

GENERAL PROVISIONS  
TO  
CONTRACT AF 33(616)-6079

ARTICLE I - GENERAL TERMS AND CONDITIONS

A. All of the clauses of Section A of the Basic Agreement designated Contract AF 18(600)-2370, dated 30 December 1960, between the parties hereto, referred to hereinafter as the "Basic Agreement", are incorporated by reference.

B. For the purposes of this contract Clause A.13 entitled, "Nondiscrimination in Employment" incorporated in the above referenced Basic Agreement is made inapplicable, and a new Clause A.13 entitled, "Nondiscrimination in Employment", (April 1961) attached hereto is now made applicable.

ARTICLE II - SPECIAL TERMS AND CONDITIONS

A. In addition to the clauses designated by ARTICLE I above, the following clauses of Section B of the Basic Agreement are incorporated by reference:

1. Clause B-1 Financial Management Report
2. Clause B-3 Advance Payments

B. The Patent Indemnity (Not Predetermined) clause referenced in PART VIII of the Schedule is hereby designated as Clause C-1 and is attached hereto and made a part hereof.

- FIRST:** The Provisions of this Schedule shall become effective 28 October 1960.
- SECOND:** By amending PART I - STATEMENT OF WORK as follows:
- A. By adding to Paragraph A, subparagraph 3 as follows:  
"3. Exhibit B, dated 1 June 1960, attached hereto and made a part hereof."
  - B. By making inapplicable subparagraphs 2 and 3 of Paragraph B and Making applicable in lieu thereof the following new subparagraphs 2 and 3, as follows:
    - "2. ITEM II - Quarterly Engineering Reports - in one hundred seventy-five (175) copies, prepared in accordance with ARDC Manual 5-1, dated June 1957, and using as a guide Exhibit WCLR-519, dated 8 October 1957, both incorporated herein by reference. A copy of the distribution list mentioned in PART II hereof shall be bound into each copy of the report by the Contractor.
    - "3. ITEM III - Final Engineering Report - in one hundred seventy-five (175) copies, one (1) copy of which shall be in a reproducible form prepared in accordance with ARDC Manual 5-1, and using as a guide Exhibit WCLR-519. A copy of the distribution list mentioned in PART II hereof shall be bound into each copy of the report by the Contractor."
- THIRD:** By amending PART II - TIME OF PERFORMANCE AND DELIVERY INSTRUCTIONS as follows:
- A. By extending the date as set forth in Paragraph A.3 from "30 September 1960" to "30 September 1961".
- FOURTH:** By amending PART III - CONSIDERATION AND PAYMENT as follows:
- A. By increasing the estimated cost set forth in Paragraph A by ONE HUNDRED NINETEEN THOUSAND NINE HUNDRED EIGHTY-NINE DOLLARS AND NO CENTS (\$119,989.00), thereby reflecting a new total estimated cost of THREE HUNDRED THIRTY-NINE THOUSAND NINE HUNDRED THIRTY-NINE DOLLARS AND NO CENTS (\$339,939.00).
- FIFTH:** By revising PART VII - SPECIAL PROVISIONS to read as follows:
- "A. Notwithstanding any of the provisions of this contract, the Contracting Officer shall be the only individual authorized to redirect the effort or in any way amend any of the terms of this contract.
  - "B. FINANCIAL STATUS REPORT OF CONTRACT
    - 1. Notwithstanding the provisions of the Clause of the General Provisions hereof entitled 'Financial Status Report of Contract', information called for in block Item 17 on the DD Form 1C97 is not required.

PART I - STATEMENT OF WORK

A. The Contractor shall, within the period of time set forth in PART II hereof, provide the necessary personnel, facilities, materials and supplies and shall perform antenna research in accordance with the following:

1. Attachment I, dated 7 July 1958, attached hereto and made a part hereof.

B. The Contractor shall, as a result of the work accomplished in accordance with the requirements of Paragraph A above, and in accordance with the schedule set forth in PART II hereof, submit the following ITEMS:

1. ITEM I - Monthly Progress Reports - in two (2) copies containing a brief outline of the status of the project and a discussion bearing upon the approach to the objectives specified herein, including both positive and negative results obtained during the reporting period.
2. ITEM II - Quarterly Engineering Reports - in ninety (90) copies, one (1) copy of which shall be in a reproducible form prepared in accordance with ARDC Manual 5-1, dated June 1957, and using as a guide Exhibit WCLR 519, dated 8 October 1957, both incorporated by reference. A copy of the distribution list mentioned in PART II hereof shall be bound into each copy of the report by the Contractor.
3. ITEM III - Final Engineering Report - in ninety (90) copies, one (1) copy of which shall be in a reproducible form prepared in accordance with ARDC Manual 5-1, and using as a guide Exhibit WCLR 519. A copy of the distribution list mentioned in PART II hereof shall be bound into each copy of the report by the Contractor.

C. The Contractor shall prepare in three (3) copies a letter of transmittal which shall be submitted concurrently with each item delivered under this contract. The Letter of Transmittal which accompanies the Monthly Progress Report shall contain an indication as to the percentage of completion of the total work required as of the end of the reporting period. The Contractor shall certify in the letter of transmittal which accompanies the Quarterly and Final Engineering Reports that the other copies of the reports have been distributed to the destinations outlined in the distribution list. The Letter of Transmittal shall be submitted in accordance with instructions contained in PART II hereof.

D. All items required herein shall bear the Contract Number and Task Number designated on the cover page of this contract.

PART II - TIME OF PERFORMANCE AND DELIVERY INSTRUCTIONS

A. The Contractor shall commence performance of the work set forth herein on or after 1 September 1958 and shall deliver the items required by PART I hereof in accordance with the following schedule:

1. ITEM I - Monthly Progress Reports - The first report shall be submitted no later than 20 October 1958 and each subsequent report shall be submitted monthly thereafter for the duration of the contract.

2. ITEM II - Quarterly Engineering Reports - The first report shall be submitted no later than 31 December 1958 and each subsequent report shall be submitted quarterly thereafter for the duration of the contract.
3. ITEM III - Final Engineering Report - shall be submitted on or before 31 October 1959.

B. The Contractor shall submit by prepaid mail all items required by PART I hereof as follows:

1. ITEM I to: Commander  
Wright Air Development Center  
ATTN: WCLRS-6, Contract AF 33(616)-6079  
Wright-Patterson Air Force Base, Ohio
2. ITEM II and ITEM III shall be distributed in accordance with a distribution list to be furnished by the Aerial Reconnaissance Laboratory.

C. The Contractor shall forward the three (3) copies of the Letter of Transmittal called for herein to the following: One (1) copy to accompany the ITEM submitted to the Laboratory; one (1) copy to the Administrative Office designated on the cover page of this contract; and one (1) copy to Commander, Wright Air Development Center, ATTN: WCLRO-3, Wright-Patterson Air Force Base, Ohio

#### PART III - CONSIDERATION AND PAYMENT

A. The estimated cost of this contract as contemplated by the General Provisions is ONE HUNDRED THOUSAND DOLLARS AND NO CENTS (\$100,000.00).

B. The Contractor shall be reimbursed for overhead expense during each overhead period at a provisional rate, applicable to direct salaries and wages, including vacation, holidays and sick leave allowance; subject, however, to the provisions of the Clause hereof entitled "Negotiated Overhead Rates". The rate for the first period is 37.25%. The first period shall extend from the inception of this Contract through 31 August 1959, and subsequent periods shall be of 12 months duration each.

#### PART IV - INSPECTION AND ACCEPTANCE

A. The Aerial Reconnaissance Laboratory, WCLR, Wright Air Development Center, Wright-Patterson Air Force Base, Ohio, is hereby designated as the point for final inspection and acceptance of all ITEMS required herein.

#### PART V - ADVANCE PAYMENTS

A. Advance Payments will be made for the work called for hereunder in accordance with the Findings and Authorization signed by the Assistant Secretary of the Air Force on 7 August 1953. Payments made pursuant to this clause shall be governed

Mr. R. H. Rines

- 2 -

February 10, 1967

*Tues Day*  
Document 5115 is the postal receipt slip dated May 5, 1959, which we had seen previously.

I don't think these documents conclusively establish that the reports went out before May 3. However, the letter of transmittal dated April 27 certainly raises a presumption of earlier mailing.

Very truly yours,

Richard S. Phillips

RSP:iag

\* Enclosures

UNIVERSITY OF ILLINOIS

DISCLOSURE OF INVENTION AND  
LETTER OF TRANSMITTAL

5124

To the University of Illinois  
Patent Committee

Date: 20 May 1959

Entered herein and attached hereto is information concerning a potentially patentable invention for your consideration.

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1. Descriptive Title of Invention

"Log Periodic Dipole Arrays"

2. Inventor:

D. E. Isbell  
Staff Member,  
Antenna Research  
Laboratory

University of Illinois  
Electrical Engineering  
Research Laboratory  
Room 311F Ext. 570

3. Description of Invention

- (a) Description: For a complete description of the invention please refer to Antenna Laboratory Technical Report No. 39, "Log Periodic Dipole Arrays," by D. E. Isbell, Contract No. AF 33(616) - 6079, Project No. 9-(15-6278) Task 40572 Wright Air Development Center, Electrical Engineering Research Laboratory, University of Illinois
- (b) Earliest date and place invention was conceived; The antenna was conceived in September of 1958 at the University of Illinois Antenna Laboratory.
- (c) Date and place of first sketch, drawing, and written description: The first recorded sketches and drawings were given on pp. 2-3 of Quarterly Engineering Report No 2 "Research Studies on Problems related to ECM Antennas," Contract No. AF 33(616)-6079 Electrical Engineering Department, University of Illinois.

4. Disclosure

- (a) Disclosure of Invention to others: The invention was disclosed to other members of the Antenna Laboratory during its initial development and was also disclosed to some visitors to our laboratory.
- (b) Date and place of completion of the first operating model or full scale device: The first operating model was made in the University of Illinois Antenna Laboratory in December of 1958.
- (c) Present location of Model: It is still located at the Antenna Laboratory.
- (d) Date, place, description and results of first test or operation: The first results were described in Technical Report No. 59 mentioned above.

5. Sponsor of the University

The development of this invention was supported entirely by the University of Illinois facilities, with the dates the same as above.

- 6. This invention was made while working on research sponsored by the Wright Air Development Center under Contract AF 33(616)-6079 entitled, "Research Studies on Problems Related to TX Antennas."

Note: This invention is unclassified.

- 7. If decision of the Patent Committee is to recommend release of interests of the University in this invention, the following is recommended:

Release to inventor, with recognition of contractual obligations of the University to sponsoring agency.

5126

Respectfully submitted,

W. B. Edell  
Inventor

Date May 31, 1950

It is certified that the statements made herein are correct to the best of my knowledge and belief.

\_\_\_\_\_  
Department Head, or Chief  
Administrative Officer

\_\_\_\_\_  
Date



RECOMMENDATIONS

It is my/our opinion and recommendation(s) that the potentially patentable invention described herein:

- Has little or no commercial value and should be released by the University to  inventor(s) or  sponsoring agency.
- Definite possibility of commercial value and retention by the University or University of Illinois Foundation for development, with partial distribution of any net income to the inventor(s).
- Other:

\_\_\_\_\_  
 Date  
 Department Head or other  
 Administrative Officer

\_\_\_\_\_  
 Date

\_\_\_\_\_  
 Date  
 Other individuals who have  
 knowledge of this invention

## LOCAL LIST

	<u>Technical</u>	<u>Progress</u>
P. Mayes	9	9
Dr. E. C. Jordan, E. E. Bldg.	1	1
<del>Dean Wendell Miller, 145 E. E. Bldg.</del>	<del>1</del>	<del>1</del>
Engineering Library, 106 Civil Eng. Hall	2	2
Local Library, E.E.R.L.	1	1
C. H. Tang (box)	1	1
Raj Mittra, E.E. College box	1	1

CLS - 00006 STIPES PER. - 021156 c/o MARGE JOHNSON, U OF I, URBANA, ILL.

5605

DATE 1959	PARTICULARS	FOLIO		DEBITS	CREDITS	BALANCES	
		BOOK	PAGE			DR.	CR.
	Bal Paid						
Apr 29	PO 44824 & 44825						
	Cont. 6079 - 2R 36						
	70 plates - 117 copies						
	gtd of only - 2 volumes						
	Gather & Bind - 117 white						
	Puff transmittal letters						
	FFEC						
	31 add'l copies - gather & bind	19015	78				
Apr 29	PO 44827 & 44898						
	Cont 6079 - 2R 2						
	25 plates - 117 copies - gtd						
	g & b - 2 volumes - gather						
	g Bind - 117 Trans letters						
	one Lhs & 117 on Puff						
	FFEC						
	31 add'l copies - gather & bind	19015	78				

STATEMENTS IN DUP.

ACCOUNT U OF I ELECTRICAL ENGINEERING

NO. 3 155

GLS - 001006 STIPES FUD. - 021154 c/o MARGE JOHNSON, U OF I, URBANA, ILL.

DATE 1959	PARTICULARS	FOLIO		DEBITS	CREDITS	BALANCES	
		BOOK	PAGE			DR.	CR.
	Bal. Fwd						
Apr 27	P.O. 44899-J - Cont. 6079						
	2ER # 2-117 Cont. corrected						
	117 Cash on plain	19016	77		2000		
Nov 28	P.O. 45350-J - Cont. 1834(2)						

5606

Date Received 4-20 1959

No 19015

Date Received 4-20 1959

No 19016

Date Promised \_\_\_\_\_ 19\_\_

Date Promised \_\_\_\_\_ 19\_\_

E-77 ✓

# CHAMPAIGN LETTER SHOP Job Ticket

# CHAMPAIGN LETTER SHOP Job Ticket

Name U of I E E

Name U of I E E

Address AF 33 (616) 6079 - QR 2

Address AF 33 (616) 6079 - QR 2 Bind \_\_\_\_\_ Pad \_\_\_\_\_

Description of Job: \_\_\_\_\_

Description of Job: \_\_\_\_\_

Quantity \_\_\_\_\_ Size 148 total run Ink \_\_\_\_\_ Stock \_\_\_\_\_

Quantity \_\_\_\_\_ Size 8 1/2 x 11 Ink Black Stock Azure Blue

25 plates - 117 copies - run f & b - 2 vellums

117 trans letters on lls & 112 on buff

EEIC - 31 add'l copies - Suther & bind 8.68

Dept. No. 1 Job Started \_\_\_\_\_ Finished 4-22-59

117 Front covers pt'd } 44899  
117 Plain back covers } 148 total run

EEIC { 31 Front covers pt'd } 44898  
31 Plain back covers }

Dept. No. 1 Job Started \_\_\_\_\_ Finished 4/21/59

5607

# REQUISITION

Department Requisitioning Electrical Engineering Office Address No. 624  
DATE 7-2-59

TO THE DIRECTOR OF PURCHASES:

Please Deliver the Following to 102 Electrical Engineering Research Lab Room Number Building 5371

Not Later Than \_\_\_\_\_ Call R. Nipper Name Ext. 2621 For additional information

QUANTITY	CATALOG NUMBER	ITEM (Give Complete Specifications)	Estimated Cost (If Available)	Suggested Vendor (If Available)	P. O. Number
117		Front and back covers for Technical Report 37, Contract 6079 printed on Antique Blue Stock. Cover copy supplied by RML.		U. of I. Print Shop	
117		Front and back covers for Technical Report No. 38, Contract 6079 printed on Antique Blue Stock. Cover copy supplied by RML.			
117		Front and back covers for Technical Report No. 39, Contract 6079 printed on Antique Blue stock. Cover copy supplied by RML.			
PLEASE RUSH					
Johnson <u>66 22 25 314</u>					

**APPROPRIATION**

I hereby certify that there is an unobligated balance available for the above expenditures in the appropriation indicated.

Approved \_\_\_\_\_

**CLASSIFICATION**

- 6. Equipment
- 7. Improvements
- 4. Other Expense 1

# REQUISITION

Department Requisitioning Electrical Engineering No. 61-R  
Office Address

TO THE DIRECTOR OF PURCHASES: DATE 7-2-59 5350  
Please Deliver the Following to 100 Electrical Engineering Research Lab  
Room Number Building

Not Later Than Call R. Rippon Ext. 2622 For additional information  
Name

QUANTITY	CATALOG NUMBER	ITEM (Give Complete Specifications)	Estimated Cost (If Available)	Suggested Vendor (If Available)	P. O. Number
40		Additional front and back covers for Technical Report No. 37, Contract 6079, printed on Antique Blue Stock. Cover copy supplied by MRL.		U. of I. Print Shop	
40		Additional front and back covers for Technical Report No. 38, Contract 6079, printed on Antique Blue Stock Cover copy supplied by MRL.			
140		Additional front and back covers for Technical Report No. 39, Contract 6079, printed on Antique Blue Stock. Cover copy supplied by MRL.			
PLEASE RUSH					
Johnson 49 22 25 300					

<p><b>APPROPRIATION</b> <span style="float: right;">ERIC</span></p> <p>I hereby certify that there is an unobligated balance available for the above expenditures in the appropriation indicated.</p> <p>Approved _____</p>	<p style="text-align: center;"><b>CLASSIFICATION</b></p> <table border="1" style="width: 100%;"> <tr> <td style="width: 80%;">6. Equipment</td> <td></td> </tr> <tr> <td>7. Improvements</td> <td></td> </tr> <tr> <td>4. Other Expense</td> <td style="text-align: center;">1,</td> </tr> </table>	6. Equipment		7. Improvements		4. Other Expense	1,
6. Equipment							
7. Improvements							
4. Other Expense	1,						

# REQUISITION

Department Requisitioning Electrical Engineering

No. 1611-R  
~~2075-1~~

Office Address

DATE 4-26-59

TO THE DIRECTOR OF PURCHASES:

Please Deliver the Following to 100 Electrical Engineering Research Lab 5372  
Room Number Building

Not Later Than \_\_\_\_\_ Call R. Ripper Ext. 2621 For additional information  
Name

QUANTITY	CATALOG NUMBER	ITEM (Give Complete Specifications)	Estimated Cost (If Available)	Suggested Vendor (If Available)	P. O. Number
31		additional copies of Technical Report No. 36 Contract AF33(616)-6079 on "Use of Coupled Waveguides in a Traveling Wave Scanning Antenna" (MacPhie) Print on one side of the paper only.	Cost	U. of I. Print Shop <i>Champaign Station</i> <i>Shop</i>	
31		71 mats including the preliminary pages, body and distribution list, and three page Reports Memorandum	Cost		
11		additional copies to be gathered and bound	Cost		
		additional covers; fronts and backs.	Cost		
Johnson					

APPROPRIATION

40 22 25 300

CLASSIFICATION

I hereby certify that there is an unobligated balance available for the above expenditures in the appropriation indicated.

EEIC

6. Equipment

7. Improvements

4. Other Expense

Approved \_\_\_\_\_



# REQUISITION

Department Requisitioning Electrical Engineering No. 1131-2  
Office Address

TO THE DIRECTOR OF PURCHASES: DATE 2-3-59  
Please Deliver the Following to 100 Electrical Engineering Research Lab. 5349  
Room Number Building

Not Later Than \_\_\_\_\_ Call R. Johnson Ext. 2661 For additional information  
Name

QUANTITY	CATALOG NUMBER	ITEM (Give Complete Specifications)	Estimated Cost (If Available)	Suggested Vendor (If Available)	P. O. Number
117		copies of transmittal letter for quarterly Status Report No. 1, Contract 6079, printed on letter head paper supplied by EML		Champaign Print Shop	
117		copies of transmittal letter for quarterly Status Report No. 1, Contract 6079, printed on yellow copy paper supplied by EML			
Total			2.50		

Johnson

45 22 25 314  
AF 33(616)5079

11/4

<p><b>APPROPRIATION</b></p> <p>I hereby certify that there is an unobligated balance available for the above expenditures in the appropriation indicated.</p> <p>Approved _____</p>	<p><b>CLASSIFICATION</b></p> <table border="1" style="width: 100%;"> <tr> <td>6. Equipment</td> <td></td> </tr> <tr> <td>7. Improvements</td> <td></td> </tr> <tr> <td>4. Other Expense</td> <td style="text-align: center;">4</td> </tr> </table>	6. Equipment		7. Improvements		4. Other Expense	4
6. Equipment							
7. Improvements							
4. Other Expense	4						

# REQUISITION

No. 1104-7 5340

Department Requisitioning Electrical Engineering Office Address

DATE 1-29-59

TO THE DIRECTOR OF PURCHASES:

Please Deliver the Following to 100 Electrical Engineering Research Lab  
Room Number Building

Not Later Than Call R. Ripper Name Ext. 2621 For additional information

QUANTITY	CATALOG NUMBER	ITEM (Give Complete Specifications)	Estimated Cost (If Available)	Suggested Vendor (If Available)	P. O. Number
31		Additional copies of Quarterly Report #1 Contract 6079, mats to be run. All pages are mats. Run on two sides of the paper, fronts and backs as marked at the top of each page	Cost	<i>Chang's Letter Shop</i> U. of I. Print Shop	<i>Shop</i>
31		copies of Quarterly Report #1 gather and bind	Cost		
31		Additional front covers printed in accordance with copy supplied; backs plain. Quarterly Report #1, Contract 6079.	Cost		

49 22 25 300

Johnson

APPROPRIATION	CLASSIFICATION
<p>I hereby certify that there is an unobligated balance available for the above expenditures in the appropriation indicated.</p> <p>Approved _____</p>	6. Equipment
	7. Improvements
	4. Other Expense <u>1.</u>

# REQUISITION

Department Requisitioning Electrical Engineering Office Address 100 Electrical Engineering Research Lab No. 1112-57  
 TO THE DIRECTOR OF PURCHASES: Please Deliver the Following to Room Number Building 3373 DATE 1-29-59  
 Not Later Than Call E. Ripper Name Ext. 2621 For additional information

QUANTITY	CATALOG NUMBER	ITEM (Give Complete Specifications)	Estimated Cost (If Available)	Suggested Vendor (If Available)	P. O. Number
117		copies of Quarterly Report #1 Contract 6079, 21 mats to be run. All pages are mats. Run on two sides of the paper, fronts and backs as marked at the top of each page.	Cost	<i>Champaign Letter Shop</i> <del>U. of I. Print Shop</del>	
117		copies of Quarterly Report #1 gather and bind	Cost		
2		complete vellum copies of Quarterly Report #1, Contract 6079, Print on one side of the paper only and gather.	Cost		
117		Front covers printed in accordance with copy supplied; backs plain. Quarterly Report #1, Contract 6079.	Cost		

46 22 25 314  
AF 331616:6079

Johnson 46 22 25 314

APPROPRIATION  I hereby certify that there is an unobligated balance available for the above expenditures in the appropriation indicated.  Approved _____	CLASSIFICATION	
	6. Equipment	
	7. Improvements	
	4. Other Expense	2

US AF 6:79

FORM 500

46-22-25-314

FEB 1959

1

ACCOUNT TITLE

ACCOUNT NUMBER

DATE

PAGE

REQUISITION OR SALES INVOICE NO.	ARTICLES OR PAYEE	CLASS	BUSINESS OFFICE NUMBER	EXPENDITURES	CREDITS	BALANCE
	FROM PREV MONTH			44262.94	100000.00	55737.0
	INDIRECT COST CHARGE	4	JV 141	2354.54		
	<del>46-22-25-314 FEB PAYROLL</del>	<del>01</del>		<del>6320.92</del>		
	RICHARD RIPPER	4	T 007958	7.81		
	WALTER L WEEKS	3	T 008154	58.91		
523R	W J JAHR CO	4	T 008918	27.66		
458R	NEWARK ELECTRIC CO	4	T 008952	49.45		
1024R	CENTRAL STEEL & WIRE CO	4	T 008953	57.40		
1018R	NAZ DAR CO	4	T 011134	5.36		
1117R	NEWARK ELECTRIC CO	4	T 012072	26.34		
1116R	THE HARDA MICROWAVE CORP	4	T 012676	60.35		
	RICHARD RIPPER	4	T 013354	7.00		
	<del>EMPLRS CONTRIB ON 387744</del>	<del>04</del>	<del>T 36229</del>	<del>328.69</del>		
	ELEC ENG REPL	4	ER 019044	56.94		
	ELEC ENG REPL	4	ER 019112	14.54		
	ELEC ENG REPL	4	ER 019116	9.49		
	ELEC ENG REPL	4	ER 019129	13.18		
	ELEC ENG REPL	4	ER 019139	27.78		
	ELEC ENG REPL	4	ER 019185	3.51		
	PHYSICS STORES	4	PC 001023	X 1.67		
	PHYSICAL PLANT STORES	4	PS 075176	X 5.11		
	COMPUTER SERVICE	4	CS 020895	47.40		
770R	PHYSICAL PLANT JOBS	4	PJ 023277	17.67		
	ILLINI UNION	4	IU 004025	X 1.66	420.00	
	TRANSFERS	4	TV 021779	420.00		
	TRANSFERS	4	TV 021810	X 22.26		
	TELEPHONE CHARGES	4	TL	16.65	16.65	
	<del>WK COMP FOR FEB 0632092</del>	<del>04</del>		<del>63.21</del>		
			supplies	30.70		
			del	436.65		
				467.35		
				5608		

EXPLANATION OF CLASS NUMBERS

- 1-SALARIES
- 2-WAGES
- 3-TRAVEL
- 4-COMMODITIES
- 5-CONTRACTUAL
- 6-EQUIPMENT
- 7-IMPROVEMENTS
- 8-LAND

EXPLANATION OF ABBREVIATIONS

- AC-ANALOG COMPUTE
- AT-AIR TRAVEL
- BD-BIOL DRAFTING
- BL-BLUEPRINTING
- CP-CAR POOL
- CR-CASH RECEIPT
- CS-COMPUTER SER
- EC-EMPLOYERS CONT
- ER-ELEC ENG. REPL
- EX-EXPRESS
- FE-FEDERAL EXT.
- FR-FEDERAL RES.
- FS-FEED STORAGE
- FT-FREIGHT
- G-GENERAL
- GA-GRAPHIC ARTS
- GB-GLASSBLOWING
- GC-GEN. CHEM STORES
- IS-INSTRUMENT SER
- IU-ILLINI UNION
- JV-JOURNAL VOUCHER
- LH-LIQUID HELIUM
- MG-MIMEOGRAPHING
- MI-MISCELLANEOUS
- MR-MACHINE REPAIR SER
- MS-MAILING SER
- OS-OFFICE SUPPLY STORE
- PC-PHYSICS STORES
- PH-PHOTOGRAPHY
- PJ-PP JOB
- PO-POSTAGE
- PR-PRINTING
- PS-PP STORES
- PY-PHYSICS SER
- RS-RECORDING SER
- S-STORES & SERVICE
- SG-STENOGRAPHIC SER
- SI-SALES INVOICE
- T-TRUST
- TG-TELEGRAMS
- TL-TELEPHONE
- TS-TABULATING SER
- TV-TRANSFER
- TY-TELETYPE
- UC-UNCLASSIFIED
- UP-UNIV PRESS ART SER
- WC-WORKING CASH

TOTALS TO DATE

END OF MONTH BALANCE

SALARIES	WAGES	EXPENSE	EQUIPMENT	EXPENDITURES	CREDITS	BALANCE
33906 96		19692 05	689 43	54288.44	100000.00	45711.5

AF 6079 IC

45-22-25-314

FEB 1959

1

ACCOUNT TITLE

ACCOUNT NUMBER

DATE

PAGE

REQUISITION OR SALES INVOICE NO.	ARTICLES OR PAYEE	CLASS	BUSINESS OFFICE NUMBER	EXPENDITURES	CREDITS	BALANCE
	FROM PREV MONTH INDIRECT COST CREDIT		JV 141	8.00	10275.80 2354.54	10267.80

EXPLANATION OF CLASS NUMBERS

- 1-SALARIES
- 2-WAGES
- 3-TRAVEL
- 4-COMMODITIES
- 5-CONTRACTUAL
- 6-EQUIPMENT
- 7-IMPROVEMENTS
- 8-LAND

EXPLANATION OF ABBREVIATIONS

- AC-ANALOG COMPUTER
- AT-AIR TRAVEL
- BD-BIOL DRAFTING
- BL-BLUEPRINTING
- CP-CAR POOL
- CR-CASH RECEIPT
- CS-COMPUTER SER
- EC-EMPLOYERS CONT
- ER-ELEC ENG. REPL
- EX-EXPRESS
- FE-FEDERAL EXT.
- FR-FEDERAL RES.
- FS-FEED STORAGE
- FT-FREIGHT
- G-GENERAL
- GA-GRAPHIC ARTS
- GB-GLASSBLOWING
- GC-GEN. CHEM STORES
- IS-INSTRUMENT SER
- IU-ILLINI UNION
- JV-JOURNAL VOUCHER
- LH-LIQUID HELIUM
- MG-MIMEOGRAPHING
- MI-MISCELLANEOUS
- MR-MACHINE REPAIR SER
- MS-MAILING SER
- OS-OFFICE SUPPLY STORE
- PC-PHYSICS STORES
- PH-PHOTOGRAPHY
- PI-PP JOB
- PO-POSTAGE
- PR-PRINTING
- PS-PP STORES
- PY-PHYSICS SER
- R5-RECORDING SER
- S-STORES & SERVICE
- SG-STENOGRAPHIC SER
- SI-SALES INVOICE
- T-TRUST
- TG-TELEGRAMS
- TL-TELEPHONE
- TS-TABULATING SER
- TV-TRANSFER
- TY-TELETYPE
- UC-UNCLASSIFIED
- UP-UNIV PRESS ART SER
- WC-WORKING CASH

5609

TOTALS TO DATE

END OF MONTH BALANCE

SALARIES	WAGES	EXPENSE	EQUIPMENT	EXPENDITURES	CREDITS	BALANCE
		8 00		8.00	12630.34	12622.34

UNIVERSITY OF ILLINOIS  
MISCELLANEOUS VOUCHER

This Copy  
for  
Department

Pay to:

Richard W. Porter NAME	
209 NUMBER	Electrical Engineering Research Lab STREET
Urbana CITY	Illinois STATE

DATE

6-18-59

UNIVERSITY  
DEPARTMENT

Electrical Engineering

QUANTITY	DESCRIPTION	AMOUNT	
	Postage on slides	2	82
	Bottle of processing solution	1	95
	Tubes	3	35
	Total	6	12

5610

46 22 25 314  
AF 33(616)6079

E

039916

UNIVERSITY OF ILLINOIS  
MISCELLANEOUS VOUCHER

This Copy  
for  
Department

Pay to:

Richard Hipper	
NAME	
209 Elec. Eng. Res. Lab.	
NUMBER	STREET
Urbana, Ill.	Ill.
CITY	STATE

DATE 3-30-59

UNIVERSITY DEPARTMENT Elec. Eng.

QUANTITY	DESCRIPTION	AMOUNT
	postage on reports	72
	5611	

46 22 25  
BE 33(616)6079

46 22 25 31A  
AF 33(616)6079

021278

**UNIVERSITY OF ILLINOIS  
MISCELLANEOUS VOUCHER**

This Copy  
for  
Department

Pay to:

Richard Rippon	
NAME	
209 Elec. Eng. Res. Lab.	
NUMBER	STREET
Urbana,	Ill.
CITY	STATE

DATE 4-25-59

UNIVERSITY DEPARTMENT Elec. Eng.

QUANTITY	DESCRIPTION	AMOUNT
	p stage on reports	1 64
	paper	3 30
	paper	3 82
	Total	8 76
	5612	
46 22 25 314		
AF 33(616)6079		

025673



ACCOUNT TITLE		ACCOUNT NUMBER		DATE	PAGE	
ACQUISITION OR SALES INVOICE NO.	ARTICLES OR PAYEE	CLASS	BUSINESS OFFICE NUMBER	EXPENDITURES	CREDITS	BALANCE
	FROM PREV MONTH			54288.44	100000.00	45711.56
	<del>46-22-25-314 MAR PAYROLL</del>	<del>01</del>		<del>5311.99</del>		
	<del>IND COST CHARGE</del>	<del>4</del>	<del>JV 158</del>	<del>2164.93</del>		
214R	<del>RADAR DESIGN CORP</del>	<del>4</del>	<del>T 014422</del>	<del>72.32</del>		
482R	<del>GENERAL RADIO CO</del>	<del>4</del>	<del>T 014780</del>	<del>25.96</del>		
35R	<del>POLARAD ELECTRONICS CORP</del>	<del>4</del>	<del>T 014986</del>	<del>1.91</del>		
58R	<del>ALLIED RADIO CORP</del>	<del>4</del>	<del>T 015845</del>	<del>82.60</del>		
153R	<del>GENERAL RADIO CO</del>	<del>4</del>	<del>T 016747</del>	<del>128.63</del>		
14R	<del>INDUSTRIAL PRODUCTS CO</del>	<del>4</del>	<del>T 017435</del>	<del>16.66</del>		
157R	<del>CROSSLEY ASSOCIATES INC</del>	<del>4</del>	<del>T 017556</del>	<del>1.73</del>		
623R	<del>HARRINGTON &amp; KING PERFOR</del>	<del>4</del>	<del>T 017557</del>	<del>98.70</del>		
236R	<del>NEWARK ELECTRIC CO</del>	<del>4</del>	<del>T 017582</del>	<del>3.67</del>		
	<del>RICHARD RIPPER</del>	<del>4</del>	<del>T 018535</del>	<del>8.70</del>		
131R	<del>CHAMPAIGN LETTER SHOP</del>	<del>4</del>	<del>T 018558</del>	<del>6.80</del>		
103R	<del>CHAMPAIGN LETTER SHOP</del>	<del>4</del>	<del>T 018559</del>	<del>84.36</del>		
342R	<del>ERSBERS CAMERA SHOP</del>	<del>4</del>	<del>T 019170</del>	<del>44.22</del>		
169R	<del>KEUFFEL &amp; ESSER CO</del>	<del>4</del>	<del>T 020145</del>	<del>26.39</del>		
118R	<del>SPERRY ELECTRONIC TUBE</del>	<del>4</del>	<del>T 020756</del>	<del>40.26</del>		
	<del>RICHARD RIPPER</del>	<del>4</del>	<del>T 021278</del>	<del>.72</del>		
	<del>EMPLRS CONTRIB-0M0381494</del>	<del>04</del>	<del>T 43288</del>	<del>323.39</del>		
3R	<del>MACHINE REPAIR</del>	<del>4</del>	<del>MR 003805</del>	<del>39.00</del>		
	<del>BLUEPRINTING PHOTOGRAPHY</del>	<del>4</del>	<del>BL 006839</del>	<del>4.32</del>		
	<del>INSTRUMENT SERVICE</del>	<del>4</del>	<del>IS 010019</del>	<del>.99</del>		
	<del>COMPUTER SERVICE</del>	<del>4</del>	<del>CS 020906</del>	<del>25.80</del>		
5840C	MARTIN MOD ADH	4	TG 000217	1.30	1345	
	TELEPHONE CHARGES	4	TL	12.15		
	<del>WK COMP FOR MAR 0581190</del>	<del>04</del>		<del>58.12</del>		

- EXPLANATION OF CLASS NUMBERS
- 1-SALARIES
  - 2-WAGES
  - 3-TRAVEL
  - 4-COMMODITIES
  - 5-CONTRACTUAL
  - 6-EQUIPMENT
  - 7-IMPROVEMENTS
  - 8-LAND
- EXPLANATION OF ABBREVIATIONS
- AC-ANALOG COMPUTER
  - AT-AIR TRAVEL
  - BD-BIOL DRAFTING
  - BL-BLUEPRINTING
  - CP-CAR POOL
  - CR-CASH RECEIPT
  - CS-COMPUTER SER
  - EC-EMPLOYERS CONT
  - ER-ELEC ENG. REPL
  - EX-EXPRESS
  - FE-FEDERAL EXT.
  - FR-FEDERAL RES.
  - FS-FEED STORAGE
  - FT-FREIGHT
  - G-GENERAL
  - GA-GRAPHIC ARTS
  - GB-GLASSBLOWING
  - GC-GEN. CHEM STORES
  - IS-INSTRUMENT SER
  - IJ-ILLINI UNION
  - JV-JOURNAL VOUCHER
  - LH-LIQUID HELIUM
  - MG-MIMEOGRAPHING
  - MI-MISCELLANEOUS
  - MR-MACHINE REPAIR SER
  - MS-MAILING SER
  - OS-OFFICE SUPPLY STORE
  - PC-PHYSICS STORES
  - PH-PHOTOGRAPHY
  - PI-PP JOB
  - PO-POSTAGE
  - PR-PRINTING
  - PS-PP STORES
  - PY-PHYSICS SER
  - RS-RECORDING SER
  - S-STORES & SERVICE
  - SG-STENOGRAPHIC SER
  - SI-SALES INVOICE
  - T-TRUST
  - TG-TELEGRAMS
  - TL-TELEPHONE
  - TS-TABULATING SER
  - TV-TRANSFER
  - TY-TELETYPE
  - UC-UNCLASSIFIED
  - UP-UNIV PRESS ART SER.
  - WC-WORKING CASH

*suppl* 5.31  
*2nd* 13.45  
 18.76

5613

TOTALS TO DATE						END OF MONTH BALANCE
SALARIES	WAGES	EXPENSE	EQUIPMENT	EXPENDITURES	CREDITS	
39718 86		22963 98	689 43	63372.27	100000.00	36627.73

REQUISITION OR SALES INVOICE NO.	ACCOUNT TITLE	CLASS	ACCOUNT NUMBER	BUSINESS OFFICE NUMBER	EXPENDITURES	DATE	CREDITS	PAGE	BALANCE
	FROM PREV MONTH IND COST CREDIT			JV 158	8.00		12630.34 2164.93		12622.34
<p>EXPLANATION OF CLASS NUMBERS</p> <p>1-SALARIES 2-WAGES 3-TRAVEL 4-COMMODITIES 5-CONTRACTUAL 6-EQUIPMENT 7-IMPROVEMENTS 8-LAND</p> <p>EXPLANATION OF ABBREVIATIONS</p> <p>AC-ANALOG COMPUTER AT-AIR TRAVEL BD-BIOL DRAFTING BL-BLUEPRINTING CP-CAR POOL CR-CASH RECEIPT CS-COMPUTER SER EC-EMPLOYERS CONT ER-ELEC ENG. REPL EX-EXPRESS FE-FEDERAL EXT. FR-FEDERAL RES. FS-FEED STORAGE FT-FREIGHT G-GENERAL GA-GRAPHIC ARTS GB-GLASSBLOWING GC-GEN. CHEM STORES IS-INSTRUMENT SER. IU-ILLINI UNION JV-JOURNAL VOUCHER LH-LIQUID HELIUM MG-MIMEOGRAPHING MI-MISCELLANEOUS MR-MACHINE REPAIR SER MS-MAILING SER OS-OFFICE SUPPLY STORE PC-PHYSICS STORES PH-PHOTOGRAPHY PJ-PP JOB PO-POSTAGE PR-PRINTING PS-PP STORES PY-PHYSICS SER RS-RECORDING SER S-STORES &amp; SERVICE SG-STENOGRAPHIC SER SI-SALES INVOICE T-TRUST TG-TELEGRAMS TL-TELEPHONE TS-TASULATING SER TV-TRANSFER TY-TELETYPE UC-UNCLASSIFIED UP-UNIV PRESS ART SER. WC-WORKING CASH</p>									
TOTALS TO DATE									END OF MONTH BALANCE
SALARIES	WAGES	EXPENSE	EQUIPMENT	EXPENDITURES	CREDITS				
		8 00		8.00	14795.27	14787.27			

15614

POSTAL RECEIPTS

ILLINOIS  
VOUCHER

RECEIVED

JAN 5 1967

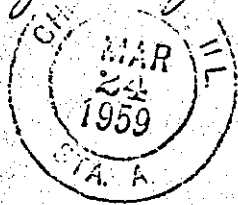
E. E. BUS. OFF.  
This Copy  
for  
Accounting  
Division

Date 24 March 1959

RECEIVED of Contract 6079

\$ 72

for postage on Journal Article (written)



Postmaster

By \_\_\_\_\_

in quadruplicate  
IS  
W)

STREET

ILL.

CITY

DATE 3-30-59

DEPARTMENT Elec. Eng.

QUANTITY	DESCRIPTION	AMOUNT
	postage on reports	72
	5615	

RECEIVED  
ACCOUNTING DIVISION

MAR 31 1959

AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

*Richard P. Pifer*

ACCOUNT CODE NUMBER <u>40 22 25 314</u> 6F 33(616)6079	EXPENSE <u>4</u>	FUND <u>7</u>	VOUCHER NUMBER <u>021278</u>
APPROPRIATION <u>CE. D. Sec 12/10</u> <u>Mar 1</u>	EXTENSION	FOR CHIEF ACCOUNTANT <i>E. E. Bus.</i>	
I certify that no requisition has been issued, and that there is an unobligated balance available for the above expenditure in the appropriation indicated.		POSTED	
APPROVED <i>H. B. Kowles</i>	MAR 31 1959		

DEPARTMENT REQUISITIONING

DELIVER TO

# UNIVERSITY OF ILLINOIS

BUSINESS OFFICE—PURCHASING DIVISION  
203 ADMINISTRATION BUILDING (E)  
URBANA, ILLINOIS

## PURCHASE ORDER

NO. **35705**  
THIS NUMBER MUST APPEAR ON ALL CORRESPONDENCE AND SHIPMENTS.

February 5, 1959

DATE

TO  
• Champaign Letter Shop  
• 10-12 Chester Street  
• Champaign, Illinois

SHIP TO

UNIVERSITY OF ILLINOIS  
100 Electrical Engineering  
Research Lab.  
URBANA, ILLINOIS

SHIPPING DATE \_\_\_\_\_ SHIP VIA: \_\_\_\_\_ (SHIP CHEAPEST WAY UNLESS OTHERWISE SPECIFIED)

QUANTITY	DESCRIPTION	PRICE	AMOUNT
117	copies of transmittal letter for Quarterly Status Report No. 1, Contract 6079, printed on letter head paper supplies by ERM.		
117	copies of transmittal letter for Quarterly Status Report No. 1, Contract 6079, printed on yellow copy paper supplies by ERM.		5616
	$  \begin{array}{r}  6.00 \\  2.50 \\  \hline  3.50  \end{array}  $		+ 3.50  <i>M</i>

PRICE F.O.B. \_\_\_\_\_ 2% 10TH OF MONTH FOLLOWING UNLESS OTHERWISE STATED TERMS \_\_\_\_\_ AS PER \_\_\_\_\_

INVOICE				TRANSPORTATION CHARGES						
PASSED	AMOUNT	PASSED	AMOUNT	Date	CRS. No.	Carrier	Pro. No.	Amt.	Pd	C

UNIVERSITY OF ILLINOIS  
**INVOICE - VOUCHER**

UNIVERSITY ORDER NO.

35705-J

MUST BE GIVEN

KEEP THIS FORM INTACT  
 Do Not Tear It Apart

PLEASE RENDER INVOICE IN QUADRUPPLICATE  
 ON THIS FORM AND MAIL ALL COPIES TO:

UNIVERSITY OF ILLINOIS  
 PURCHASING DIVISION  
 203 ADMINISTRATION BLDG. (EAST)  
 URBANA, ILLINOIS

**PAY TO:**

FIRM NAME	Champaign Letter Shop 004006
STREET AND NUMBER	10 Chester Street
CITY AND STATE	Champaign, Illinois

THIS COPY FOR  
 DEPARTMENT

DATE February 5, 1959

FIRM INVOICE NO.

TERMS: Net

2% 10th OF MONTH FOLLOWING  
 UNLESS OTHERWISE STATED.

QUANTITY	DESCRIPTION	UNIT PRICE	AMOUNT
117	copies of transmittal letter for Quarterly Status Report No. 1, Contract 6079, printed on letter head paper supplied by EERL		56.17
117	copies of transmittal letter for Quarterly Status Report No. 1, Contract 6079, printed on yellow copy paper supplied by EERL		\$ 6.00
PAYEE SHOULD NOT WRITE BELOW THIS LINE			

1131-R

46 22 25 314

(4)

018558

# REQUISITION

Department Requisitioning Electrical Engineering No. 1131-R  
Office Address \_\_\_\_\_ DATE 2-3-59

TO THE DIRECTOR OF PURCHASES: 100 Electrical Engineering Research Lab.  
Please Deliver the Following to \_\_\_\_\_  
Room Number \_\_\_\_\_ Building \_\_\_\_\_

Not Later Than \_\_\_\_\_ Call R. Ripper Name \_\_\_\_\_ Ext. 2621 For additional information

QUANTITY	CATALOG NUMBER	ITEM (Give Complete Specifications)	Estimated Cost (If Available)	Suggested Vendor (If Available)	P. O. Number
117		copies of transmittal letter for Quarterly Status Report No. 1, Contract 6079, printed on letter head paper supplied by EERL		Champaign Print Shop	
117		copies of transmittal letter for Quarterly Status Report No. 1, Contract 6079, printed on yellow copy paper supplied by EERL		5618	
Total			2.50	✓ 2/9/59 Loc. DEC.	
		Johnson	46 22 25 314 OF 321616/6079		E

<p><b>APPROPRIATION</b></p> <p>I hereby certify that there is an unobligated balance available for the above expenditures in the appropriation indicated.</p> <p>Approved _____</p>	<p><b>CLASSIFICATION</b></p> <table border="1" style="width: 100%;"> <tr> <td>6. Equipment</td> <td></td> </tr> <tr> <td>7. Improvements</td> <td></td> </tr> <tr> <td>4. Other Expense</td> <td style="text-align: center;">4</td> </tr> </table>	6. Equipment		7. Improvements		4. Other Expense	4
6. Equipment							
7. Improvements							
4. Other Expense	4						

DEPARTMENT REQUISITIONING

DELIVER TO

UNIVERSITY OF ILLINOIS

BUSINESS OFFICE—PURCHASING DIVISION  
203 ADMINISTRATION BUILDING (E)  
URBANA, ILLINOIS

PURCHASE ORDER

No. 35553  
THIS NUMBER MUST APPEAR ON ALL CORRESPONDENCE AND SHIPMENTS.

DATE February 3, 1950

TO : Champaign Letter Shop  
10 Chester St.  
Champaign, Illinois

SHIP TO

UNIVERSITY OF ILLINOIS  
100 Electrical Engineering  
Research Lab.

URBANA, ILLINOIS

SHIPPING DATE

SHIP VIA:

(SHIP CHEAPEST WAY UNLESS OTHERWISE SPECIFIED)

QUANTITY	DESCRIPTION	PRICE	AMOUNT
117	Copies of Quarterly Report #1 Contract 6079, 21 mats to be run. All pages are mats. Run on two sides of the paper, fronts and backs as marked at the top of each page.		5619
117	Copies of Quarterly Report #1 Gather and bind		
2	Complete yellow copies of Quarterly Report #1, Contract 6079, Print on one side of the paper only and gather.		
117	Front covers printed in accordance with copy supplied; backs plain. Quarterly Report #1, Contract 6079		
NOTE: Prices to be in accordance with attached schedule			

*all 124.36*  
*60.00*  
*entered*

$$\begin{array}{r}
 84.36 \\
 60.00 \\
 \hline
 24.36
 \end{array}$$

2% 10TH OF MONTH FOLLOWING UNLESS OTHERWISE STATED

INVOICE				TRANSPORTATION CHARGES						
PASSED	AMOUNT	PASSED	AMOUNT	Date	CRS. No.	Carrier	Pro. No.	Amt.	Pd	C
				/						
				/						
				/						



Prices effective July 1, 1957 for printing and binding government research reports for the Electrical Engineering Department, University of Illinois, Urbana, Illinois

5620

Press work:

Prices based on 25 plates or more at one time

Prices based on less than 25 plates at one time

	<u>1 side</u>	<u>2 sides</u>		<u>1 side</u>	<u>2 sides</u>
Less than 100 copies	\$1.00	1.25	Less than 100 copies	\$1.25	1.50
Each add'n 50 or less	.25	.25	Each add'n 50 or less	.25	.25

Add per page for thesis copies on either of the above .25¢

Add per page for vellum copies on either of the above .10¢

No handling charge on paper furnished by University unless we cut paper.

Gather, bind (stitch, affix tape and tape) and trim: 25 p. or less or less

50 copies or less 30¢ each 6¢ each

More than 50 copies 25¢ each 6¢ each

(nailing books and trimming nailed books extra charge)

Photo plates, including line drawings and combination plates:

Our cost plus 20%. The following items of cost will remain constant on all plates: Plate 50¢ - check negatives, burn and develop \$1.00. Added to these two items will be our cost of negatives and postage.

Where it is necessary to "Clean up" plates, charge will be made at the rate of \$3.00 per hour.

Overtime charge when authorized will be billed at the rate of \$2.75 per hour over regular rates.

Oftentimes we must remove sheets after reports are gathered and insert new sheets - for this work time will be charged at \$2.50 per hour.



UNIVERSITY OF ILLINOIS  
**INVOICE - VOUCHER**

UNIVERSITY ORDER NO.

**35553 -J**

MUST BE GIVEN

PLEASE RENDER INVOICE IN QUADRUPPLICATE  
 ON THIS FORM AND MAIL ALL COPIES TO:

UNIVERSITY OF ILLINOIS  
 PURCHASING DIVISION  
 203 ADMINISTRATION BLDG. (EAST)  
 URBANA, ILLINOIS

KEEP THIS FORM INTACT  
 Do Not Tear It Apart

5621

THIS COPY FOR  
 DEPARTMENT

**PAY TO:**

FIRM NAME Champaign Letter Shop 001006

STREET AND NUMBER 10 Chester Street

CITY AND STATE Champaign, Illinois

DATE February 2, 1959

FIRM INVOICE NO.

TERMS: Net

2% 10th OF MONTH FOLLOWING,  
 UNLESS OTHERWISE STATED.

QUANTITY	DESCRIPTION	UNIT PRICE	AMOUNT
117	Copies of Quarterly Report #1 Contract 6079, 21 mats to be run. All pages are mats. Run on X two sides of the paper, fronts and backs as marked at the top of each page. 21 mats	@ 1.50	\$ 31.50
117	Copies of Quarterly Report #1 Gather and bind	@ .28	32.76
2	Complete vellum copies of Quarterly Report #1, Contract 6079, Print on one side of the paper only and gather. 21 mats	@ .10	2.10
117	Front covers printed in accordance with copy supplied: backs plain. Quarterly Report #1, Contract 6079		<u>18.00</u> \$ 84.36
PAYEE SHOULD NOT WRITE BELOW THIS LINE			

1103-R

46 22 25 314

018559

# REQUISITION

Department Requisitioning Electrical Engineering No. 1103-R  
Office Address 100 Electrical Engineering Research Lab DATE 1-29-59  
TO THE DIRECTOR OF PURCHASES:  
Please Deliver the Following to \_\_\_\_\_  
Room Number R. Ripper Building 2621  
Not Later Than \_\_\_\_\_ Call \_\_\_\_\_ Ext. \_\_\_\_\_ For additional information

QUANTITY	CATALOG NUMBER	ITEM (Give Complete Specifications)	Estimated Cost (If Available)	Suggested Vendor (If Available)	P. O. Number
117		copies of Quarterly Report #1 Contract 6079, 21 mats to be run. All pages are mats. Run on two sides of the paper, fronts and backs as marked at the top of each page.	Cost ✓	U. of I. Print Shop	
117		copies of Quarterly Report #1 gather and bind	Cost ✓		
2		complete vellum copies of Quarterly Report #1, Contract 6079, Print on one side of the paper only and gather.	Cost ✓		
17		Front covers printed in accordance with copy supplied; backs plain. Quarterly Report #1, Contract 6079.	Cost ✓		

15622

3/6/59

Loe Dec

E

Johnson 46 22 25 314

<p><b>APPROPRIATION</b> AF 33(616)6079</p> <p>I hereby certify that there is an unobligated balance available for the above expenditures in the appropriation indicated.</p> <p>Approved _____</p>	<p><b>CLASSIFICATION</b></p> <table border="1" style="width: 100%;"> <tr> <td>6. Equipment</td> <td></td> </tr> <tr> <td>7. Improvements</td> <td></td> </tr> <tr> <td>4. Other Expense</td> <td style="text-align: center;">4</td> </tr> </table>	6. Equipment		7. Improvements		4. Other Expense	4
6. Equipment							
7. Improvements							
4. Other Expense	4						

NAME J. Whell PROMISED Tues 3/11/59  
(Day and Date)

DATE 2-20-59 REQ'N # \_\_\_\_\_ PHONE \_\_\_\_\_ CLERK MF

DUPLICATE \_\_\_\_\_ FOR DEPARTMENT \_\_\_\_\_

COPY CONSISTS OF \_\_\_\_\_

2 - Kodachromes 5623

WORK TO BE DONE

	UNIT	CHARGES
<u>1 - Standard Copy neg</u> <u>of ea</u>	<u>20</u>	<u>1.00</u> <u>200</u>
<u>2 - 5X7 glass subjects</u> <u>of ea</u>	<u>40</u>	<u>40</u> <u>160</u>
<u>20% Quality</u>		<u>72</u>

CHARGE TO 46-22-25-314  
A. D. 6079  
RECEIVED BY J. Whell  
Auditor \_\_\_\_\_ Class \_\_\_\_\_ Fund \_\_\_\_\_

Photography  
Blueprinting  
09-10-18-906

Total 4/32  
Del. by \_\_\_\_\_  
Correct \_\_\_\_\_  
(Manager)

ACCOUNT TITLE

ACCOUNT NUMBER

DATE

PAGE

REQUISITION OR SALES INVOICE NO.	ARTICLES OR PAYEE	CLASS	BUSINESS OFFICE NUMBER	EXPENDITURES	CREDITS	BALANCE
	FROM PREV MONTH			63372.27	100000.00	36627.73
	<del>IND COST CHARGE</del>	<del>4</del>	<del>JV 176</del>	<del>2087.64</del>		
	<del>46-22-25-314 APR PAYROLL</del>	<del>01</del>		<del>5604.40</del>		
1397	<del>ALLIED RADIO CORP</del>	<del>4</del>	<del>T 021595</del>	<del>96</del>		
1329R	<del>BAMBACH MACHINERY CO INC</del>	<del>4</del>	<del>T 021888</del>	<del>68.16</del>		
614R	<del>INDUSTRIAL PRODUCTS CO</del>	<del>4</del>	<del>T 022501</del>	<del>16.66</del>		
1422R	<del>CROSSLEY ASSOCIATES INC</del>	<del>4</del>	<del>T 023223</del>	<del>22.09</del>		
1118R	<del>SPERRY ELECTRONIC TUBE</del>	<del>4</del>	<del>T 023700</del>	<del>20.26</del>		
1322R	<del>NEWARK ELECTRI CO</del>	<del>4</del>	<del>T 023701</del>	<del>13.63</del>		
1397R	<del>ALLIED RADIO CORP</del>	<del>4</del>	<del>T 024043</del>	<del>23.04</del>		
	<del>R MITTRA</del>	<del>3</del>	<del>T 024462</del>	<del>61.50</del>		
153R	<del>ALLIED RADIO CORP</del>	<del>4</del>	<del>T 024511</del>	<del>80.10</del>	5624	
1441R	<del>EASTMAN KODAK STORES INC</del>	<del>4</del>	<del>T 025244</del>	<del>13.57</del>		
14R	<del>DEPKE WELDING SUPPLIES</del>	<del>4</del>	<del>T 025245</del>	<del>7.20</del>		
	<del>RICHARD RIPPER</del>	<del>4</del>	<del>T 025673</del>	<del>8.76</del>		
1446R	<del>SPERRY ELECTRONIC TUBE</del>	<del>4</del>	<del>T 026244</del>	<del>84.26</del>		
	<del>EMPLRS CONTRIB ON0381494</del>	<del>04</del>	<del>T 50387</del>	<del>323.39</del>		
	ELEC ENG REPL	4	ER 012023	17.31		
	ELEC ENG REPL	4	ER 012041	21.99		
	ELEC ENG REPL	4	ER 024402	73.75		
	ELEC ENG REPL	4	ER 024421	67.46		
	ELEC ENG REPL	4	ER 024432	16.45		
	ELEC ENG REPL	4	ER 024434	.78		
	PHYSICS STORES	4	PC 001374	X 2.39		
X	BLUEPRINTING PHOTOGRAPHY	4	BL 007696	X 16.80		
X	BLUEPRINTING PHOTOGRAPHY	4	BL 007973	X 21.00		
X	BLUEPRINTING PHOTOGRAPHY	4	BL 008112	X 6.40		
X	BLUEPRINTING PHOTOGRAPHY	4	BL 008144	X .60		
	ILLINI UNION	4	IU 004248	X 2.17		
	ILLINI UNION	4	IU 004307	X 1.89		
41860	TRU TOOL	4	EX 022274	3.22		
34831	HARRINGTON	4	FT 016067	3.25		
	LAWLER MISSILE	4	TG 000318	1.45		
	TELEPHONE CHARGES	4	TL	19.50		
	<del>WK COMP FOR APR 0560440</del>	<del>04</del>		<del>56.04</del>		

EXPLANATION OF CLASS NUMBERS

- 1-SALARIES
- 2-WAGES
- 3-TRAVEL
- 4-COMMODITIES
- 5-CONTRACTUAL
- 6-EQUIPMENT
- 7-IMPROVEMENTS
- 8-LAND

EXPLANATION OF ABBREVIATIONS

- AC-ANALOG COMPUTER
- AT-AIR TRAVEL
- BD-BIOL DRAFTING
- BL-BLUEPRINTING
- CP-CAR POOL
- CR-CASH RECEIPT
- CS-COMPUTER SER
- EC-EMPLOYERS CONF
- ER-ELEC ENG. REPL
- EX-EXPRESS
- FE-FEDERAL EXT.
- FR-FEDERAL RES.
- FS-FEED STORAGE
- FT-FREIGHT
- G-GENERAL
- GA-GRAPHIC ARTS
- GB-GLASSBLOWING
- GC-GEN. CHEM STORES
- IS-INSTRUMENT SER
- IU-ILLINI UNION
- JV-JOURNAL VOUCHER
- LH-LIQUID HELIUM
- MG-MIMEOGRAPHING
- MI-MISCELLANEOUS
- MR-MACHINE REPAIR SER
- MS-MAILING SER
- OS-OFFICE SUPPLY STORE
- PC-PHYSICS STORES
- PH-PHOTOGRAPHY
- PJ-PP JOB
- PO-POSTAGE
- PR-PRINTING
- PS-PP STORES
- PY-PHYSICS SER
- RS-RECORDING SER
- S-STORES & SERVICE
- SG-STENOGRAPHIC SER
- SI-SALES INVOICE
- T-TRUST
- TG-TELEGRAMS
- TL-TELEPHONE
- TS-TABULATING SER
- TV-TRANSFER
- TY-TELETYPE
- UC-UNCLASSIFIED
- UP-UNIV PRESS ART SER
- WC-WORKING CASH

supplies 51.25  
 Feb 6.47  
 Jul 20.96  
 48.68

47  
 20.96

TOTALS TO DATE

END OF MONTH BALANCE

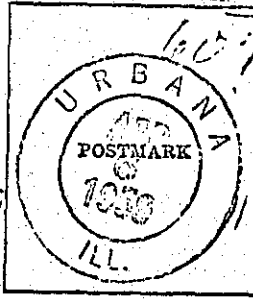
SALARIES	WAGES	EXPENSE	EQUIPMENT	EXPENDITURES	CREDITS	BALANCE
45323 26		26127 66	689 43	72140.35	100000.00	27859.65

ACCOUNT TITLE		ACCOUNT NUMBER		DATE	PAGE	
REQUISITION OR SALES INVOICE NO.	ARTICLES OR PAYEE	CLASS	BUSINESS OFFICE NUMBER	EXPENDITURES	CREDITS	BALANCE
	FROM PREV MONTH - IND COST CREDIT IND COST DISTRIBUTION		JV 176 JV 165	8.00	14795.27 2087.64 8144.50-	14787.27
						<p>EXPLANATION OF CLASS NUMBERS</p> <p>1-SALARIES 2-WAGES 3-TRAVEL 4-COMMODITIES 5-CONTRACTUAL 6-EQUIPMENT 7-IMPROVEMENTS 8-LAND</p> <p>EXPLANATION OF ABBREVIATIONS</p> <p>AC-ANALOG COMPUTER AT-AIR TRAVEL BO-BIOL DRAFTING BL-BLUSPRINTING CP-CAR POOL CR-CASH RECEIPT CS-COMPUTER SER EC-EMPLOYERS CONT ER-ELEC ENG. REPL EX-EXPRESS FE-FEDERAL EXT. FR-FEDERAL RES. FS-FEED STORAGE FT-FREIGHT G-GENERAL GA-GRAPHIC ARTS GB-GLASSBLOWING GC-GEN CHEM STORES IS-INSTRUMENT SER IU-ILLINI UNION JV-JOURNAL VOUCHER LH-LIQUID HELIUM MG-MIMEOGRAPHING MI-MISCELLANEOUS MR-MACHINE REPAIR SER MS-MAILING SER OS-OFFICE SUPPLY STORE PC-PHYSICS STORES PH-PHOTOGRAPHY PJ-PP JOB PO-POSTAGE PR-PRINTING PS-PP STORES PY-PHYSICS SER RS-RECORDING SER S-STORES &amp; SERVICE SG-STENOGRAPHIC SER SI-SALES INVOICE T-TRUST TG-TELEGRAMS TL-TELEPHONE TS-TABULATING SER TV-TRANSFER TY-TELETYPE UC-UNCLASSIFIED UP-UNIV. PRESS ART SER. WC-WORKING CASH</p>
5625						
TOTALS TO DATE						
SALARIES	WAGES	EXPENSE	EQUIPMENT	EXPENDITURES	CREDITS	END OF MONTH BALANCE
		8 00		8.00	8738.41	8730.41

RECEIPT FOR REGISTERED ARTICLE NO. 12158 Date

RECEIVED  
 JAN 5 1967  
 E. E. BUSBY OF  
 This Copy  
 for  
 Accounting  
 Division

Postage \$ 10.00  
 Special delivery fee  
 Return receipt fee 10.00  
 Restricted delivery fee  
 Airmail   
 Prof. R. L. W. S. D.  
 E. K. Gannett  
 (Address) (Accepting employee)



Urbana, ILL.  
 CITY STATE

DATE 4-15-59 UNIVERSITY DEPARTMENT Elec. Eng.

QUANTITY	DESCRIPTION	AMOUNT
	postage on reports	1 64
	paper	3 30
	paper	3 82
	Total	8 76

RECEIVED  
 ACCOUNTING DIVISION

APR 17 1959

AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

*R. Reppner*

46 22 25 314  
 AF 33(616)5079

ACCOUNT CODE NUMBER 46-22-25-314	EXPENSE 4	FUND T	VOUCHER NUMBER 025673
APPROPRIATION	EXTENSION 7	FOR CHIEF ACCOUNTANT <i>E. E. Busby</i>	
I certify that no requisition has been issued, and that there is an unobligated balance available for the above expenditure in the appropriation indicated.		POSTED	APR 21 1959
APPROVED <i>H. B. Lawler</i>			

ACCOUNT TITLE

ACCOUNT NUMBER

DATE

PAGE

REQUISITION OR SALES INVOICE NO.	ARTICLES OR PAYEE	CLASS	BUSINESS OFFICE NUMBER	EXPENDITURES	CREDITS	BALANCE
	FROM PREV MONTH			72140.35	100000.00	27859.65
	<del>EXPENSE CLASS CHANGE</del>	<del>6</del>	<del>JV 189</del>	<del>369.91</del>		
	<del>IND COST CHARGE</del>	<del>4</del>	<del>JV 187</del>	<del>2972.13</del>		
X	RICHARD RIPPER	4	T 028170	4.45		
14R	DEPKE WELDING SUPPLIES	4	T 028488	4.17		
1580R	NEWARK ELECTRIC CO	4	T 028802	12.05		
1445R	EUGENE DIETZGEN CO	4	T 029148	34.66		
1365R	EUGENE DIETZGEN CO	4	T 029514	77.63		
1631R	ARROW SALES CHICAGO INC	4	T 030587	17.81		
	<del>PAUL F. MAYES</del>	<del>3</del>	<del>T 031002</del>	<del>14.45</del>		
	<del>JOHN D. DYSON</del>	<del>3</del>	<del>T 031882</del>	<del>11.80</del>		
1662R	PHILIP A HUNT CO	4	T 032596	47.56		
1613R	CHAMPAIGN LETTER SHOP	4	T 032623	20.00		
1612R	CHAMPAIGN LETTER SHOP	4	T 032624	77.25		
1610R	CHAMPAIGN LETTER SHOP	4	T 032625	20.00		
1609R	CHAMPAIGN LETTER SHOP	4	T 032626	147.15		
1685R	GENERAL RADIO CO	4	T 032924	4.08		
X	RICHARD RIPPER	4	T 033163	16.50		
	<del>EMPLS CONTRIB ON 0450479</del>	<del>04</del>	<del>T 57434</del>	<del>381.87</del>		
	ELEC ENG REPL	4	ER 023777	45.43		
	ELEC ENG REPL	4	ER 023941	16.95		
	ELEC ENG REPL	4	ER 023962	.21		
	ELEC ENG REPL	4	ER 024024	15.77		
	ELEC ENG REPL	4	ER 024150	43.54		
	ELEC ENG REPL	4	ER 024270	13.57		
	ELEC ENG REPL	4	ER 024292	10.64		
	ELEC ENG REPL	4	ER 024310	38.10		
	ELEC ENG REPL	4	ER 024455	34.02		
	ELEC ENG REPL	4	ER 024462	18.95		
	ELEC ENG REPL	4	ER 024472	20.60		
	ELEC ENG REPL	4	ER 024491	21.45		
	ELEC ENG REPL	4	ER 024497	23.50		
X	BLUEPRINTING PHOTOGRAPHY	4	BL 008691	X 15.10		
X	BLUEPRINTING PHOTOGRAPHY	4	BL 008764	X 9.00		
X	BLUEPRINTING PHOTOGRAPHY	4	BL 008942	X 22.00		
X	BLUEPRINTING PHOTOGRAPHY	4	BL 008949	X 16.30		
	ILLINI UNION	4	IU 004451	X 1.69		
	TRANSFERS	4	TV 025191	X 150.74		
	TRANSFERS	4	TV 025202	X 293.92		
	DYSON JACOBS	4	TG 000403	1.10		
34319D	MARTIN NEWARK	4	TG 000420	.90		
	TELEPHONE CHARGES	4	TL	9.35		
	<del>WK COMP FOR MAY 0707887</del>	<del>04</del>		<del>79.79</del>		
	<del>46-22-25-314 MAY PAYROLL</del>	<del>01</del>		<del>7978.87</del>		
				508.75		
				11.35		
				520.10		

EXPLANATION OF CLASS NUMBERS

EXPLANATION OF ABBREVIATIONS

- 1-SALARIES
- 2-WAGES
- 3-TRAVEL
- 4-COMMODITIES
- 5-CONTRACTUAL
- 6-EQUIPMENT
- 7-IMPROVEMENTS
- 8-LAND
- AC-ANALOG COMPUTER
- AD-AIR TRAVEL
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- CP-CAR POOL
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- EC-EMPLOYERS CONT
- ER-ELEC ENG. REPL
- EX-EXPRESS
- FE-FEDERAL EXT.
- FR-FEDERAL RES.
- FS-FEED STORAGE
- FT-FREIGHT
- G-GENERAL
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- GB-GLASSBLOWING
- GC-GEN. CHEM STORES
- IS-INSTRUMENT SER
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- SG-STENOGRAPHIC SER
- SI-SALES INVOICE
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- TL-TELEPHONE
- TS-TABULATING SER
- TV-TRANSFER
- TY-TELETYPE
- UC-UNCLASSIFIED
- UP-UNIV PRESS ART SER
- WC-WORKING CASH

TOTALS TO DATE

SALARIES	WAGES	EXPENSE	EQUIPMENT	EXPENDITURES	CREDITS	END OF MONTH BALANCE
53302 13		30893 85	1059 34	85255.32	100000.00	14744.68



AF 6079 IC

45-22-25-314

MAY 1959

1

REQUISITION OR SALES INVOICE NO.	ACCOUNT TITLE	CLASS	BUSINESS OFFICE NUMBER	EXPENDITURES	CREDITS	BALANCE
	FROM PREV MONTH IND COST CREDIT		JV 187	8.00	8738.41 2972.13	8730.41

5628

EXPLANATION OF CLASS NUMBERS

- 1-SALARIES
- 2-WAGES
- 3-TRAVEL
- 4-COMMODITIES
- 5-CONTRACTUAL
- 6-EQUIPMENT
- 7-IMPROVEMENTS
- 8-LAND

EXPLANATION OF ABBREVIATIONS

- AC-ANALOG COMPUTER
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- BL-BLUEPRINTING
- CP-CAR POOL
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- FT-FREIGHT
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- GB-GLASSBLOWING
- GC-GEN. CHEM STORES
- IS-INSTRUMENT SER
- IU-ILLINI UNION
- JV-JOURNAL VOUCHER
- LH-LIQUID HELIUM
- MG-MIMEOGRAPHING
- MI-MISCELLANEOUS
- MR-MACHINE REPAIR SER
- MS-MAILING SER
- OS-OFFICE SUPPLY STORE
- PC-PHYSICS STORES
- PH-PHOTOGRAPHY
- PJ-PP JOB
- PO-POSTAGE
- PR-PRINTING
- PS-PP STORES
- PY-PHYSICS SER
- RS-RECORDING SER
- S-STORES & SERVICE
- SG-STENOGRAPHIC SER
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- TS-TABULATING SER
- TV-TRANSFER
- TY-TELETYPE
- UC-UNCLASSIFIED
- UP-UNIV. PRESS ART SER
- WC-WORKING CASH

TOTALS TO DATE

SALARIES	WAGES	EXPENSE	EQUIPMENT	EXPENDITURES	CREDITS	END OF MONTH BALANCE
		8 00		8.00	11710.54	11702.54



REQ. NO.	APPROPRIATION	ENC. NO.	DEPARTMENT NAME
5339	50 00 01 234 AF (915) 6079 (4)	10.10 nc	Elec. Eng. 100 Elec. Eng. Res. Lab. 5339

DEPARTMENT REQUISITIONING

DELIVER TO

# UNIVERSITY OF ILLINOIS

BUSINESS OFFICE—PURCHASING DIVISION  
200 ADMINISTRATION BUILDING (B)  
URBANA, ILLINOIS

## PURCHASE ORDER

NO. 44839  
THIS NUMBER MUST APPEAR ON ALL CORRESPONDENCE AND SHIPMENTS.

April 21, 1959

TO: Champaign letter Shop  
10-12 Greater Street  
Champaign, Illinois

SHIP TO

DATE  
UNIVERSITY OF ILLINOIS  
100 Elec. Engineering Research Lab.  
URBANA, ILLINOIS

DELIVERY DESIRED BY SHIP VIA: (SHIP CHEAPEST WAY UNLESS OTHERWISE SPECIFIED)

QUANTITY	DESCRIPTION	PRICE	AMOUNT
117	front and back covers; fronts to be printed in accordance with copy supplied, backs plain. Print on blue stock (GEN #2, contract 6079)		
Prices to be in accordance with price schedule attached			
			20.00 10.00 <hr/> 10.00

*any 113.00*  
*E*

PRICE F.O.B. 2% 10TH OF MONTH FOLLOWING UNLESS OTHERWISE STATED TERMS AS PER

INVOICE				TRANSPORTATION CHARGES						
PASSED	AMOUNT	PASSED	AMOUNT	Date	CRS. No.	Carrier	Pro. No.	Amr.	Pd	C
				/						
				/						
				/						

THIS COPY FOR  
DEPARTMENT

# UNIVERSITY OF ILLINOIS DELIVERY INVOICE - VOUCHER

UNIVERSITY ORDER NO.

44899-5

MUST BE GIVEN

UNIVERSITY OF ILLINOIS  
PURCHASING DIVISION  
200 ADMINISTRATION BLDG. (EAST)  
URBANA, ILLINOIS

PLEASE RENDER INVOICE IN QUADRUPPLICATE ON  
THIS FORM AND MAIL ALL COPIES TO THE ABOVE ADDRESS.

5340

PAY TO:

FIRM NAME	Champaign Letter Shop 081,506
STREET AND NUMBER	10 Champaign Street
CITY AND STATE	Champaign, Illinois

DATE April 27, 1957

FIRM INVOICE NO.

TERMS: Net

2% 10th OF MONTH FOLLOWING,  
UNLESS OTHERWISE STATED.

QUANTITY	DESCRIPTION	UNIT PRICE	AMOUNT
117	Four and half covers: Texts to be printed in accompanying title copy supplied; plain print on blue stock (122 12, Contract 1079)		\$ 20.00
PAYEE SHOULD NOT WRITE BELOW THIS LINE			

7-13-7

032623

# REQUISITION

1613-R  
553-R

Department Requisitioning Electrical Engineering

No. 1613-R

Office Address

DATE 4-16-59

TO THE DIRECTOR OF PURCHASES:

Please Deliver the Following to

100 Electrical Engineering Research Lab

Room Number

Building

5341

Not Later Than

Call

R. Ripper

Ext. 2621

For additional information

Name

QUANTITY	CATALOG NUMBER	ITEM (Give Complete Specifications)	Estimated Cost (If Available)	Suggested Vendor (If Available)	P. O. Number
117		front and back covers; fronts to be printed in accordance with copy supplied, backs plain. Print on blue stock. (QER #2, contract 6079)	Cost ✓	U. of I. Print Shop  ✓ 4/30/59	
		Johnson			

APPROPRIATION

I hereby certify that there is an unobligated balance available for the above expenditures in the appropriation indicated.

Approved \_\_\_\_\_

46 22 25 347

AF 33(616)6079

CLASSIFICATION

6. Equipment

7. Improvements

4. Other Expense

4

REC'D NO.	APPROPRIATION	ENC. NO.	DEPARTMENT NAME
1011-1	45 25 25 314 AF 3(110)073	(4) 1370.00	100 Elec. Eng. Res. Lab. 5342

DEPARTMENT REQUISITIONING

DELIVER TO

# UNIVERSITY OF ILLINOIS

## PURCHASE ORDER

BUSINESS OFFICE—PURCHASING DIVISION  
200 ADMINISTRATION BUILDING (E)  
URBANA, ILLINOIS

NO. 44827-J  
THIS NUMBER MUST APPEAR  
ON ALL CORRESPONDENCE AND  
SHIPMENTS.

DATE April 21, 1959

UNIVERSITY OF ILLINOIS

S  
H  
I  
P

100 Elec. Engineering Research Lab.

URBANA, ILLINOIS

TO : Champaign Letter Shop  
10-12 Chester Street  
Champaign, Illinois

DELIVERY DESIRED BY

SHIP VIA:

(SHIP CHEAPEST WAY UNLESS OTHERWISE SPECIFIED)

QUANTITY	DESCRIPTION	PRICE	AMOUNT
117	copies of Quarterly Engineering Report No. 2, Contract AF 4079 "Research Studies on Problems Related to E.C.M. Antennas" please print on both sides of the paper		
	25 mats, including six page distribution list and three page Reports Memoranda. Fronts and backs as marked at the top of each mat.		
117	copies of the above - gather and bind.		
2	complete vellum copies of the above. Print on one side of the paper only.		
117	Transmittal letters printed on letterhead paper		
117	transmittal letters printed on buff		
Prices to be in accordance with attached schedule			
$  \begin{array}{r}  175.00 \\  77.26 \\  \hline  97.74  \end{array}  $			<i>adj - 97.74</i>  <i>E</i>

2% 10TH OF MONTH FOLLOWING UNLESS OTHERWISE STATED

PRICE F.O.B.

TERMS

AS PER

INVOICE				TRANSPORTATION CHARGES						
PASSED	AMOUNT	PASSED	AMOUNT	Date	CRS. No.	Carrier	Pro. No.	Amt.	Pd	C
				/						
				/						
				/						

THIS COPY FOR  
DEPARTMENT

# UNIVERSITY OF ILLINOIS DELIVERY INVOICE - VOUCHER

UNIVERSITY ORDER NO.

44827-3

MUST BE GIVEN

UNIVERSITY OF ILLINOIS  
PURCHASING DIVISION  
200 ADMINISTRATION BLDG. (EAST)  
URBANA, ILLINOIS

PLEASE RENDER INVOICE IN QUADRUPPLICATE ON  
THIS FORM AND MAIL ALL COPIES TO THE ABOVE ADDRESS.

5343

PAY TO:

FIRM NAME	General Letter Shop 001006
STREET AND NUMBER	10 Webster Street
CITY AND STATE	Urbana, Illinois

DATE April 30, 1959

FIRM INVOICE NO.

TERMS: net

2% 10th OF MONTH FOLLOWING,  
UNLESS OTHERWISE STATED.

QUANTITY	DESCRIPTION	UNIT PRICE	AMOUNT
117	Copies of Quarterly Engineering Report No. 2, Contract # 4079 "Research Studies on Problems Related to L.O.T. Antennas" please print on both sides of the paper 25 sets, including six page distribution list and three page Reports Memoranda. Fronts and backs as marked at the top of each mt. 0.325 1.50		37.50
117	copies of the above - gather and bind. 0.23		26.76
2	Complete volume copies of the above. Printed on one side of the paper only. 25 @ .10		2.50
117	Transmittal letters printed on letterhead paper		1.50
117	Transmittal letters printed on buff		1.50
			377.26
PAYEE SHOULD NOT WRITE BELOW THIS LINE			

✓

032624

# REQUISITION

Department Requisitioning Electrical Engineering  
Office Address

No. 1612-12  
~~1572-8~~

DATE 4-16-59

TO THE DIRECTOR OF PURCHASES:

Please Deliver the Following to 100 Electrical Engineering Research Lab  
Room Number Building

5346

Not Later Than \_\_\_\_\_ Call R. Ripper Name Ext. 2621 For additional information

QUANTITY	CATALOG NUMBER	ITEM (Give Complete Specifications)	Estimated Cost (if Available)	Suggested Vendor (If Available)	P. O. Number
117		copies of Quarterly Engineering Report No. 2, Contract AF 6079 "Research Studies on Problems Related to E. C. M. Antennas" please print on both sides of the paper. 25 mats, including six page distribution list and three page Reports Memoranda. Fronts and backs as marked at the top of each mat.	Cost	U. of I. Print Shop	
117		copies of the above - gather and bind.			
2		complete vellum copies of the above. Print on one side of the paper only.			
117		transmittal letters printed on letterhead paper.			
117		transmittal letters printed on buff.	Cost		

*Completed 4/30/59*

*E*

<p><b>APPROPRIATION</b></p> <p>I hereby certify that there is an unobligated balance available for the above expenditures in the appropriation indicated.</p> <p>Approved _____</p>	<p><u>43 22 25 314</u> AF 33(016)0073</p>	<p><b>CLASSIFICATION</b></p> <p>6. Equipment</p> <p>7. Improvements</p> <p>4. Other Expense <span style="float: right;">4</span></p>
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APPROPRIATION	ENG. NO.	DEPARTMENT NAME
200 (10) 014 AF 33(010) 1070 (4)	110.00 to	Eng. Res. 100 Elec. Eng. Res. Lab.

DEPARTMENT REQUISITIONING

(DELIVER TO)

# UNIVERSITY OF ILLINOIS

BUSINESS OFFICE—PURCHASING DIVISION  
203 ADMINISTRATION BUILDING (E)  
URBANA, ILLINOIS

## PURCHASE ORDER

NO. 44828-3  
THIS NUMBER MUST APPEAR  
ON ALL CORRESPONDENCE AND  
SHIPMENTS.

TO : Champaign Letter Shop  
10-12 Chester Street  
Champaign, Illinois

SHIP TO

DATE April 21, 1959  
UNIVERSITY OF ILLINOIS

100 Elec. Engineering Research Lab.  
URBANA, ILLINOIS

DELIVERY DESIRED BY \_\_\_\_\_ SHIP VIA \_\_\_\_\_ (SHIP CHEAPEST WAY UNLESS OTHERWISE SPECIFIED)

QUANTITY	DESCRIPTION	PRICE	AMOUNT
117 ea.	Covers: Front and Back covers for Technical Report No. 36, Contract 6079 (MacPhie).  Fronts as per the attached sample: backs plain. Please print on Blue Stock  Prices to be in accordance with attached schedule		5629
	$\begin{array}{r} 20.00 \\ 10.00 \\ \hline 10.00 \end{array}$		

PRICE F.O.B. \_\_\_\_\_ TERMS 2% 10TH OF MONTH FOLLOWING UNLESS OTHERWISE STATED AS PER \_\_\_\_\_

INVOICE				TRANSPORTATION CHARGES						
PASSED	AMOUNT	PASSED	AMOUNT	Date	CRS. No.	Carrier	Pro. No.	Amt.	Pd	C
				/						
				/						
				/						



THIS COPY FOR  
DEPARTMENT

# UNIVERSITY OF ILLINOIS DELIVERY INVOICE - VOUCHER

UNIVERSITY ORDER NO.

44826-3

MUST BE GIVEN

UNIVERSITY OF ILLINOIS  
PURCHASING DIVISION  
200 ADMINISTRATION BLDG. (EAST)  
URBANA, ILLINOIS

PLEASE RENDER INVOICE IN QUADRUPPLICATE ON  
THIS FORM AND MAIL ALL COPIES TO THE ABOVE ADDRESS.

PAY TO:

FIRM NAME	Continental Paper Co. Inc. 10/15/46
STREET AND NUMBER	10 Chester Street
CITY AND STATE	Springfield, Illinois

DATE: 10/15/46

FIRM INVOICE NO.

TERMS: 1-10

2% 10th OF MONTH FOLLOWING,  
UNLESS OTHERWISE STATED.

QUANTITY	DESCRIPTION	UNIT PRICE	AMOUNT
117 cc.	STAMP: Front and Back covers for Statistical Report No. 16, Contract (U7) (10/15/46)  Printed on four attached samples: back plain, printed on blue stock	5630	\$ 30.00 E
PAYEE SHOULD NOT WRITE BELOW THIS LINE			

No. 22 25 312 10-1

032625



# REQUISITION

Department Requisitioning Electrical Engineering

No. 7610-R

Office Address

DATE 1-16-59

TO THE DIRECTOR OF PURCHASES:

Please Deliver the Following to 100 Electrical Engineering Research Lab  
Room Number Building

Not Later Than \_\_\_\_\_ Call R. Ripper Name Ext. 2621 For additional information

QUANTITY	CATALOG NUMBER	ITEM (Give Complete Specifications)	Estimated Cost (If Available)	Suggested Vendor (If Available)	P. O. Number
117 ea.		covers; Front and Back covers for Technical Report No. 36, Contract 6079 (MacPhie).  Fronts as per the attached sample; backs plain. Please print on Blue Stock.	Cost ✓	U. of I. Print Shop  <i>Complete</i> <i>1/31/59</i>  5631	

Johnson

46 22 25 314  
AF 33(616)6079

**APPROPRIATION**

I hereby certify that there is an unobligated balance available for the above expenditures in the appropriation indicated.

Approved \_\_\_\_\_

**CLASSIFICATION**

- 6. Equipment
- 7. Improvements
- 4. Other Expense 4

FORM NO.	APPROPRIATION	ENC. NO.	DEPARTMENT NAME
100-1	AP 22 20 300 AF 30(110)1979 (4)	200.00 nc	Elec. Eng. 100 Elec. Eng. Res. Lab.

DEPARTMENT REQUISITIONING

DELIVER TO

# UNIVERSITY OF ILLINOIS

## PURCHASE ORDER

BUSINESS OFFICE—PURCHASING DIVISION  
200 ADMINISTRATION BUILDING (B)  
URBANA, ILLINOIS

NO. 44824 -3  
THIS NUMBER MUST APPEAR  
ON ALL CORRESPONDENCE AND  
SHIPMENTS.

April 21, 1959

TO: Champaign Letter Shop  
10-12 Chestnut Street  
Champaign, Illinois

SHIP TO: UNIVERSITY OF ILLINOIS  
100 Elec. Engineering Research Lab.  
URBANA, ILLINOIS

DELIVERY DESIRED BY: SHIP VIA: (SHIP CHEAPEST WAY UNLESS OTHERWISE SPECIFIED)

QUANTITY	DESCRIPTION	PRICE	AMOUNT
117	copies of Technical Report No. 36 Contract AF33(616)-1079 on "Use of Coupled Waveguides in a Traveling Wave Scanning Antenna" (MacPhis) Print on one side of the paper only.		
	71 mats including the preliminary pages, body and distribution list, and three page Report memorandum		5632
117	copies to be gathered and bound		
2	complete volumn copies. Print on one side of the paper only		
117	transmittal letters: 117 on Letterhead paper and 117 on buff paper		
Prices to be in accordance with attached schedule			

250.00  
147.15  
102.85

Adj - 102.85

E

PRICE F.O.B. TERMS 2% 10TH OF MONTH FOLLOWING UNLESS OTHERWISE STATED AS PER

INVOICE				TRANSPORTATION CHARGES						
PASSED	AMOUNT	PASSED	AMOUNT	Date	CRS. No.	Carrier	Pro. No.	Amt.	Pd	C
				/						
				/						
				/						

THIS COPY FOR  
DEPARTMENT

# UNIVERSITY OF ILLINOIS DELIVERY INVOICE - VOUCHER

UNIVERSITY ORDER NO.

44824-3

MUST BE GIVEN

UNIVERSITY OF ILLINOIS  
PURCHASING DIVISION  
200 ADMINISTRATION BLDG. (EAST)  
URBANA, ILLINOIS

PLEASE RENDER INVOICE IN QUADRUPLICATE ON  
THIS FORM AND MAIL ALL COPIES TO THE ABOVE ADDRESS.

PAY TO:

FIRM NAME	General Letter Shop COACCO
STREET AND NUMBER	20 Clinton Street
CITY AND STATE	Urbana, Illinois

5633

DATE April 29, 1977

FIRM INVOICE NO.

TERMS: Net

2% 10th OF MONTH FOLLOWING,  
UNLESS OTHERWISE STATED.

QUANTITY	DESCRIPTION	UNIT PRICE	AMOUNT
117	Copies of Technical Report No. 36, Contract 1933(416)-507 on "Use of Coupled Waveguides in a Travelling Wave Scanning Antenna" (12-51-52) Printed on one side of the paper only  72 rate including the preliminary pages, table and distribution list, and three page report transmission @ 1.25		06.75
117	Copies to be gathered and bound @ .10		11.70
2	complete volume copies. Print on one side of the paper only @ .35		7.20
117	Transmittal letters: 117 on letterhead paper and 117 on buff paper		1.20
			27.25

PAYEE SHOULD NOT WRITE BELOW THIS LINE

032626

# REQUISITION

No. 1609-R

Department Requisitioning Electrical Engineering Office Address

DATE 4-16-59

TO THE DIRECTOR OF PURCHASES:  
Please Deliver the Following to 100 Electrical Engineering Research Lab  
Room Number                      Building                     

Not Later Than                      Call R. Ripper Name                      Ext. 2621 For additional information

QUANTITY	CATALOG NUMBER	ITEM (Give Complete Specifications)	Estimated Cost (If Available)	Suggested Vendor (If Available)	P. O. Number
117		copies of Technical Report No. 36 Contract AF33(616)-6079 on "Use of Coupled Waveguides in a Traveling Wave Scanning Antenna" (MacPhie) Print on one side of the paper only.	Cost ✓	U. of I. Print Shop	
		71 mats including the preliminary pages, body and distribution list, and three page Reports Memorandum	Cost ✓	5634 / Complete 4/30/59	
117		copies to be gathered and bound	Cost ✓		
2		complete vellum copies. Print on one side of the paper only	Cost ✓		
117		transmittal letters: 117 on letterhead paper and 117 on buff paper	Cost ✓		

Johnson

E

<p><b>APPROPRIATION</b></p> <p>I hereby certify that there is an unobligated balance available for the above expenditures in the appropriation indicated.</p> <p>Approved _____</p>	<p><b>CLASSIFICATION</b></p> <p>6. Equipment</p> <p>7. Improvements</p> <p>4. Other Expense <u>4</u></p>

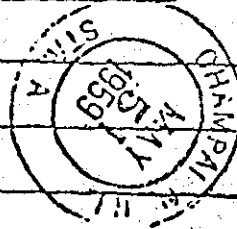
POSTAL RECEIPTS

Date May, 1957

RECEIVED of Contract 6079

\$ 13.30

for parties on reports



5115

Postmaster

By

[Signature]

UNIVERSITY BOOK STORE

Phone Fleetwood 2-5726

**610**

610 E. DANIELS ST.

CHAMPAIGN, ILLINOIS

QUAN. DESCRIPTION Amount

1 folder 3.20

AR-6079

J. J. [Signature]

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Customer's Order No. 514 1957

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Address \_\_\_\_\_

C 6486 Received By [Signature]

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PINK - FOR CUSTOMER

1330:  
320:  
1650H

# UNIVERSITY OF ILLINOIS MISCELLANEOUS VOUCHER

5114

The University department will prepare in quadruplicate  
and mail three copies to

UNIVERSITY OF ILLINOIS  
Accounting Division  
257 Administration Bldg. (W)  
Urbana, Illinois

This Copy  
for  
Accounting  
Division

Pay to:

Richard Ripper	
<small>NAME</small>	
209 Elec. Eng. Res. Lab.	STREET
<small>NUMBER</small>	<small>STREET</small>
Urbana,	Ill.
<small>CITY</small>	<small>STATE</small>

DATE 5-20-59

UNIVERSITY DEPARTMENT Elec. Eng.

QUANTITY	DESCRIPTION	AMOUNT
	postage on reports	13 30
	folder	3 20
	Total	16 50

*W. A. Weston*

*Richard Ripper*

ACCOUNT CODE NUMBER <b>46 22 25 314</b> <i>ecol. Serv. Bldg.</i> <small>AF 33(616)6079</small>	EXPENSE <i>✓</i>	FUND <i>IT</i>	VOUCHER NUMBER <b>033163</b>
APPROPRIATION <i>AF 33(616)6079</i>	EXTENSION <i>7</i>	FOR CHIEF ACCOUNTANT <i>[Signature]</i>	
I certify that no requisition has been issued, and that there is an unobligated balance available for the above expenditure in the appropriation indicated.		POSTED <b>MAY 26 1959</b>	
APPROVED <i>[Signature]</i>			

**UNIVERSITY OF ILLINOIS  
MISCELLANEOUS VOUCHER**

This Copy  
for  
Department

Pay to:

Richard Dwyer	
NAME	
202 Elec. Eng. Bldg.	
NUMBER	STREET
Urbana	Ill
CITY	STATE

5635

DATE 5-22-60 UNIVERSITY DEPARTMENT Elec. Eng.

QUANTITY	DESCRIPTION	AMOUNT
	postage on reports	13 30
	folder	3 20
	Total	16 50

46 22 25 314  
AF 33(616)6079

033163



US AF 6079

46-22-25-314

JUN 1959

FORM 500

1

REQUISITION OR SALES INVOICE NO.	ACCOUNT TITLE	CLASS	BUSINESS OFFICE NUMBER	EXPENDITURES	DATE	CREDITS	BALANCE
	FROM PREV MONTH			85255.32		100000.00	14744.68
	<del>IND COST CHARGE</del>		JV 209	<del>1897.33</del>			
	<del>46-22-25-314 JUN PAYROLL</del>	01		<del>5093.63</del>			
1751R	THE PARSA MICROWAVE CORP	4	T 034495	24.16			
1817R	NEWARK ELECTRIC CO	4	T 035305	29.87			
1541R	CROSSEY ASSOCIATES INC	4	T 035324	19.73			
	RICHARD RIPPER	4	T 036494	2.84			
14R	DEPHE WELDING SUPPLIES	4	T 036911	5.40			
1854R	STEVENS-ARNOLD INC	4	T 039395	43.84			
	RICHARD RIPPER	4	T 039916	8.12			
	GEORGES-A-DESCHAMPS	3	T 041608	186.75			
	EMPLRS CONTRIB-000300713	04	T 64866	254.91			
	OFFICE SUPPLY STORE	4	OS 022968	X2.31			
	OFFICE SUPPLY STORE	4	OS 023381	X1.85			
	OFFICE SUPPLY STORE	4	OS 023449	X19.80			
	ELEC ENG REPL	4	ER 024332	19.48			
	ELEC ENG REPL	4	ER 024344	70.76			
	ELEC ENG REPL	4	ER 028017	13.51			
	ELEC ENG REPL	4	ER 028040	7.42		5636	
	ELEC ENG REPL	4	ER 028144	17.54			
	ELEC ENG REPL	4	ER 028165	25.59			
	ELEC ENG REPL	4	ER 028190	11.53			
	ELEC ENG REPL	4	ER 028304	4.07			
	PHYSICS STORES	4	PC 001674	X6.30			
	PHYSICAL PLANT STORES	4	PS 080789	X1.71			
	BLUEPRINTING PHOTOGRAPHY	4	BL 000025	X13.50			
	BLUEPRINTING PHOTOGRAPHY	4	BL 000357	X14.70			
	BLUEPRINTING PHOTOGRAPHY	4	BL 000689	X36.00			
	BLUEPRINTING PHOTOGRAPHY	4	BL 000819	X18.00			
	BLUEPRINTING PHOTOGRAPHY	4	BL 009090	X2.50			
	BLUEPRINTING PHOTOGRAPHY	4	BL 009877	X6.66			
	COMPUTER SERVICE	4	CS 020921	X64.75			
	COMPUTER SERVICE	4	CS 020940	X96.25			
	ILLINI UNION	4	IU 004649	X3.23			
	ILLINI UNION	4	IU 004651	X.84			
45951	P A HUNT	4	FT 031784	3.41	3.41		
	DYSON-NUSSBAUM	4	TG 000610	1.40	1.40		
00495	513 MAYES DAYTON O	03	CP 05 04	29.70			
	TELEPHONE CHARGES	4	TL	18.55	18.55		
	<del>WK-COMP-FOR-JUNE-0509363</del>	04		<del>50.94</del>			
	UNBILLED EXPEND 6-30-59		JV 225			8128.93	
	INCOME DEFERRED TO 59-60		JV 225			14744.68	
				supplies -		288.40	
				teleph. w/ telegraph -		19.95	
				freight -		3.41	
						311.76	

EXPLANATION OF CLASS NUMBERS

- 1-SALARIES
- 2-WAGES
- 3-TRAVEL
- 4-COMMODITIES
- 5-CONTRACTUAL
- 6-EQUIPMENT
- 7-IMPROVEMENTS
- 8-LAND

EXPLANATION OF ABBREVIATIONS

- AC-ANALOG COMPUTER
- AT-AIR TRAVEL
- BD-BIOL DRAFTING
- BL-BLUEPRINTING
- CP-CAR POOL
- CR-CASH RECEIPT
- CS-COMPUTER SER
- EC-EMPLOYERS CONT
- ER-ELEC ENG. REPL
- EX-EXPRESS
- FE-FEDERAL EXT.
- FR-FEDERAL RES.
- FS-FEED STORAGE
- FT-FREIGHT
- G-GENERAL
- GA-GRAPHIC ARTS
- GB-GLASSBLOWING
- GC-GEN. CHEM STORES
- IS-INSTRUMENT SER
- IU-ILLINI UNION
- JV-JOURNAL VOUCHER
- LM-LIQUID HELIUM
- MG-MIMEOGRAPHING
- MI-MISCELLANEOUS
- MR-MACHINE REPAIR SER
- MS-MAILING SER
- OS-OFFICE SUPPLY STORE
- PC-PHYSICS STORES
- PH-PHOTOGRAPHY
- PI-PP JOB
- PO-POSTAGE
- PR-PRINTING
- PS-PP STORES
- PY-PHYSICS SER
- RS-RECORDING SER
- S-STORES & SERVICE
- SG-STENOGRAPHIC SER
- SI-SALES INVOICE
- T-TRUST
- TO-TELEGRAMS
- TL-TELEPHONE
- TS-TASULATING SER
- TV-TRANSFER
- TY-TELETYPE
- UC-UNCLASSIFIED
- UP-UNIV PRESS ART SER
- WC-WORKING CASH

TOTALS TO DATE

SALARIES	WAGES	EXPENSE	EQUIPMENT	EXPENDITURES	CREDITS	END OF MONTH BALANCE
58395 76		33929 15	1059 34	93384.25	93384.25	



AF 6079 IC

45-22-25-314

JUN 1959

1

REQUISITION OR SALES INVOICE NO.	ACCOUNT TITLE	CLASS	BUSINESS OFFICE NUMBER	EXPENDITURES	DATE	CREDITS	PAGE	
	FROM PREV MONTH IND COST CREDIT INDIRECT COST DISTR		JV 209 JV 193	8.00		11710.54 1897.38 4442.22-	11702.54	
							<p>EXPLANATION OF CLASS NUMBERS</p> <p>1-SALARIES 2-WAGES 3-TRAVEL 4-COMMODITIES 5-CONTRACTUAL 6-EQUIPMENT 7-IMPROVEMENTS 8-LAND</p> <p>EXPLANATION OF ABBREVIATIONS</p> <p>AC-ANALOG COMPUTER AT-AIR TRAVEL BD-BIOL DRAFTING BL-BLUEPRINTING CP-CAR POOL CR-CASH RECEIPT CS-COMPUTER SER EC-EMPLOYERS CONT ER-ELEC ENG. REPL EX-EXPRESS FE-FEDERAL EXT. FR-FEDERAL RES. FS-FEED STORAGE FT-FREIGHT G-GENERAL GA-GRAPHIC ARTS GB-GLASSBLOWING GC-GEN. CHEM STORES IS-INSTRUMENT SER IU-INTL UNION JV-JOURNAL VOUCHER LM-LIQUID HELIUM MG-MIMEOGRAPHING MI-MISCELLANEOUS MR-MACHINE REPAIR SER MS-MAKING SER OS-OFFICE SUPPLY STORE PC-PHYSICS STORES PH-PHOTOGRAPHY PJ-PP JOB PO-POSTAGE PR-PRINTING PS-PP STORES PY-PHYSICS SER RS-RECORDING SER S-STORES &amp; SERVICE SG-STENOGRAPHIC SER SI-SALES INVOICE T-TRUST TG-TELEGRAMS TL-TELEPHONE TS-TABULATING SER TV-TRANSFER TY-TELETYPE UC-UNCLASSIFIED UP-UNIV PRESS ART SER. WC-WORKING CASH</p>	
TOTALS TO DATE							5637	END OF MONTH BALANCE
	SALARIES	WAGES	EXPENSE	EQUIPMENT	EXPENDITURES	CREDITS		
			8 00		8.00	9165.70	9157.7	

POSTAL RECEIPTS

ILLINOIS VOUCHER

RECEIVED

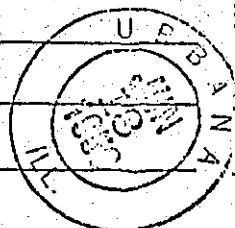
JAN 5 1967

Date June 18, 1959 in quadruplicate  
to DIS (W)

E. E. BHS. OFF.  
This Copy  
for  
Accounting  
Division

RECEIVED of Contract 6679

\$ 12.82  
for postage on slides



Postmaster  
By J. L. Riley

Arch Lab  
STREET  
Illinois  
STATE

DATE 6-18-59 UNIVERSITY DEPARTMENT Electrical Engineering

QUANTITY	DESCRIPTION	AMOUNT
	Postage on slides	2 82
	Bottle of processing solution	1 95
	Tubes	3 35
	Total	8 12

5638

RECEIVED  
ACCOUNTING DIVISION  
JUN 23 1959  
AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

*Richard Rippe*

ACCOUNT CODE NUMBER  
APPROPRIATION 46 22 25 314  
AF 33(616)376

I certify that no requisition has been issued, and that there is an unobligated balance available for the above expenditure in the appropriation indicated.

APPROVED H. B. Lawler C. C. Dept

EXPENSE FUND VOUCHER NUMBER

EXTENSION FOR CHIEF ACCOUNTANT 5638

POSTED E. E. BHS.

JUN 24 1959

**UNIVERSITY OF ILLINOIS  
MISCELLANEOUS VOUCHER**

5113

The University Department will prepare in quadruplicate  
and mail three copies to  
**UNIVERSITY OF ILLINOIS**  
Accounting Division  
257 Administration Bldg. (W)  
Urbana, Illinois

This Copy  
for  
Accounting  
Division

Pay to:

Richard Ripper NAME
209 Electrical Engineering Research Lab NUMBER STREET
Urbana Illinois CITY STATE

DATE 8-25-59 UNIVERSITY DEPARTMENT Electrical Engineering

QUANTITY	DESCRIPTION	AMOUNT
	Postage	36 18
1	Protractor	
1	Protractor	3 35
	Total	39 53

**RECEIVED**  
ACCOUNTING DIVISION  
AUG 26 1959  
AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

*Richard Ripper*

46 22 25 314

ACCOUNT CODE NUMBER AF 33(616)6079	EXPENSE	FUND	VOUCHER NUMBER 054206
APPROPRIATION Bursar	EXTENSION	FOR CHIEF ACCOUNTANT	
I certify that no requisition has been issued, and that there is an unobligated balance available for the above expenditure in the appropriation indicated.		POSTED	AUG 28 1959
APPROVED <i>H B Lawler</i>			

THE U. of I. SUPPLY STORE  
BOOKS

STATIONERY, ART AND ATHLETIC SUPPLIES

625-31 S. WRIGHT ST.

PHONE 6-1369

No. \_\_\_\_\_ Champaign, Ill. Aug 18 1959

Sold to EE Research Lab

Address \_\_\_\_\_

QUAN.	DESCRIPTION	AMOUNT
<u>1</u>	<u>Protractor</u>	<u>1.25</u>
<u>1</u>	<u>"</u>	<u>1.60</u>
		<u>(Total)</u>
		<u>2.85</u>
	<u>paid</u>	
	<u>2.85</u>	
	<u>AF 6079</u>	
	<u>R. Carrel</u>	

Received by J. O. Koerner

POSTAL RECEIPTS

Date 21 Aug. 1959

RECEIVED of Contract 6079

\$ 26.18

for postage on TR # 37, 38, 39 & QER # 3

JOHN THEODORE, Postmaster, Urbana, Illinois

Postmaster

By J. L. Dudley

27 April 1959

5639

Dear Sir:

In accordance with contract requirements, attached please find **copies**  
each of

Technical Report No. 36, "Use of Coupled Waveguides In a Traveling  
Wave Scanning Antenna" by Robert H. MacPhie.

Quarterly Engineering Report No. 2, "Research Studies on Problems  
Related to ECM Antennas"

issued by our Antenna Laboratory under Contract AF33(616)-6079. Project  
number is 9(13-6278), Task 40572, and the sponsor is the Wright Air Develop-  
ment Center.

Sincerely,



(Miss) Marge Johnson  
Technical Editor  
210 Electrical Engineering  
Research Laboratory  
University of Illinois  
Urbana, Illinois

MJ:sk

15 February 1962

Aeronautical Systems Div.  
Attn: (ASRNRE-4)  
Wright-Patterson Air Force Base  
Ohio

5640

Dear Sir:

In accordance with contract requirements, we are sending you one (1)<sup>3</sup> copy of Quarterly Engineering Report No. 13 on "Research Studies on Problems Related to ECM Antennas," for the period 1 September 1961 to 30 November 1961, issued under contract AF33(616)-6079.

Sincerely,

*Marge Johnson*

(Miss) Marge Johnson  
Technical Editor  
205 Electrical Engineering  
Research Laboratory  
University of Illinois  
Urbana, Illinois

MJ:ss

cc: *Mr. H. B. Fowler*  
*Mr. F. V. Finnigan*

FOR INFORMATION OF

*Lawler 6079*

12 December 1961

5641

Commander  
Aeronautical Systems Division  
Wright-Patterson Air Force Base  
Ohio

Attention: ASRNRE-4

Re: Contract AF33(616)-6079

Dear Sir:

In accordance with contract requirements, we are forwarding to you two (2) copies of the October Monthly Progress Report on "Broadbanding, Pattern Synthesis, and Non-Radiating Structures," issued under the subject contract.

Sincerely,

G. A. Deschamps  
Professor  
Electrical Engineering  
Research Laboratory  
University of Illinois  
Urbana, Illinois

GAD:bsc

Enclosure

cc: ASD, Attn: ASKCS  
ONR, Chicago  
F. X. Finnigan  
H. B. Lawler

*Handwritten signature*



FOR INFORMATION OF Lawler

31 October 1961

5642

Commander  
Aeronautical Systems Division  
Wright-Patterson Air Force Base  
Ohio

Attention: ASRNRE-4

Re: Contract AF33(616)-6079

Dear Sir:

In accordance with contract requirements, we are forwarding to you two (2) copies of the September Monthly Progress Report on "Broadbanding, Pattern Synthesis, and New Radiating Structures," issued under the subject contract.

Sincerely,

G. A. Deschamps  
Professor  
Electrical Engineering  
Research Laboratory  
University of Illinois  
Urbana, Illinois

GAD:bsc

Enclosure

cc: ASD, Attn: ASKCE

ONR, Chicago

F. X. Finnigan

H. B. Lawler

*Handwritten signature*



11 September 1961

Aeronautical Systems Div.  
Attn: (ASRNRE-4)  
Wright-Patterson Air Force Base  
Ohio

5643

Dear Sir:

In accordance with contract requirements please find enclosed <sup>10 copies</sup> ~~one (1)~~ copy of Quarterly Engineering Report No. 11 on "Research Studies on Problems Related to ECM Antennas," for the period 1 March 1961 to 1 June 1961, issued under contract AF33(616)-6079.

Sincerely,

*Marge Johnson*

(Miss) Marge Johnson  
Technical Editor  
205 Electrical Engineering  
Research Laboratory  
University of Illinois  
Urbana, Illinois

MJ:ss

Enclosure

cc: *H. B. Zambler*  
*D. X. Dinnigan*

*H. B. Zambler*

28 August 1951

5644

Commander  
Aeronautical Systems Division  
Wright-Patterson Air Force Base  
Ohio

Attention: ASR122-4

Re: Contract AF33(615)-6079

Dear Sir:

In accordance with contract requirements, we are forwarding to you the July Monthly Progress Report on "Broadbanding, Pattern Synthesis, and New Radiating Structures," issued under the subject contract. Attached please find two copies.

Sincerely,

P. E. Hayes  
Associate Professor  
Electrical Engineering  
Research Laboratory  
University of Illinois  
Urbana, Illinois

PEH:jz

Enclosure

cc: ASD, Attn: ASR122

CSR, Chicago

F. X. Finnigan

H. B. Lawler

26 July 1961

5645

Commander  
Aeronautical Systems Division  
Wright-Patterson Air Force Base  
Ohio

Attention: ASRNE-4

Re: Contract AF33(615)-6079

Dear Sir:

In accordance with contract requirements, we are forwarding to you the June Monthly Progress Report on "Broadbanding, Pattern Synthesis, and New Radiating Structures," issued under the subject contract. Attached please find two copies.

Sincerely,

P. E. Hayes  
Associate Professor  
Electrical Engineering  
Research Laboratory  
University of Illinois  
Urbana, Illinois

PE:ias

Enclosure

cc: ASD, Attn: ASRCE  
ONR, Chicago  
F. X. Finnigan  
H. D. Lawler

BL

FOR INFORMATION OF \_\_\_\_\_

19 June 1961

5646

Commander  
Aeronautical Systems Division  
Air Force Systems Command  
Wright-Patterson Air Force Base, Ohio

Attention: ASRNRE-4

Re. Contract AF33(616)-C079

Dear Sir:

In accordance with contract requirements, we are forwarding to you the April Monthly Progress Report on "Broadbanding, Pattern Synthesis, and New Radiating Structures," issued under the subject contract. Attached please find two copies.

Sincerely,

P. E. Mayes  
Associate Professor  
Electrical Engineering  
Research Laboratory  
University of Illinois  
Urbana, Illinois

PEM:jk

Enclosure

cc: ASD, Attn: ASKCE  
ONR, Chicago  
F. K. Finnigan  
H. B. Lawler

*HBS*

5647

8 February 1961

Commander  
Wright Air Development Center  
Wright-Patterson Air Force Base, Ohio

Attention: WCLRS-A

Re: Contract AF33(616)-6079

Dear Sir:

In accordance with contract requirements, we are forwarding to you the December Monthly Progress Report on "Research Studies on Problems Related to ECM Antennas," issued under the subject contract. Attached please find two copies.

Sincerely,

P. E. Mayes  
Associate Professor  
Electrical Engineering  
Research Laboratory  
University of Illinois  
Urbana, Illinois

PEM:ss

Enclosure

cc: WADC, Attn: WCKCE  
ONR Chicago  
F. X. Finnigan  
H. B. Lawler

*HBL*

5648

7 February 1961

Wright Air Development Div.  
Attn: WWDBEG, Mr. Nicholas C. Draganjac  
Wright-Patterson Air Force Base, Ohio

Dear Sir:

In accordance with contract requirements, please find enclosed one (1) copy of Quarterly Engineering Report No. 9, "Research Studies on Problems Related to ECM Antennas", by P. E. Mayes and G. A. Deschamps, dated 31 December 1960, sponsored by Wright Air Development Center, under contract number AF33(616)-6079.

Sincerely,

*Marge Johnson*  
(Miss) Marge Johnson  
Technical Editor  
205 Electrical Engineering  
Research Laboratory  
University of Illinois  
Urbana, Illinois

MJ:bsc  
Enclosure

cc: H.B. Lawler

*H.B.L.*

5649

29 November 1960

Commander  
Wright Air Development Center  
Wright-Patterson Air Force Base, Ohio

Attention: WCLRS-A

Re: Contract AF33(616)-6079

Dear Sir:

In accordance with contract requirements, we are forwarding to you the October Monthly Progress Report on "Research Studies on Problems Related to ECM Antennas," issued under the subject contract. Attached please find two copies.

Sincerely,

P. E. Mayes  
Associate Professor  
Electrical Engineering  
Research Laboratory  
University of Illinois  
Urbana, Illinois

PEM:ss

Enc.

cc: WADC, Attn: WCKCS  
CNR Chicago  
P. X. Finnigan  
H. B. Lawler





5650

10 November 1960

Wright Air Development Div.  
Attn: WWDBEG, Mr. Nicholas C. Draganjac  
Wright-Patterson Air Force Base, Ohio

Dear Sir:

In accordance with contract requirements, enclosed please find one copy of Quarterly Report No. 8, "Research Studies on Problems Related to ECM Antennas," Sponsored by Wright Air Development Center for the period 1 June 1960 to 1 September 1960 and issued under Contract No. AF33(616)-6079.

Sincerely,

*Marge Johnson*

(Miss) Marge Johnson  
Technical Editor  
205 Electrical Engineering  
Research Laboratory  
University of Illinois  
Urbana, Illinois

MJ:jk

Encl

cc: *F. X. Finnigan*  
*H. B. Fowler* ✓

*HBF*



5651

18 November 1960

Wright Air Development Div.  
Attn: WWDBEG, Mr. Nicholas C. Draganjac  
Wright-Patterson Air Force Base, Ohio

Dear Sir:

In accordance with contract requirements, please find enclosed one (1) copy of Technical Report No. 47, "Logarithmically Periodic Resonant-V Arrays," by Paul E. Mayes and Robert L. Carrel, dated 15 July 1960, sponsored by Wright Air Development Center, under contract number AF33(616)-6079.

Sincerely,

*Marge Johnson*

(Miss) Marge Johnson  
Technical Editor  
205 Electrical Engineering  
Research Laboratory  
University of Illinois  
Urbana, Illinois

MJ:ss

Enclosure

cc: *F. X. Finnigan*  
*H. B. Lovler* ✓

*H.B.L.*

5652

22 February 1961

Commander  
Wright Air Development Center  
Wright-Patterson Air Force Base, Ohio

Attention: WCLRS-A

Re: Contract AF33(616)-6079

Dear Sir:

In accordance with contract requirements, we are forwarding to you the January Monthly Progress Report on "Research Studies on Problems Related to ECM Antennas," issued under the subject contract. Attached please find two copies.

Sincerely,

P. E. Hayes  
Associate Professor  
Electrical Engineering  
Research Laboratory  
University of Illinois  
Urbana, Illinois

PEH:es

Enclosure

cc: WADC, Attn: WCKCE  
ONR Chicago  
F. X. Finnigan  
H. B. Lawler

5653

21 June 1960

Commander  
Wright Air Development Center  
Wright-Patterson Air Force Base, Ohio

Attn: WCLRS-A

Re: Contract AF33(616)-6079

Dear Sir:

In accordance with contract requirements, we are forwarding to you the June Monthly Progress Report on "Research Studies on Problems Related to ECM Antennas," issued under the subject contract. Attached please find two copies.

Sincerely,

P. E. Mayes  
Associate Professor  
Electrical Engineering  
Research Laboratory  
University of Illinois  
Urbana, Illinois

PEM:aa

Enc.

cc: WADC, Attn: WCKCE  
ONR Chicago  
F. X. Finnigan  
H. B. Lawler ✓

*Handwritten signature/initials*

5654

15 July 1960

Wright Air Development Division  
ATTN: WWRNRE-4, E.M. Turner  
Wright-Patterson Air Force Base, Ohio

Dear Sir:

In accordance with contract requirements, enclosed please find <sup>2 copies</sup> ~~one copy~~ of Quarterly Engineering Report No. 7 on "Research Studies on Problems Related to ECM Antennas", for the period 1 March 1960 to 1 June 1960; sponsored by Wright Air Development Center and issued under Contract No. AF33(616)-6079.

Sincerely,

*Marge Johnson*

(Miss) Marge Johnson  
Technical Editor  
205 Electrical Engineering  
Research Laboratory  
University of Illinois  
Urbana, Illinois

MJ:sk

Encl.

cc: *S. T. Dunigan*  
*H. B. Lander*

*HBL*

FOR INFORMATION OF

*Lawler*

5655

May 23, 1960

Re: Contract No.  
AF33(616)-6079

Commander  
Wright Air Development Center  
Wright-Patterson Air Force Base, Ohio

Dear Sir:

In accordance with contract requirements, we are forwarding to you the April Monthly Progress Report on "Research Studies on Problems Related to ECM Antennas", issued under the subject contract. Attached please find two copies.

Sincerely,

P. E. Hayes  
Associate Professor  
Electrical Engineering  
Research Laboratory  
University of Illinois  
Urbana, Illinois

PEH:san

Enclosure

CC: WADC, ATTN; WORCE  
ONR Chicago  
F. X. Finnigan  
✓H. B. Lawler

*HBL*

6079

5656

April 25, 1960

6079

Commander  
Wright Air Development Center  
Wright-Patterson Air Force Base, Ohio

Dear Sir:

In accordance with contract requirements, we are forwarding to you the March Monthly Progress Report on "Research Studies on Problems Related to ECM Antennas", issued under the subject contract. Attached please find two copies.

Sincerely,

P. E. Mayes  
Associate Professor  
Electrical Engineering  
Research Laboratory  
University of Illinois  
Urbana, Illinois

PEM:san  
Enclosure  
CC: WADC, ATTN; WCECE  
ONR Chicago  
F. N. Finnigan  
✓ H. B. Lawler

HBL

6079

5657

Commander  
Wright Air Development Division  
ATTN: E. M. Turner (WCLRRB)  
Wright-Patterson Air Force Base, Ohio

27 April 1960

Dear Sir:

In accordance with contract requirements, enclosed please find <sup>two</sup> one copy of Quarterly Engineering Report on "Research Studies on Problems Related to ECM Antennas," sponsored by Wright Air Development Center for the period 1 December 1959 to 1 March 1960 and issued under Contract No. AF33(616)-6079. The Project No. is 9-(13-6278), the Task is 40572. This is the sixth quarterly report.

Sincerely,

*Marge Johnson*

(Miss) Marge Johnson  
Technical Editor  
210 Electrical Engineering  
Research Laboratory  
University of Illinois  
Urbana, Illinois

MJ:sk

Encl.

cc: *J. X. Finnegan*  
*H.B. Hawler*



FOR INFORMATION OF

H. B. Lawler

5658

February 24, 1969

6079

Commander  
Wright Air Development Center  
Wright-Patterson Air Force Base, Ohio

Attn: WCLAS-A

Dear Sir:

In accordance with contract requirements, we are forwarding to you the January Monthly Progress Report on "Research Studies on Problems Related to ECM Antennas," issued under the subject contract. Attached please find two copies.

Sincerely,

P. E. Hayes  
Associate Professor  
Electrical Engineering Research  
Laboratory  
University of Illinois  
Urbana, Illinois

PEH:san  
Enc.

CC: WADC, ATTN: WCRCS  
CMI Chicago  
F. X. Finnigan  
H. B. Lawler

5659

15 February 1960

Commander  
Wright Air Development Division  
ATTN: E. M. Turner (WCLRRB)  
Wright-Patterson Air Force Base, Ohio

Dear Sir:

In accordance with contract requirements, enclosed please find <sup>two copies</sup> ~~one copy~~ of Quarterly Engineering Report No. 5 on "Research Studies on Problems Related to ECM Antennas." This report is issued under Contract No. AF33(616)~~6079~~ Project No. 9-(13-6278) Task 40572, and is sponsored by Wright Air Development Center.

Sincerely,

*Marge Johnson*

(Miss) Marge Johnson  
Technical Editor  
210 Electrical Engineering  
Research Laboratory  
University of Illinois  
Urbana, Illinois

MJ:sk

cc: J. K. Jensen  
A. B. Lawler

212 Electrical Engineering  
Research Laboratory  
February 18, 1960

5660

Professor W. E. Miller  
156 E. E. Building

Professor Miller:

Attached are seven copies of a Disclosure of Invention and Letter of Transmittal entitled, "All-Channel TV and FM Receiving Antenna." This disclosure has been prepared by Professor P. E. Mayes and Mr. Robert L. Carrel. This is the invention for which support was recently requested from the University of Illinois Foundation. Will you please transmit all copies along with the recommendation of the Department Head to Mr. C. C. DeLong, Secretary, Patent Committee.

Harold B. Lawler  
Laboratory Manager

HBL:mag

5661

January 27, 1969

Commander  
Wright Air Development Center  
Wright-Patterson Air Force Base, Chicago

Attn: WCLRS-A

Re: Contract AF33(616)-6079

Dear Sir:

In accordance with contract requirements, we are forwarding to you the December Monthly Progress Report on Research Studies on Problems Related to ECM Antennas, issued under the subject contract. Attached please find two copies.

Sincerely,

P.E. Hayes  
Associate Professor  
Electrical Engineering Research  
Laboratory  
University of Illinois  
Urbana, Illinois

PEM:aa

Enc.

cc: WADC, Attn: WCHCE  
ONR Chicago  
F. X. Finnigan  
✓ H. B. Lawler

5562

January 27, 1960

Commander  
Wright Air Development Center  
Wright-Patterson Air Force Base, Ohio

Attn: WCLRS-A

Re: Contract AF33(616)-6079

Dear Sir:

In accordance with contract requirements, we are forwarding to you the December Monthly Progress Report on Research Studies on Problems Related to ECM Antennas, issued under the subject contract. Attached please find two copies.

Sincerely,

P.E. Hayes  
Associate Professor  
Electrical Engineering Research  
Laboratory

University of Illinois  
Urbana, Illinois

PEH:aa

Enc.

cc: WADC, Attn: WCECS  
CNA Chicago  
F. K. Finnigan  
✓ H. B. Lawler

6079

November 27, 1959

5663

Commander  
Wright Air Development Center  
Wright-Patterson Air Force Base, Ohio

Attn: WCIRS-A

Re: Contract AF33(616)-6079

Dear Sir:

In accordance with contract requirements, we are forwarding to you the October Monthly Progress Report on "Research Studies on Problems Related to ECM Antennas" issued under the subject contract. Attached please find two copies.

Sincerely,

P. E. Mayes  
Associate Professor  
Electrical Engineering Research  
Laboratory  
University of Illinois  
Urbana, Illinois

PEM:ea

Enc.

cc: WADC, Attn: WCIRCE  
ONR Chicago  
F. X. Finnigan  
H. D. Lawler

5664

6 November 1959

Commander  
Wright Air Development Center  
Attn: WCLRS-A, Mr. W. J. Portune  
Wright-Patterson Air Force Base, Ohio

Dear Sir:

In accordance with contract requirements, attached please find one copy of Quarterly Engineering Report on Research Studies on Problems Related to ECM Antennas issued on Contract No. AF33(616)-6079. Project number is 9-(13-6278), Task 40572, and the sponsor is the Wright Air Development Center.

Sincerely,

*Marge Johnson*

(Miss) Marge Johnson  
Technical Editor  
210 Electrical Engineering  
Research Laboratory  
University of Illinois  
Urbana, Illinois

MJ:sk

Encl.

*H. K. Frumgar*  
*R. B. Laurel*



27 October 1959

5665

Commander  
Wright Air Development Center  
Wright-Patterson Air Force Base, Ohio

Re: Contract W32(616)-6079

Attn: WCLRS-A

Dear Sir:

In accordance with contract requirements, we are forwarding to you the September Monthly Progress Report on "Research Studies on Problems Related to ECM Antennas," issued under the subject contract. Attached please find two copies.

Sincerely,

P. E. Mayes  
Associate Professor  
Electrical Engineering  
Research Laboratory  
University of Illinois  
Urbana, Illinois

PEM:sk  
Encl.

cc: WADC, Attn: WCECE  
ONR Chicago  
F. X. Finnigan  
H. B. Lawler

5666

August 13, 1959

Commander  
Wright Air Development Center  
Wright-Patterson Air Force Base, Ohio

Attn: WCLRS-6

Re: Contract AF32(616)-6079

Dear Sir:

In accordance with contract requirements, we are forwarding to you the July Monthly Progress Report on "Research Studies on Problems Related to ECM Antennas," issued under the subject contract. Attached please find two copies.

Sincerely,

P. E. Mayes  
Associate Professor  
Electrical Engineering  
Research Laboratory  
University of Illinois  
Urbana, Illinois

FEM:ds

Enc.

cc: WADC, Attn: WCLRS  
OER Chicago  
F. X. Finnigan  
H. B. Lawler  
P. E. Mayes

5667

21 August 1959

Armed Services Technical  
Information Agency  
Arlington Hall Station  
Arlington 12, Va.

Dear Sir:

In accordance with contract requirements, attached please find <sup>10 copies</sup> ~~one~~ copy  
each of

Quarterly Engineering Report No. 2, "Research Studies on Problems  
Related to ECM Antennas,"

Technical Report No. 37, "On the Solution of a Class of Wiener-Hopf  
Integral Equations in Finite and Infinite Ranges," by Raj Mittra.

Technical Report No. 38, "Prolate Spheroidal Wave Functions for  
Electromagnetic Theory," by Walter L. Weeks.

Technical Report No. 39, "Log Periodic Dipole Arrays," by Dwight E.  
Isbell.

issued by our Antenna Laboratory under Contract AF33(616)-6079 Project  
number is 9-(13-6278), Task 40572, and the sponsor is the Wright Air Develop-  
ment Center.

Sincerely,

*Marge Johnson*

(Miss) Marge Johnson  
Technical Editor  
210 Electrical Engineering  
Research Laboratory  
University of Illinois  
Urbana, Illinois

MJ:sk

*R. L. Finnigan*  
*A. B. Lawler*

5668

21 July 1959

Commander  
Wright Air Development Center  
Wright-Patterson Air Force Base, Ohio

Re: Contract AF32(616)-6079

Attn: WCIRS-6

Dear Sir:

In accordance with contract requirements, we are forwarding to you the June Monthly Progress Report on "Research Studies on Problems Related to ECM Antennas," issued under the subject contract. Attached please find two copies.

Sincerely,

P.E. Hayes  
Associate Professor  
Electrical Engineering  
Research Laboratory  
University of Illinois  
Urbana, Illinois

PHL:ck

Encl.

cc: SAC, Attn: WCIRS  
CML Chicago  
F.X. Finnigan

Mr. R. E. Gentry  
100b Administration

5669

Ref: AF33(616)-6079

Mr. Gentry:

Accompanying this letter is a Disclosure of Invention prepared by Mr. D. E. Isbell of the Department of Electrical Engineering. Seven copies of the University letter of transmittal and three copies each of forms NAVEXOS 2374 and NAVEXOS 2375. There is also included five copies of Technical Report No. 39 on the subject contract in which this invention is described in detail. It is my understanding that two copies of this report are required by the University Patent Committee and three copies for the Department of Defense.

Will you please execute these documents at your earliest convenience.

Harold B. Lawler  
Laboratory Manager

HBL:mat

cc: F.X. Finnigan  
P.E. Mays

*H.B. Lawler*

210 E.E.R.L.

3 February 1959

5670

Commander  
Wright Air Development Center  
Wright-Patterson Air Force Base, Ohio

ATTN: WCLRS-6, Mr. F.E. Burnham

Dear Sir:

In accordance with contract requirements, attached please find 3 copies of Quarterly Engineering Report No. 1, "Research Studies on Problems Related to Antennas," issued by our Antenna Laboratory under Contract AF33(616)-6079. Project number is 9(13-6278) Task 40572, and sponsor is the Wright Air Development Center.

Sincerely,

(Miss) Marge Johnson  
Technical Editor  
210 Electrical Engineering  
Research Laboratory  
University of Illinois  
Urbana, Illinois

MJ:dm

cc: F.X. Finnigan  
H.B. Lawler

All copies of this report have been distributed in accordance with instructions received from Wright Air Development Center, Wright-Patterson Air Force Base, Ohio.

6079 3/B Lawler

29 January 1959

5671

Commander  
Wright Air Development Center  
Wright-Patterson Air Force Base, Ohio

Re: Contract AF33(616)-6079

ATTN: WCLRS-6

Dear Sir:

In accordance with contract requirements, we are forwarding you the January Monthly Progress Report on "Research Studies on Problems Related to ECM Antennas," issued under the subject contract. Attached please find two copies.

Sincerely,

P.E. Inyes  
Associate Professor  
Electrical Engineering  
Research Laboratory  
University of Illinois  
Urbana, Illinois

PEH:dm

cc: WADC, Attn: WCRCE  
OER, Chicago  
F.X. Finnigan