

~~SECRET~~ 1858

OFFICE  THE DIRECTOR

( ) Lundahl

( )

( )

( )

( )

( )

( )

( ) Office of Director Files

( ) Admin. Staff Files

( ) Dispatch to \_\_\_\_\_

*File*  
*R&D*

STAT

SECRET

JOINT CHIEFS OF STAFF, PHOTOGRAPHIC AND SURVEY BRANCH

WORKING PARTY FOR COORDINATION AND STANDARDIZATION  
OF INTELLIGENCE GROUND PHOTOGRAPHIC  
PROCEDURES AND TECHNIQUES

MINUTES

6 & 7 NOVEMBER 1958, MEETING

AT


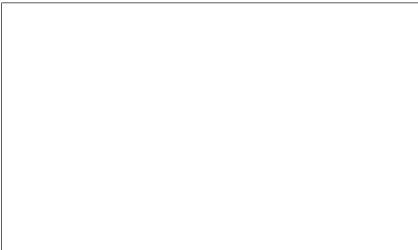
ROCHESTER, NEW YORK

SECRET

SECRET

The regular meeting of the Working Party was held in the Rochester, New York area on 6 and 7 November 1958, inclusive.

The members attending were as follows:

JCS	- Mr. Harry Coggin	
USN	- CDR. D. L. Soper Mr. V. Van Keuran Ch/WO C.C. Herring Mr. E. D. Grienke Mr. S. Domeshek Mr. E. B. Nowicki	USN PIC USN PIC BuAER Photo BuAER Photo Nav. Tra. Dev. Cntr. Nav. Tra. Dev. Cntr.
USMC	- Lt. Col. H. W. Bollman Capt. O. G. Candler	USMC G-2, HQMC MCEB, MCDC
USA	- Lt. Col. R. M. Luman Maj. F. Buffalano Mr. J. Glidden	AIB, Ft. Holabird AIB, Ft. Holabird AIB, Ft. Holabird
USAF	- Lt. Col. D. C. Searles Maj. C. E. Chambers Maj. R. S. Marshall	AFDRD-ER-1 AFDRQ-RN HQ. ARDC
FBI	- Mr. F. Webb	
CIA	-  Mr. A. C. Lundahl 	APD APD OCR/GR OCR/GR OCR/GR PIC PIC PIC PIC PIC PIC PIC PIC PIC

50X1

50X1

SECRET

SECRET

The meetings began on the morning of 6 November 1958, at the [redacted] [redacted] Following a welcoming address by the [redacted] Vice President, the morning session was given over to a tour of the plant and briefings on current [redacted] production and development projects. Beyond the usual production of cameras and related equipment [redacted] is doing production of several defense items including a tank gun sight and precision parts for the "Sidewinder" missile. The plant demonstrated a high capability in the production of very precise machine parts and assemblies.

50X1  
50X1  
50X1  
50X1  
50X1

The formal business meeting of the Working Party was held in the afternoon. Mr. A. C. Lundahl (CIA/PIC) the regular Chairman conducted the meeting.

50X1

The meeting opened with the reading of a welcoming letter from [redacted] President of [redacted]. The next order of business was the introduction of new members, these included: CDR. D. Soper, Lt. Col. H. Bollman, Lt. Col. R. Luman, Maj. F. Buffalano, [redacted]

50X1

50X1  
50X1

Lt. Col. Searles briefed the Working Party on the DOD-AF organization for the accomplishment of Photographic Research and Development. He traced the command channel for Photo R&D from DOD R&D to Gen. Wilson, USAF to parrallel components with developmental planning under Gen. Strandhan and R&D under Gen. Demmler. Gen. Demmlers command breaks down further to include Tactical Systems development, Strategic Systems development and Electronic and Reconnaissance Systems development.

Col. Searles office falls under the Electronic and Reconnaissance System Division and has cognizance over Reconnaissance R&D taking place at ARDC, Rome Air Force Base, and to some extent appropriate projects at ATIC and the Cambridge installation.

Col. Searles further identified Mr. G. B. Wareham of the office of the Secretary of Defense as the appropriate focal point for all R&D in the Reconnaissance and Intelligence Photo fields. Col. Searles noted that Mr. Wareham serves under Dr. Foote the Assistant Secretary for R&D and in that capacity could be of great value in the coordination and support of appropriate projects and proposals.

Mr. Lundahl outlined the past history of the Working Party for the benefit of the new members. He recounted the need for exchange of knowledge and ideas in the ground photography field and how from that need arose the original committee. The development of the group was traced through its formalization under a JCS PSS charter and some of its benefits and accomplishments were outlined.

SECRET

SECRET

Maj. Marshall, (ARDC) outlined the functions and responsibilities of the ARDC in the Photo and Recon fields. He traced the flow of requirements for R&D work and presented the administrative and command procedures that implement the fulfillment of a requirement. Maj. Marshall then outlined the R&D responsibilities of those Air Force Centers having an active part in the Recon & Photo Development efforts. ARDC at Andrews Field has responsibility for the development of Air Photographic Equipment and its appropriate support laboratory equipments. Rome AFB has the prime responsibility for R&D in Photo Intelligence equipment to accomplish the efficient analysis of collected photography, and the Cambridge unit while primarily interest in Infra Red equipment does some photo R&D in the IR field.

Mr. Lundahl reviewed the development of Ground Photography as an intelligence source and paid attention to some of the recent major gains that have been made through photographic collection.

50X1

50X1

Mr. Lundahl further outlined the efforts of the CIA/PIC in support of the Air Space Sub-group of the Committee against Surprise Attack. PIC has prepared a study on the utility of various collection techniques in the prevention of surprise attack and it was reported that Reconnaissance photography was an excellent source of strategic warning, a fair source of tactical warning, and a generally unsuitable source of early warning data.

[redacted] (CIA/PIC) presented an outline of problems and progress in Electronic Rectification. He presented the development of photo reconnaissance equipment to the point in development where the photo image is no longer a portion of a plane but rather a section of a spheroidal surface. On such a curved surface the problems of scale and surface geometry become very complex and the optical rectification of such an image to planiform state is impossible. As a result of this optical deadend CIA has under development on electronic device that will provide accurate rectification through electronic scan coupled with a mechanical conversion of the form of the scanned image.

50X1

[redacted] (CIA/PIC) discussed another solution to the problem of rectification where in the precise positions of a multitude of points on the photo image are measured in reference to a known point. The measurement is accomplished on a Mann Comparator or other device equipped with electronic readout. All measured data is then received in punched tape form and is fed through an electronic computer to achieve mathematical solutions for each points true position. The true position data (in tape form) may then be fed to a Benson Lehner Coordinate Plotter to achieve a graphic point or line presentation of data to any desired scale.

50X1

SECRET

SECRET

A brief report by [ ] described the Richardson Film Viewer. A scanning device for 35mm and 70mm films, the equipment has high quality optics and provides slow film travel from .01" to 3" per second. A power driven change of magnifications from 5X to 10X or reverse and image rotation make the instrument a fine tool for film scanning. The addition of an available electronic X & Y readout heads an electronic attitude or azimuth readout mechanism provides a component compatible with the most sophisticated of date reduction systems.

50X1

[ ] reported on the Wild Stereo Microscope as modified for Photo Interpretation - a four inch working distance and X & Y axis verniers make it a precision tool of tremendous utility for use with the yield of high acuatance photo systems. He also mentioned CIA investigations in the field of image enhancement and promised a report on results when work has progressed to the point when conclusive evidence is available.

50X1

Mr. Van Keuran, (USN/PIC) reported the delivery of the USN PIC desk top camera calibrator and indicated the beginning of a Navy effort to collect callibration data on all camera used by Navy for Ground Photo collection.

Mr. E. Grienke, (USN BuAER R&D) proposed that the working party prepare a staff study type of document on the imperative need for the submission of supplemental information with Ground Photographs - the study to be used as a means of gaining more stature for this recommended procedure. Mr. Lundahl pointed an objection on procedural grounds stating his opinion that such action was beyond the authority of the Working Group. He acknowledged the value of the desired information and suggested consideration for other means of impressing the need and utility of the required data on the field collector.

Mr. J. Glidden, (USA Int. Brd.) reported briefly on the excellent haze penetration characteristics of an Eastman Kodak experimental emulsion #8401. This material in other respects shows a remarkable similarity to Kodak Plus X Aerocon.

Capt. Candler, (USMC EQ. BD) reported on the status of the USMC Helicopter transportable Photo Laboratory and will present drawings and mockups thereof at the next meeting.

Mr. E. Nowicki, (USN TRG. DEV. CNTR) reported completion and operational testing of an automatic terrain model cutting device and he will present a detailed report at the first subsequent meeting.

The date and place of the next regular meeting was established as 15 January 1958, at the new quarters of the USN PIC, Suitland, Maryland.

SECRET

SECRET

Mr. H. Coggin, (JCS/PSB) made some pertinent comments on the value of the Working Party and the further value of meetings such as the current one by reason of the opportunity so presented to become familiar with and evaluate the various manufacturers of concern to the group.

There being no further business the formal meeting closed.

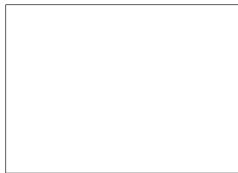
On Friday morning 7 November, the group were guests of the Apparatus and Optical Division of Eastman Kodak at the Hawkeye Works in Rochester. Various members of the Kodak Development staff presented briefings on current E. K. developmental work to include: General briefing by [redacted], Processing and Printing Equipment by Mr. Ed. Green, Photo Materials for Aerial Photography by [redacted] and the intelligence uses of the "Minicard System". The briefing period was followed by an extensive tour and demonstration of "Minicard" its equipment and its use as a file system for aerial negatives, for print or projection recall.

50X1  
50X1

50X1  
50X1

The afternoon of 7 November was spent as guests of [redacted] [redacted] After a formal welcome [redacted] Assistant Director of the [redacted] Scientific Bureau, presented a short briefing on the scope and diversity of [redacted] efforts and products. Following [redacted] briefing additional briefings were presented as follows:

50X1  
50X1  
50X1  
50X1



- Fiber Optics
- Photographic Lenses
- Aspheric Lens
- New Materials in Optics
- Photogrammetric Program

50X1

Upon completion of [redacted] presentations the meetings adjourned with members departing for their proper stations.

50X1

SECRET