



## 2015 Cryptologic History Symposium

“A Century of Cryptology”

Preliminary Program

(subject to change)

◆ **Thursday 22 October 2015** ◆

Kossiakoff Center, JHU Applied Physics Lab

*Registration opens at 0700*

**OPENING PLENARY 0800-0915**

**Keynote speaker: *Richard H. Ledgett, Jr.***  
**Deputy Director NSA (Invited)**

**Parkway Chorale**

*Break 0915-0945*

**SESSION 1 (Concurrent Sessions) 0945 – 1115**

**1A World War II – Cryptanalytic Issues I**

*How Effective Was Tunny Cryptanalysis at*

*Bletchley Park?*

*Jim Reeds*

*German Mathematicians and Cryptology during World War II*

*Sandy L. Zabell*

**1B Pre-20th Century Cryptology**

*Use of Techniques of Cryptology in Real Life Situations in 17th and 18th Century Central Europe* *Benedek Lang*

*Simple Code and Unknown Hazards: Alexander Fraser's Journey to the Illinois Country* *Daniel A. Papsdorf*

*Growth of the Telegraph During the Civil War*  
*Timothy A. Carver*

*Confederate Cryptology: States' Rights & Laissez Faire*  
*Robert S. Stewart*

**1C Cipher and Crime**

*FBI Codebreakers: History and Highlights of the FBI's Cryptanalysis and Racketeering Records Unit*  
*Daniel B. Olson*

*Unsolved Cryptograms from Criminals and Crime Victims*  
*Klaus Schmeh*

*The Zodiac Ciphers: What Do We Know and When Do We Stop Trying to Solve Them?* *David Oranchak*

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**LUNCH 1115 – 1230**

**Speaker 1145 - 1215**

**“Technology ... the Key to NSA Success” *John H. O'Hara***

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**SESSION 2 (Concurrent Sessions) 1230 – 1400**

**2A World War II – Cryptanalytic Issues II**

*The Japanese Coral Cipher Machine* Chris Christensen

*Calculating Hall's Weights* Jared Antrobus

**2B Declassification of the Friedman Papers**

*The National Security Agency and the William Friedman Collection* David Sherman

*Processing the Friedman Release*

*Sarah Parsons, Robert Simpson, Sheryl J. Shenberger*

*The Friedman Papers at the Marshall Library* Jeffrey S. Kozak

**2C The Historical Value of Signals Intelligence**

*HUMINT versus SIGINT in the Cyber Age* David Gioe

*The Hidden Hand* Gene Poteat

*"Manna for Moscow"* Benjamin B. Fischer

**Break 1400 – 1430**

**SESSION 3 – Plenary 1430 – 1600**

**Looking Back 100 Years – The Friedman Legacy**

*Elizebeth Friedman and Law Enforcement*

*Barbara Osteika*

*National Security and Career Concerns: Legendary Cryptanalyst Elizebeth Friedman's Qualms on the Eve of World War II* G. Stuart Smith

*The Friedman-Hagelin Connection and NSA Cryptologic "Back Doors"* Stephen Budiansky

*My Grandparents, William and Elizebeth Friedman*

*Chris Atchison*

◆ **Friday 23 October 2015** ◆

Kossiakoff Center, JHU Applied Physics Lab

**Registration opens at 0700**

**SESSION 4 (Concurrent Sessions) 0800 – 0930**

**4A World War II - The Use of Signals Intelligence**

*The RADO Case and the Hunt for Clandestine Emitters in Switzerland during World War II* Christian Rossé

*Nimitz Bets the Ranch: The Commander's Role in Intelligence*

*J. Paul Pope and Richard H. Ector*

*The Wolf at the Door: An Analysis of Army Prewar Plans, SIGINT, "Joint" Regional Intelligence, and the FCC in the Second World War Japanese-American Internment Decision* Paul Thomsen

#### **4B World War I – Early Application of SIGINT**

*Knowing the Enemy's Plans: The Battle of Tannenberg and German Radio Intercepts on 25 August 1914*

*Andrew H. Smoot*

*Birth of the Russian Radio-Intelligence on the Baltic Sea in World War I*

*Ivo Juurvee*

*Deployment of SIGINT Assets to Support AEF Military Operations*

*Betsy Rohaly Smoot*

*Signals Intelligence, Sound Ranging, and Target Acquisition*

*John Ferris*

#### **4C Cyber Issues**

*The Emergence of Computer Security Discourse at RAND (1958-1970)*

*Tom Misa*

*The Case for (and against) Dual EC DRBG*

*Stephen Checkoway and Matthew Green*

*Crisis Stability, the Security Dilemma, and Cyberspace Operations*

*Marty Busse*

**Break 0930 - 0945**

#### **SESSION 5 (Concurrent Sessions) 0945 – 1115**

##### **5A Issues in Asian Cryptology**

*Disinformation in Historic China*

*Ralph D. Sawyer*

*The Sino-Japanese War of 1894-1895 Decrypted*

*Gregory J. Nedved*

##### **5B World War I – Women, Spies, and Mysteries**

*Advance to the "Fighting Lines": The Changing Role of Women Telephone Operators in France During World War I*

*Jill Frahm*

*Spies in America: German Spies & MI-8 in World War I*

*John Dooley*

*A 100-Year-Old Unsolved Cipher*

*Craig Bauer*

##### **5C World War II – From Bletchley to Burma**

*The Restoration of Bletchley Park – Current Status and Future Objectives*

*Joel Greenberg*

*Oral Histories of Americans at Bletchley Park*

*David P. Cooley*

*The Neglected Theater: SIGINT in the China, Burma, India Theater of War*

*David A. Hatch*

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**LUNCH 1115 – 1230**

**Speaker 1145 – 1215**

**John C. "Chris" Inglis**

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**SESSION 6 (Concurrent Sessions) 1230 – 1400**

**6A World War II – Machines**

*Restoring SIGABA* *Paul E. Orman*

*Repairing and Restoring Enigmas* *Jim Oram*

**6B Are They Solvable? Some Unsolved Ciphers**

*Cracking Unsolved Historical Ciphers and Challenges*  
*George Lasry*

*The World's Oldest Unsolved Cipher* *Craig Bauer*

*The New Clue about Kryptos* *Elonka Dunin*

**6C British SIGINT from Mazzini to Post-World War II**

*The Mazzini Affair and the (Temporary) Closure of British SIGINT*  
*Marty Busse*

*The Secret Admiral: Researches in the Life of Hugh Sinclair, Director GC&CS, 1923-1939*  
*James A. Bruce*

*Designing a Postwar SIGINT Organisation for the UK*  
*Tony Comer*

**Break 1400 - 1430**

**SESSION 7 – Plenary 1430 – 1600**

**The Legacies of Gordon Welchman and Alan Turing**

*Gordon Welchman, Bletchley Park's Architect of Ultra Intelligence*  
*Joel Greenberg*

*Alan Turing* *Sir Dermot Turing*

**◆ Saturday 24 October 2015 ◆**

National Cryptologic Museum

**Self-guided tours 0900-1200**

**0930 – 1100** *Guided tour*

**1000 – 1130** *Workshop on sources for cryptologic history*

*Bring your research problems/questions*

*Meet in Library*

*Sign up at registration on Thursday or Friday.*

**1000 – 1130** *Museum History and Treasures*

*MAGIC room, no sign-up needed*

