1979





NSGA Sabana Seca Puerto Rico Attack December 3, 1979

RM3 Cottie Allen (wounded)
CTO1 John Ball (killed) Driver
CTRSN Allen Bush (wounded)
CTRSN Brad Clark (wounded)
CTT2 Cindy Edwards (wounded)
CTM3 Joe Key (wounded)
CTRSN Clifton Looney
CTM2 Robert Minnick



RM3 Drusilla Penderghest
CTRSA Monique Ritter (wounded)
CTOSN Rich Sauter (wounded)
CTO3 Sandy Seaton (wounded)
CTRC Warren C. Smith (wounded)
CTTSN Ken Toman
RM3 Emil White (killed) Behind the Driver
RM3 Debra Whitehurst (wounded)



CTM3 Gil Zuback

EA-3B (Ranger-12) January 25, 1987

The list of the seven men who gave their lives:

- LT Stephen H. Batchelder (Intelligence Evaluator)
- LCDR Ronald R. Callander (Navigator)
- AT2 Richard A. Herzing
- LT Alan A. Levine (Pilot)
- CTI3 Patrick R. Price*
- LT James D. Richards (Junior Evaluator)
- CTI3 Craig H. Rudolf*



Attack on USS Stark May 17, 1987

37 Sailors were killed.
Below are those future IWC Sailors who killed

RM2 Jerry Boyd Farr EW3 Charles T. Moller EW3 Joseph P. Watson

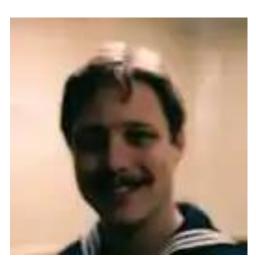


EW Joseph Watson





EW Charles Moller



RM2 Jerry Boyd Farr

Attack on USS Cole October 12, 2000

17 Sailors killed and 39 injured.

Below are those future IWC Sailors killed

ITSN Timothy Lee Gauna EW2 Kevin Shawn Rux EW3 Ronald Scott Owens



Hainan Island, China Incident April 1, 2001







Hainan Island, China Incident April 1, 2001

VQ-1 Crew:

LT Pat Honeck, USN LT Shane Osborn, USN LTJG John Comerford, USN LTJG Regina Kauffman, USN LTJG Ricky Payne, USN LTJG Jeff Vignery, USN ADCS Nick Mellos, USN AT2 Dave Cecka, USN AT2 Scott Guidry, USN AT2 Ramon Mercado, USN AD2 Wendy Westbrook, USN AE3 Steve Blocher, USN CTT2 Jason Hanser, USN CTTSN Bradford Borland, USN

NSGA, Misawa, Japan Crew:

LT Marcia Sonon, USN
ENS Richard Bensing, USN
CTO1 Shawn Coursen, USN
CTI1 Josef Edmunds, USN
CTI2 Brandon Funk, USN
CTR2 Kenneth Richter, USN
CTI3 Rodney Young, USN
CTRSN Jeremy Crandall, USN
Sgt. Richard Pray, USMC





War on Terrorism

CTT1 Steven P. Daugherty, USN Killed In Action May 16, 1979 – July 6, 2007

Assigned to NIOC Norfolk and deployed to a U.S. Navy SEAL team operating in Iraq.

Mission to provide timely and effective cryptologic support (I&W).

On July 6, 2007, CTT1(SW) Daugherty was returning from a mission with is team when their vehicle struck an IED, killing him and two others members of his unit.

Daughter leaves behind a loving family and young son.

His work earlier that day played a significant role in preventing insurgents from killing coalition forces.



CTM3 Matthew J. O'Bryant, USN Killed In Action September 20, 2008

Assigned to NIOC Maryland.

CTM3 O'Bryant paid the ultimate sacrifice on September 2008 while performing a cryptologic mission in Pakistan.

He was killing during the bombing of the Marriott Hotel in Islamabad, Pakistan.

*NIOC Maryland is now Cryptologic Warfare Group-SIX



CTRCS David "Blake" McLendon, USN Killed In Action September 21, 2010

Assigned to Naval Special Warfare Group 2 Support Activity in Norfolk, Virginia.

Nine military personnel were killed and three other injured when the UH-60 Black Hawk helicopter they were flying in crashed in Zabul province in Southern Afghanistan.

Three Navy SEALS and one Naval Special warfare support technician are among the dead. Five U.S. Army air crew member also perished in the crash.

LT Brendon Looney, 29 CTRCS David McLendon, 30 SpecWarOp PO2 Adam Smith, 26 SpcWarOP PO2 Denis Maranda, 24



CTR1 Michael J. Strange, USN Killed In Action August 6, 2011 Callsign Extortion 17

SGT Alexander J. Bennett

SPC Spencer Duncan (youngest onboard)

CWO Bryan J. Nichols

CWO David R. Carter (oldest onboard)

SSG Patrick D. Hamburger

TSgt John W. Brown

SSgt Andrew W. Harvell

TSgt Daniel L. Zerbe

PO1 (SEAL) Darrick C. Benson

CPO (SEAL) Brian R. Bill

PO1 (SEAL) Christopher G. Campbell

IT1 Jared W. Day

MA1 (EXW) John Douangdara

Navy SEAL Dog "Bart"

CPO (SEAL) John W. Faas

CPO (SEAL) Kevin A. Houston

Lt. Cmdr. (SEAL) Jonas B. Kelsall

MCPO (SEAL) Louis J. Langlais

CPO (SEAL) Matthew D. Mason

CPO (SEAL) Stephen M. Mills

CPO Nicholas H. Null

PO1 (SEAL) Jesse D. Pittman

SCPO (SEAL) Thomas A. Ratzlaff

CPO (SEAL) Robert J. Reeves

CPO (SEAL) Heath M. Robinson

PO2 (SEAL) Nicholas P. Spehar

CTR1 Michael J. Strange

PO1 (SEAL) Jon T. Tumilson

PO1 (SEAL) Aaron C. Vaughn

SCPO Kraig M. Vickers

PO1 (SEAL) Jason R. Workman

One Special Operations Dog



LT Thomas C. Fouke, USN Killed In Training January 17, 2012

LT Thomas C. Fouke, an Information Warfare
Officer assigned to an East Coast SEAL unit during
physical training.

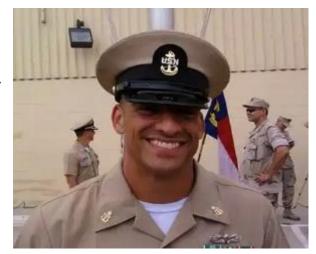
** The designator title Information Warfare Officer changed to Cryptologic Warfare Officer.



CTTC (IDW/SW) Christian Pike, USN
Killed In Action
March 13, 2013

On March 31, 2013, Chief Pike passed away in Landstuhl, Germany due to head wound injuries received while providing intelligene support in support of Naval Special Warfare and Afghanistan Commando operations.

Chief Pike enlisted in august 2001 and was assigned to Naval Warfare Support Activity-1 in San Diego.





CTICS (IW/EXW) Shannon Kent, USN Killed In Action January 16, 2019

On January 16, 2019 Senior Chief Kent was killed in Manbij, Syria along with three others while supporting Combined Joint Task Force – Operation Inherent Resolve.

Senior Chief Kent left behind a husband and two sons, an 18 month old and 3 year old.

Senior Chief Kent was assigned to CWA-66 when she was TAD.

At the time of her death, she was the only female cryptologist to be killed in action.





CTT1 (IW/AW) Robin Collins, USN Killed In Action July 18, 2021

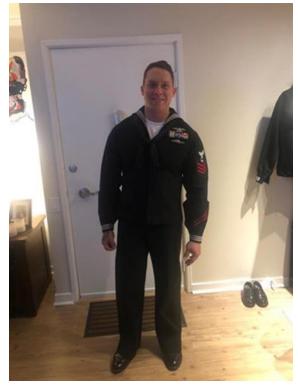
CTT1 Robin Nicole Collins gave the ultimate sacrifice on July 18, 2021 while on duty a shelter roof and chimney collapsed on her during heavy weather.

She was assigned to C6F and TAD/TDY when she was killed.



CTR1 (IW/EXW) Andrew James Vestal, USN Killed In Training September 25, 2023

CTR1 (IW/EXW) Andrew Vestal died while screening for the Joint Special Operations Command Intelligence Brigade.



Sgt. Jacob M. Durham, USMC Killed In Action February 9, 2025

Sgt. Durham was killed while conducing a Intelligence Surveillance and Reconnaissance mission over the Philippines. He was assigned to the 1st Radio Battalion.







Oceanography/Meteorology Officers (1800/780X)



- Oceanographers enhance operational commanders' warfare capabilities by understanding and forecasting the environmental conditions likely to impact military operations
- Deliver timely and accurate understanding of the battlespace from the bottom of ocean to the outer reaches of space
- Responsible for charting the ocean floor and maintaining the military's primary master clock, which
 provides the most precise time interval in the world and drives the Global Positioning System
- Sea duty may include small team detachments aboard U.S. and foreign navy surface combatants and survey vessels, aircraft carrier or large amphibious ship, Strike Group staff, or deployed Joint Task Force staff at every grade.
 - Shore tours include assignments at major production commands, forecast or reach back centers of excellence, major headquarters and Joint commands, Office of Naval Research, Naval Research Labs, and various overseas assignments
- Oversee AG who serve as specialists in weather



Cryptologic Warfare Officers (1810/7810s)



- Deliver information to decision-makers
- Defend and exploit networks to capitalize on vulnerabilities in the information domain
- Understand sensors and weapons, strategy and tactics, as well as national systems' capabilities and limitations.
- Roles include:
 - Collecting, processing, analyzing and reporting real-time signal intelligence
 - Conducting computer network operations
- Develop and acquire cutting-edge exploitation and defense systems
- Plan and deliver IW effects during exercises and operations
- Oversee CTs who serve as specialists in cryptology
- Rotate between sea, shore and educational tours
- Serve at one of the National Security Agency Cryptologic Centers
- Serve aboard ships, submarines and aircraft
- Support Naval Special Warfare



Information Professional Officers (1820/782X)

- Navy's Cyberspace Defensive Operations and Communications Officers with SME in networks, computer systems, satellite communications, cyber defense, information & knowledge management, and C2.
- Support of maritime operations ranging from coordination with Allies, to humanitarian assistance and disaster relief, to defense of the Nation against terrorism, and to combat operations.
- Help translate requirements of combat forces into capabilities that effectively employ C2 at the tactical, operational, and strategic levels of war, under all conditions.
- Responsible for the maintenance, operation, and development of cutting-edge cyberspace systems, as well as global telecommunications and space systems that have been designed to operate under the most adverse conditions, from the deep ocean environment to outer space.
- Technically adept, as well as effective communicators, able to translate complex technical issues into
 operationally relevant information for Naval and Joint Commanders.



Intelligence Officers (1830/783X)



- Know your enemy!
- Intelligence officers provide accurate assessments on enemy capability and intentions, in sufficient time for the commander to take effective measures at strategic, operational or tactical level
- Derived from technical and human penetration of the enemy and through a deep understanding of the adversary acquired through analytical rigor and expertise.
- Counter the Enemy's Operational & Information Security by aggressively pursuing a wide range of traditional and non-traditional operations.
- Provide All-Source & Predictive Analysis
- Understand & Communicate the Threat



Cyber Warfare Engineer (1840)



- Highly-technical computer scientists and computer engineers
 Provide defense against attacks and deliver tactical advantages
- Develop tools and techniques in the information environment that ensure situational awareness
- Serve as a key part of the Information Warfare Community in its mission to gain a deep understanding of the inner workings of adversaries and developing unmatched knowledge of the battlespace during wartime
- Cyber Warfare Engineers serve in challenging roles that are designed to leverage their expertise in Computer Network Operations. CWEs serve at a shore commands such as Navy Cyber Warfare Development Group and Cyber Warfare Activity-67.



Maritime Space Officer (1870)



- Navy's space operations professionals, tasked with integrating joint space capabilities into maritime plans and operations.
- These officers fill key space-oriented billets at fleet and component commands within Maritime
 Operations Centers (MOC), Warfighting Development Centers (WDC), US Space Command, the
 intelligence community as well as at the Information Warfare Type Command.



Maritime Cyber Warfare Officer (1880)



- Experts in cyberspace operations focused on both Offensive Cyberspace operations (OCO) and Defensive Cyberspace operations (DCO)
- Conduct operational and leadership tours within the Cyber Operation Force (COF) and Cyber Mission
 Force (CMF), including tours on National Mission Teams, Cyber Mission Teams, Cyber Protection Teams,
 and Cyber Support Teams
- Conduct exploitation analyst and integrated on net (ION) training as well as serve as team leaders, planners, and operations officers



Chief Warrant Officer/ Warrant Officer (784X)



- Provides expertise in full-spectrum cyber operations through the planning, directing, and execution of offensive and defensive operations.
- They may serve as, but are not limited to serving as, Cyber Operations Officers, Cyber Mission Commanders, Interactive On-Net (ION) operators, and staff billets.



Aerographer's Mate (AG)



- Collect, measure, and analyze the elements of the physical environment (land, sea, air, space) and land/sea interface
- Synthesize oceanographic and meteorological data for observation and measurements to produce forecasts and warnings in support of safety of flight and navigation, as well as Naval/Joint Operations and missions
- Expertise in Hydrography, Geospatial Information and Services, datum issues, and Tactical Decision Aids
- Predict environmental impacts to friendly and enemy platforms, sensors, and weapon systems
- Develop actionable recommendations to tactics, techniques, and procedures that fully exploit environmental parameters, mitigate risk, and enable decision superiority across all warfighting areas and strategic and enabling capabilities
- Distribute data internally and externally to aircraft, ships, and shore activities in direct support of afloat units, fleet/joint staffs, or combatant/operational commanders.



Cryptologic Technicians Interpretive (CTI)



- Navy's experts in linguistics (including Arabic, Chinese, Korean, Persian-Farsi, Russian and Spanish) and deciphering information in other languages.
- Responsibilities include:
 - Collecting and analyzing foreign language communications of interest
 - Transcribing, translating and interpreting foreign language materials
 - Reporting highly technical information of strategic and tactical importance to fleet commanders and national intelligence agencies
 - Providing cultural and regional guidance in support of Navy, Joint Force, national and multinational needs
 - Operating sophisticated state-of-the-art electronic radio receivers, recording devices, computer terminals and associated peripherals in the communications signals environment
 - CTIs serve on shore and a variety of air, surface subsurface platforms and Special Warfare units



Cryptologic Technicians Collection (CTR)



- Navy's experts in intercepting signals of all types.
- Their responsibilities include:
 - Analyzing and reporting on communication signals using state-of-the-art computers, specialized computer-assisted communications equipment, video display terminals and electronic/magnetic tape recorders
 - Exploit signals of interest to identify, locate and report worldwide threats
 - Providing tactical and strategic signals intelligence, technical guidance and information warfare support to surface, subsurface, air and special warfare units.
- CTRs serve on shore and a variety of air, surface, subsurface platforms and Special Warfare units.



Cryptologic Technicians Maintenance (CTM)



- Navy's experts in the preventive and corrective maintenance of sophisticated cryptologic equipment, networks and systems.
- Their responsibilities include:
 - Installing, testing, troubleshooting, repairing or replacing cryptologic networks, physical security systems, electronic equipment, antennas, personal computers, auxiliary equipment, digital and optical interfaces and data systems
 - Configuring, monitoring and evaluating Information Operations (IO), Information Warfare (IW) systems and Information Assurance (IA) operations
 - Maintain fleet cryptologic permanent and carry-on direct support systems required in special land, sea surface and subsurface operations
- CTMs serve on shore and a variety of surface, subsurface platforms and Special Warfare units



Cryptologic Technicians Technical (CTT)



- Navy's experts in airborne, shipborne and land-based radar signals.
- Their responsibilities include:
 - Operating electronic intelligence-receiving and direction-finding systems, digital recording devices, analysis terminals and associated computer equipment
 - Operating systems that produce high-power jamming signals used to deceive electronic sensors and defeat radar-guided weapons systems
- CTTs serve on shore and a variety of air, surface, subsurface platforms and Special Warfare units.



Cyber Warfare Technician (CWT)



- Navy's experts in communication network defense and forensics.
- Their responsibilities include:
 - Monitoring, identifying, collecting and analyzing information
 - Providing computer network risk mitigation and network vulnerability assessments and incident response/reconstruction
 - Providing network target access tool development
 - Conducting computer network operations worldwide in support of Navy and Department of Defense missions
 - Detecting, protecting, reacting and responding to threats against Navy networks
- CWTs serve ashore and Special Warfare units.



Information Systems Technician (IT)



- Manage communication operations and networks aboard Navy vessels
- Manage email systems, special intelligence and information warfare systems
- Establish, monitors and maintains RF communication systems
- Operates and maintain global satellite telecommunications systems
- Transmit, receive and store all incoming and outgoing messages
- Design, install and operate WANs, computer systems and associated devices
- Perform network sysadmin, maintenance and manage network security
- Install applications, troubleshoot user problems and providing training and assistance with use of computer hardware and software
- Write programs to collect and distribute data for a variety of applications
- Perform diagnostics and data recovery operations and maintaining logs
- ITs are serve ashore, aboard ships and aboard submarines.



Intelligence Specialist (IS)



- Assist in every phase of the planning, collection, processing, analysis, and dissemination of intelligence in support of all warfare domains, both ashore and afloat
- Prepare and present intelligence products; provide input to and receive data from organic and nonorganic sources; maintain files, libraries, and databases