AMERICAN UNIVERSITY

CENTER FOR TECHNOLOGY AND ADMINISTRATION

ABSTRACTS OF SPEECHES

and

BIOGRAPHIC SKETCHES

of

SPEAKERS

for

THE INSTITUTE ON MANAGEMENT INFORMATION

AND DATA TRANSFER SYSTEMS

October 18-21, 1965

Wednesday A.M.

Lt. Col. Thomas J. Freaney, Jr., USAF
Defense Supply Agency

A B S T R A C T

"THE DEFENSE SUPPLY AGENCY's MANAGEMENT INFORMATION SYSTEM"

This presentation will emphasize user experience in the development, implementation and maintenance of a Management Information System designed to retain a centralized control over a decentralized type of operation. In effect it will follow the purpose of this session - "Retaining control through effective management of Information and Data Transfer Systems".

The presentation will show through a series of 35 MM slides (30), the development processes that took place in establishing the present DSA Management Information System and the use that is being made today of the products of this system. These products being produced from the Data Bank htat has been established and associated with the System.

Progress in development will be shown through the use of a manual and later a mechanized Management Information System.

One of the important products of the MIS will be portrayed - a Performance Rating System. This system is designed to give a relative standing to each field activity with the objective of creating competition between these activities and thereby resulting in the improvement of management and management techniques.

B I O G R A P H I C S K E T C H

Temple University, Philadelphia, Pennsylvania - AB - 1938
Ohio State University Law School, Columbus, Ohio - 1940-1941,
Columbus Law School of Catholic University, Washington, D.C. LLB-1953

Lt. Col. Freaney was selected to become junior executive with the Firestone Tire & Rubber Company upon graduation from Temple University, from which position he went on leave of absence to attend Ohio State University Law School. He entered military service as an Aviation Cadet, Army Air Corps, in September, 1941. Upon receiving his wings in April, 1942, he was assigned as an advanced flying instructor in the Air Training Command. Until February, 1946 he served in various flying instructor assignments, most of the time as an instructor in the Central Instructors School at Randolph Field, Texas. In February, 1946 he was assigned to the Air Materiel Command as a Branch Chief in

Lt. Col. Thomas J. Freaney Jr. (cont'd)

the Engineering Division. He was relieved from extended active duty and returned to civilian life in November, 1946, where he established an importing concern bearing his name. In January, 1951 during the Korean conflict, Colonel Freaney was recalled to active duty and was assigned as Assistant Executive Officer with the Office of the DCS/Comptroller at HQ USAF. During this tour of duty he completed his legal education in off-duty hours and was admitted to the Bar for both the State of Virginia and the District of Columbia. In January, 1955 he was assigned as Chief of Internal Audits for the European District of the USAF Auditor General at Rhein Main, Germany. Upon his return to the CONUS in September, 1958 he was assigned to the Directorate of Plans and Programs at HQ Air Force Logistics Command at Wright-Patterson Air Force Base, Ohio. He was selected for the initial increment of officers assigned to HQ Defense Supply Agency in February, 1962 where he is currently assigned as Chief of the Management Information System Control office of the Comptroller.

In non-military activities, he is currently serving on the Board of Directors of two corporations.

Wednesday A. M.

William H. Whitaker, Director of Product Management
Industrial Data-Processing Division
Control Data Corporation

A B S T R A C T

"MESSAGE SWITCHING AND REMOTE DATA PROCESSING - OR TOTAL MANAGEMENT INFORMATION SYSTEMS"

The presentation will deal with implementing a computer controlled message switching system and the up-grading of such a system to a Total Management Information System. Problems associated with creating a "Data Base" for the system will be discussed. A management information system presently under implementation at Control Data for internal corporated use will be used as an example.

B I O G R A P H I C S K E T C H

Education: B.S.E.E. - Auburn University, Graduate Studies at University of Arizona.

Previous Experience: Project Engineer, Kaiser Aircraft and Electronics, Applied Science Representative, I.B.M.

Previous Positions with Control Data: Joined Control Data as Sales Engineer in January 1960, District Manager, July 1961, Product Manager, June 1964, and Present Position, January 1965.

Model 210-COC - w chart by display code - messages -

Murray Green, Auerbach Corporation

A B S T R A C T

THE DATA COMMUNICATION SUBSYSTEM

ONE ELEMENT OF A MANAGEMENT INFORMATION SYSTEM

There are basically three major elements in an effective Management Information System. The first is data processing equipment, which includes high speed computer systems and remote located input/output terminal equipments. A second basic element are the files of information. The third and perhaps most overlooked element are the communication links for data transfers. The overall communication network associated with a Management Information System can be considered as a subsystem. A corporation in order to gain the competitive and managerial advantages possible with a well planned Management Information System must recognize the problems and possible solutions associated with data transfers over communication links.

This presentation will discuss those areas that are related to a nation-wide corporation getting their data communication subsystem off the ground and into implementation reality. To accomplish this, the areas of concern are management planning, system design, equipment selection and system operation. In addition, the teamwork that is essential between communications and data processing operations for making the effective Management Information System a reality is an important item for consideration. The discussion will also stress how a corporation can get the most out of the communication subsystem.

B I O G R A P H I C S K E T C H

Spent three years in the U.S. Air Force teaching electronics. Employed by IBM as customer engineer before entering Temple University where I received a degree in Physics in 1957. From 1957 to 1963, was at RCA where I was involved in logic design, large-scale communication system studies and new techniques in the area of digital data links. Since 1963 I have been a member of AUERBACH's Technical Staff. My main area of activity at AUERBACH has been in the field of data communications for both government and commercial groups. I have been involved in the Autodin program for DCA. This involvement included preparation of specifications, evaluation of proposals and monitoring prime contractors in the areas of reliability and software. Recently, I have done system studies for data communication systems for many large scale nation-wide commercial organizations. He is a member of the IEEE and of Sigma Pi Sigma, the Physics Honor Society.

Wednesday Luncheon Speaker

Dr. George P. Cressman, Director
U.S. Weather Bureau

ABSTRACT

THE NATION'S WEATHER SERVICE -- AN INFORMATION PROCESSING SYSTEM

The Weather Bureau can be viewed as a system having the function of acquiring, processing, and distributing information. It is not a closed system, since it depends on other countries for acquiring data, other agencies for communicating it, and on private business for distributing the results.

The basic nature of the meteorological problem is so ideally suited to treatment by electronic data processing equipment that the Weather Bureau has been active for the last ten years in converting from manual to automatic methods of data processing. The principal components of the system, the problems encountered, and the progress achieved are described. Limiting conditions to progress are the state of the art in meteorology and in electronic data processing equipment, as well as the necessity for keeping the cost-benefit ratio of services at a very low figure.

BIOGRAPHIC SKETCH

Born in West Chester, Pennsylvania, Dr. Cressman received his bachelor's degree from Pennsylvania State College in 1941, his master's degree from New York University in 1942, and his doctorate from the University of Chicago in 1949.

He served in the U.S. Army as Meteorolgist from 1941-1946. After leaving the Army, Dr. Cressman served as a Research Assistant in the Department of Meteorology at the University of Chicago. From 1949-1954 he was in a civilian capacity as Consultant with the Air Weather Service at Andrews Air Force Base in Washington, D.C. In 1954 he assumed responsibility for establishing the Joint Numerical Weather Prediction Unit. This special forecast unit, sponsored jointly by the Weather Bureau, Air Force, and Navy poineered in the field of operational forecasting procedures by numerical weather prediction techniques. When the Weather Bureau's Office of National Meteorological Services was established in 1964, he was named Director of this Office and was recently appointed Acting Director of the U.S. Weather Bureau following the recent reorganization in the Department of Commerce.

Wednesday P.M.

A.R. Bumsted, Special Studies Staff
Advanced Systems Division
System Development Corporation

A B S T R A C T

TIME-SHARING AS A MANAGEMENT TOOL

A brief description of the theory of a general purpose time-shared computer system will be presented with emphasis on those features of time-sharing that are applicable to management needs. Some programs now operational in the SDC system will be used as illustrations of information retrieval and the man-machine communication capability under time-sharing.

B I O G R A P H I C S K E T C H

Mr. Bumsted is a computer systems specialist in the Special Systems Department of the System Development Corporation. He is also the Washington representative for SDC's Time-Sharing System and coordinator of its use at the Falls Church office.

He is a member of the Association for Computing Machinery, presently serving as chairman of the Education and Professional Development Committee for the Washington, D. C., chapter and is also the chairman of the National ACM Professional Development Committee.

Wednesday P.M.

A.E. Speckhard, General Manager
Computer Sciences Corporation

A B S T R A C T

TIME-SHARING SYSTEMS AND THE SMALL COMPUTER INSTALLATION

The prospect for the existence of large centrally located time-sharing installations operating as "computer utilities" poses some significant management decisions for the manager of a small computer installation. The major question I would pose might be considered by many to be a matter of "life or death". Namely, in the face of being able to obtain computing services from a "computer utility", is it economically justified to operate a small scale computer installation. I contend that this is a question which is meaningful to ask today. I further contend that a careful review of the situation will provide an answer in favor of the "computer utility".

A. What is a "computer utility"?
B. Who is a user of computers?
C. What are some of the true costs associated with the operation of a computer installation?
D. What change in attituted and techniques will be required to successfully use a "computer utility"?
E. What advantages should be anticipated from the use of "computer utility" services?
F. How will the "computer utility" affect the future of the computer oriented professions?

(The bulk of the discussion will involve an examination of the above listed points in the light of the question posed in the initial paragraph.)

B I O G R A P H I C S K E T C H

Mr. Speckhard graduated from the University of Michigan in the spring of 1954 with an A.B. degree in Math and Philosophy. In 1954, he joined Gilfillan Bros. Inc. of Los Angeles, California who were at that time involved in quided missile weapons work.

From 1958 through 1962 Mr. Speckhard was employed by IBM in Applied Sciences activities on the West Coast, responsible for much of the early thinking and lobbying for "Direct Coupled Systems" oriented to machine room automation and remote access capabilities.

In late 1962 he joined Bellcomm, Inc. in Washington, D.C. (a subsidiary of AT&T) an organization which provided systems engineering support to NASA's Apollo programs. At Bellcomm Mr. Speckhard was

responsible for management of their Data Processing activities. During his stay with Bellcomm the monitor system for a direct coupled configuration of an IBM 7040-7044 computer was developed which is capable of providing on-line time-sharing access to the computer from remote sources. This system is presently in operation in Washington, D.C.

In June of this year Mr. Speckhard joined Computer Science Corporation as Assistant General Manager of the Northwest Division and has since been promoted to the position of General Manager. In this capacity he is responsible for the supervision of a staff of approximately 170 people supplying computational support to the Atomic Energy Commission and its contractros in Richland, Washington, as well as our normal commercial activities in the Pacific Northwest. The Northwest Division has the responsibility for the planning effort within CSC leading to a "computer utility" service.

Wednesday P.M.

Thomas W
Thomas Gorman, Jr. Product Administrator for
Time-Sharing Systems
Data Processing Division
I B M Corporation

A B S T R A C T

INTRODUCTION TO TIME-SHARING

The background and development of Time-Sharing Systems will be discussed. The relationship of Time-Sharing, conversational facilities, remote computing and multiprocessing will be described as well as their role in applications currently under consideration.

B I O G R A P H I C S K E T C H

A graduate of American University Mr. Gorman specialized in the fields of Mathematics and Statistics.

His areas of specialization in IBM have been military command of control systems and large scale scientific systems. Currently he is responsible for the introduction into the market of IBM's System 360 Model 67 Time-Sharing System.