COMMUNICATION SCIENCES AND ENGINEERING

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XIII. PROCESSING AND TRANSMISSION OF INFORMATION

Academic and Research Staff

Prof. Peter Elias Prof. Robert G. Gallager Prof. Robert S. Kennedy Prof. Jeffrey H. Shapiro Dr. Estil V. Hoversten Dr. Horace P. H. Yuen

Graduate Students

Vincent Chan
Samuel J. Dolinar, Jr.
Richard A. Flower
Robert P. Gallant
John G. Himes

Pierre A. Humblet Thomas L. Marzetta Gerard P. Massa Robert J. Metzger Nam-soo Myung Howard F. Okrent

John J. Poklemba Stanley R. Robinson Alexander S. Theoduru Victor Vilnrotter Kohei Yamada

A. INFORMATION THEORY OF DATA-PROCESSING SYSTEMS

Joint Services Electronics Program (Contract DAAB07-71-C-0300) National Science Foundation (Grant GK-37582)

Peter Elias

During the past six months three papers have been written by Peter Elias. The first paper, entitled "Efficient Storage and Retrieval by Content and Address of Static Files," appeared in the April 1974 issue of the Journal of the Association for Computing Machinery, Vol. 21, pp. 246-260. The second paper, entitled "Minimum Times and Memories Needed to Compute the Values of a Function," has been accepted for publication in the Journal of Computer and System Sciences. The third paper, entitled "The Complexity of Some Simple Static Retrieval Problems," has been submitted for publication to the Journal of the Association for Computing Machinery.

The doctoral research of Richard A. Flower on the complexity of updating a data base is essentially complete and his thesis should be available by September, 1974.

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