

LARS Report 112779

**ANNUAL
FINANCIAL
REPORT
TO THE UNIVERSITY**

FISCAL YEAR 1979

**Laboratory for Applications of Remote Sensing
Purdue University
West Lafayette, Indiana 47906 USA**

ANNUAL FINANCIAL REPORT TO THE UNIVERSITY
FISCAL YEAR 1979

This report is a companion to one entitled, "Annual Report to the University." Enclosed herein are a series of tables which provide further details on the sources of funding and distribution of expenditures within the University. The tables are as follows:

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TABLE 1

LARS PROJECT FUNDING

July 1, 1978 to June 30, 1979

<u>Project Title</u>	<u>Sponsor</u>	<u>Expenditures</u>
- Research in Remote Sensing of Agriculture, Earth Resources, and the Environment	National Aeronautics and Space Administration	\$ 700,602
- Research in Remote Sensing of Agriculture, Earth Resources, and the Environment	National Aeronautics and Space Administration	629,895
- The Application of Remote Sensing Technology to the Solution of Problems in the Management of Resources in Indiana	National Aeronautics and Space Administration	133,306
- Project to Develop an Operational Forest Resource Information System	National Aeronautics and Space Administration	
• Phase I		279
• Phase II		180,001
• Phase III		61,174
- Thermal Behavior of Dispersive Electrodes	New Dimensions in Medicine Corporation	12,236
- Technical Coordination and Implementation of Remote Sensing Experiments for Analogous Vegetative Areas in the U.S. and the Soviet Union	National Aeronautics and Space Administration	102,536
- Optical Detection of Neonatal Jaundice (II)	National Institute of Health, H.E.W.	6,514
- Indiana State University Earth Resources Data Processing Remote Terminal Support	Indiana State University	39,163
- Preprocessing and Analysis of Geophysical Remote Sensing Data	National Science Foundation	14,109
- Visiting Scientist Program	Participants' Sponsors	107,887

TABLE 1 Continued

- A Study of the Feasibility of Using a Cyber/Icon System as the Nucleus of an Experimental Agriculture Data Center	Control Data Corporation	5,581
- Central American Project	Inter-American Development Bank	49,567
- Wallops Flight Center Earth Resources Data Processing Remote Terminal Support	Wallops Flight Center	6,154
- Digital Processing of Landsat MSS and Topographic Data to Improve Capabilities for Computerized Mapping of Forest Cover Types	National Aeronautics and Space Administration	130,450
- Goddard Space Flight Center Earth Resources Data Processing Remote Terminal Support	Goddard Space Flight Center	14,393
- Technical Assistance for the Implementation of Selected LARSYS Processors in a Bolivian Computer Facility - Phase III	Bolivian ERTS Program	6,752
- Evaluation of Usefulness of Classified MSS Data in Inventorying Natural Resources in Saudi Arabia	Joint U.S./Saudi Arabian Commission of Economic Cooperation	1,145
- Urban and Natural Resource Classification by Digital Image Processing	U.S. Geological Survey	1,040
- Republic of China	Economic Counselor of the Embassy of the Republic of China	818
- Soil Survey of the Winkleman, Arizona Area	Bureau of Land Management	895
- Soil Survey of the Upper Gila-San Simon Grazing ES	Bureau of Land Management	95
- Evaluation of SLAR and Simulated Thematic Mapper MSS Data for Forest Cover Mapping Using Computer-Aided Analysis Techniques	National Aeronautics and Space Administration	4,175
- Alabama A&M University Earth Resources Data Processing Remote Terminal Support	Alabama A&M University	29,456

TABLE 1 Continued

- Training for William D. DiPaolo, Bureau of Land Management	Bureau of Land Management	12,715
- Spectral Mapping of the Nogales, Sierra Vista and Douglas Ranger Districts of the Coronado National Forest	U.S. Forest Service Coronado National Forest	5,036
- Preprocessing and Analysis of Geophysical Remote Sensing Data	National Science Foundation	4,295
- Distribution of Field Measurements Data to General Electric	General Electric	1,411
- Measurement of Spectral Bi-Directional Reflectance Factor for Alabama A&M	Alabama A&M University	3,000
- Ford County Co-Op Agreement	U.S. Department of Agriculture/Soil Conservation Service	3,778
- Short Course	Purdue University	24,052
- Minicourse Development - Phase II	Purdue University	15,770
- Remote Sensing Video Tapes	Purdue University	4,779
- Advanced Short Course	Purdue University	900
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TOTAL PROJECT FUNDING		\$2,313,959

TABLE 2
LARS PROJECT EXPENDITURES
July 1, 1978 to June 30, 1979

Salaries:

Engineering	\$379,388
Agriculture	258,712
Science	66,727
HSSE	<u>22,562</u>

\$ 727,389

Fringe Benefits	\$ 88,555
Overhead	474,308
Computer	758,257
Travel	57,749
Supplies	196,060
Capital	<u>11,641</u>

\$1,586,570

TOTAL PROJECT EXPENDITURES

\$2,313,959

TABLE 2A

ENGINEERING PROJECT EXPENDITURES

July 1, 1978 to June 30, 1979

	<u>EES</u>	<u>CHM</u>	<u>EE</u>	<u>ME</u>	<u>BIOMED</u>	<u>TOTAL</u>
Salaries	\$ 221,266	\$ 293	\$151,463	\$ 4,644	\$ 1,722	\$ 379,388
Fringe Benefits	18,884	1	21,544	324	253	41,006
Overhead	141,359	204	103,038	3,164	1,137	248,902
Computer	757,999					757,999
Travel	57,650					57,650
Supplies	195,646		19	17	36	195,718
Capital	<u>11,431</u>		<u>210</u>			<u>11,641</u>
Total	\$1,404,235	\$ 498	\$276,274	\$ 8,149	\$ 3,148	\$1,692,304

TABLE 2B

AGRICULTURE PROJECT EXPENDITURES

July 1, 1978 to June 30, 1979

	<u>Agronomy</u>	<u>Forestry and Natural Resources</u>	<u>Total</u>
Salaries	\$172,850	\$ 85,862	\$258,712
Fringe Benefits	26,303	12,020	38,323
Overhead	114,614	58,302	172,916
Computer	258		258
Travel	99		99
Supplies	342		342
Capital			
Total	\$314,466	\$156,184	\$470,650

TABLE 2C

SCIENCE PROJECT EXPENDITURES

July 1, 1978 to June 30, 1979

	<u>Geoscience</u>	<u>Computer</u>	<u>Statistics</u>	<u>Total</u>
Salaries	\$ 9,829	\$ 4,273	\$52,625	\$ 66,727
Fringe Benefits	1,275	7	3,157	4,439
Overhead	6,681	2,958	36,546	46,185
Computer				
Travel				
Supplies				
Capital				
	_____	_____	_____	_____
Total	\$17,785	\$ 7,238	\$92,328	\$117,351

TABLE 2D

HSSE PROJECT EXPENDITURES

July 1, 1978 to June 30, 1979

	<u>Education</u>	<u>Communication</u>	<u>Total</u>
Salaries	\$ 7,262	\$15,300	\$22,562
Fringe Benefits	1,146	3,641	4,787
Overhead	296	6,009	6,305
Computer			
Travel			
Supplies			
Capital			
	_____	_____	_____
Total	\$ 8,704	\$24,950	\$33,654

TABLE 3
LARS GENERAL FUND ALLOCATION
July 1, 1978 to June 30, 1979

Allocation:

Recurring	\$130,688	
Non-Recurring	<u>2,900</u>	
		\$133,588

Expenditures:

Salaries	\$ 94,054	
Supplies	20,155	
Travel	606	
Computer	5,348	
Capital	<u>13,410</u>	
		<u>\$133,573</u>

Balance		\$ 15
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TABLE 4

LARS SYSTEM SERVICES

July 1, 1978 to June 30, 1979

Income:

LARS Research	\$807,141
LARS System Services	288,967
LARS Administration	8,681
Other Purdue	33,725
Outside Accounts	<u>4,997</u>

\$1,143,511

Expenditures:

Machine Rentals	\$441,990
Salaries	286,622
Supplies	77,194
System Services	<u>288,967</u>

\$1,094,773

Balance Forward from Prior Year

\$ 48,738

108,718

Balance Forward June 30, 1979

\$ 157,456

TABLE 5
1980 FUNDED PROJECTS
As of July 1, 1979

<u>Project</u>	<u>Source</u>	<u>FY79</u>	<u>Duration</u>
General Funds	Purdue	\$ 176,206	7/79 - 6/80
SR&T	NASA	918,664	12/78 - 11/79
PY	NASA	68,963	6/78 - 5/80
US/USSR	NASA	49,952	8/76 - 11/79
Alabama A&M Terminal	Alabama A&M Univ.	23,326	10/78 - 10/79
Goddard Terminal	NASA	1,496	3/77 - 8/79
Visiting Scientist	Various	132,000	4/74 - 6/80
NSF	NSF	83,972	4/79 - 3/81
Bureau of Land Manage- ment Training	BLM	2,785	9/78 - 9/79
ISU	State of Indiana	52,574	3/74 - 6/79
Short Course	Purdue	22,873	7/79 - 6/80
Forestry Resource Infor- mation System	St. Regis/NASA	215,897	10/77 - 6/80
Forestry Topography	NASA	40,914	12/77 - 1/80
MSS Data Inventory Saudi Arabia	Saudi Arabia	4,602	10/77 - 12/79
Mini Courses Development	Purdue	5,502	7/78 - 00/00
Remote Sensing Video Tapes	Purdue	23,421	2/79 - 1/80
Forestry SAR	NASA	60,770	5/79 - 11/79
Spectral Data Collection & Processing	Univ. of Missouri	2,790	6/79 - 7/79
Landsat Digital Data in Arizona	Univ. of Arizona	1,000	6/79 - 9/79
Goddard Field Research	Goddard	500	5/79 - 9/79
Africare	Africare/USAID	30,164	9/79 - 2/80
Ball State Terminal	Ball State Univ.	14,300	9/79 - 8/80
Ford County Co-Op Agreement	USDA/SCS	25,222	2/79 - 1/80
Idaho/Big Desert Area	USDA/SCS	26,874	9/79 - 2/80
Goddard/Eval. of Thematic Mapper	Goddard	50,977	10/1/79 - 9/30/80
		<hr/>	
		\$2,035,744	

TABLE 6
VISITORS SUMMARY

OVERALL SUMMARY

a. Federal Agencies	29
b. State and Local Agencies	7
c. Other State and Local Agencies	7
d. Purdue University	81
e. Other American Universities	39
f. Industry	38
g. Foreign	54
h. Miscellaneous	12

VISITORS BY AFFILIATION

A. FEDERAL AGENCIES

a. NASA/Goddard Space Flight Center	3
b. National Aeronautics and Space Administration/JSC	13
c. DARPA/IPTO	1
d. U. S. Department of Agriculture	1
e. U. S. Department of Agriculture/SEA	1
f. ERIM	1
g. EROS Data Center	1
h. United States Army	1
i. NASA Lewis Research Center	2
j. World Food Board	1
k. U. S. Department of Commerce/NOAA - OA22	1
l. National Weather Service	1
m. U. S. Department of Energy	1
n. Lockheed Electronics	1

B. STATE AND LOCAL AGENCIES

a. Indiana Department of Natural Resources	3
b. Indiana Dunnes National Lake Shore	1
c. Soil Conservation Service	3

C. OTHER STATE AND LOCAL AGENCIES

a. New Jersey	1
b. Missouri	1
c. California	2
d. Colorado	2
e. Arizona	1

D. PURDUE UNIVERSITY	81
E. OTHER AMERICAN UNIVERSITIES	39
F. INDUSTRY	38
G. FOREIGN COUNTRIES	
a. Australia	1
b. France	4
c. South Africa	1
d. China	5
e. New Zealand	1
f. Uruguay	1
g. England	9
h. Syria	1
i. Austria	2
j. Canada	4
k. Brazil	5
l. Japan	2
m. West Germany	1
n. Peru	8
o. Argentina	4
p. Sweden	2
q. India	2
r. Republic of China	1
H. MISCELLANEOUS	12