# 2011 Cryptologic History Symposium

# Cryptology in War and Peace: Crisis Points in History

### THURSDAY, 6 October 2011

0700 - Registration Opens (Lobby)

<u>0800-0830</u> — Welcome and Day 1 Opening Address (Auditorium)

Moderator: Dr. William J. Williams, NSA/CSS Center for Cryptologic History

**KEYNOTE 1: LtGen Robert E. Schmidle, Jr., Deputy Commander, U.S. Cyber Command** "Understanding the Value of History in Intelligence"

<u>0830-0845</u> — BREAK

<u>0845-1000</u> – PANEL 1: "Pioneers in Cryptology" (Auditorium)

Moderator: Dr. William J. Williams, NSA/CSS Center for Cryptologic History

Dr. Steven Bellovin, Columbia University

"Frank Miller and the Invention of the One-Time Pad"

Betsy Rohaly Smoot, Center for Cryptologic History

"Fighting the Dammed Huns': The World War I Experience of Cryptologic Pioneers Colonel Parker Hitt and Genevieve Young Hitt"

Dr. Chris Christensen, Northern Kentucky University

"Lester Hill Revisited"

1000-1015 — BREAK

1015-1145 - PANEL 2A: "British COMINT History" (Auditorium)

Moderator: David Kahn, author, Cryptologic Historian, and former NSA Historian Scholar-in-Residence

Dr. Jim Reeds, Institute for Defense Analyses

"Editing the 'General Report on TUNNY"

Dr. Richard J. Aldrich, Professor, University of Warwick

"GCHQ-The Problems of Researching Open Secrets"

Tony Comer, Departmental Historian, Government Communications Headquarters

"History of Sources for British SIGINT History"

1015-1145 — PANEL 2B: "Early Modern Cryptology" (Classroom)

Moderator: Dr. Timothy J. Mucklow, NSA/CSS Center for Cryptologic History

Dr. Benedek Lang, Budapest University of Technology and Economics

"Towards a Social History of Early Modern Cryptography"

Erin Higgins, Department of Defense

"Humanism, Magic, and Cryptology in the Renaissance"

Dr. Nicholas Gessler, Duke University

"The Nicolas Bion Cipher Disk and Schotti's 1680 'Rotularium'"

1145-1300 — LUNCH (Foyer)

Moderator: Dr. David A. Hatch, NSA/CSS Center for Cryptologic History

**KEYNOTE 2: Dr. Allen Weinstein, 9th Archivist of the United States** 

"Spies and Lies: NSA in Documents"

### <u>1300-1430</u> — (concurrent sessions)

PANEL 3A: "Sources for Cryptologic History" (Auditorium)

Moderator: Dr. William J. Williams, NSA/CSS Center for Cryptologic History

Dr. Craig Bauer, York College of Pennsylvania, and NSA Historian Scholar-in-Residence

"Open Problems in Cryptologic History"

Gene W. Anderson, University of California – San Diego

"What Leo Marks Never Knew: Coding Clues and Cipher Mismanagement during World War II"

Dr. Gerhard F. Strasser, The University of Pennsylvania

"Late 18th-Century French Encrypted Diplomatic 'Letters of Recommendation"

Dr. N. Katherine Hayles, Duke University

"The Cryptographic Grille and Contemporary Literature"

### PANEL 3B: "The Challenges of Technology in History" (Classroom)

### Moderator: Dr. Jeffrey Yost, University of Minnesota

Dave Tompkins, Columnist for The Wire

"Vocoders in Music and Film"

Dr. Niels Jørgensen, Roskilde University

"How Encryption Became an Open Technology"

Elonka Dunin, Independent Scholar

"Kryptos-The Decades-Old Enigma at Langley"

Dr. Jeffrey Yost, University of Minnesota

"U.S. Computer Security Research and Standards (1965-1985)"

### 1430-1445 - BREAK

<u>1445-1545</u> — (concurrent sessions)

### PANEL 4A: "The FBI and ULTRA" (Auditorium)

Moderator: Dr. Larry Valero, University of Texas at El Paso,

and former NSA Historian Scholar-in-Residence

Dr. Raymond J. Batvinis, Federal Bureau of Investigation (ret.)

"ULTRA and the FBI's Double Agent Program"

Dr. John F. Fox, Federal Bureau of Investigation

"OSTRICH-Or How Not to Stick One's Head in the Sand"

### PANEL 4B: "Investigating the Voynich Manuscript" (Classroom)

### Moderator: David P. Cooley, NSA/CSS Center for Cryptologic History

Klaus Schmeh, Independent Scholar

"New Research on the Voynich Manuscript"

Dr. Greg Hodgins, University of Arizona

"Radiocarbon Dating and the Voynich Manuscript

### <u>1545-1600</u> — BREAK

# <u>1600-1730</u> — PLENARY 1: "Pioneering SIGINT in the Early Days of the Vietnam War: Challenges and Opportunities" (Auditorium)

### Moderator: Sharon Maneki, NSA/CSS Center for Cryptologic History

Discussion with panelists including in-theater cryptologic veterans such as General Alfred M. Gray, Jr., USMC (ret.); MSgt Stephen Crum, USAF (ret.); and Dr. Tom Glenn, civilian cryptologist with longest service in Vietnam.



### 2011 Cryptologic History Symposium

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### FRIDAY, 7 October 2011

<u>0700</u> – Registration Continues (Lobby)

<u>0800-0830</u> – Day 2 Opening Address (Auditorium)

Moderator: Dr. William J. Williams, NSA/CSS Center for Cryptologic History

**KEYNOTE 3: David P. Cooley, NSA/CSS Center for Cryptologic History** 

"Voices from the Past: CCH's Oral History Collection"

0830-0845 — BREAK

<u>0845-1000</u> — (concurrent sessions)

PANEL 5A: "Codes and Ciphers in the Civil War and Reconstruction" (Auditorium)

Moderator: Barry D. Carleen, NSA/CSS Center for Cryptologic History

David Shanet Clark, DeKalb County Public Schools

"Instant Text Messages of the 1860s: President Lincoln's Telegraph Office and the Origins of Modern War Signals Communication"

Tim Carver, Trine University

"David Homer Bates: A Telegrapher for Lincoln"

Cheryl Heckler, Miami University

"The Hayes-Tilden Election, The Ciphers Dispatches and *The New York Tribune*'s Benchmark for Code Breaking"

PANEL 5B: "Naval COMINT and the Advent of War" (Classroom)

Moderator: Dr. Kent Sieg, NSA/CSS Center for Cryptologic History

Dr. Timothy J. Mucklow, NSA/Center for Cryptologic History

"Station CAST: Tip of the Lance"

Dr. Peter Donovan, University of New South Wales

"Breaking Japanese Naval Communications, March-May 1942"

Dr. Chris Christensen, Northern Kentucky University

"The U.S. Navy's Correspondence Course in Elementary Cryptanalysis"

1000-1015 — BREAK

1015-1145 - PANEL 6: "Communications as Sword and Shield: Defense and Offense On-the-Air and On-Line" (Auditorium)

Moderator: Dr. David A. Rosenberg, Institute for Defense Analyses

Dr. John Ferris, University of Calgary, and former NSA Historian Scholar-in-Residence

"Operationalizing Communications Security for Offensive Advantage: British Naval Cryptography and Cryptology in World War I"

Dr. Jonathan Winkler, Wright State University

"Who's in Charge?: The Larger Context of the Fight between U.S. Navy Intelligence and the Federal Communications Commission over Access to SIGINT in World War II"

Mircea Munteanu, Woodrow Wilson International Center for Scholars

"Cooperation between the Soviets and East European Intelligence on Aspects of Scientific and Technical Espionage and Counterespionage"

Dr. Michael Warner, U.S. Cyber Command

"Organizing U.S. Cyber Command and Operations Since the 1960s"

1145-1300 — LUNCH (Foyer)

Moderator: Dr. David A. Hatch, NSA/CSS Center for Cryptologic History

**KEYNOTE 4: Professor Mary Tarantino, Department of Theater.** 

The Ohio State University

"The Camouflage Project: Cryptology in a Performance/Exhibition"

1300-1400 — (concurrent sessions)

PANEL 7A: "COMINT and the Great War" (Auditorium)

Moderator: Betsy Rohaly Smoot, NSA/CSS Center for Cryptologic History

Andrew Smoot, Department of Defense (ret.)

"Gumbinnen: The Battle That COMINT Didn't Win"

Dr. Thomas Boghardt, U.S. Army Center for Military History

"The Zimmermann Telegram Revisited: Interception, Publication, and Effect"

PANEL 7B: "Organization for SIGINT Activity" (Classroom)

Moderator: Gary Grantham, NSA/CSS Center for Cryptologic History

Richard L. Bernard, NSA/CSS Center for Cryptologic History

"The Forefront for Foreign Missile and Space Intelligence: A History of the Defense Special Missile and Aerospace Center (DEFSMAC)"

Dr. Laszlo Ritter, Institute of History of the Hungarian Academy of Sciences

"The First Among the Soviet Satellites: Hungarian Cryptology Between 1956 and 1989"

1400-1415 — BREAK

1415-1545 — PANEL 8: "Cryptology in the Interwar Years" (Auditorium)

Moderator: Dr. David A. Hatch, NSA/CSS Center for Cryptologic History

Matt Zullo, Department of Defense

"Harry Kidder - A Transformational Cryptologic Giant"

John F. Dooley, Knox College

"1929-1931: A Transition Point to US Cryptologic History"

Dr. Brian R. Sullivan, Independent Scholar

"In the Kingdom of the Blind, Sometimes a Blind Man Can Be King': Italian Cryptology under the Fascist Regime, 1922-1940"

Dr. John Ferris, University of Calgary, and former NSA Historian Scholar-in-Residence

"SIGINT and the 1922 Chanak Crisis"

1545-1600 - BREAK

1600-1730 - PLENARY 2: "War, Arlington Hall, and AFSA: Memories of

Cryptology in the 1940s and 1950s" (Auditorium)

Moderator: William Kvetkas, NSA/CSS Center for Cryptologic History

Roundtable discussion of firsthand accounts regarding life and work at Arlington Hall during World War II through the last days of the Armed Forces Security Agency (AFSA). Panel will include Art Hausman, Ann Caracristi, Don Borrmann, Selmer Norland, and Jack Harney.

# THE NATIONAL CRYPTOLOGIC MUSEUM WILL OPEN 1000 to 1200 ON 8 OCTOBER EXCLUSIVELY FOR CONFERENCE ATTENDEES.





The Enigma (at left)

The Korean War Exhibit (at right)





The Vietnam War Exhibit (at left)