

Incidental Paper

**Seminar on Command, Control,
Communications and Intelligence**

Guest Presentations, Spring 1984:

Richard S. Beal, Stuart E. Branch, Leo Cherne, Hubert
L. Kertz, David McManis, Robert A. Rosenberg, James
W. Stansberry, W. Scott Thompson

**Program on Information
Resources Policy**

Harvard University
Center for Information Policy Research
Cambridge, Massachusetts

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Communications, and Intelligence**

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The responsibility for any sins of omission or commission nonetheless remains entirely ours.

John F. McLaughlin
Anthony G. Oettinger

Introduction

The papers in this volume are lightly edited transcripts of presentations and discussions ordered in the sequence in which they took place. The informality of oral exposition interrupted by questions or comments has been preserved. Only pauses and repetitions have been eliminated and tripping sentences have been smoothed. Substance has, as far as possible, been left unaltered. All guests but one made their presentations in open forum, forewarned that neither classified nor proprietary matters are appropriate in a university classroom. Unlike the others, the remarks of Hubert L. Kertz are from a taped interview.

Sadly, we report that Richard Beal died in November 1984 after an extensive hospitalization. The text, happily, reflects the spirit of the feisty, exuberant speaker of springtime. We are grateful to Brenda Reger and Ron Hinkley for their assistance in preparing Richard Beal's remarks for publication.

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Glossary

ADCOM	Aerospace Defense Command	INTELSAT	International Telecommunications Satellite Organization
ARC	airborne radio communications	IR	infrared
ASW	antisubmarine warfare	Joint STARS	Joint Surveillance and Target Attack Radar System
ASAT	antisatellite	KGB	Committee for State Security (Soviet Union)
AUTOVON	Automatic Voice Network	MILSTAR	Military Strategic Tactical and Relay System
AWACS	Airborne Warning and Control System	NASA	National Aeronautics and Space Administration
BMD	Ballistic Missile Defense	NATO	North Atlantic Treaty Organization
C ³ I	Command, Control, Communications, and Intelligence	NCA	National Command Authority
CEO	Chief Executive Officer	NCMC	NORAD Cheyenne Mountain Complex
CIA	Central Intelligence Agency	NEACP	National Emergency Airborne Command Post
CINADCOM	Commander-in-Chief, Aerospace Defense Command	NMCC	National Military Command Center
CINCEUR	Commander-in-Chief, Europe	NOFORN	No Foreign Access (a security classification)
CINCLANT	Commander-in-Chief, U.S. Atlantic Command	NORAD	North American Aerospace Defense Command
CINCMAC	Commander-in-Chief, Military Air Command	NSA	National Security Agency
CINCNORAD	Commander-in-Chief, North American Aerospace Defense Command	NSC	National Security Council
CINCPAC	Commander-in-Chief, Pacific	OMB	Office of Management and Budget
CINCSAC	Commander-in-Chief, Strategic Air Command	OSD	Office of the Secretary of Defense
CNN	Cable News Network	OSS	Office of Strategic Services
CPU	central processing unit (of a computer)	OTH	over-the-horizon
CRT	cathode ray tube (often used to refer to the video screen of a computer terminal)	PTT	Postal, Telephone, and Telegraph authority
DARPA	Defense Advanced Research Projects Agency	RDT&E	research, development, test, and evaluation
DCI	Director of Central Intelligence	ROCC	Regional Operations Control Center
DDR&E	Directorate of Defense Research and Engineering	ROEs	rules of engagement
DIA	Defense Intelligence Agency	SALT	Strategic Arms Limitation Talks
EMP	electromagnetic pulse (nuclear)	SLBM	submarine-launched ballistic missile
ESD	Electronic Systems Division	SOP	standard operating procedure
FAA	Federal Aviation Administration	STS	Space Transportation System (the space shuttle)
FCC	Federal Communications Commission	TAC	Tactical Air Command
GCI	ground controlled interception	TCI	Telephone Communications of Iran
GLCM	ground-launched cruise missile	TDY	temporary duty
ICBM	intercontinental ballistic missile	VOA	Voice of America
		WARC	World Administration Radio Conference