Incidental Paper

Seminar on Command, Control, Communications and Intelligence

Guest Presentations — Spring 1981:

William O. Baker	James M. Osborne
John H. Cushman	David C. Richardson
Richard D. DeLauer	Charles Rose
B. R. Inman	Charles W. Snodgrass

Program on Information Resources Policy

Harvard University   Center for Information
Policy Research

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Introduction

The presentations in the first volume of this series (Guest Presentations — Spring 1980) described command, control, communications and intelligence principally from the perspective of national-level policy making in the Executive Branch of the U.S. Government.

In this volume, the perspective is broadened to encompass the Congress, combatant commands, defense contractors and technological innovators. All guests made their presentations in open forum, forewarned that neither classified nor proprietary matters were appropriate in a university classroom. The presentations and discussions were taped.

The papers in this volume are lightly edited transcripts of these 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.

Meeting Military Needs for Intelligence Systems
— James M. Osborne

Osborne's background includes tactical development for the U.S. Army Signal Corps and 19 years with RCA, in which he rose to Vice President and General Manager of the Government Communications and Automated Systems Division. His career culminated with his Senior Vice Presidency at E-Systems, where he served as Group Executive for the company's Production Electronics Group and General Manager of the ECI Division. Thus Osborne has a wide purview over the many facets of industry's task in supplying intelligence systems to the military. I asked him to talk about what he sees as effective or ineffective in the C³I world from the supplier's vantage point.

The Convergence of C³I Techniques and Technology
— William O. Baker

Dr. Baker rose to his present eminence via responsibility for Bell Labs' renowned research capability, whose discoveries have led to some fundamental modern technology: transistors, superconductors, lasers. As a technologist, he shares the view that the very existence of technology — the digital computer, for example — inevitably dictates new ways of doing things, in C³I as elsewhere.

A Major Contractor's View of C³I
— Richard D. DeLauer

Since Dr. DeLauer made the remarks that follow, he has become Undersecretary of Defense for Research and Engineering. He speaks here, though, from the point of view of industry, based on a 23-year career at TRW seeing the C³I business from the viewpoint of one of the west coast's principal suppliers of military systems to the Armed Services. Visitors during Dr. DeLauer's presentation, and participants in what became an energetic three- (four-, five-) way discussion, were Robert R. Everett, President of the MITRE Corporation, and MITRE's Chief Management Scientist, Dr. Norman Waks.

C³I and the Commander: Responsibility and Accountability
— John H. Cushman

We have been hearing of technological miracles, and of the need to straighten out the administrative and procurement processes. General Cushman has spent his career as a commander and staff officer, culminating in major commands in Vietnam and Korea, as well as stateside command of the Army's Combined Arms Center and a tour as Commandant of the Command and General Staff College. He tells us what C³I looks like from the viewpoint of the hierarchy responsible for doing the job to which those technological and operational miracles are intended to contribute.

Funding C³I
— Charles W. Snodgrass

During his 15-year career Charles Snodgrass has moved from the Office of Management and Budget through the congressional staff to a cabinet-level office, gaining a view of the Federal budgetary process which is both broad and deep. During that time he has been associated with many aspects of C³I acquisition, including a successful strategy to protect Air Force interests in defeating an automatic data processing bill in the Senate, and development of means of Congressional oversight of the US intelligence community during his years as a staff assistant to the House Appropriations Committee's Defense Subcommittee. Out of his sometimes controversial experience with Federal bread-and-butter issues, he gives us a behind-the-scenes tour of what is involved in managing funding programs through the approval process.

The Uses of Intelligence
— David C. Richardson

Admiral Richardson spent his career in the Navy in a variety of command and staff positions, including command of the U.S. Sixth Fleet in the Mediterranean and deputy command of the Pacific Fleet. Since his retirement he has been acting as a consultant in electronic technology applications, serving on the Defense Intelligence Review Panel, several panels of the Defense Science Board, the Navy Space Panel of the National Academy of Sciences, and the C³I panel of the Naval Research Advisory Committee. So his viewpoint combines the field commander's perspective of tactical warfare with the outlook of someone engaged in prodding Washington people into doing the right thing.

Congress and C³I
— Charles Rose

Representative Rose enlarges our understanding of the Congressional viewpoint from the perspective of a Congressman interested in information technologies. He is Chairman of the Policy Group on Information and Computers, active in computer and television service to the House as a member of the House Administration Committee, and of special interest to us, he is Chairman of the Subcommittee on Oversight and Evaluation of the House Permanent Select Committee on Intelligence. He covers aspects of the intelligence community's use of automatic data processing, the C³I interface and its relationship to organizational arrangements within the Defense Department, and the role of Congressional oversight of intelligence.

Issues in Intelligence
— B.R. Inman

The single speaker among the previous year's guests who rejoined us in 1981, Admiral Inman had just been appointed to his new position after serving jointly as Director of the National Security Agency and Chief of the Central Security Service. He chose to skirt what he called the "personal memoir" of the previous year in favor of a discussion of the principles and problems of intelligence, particularly as they relate to command and control, and some of the central issues facing intelligence today.

GLOSSARY

ACO	Administrative Contracting Officer
ADP	automated data processing
AEGIS	Air Force: a predecessor of JTIDS program Navy: surface-borne electronic warfare system
AFCEA	Armed Forces Communication Electronic Association
AFSC	Air Force Systems Command
ARMAC	Army Materiel Acquisition Study
AT&T	American Telephone and Telegraph Co.
AUTODIN	Automatic Digital Network
AUTOSEVOCOM	Automatic Secure Voice Communications System
BETA	Battlefield Exploitation and Target Acquisition System
CDRL	Contract Data Requirements List. Specifies deliverable data under a contract.
CEO	Chief Executive Officer
CEWI	combat electronic warfare intelligence
CINCPAC	Commander-in-Chief, Pacific
CNO	Chief of Naval Operations
COC	Command Operations Center
COMSEC	communications security
C³I	command, control, communications and intelligence
DAR	Department of the Army
DARCOM	US Army R&D organization, Fort Monmouth, NJ
DCA	Defense Communications Agency
DDR&E	Director, Defense Research and Engineering (now Undersecretary of Defense Research & Engineering)
DMZ	Demilitarized Zone
DOD	Department of Defense
DSB	Defense Science Board
EDS	Electronic Data Systems Corporation
EIA	Electronic Industries Association
ESS	Electronic Switching System
FLTSAT	US Navy Fleet Satellite Communications System
HUD	Department of Housing and Urban Development
HUMINT	human intelligence (data collected by or from human sources)
ICBM	intercontinental ballistic missile
IFF	identification, friend or foe

IOC	initial (or interim) operational capability
IR	industrial relations (also infrared)
JCS	Joint Chiefs of Staff
LANTCOM	Atlantic Command
LEASESAT	leased satellite communications facilities
LIFO	last in, first out
LRIP	low rate initial production
LSI	large scale integration
LST	landing craft
MBA	Master of Business Administration
MEGO	"my eyes glaze over"
MIFASS	US Marine Corps artillery fire and tactical air control system
MIL-STD	military standard
MOPS	mega-operations per second
MRASM	medium-range air-to-surface missile
MTBF	mean time between failures
NASA	National Aeronautics and Space Administration
NATO	North Atlantic Treaty Organization
NORAD	North American Air Defense Command
NSA	National Security Agency
NSC	National Security Council
OMB	Office of Management and Budget
PABX	Private Automatic Branch Exchange
PFIAB	President's Foreign Intelligence Advisory Board
PSAC	President's Science Advisory Committee
PTT	postal, telephone and telegraph agencies
P&L	profit and loss
QRC	quick response capability
RADCOM	Research and Development Command
RAF	Royal Air Force (United Kingdom)
RCA	Radio Corporation of America
RDF	rapid deployment force
RDJTF	Rapid Deployment Joint Task Force
ROK	Republic of Korea
R&D	research and development
SAC	Strategic Air Command

SEC	Securities and Exchange Commission
SECDEF	Secretary of Defense
SPO	System Program Office
SSG	Space Systems Group
S/W	Software
TACAMO	"Take Charge And Move Out" — acronym for airborne communications link with strategic submarine force
TACC	Tactical Air Control Center
TACFIRE	US Army tactical fire control system
TASES	Tactical Airborne Signal Exploitation System
TOC	Tactical Operations Center
USAFE	Headquarters, US Air Force Europe
USDR&E	Undersecretary of Defense for Research and Engineering
VLSI	very large scale integration
VHSIC	very high speed integrated circuit
WWMCCS	World Wide Military Command and Control System