

RI 306775-53-34
RFP-146

(REVISED) **FINANCIAL PROPOSAL**
VOLUME II

Cassegrain Feeds for NRAO

For
National Radio Astronomy Observation
Edgemont Road
Charlottesville, Virginia 22901

Attention:
J. Marymor

8 September 1972

This data furnished in response to RFP-146 , shall not be disclosed outside the Government or be duplicated, used or disclosed in whole or in part for any purpose other than to evaluate the proposal, provided that if a contract is awarded to this offeror as a result of or in connection with the submission of such data, the Government shall have the right to duplicate, use, or disclose this data to the extent provided in the contract. This restriction does not limit the right of the Government to use information contained in such data if it is obtained from another source.

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SECTION 1.0
INTRODUCTION

1.0 INTRODUCTION

1.1 General

Radiation, a Division of Harris-Intertype Corporation, submits this revised Fixed-Price proposal to National Radio Astronomy Observatory, Edgemont Road, Charlottesville, Virginia 20991 in response to RFP-146.

1.2 Scope of Work

This cost proposal is for material and services necessary to develop Cassegrain Feeds. Three Cassegrain primary feeds must be designed and tested to satisfy particularly stringent requirements. One feed operates at L-Band, another at K-Band. The third is a dual frequency feed that must operate simultaneously in the C and Ku-Bands.

1.3 Validity Period

This proposal is valid for a period of ninety (90) days beginning 8 September 1972. Upon expiration of the validity period, Radiation reserves the right to modify this proposal or to extend its validity for an additional period of time.

1.4 Basis of Estimates

1.4.1 Labor

Labor estimates are based upon Engineering evaluation of the technical difficulty involved in the development, design, fabrication, and assembly of this system. Previous experience and general similarity to products developed by Radiation were weighed with regard to their applicability to this program.

1.4.2 Material

Material requirements were established on the basis of Design evaluation of this program. The unit cost was established by the Material Department using the basis of estimate shown for each line item, as indicated on the Material Schedules.

1.4.3 Travel

Travel estimates were determined by functional organizations. The proposed rates for travel are furnished by the Radiation Travel Office.

1.5 Combination Costs

Included also is a cost summary for the combination of all feeds if purchased as a single procurement. These costs may be found on Page 2 of Exhibit 1.

1.6 Disclosure Statement

(X) 3. CERTIFICATE OF PREVIOUSLY SUBMITTED DISCLOSURE STATEMENT(S)

The offeror hereby certifies that the Disclosure Statement(s) were filed as follows:

<u>Date of Disclosure Statement(s)</u>	<u>Name(s) and Address(es) of Cognizant ACO(s) Where Filed</u>
26 June 1972	Clark W. Emmons, Administrative Contracting Officer Defense Supply Agency Defense Contract Administrative Services District, Orlando 3555 Maguire Boulevard Orlando, Florida 32803

The offeror further certifies that practices used in estimating costs in pricing this proposal are consistent with the cost accounting practices in the Disclosure Statement(s).

1.7 Cognizant Government Agencies

Resident Auditor

The Defense Contract Audit Agency (DCAA) maintains an audit staff at the Radiation home office facility.

Address:

Radiation Resident Office
Defense Contract Audit Agency
c/o Radiation
P. O. Box 1510
Melbourne, Florida 32901

Defense Contract Administrative Services

Radiation is under the cognizance of the Defense Contract Administrative Services District, Orlando, Florida.

Address:

Defense Supply Agency
Defense Contract Administrative Services District, Orlando
3555 Maguire Blvd.
Orlando, Florida 32803

Attention: Mr. C. W. Emmons, DCRA-DOCC
Administrative Contracting Officer

SECTION 2.0
PROGRAM SCHEDULE

PROGRAM SCHEDULE

TASK	MONTHS									
	1	2	3	4	5	6	7	8	9	
1. DESIGN BASIC HORN	██████████									
2. DESIGN FREQUENCY SENSITIVE PLATE (FSP)	██████████									
3. DESIGN ORTHOGONAL PLZN TRANSDUCER (LINEAR)	██████████									
4. DSGN ORTHOGONAL PLZN TRANSDUCER (CP)	██████████									
5. FABRICATE HORNS FOR DUAL FREQUENCY ANTENNA		██████████								
6. FABRICATE FSP		██████████								
7. TEST HORNS			██████							
8. TEST FSP			██████							
9. DESIGN REVISION AND RETEST				██████████						
10. ASSEMBLE DUAL FREQUENCY FEED				██████████						
11. TEST DUAL FREQUENCY FEED				██████						
12. FABRICATE PROTOTYPE FEEDS					██					
13. FINAL TESTS					██████					
14. PREPARE ENGRG DRAWINGS					██					
15. PREPARE REPORTS		██████	██████	██████	██████	██████	██████	██████	██████	
16. WRITE FINAL REPORT							████████████████████			

SECTION 3.0
COST SUMMARIES

COST SUMMARY
 Items Purchased Separately

COST ELEMENTS		Short Horn Feed Item 1	Long Horn Feed Item 2	Dual Fre- quency Feed Item 3	Reference	
1. DIRECT MATERIAL	a. PURCHASED PARTS ⁵	\$13,476	\$ 490	\$ 1,517	Schedule A	
	b. SUBCONTRACTED ITEMS ⁶	1,700		1,230	Schedule B	
	c. OTHER MATERIAL	(1) RAW MATERIAL ⁷				
		(2) STANDARD COMMERCIAL ITEMS ⁸				
(3) INTERDIVISIONAL TRANSFERS (at other than cost) ⁹						
2. MATERIAL OVERHEAD ¹⁰						
3. INTERDIVISIONAL TRANSFERS AT COST ¹¹						
4. DIRECT ENGINEERING LABOR ¹²		19,540	15,082	20,477	Schedule C	
5. ENGINEERING OVERHEAD ¹⁰		26,379	20,361	27,644	Schedule C	
6. DIRECT MANUFACTURING LABOR ¹²						
7. MANUFACTURING OVERHEAD ¹⁰						
8. OTHER COSTS ¹³		332	332	332	Schedule D	
9. SUBTOTALS		\$61,427	\$36,265	\$51,200		
10. GENERAL AND ADMINISTRATIVE EXPENSES ¹⁰		6,573	3,880	5,478	Section 5.4	
11. ROYALTIES ¹⁴						
12. FEDERAL EXCISE TAX ¹⁵						
13. SUBTOTALS		\$68,000	\$40,145	\$56,678		
14. PROFIT OR FEE		6,800	4,015	5,668		
15. TOTAL PRICE (Amount)		\$74,800	\$44,160	\$62,346		

COST SUMMARY
All Items Purchased as Single Procurement

Exhibit 1
Sheet 2 of 2

COST ELEMENTS		Combination Items 1,2,&3				Reference	
1. DIRECT MATERIAL ⁴	a. PURCHASED PARTS ⁵	\$ 14,618				Schedule A	
	b. SUBCONTRACTED ITEMS ⁶	2,930				Schedule B	
	c. OTHER MATERIAL	(1) RAW MATERIAL ⁷					
		(2) STANDARD COMMERCIAL ITEMS ⁸					
(3) INTERDIVISIONAL TRANSFERS (at other than cost) ⁹							
2. MATERIAL OVERHEAD ¹⁰							
3. INTERDIVISIONAL TRANSFERS AT COST ¹¹							
4. DIRECT ENGINEERING LABOR ¹²		52,013				Schedule C	
5. ENGINEERING OVERHEAD ¹⁰		70,218				Schedule C	
6. DIRECT MANUFACTURING LABOR ¹²							
7. MANUFACTURING OVERHEAD ¹⁰							
8. OTHER COSTS ¹³		664				Schedule D	
9. SUBTOTALS		\$140,443					
10. GENERAL AND ADMINISTRATIVE EXPENSES ¹⁰		15,027				Section 5.4	
11. ROYALTIES ¹⁴							
12. FEDERAL EXCISE TAX ¹⁵							
13. SUBTOTALS		\$155,470					
14. PROFIT OR FEE		15,547					
15. TOTAL PRICE (Amount)		\$171,017					

SECTION 4.0
DETAILED COST DATA

MATERIAL

Item # 1
 Item Title Short Horn Feed

PART NUMBER	DESCRIPTION	QTY.	UNIT COST	TOTAL COST	VENDOR	BASIS OF EST
	Honeycone, .40 thick, .03 alu. skin - 46" x 96"	35	\$200.00	\$ 7,000		EE
	Lens Material	24 shts.	.212.00	5,088	Cadillac Plastics	CAT
	Aluminum, .190 thick, 60 x 144	644 lbs.	.60	386	Jenks	BE
	Aluminum, .190 thick, 60 x 120	268 lbs.	.60	161	Jenks	BE
WR-187	Waveguide	4 ft.	3.36/ ft.	13	Pacific Ordnance	CAT
WR-187	Flanges	3	15.00	45		EE
WR-187	Bends	1	10.00	10		EE
	Miscellaneous Hardware Fiberglass & Styrofoam			<u>773</u>		EE
	TOTAL ITEM 1 MATERIAL			<u>\$13,476</u>		

MATERIAL

Item # 2
 Item Title Long Horn Feed

PART NUMBER	DESCRIPTION	QTY.	UNIT COST	TOTAL COST	VENDOR	BASIS OF EST
WR-42	Waveguide	8 ft.	\$2.00/ft.	\$ 16		EE
UG 598/U	Flange	3	5.00	15		EE
	Brass, .032 thick, 12" Wide Coiled Sheet	130 ft.	1.18/ft.	153	Jenks	BE
	Solder, .003 Preformed	1,200	.10	120		EE
	Miscellaneous Hardware, Fiberglass & Styrofoam			<u>186</u>		EE
	TOTAL ITEM 2 MATERIAL			<u>\$490</u>		

MATERIAL

Item # 3
 Item Title Dual Frequency Feed

PART NUMBER	DESCRIPTION	QTY.	UNIT COST	TOTAL COST	VENDOR	BASIS OF EST
	Brass, .064 thick Coiled Sheet, 12" Wide	170 ft.	\$ 2.22/ft.	\$ 377	Jenks	BE
	Solder, .006 Preformed	900	.10	90		EE
	Aluminum, .190 thick 60 x 144	644 lbs.	.60	386	Jenks	BE
	Aluminum, .190 thick 60 x 120	268 lbs.	.60	161	Jenks	BE
WR-187	Waveguide	4 ft.	3.36/ft.	13	Pacific Ordnance	CAT
WR-187	Flanges	3	15.00	45		EE
WR-187	Bends	1	10.00	10		EE
	Miscellaneous Hardware, Fiberglass & Styrofoam			<u>435</u>		EE
	TOTAL ITEM 3 MATERIAL			<u>\$1,517</u>		

MATERIAL

Item # 1, 2, and 3
Item Title Combination

PART NUMBER	DESCRIPTION	QTY.	UNIT COST	TOTAL COST	VENDOR	BASIS OF EST
	Honeycone, .40 thick, .03 alum.skin-46" x 96"	35	\$200.00	\$ 7,000		EE
	Lens Material	24 shts.	.212.00	5,088	Cadillac Plastics	CAT
	Aluminum, .190 thick 60 x 144	644 lbs.	.60	386	Jenks	BE
	Aluminum, .190 thick 60 x 120	268 lbs.	.60	161	Jenks	BE
WR-42	Waveguide	8 ft.	2.00/ ft.	16		EE
UG 598/U	Flange	3	5.00	15		EE
	Brass, .032 thick, Coiled Sheet, 12" Wide	130 ft.	1.18/ ft.	153	Jenks	BE
	Brass, .064 thick, Coiled Sheet, 12" Wide	170 ft.	2.22/ ft.	377	Jenks	BE
	Solder, .003 Preformed	1,200	.10	120		EE
	Solder, .006 Preformed	900	.10	90		EE
	Miscellaneous Hardware, Fiberglass & Styrofoam			1,212		EE
	TOTAL MATERIAL ALL THREE FEEDS			<u>\$14,618</u>		

SUBCONTRACTED ITEMS

Item No. <u>1</u>	Item Title <u>Short Horn Feed</u>	<u>COST</u>
	Machine Lens	\$1,200
	Tooling Lens	<u>500</u>
	Based on Engineering Estimates	
	TOTAL ITEM 1 SUBCONTRACTED ITEMS	<u><u>\$1,700</u></u>

SUBCONTRACTED ITEMS

Item No. <u>3</u>	Item Title <u>Dual Frequency Feed</u>	
		<u>COST</u>
	Stamping Metal Blanks, 6", 300 @ \$.20 each =	\$ 60
	Stamping Metal Blanks, 5", 300 @ \$.20 each =	60
	Stamping Metal Blanks, 4", 300 @ \$.20 each =	60
	Tooling for 3 dies @ \$350 each =	<u>1,050</u>
	Based on Engineering Estimates	
	TOTAL ITEM 3 SUBCONTRACTED ITEMS	<u><u>\$1,230</u></u>

SUBCONTRACTED ITEMS

Item No. <u>1, 2, and 3</u>	<u>Item Title</u> <u>Combinations</u>	<u>COST</u>
	Machine Lens =	\$1,200
	Tooling Lens =	500
	Stamping Metal Blanks, 6", 300 @ \$.20 each =	60
	Stamping Metal Blanks, 5", 300 @ \$.20 each =	60
	Stamping Metal Blanks, 4", 300 @ \$.20 each =	60
	Tooling for 3 dies @ \$350 each =	<u>1,050</u>
Based on Engineering Estimates		
	TOTAL SUBCONTRACTED ITEMS ALL THREE FEEDS	<u><u>\$2,930</u></u>

DIRECT LABOR AND OVERHEAD

Item No. 1

Item Title Short Horn Feed

Task Description and Manhours

Design Basic Horn

Design Orthogonal Transducer

Fabricate Model

Test Horn

Final Tests

Design Lens

Fabricate Lens

Test Lens

Schedule C

Page 1 of 6

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Labor Category	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	Total Hours	Hourly Rates	Cost
Principal Engineer	18	12	18	10		4					
Senior Engineer	120	66	166	50	40	90	44				
Engineer											
Senior Technician			330	140	80		112	60			
Technician			306				40				
Group Leader											
Senior Assembler											
Assembler											
Project Planner			55								
Project Clerk			44								
Machinist			345								
Sheet Metal			306				8				
Maintenance											
Draftsman	80	80				64					
Design Draftsman	80	80				56					
Technical Writer											
Documentation Spec.											
Documentation Clerk											
Inspector											
E/M Inspector			44				10				
Quality Specialist			10				2				
Total Hours	298	238	1,624	200	120	214	216	60			
									Total Direct Labor		
									Overhead @		
									Total Direct Labor And Overhead		

DIRECT LABOR AND OVERHEAD

Item No. 1

Item Title Short Horn Feed

Task Description and Manhours

*Design and Fabricate Assembly
Fixture*

Design Top and Bottom Flanges

Design Reviews and Changes

Fabricate Top and Bottom Flanges

Program Management

Schedule C

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Labor Category	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	Total Hours	Hourly Rates	Cost
Principal Engineer			12		140				214	\$9.14	\$ 1,956
Senior Engineer	20	16	20	24					656	6.88	4,513
Engineer											
Senior Technician									722	4.61	3,328
Technician									346	3.20	1,107
Group Leader											
Senior Assembler											
Assembler											
Project Planner			10		120				185	5.13	949
Project Clerk			10		120				174	2.98	519
Machinist	24			40					409	5.04	2,061
Sheet Metal	40			8					362	4.92	1,781
Maintenance											
Draftsman	16	24			20				284	3.78	1,074
Design Draftsman	16	16			20				268	5.91	1,584
Technical Writer											
Documentation Spec.					60				60	5.07	304
Documentation Clerk											
Inspector											
E/M Inspector	7			3					64	4.37	280
Quality Specialist	1								13	6.45	84
Total Hours	124	56	52	75	480				3,757		
									Total Direct Labor		\$19,540
									Overhead @ 135%		26,379
									Total Direct Labor And Overhead		\$45,919

DIRECT LABOR AND OVERHEAD

Item No. 2

Item Title Long Horn Feed

Task Description and Manhours

Design Horn

Design Orthogonal Transducer

Fabricate Model

Test Horn

Final Tests

Design and Fabricate Assembly Fixtures

Design Reviews and Changes

Program Management

Schedule C

Page 3 of 6

Labor Category	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	Total Hours	Hourly Rates	Cost
Principal Engineer	30	20	16	10	10	4	12	90	192	\$9.14	\$ 1,755
Senior Engineer	140	80	95	40	40	24	24		443	6.88	3,048
Engineer											
Senior Technician	10		40	100	100				250	4.61	1,153
Technician			24						24	3.20	77
Group Leader											
Senior Assembler											
Assembler											
Project Planner	5	5	32					80	122	5.13	626
Project Clerk			36				15	80	131	2.98	390
Machinist			991			72			1,063	5.04	5,358
Sheet Metal			64			32			96	4.92	472
Maintenance											
Draftsman	60	60				24	20	10	174	3.78	658
Design Draftsman	60	60				16		10	146	5.91	863
Technical Writer											
Documentation Spec.								40	40	5.07	203
Documentation Clerk											
Inspector											
E/M Inspector			64			16			80	4.37	350
Quality Specialist			17			3			20	6.45	129
Total Hours	305	225	1,379	150	150	191	71	310	2,781		
									Total Direct Labor		\$15,082
									Overhead @ 135%		20,361
									Total Direct Labor And Overhead		\$35,443

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DIRECT LABOR AND OVERHEAD

Item No. 3

Item Title Dual Frequency Feed

Task Description and Manhours

Design Basic Horn

Design FSP

Design Orthogonal Pol.
Transducer (L.P.)

Fabricate Horns

Fabricate FSP

Test Horns

Test FSP

Assemble Feed

Schedule C

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Labor Category	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	Total Hours	Hourly Rates	Cost
Principal Engineer	20	20	30	24	6						
Senior Engineer	174	160	60	188	16	40	60	50			
Engineer											
Senior Technician				24	48	130	80	60			
Technician				8	32						
Group Leader											
Senior Assembler											
Assembler											
Project Planner		10		57	4						
Project Clerk		10		46	4						
Machinist				745	8						
Sheet Metal				164							
Maintenance											
Draftsman	80	88	80								
Design Draftsman	120	24	120								
Technical Writer											
Documentation Spec.											
Documentation Clerk											
Inspector											
E/M Inspector				76	6			4			
Quality Specialist				17	1						
Total Hours	394	312	290	1,349	125	170	140	114			
									Total Direct Labor		
									Overhead @		
									Total Direct Labor And Overhead		

DIRECT LABOR AND OVERHEAD

Item No. 3

Item Title Dual Frequency Feed

Task Description and Manhours

Test Feed

Final Tests

Design Assembly Fixture

Program Management

Schedule C

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Labor Category	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	Total Hours	Hourly Rates	Cost
Principal Engineer			8	120					228	\$9.14	\$ 2,084
Senior Engineer	70	40	64						922	6.88	6,343
Engineer											
Senior Technician	100	90	16						548	4.61	2,526
Technician			16						56	3.20	179
Group Leader											
Senior Assembler											
Assembler											
Project Planner				100					171	5.13	877
Project Clerk				100					160	2.98	477
Machinist									753	5.04	3,795
Sheet Metal Maintenance									164	4.92	807
Draftsman			10	5					263	3.78	994
Design Draftsman			10	5					279	5.91	1,649
Technical Writer											
Documentation Spec.				50					50	5.07	254
Documentation Clerk											
Inspector											
E/M Inspector									86	4.37	376
Quality Specialist									18	6.45	116
Total Hours	170	130	124	380					3,698		
									Total Direct Labor		\$20,477
									Overhead @135%		27,644
									Total Direct Labor And Overhead		\$48,121

DIRECT LABOR AND OVERHEAD

Item No. 1, 2, and 3

Item Title Combination

Task Description and Manhours

Schedule C

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Design

Fabricate

Test

Program Management

23

Labor Category	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	Total Hours	Hourly Rates	Cost
Principal Engineer	156	68	30	300					554	\$9.14	\$ 5,064
Senior Engineer	1,108	580	360						2,048	6.88	14,090
Engineer											
Senior Technician	26	604	880						1,510	4.61	6,961
Technician	16	410							426	3.20	1,363
Group Leader											
Senior Assembler											
Assembler											
Project Planner	30	148		300					478	5.13	2,452
Project Clerk	35	130		300					465	2.98	1,386
Machinist		1,860							1,860	5.04	9,374
Sheet Metal		558							558	4.92	2,745
Maintenance											
Draftsman	632			40					672	3.78	2,540
Design Draftsman	656			40					696	5.91	4,113
Technical Writer											
Documentation Spec.				150					150	5.07	761
Documentation Clerk											
Inspector											
E/M Inspector		200							200	4.37	874
Quality Specialist		45							45	6.45	290
Total Hours	2,659	4,603	1,270	1,130					9,662		
									Total Direct Labor		\$ 52,013
									Overhead @135%		70,218
									Total Direct Labor And Overhead		\$122,231

TRAVEL

SCHEDULE D

SHEET 1 OF 4

ITEM 1 TITLE Short Horn Feed

DESCRIPTION		PURPOSE OF TRIP	NO. OF PERS.	NO. OF TRIPS	TOTAL NO. M. T'S	RATE PER TRIP	TOTAL TRANS COST	CAR RENTAL			LIVING EXPENSE			TOTAL TRAVEL & LIVING
								NO. CAR DAYS	RATE PER DAY	AMOUNT	NO. MAN DAYS	RATE PER DAY	AMOUNT	
FROM	TO													
Melbourne, Fla.	Charlottesville, Va.	Customer Liaison	2	1	2	\$122	\$244	2	\$19	\$38	2	\$25	\$50	\$332
		TOTAL TRANSPORTATION					\$224		+	\$38				\$282
		TOTAL SUBSISTENCE										\$50	50	
		TOTAL TRAVEL (TRANSPORTATION + SUBSISTENCE)										\$332		

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TRAVEL

SCHEDULE D

SHEET 2 OF 4

ITEM 2 TITLE Long Horn Feed

DESCRIPTION		PURPOSE OF TRIP	NO. OF PERS.	NO. OF TRIPS	TOTAL NO. M T'S	RATE PER TRIP	TOTAL TRANS COST	CAR RENTAL			LIVING EXPENSE			TOTAL TRAVEL & LIVING
								NO. CAR DAYS	RATE PER DAY	AMOUNT	NO. MAN DAYS	RATE PER DAY	AMOUNT	
FROM	TO													
Melbourne, Fla.	Charlottesville, Va.	Customer Liaison	2	1	2	\$122	\$244	2	\$19	\$38	2	\$25	\$50	\$332
		TOTAL TRANSPORTATION					\$244		+	\$38				\$282
		TOTAL SUBSISTENCE										\$50	50	
		TOTAL TRAVEL (TRANSPORTATION + SUBSISTENCE)										\$332		

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TRAVEL

SCHEDULE D

SHEET 3 OF 4

ITEM 3 TITLE Dual Frequency Feed

DESCRIPTION		PURPOSE OF TRIP	NO. OF PERS.	NO. OF TRIPS	TOTAL NO. M. T'S	RATE PER TRIP	TOTAL TRANS COST	CAR RENTAL			LIVING EXPENSE			TOTAL TRAVEL & LIVING
								NO. CAR DAYS	RATE PER DAY	AMOUNT	NO. MAN DAYS	RATE PER DAY	AMOUNT	
FROM	TO													
Melbourne, Fla.	Charlottesville, Va.	Customer Liaison	2	1	2	\$122	\$244	2	\$19	\$38	2	\$25	\$50	\$332
		TOTAL TRANSPORTATION					\$244		+	\$38				\$282
		TOTAL SUBSISTENCE								\$50			50	
		TOTAL TRAVEL (TRANSPORTATION + SUBSISTENCE)											\$332	

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TRAVEL

SCHEDULE D
SHEET 4 OF 4

ITEM 1, 2, and 3 TITLE Combination

DESCRIPTION		PURPOSE OF TRIP	NO. OF PERS.	NO. OF TRIPS	TOTAL NO. M/T'S	RATE PER TRIP	TOTAL TRANS COST	CAR RENTAL			LIVING EXPENSE			TOTAL TRAVEL & LIVING	
								NO. CAR DAYS	RATE PER DAY	AMOUNT	NO. MAN DAYS	RATE PER DAY	AMOUNT		
FROM	TO														
Melbourne, Fla.	Charlottesville, Va.	Customer Liaison	2	2	4	\$122	\$488	4	\$19	\$76	4	\$25	\$100	\$664	
		TOTAL TRANSPORTATION						\$488	+	\$76					\$564
		TOTAL SUBSISTENCE											\$100	100	
		TOTAL TRAVEL (TRANSPORTATION + SUBSISTENCE)											\$664		

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SECTION 5.0
SUPPORTING FINANCIAL INFORMATION

5.0 SUPPORTING FINANCIAL INFORMATION

5.1 Direct Labor Rates

Radiation Division proposal labor rates are determined by taking the actual average direct labor rates by labor category as of 1 April 1972, projecting a 1% increase per quarter to account for normal salary adjustments, and incorporating these various rates into a "Radiation Division Proposal Bid Rates" table. This table is submitted to, reviewed by, and on file with the Resident DCAA Auditor.

Rate table selection is based upon the estimated midpoint of man-hours expended.

Direct Labor Rates

<u>Category of Labor</u>	<u>Bid Rates</u>
Principal Engineer	\$9.14
Senior Engineer	6.88
Senior Technician	4.61
Technician	3.20
Project Planner	5.13
Project Clerk	2.98
Machinist	5.04
Sheet Metal	4.92
Draftsman	3.78
Design Draftsman	5.91
Documentation Specialist	5.07
E/M Inspector	4.37
Quality Specialist	6.45

Midpoint of effort: January 1973

Period of performance: October 1972 through July 1973

**RADIATION**
INCORPORATED

CORPORATE ELECTRONIC INTERIERS CORPORATION

SYSTEMS DIVISION

P. O. Box 37 • Melbourne, Florida 32901 • Phone (305) 727 4000

18 May 1972

Defense Contract Audit Agency
Radiation Incorporated
P.O. Box 1510
Melbourne, Florida 32901

Attention: Mr. R. L. Hess, Resident Auditor

Subject: Labor Bid Rates

Gentlemen:

Attached are revised labor bid rates, effective 18 May 1972, for:

1. Systems Division (excluding Miami and Riverdale)
2. Miami

Your concurrence that these bid rates represent a reasonable projection of the labor rates for the categories listed for the period indicated is requested.

Sincerely yours,

A handwritten signature in cursive script that reads "A. F. Parrish".

A. F. Parrish, Manager
Audit Liaison

AFP/sf

Attachments

CONCUR: _____

A handwritten signature in cursive script that reads "R. L. Hess".
R. L. Hess, DCAA5-22-72
Date

5.3 Overhead Burden Rate

Radiation has only one burden pool -- a direct labor burden. This pool consists of accounts used to record salaries and wages, fringe benefits, materials, supplies, equipment, utilities, services and other expense of a general nature which cannot readily be associated with specific contracts or identified with end items of production. The pool is broken down into major accounts which consist of various subaccounts. The details of these subaccounts have been provided to the Resident DCAA Auditor.

The formula for the calculation of the overhead rate is:

$$\frac{\text{Overhead Dollars}}{\text{Direct Labor Dollars}} \times 100 = \text{Overhead Rate \%}$$

The overhead rates proposed for FY72 are submitted to and reviewed by the Resident DCAA Auditor. Rates used for years beyond FY72 are based on the FY72 projection with anticipated reduction until such time that approved financial plans are available which warrant a revised projection. The overhead rates used in this proposal are as follows:

<u>Fiscal Year</u>	<u>Radiation Division</u>
1973	135%

5.4 General and Administrative Rate

G & A expenses are accumulated in a separate account pool.

Corporate G & A expenses are accumulated for the Corporation as a whole, and are allocated to the Divisions.

A detailed Chart of Accounts is maintained in the Resident DCAA Office. The rates proposed for FY72 are submitted to and reviewed by the Resident DCAA Auditor. Rates used for years beyond FY72 are the same until such time that approved financial plans are available which warrant a revised projection. The G & A rates used in this proposal are as follows:

<u>Fiscal Year</u>	<u>Radiation Division</u>
1973	10.7%



DEFENSE SUPPLY AGENCY
 DEFENSE CONTRACT ADMINISTRATION SERVICES DISTRICT, ORLANDO
 3555 MAGUIRE BOULEVARD - ORLANDO, FLORIDA 32803

IN REPLY
 REFER TO **DCRA-DOCC**

8 July 1971

SUBJECT: Forward Pricing Rates - Fiscal Year 1972

Radiation, Inc.
 ATTN: Mr. J. C. Hunt, Director of Operation Analysis
 P. O. Box 37
 Melbourne, FL 32901

Gentlemen:

Reference is made to our discussion held on 15 June 1971 and to your letter, subject as above, dated 16 June 1971.

Pending processing of a formal forward pricing agreement the following rates will be recognized for Systems Division (Melbourne Only) for forward pricing and Progress Payment Requests for Fiscal Year 1972 and beyond:

Overhead	135.0%
G&A	10.7%

In arriving at the above rates both parties acknowledge a reduction from prior years experience for bid and proposal and IR&D effort. Acceptance of the above rates is not to be construed as a precedent in, nor relief to the contractor from his responsibilities for, negotiation under public law 91-441. However, unless otherwise terminated, the above rates will apply until negotiations are completed with your company under public law 91-441.

4. The above may be amended or cancelled by written notification of either party.

Sincerely,

CLARK W. EMONS
 Contracting Officer

Copy furnished:
 DCAA/Mr. Hess