

LARS Report 063081

ANNUAL FINANCIAL REPORT

to the University

Fiscal Year 1981

Purdue University

Laboratory for Applications of Remote Sensing
West Lafayette, Indiana 47907 USA

ANNUAL FINANCIAL REPORT TO THE UNIVERSITY
FISCAL YEAR 1981

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, 1980 to June 30, 1981

<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	\$1,105,055
- Research in Remote Sensing of Agriculture, Earth Resources, and the Environment	National Aeronautics and Space Administration	1,235,386
- Project to Develop an Operational Forest Resource Information System • Phase III & Phase IV	National Aeronautics and Space Administration	102,214
- Quantitative Applications-oriented Evaluation of Thematic Mapper Design Specifications	National Aeronautics and Space Administration	21,794
- A Low-Cost Earth Resources Processing Capability for Ball State University	Ball State University	9,139
- Indiana State University Earth Resources Data Processing Remote Terminal Support	Indiana State University	44,101
- Visiting Scientist Program	Participants' Sponsors	70,804
- Digital Processing of Landsat MSS and Topographic Data to Improve Capabilities for Computerized Mapping of Forest Cover Types	National Aeronautics and Space Administration	5,400
- Goddard Space Flight Center Earth Resources Data Processing Remote Terminal Support	Goddard Space Flight Center	688
- Evaluation of Usefulness of Classified MSS Data in Inventorying Natural Resources in Saudi Arabia	Joint U.S./Saudi Arabian Commission of Economic Cooperation	15

TABLE 1 (Continued)

- Use of Spectral Data to Estimate the Relationship Between Soil Tensions and Their Corresponding Reflectances	Office of Water Resources and Technology/Dept. of the Interior	\$ 10,983
- Evaluation of SLAR and Simulated Thematic Mapper MSS Data for Forest Cover Mapping Using Computer-Aided Analysis Techniques	National Aeronautics and Space Administration	101,578
- Alabama A&M University Earth Resources Data Processing Remote Terminal Support	Alabama A&M University	54,531
- Preprocessing and Analysis of Geophysical Remote Sensing Data	National Science Foundation	33,237
- Remote Sensing for Mineral Specialists	Bureau of Land Management	28,289
- Development of a Low-Cost Earth Resources Processing Capability for the University of California at Riverside	University of California at Riverside	2,827
- 1981 Symposium	Purdue University	8,741
- 1980 Symposium	Purdue University	5,588
- Short Course	Purdue University	18,526
- Remote Sensing Video Tapes	Purdue University	2,773
- Minicourse ITC	Purdue University	65
- The Application of Remote Sensing Techniques for Waterfowl Habitat Inventory	Ducks Unlimited	38,004
- Preparation of a Natural Resource Inventory for the Seguenega Project Area in Upper Volta	Africare	2,889
- Processing Landsat Digital Data for Various Areas in Arizona	University of Arizona Soil, Water and Engineering	66

TABLE 1 (Continued)

- Processing of Landsat Computer Compatible Tapes	Defense Mapping Agency/ Inter-American Geodetic Survey	\$ 5,042
- Computer Time from Purdue/ LARS System Services	University of California	736
- Technical Support and Maintenance of CPS and PSS Crop Simulation Models	Control Data Corporation	3,467
- Digital Information System for the Oruro Department, Bolivia	Programa ERTS/Bolivia	198,889
- Course on Processing of Landsat Computer Compatible Tapes	Defense Mapping Agency/ Inter-American Geodetic Survey	163
- Course and Hands-on Computer Experience	Defense Mapping Agency/ Inter-American Geodetic Survey	2,502
- Courses in Remote Sensing & Image Processing	U.S. Army Engineer Division	29,742
- A Conference on Remote Sensing Education	National Aeronautics and Space Administration	18,157
- Precision Geometric Correction of Elk River Landsat Data Set	Lockheed Engineering and Mgmt Services Co.	1,990
- Digital Image Processing Service	State of Washington	1,781
- Research Expenses for Al-Mahawili	Iraq	165
- Analysis of Wildlife Research & Survey Data	State of Indiana	113
- Develop an Instructional Module on Interactive Image Processing	COMTAL/3M	12,539
- Application of Photo-interpretation Techniques to Assess Episodic Storm Damage	Dept. of the Army	50,149

TABLE 1 (Continued)

- Extending an Interactive System to Include Package Execution Capability	IBM	\$ 158
		<hr/>
	TOTAL PROJECT FUNDING	\$3,228,286

TABLE 2

LARS PROJECT EXPENDITURES

July 1, 1980 to June 30, 1981

Salaries

Engineering	\$ 523,715
Agriculture	284,889
Science	59,496
HSSE	<u>14,445</u>

\$ 882,545

Fringe Benefits	112,435
Overhead	540,486
Computer	1,171,103
Travel	88,655
Supplies	251,618
Capital	<u>181,444</u>

\$2,345,741

TOTAL PROJECT EXPENDITURES

\$3,228,286

TABLE 2A
ENGINEERING PROJECT EXPENDITURES
July 1, 1980 to June 30, 1981

	Engineering Experiment Station	Electrical Engineering	Mechanical Engineering	Civil Engineering	Total
Salaries	\$ 307,713	\$206,503	\$5,160	\$4,339	\$ 523,715
Fringe Benefits	30,124	28,768	1,092	827	60,811
Overhead	186,121	131,363	3,283	2,953	323,720
Computer	1,169,184				1,169,184
Travel	87,098				87,098
Supplies	241,439	410			241,849
Capital	<u>181,444</u>				<u>181,444</u>
TOTAL	\$2,203,123	\$367,044	\$9,535	\$8,119	\$2,587,821

TABLE 2B
AGRICULTURE PROJECT EXPENDITURES
July 1, 1980 to June 30, 1981

	Agronomy	Forestry and Natural Resources	Agricultural Economics	Total
Salaries	\$219,785	\$ 56,291	\$ 8,813	\$284,889
Fringe Benefits	27,826	8,967	1,219	38,012
Overhead	134,912	35,598	6,134	176,644
Computer	1,919			1,919
Travel	1,531		26	1,557
Supplies	<u>9,697</u>	<u>42</u>	<u>30</u>	<u>9,769</u>
TOTAL	\$395,670	\$100,898	\$16,222	\$512,790

TABLE 2C
 SCIENCE PROJECT EXPENDITURES
 July 1, 1980 to June 30, 1981

	<u>Geoscience</u>	<u>Computer</u>	<u>Statistics</u>	<u>Total</u>
Salaries	\$17,913	\$2,610	\$38,973	\$ 59,496
Fringe Benefits	2,545	5	7,434	9,984
Overhead	<u>12,232</u>	<u>1,598</u>	<u>24,735</u>	<u>38,565</u>
TOTAL	\$32,690	\$4,213	\$71,142	\$108,045

TABLE 2D
 HSSE PROJECT EXPENDITURES
 July 1, 1980 to June 30, 1981

	<u>Communication</u>	<u>Total</u>
Salaries	\$14,445	\$14,445
Fringe Benefits	3,628	3,628
Overhead	<u>1,557</u>	<u>1,557</u>
TOTAL	\$19,630	\$19,630

TABLE 3

LARS GENERAL FUND ALLOCATION

July 1, 1980 to June 30, 1981

Allocation:

Recurring	\$200,548	
Non-Recurring	<u>48,877</u>	
		\$249,425

Expenditures:

Salaries	\$142,548	
Supplies	48,782	
Travel	5,112	
Specialized Services	26,084	
Capital	<u>37,290</u>	
		<u>\$259,816</u>

Balance		(\$ 10,391)
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TABLE 4

LARS SYSTEM SERVICES

July 1, 1980 to June 30, 1981

Income:

LARS Research	\$1,169,502	
LARS System Services	477,979	
LARS Administration	24,288	
Other Purdue	44,814	
Outside Accounts	<u>6,571</u>	
		\$1,723,154

Expenditures:

Machine Rentals	\$ 644,269	
Salaries	418,631	
Supplies	67,330	
System Services	<u>477,979</u>	
		<u>\$1,608,209</u>
Balance Forward from Prior Year		\$ 114,945
		<u>210,565</u>
Balance Forward June 30, 1981		\$ 325,510

TABLE 5
1982 FUNDED PROJECTS

As of July 1, 1981

<u>Project</u>	<u>Source</u>	<u>FY81</u>	<u>Duration</u>
General Funds	Purdue	\$ 209,502	7/81 - 6/82
SR	NASA	1,182,893	12/78 - 11/81
Alabama A&M Terminal	Alabama A&M Univ.	16,751	10/78 - 9/81
NSF	NSF	10,582	4/79 - 9/81
ISU	State of Indiana	67,161	3/74 - 6/82
Short Course	Purdue	35,040	7/79 - 6/82
MSS Data Inventory	Saudi Arabia	1,895	10/77 - 12/81
Saudi Arabia			
Remote Sensing Video Tapes	Purdue	10,159	2/79 - 9/81
Forestry SAR	NASA	50,422	5/79 - 11/81
Landsat Digital Data in	Univ. of Arizona	164	6/79 - 00/00
Arizona			
Ball State Terminal	Ball State Univ.	11,980	9/79 - 6/82
Digital Information System	Bolivia	95,484	4/80 - 10/81
Univ. of California-	Univ. of California-	7,227	10/80 - 9/81
Riverside	Riverside		
Use of Spectral Data Soil	Water Resources	5,549	11/79 - 3/82
Moisture			
Waterfowl Habitat	Ducks Unlimited	71,654	12/79 - 12/81
Inventory			
BLM Training II	Bureau of Land Management	95,484	9/15/80 - 2/28/82
Visiting Scientist Program	Participant's Sponsor	15,218	00/00 - 00/00
Sensor Parameter Study	NASA	52,567	10/79 - 4/82
Dev. Instructional Module	COMTAL/3M	17,988	2/81 - 11/81
Extending an Interactive	IBM	842	5/81 - 00/00
System			
Application of Photo-	Dept. of the Army	16,956	1/81 - 12/81
Interpretation			
Research for Al-Mahawili	Iraq	8,827	8/80 - 7/82
Course in Remote Sensing	Dept. of the Army	21,767	11/80 - 9/81
Processing of Landsat	DMA	9,412	5/81 - 7/81
Tapes			
Dev. Plans for Rehabili-	IDNR	200,174	7/81 - 6/82
tating Abandoned Mine			
Lands			
Analysis of Wildlife	IDNR	651	9/80 - 00/00
Research & Survey Data			
Course & Hands-on Computer	DMA	7,884	8/80 - 10/81
Experience			
		\$2,224,233	