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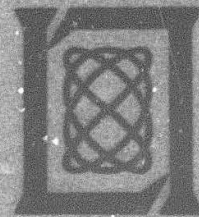
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VOLUME 5

15 December 1975



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FOR THE COMMANDER



William H. Lawton, Lt. Col., USAF

Acting Chief, ESD Lincoln Laboratory Project Office

FOREWORD

Volume 5 of Unclassified Publications of Lincoln Laboratory lists reports published from 15 December 1973 to 15 December 1975, as well as updated information on earlier publications.

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15 February 1974	AD-777154/6	15 February 1975	AD-A008503/5
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15 August 1974	AD-787882/0	15 August 1975	AD-A016399/8
15 November 1974	AD-A002877/9	15 November 1975	AD-A020959/3

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1 January 1974	AD-776118/2	1 January 1975	AD-A007060/7
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15 June 1974	AD-782422/0	15 March 1975	AD-A008502/7
15 September 1974	AD-A001244/3	15 June 1975	AD-A014255/4

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15 April 1974	AD-919549-L	15 April 1975	AD-B004671-L
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83	18-Mcps Field-Strength Measurements over Sea Water	S. J. Fricker R. P. Ingalls W. T. Quinn M. L. Stone C. A. Stutt	14 June 1955	AD-76455
492	An Experimental ELF Receiver	S. L. Bernstein D. A. McNeil O. G. Nackoney I. Richer	1 Sept. 1973	AD-776796/5
496	Load Impedance Characteristics of TRAPATT Oscillators	J. D. Welch	9 July 1973	AD-776773/4
501	Compensation of Multipath Angular Tracking Errors in Radar	I. Kupiec	20 Mar. 1974	AD-781100/3
502	Magnetic Moment Versus Temperature Curves of LiZnTi Ferrites	G. F. Dionne	10 May 1974	AD-782421/2
508	Millstone Hill Radar Propagation Study: Calibration	J. V. Evans, Editor	5 Oct. 1973	AD-779689/9
509	Millstone Hill Radar Propagation Study: Scientific Results - Part I Part II Part III	J. V. Evans, Editor	13 Nov. 1973	AD-781179/7 AD-782748/8 AD-780519/5
510	The Bulk Filtering, Acquisition and Tracking System (BATS)	C. M. Steinmetz	2 Oct. 1973	AD-781101/1
511	Energy Dissipation by Electron Beam Scattering in Thin Polymer Films	R. J. Hawryluk	11 Nov. 1974	AD-A007061/5
512	Radio-Frequency Interference from Linear-FM Pulses	J. J. G. McCue	16 July 1974	AD-A003677/2
513	Millstone Hill Thomson Scatter Results for 1969	J. V. Evans	23 July 1974	AD-A008505/0
514	Unified Model of the Insulator-Metal Transition in Ti_2O_3 and the High-Temperature Transition in V_2O_3	H. J. Zeiger	22 Aug. 1974	AD-A001546/1
515	Lincoln Laboratory LTS-3S Training System: Application to Teaching Essential Mining Skills	W. P. Harris R. E. Rodgers	15 July 1975	

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1973-36, Rev. 1	An Introduction to the Mathematics of Linear Predictive Filtering as Applied to Speech Analysis and Synthesis	E. M. Hofstetter	12 Apr. 1974	AD-777579/4
1973-43	Accuracy Limitations of Range-Range (Spherical) Multilateration Systems	H. B. Lee	11 Oct. 1973	PB-228135/0
1974-1	Design of an Autonomous Stationkeeping Controller for LES-8/9	S. Srivastava R. W. Brockett	21 Feb. 1974	AD-775144/9
1974-2	Review of High-Reliability Procurement Practices in the Semiconductor Industry	A. G. Stanley	11 Jan. 1974	AD-773833/9
1974-4	Designing Algorithms for Exo-atmospheric Discrimination	B. J. Burdick G. L. Carayannopoulos W. H. Schoendorf C. W. Therrien	16 Jan. 1974	AD-773834/7
1974-5	Doubly Averaged Effect of the Moon and Sun on a High Altitude Earth Satellite Orbit	M. E. Ash	1 Mar. 1974	AD-776022/6
1974-7	Models of Multipath Propagation Effects in a Ground-to-Air Surveillance System	T. P. McGarty	25 Feb. 1974	AD-777241/1
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1974-9	Closed Loop Testing of LES-8/9 Autonomous Stationkeeping System	S. Srivastava W. A. Petersen F. S. Zimnoch W. B. Smith	25 Oct. 1974	AD-A002315/0
1974-12	False Target Elimination at Albuquerque Using ARTS-III Software	A. G. Cameron	12 Mar. 1974	AD-776798/1
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1974-37	Optimum Detectors of Pseudo-noise Waveforms	S. L. Bernstein	19 June 1974	AD-781800/8
1974-38	Digital Aircraft Communications with Emphasis on Satellites	L. M. Goodman	30 May 1974	AD-921085-L
1974-39	Fabrication of Electron-Bombarded Semiconductor (EBS) Diodes	B. E. Burke R. A. Cohen R. W. Mountain	29 July 1974	AD-784856/7
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1974-51	Computer Code Used in Monte Carlo Calculations of the Energy Dissipation in a Thin Polymer Film by Electron Beam Scattering	A. M. Hawryluk R. J. Hawryluk	13 Sept. 1974	AD-786809/4
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1974-54	The LES-8/9 UHF Downlink Code	D. B. Coomber G. G. Lias T. S. Seay E. Weiss	12 Dec. 1974	AD-A003680/6
1974-56	Intermodulation Products of a UHF Diplexer	J. C. Lee	21 Oct. 1974	AD-A001583/4

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1974-58, Vols. 1 & 2	Digital Signal Processor Designs for Radar Applications	R. J. Purdy P. E. Blankenship A. E. Filip J. M. Frankovich A. H. Huntoon J. H. McClellan J. L. Mitchell V. J. Sferrino	31 Dec. 1974	AD-B001419-L (Vol. 1) AD-B001420-L (Vol. 2)
1974-59	A Generalized Approach to Linear Methods of Feature Extraction	C. W. Therrien	30 Dec. 1974	AD-A004212/7
1975-1	Spacecraft Self-Contamination by Molecular Outgassing	R. L. Harvey	31 Mar. 1975	AD-A008504/3
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1975-27	Capacitive Profile Tapering for Towed ELF Loop Antennas	M. L. Burrows	27 May 1975	AD-A011980/0
1975-28	Ionospheric Limitations on Radar Accuracy at L-Band	R. H. Wand	27 May 1975	AD-A013731/5
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1975-30	Winding a Long Coil with a Pre-Programmed Turns Density Variation	M. L. Burrows S. H. Prince	27 May 1975	AD-A011948/7
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1975-36	Observations of Synchronous Satellite ATS-3 with Three Coherent Radars	L. B. Spence G. P. Banner	9 June 1975	AD-A013105/2
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1975-44	EBS (Electron Bombarded Semiconductor) RF Amplifier Design	D. J. Kostishack	31 July 1975	AD-A014256/2
1975-45	Experimental Verification of the Performance of the Aperture Sampling Technique	I. Kupiec	15 Sept. 1975	AD-A016779/1
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1975-48, Vol. 1	Evaluation of the Applicability of Modern Signal Detection and Clutter Rejection Techniques to the AN/FPS-20A/67D/100 and AN/FPS-19 Classes of Air Force Radars	M. Labitt D. H. Griffin R. M. O'Donnell	23 Sept. 1975	AD-B007947-L
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1975-60	Satellite Communications Availability - Launch Scheduling	C. W. Niessen	18 Nov. 1975	AD-A019319/3
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| 3568 | Atom Movements: Diffusion | R. F. Brebrick | In <u>Solid State Chemistry and Physics: An Introduction</u> , P. Weller, Ed. (Dekker, New York, 1973), p. 589 |
| 3569 | Discrete Time Solution of Plane P-SV Waves in a Plane Layered Medium | C. W. Frasier | Geophysics <u>35</u> , 197 (1970) |
| 3877 | Seismicity of a Caldera Collapse: Galapagos Islands 1968 | J. Filson
T. Simkin
L. Leu | J. Geophys. Res. <u>78</u> , 8591 (1973), DDC AD-777554/7 |
| 3931 | Variable-Length Encoding of Fixed-Rate Markov Sources for Fixed-Rate Channels | F. Jelinek
K. S. Schneider | IEEE Trans. Inf. Theory <u>IT-20</u> , 750 (1974) |
| 3972 | A Direct Measurement of the Earth's Short-Period Attenuation along a Teleseismic Ray Path | C. W. Frasier
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