

MONTHLY PROGRESS REPORT  
NUCLEAR REGULATORY COMMISSION

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Docket No. \_\_\_\_\_

TO: Distribution

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LPDR ✓ (B.N.S)

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VIA: Birger Andersen, SAIC Program Manager

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SUBJECT: Monthly Progress for Period 1 Sept. - 31 Oct. 1986

This report is submitted in accordance with paragraph F.1.1 of the subject contract.

I. TECHNICAL

A. Task Performance:

Task 1A. Document Review - Task Complete

Task 1B. Current Digitizing & Indexing Procedures - Task complete

Task 1C. System Integration Plan - Draft plan has been completed and is currently undergoing internal SAIC review.

Task 1D. System Specification & Performance Standards - Draft specification document has been completed and has been incorporated as an Appendix to the Integration Plan. During the initial planning meeting it was determined that a waiver would have to be obtained for the Manual Chapter 904 system specification and standards, since the pilot project hardware

would not meet the non-modification standards imposed by the Manual Chapter 904 requirements.

Task 1E. System Installation - Phase I System hardware and software was installed at NRC/DWM facilities. This included IBM PC-AT, Priam Cluster Tower Drive, Palantir CDP and Scanner. The System has been fully configured to operate within current DCC operations. NRC file header software and SAIC developed CDP menuing software have been integrated to be compatible with the DCC operations. The software provides for the reformatting of digitized documents to a 69 character line length so that the text is compatible with the Stairs Database. The program has also been integrated into the SAIC Menu program and provides automatic reformatting and viewing of "clean" text on a monitor.

Task 1E. System Tests - Following the demonstration of full text search was accomplished during the reporting period, SAIC has been continuing its evaluation of other full text search applications. The MS-DOS version of the full text search application program "BlueFish" has also been adapted to accept the current NRC Stairs database, and will also be considered along with "TextBank" as a candidate for NRC's document control applications.

Task 2B. Training - Training of NRC personnel commenced upon delivery of the Phase I system to the NRC. One computer technician has been fully trained to operate the system in its current configuration. Further training of this individual will continue as other hardware and software are added. Training of additional NRC staff personnel will be initiated as required.

Task 3B. Thesaurus Evaluation - A thesaurus selection task report will be submitted to NRC during the fourth week in October. The report will provide an evaluation of each thesaurus along with the benefits of the chosen thesaurus, in addition to

a table comparing the pros and cons of each thesaurus considered in the evaluation will be provided.

#### B. Key Milestones Achieved:

The key milestone achieved during this reporting period was the delivery and installation of the Phase I hardware/software to the NRC along with the training of one NRC staff member in operation of the system.

#### C. Meetings and Field Trips:

No formal scheduled meetings were held during the reporting period, however, a number of informal technical meetings were held between NASM, SAIC, and NRC project staff members to discuss and clarify a wide variety of technical issues including:

- \* DCC Document Handling Procedures
- \* File Header Strategies
- \* Palantir Demonstration
- \* Current Full Text Search Capabilities
- \* Potential problems associated with the integration of the NRC database into a mainframe based INQUIRE database environment.

## II. COST EXPENDITURES

A detailed list of hardware costs and delivery schedule is shown in Attachment A. Cost expenditures for the reporting period are shown in Attachment B. The labor expenditures include SAIC overhead, fringe and G&A charges against direct labor. Hardware/software cost expenditures include items that were delivered during the reporting period along with a cumulative list of all hardware/software received to date. SAIC fee has been added to reflect total cost to NRC.

### **III. PERSONNEL ASSIGNED**

Personnel assigned to the project during the reporting period are shown in Attachment B. Included are both time and cost expenditures for each SAIC staff member assigned to the project

### **IV. PROJECTION OF COSTS**

Projection of costs by month to completion of the work contained in the current statement of work and work breakdown structure (WBS) for period 1 July 1986 thru 31 January 1987 is presented graphically in Attachment C. The current variance in the actual vs. projected costs is a reflection of equipment that has yet to be delivered and therefore not entered as a cost item.

**HARDWARE COSTS & DELIVERY SCHEDULE**

**ATTACHMENT "A"**

Date: September 30, 1986

Project: NRC Pilot Project - FY 86

Project Title: "Demonstration of Laser Disc Technology for Licensing Records

**ITEM HARDWARE/SOFTWARE DESCRIPTION**

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	COST	PRO SUBMITTED	PO ASSIGNED	ACTUAL COST	PROMISED DELIVERY	ACTUAL DELIVERY
<b>MICROCOMPUTER</b>						
1 IBM PC AT (Model 339)	\$5,300	7/7/86	7/10/86	\$3,865	9/15/86	9/3/86
2 Hercules Monochrome Graphics Board	\$400				9/16/86	9/16/86
3 JRAM AT3 Memory Card	\$500	9/8/86	9/18/86	\$498	10/1/86	9/19/86
4 Additional Memory 128K RAM (256K Chips)	\$80	7/17/86	7/31/86	\$57	8/6/86	8/17/86
<b>MASS STORAGE DEVICE</b>						
5 PRIAM ClusterTower (190MB + 60MB Tape Backup)	\$10,000	7/17/86	7/31/86	\$7,677	8/6/86	8/15/86
6 SONY Writable Optical Disk Subsystem	\$18,000	7/11/86	7/18/86	\$14,545	8/15/86	8/05/86
Writable Disk Drive WDD-3000 3 1/2 bytes \$8556						
Writable Disk Controller WDC-2000 \$5989						
7 PC Interface to Optical Disk	\$1,800	7/11/86	7/18/86	\$1,575	8/15/86	8/15/86
<b>OPTICAL SCANNING SYSTEM</b>						
8 Display Subsystem	\$4,875	9/8/86	9/9/86	\$4,875	10/30/86	
* LV 610 Monitor Controller						
* LV 630 Decompression Processor						
* LV 700 High Resolution Page Oriented Display						
Scanner Subsystem						
* Form Feed Scanner - RICOH IS-400	\$8,000	8/30/86	9/1/86	\$7,700	9/15/86	10/10/86
* LV 810 Compression Proc./ Scanner Interface	\$2,025	9/8/86	9/9/86	\$2,025	10/30/86	
9 SDD Compound Document Processor	\$40,000	7/1/86	7/2/86	\$31,500	7/8/86	7/8/86
<b>DISPLAY SYSTEM</b>						
10 Roland High Res Model # MB142 (Sanyo)	\$350	9/08/86	9/18/86	\$140	9/19/86	9/19/86
<b>PRINTERS</b>						
11 Laser Printer (8 ppm) & PC Interface	\$4,500	9/8/86	9/9/86	\$4,060	10/30/86	
12 Matrix Printer	\$400					
13 ADDITIONAL HARDWARE (Task 3)	\$17,900					
<b>SYSTEM SOFTWARE</b>						
14 Operating System (PC DOS 3.1)	\$85			\$85	9/3/86	9/3/86
15 Full Text Search Software	\$2,000	7/17/86	7/21/86	\$746	7/30/86	7/31/86
<b>SUPPLIES AND EXPENDIBLES</b>						
16 Tape Cartridges & Printer Supplies	\$6,000					
	\$122,215			\$79,348		
	202					
	\$97,772					

MONTHLY COST EXPENDITURES - 1 SEPTEMBER thru 30 SEPTEMBER 1986

ATTACHMENT "B"

Project: NRC Pilot Project - FY 86  
 Project Title: Demonstration of Laser Disc Technology for Licensing Records  
 Contract Number: NRC-02-86-006

LABOR COSTS EXPENDITURES

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NAME	HOURS	COST	CUM. HOURS	CUM. COST
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B. Andersen	124	\$9,378	348	\$26,318
M. Whitley	155	\$3,391	439.5	\$9,614
S. Fullerton	80	\$3,798	260	\$12,344
A. Muller	40	\$2,885	108	\$7,790
A. Ratliff	80	\$2,404	109	\$3,275
Tech. Typist	0	\$0	0	\$0
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	479	\$21,855	1265	\$59,340

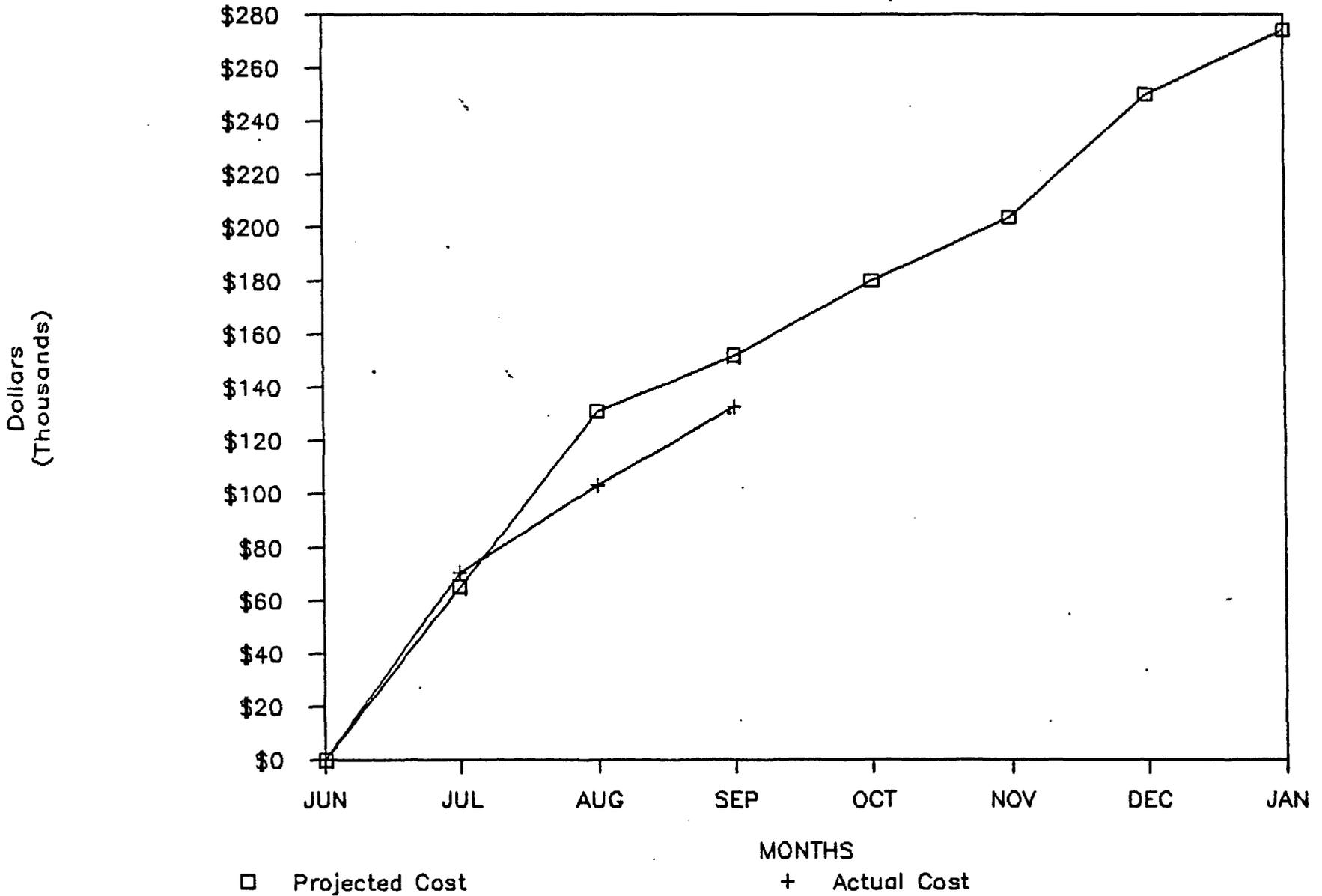
HARDWARE COST EXPENDITURES

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HARDWARE ITEM	MONTHLY CUMULATIVE		DELIVERY	
	COST	COST		
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Palantir CDP + Software		\$31,500	7/08/86	
Group L Search Software		\$756	7/31/86	
SONY Writable Optical Disk Sys.		\$14,545	8/01/86	
PRIAM DataTower (160MB + 60MB Tape)		\$7,677	8/15/86	
Instar Optical Disc Interface		\$1,575	8/15/86	
PC DDS 3.1 & Misc. Software		\$350	8/07/86	
IBM PC AT (Model 339)	\$3,865	\$3,865	9/03/86	
JRAM AT3 Memory Board	\$479	\$479	9/19/86	
Sanyo Monochrome Monitor	\$135	\$135	9/19/86	
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	\$4,479	\$60,882		\$60,882
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				\$120,222
			Misc. ODC's	\$400
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				\$120,622
			SAIC Fee @ 10%	\$12,022
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			Total Cumulative Cost	\$132,644
NASM Overhead and Support Services	\$76,099			
SAIC Technical Support SubContract	\$273,884			
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Total NRC Contract to Smithsonian/NASM	\$349,983			
Percent of Total Funds Allotted		38%		
Percent of SAIC Technical Support Subcontract		48%		

# PROJECTED VS ACTUAL COST CURVE

Period 1 Jul. - 30 Sep. 1986



Attachment "C"