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Department of Mechanical Sciences  
November 7, 1988

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Commander, AVSCOM  
Attn: Lt. Col. Francisco, AMSAV/LU  
Weapons Systems Manager  
Utility Helicopter  
4300 Goodfellow Blvd.  
St. Louis, MO 63120

Subject: Final Report on SwRI Project No. 17-7958-832, "Nondestructive Qualification of UH-1 Replacement Parts - Completion Enhancement." Prime Contract No. DLA-900-84-C-0910-CLIN-0001BA

AD-A206 674

Dear Sir:

The following is the final report on the above referenced project. A total of 152 UH-1 replacement parts were considered. The attached letter from RCI shows the completion of packages accomplished in the final period of the program. Previous package completion was reported in our progress report (April 29, 1987).

Of all items considered, only two items were investigated for possible reverse-engineering. These items were disassembled as described in our progress report (November 3, 1987). It was decided in the November/December time frame that AVSCOM did not wish to pursue reverse-engineering of these items under the current contract. Accordingly, our November 3, 1987, progress report details the final disposition on these two parts.

I am enclosing Form DD250 so that we can officially close this contract. Since the project work was terminated at the sponsor's request and this was a time and materials contract, the contract has a net underrun.

Please let me know if there are any further questions with regard to this matter.

Sincerely yours,

*R. L. Bessey*  
Roger L. Bessey, Manager  
Structural Dynamics and  
Environmental Testing

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Approved:

*Robert L. Bass*  
Robert L. Bass, Director  
Department of Mechanical Sciences

RLB:da

cc: R.L. Bass  
F.A. Iddings  
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**REPORT DOCUMENTATION PAGE**

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9 December 1987

Note to Roger Bessey - The following is the information requested so that the final progress report can be submitted.

Subject: Final Progress Report on SWRI Project 17-7958-832  
Non-Destructive Qualification of UH-1 Replacement Parts  
Competition Enhancement

Prime Contract DLA-900-84-C-0910 CLIN 0001BA

Dear Sir:

The following is a final progress report for subject project. This project is being performed in accordance with work scope as given in SWRI Proposal No. 06-4781 (9286) and is an extension of SWRI Proposal No. 06-4880 (91886). The final period consisted of completion of the packages listed on the attachment in connection with Task 1 of the Statement of Work. While this does not represent completion of 152 parts, it does reflect a complete breakout/feasibility study of the items listed on the attachment.

While RCI stopped continuation of breakout analysis when their funding was exhausted, the packages listed represent a complete DAR Supplement No.6 screen review. Information is also provided on the attachment with respect to the competitive coding achieved for the packages completed and delivered. Remaining funds are those which will be utilized by SWR Institute for non-destructive testing related to reverse engineering.

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PACKAGES COMPLETED OCT., 1986 - Oct., 1987 and DELIVERED UNDER CONTRACT DLA900-84-0910

Package No.	NSN	Description	CODE CHANGE	
			FROM	TO
6M001	4320-00-150-0309	Lube, Pump, Rotary	NC	
6M002	1615-00-735-6560	Case Assy. 42° Gear Box	3H	2C
6M003	1615-01-063-4016	Strap Assy., Tension-Torsion	NC	
6M004	1615-00-893-3442	Case Assy., Upper Transmission	NC	
6M008	1615-00-858-8397	Case Assy., Top Transmission	3C	2C
6M014	3110-01-094-4412	Bearing, Ball	3B	2B
6M015	1650-00-157-6843	Dampener, Flutter	4B	2B
6M016	6220-00-075-1989	Landing Light	3C	2G*
6M030	1560-00-966-7517	Horn, Elevator, Assy.	3M	2C
6M046	1615-00-798-3643	Sleeve Assy., T.R. Drive	3H	2C
6M057	1620-00-076-9036	Crosstube Assy., Skid	3C	2G
6M072	1660-00-977-2455	Control, Air Temp.	3B	2G*
6M082	1680-01-070-0985	Control Panel, Hoist	3H	3P
6M083	1680-01-070-9953	Boom Head, Hoist	3H	3P
6M084	1680-01-070-9963	Rotary Actuator, Hoist	3H	3P
6M085	1680-01-089-4331	Winch, Aircraft Mount	3A	3P
6M086	1680-01-122-3580	Cable Assy., Hoist	3H	2G*
6M087	2925-00-228-8853	Armature, Generator	NC	
6M090	2945-00-027-3022	Filter Assy., Engine Air	3P	2G *
6M091	2945-00-027-3025	Filter Assy., Engine Air	3C	2G
6M097	4730-00-176-4623	Valve, Crashworthy, Fuel	3B	2B
6M098	4935-00-075-1108	Piston and Shoe	3H	2G
6M099	5330-00-614-5750	Seal, Plain Encased, Input	3C	2C
6M100	5330-00-753-4409	Seal, Main Rotor Grip	3C	2C

\* - AFTER REVERSE ENGINEERING

Package No.	NSN	Description	CODE CHANGE	
			FROM	TO
6M105	6680-00-133-7912	Transmitter, Liquid Level	NC	
6M106	6680-00-181-1955	Gage Liquid Level, Fuel	NC	
6M107	6680-00-758-2816	Transmitter, Liquid Level	NC	
6M111	2925-00-878-1136	Starter Generator	NC	
6M112	6610-00-781-8531	Attitude, Indicator	NC	
6M113	1560-00-176-1250	Fuel Tank, LH, Self-Sealing	NC	
6M114	1560-00-176-1248	Fuel Tank, RH, Self-Sealing	NC	
6M115	6115-00-901-1818	Generator, Direct Current	NC	
6M118	4320-00-134-0980	Pump, Axial, Piston, Hydraulic	1H	1B
6M131	2840-00-229-6682	Housing, Assy., Engine Inlet	3H	3C
6M134	2840-01-008-5982	Rotor, Turbine, 2nd Stage	NC	
6M137	2915-01-005-9196	Governor, Overspeed	NC	
6M138	2840-01-010-5949	Rotor, Turbine, 1st stage	3M	3C
6M140	2915-00-797-1535	Valve Assy., Foot	3A	3B
6M141	2915-00-944-8237	Computer Housing Assy.	NC	
6M142	2915-00-828-3362	Computer Housing	NC	
6M143	2915-00-827-6535	Plate and Seat Assy.	3A	3C
6M145	2915-01-018-2491	Coupling Half, Sub Assy.	3H	3C
6M148	2945-01-115-9547	Filter Element, Fuel	NC	
6M149	5330-00-975-0245	Seal, Plain	NC	
6M150	5330-00-946-7073	Seal, Plain Encased	NC	
6M151	5330-01-010-1085	Seal, Plain Encased	NC	
6M152	6685-01-011-8036	Harness Assy, Thermocouple	3B	2C