

GEORGIA INSTITUTE OF TECHNOLOGY
OFFICE OF CONTRACT ADMINISTRATION
SPONSORED PROJECT INITIATION

Date: March 24, 1980

Project Title: Specialized Research Equipment: Automated Radiation Laboratory

Project No: E-21-610

Project Director: Dr. G. K. Huddleston

Sponsor: National Science Foundation

Agreement Period: From February 15, 1980 Until July 31, 1981 (Grant Period)

Type Agreement: Grant No. ECS-7923613, dated 3/10/80

Amount: $\left. \begin{array}{l} \$35,000 \text{ NSF (E-21-610)} \\ 35,000 \text{ GTRI (E-21-606)} \\ 16,753 \text{ GIT (E-21-351)} \end{array} \right\} \text{Cost sharing}$
\$86,753 TOTAL

Reports Required: Final Project Report

Sponsor Contact Person (s):

Technical Matters

NSF PROGRAM OFFICIAL

C. Paul Christensen
Program Director for Quantum, Electronics,
Waves and Beams
Division of Electrical Computer and
Systems Engineering
Directorate for Engineering and Applied
Science
National Science Foundation
Washington, D. C. 20550

(202) 632-5881
Defense Priority Rating:

N/A

Assigned to: Electrical Engineering (School/~~Laboratory~~)

Contractual Matters

(thru OCA)

NSF GRANTS OFFICIAL

Hugh L. Lyon
AAEO/EAS Branch, Section II
Division of Grants and Contracts
Directorate for Administration
National Science Foundation
Washington, D. C. 20550
(202) 632-5860

COPIES TO:

Project Director
Division Chief (EES)
School/Laboratory Director
Dean/Director-EES
Accounting Office
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Library, Technical Reports Section
EES Information Office
EES Reports & Procedures
Project File (OCA)
Project Code (GTRI)
Other C. E. Smith

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SPONSORED PROJECT TERMINATION SHEET

22
SR 10407

Date 4/2/82

Project Title: Specialized Research Equipment: Automated Radiation Laboratory

Project No: E-21-610

Project Director: Dr. G. K. Huddleston

Sponsor: National Science Foundation

Effective Termination Date: 7/31/81

Clearance of Accounting Charges: 7/31/81

Grant/Contract Closeout Actions Remaining:

- Final Invoice and Closing Documents
- Final Fiscal ~~Report~~ Accounting (FCTR)
- Final Report of Inventions
- Govt. Property Inventory & Related Certificate
- Classified Material Certificate
- Other _____

Assigned to: Electrical Engineering (School/~~Laboratory~~)

COPIES TO: Research Administrative Network

Administrative Coordination	Research Security Services	EES Public Relations (2)
Research Property Management	Reports Coordinator (OCA)	Computer Input
Accounting	Legal Services (OCA)	Project File
Procurement/EES Supply Services	Library	Other _____



GEORGIA INSTITUTE OF TECHNOLOGY
SCHOOL OF ELECTRICAL ENGINEERING
ATLANTA, GEORGIA 30332

TELEPHONE: (404) 894-2961

March 24, 1982

National Science Foundation
Division of Grants and Contracts
Post-Award Projects Branch
1800 G Street, N. W.
Washington, D. c. 20550

Ref: NSF Award Number ECS-7923613, Specialized Research Equipment

Dear Sirs:

The Final Project Report is forwarded in conformance with the grant specifications.

Should you have any questions or comments regarding this report, please feel free to contact me at (404) 894-2961.

Sincerely,

Marsha Segraves U
Admin. Asst.

cc: OCA (2)
Dr. G. K. Huddleston
file

/ms

PLEASE READ INSTRUCTIONS ON REVERSE BEFORE COMPLETING

PART I-PROJECT IDENTIFICATION INFORMATION

1. Institution and Address Georgia Institute of Technology School of Electrical Engineering Atlanta, Georgia 30332	2. NSF Program Specialized Res. Equipment	3. NSF Award Number ECS-7923613
	4. Award Period From 2-15-80 To 7-31-81	5. Cumulative Award Amount \$35,000
6. Project Title Automated Radiation Laboratory		

PART II-SUMMARY OF COMPLETED PROJECT (FOR PUBLIC USE)

Specialized research equipment has been obtained to establish an Automated Radiation Laboratory in the School of Electrical Engineering at Georgia Institute of Technology. The facility provides the capabilities to automatically acquire, store and process voluminous electromagnetic field measurement data in the 8.2 - 12.4 GHz frequency band as received by a probe antenna accurately positioned on a spherical measurement surface enclosing the antenna under test. The positioner, amplitude/phase receiver, phase-locked microwave source, and microcomputer equipment cost \$90,488, including waveguide components and interfacing electronics. The equipment is housed in a control room and adjacent anechoic chamber measuring 29' x 47' x 11' high and lined with 5-inch (50 dB) pyramidal absorber material costing a total of \$36,400, including renovations. The facility is being readied for use on a number of faculty and student research programs involving near-field/far-field transformations, electromagnetic interference, and scattering. Matching funds were provided by Georgia Tech Research Institute.

PART III-TECHNICAL INFORMATION (FOR PROGRAM MANAGEMENT USES)

1. ITEM (Check appropriate blocks)	NONE	ATTACHED	PREVIOUSLY FURNISHED	TO BE FURNISHED SEPARATELY TO PROGRAM	
				Check (✓)	Approx. Date
a. Abstracts of Theses	X				
b. Publication Citations	X				
c. Data on Scientific Collaborators	X				
d. Information on Inventions	X				
e. Technical Description of Project and Results					
f. Other (specify)					
2. Principal Investigator/Project Director Name (Typed) Gene K. Huddleston	3. Principal Investigator/Project Director Signature A			4. Date 3/23/82	

PATENT AGREEMENT

I the undersigned, an employee of the GEORGIA INSTITUTE OF TECHNOLOGY, as a condition of my assignment to work on Research Project No. E-21-610 under a Grant agreement (Grant No. ECS-7923613) between the Georgia Tech Research Institute and the National Science Foundation (NSF) hereby agree to the following conditions as to patent rights:

PATENT RIGHTS - Whenever any invention, improvement, or discovery (whether or not patentable) is made or conceived or first time actually or constructively reduced to practice in the course of, in connection with, or under the terms of said project, I shall immediately give NSF written notice thereof, and shall thereafter furnish NSF with complete information thereon; and NSF shall have the sole and exclusive power to determine the disposition of all rights in such invention, improvement, or discovery, including title to and rights under any patent application or patent that may issue thereon. The determination of NSF on all these matters shall be accepted as final; and I agree that I will execute all documents and do all things necessary or proper to the effectuation of such determination.

Gene K. Huddleston

(Typed Name)

(Signature)

WITNESS:

March 23, 1982
(Date)