

NO-A191 760

IQUANA - INTERACTIVE GRAPHICS UTILITY FOR AUTOMATED NEC
ANALYSIS(U) NAVAL OCEAN SYSTEMS CENTER SAN DIEGO CA
J C LOGAN ET AL. OCT 87

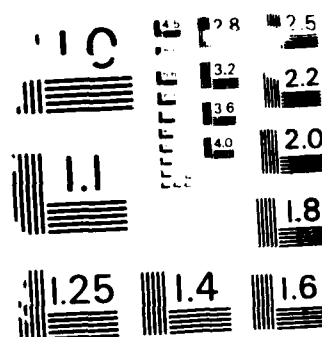
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U.S. GOVERNMENT PRINTING OFFICE: 1963
 NATIONAL BUREAU OF STANDARDS - B-61

AD-A191 760

DTIC FILE 001

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REPORT DOCUMENTATION PAGE

1a REPORT SECURITY CLASSIFICATION UNCLASSIFIED			1b RESTRICTIVE MARKINGS													
2a SECURITY CLASSIFICATION AUTHORITY			3 DISTRIBUTION AVAILABILITY OF REPORT Approved for public release; distribution is unlimited.													
2b DECLASSIFICATION/DOWNGRADING SCHEDULE																
4 PERFORMING ORGANIZATION REPORT NUMBER(S) NOSC			5 MONITORING ORGANIZATION REPORT NUMBER(S)													
6a NAME OF PERFORMING ORGANIZATION Naval Ocean Systems Center		6b OFFICE SYMBOL (if applicable) NOSC	7a NAME OF MONITORING ORGANIZATION Naval Ocean Systems Center													
6c ADDRESS (City, State and ZIP Code) San Diego, CA 92152-5000			7b ADDRESS (City, State and ZIP Code) San Diego, CA 92152-5000													
8a NAME OF FUNDING SPONSORING ORGANIZATION Naval Ship Research and Development Center		8b OFFICE SYMBOL (if applicable) NSRD	9 PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER													
8c ADDRESS (City, State and ZIP Code) Bethesda, MD 20084			10 SOURCE OF FUNDING NUMBERS <table border="1"><tr><td>PROGRAM ELEMENT NO 62543N</td><td>PROJECT NO CM41</td><td>TASK NO RF 45405</td><td>AGENCY ACCESSION NO DN088 509</td></tr></table>		PROGRAM ELEMENT NO 62543N	PROJECT NO CM41	TASK NO RF 45405	AGENCY ACCESSION NO DN088 509								
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11 TITLE (include Security Classification) IGUANA - Interactive Graphics Utility for Automated NEC Analysis																
12 PERSONAL AUTHOR(S) J.C. Logan																
13a TYPE OF REPORT Presentation/Speech		13b TIME COVERED FROM Mar 1987 TO Mar 1987		14 DATE OF REPORT (Year, Month, Day) October 1987												
15 PAGE COUNT																
16 SUPPLEMENTARY NOTATION																
17 COSATI CODES <table border="1"><tr><td>FIELD</td><td>GROUP</td><td>SUB GROUP</td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr></table>			FIELD	GROUP	SUB GROUP										18 SUBJECT TERMS (Continue on reverse if necessary and identify by block number) digitizer input isometric image display	
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19 ABSTRACT (Continue on reverse if necessary and identify by block number) The Interactive Graphics Utility for Automated NEC Analysis (IGUANA) is a computer program designed to reduce the time for antenna model evaluation by providing partial automation to both the data entry process and the data display process.																
20 DISTRIBUTION AVAILABILITY OF ABSTRACT ☐ UNCLASSIFIED UNLIMITED ☒ SAME AS RPT ☐ DTIC USERS			21 ABSTRACT SECURITY CLASSIFICATION UNCLASSIFIED													
22 NAME OF RESPONSIBLE INDIVIDUAL J.C. Logan			23 TELEPHONE (include Area Code) (619)225-2646													
			24 OFFICE SYMBOL Code 822													

DD FORM 1473, 84 JAN

83 APR EDITION MAY BE USED UNTIL EXHAUSTED
ALL OTHER EDITIONS ARE OBSOLETEUNCLASSIFIED
SECURITY CLASSIFICATION OF THIS PAGE

88 3 16 064



IGUANA - INTERACTIVE GRAPHICS UTILITY FOR AUTOMATED NEC ANALYSIS

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The Interactive Graphics Utility for Automated NEC Analysis (IGUANA) is a computer program designed to reduce the time for antenna model evaluation by providing partial automation to both the data entry process and the data display process.

IGUANA is an aid to NEC input data preparation and NEC output data display; IGUANA performs no antenna evaluations itself. IGUANA resides on a microcomputer (an IBM XT or compatible) and is independent of the main frame on which NEC resides. IGUANA is a composite of independently developed but fully integrated subprograms designed to aid in preparation and display of NEC related data sets. The effort required for NEC model composition and data entry is significantly reduced by the use of IGUANA; hence the time required to prepare an error free data set constituting a valid NEC model may be significantly reduced (from weeks to a matter of hours in some cases involving very complex models).

IGUANA provides for digitizer input of model geometry information with isometric image display on a monitor and hard copy on a plotter. Model maker features include model building by "gluing" together two or more models, wire sorting for ordering the specification of wires (which may reduce NEC solution time) and automatic generation of GW card images using user specified or system default parameters for wire radius and segmentation density.

IGUANA also has a simple card image editor customized to the requirements of NEC. The card editor includes field by field prompting of data required for creating geometry card images and control card images. The editor prevents some of the common but sometimes costly mistakes such as failure to use zeros for unused fields or improper entry of data in incorrect fields.

Other IGUANA features include automatic data file management, archiving and retrieval to floppy disks, and data file transfer to and from main frame computers.

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