

*Reports file*

UNITED STATES GOVERNMENT

# Memorandum

TO : Distribution

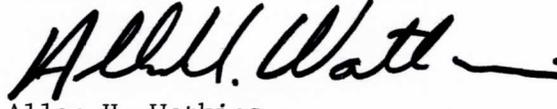
DATE: January 13, 1978

FROM : Chief, EROS Data Center

RE: OC 1-13

SUBJECT: Monthly Significant Activities Report

Attached is the Monthly Significant Activities Report for the EROS Data Center and EROS Applications Assistance Facilities for the period December 1, 1977, through December 31, 1977. Also included are Data Base and Data Production Statistical Summaries.



Allen H. Watkins

Attachments

Distribution:

- J. Balsley
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EROS Data Center and  
EROS Applications Assistance Facilities  
Significant Activities Report  
December 1, 1977 through December 31, 1977

I. EROS Data Center

WATER RESOURCES REMOTE SENSING WORKSHOP: A Workshop was given at the Data Center to acquaint participants with practical applications of Landsat imagery and high altitude aerial photography for water resources. The Workshop was designed primarily for hydrologists from USGS Water Resources Division and their cooperating agencies and included eighteen participants. The workshop included lectures and discussions on the basic principles of remote sensing and on the feasibility and economic aspects of using these methods in ongoing studies and two workshop exercises to demonstrate how image analysis and interpretation could provide hydrologic information.

U.S. FOREST SERVICE ORIENTATION SESSION: An orientation session was given at EDC December 6-7 to eleven representatives from the Northern Forest Laboratory in Missoula, Montana, and other Forest Service Units conducting development studies to map and inventory forest fire fuels, model fire behavior and reduce residual fire from logging activities. The session objective was to demonstrate state-of-the-art remote sensing technology potentially applicable to these developmental efforts. The session included an introduction to the EROS program, a review of demonstration projects, and demonstrations of digital image processing techniques and applications. Demonstrations in the Data Analysis Laboratory included session participants conducting an analysis on the Image 100 to classify forest cover types from Landsat data for an area near Missoula, Montana. Each participant received a compilation of selected readings discussing applications of small scale imagery and digital data to forest management.

DENVER MESA REMOTE SENSING SEMINAR: EDC personnel participated in a remote sensing seminar held at the Denver Federal Center December 7-8, 1977. The seminar, conducted by MESA's Denver Technical Support Center and USGS/EDC, covered the basic principles of remote sensing and its use in mini-ground stability problems. Approximately 70 participants from the mining industry and related fields attended the seminar. Considerable interest in remote sensing technology was expressed by the attendees and a few mining companies indicated they are using the data routinely.

CLAUNCH, NEW MEXICO PROJECT: EROS personnel spent four days in the Claunch, New Mexico area to field check Landsat image interpretations and aeromagnetic data anomalies. Lineaments exhibited on Landsat images correlated with faults, karst structures and dikes. Positive aeromagnetic anomalies occur over diabase dikes and sills and outcrops of Precambrian rocks. Other magnetic anomalies could not be explained by surface expressions and may correspond to topographic variations on the Precambrian rocks in the subsurface.

EROS DIGITAL IMAGE PROCESSING SYSTEM (EDIPS): EDC completed review of the MK II High Resolution Film Recording System (HRFRS) Acceptance Test Procedure and submitted a detailed report to Branch of Contracts. HRFRS provisional acceptance tests are scheduled to start at Goodyear Aerospace January 9, 1978, and the system is scheduled to be shipped to TRW January 18, 1978, for interface with the EDIPS system. The final EDIPS System Verification and test plan was received in mid-December. EDIPS testing is scheduled to begin in March at TRW and the system delivered to EDC in April.

VISITORS: The Data Center had over 600 visitors during December, including representatives from: local colleges and universities, the EROS Program, the Geologic Division, the Maine Geological Survey, the University of New Mexico, NASA/GSFC, and the Subcommittee on the Environment and Atmosphere of the House Science and Technology Committee.

## II. EROS Applications Assistance Facilities (AAFs)

IAGS ACTIVITY: A five day conference was held on Satellite-Derived Sea Surface Temperatures jointly sponsored by IAGS, EROS and NOAA. Participants from Chile, Ecuador, Peru and NOAA were in attendnace. The meetings took place at the DMA IAGS Cartographic School. A regional seminar on Remote Sensing of Natural Resources sponsored by the Guatemalan Government and the Canadian Government was held in Guatemala City, Guatemala. Presentations were made by individuals from DMA IAGS, Canada, Costa Rica and Guatemala. Attendance exceeded 100 people. A regional symposium of Remote Sensing in Natural Resources was held in Bolivia during the first week of December. The meetings were sponsored by the Geological Service of Bolivia.

ALASKA ACTIVITY: Participated in an interagency workshop on aerial photography in Alaska sponsored by the Bureau of Land Management and the National Aeronautics and Space Administration. Representatives from State, Local and Federal Government agencies attended and discussed the various ways and means of obtaining aerial photography of the state. They also discussed what was already available, where it was archived and maps were exchanged showing the extent of coverage held by the agencies involved. Participated in a workshop sponsored by the U.S. Forest Service and the Soil Conservation Service which was a generalized, inter-agency seminar to review the status of various projects within the state which involve typemapping and/or inventories. Also discussed the feasibility of conducting some of the studies jointly to more efficiently utilize the manpower and funds available for these activities. Seventy-three people visited the AAF in addition to Geophysical Institute personnel and fourteen B/W and ten color orders were placed through the EROS Data Center with total dollar value of \$3,183. In addition orders were placed with the National Ocean Survey for aircraft imagery totaling \$4,061.

## III. Statistical Reports

Data Production and Data Base Summaries are attached.

# EROS DATA CENTER

## Product Summary



QUARTER October-December  
1977

PRODUCT / CUSTOMER PROFILE	CURRENT QUARTER				LAST QUARTER		QUARTER LAST YEAR			ORDER VALUE BY LOCATION
	ITEMS	%	DOLLARS	%	ITEMS	DOLLARS	ITEMS	DOLLARS	% \$ CHANGE	
1. LANDSAT	24,637	34	317,884	56	30,194	339,123	44,286	272,036	17	21. Terminals A. EDC \$634,822 B. EMC 3,715 C. MCMC 12,665 D. NCIC 29,327 E. COE - F. RMMC 21,777 G. NSTL 29,461 H. WMC 31,304 22. Other A. Alaska 8,186*** B. IACS  TOTAL \$763,071 ***Included in 21.A.  REMARKS: #13 is shipped imagery only for Current Quarter and Last Quarter.
A. Federal Government	6,583	27	94,201	30	6,407	80,385	8,228	52,714	79	
(1) U.S.G.S.	4,058	62	62,596	67	3,003	42,259	2,481	21,089	197	
(2) Other Federal	2,165	33	28,421	30	1,760	22,292	2,956	18,055	57	
(3) EDC / EPO PAO	0	0	0	0	0	0	2	40	-100	
(4) NASA P.I.'s	360	5	3,184	3	1,644	15,834	2,789	13,530	-76	
B. State, Local Government	478	2	7,499	2	246	2,646	470	5,422	38	
C. Academic	3,138	13	30,404	9	3,432	29,535	4,207	25,332	20	
D. Industrial	4,508	18	72,888	23	6,865	74,461	13,339	75,458	-3	
E. Individuals	1,337	5	17,836	6	1,414	14,495	3,908	28,096	-37	
F. Non-U.S.	8,593	35	95,056	30	11,830	137,601	14,096	84,784	12	
G. Non-Classified	0	0	0	0	0	0	38	230	-100	
2. MANNED SATELLITE	685	1	10,916	2	855	14,648	1,206	12,327	-11	
3. NASA AIRCRAFT	8,881	12	100,170	18	8,050	93,440	9,331	88,285	13	
4. USDI AERIAL MAPPING	38,524	53	135,659	24	37,759	110,920	40,464	91,189	49	
5. TOTAL IMAGERY (#1,2,3,4)	72,727	100%	564,629	100%	76,858	558,131	95,287	463,837	22	
A. Federal Government	36,125	50	222,161	39	34,843	183,521	43,036	134,727	65	
(1) U.S.G.S.	11,395	32	102,241	46	13,381	81,380	4,895	37,181	175	
(2) Other Federal	24,370	67	116,736	53	19,777	84,395	33,413	75,576	54	
(3) EDC / EPO PAO	0	0	0	0	0	0	2	40	-100	
(4) NASA P.I.'s	360	1	3,184	1	1,685	17,746	4,726	21,930	-85	
B. State / Local Government	1,146	2	13,122	2	1,451	11,556	1,001	10,444	26	
C. Academic	4,652	6	40,660	7	6,546	45,610	6,149	38,924	4	
D. Industrial	16,638	23	143,231	26	17,785	139,882	21,151	126,590	13	
E. Individuals	5,312	7	48,178	9	4,059	37,311	9,254	65,028	-26	
F. Non-U.S.	8,854	12	97,277	17	12,174	140,251	14,467	87,149	12	
G. Non-Classified	0	0	0	0	0	0	229	975	-100	
6. COMPUTER COMP. TAPES	686		137,200		510	102,000	638	127,236	8	
7. DATA BASE TAPES	0		0		10	1,585	0	0	0	
8. MISC. CUST. & SPEC. PROC.			61,242			79,059		6,952	781	
9. TOTAL VALUE (#5,6,7,8)			763,071			740,775		598,025	28	
10. Average Order Value			Discontinued		\$	-		\$	-	
11. Average Frame Value			Discontinued		\$	-		\$	-	
12. Work In Process *			\$534,825		\$	352,969		\$	200,538	
13. Orders Received			5,638			5,760			6,172	
14. Customer Contacts			9,000			9,936			10,890	
15. Visitors to EDC			3,034			6,465			3,822	
16. EDC Staff			320			326			331	
17. Valid Complaints			168			219			287	
18. Complaints to Orders Ratio			2 %			3 %			3 %	
19. Shipped Orders Over 30 Days Old			8 %			11 %			6 %	
20. Average Delivery Time (Imagery)			14 Days			15 Days			13 Days	

\* As of Last Working Day of the Quarter

Date Issued 1/10/78

# EROS DATA CENTER

## Product Summary

MONTH December, 1977

PRODUCT / CUSTOMER PROFILE	CURRENT MONTH				LAST MONTH		MONTH LAST YEAR			ORDER VALUE BY LOCATION
	ITEMS	%	DOLLARS	%	ITEMS	DOLLARS	ITEMS	DOLLARS	% \$ CHANGE	
1. LANDSAT	5,544	29	78,264	49	8,888	114,650	14,702	92,186	-15	21. Terminals A. EDC \$173,527 B. EMC 1,109 C. MCMC 5,521 D. NCIC 6,877 E. COE - F. RMMC 6,944 G. NSTL 11,454 H. WMC 13,102 22. Other A. Alaska 3,183*** B. IAGS  TOTAL \$218,534 ***Included in 21.A.  REMARKS: #13 is shipped imagery only for Current Month and Last Month.
A. Federal Government	1,459	26	20,033	26	2,224	35,529	2,851	16,805	19	
(1) U.S.G.S.	822	56	10,217	51	1,623	26,057	569	5,997	70	
(2) Other Federal	546	38	8,960	45	563	9,208	1,907	9,010	-1	
(3) EDC EPO PAO	0	0	0	0	0	0	0	0	0	
(4) NASA P.I.'s	91	6	856	4	38	264	375	1,798	-52	
B. State, Local Government	53	1	1,704	2	321	3,986	432	5,104	-67	
C. Academic	681	12	9,522	12	1,071	9,373	995	7,186	33	
D. Industrial	1,109	20	19,824	25	1,810	26,353	4,805	25,917	-24	
E. Individuals	469	9	6,813	9	395	6,260	1,129	8,621	-21	
F. Non-U.S.	1,773	32	20,368	26	3,067	33,149	4,486	28,537	-29	
G. Non-Classified	0	0	0	0	0	0	4	16	-100	
2. MANNED SATELLITE	144	1	3,178	2	256	4,160	269	3,098	3	
3. NASA AIRCRAFT	4,209	22	41,020	25	1,855	26,237	3,532	32,315	27	
4. USDI AERIAL MAPPING	8,983	48	38,216	24	15,804	47,877	4,933	16,504	132	
5. <b>TOTAL IMAGERY (#1,2,3,4)</b>	<b>18,880</b>	<b>100%</b>	<b>160,678</b>	<b>100%</b>	<b>26,803</b>	<b>192,924</b>	<b>23,436</b>	<b>144,103</b>	<b>12</b>	
A. Federal Government	11,140	59	74,180	46	12,667	71,890	6,319	35,288	110	
(1) U.S.G.S.	3,927	35	30,129	41	4,894	38,104	1,147	10,844	178	
(2) Other Federal	7,122	61	43,195	58	7,735	33,522	4,541	21,214	104	
(3) EDC EPO PAO	0	0	0	0	0	0	0	0	0	
(4) NASA P.I.'s	91	1	856	1	38	264	631	3,230	-73	
B. State, Local Government	154	1	2,651	2	647	6,584	711	6,728	-61	
C. Academic	949	5	11,948	8	1,591	12,476	1,560	11,010	9	
D. Industrial	3,135	16	34,178	21	7,035	52,264	7,555	41,122	-17	
E. Individuals	1,661	9	16,580	10	1,730	16,298	2,739	20,909	-21	
F. Non-U.S.	1,841	10	21,141	13	3,133	33,412	4,538	28,960	-27	
G. Non-Classified	0	0	0	0	0	0	14	86	-100	
6. COMPUTER COMP. TAPES	222		44,400		207	41,400	218	43,600	2	
7. DATA BASE TAPES	0		0		0	0	0	0	0	
8. MISC. CUST. & SPEC. PROC.			13,456			12,573		0	100	
9. <b>TOTAL VALUE (#5,6,7,8)</b>			<b>218,534</b>			<b>246,897</b>		<b>187,703</b>	<b>16</b>	
10. Average Order Value			\$Discontinued		\$ -		\$ -			
11. Average Frame Value			\$Discontinued		\$ -		\$ -			
12. Work In Process *			\$534,825		\$435,580		\$200,538			
13. Orders Received			1,777		2,083		1,910			
14. Customer Contacts			2,778		3,150		3,188			
15. Visitors to EDC			614		1,191		1,024			
16. EDC Staff			320		325		331			
17. Valid Complaints			62		59		88			
18. Complaints to Orders Ratio			2 %		2 %		3 %			
19. Shipped Orders Over 30 Days Old			8 %		9 %		4 %			
20. Average Delivery Time (Imagery)			14 Days		15 Days		13 Days			

\* As Of Last Working Day Of The Month

Date Issued 1/10/78

MAIN IMAGE FILE AS OF DECEMBER 31, 1977

	<u>FILM ROLLS</u>	<u>FRAMES</u>	<u>GEOREF ACCESSIONS</u>
Apollo/Gemini Space Photography	122	6,000	470
Skylab Imagery	634	44,845	38,766
Landsat Data (MSS-RBV)	<u>6,296</u>	<u>1,113,756</u>	<u>278,439</u>
TOTAL SPACE DATA	7,052	1,164,601	317,675
NASA Research Aircraft Imagery	10,039	1,425,163	132,899
USDI Aerial Mapping Photography	<u>20,927</u>	<u>3,133,694</u>	<u>67,739</u>
TOTAL AIRCRAFT DATA	30,966	4,558,857	200,638
<u>TOTAL EROS DATA CENTER HOLDINGS</u>	<u>38,018</u>	<u>5,723,458</u>	<u>518,313</u>