January 27, 1965

Dr. Ottis Rechard National Science Foundation 1951 Constitution Avenue Washington, D. C.

Dear Dr. Rechard:

At Mr. Anderson's request, I am enclosing a copy of the I/O Processor Type 167 description.

Sincerely,

(Mrs.) N. C. Survilas Administration

ncs Enc: Description

February 1, 1965

Mr. Robert H. Farwell 24 Balfour Street Lexington, Massachusetts

Dear Mr. Farwell:

Thank you for your letter of January 12 expressing interest in a position at DEC. At the present, we do need a senior man with considerable experience in financial management. We have considered your background and, although you have much to offer, we feel that our requirement is for an individual with more extensive accounting and corporate finance experience than you have had.

I appreciate your considering DEC and am sorry to have to respond negatively to you.

Sincerely,

Harlan E. Anderson Vice President

HEA:ncs

State Bank of Freeport

FREEPORT, ILLINOIS

ESTABLISHED 1891

February 3, 1965

Mr. Harlan Anderson, Vice President Digital Equipment Corp. Maynard, Mass.

Dear Harlan:

After neglecting the Smith's correspondence with the Andersons for so long, I apologize that communication comes in the form of a business letter. Nevertheless, I wanted to write to you concerning a young man by the name of Thomas Doyle, from Freeport.

My acquaintance with Tom has been in my capacity at the bank, inasmuch as the bank was Tom's guardian until he reached his majority. He is now in his last year at Case Institute of Technology, having spent three years at Monmouth College, Monmouth, Illinois, and two years at Case. He will graduate in June with a Bachelor of Science in electrical engineering and receive a Bachelor of Arts from Monmouth in physics. His major has been electrical engineering with designation in the field of electronics. His grade average at Monmouth was 3.105 on a 4.0 system and he is maintaining a 2.4 at Case on a 4.0 system. While discussing Tom's future plans with him, he mentioned that he was leaning toward the computer field and I mentioned to him that I would write to you in the event that you might be interested in a man with his qualifications. He states that he is interested more in product engineering than in designing.

In my personal contact with Tom, I have formed the conclusion that he is a young man of excellent character. He is a serious minded person, apparently has an excellent moral character, and I am sure he is the type of man who would give his employer a 200% effort in everything he was assigned. I have no idea as to whether you would be interested in Tom, but if you are, perhaps it would be best to correspond directly with him. His address is ll240 Bellflower Road, Cleveland 6, Ohio. If you are not interested in him, I would appreciate a letter to that effect so that I can let him know. -2-

Mr. Harlan Anderson

February 3, 1965

I have enjoyed hearing the continued good reports about your company and about your activities, and I hope that this excellent progress continues indefinitely. Please give my warm wishes to Lois and I hope that we can get together again in the near future.

My best regards to you,

Very truly yours,

Robert P. smith Assistant Trust Officer

RPS:jm

AKX,

February 17, 1965

Mr. Robert P. Smith Assistant Trust Officer State Bank of Freeport Freeport, Illinois

Dear Bob:

It was a pleasant surprise to receive a letter from you last week and I am sure my correspondence record is poorer than yours. I am planning a business trip next week to the Midwest and am bringing the family to Freeport for the week. Perhaps we can get together some time during the week. We are arriving late Friday night, February 19.

Concerning Tom Doyle, we are always interested in exploring employment possibilities with young engineering graduates interested in the computer field. Although the company as a whole is growing rapidly (over 700 employees), we do not employ a large number of engineers. I have turned over your letter to our professional personnel man whose name is Winston Hindle and asked him to contact Tom by letter so that we can further explore the possibilities. Thank you very much for the introduction to him and we will see if our needs and his interests are at all compatible.

I hope we have an opportunity to get together next week.

Sincerely,

Harlan E. Anderson Vice President

HEA:ncs

February 19, 1965

Mr. Roscoe Irving Lybrand, Ross Brothers and Montgomery 80 Federal Street Boston, Massachusetts 02110

Dear Mr. Irving:

-2

Thank you for your kind invitation to the February 25th Meeting and Luncheon; unfortunately, I have made previous plans to be in Chicago for the entire week and will be unable to attend.

Sincerely,

Harlan E. Anderson Vice President

HEA:ncs

LYBRAND, ROSS BROS. & MONTGOMERY

COOPERS & LYBRAND IN AREAS OF THE WORLD OUTSIDE THE UNITED STATES 80 FEDERAL STREET BOSTON 02110

February 11, 1965

Mr. Harlan Anderson, Vice President & Treasurer Digital Equipment Corporation Maynard, Massachusetts

Dear Andy:

On Thursday, February 25th, we are planning a meeting for a small group of clients with our partners and managers, followed by cocktails and luncheon, at the Algonquin Club of Boston.

The subject of the meeting is executive compensation and related tax implications. A copy of the program is enclosed. During the course of the program, we hope to have informal discussion and questions on these topics. This is essentially the same material we covered at our meeting of December 16, 1964, which you were unable to attend.

Our meeting at the Algonquin Club, 217 Commonwealth Avenue, Boston, will begin at 11:15 A.M., followed by cocktails and luncheon. Our plan is to be through luncheon not later than 2 P.M. The meeting itself will be on the third floor of the Club.

We would be very pleased to have you attend the meeting. It will assist us if you will let us know if you can do so. We hope very much that you can be with us.

Sincerely yours,

Roscoe During

REI:RWR

Enclosure (1) Program LYBRAND, ROSS BROS. & MONTGOMERY BOSTON OFFICE - CLIENT MEETING "EXECUTIVE COMPENSATION"

11:15 A.M. - February 25, 1965

Algonquin Club, 217 Commonwealth Avenue Boston, Massachusetts

AGENDA

Robert D. Collins "Sharing Profits Through Deferred Plans"

Stephen Stewart "Executive Compansation Plans"

Warren G. Wintrub "Tax Implications of Executive Compensation"

Cocktails

Luncheon



March 25, 1965

Office of Institutional Research 1785 Massachusetts Avenue, N. W. Washington, D. C. 20036

Gentlemen:

As advertised in the CHANGING TIMES magazine, please send me the article, "Nuclear Science and Engineering at State Universities and Land-Grant Institutions."

Your prompt attention to this request will be appreciated.

Sincerely,

Harlan E. Anderson

HEA:ecc

Kto the



March 18, 1965

Mr. R. N. Close, Director Apparatus Division Cutler-Hammer Comac Road Deer Park, Long Island, New York

Dear Mr. Close:

As promised in my letter of March 5, 1 am enclosing a copy of the latest printing of DEC's FLIP CHIP Modules Catalog.

Please accept my invitation to visit our facilities in Maynard the next time you are in the Boston area.

Sincerely,

Harlan E. Anderson Vice President

HEA:ncs Enc: C-105 cc: S. Olsen D. Denniston

JER's



March 5, 1965

Mr. R. N. Close, Director Apparatus Division Cutler-Hammer Comac Road Deer Park, Long Island, N.Y.

Dear Mr. Close:

It was a pleasure to have the opportunity of meeting you at the recent American Research and Development Meeting and to hear of your interest in DEC's modules. Unfortunately our latest module catalog is still in the printing process and will not be available until the middle of March at which time we will have a copy sent to you.

Sincerely,

Harian E. Anderson Vice President

HEAsnes

cc: Nancy's Follow Up D. Denniston S. Olsen •

March 5, 1965

- Son of Lloyd Saha

Mr. Mark C. Hahn RR #2 Box 266 Evansville, Indiana

Dear Mark:

I was quite pleased to learn of your interest in computers at the recent ARD Annual Meeting and hope the enclosed literature will encourage your potential in this field.

My personal regards.

HEA:ncs Enc: PDP-8 Fortran PDP-5 Workbook



March 31, 1965

Mr. Roscoe E. Irving Lybrand, Ross Bros. and Montgomery 80 Federal Street Boston, Massachusetts 02110

Dear Roscoe:

and a state

Thank you for sending me the latest edition of the "Massachusetts Taxation of Corporations". I am sure we will obtain a great deal of useful information from it as we have from the past editions.

Sincerely,

Harlan E. Anderson Vice President

HEA;ncs

Send thankyour note and send book

Lybrand, Ross Bros. & Montgomery

COOPERS & LYBRAND IN AREAS OF THE WORLD OUTSIDE THE UNITED STATES

80 FEDERAL STREET BOSTON 02110 March 17, 1965

Mr. Harlan E. Anderson, Vice President Digital Equipment Corporation Maynard, Massachusetts

Dear Andy:

I am pleased to enclose a copy of the Sixth Edition of "Massachusetts Taxation of Corporations" by Herman Stuetzer, Jr. of this firm. This edition reflects the changes since 1963 in the Massachusetts tax laws affecting corporations and in their administration. I hope that this manual will prove of assistance to you.

Sincerely yours,

Rossoe E. During

REI:ECB Enclosure Manual

HEA

April 2, 1965

Mr. Les D. Earnest Mitre Corporation 2009 14th Streat N. Arlington, Virginia

Dear Les:

Enclosed is technical information that I promised you Tuesday night concerning our new Type 338 Display which includes a PDP-8 for use as a buffer and control unit. I have asked Mike Ford of our DEC office in Maynard to contact you further about the equipment. The basic unit including the PDP-8 is priced at \$62,500. Please feel free to contact Howie Painter in our Washington office or Mike Ford or myself in Maynard if you wish additional information.

Sincerely,

Horlen E. Anderson Vice President

HEA:nes Enc: Type 340 Brochure F-13 Type 338 Programmed Buffered Display

ac: H. Painter M. Ford

Mike,

Would you see that Mr. Earnest receives a description of the Keyboard or special subroutining feature like we provided Ivan Sutherland. Les was impressed by the glossy photo – please have one sent to him.

Andy

YER

April 2, 1965

Mr. John Watt Casa Blanca 12 Tytherington Park Road Macclesfield, Cheshire England

Dear Mr. Watt:

Thank you for your recent letter concerning the possibility of using PDP equipment for commercial purposes in England. As you probably know, we have had no plans to do this type of thing in the near future but would be interested in having exploratory discussions with you. I would suggest you contact the manager of our English operation whose name is Mr. John Leng and whose address is Digital Equipment Corporation (U.K.) Limited, 11 Castle Street, Reading, Berkshire, England. I will send him a copy of your letter and will tell him to expect a telephone call from you in the near future.

Thank you again for your interest.

Sincerely,

Harlan E. Anderson Vice President

HEAsics cc: J. Leng e e Jours

John: If these fellows look like an interesting possibility then it would be good if Ken and/or I met them when we come to Europe later this month.

Andy

"Casa Blanca"

12 Tytherington Park Road,

MACCLESFIELD, Cheshire,

ENGLAND

4th March 1965

Dear Sirs,

I have recently read your brochures on your PDP8 and PDP6 range of computers, which I understand are at present being sold for scientific purposes in the United Kingdom. I have discussed your equipment with some of my colleagues and we are all very much impressed with the price/specification ratio of your hardware.

As we are all employed by a large American company, marketing business equipment in the U.K., we are naturally very interested to know if you have plans to market the equipment for commercial purposes in this country.

We would be interested in setting up a commercial Division of Sales and Systems Support Services for this purpose and would like to have the opportunity of discussing the possibilities of a financial agreement with yourselves, as we consider that there is considerable market potential, especially for the PDP8, in the U.K. there being some 50,000 medium sized businesses in this country.

We would appreciate an exploratory discussion with your representatives in Britain at your convenience.

Yours faithfully,

JOHN WATT A.C.A.

Digital Equipment Corporation, 146 Main Street, MAYNARD, Massachusetts, U. S. A.

Sender's name and address :

John Watt Esq. K.C.A.

"Casa Blanca"

12 Tytherington Park Read,

MACCLESFIELD, Cheshire,

ENGLAND

AN AIR LETTER SHOULD NOT CONTAIN ANY ENCLOSURE ; IF IT DOES IT WILL BE SURCHARGED OR SENT BY ORDINARY MAIL.

- Second fold here -----



First fold here



To open slit al

Digital Equipment Corporation,

146 Main Street,

MAYNARD,

Massachusetts,

UNITED STATES OF AMERICA

To open slit along here

HAT for

April 14, 1965

Mr. B. O. Evans, President Federal Systems Division International Business Machines Corporation 326 East Montgomery Avenue Rockville, Maryland

Reference:

Your letter of April 5, 1965 Regarding Information Disclosure Agreement

Dear Mr. Evans:

As you requested I have signed the attached copy of your above-referenced letter indicating approval of extending the expiration date to December 23, 1965 and authorizing W. R. Brusso as the receiver of proprietary information. Our lawyer, Robert Cesari, has been in contact with your counsel and according to their discussion I should be receiving a new agreement contract within a few weeks.

Sincerely,

Harlan E. Anderson Vice President

HEA mas cc: R, Cesari

International Business Machines Corporation

326 East Montgomery Avenue, Rockville, Maryland

Office of the President Federal Systems Division

April 5, 1965

Digital Equipment Corporation Maynard Massachusetts

Attention:

Mr. Harlan E. Anderson Vice President

Subject:

Information Disclosure Agreement

Gentlemen:

On December 23, 1963, Digital Equipment Corporation and IBM entered into an information exchange agreement to provide access to IBM to data on the PDP-1 Processor. The data was to be used in the maintenance of the PDP-1 interconnected with the AN/FSQ-32 (XD-1A) at Systems Development Corporation, Santa Monica.

Since the use of this data is still required, it is suggested that the expiration date of the above agreement be extended to be December 23, 1965. It is requested that Mr. W. R. Brusso be recognized as the individual authorized to receive confidential and/or proprietary information. All other terms of the agreement would remain unchanged.

If this proposed extension is satisfactory to you, please indicate your acceptance by signing one copy of this document and returning it to the above address.

Very truly yours,

B. O. Evans President Federal Systems Division

BOE:hml

April 9, 1965

Mr. Arnaud de Vitry 12 rue de la Paix Paris 2, France

Dear Arnaud,

I am planning to visit Europe for the Hannover Fair and the London Electronic Exhibition and will be arriving in Paris on the evening of 21 April to assist Jon Fadiman in getting started in France.

We are trying to understand the practical effects of the new formalization of the French government policy on foreign owned subsidiaries. Would like to meet with you sometime during my visit and will plan to call you on the morning of 22 April to arrange a time.

Sincerely,

H

HEA :ncs

April 16, 1965

1.12

Mr. Araaud de Vitry 12 rue de la Paix Paris 2, France

Dear Arnaud,

Due to many pressing matters here in Maynard, I will be unable to be in Europe as I had planned. I will let you know if I should reschedule this visit.

Ken Olsen and Jon Fadiman plan to contact you next week.

Sincerely,

Harlan E. Anderson Vice President

 \mathbb{V}

1

HEA:ncs



WAYNE STATE UNIVERSITY

COLLEGE OF EDUCATION

DETROIT 2, MICHIGAN

DEPARTMENT OF INDUSTRIAL EDUCATION

March 24, 1965

Send no answer nothing mitable would be

Digital Equipment Corporation 146 Main Street Maynard, Massachussetts

Gentlemen:

Mr. Curry and I are at work on a major revision of our book titled <u>Teaching Successfully the Industrial Arts and Vocational</u> <u>Subjects</u>. This book has been widely used in teacher education programs throughout the United States. The Preface and Table of Contents for the major revision are enclosed.

I have just finished checking copy for Topic 23. On page 5 of this manuscript, which is being enclosed, you will note that provision is being made for two illustrations for teaching machines. The first of these, as Figure 23-1, would need to be a very simple inexpensive device to facilitate linear instruction. For Figure 23-2 we are hoping to find an illustration that would illustrate a very sophisticated teaching machine now used for industrial technical instruction with program instruction planned with the branching approach.

If you have glossy photographs that you could submit with the suggested captions, they will be considered, and if used, properly acknowledged.

Sincerely,

G. Havard Selim

G. Harold Silvius Professor and Chairman

GHS/bw

Enclosures - Retarned it

cc: Mr. Curry Mr. Stephens (McKnight & McKnight Publishing Co.)

April 23, 1965

Professor G. Harold Silvius Department of Industrial Education Wayne State University Detroit 2, Michigan

Dear Professor Silvius:

In response to your letter of March 24 requesting glossy photographs which could be used in your book, we feel there is nothing available at this time that would be suitable to your needs but do appreciate your interest in DEC's equipment.

Sincerely,

Harlan E. Anderson Vice President

HEA:ncs

April 27, 1965

Mr. Thomas E. Leggat, Vice President R. M. Bradley and Company, Inc. 250 Boylston Street Boston, Massachusetts 02116

Dear Mr. Leggat:

Thank you for your letters of March 25 and April 12 indicating the availability of office space in the Concord and Newton area. The present facilities here in Maynard are quite satisfactory and all probability of our moving in the near future is undetermined.

Sincerely,

Harlan E. Anderson Vice President

HEA:ncs

B cc: Dick Mills along with letter and brochure describing space.

535 BoylstonStreet Boston, Mass. 02116 262-4400

April 23, 1965

Treasurer Digital Equipment Corp. 146 Main Street Maynard, Massachusetts

Dear Sir:

I have a customer interested in purchasing a small amount of the stock of your company.

I have not been able to run down any quotation by searching the ordinary sources and I am writing to you inquiring as to your knowledge of any stockholder interested in disposing of a part of their holding.

Thanking you for your attention, I am

Very truly yours,

Ner a asle John A. Foster

JAF:kn

April 27, 1965

Mr. John A. Foster Hornblower and Weeks-Hemphill, Noyes 635 Boylston Street Boston, Massachusetts 02116

Dear Mr. Foster:

Thank you for your letter of April 23 and for your customer's interest in DEC. At the present time, there is no public trading of DEC stock. The majority of our stock is owned by American Research and Development Corporation of Boston and ARD stock is presently traded on the New York Stock Exchange.

I am enclosing for your interest a copy of our annual report covering the Fiscal Year Ended June 27, 1964.

Sincerely,

Harlan E. Anderson Vice President

HEA:ncs Enclosure (1)



equipment corporation

MAYNARD, MASSACHUSETTS TWinoaks 7-8822 TWX MAYN 816

April 29, 1965

Mr. Paul Slattery, Vice President Keydata Corporation 575 Technology Square Main Street Cambridge 39, Massachusetts

Dear Paul:

This letter is a confirmation of our discussion on Wednesday of this week in which I stated that a great deal of work still remains to be done in order to complete the installation of Keydata's PDP-6 System. This work ranges from minor clean up matters to the major job of installing the drum system.

In order to complete this work and allow Keydata to go into full operation as soon as possible, we feel that the work on the system must take priority over all other operations. At the same time, we recognize Keydata's commitments for pre-acceptance use and demonstrations starting May 3.

After considering your requirements, we have established the following schedule of time when the system will be available for your use:

April	25-26	12:00 p.m.	to	8:00 a.m.
May	3-7	8:30 a.m.	to	1:00 p.m.
May	8	9:00 a.m.	to	6:00 p.m.
May	9-12	12:00 a.m.	to	9:00 p.m.
	•	8:30 a.m.	to	1:00 p.m.
May	17 to Completion of			
1	Installation	8:30 a.m.	to	6:00 p.m.
	May May May May	April 25–26 May 3– 7 May 8 May 9–12 May 13–14 May 17 to Completion of Installation	May 3-7 8:30 a.m. May 8 9:00 a.m. May 9-12 12:00 a.m. May 13-14 8:30 a.m. May 117 to Completion of 8:30 a.m.	May 3-7 8:30 a.m. to May 8 9:00 a.m. to May 9-12 12:00 a.m. to May 13-14 8:30 a.m. to May 17 to Completion of 17

Mr. Paul Slattery, Vice President Keydata Corporation

April 29, 1965 Page Two

In addition to the times listed above, it is anticipated that additional time will occasionally be available. Every effort will be made to notify you in advance when additional time would be available to you.

DEC is eager to complete the installation and minimize the effect of past delays. We feel that this constraint in your use of the system is in the best interests of both Keydata and DEC.

Sincerely,

Harlan E. Anderson Vice President

HEA:ncs cc: R. Beckman L. White



April 30, 1965

Mr. Roscoe Irving Lybrand, Ross Bros. and Montgomery 80 Federal Street Boston, Massachusetts

Dear Roscoe:

I have looked over the resume of Mr. Higgins that you sent me on April 21st and would like to have any additional information you may be able to obtain on him and would like to have a contact with him that might lead to an interview. Please let me know if you have any suggestions about the proper way to approach Mr. Higgins.

Thank you for your continued help in this matter.

Sincerely,

Harlan E. Anderson Vice President

HEA:ncs

WASHINGTON STATE UNIVERSITY

PULLMAN, WASHINGTON 99163

DATA PROCESSING OFFICE

April 19, 1965

Digital Equipment Corporation Maynard, Massachusetts

Dear Sirs:

As part of a graduate course project in Information Science at Washington State University, we are working on a study of internal automation operations. Included are the automation operations of the company itself as well as that of its customers. I would appreciate very much your help to obtain data for this study.

More specifically, information about your philosophy and approaches to internal automation as well as any changes that have been made in the application, development, and implementation of internal automation systems would be very helpful. Here I am concerned mainly with applications involving integrated data processing systems.

Also I would like to find out whether the responsibility for the internal automation applications and operations of Digital Equipment Corporation itself is placed with the same or different group from that responsible to the customers for these same operations.

Any information you could provide would be greatly appreciated.

Sincerely,

John D. Munso

John D. Munro 40 C South Fairway Pullman, Washington 99163

INOUIRY NO you are responsible and raintying up this inquiry.

It must be answered within three days and a copy sant to

May 4, 1965

Mr. John D. Munro 40 C South Fairway Pullman, Washington 99163

Dear Mr. Munro:

We have received your letter of April 19 dealing with a project for your graduate course in information science at WSU. I am sorry to say that we will not have much pertinent information that would be helpful to you in your study. Most of our computers have been used either for scientific calculations or other non business-oriented applications. This is true of almost all of our customers as well as our internal utilization of computers. We do not have an integrated on-line data processing system for our business operations.

Thank you for your interest in DEC and I am sorry we do not have more information that would be useful to you at this time.

Sincerely,

Harlan E. Anderson Vice President

HEA:ncs

May 5, 1965

Mr. J. D. Madden, Executive Director Association for Computing Machinery 211 East 43rd Street New York, New York 10017

Dear Mr. Madden:

Since your situation required some discussion with my associates, I have been delayed in responding to your letter of March 2. Unfortunately, we do not have a suitable machine available for the ACM.

We appreciate your considering DEC and wish you success in solving your problems.

Sincerely,

Harlan E. Anderson Vice President

HEA:ncs



COUNCIL

C. L. BRADS
F. J. CORBA
W. H. EICHE
A. EVANS, JI
B. GALLER

ASSOCIATION FOR COMPUTING MACHINERY

211 EAST 43 STREET, NEW YORK, N.Y. 10017

March 2, 1965

Mr. Harlan E. Anderson, Vice President Digital Equipment Corporation 146 Main Street Maynard, Massachusetts

Dear Harlan:

I am writing to you as a Corporate Institutional Member of the Association for Computing Machinery to highlight a current problem of the organization, and to ask your consideration of possible solutions. As you know, the ACM is the professional society for people in the computing and information processing field. Although our recent growth rate has not been as high as we would have liked, we have reason to believe that it will accelerate. We currently have just over 13,000 members, and expect to reach 25,000 within five years.

At present, we have a very austere EAM installation. You will not be interested in the particular models of EAM we have; suffice it to say that our annual rental is \$10,000 and our staff salaries are \$13,000. I believe you will agree that this is a very small installation.

Our work load is characterized by quite a bit of punch card input, a large amount of printer output (principally on mailing labels) and file maintenance - insertion, deletion and much sorting.

We handle membership accounting, subscription accounting, and a number of other applications. We support our Chapters, Special Interest Groups, Committees, and Advertising Department with a variety of services. There is a great number of additional functions we would like to automate which would result ultimately in improved services to our membership.

In consideration of the inevitable increase in the number of members to be served, the number of functions which should be automated and, partly, because we feel that the Association for Computing Machinery should be using later equipment, we are searching for a way to effect a transition to a small tape system. Our financial position is such that we should be able to afford \$5,000 more for this operation next fiscal year, but we predict that this will be required for salaries if we convert to a computer. Hence, our dilemma is to find a small tape system which includes card input and printer devices sufficient to handle our load and which will cost no more than the \$10,000 we are now paying for the EAM installation.

My questions are these: Do you have a plan for organizations like the ACM which would enable us to get a computer? Do you have a retired but serviceable computer which you could let us have? My only arguments are: The need is great; you have a fairly direct interest in the success of the ACM, and there are significant advertising values in being able to state that the ACM uses your equipment.

I would greatly appreciate your considering this problem, and letting me know if you can see any solution.

Sincerely,

, hyadde

J. D. Madden Executive Director

JDM/ph



DATE March 29, 1965

SUBJECT Mass Memory

Kenneth Olsen

Gordon Bell

TO

FROM

Harlan Anderson 9

Today Mr. Edward Rogal of 80 Mann Lot Road, North Scituate, Mass., Zip Code 02060 telephoned me. He had read an article a year ago in Business Week magazine concerning the PDP-6 and wanted to talk to us about an invention that he has. His telephone number is 545-1254. He has apparently invented a system for retail store automation known as Uni-Tote which is distributed by the American Totalizer Corporation. The particular device that he has in mind would be used he thinks for an expanded retail store system. It is covered by eight patents and a prototype has been constructed for him by Jackson and Moreland Engineering Company in Boston. Its characteristics are capacity of 300 million bits with an access time of approximately one second and a cost of \$30,000. His system ideas have been discussed with someone named Ferguson at Project MAC. I would think we might be able to get some further background on Mr. Rogal there. He called with the idea of trying to talk us into marketing his total package to retail stores which I indicated we were not interested in but that we might be interested in hearing more about his memory device. One important characteristic that I failed to ask him about was the transfer rate after access has been made. I promised we would call him back in a week or so to indicate if we had any further interest in this. Mr. Rogal is an older man in semi retirement I would guess.

Andy

HEA:ncs cc: Follow-up File 4/5/65
May 5, 1965

Mr. Edward Rogal 80 Mann Lot Road North Scituate, Mass. 02060

Dear Mr. Rogal:

I want to thank you once again for your interest in DEC and for your indication of a joint business venture regarding the marketing of your system to retail stores. After some discussion with my associates, we feel that at the present time we cannot see any mutual benefit of such a venture. We appreciate your interest in DEC and wish you future success with Uni-Tote.

Please accept my invitation to visit our plant in Maynard the next time you are in the area.

Sincerely,

Harlan E. Anderson Vice President

HEA:ncs

Washington State

MEN

March 15, 1965

Mr. D. R. Richards Branch Manager IBM South 800 Stevens Street Spokane, Washington

Dear Mr. Richards:

I am writing as per our recent discussion with regard to development of specific plans for conversion of the data Processing Office computer work load onto the proposed IBM 360 Models 30 and 64.

My present thinking about our conversion problems and utilization of anticipated resources are as follows: the remaining portion of 1965 will be utilized primarily for education and training of our programming staff on the new equipment and continuation of planned levelopment. Any maintenance of existing programs performed during his time period would be coordinated to facilitate conversion. Development of any new system which is started during 1965 would be programmed for the 360 if conversion could be delayed beyond installation of the Model 30.

Our Student Records System which has been under development for a considerable time is being programmed for the IBM 709 and 1401; however, plans to facilitate conversion will be incorporated if they do not significantly delay operational status of this system.

After installation of the IBM 360-30 (January, 1966), I anticipate that all efforts of the Data Processing Office programming staff will be devoted to affecting a conversion of all 1401 programs to this machine. The 1401 compatability feature should allow this to be accomplished in not more than one month. Thereafter, the efforts of the programming staff will be devoted to conversion of the Payroll and Student Record Systems. These two systems have many large and complex 709 and 1401 programs. The 709 programs are programmed in COBOL while the 1401 programs are in Autocoder. I estimate it will require all of the efforts of the Data Processing Office programming staff to complete the conversion of these systems before installation of the 360-64 in August, 1966. Mr. D. R. Richards

It is the remaining IBM 1401 programs not a part of the Student Record or Payroll Systems which are causing me major concern. Because there will be no 1401 compatability feature on the 360-64, these programs must be converted again from the 360-30 to the 360-64.

Satisfactory administrative operation of the University is dependent upon the successful operation of many of these programs. In addition most of these programs must, from a practical standpoint, operate on a computer located at Washington State University. I cannot over emphasize the importance of successful and timely conversion of these programs to the University.

This is the area of the conversion process which your personnel have said that IBM will support and complete. Because of our previous experience with the actual accomplishments of this type of support and the critical nature of these programs, I think it is essential that some type of equipment backup be planned. And in addition, should the equipment backup be needed, it should be without expense to WSU. In fact, I cannot recommend the existing proposal for replacement of our present computing equipment without a satisfacotyr solution to the conversion problem.

In order to facilitate your evaluation of this problem, I have summarized the application areas, number of programs and conversion criteria below. Mr. Paul Gershon has more detail available regarding the status of the specific programs. These 1401 programs number approximately 95 and are divided into the various application areas as follows:

Utility	-	1
Regular Budget	-	45
Annual Budget	-	11
Accts. Receivable	-	7
Student Records	-	10
Damage Deposit Refun	din	ng - 1
Miscellaneous		11

These programs reach both extremes in complexity and size, and documentation of the programs is extremely variable. Generally, the more complex and larger programs are well documentated and defined while many of the smaller and simpler programs have effectively no documentation.

0

Mr. D. R. Richards

March 15, 1965

I estimate that 12 to 18 man months would be required for conversion of this group of 1401 programs onto the IBM 360 using methods as practiced today. However, in view of recent IBM announcements for conversion aid materials and programs this process could require only six to eight man months. Of course, this lower time estimate is dependent on how well the newly announced conversion aids actually perform.

-3-

In almost all cases with these 1401 programs, we will either redesign the system or the function of different programs within the next few years. Therefore, my primary concern is to be able to operate these programs in the intervening period with at least the same degree of efficiency achieved by the 1401.

I will look forward to hearing from you regarding your plans for solution of this conversion problem.

Sincerely,

J. E. Farmer Supervisor

JEF/pt

2

cc: R. A. Parker C. Pettibone O. W. Rechard

May 4, 1965

Dr. Ottis Rechard National Science Foundation 1800 G. Street Room 305 Washington, D. C.

Dear Dr. Rechard:

Mr. Anderson has requested that I keep you updated on our latest PDP-6 literature. I have enclosed for your interest the PDP-6 DDT Programming Manual.

If you would like additional brochures or manuals please feel free to contact me.

Sincerely,

(Mrs.) N. Survilas, Secretary to Harlan E. Anderson, Vice President

ncs cc: Dr. Richard Parker WSU

Enclosure: DEC-6-0-UP-DDT-UM-FP-ACTOO

on June 3 rel Bob Lone said te would prefer & send monuces to above.

DOT 4/2/65 /. Ottis Richard Reminder on Manuals Has been thinking the last couple day full time. C.D.C. came into Town mestday, Dick said we are up in the air again! Concerned about companies in a race with each other W.S. U. wants this in the long pull : long range goals ? a) build a larg term computer science program. b.) - > Symbiotic relationship between W.S.O. and a manufacturer. I Dick was dreaming and is writing a letter to C.D.C. outlining long range goals. angrange UNIV. V DE c'enters' noto a gaily long term association with PDP-6. System Research Center - not concerned with day to day operating systems although they are notefoludef. Dick Stark proposal to NSF. - 263 year futures WS.U. agree to: Purchase PPP-6 outlined incontract.

Beginning in following bienning one year to 18 months all to equip. 100× (year for each of the next 4 years. might a want to at least 1/2 would be DEC supplied. & equip agreeable to both partie . . Building will have 3 more bays toward the parking lot. (185K budgeted and areasking NSF for another 115K) 50x 54 = 2,900 min 6000 xg. 81, Office space I lab space Supply research time of 3 Joculty member + overhead DEC might do Ind Processon contributed with title to WSU matching funds of 100 Kequip/yen to title & remain with DEC. DEC maintain the equip & provide 3 systems type people and one of whom might be a series person to act as a co-director who might qualify for 4 courtesy appoint. on faculty, One of these as trainee Supplement this with 50K/year for grad, assis, + visitore. [Immediate needs of DEC to longer range]

· i. . -3a concentrated affort of y grad, asses, be devoted to library of applic. programs on the air. model 30 for business operations maybe rental Dick Stark had the best reaction. He said this tends to isolate the deas two kind of deta processing 4 @ alternatives - Let W.S. U. write COBOL with me 3 DEC's people. Ottis Richard Washing .

W.S. U. COSTS		
3-187	2.7	
166,626	45.	
3-163	68.	
1-162	11.	
3-136	10.	
1-6760	33.	
1-461	17.	
1-551	15	
1-760	3	
2-555 -	6	
1-167,236,237 40+	70	
1-466		
2-516-521	12	
6-570	84	
1-5		
1- 630	5	
- 8- 33KSRS	3.	
1-3+6	, 14.	
	389.7	
INSTALL	-153	
IYEAR E.S.	20.7	
	415.	





Bank of Montreal Ottawa Branch Ottawa, Ontario, Canada

Gentlemen:

This letter is to notify you that any checks with Richard F. Mills' signature dated later than June 10, 1965 should not be honored.

Very truly yours,

DIGITAL EQUIPMENT CORPORATION

Harlan E. Anderson Vice President and Treasurer



Barclays Bank Limited 54 Lombard Street London E.C.3, England

Gentlemen:

ø

This letter is to notify you that any checks with Richard F. Mills' signature dated later than June 10, 1965 should not be honored.

Very truly yours,

DIGITAL EQUIPMENT CORPORATION

Harlan E. Anderson Vice President and Treasurer

HEA/jh



.

Gentlemen:

New York, New York

23 Wall Street

Morgan Guaranty Trust Company of New York

This letter is to notify you that any checks with Richard F. Mills' signature dated later than June 10, 1965 should not be honored.

Very truly yours,

DIGITAL EQUIPMENT CORPORATION

Harlan E. Anderson Vice President and Treasurer

HEA/Th



The Middlesex County National Bank 81 Main Street Maynard, Massachusetts

Gentlemen:

This letter is to notify you that any checks with Richard F. Mills' signature dated later than June 10, 1965 should not be honored.

Very truly yours,

DIGITAL EQUIPMENT CORPORATION

Harlan E. Anderson Vice President and Treasurer

HEA/Jh

1

The National Shawmut Bank of Boston 40 Water Street Boston, Massachusetts

Gentlemen:

This letter is to notify you that any checks with Richard F. Mills' signature dated later than June 10, 1965 should not be honored.

Very truly yours,

DIGITAL EQUIPMENT CORPORATION

Harlan E. Anderson Vice President and Treasurer

HEA/jh

Bank of New South Wales Sydney, New South Wales, Australia

Gentlemen:

1

*

This letter is to notify you that any checks with Richard F. Mills' signature dated later than June 10, 1965 should not be honored.

Very truly yours,

DIGITAL EQUIPMENT CORPORATION

Harlan E. Anderson Vice President and Treasurer

HEA/Ih

Bayerische Vereinsback Munich, West Germany

Gentlemen:

This letter is to notify you that any checks with Richard F. Mills' signature dated later than June 10, 1965 should not be honored.

Very truly yours,

DIGITAL EQUIPMENT CORPORATION

Harlan E. Anderson Vice President and Treasurer

HEA/jh



Paris, France Gentlemen:

19, Boulevard Des Italiens

Credit Lyonnais

HEA/jh

This letter is to notify you that any checks with Richard F. Mills' signature dated later than June 10, 1965 should not be honored.

Very truly yours,

DIGITAL EQUIPMENT CORPORATION

Harlan E. Anderson Vice President and Treasurer



The Royal Bank of Canada Carleton Place Ontario, Canada

Gentlemen:

This letter is to notify you that any checks with Richard F. Mills' signature dated later than June 10, 1965 should not be honored.

Very truly yours,

DIGITAL EQUIPMENT CORPORATION

Harlan E. Anderson Vice President and Treasurer

HEA/jh

June 4, 1965

Mr. John P. Paulsen 38 Harwood Drive East Glen Cove, New York

Dear Mr. Paulsen:

It was a pleasure to have an opportunity to meet you in New York this week. Enclosed is the copy of our annual report that I promised you.

Sincerely,

Harlan E. Anderson Vice President

HEA:ncs Enc: Annual Report

THE LEVER COMPANY

100 MERRICK ROAD

ROCKVILLE CENTRE, NEW YORK

(516) RO 4-5700

May 28, 1965

Mr. Kenneth H. Olsen Digital Equipment Corp. 146 Main Street Maynard, Mass.

Dear Mr. Olsen:

When we wrote to your company last, we announced the achievement of final plans for the design, erection and operation by us of a multi-story center for Data Processing-related companies.

We are now ready to make the presentation to you of why this center should prove of strong interest, business-wise, to Digital Equipment Corp.

The center will be occupied by companies which provide equipment, hardware, supplies and/or consultative services in Data Processing, Automation and Computerrelated requirements of the Long Island and New York City markets.

We, of necessity, conducted extensive studies in advance of this substantial commitment and investment. In brief, facilities, systems and "know-how" for installing, servicing and processing management information systems is a very rapidly increasing need here. This is the warehousing/servicing area for the greater New York City market in addition to being the 4th largest growing industrial area in the U.S.A. (with a \$635,000,000 payroll covering over 23,000 business firms and 3,000 manufacturing companies).

Some 87 companies in the data processing-related field responded to our initial letter proposing a review of our offering.

We are prepared with a very specific and direct array of facts along with details of the building to be located at Roosevelt Field, Garden City, L.I., N.Y. In addition to cost per sq. ft., transportation and unlimited parking facilities, this presentation will deal with the market potential which we believe exists here for Digital Equipment Corp.

Mr. Harold Lever, our Executive Vice-President, will personally meet with you or your representative either here in New York or at your offices in Maynard.

A convenient responding memorandum is enclosed. We look forward to hearing from you.

Sincerely,

Lawrence Lever President

LL:jm

June 14, 1965

Mr. Lawrence Lever, President The Lever Company 100 Merrick Road Rockville Centre, New York

Dear Mr. Lever:

I am responding to your letter of May 28 to Mr. Kenneth H. Olsen concerning the advantages of your newly established center for Data Processing-related companies to Digital Equipment Corporation.

We thank you for offering us the opportunity of being part of your facility but at this time we wish to decline your proposal.

Your interest in DEC is appreciated.

Sincerely,

Harlan È. Anderson Vice President

HEA:ncs

THE FIRST NATIONAL BANK OF DENVER

DENVER 17, COLORADO

BRUCE E. DINES

T. A. BOX 5808 AMHERST 6-2211

June 2, 1965

Mr. Harlan P. Anderson Vice President and Treasurer Digital Equipment Corporation 146 Main Street Maynard, Massachusetts

Dear Mr. Anderson:

It is a pleasure to learn that your company has filed with the Secretary of State to do business in Colorado, and to offer you our best wishes for your successful operations in the entire Rocky Mountain region.

We enjoy a direct correspondent relationship with approximately two hundred banks scattered throughout the Rocky Mountain region and are, therefore, in a position to aid you in financial transactions arising from the Montana-Dakota area to Texas. This direct correspondent relationship is supplemented by our membership in the bank wire and our seven-day-a-week night transit service, offering an unparalled collection and remittance service. We also maintain banking relationships with other banks situated in every major city throughout the United States.

We cordially invite you to use the facilities and services of The First National Bank of Denver for any accounts which you may require in the city. In order that you may be familiar with our bank, I am enclosing a copy of our latest published Statement of Condition as of March 31, 1965.

We would warmly welcome a relationship with your company; and if we can be of assistance to you or your associates in the establishment of a Denver office, I sincerely trust that you will not hesitate to call upon us.

in annual Report file

Yours very truly,

BED/bb Enclosure

June 15, 1965

P

Mr. Bruce E. Dines, Vice President The First National Bank of Denver T. A. Box 5808 Denver 17, Colorado

Dear Mr. Dines:

Thank you for your letter of June 2 expressing interest in DEC's banking arrangements in Colorado.

At the present time, we do not anticipate a need for banking service but will contact you if there should be a change in plans.

Your kind offer of assistance is appreciated.

Sincerely,

Harlan E. Anderson Vice President

HEA:ncs

Name Digital Equipment Corporation	When Replying Sign Your Full Name and Address Give Inmate's Full Name and Number		
Street & No.	BOX 149,		
City Maynard, State Massachussets	Attica, N.Y., 14011ATTICA		
Gentlemen:			
I have been a student of computer programming for the last			
year and one-half, and to date have acquired a detailed knowledge			
of the operation codes and symbolic programming systems used for			
several such machines. I just read your advertisement in a recent			
issue of Scientific American of the PDP-6 general purpose computer,			
which apperars to be a quite powerful machine, one which I would			
like to learn more about. Would you advise me as to the availability			
of materials that describe this machine, including machine codes,			
operation times, and the symbolic languages that can be used to			
program it?			
I intend, eventually, to work in this field as a programmer,			
and I will be very grateful for whatev			
my request.			
	Very truly yours,		
114V	Donald Mority		
INQUIRY NO.	Donald Moritz		
1 6/14/63	16213		
DATE	· /###5.		
L'IS ANCOLOUR UD THIS WAS A			
for a syl ing, and within three days			
It must be answered the face copy sent to highly the			

June 17, 1965

Mr. Donald Moritz, 16213 Attica Prison Box 149 Attica, New York 14011

Dear Mr. Moritz:

Thank you for your letter of June 9 expressing interest in Digital Equipment and the PDP-6 Computer. I was quite pleased to learn of your enthusiasm for programming and have enclosed all available literature on the PDP-6 to date.

May I wish you success in establishing yourself in this field.

Sincerely,

Harlan E. Anderson Vice President

V

HEA:ncs Enclosures: F-61, F-62, F-61B, F-64 MAS, F-65, F-64PX, DEC-6-0-UP-DDT-UM-FP-ACTOO, and DEC-6-0-TP-FII-LM-FP-PREOO, F-68 and the Programming Systems Notebook.

June 22, 1965

P

Mr. Roscoe Irving Lybrand, Ross Brothers and Montgomery 80 Federal Street Boston, Massachusetts

Dear Mr. Irving:

As mentioned in our conversation this afternoon, I am enclosing a resume for Mr. L. T. Murphy.

Mr. Anderson plans to call you on June 29th to arrange a specific time and place for your meeting with Mr. Murphy.

Sincerely,

(Mrs.) N. Survilas Secretary to H. Anderson

Enc: Resume

July 7, 1965

Mr. M. K. Hamid Assistant Professor The Department of Business Administration Oregon State University Corvallis, Oregon 97331

Dear Professor Hamid:

Enclosed please find the questionnaire you requested be completed by personnel at Digital Equipment Corporation. Since the answers to many of your questions are of a confidential nature, I am sorry that DEC will not be able to reply to your questionnaire.

Thank you for showing interest in DEC.

Sincerely,

Harlan E. Anderson Vice President

HEA:ecc Enclosure

fit

July 14, 1965

Mr. Howard L. Morton, President Organizers and Underwriters, Inc. Post Office Box 1488 Cedar Rapids, Iowa

Dear Mr. Morton:

I am enclosing a copy of our annual report covering the Fiscal Year Ended June 27, 1964 as you requested in your letter of July 6. As you may know, there is no public trading of DEC stock and the majority of DEC stock is owned by American Research and Development Corporation of Boston. AR&D stock is traded on the New York Stock Exchange.

I have passed your letter along to our PDP-6 Computer Department for response on what DEC has to offer in the computer service center field. You should be hearing from them shortly.

Your interest in DEC is appreciated and 1 trust the enclosed information will be useful to you.

Sincerely,

Harlan E. Anderson Vice President

HEA:ncs Enc: Annual Report cc: P. Behn RCA SERVICE COMPANY a division of radio corporation of America GAMDEN, NEW JERSEY 08101

June 28, 1965

Mr. Harlan E. Anderson Digital Equipment Corp. 146 Main Street Maynard, Massachusetts

Dear Mr. Anderson:

We would be interested in discussing the possibility of RCA providing field installation, warranty, and planned maintenance service on the data processing and teletypesetter equipment you are marketing.

We are a national service organization - a Division of Radio Corporation of America - maintaining a large staff of field service personnel, all employees of RCA, in the principal cities of the United States. Our field service personnel are men with electronic and electro-mechanical capabilities.

We maintain regional and field supervision of our service personnel as well as inventory, commercial, and engineering support from our Home Office at Cherry Hill, New Jersey.

We are engaged in providing installation and field maintenance service on data processing and its peripheral equipment, teletypewriters, teletypesetters, electron microscopes, electronic counters, electronic scales, electronic handwritten transmission equipment, electronic interrogation and display equipment, electrostatic office copiers, closed circuit television, mobile radio, microwave, automatic dial telephone systems, and other electronic and electromechanical equipments.

Our services are provided for both equipments manufactured by RCA and others.

Upon agreement, we provide field service for the manufacturer's account on a contractual basis on an agreed upon flat sum basis with parts being supplied by the manufacturer. In some cases, the services we provide are supplied on an hourly basis.

-cont'd. -

(A) THE MOST TRUSTED NAME IN ELECTRONICS

We would be happy to meet with you to discuss how we might be of assistance to your overall marketing effort. Merely write or call me and we will arrange a meeting at your convenience.

Very truly yours,

nosm

B. L. Grossman, Manager Market Research & Development Building 203-1, Cherry Hill WOodlawn 3-8000, Ext. PY 5603

BLG/jcs

HEAL

July 15, 1965

Mr. B. L. Grossman, Manager Market Research and Development Building 203–1, Cherry Hill RCA Service Company Camden, New Jersey 08101

Dear Mr. Grossman:

Thank you for your letter of June 28, 1965 describing the services of the RCA Service Company that might be appropriate to our typesetting business. I have referred your letter to Nick Mazzarese who is in charge of that particular part of our organization and indicated that you might be contacting him in the near future.

Thank you for your interest in DEC.

Sincerely,

Harlan E. Anderson Vice President

HEA:ncs cc: N. Mazzarese

digital CORPORATION RD. MASSACHUSETTS TC TIME DATE MRS. TELEPHONED CALLED TO SEE YOU wante inu MESSAGE write etter Cr Coul suranc mb Rarianie check e Friger, 1/ 5M/6-62 DF 100-7/ T

Information from Fred Mariani regarding the computers at Inforonics

PDP-1 C45 -- reclassified from FC - 1C 55 While at United Aircraft in ktax East Hartford from July 1 - January 5, The machine will be insured by DEC against all risks.

PDP-1 C 20 which was loaned to Inforonics to replace the 1C 55 will also be insured by DEC for the loan period until the 1C 55 comes back from East Hartford, Connecticut.

Fred said he will be glad to issue a certificate of insurance if Informics wants it for their files.

July 15, 1965

Mrs. Nyquist Inforonics, Inc. Box 267 Maynard, Massachusetts

Dear Mrs. Nyquist:

",

Per our conversation of Tuesday, July 13, 1 am enclosing an insurance memorandum covering your PDP-1C.

If this memorandum is not satisfactory for your needs, please feel free to call me again.

Sincerely,

(Mrs.) N. Survilas Harlan E. Anderson's Secretary

ncs Enclosure



Insurance Company of North America

PROTECT WHAT YOU HAVE C

a stock company Philadelphia, pennsylvania

Insurance Memorandum

CAPITAL \$18,000,000

 Digital Equipment Corporation
 ha s
 insurance

 Assured
 assured
 of the Insurance Company of North America

 (Expiration Date
 Until Cancelled
) as follows:

\$120,000. on: 1 PDP-1C & Periferal Equipment Machine on loan to Informics, Inc., situated at 146 Main St., Maynard, Massachusetts

and

\$120,000. on:

1 PDP-1C & Periferal Equipment Machine on loan to United Aircraft Corp. at Silver Lane, East Hartford, Connecticut.

Coverage: This equipment is insured against all risks of loss or damage to property insured from any external cause except as provided under this policy.

Each claim for loss or damage shall be adjusted separately and from the amount of such claim the sum of \$1000. shall be deducted.

This is given solely as a matter of information and is accepted by the holder with the expressed stipulation that it conveys no rights under the policy to parties other than the assured named in the policy. Said policy is subject to cancellation, endorsement, alteration, transfer, assignment without notice to the holder of this memorandum.

> INSURANCE COMPANY OF NORTH AMERICA FIELD & COWLES

Date...July 14, 1965

(Authorized Signature)

M-40 9-14-55
Battelle Memorial Institute · COLUMBUS LABORATORIES

505 KING AVENUE COLUMBUS, OHIO 43201 · AREA CODE 614, TELEPHONE 299-3151 · CABLE ADDRESS: BATMIN

June 25, 1965

Mr. Kenneth H. Olsen Digital Equipment Corporation Maynard Mills Maynard, Massachusetts

Dear Mr. Olsen:

Battelle is conducting an internally funded study of the impact of the "public utility" concept of computer usage upon information systems and information-analysis centers.

We believe the most valuable sources of information in this area of computer application will not be the published literature, but rather the expressions of personnel experienced in computer manufacturing, usage, and applications, academicians, and information scientists and specialists.

Your familiarity with this rapidly emerging area is such that Eattelle would greatly appreciate the opportunity to discuss the time-sharing concepts of computer usage in some detail with you or another knowledgeable member of your organization whom you may wish to designate. If this is agreeable, may we suggest that we telephone you a few weeks in advance of the proposed meeting to arrange a suitable time for our visiting you.

For your information, we are enclosing a reprint of a Business Week article describing Battelle, its operations, and objectives.

We are looking forward to the opportunity to talk to you in the near future.

Sincerely yours,

Paker & Kohn

Robert S. Kohn Information Systems Engineering Division

RSK:kc

Enc. (1)



Perry J. Rieppel, manager, Process & Physical Metallurgy, is proud of his lab's many feasibility studies in steel.

Germany as its special sales territory; Battelle-Geneva (\$3½-million last year) has Switzerland, Italy, France, Belgium, and Luxembourg.

for sales, both labs are encouraged Battelle's orderly growth overseas. to vie for new work in many "open" countries, such as South Africa, III. Group effort Spain, Portugal, and the Eastern Mediterranean nations. In such areas, they compete not only with one another but with the U.S. labs as well.

Battelle expects foreign business to was overseas. be the big gainer in the next few years, perhaps increasing at the rate put into effect in Battelle's two overof 10% annually

of a particularly great upsurge in For the past half-dozen years, for demand from any given area, and example, Columbus labs have been Battelle is staying flexible. Admin- assigning men according to the job istrators talk of setting up sales "rather than by any artificial termioffices in South America (probably Peru) and Australia, similar to the Minton, Jr., puts it. He says labs are on basic, unsponsored research projone already operating in Britain. organized according to traditional Such offices act as clearing points, relaying research proposals to the lab best able to handle a specific project.

There's no need for haste in establishing more of these outposts, Black says. It's more important, he believes, to pick the best location and Besides these prime target areas to create the proper atmosphere for

Battelle-Columbus is both the oldest and the largest of the institute's contributors to 1964 dollar volume— \$31.2-million out of the \$39.4-million To promote sales. Everyone at over all. About \$342,000 of its work

Many of the ideas that are being However, Black now sees no sign extensions of practices at Columbus. nology," as lab director David C. lapped by personnel."

came that no department designa- these projects are in solid-state phys-

tion at Battelle can be considered off limits for changes, though.

W. H. Browne, manager, Mechanical Engineering, says

study ideas run from exotic materials to Army dung burners.

Sherwood Fawcett left Columbus to take over as director of Battelle Northwest, and the department he had headed-the Dept. of Metallurgy & Physics—was promptly broken up into three packages that Minton obviously finds more manageable: the Process & Physical Metallurgy Dept., the Materials Engineering Dept. and the Physics Dept.

Well balanced. Each of the seven departments at Columbus, including the three above, handled between \$3.3-million and \$5.3-million worth of research contracts last year. Their seas operations are adaptations or complements of professional scientists and engineers range between 100 and 185. The lab also has 18 project development men out look ing for new business.

"Battelle-Columbus spends modest amount [about \$1-million] ects each year," says Minton. "This scientific disciplines but are "over- is probably just what it should be in view of Columbus' total \$31.2-mil-Proving it. Just last year, proof lion business volume." The bulk of

ics, metal sciences, and surface chemistry.

About 58% of work at Battelle Columbus is for the government; the rest is scattered among more than 400 companies in almost every major industry. This business mix, according to Minton, is "also just about right." But, he adds, "in view of the huge expansion in government research spending, it's a hard job to keep it that way.

Minton fears a disproportion of government-sponsored research which, he feels, "cuts down on the desirability of a not-for-profit lab in the eyes of industry sponsors."

Group research. Minton is enthusiastic, however, about group research projects, through which companies can get the benefit of scientific studies they could not otherwise afford. These are strictly industrial projects. To include the government, Minton says, would be making "a horse and rabbit stew."

"We cook up a program in any area where we're sure there's need of major research work," Minton explains. "and then we invite companies to join the sponsoring group for a fixed annual fee. The fee is based solely on what Battelle thinks it is going to cost to get the work done. Participation is open to all comers, right up to the time when a final project report is submitted."

Battelle-Columbus has 14 group research projects currently under way, ranging from studies of fuel cell materials to an economic report steel technology. Practical limit. Minton calculates

that the physical capacity of the University's campus, is between 3,000 and 4,000 staff members.

"What you must face anywhere when a laboratory gets really big," he says, "is the old Tower of Babel problem.

Turnover among research personnel runs at a steady 10% to 12% a year, and Minton finds this acceptable. "Part of our basic charter," he says, echoing Pres. Thomas, "is educating scientists and engineers for industry." And industry is where most of the resigning men go.

"One thing that unquestionably keeps our 1,000 professionals work- velopment of a new type of honeying so effectively," Minton notes, "is all doing research themselves. That's going to continue."

IV. A development wing

Battelle often finds byproducts from its own self-starting research that don't find obvious use imme-



diately in industry or government. ideas get out to industry.

Battelle Development Corp., notindustry will take them over."

Gray says BDC looks every year at about 300 ideas generated internally by Battelle, another 100 or so on supplies required by the new from outside inventors, and around 200 from universities. BDC has an looked at the \$475 gauge and comno manufacturing, but occasionally Columbus site, bordering Ohio State it gets a big return from an idea. A prime example is BDC's \$500,000 investment in early research in xerography, which has netted the institute, in cash and stock, over \$90-

million to date.

Projects at work. Among BDC's current projects is a new method of using chemicals to polish metals, process is almost the reverse of gadget to put numbers on the spines electroplating: Chemicals are used to smooth the surface of, say, a sheet American Library Assn., and a tiny of stainless steel.

Also under BDC's wing is deon a non-exclusive basis. Douglas may use it for Titan booster rockets. SAI too profitable. BDC originally invested about \$30,-000 in development of the process, in further research.

the shop by an outsider—a way of new technical industry, too,"

Lab's Dept. of Engineering Physics.

So the institute has two arms—one of them intended for profit and therefore taxpaying—to see that

for-profit, was formed 31 years ago. "We take ideas nobody else wants to sponsor," says its director. John Gray, "and carry them through their

making sour cream without going through the natural culture. BDC . has invested \$20,000 and has turned the technical economics group of Battelle-Columbus loose on the problem of production and marketing.

V. Aiming at a profit

Battelle's other incubator of ideas, Scientific Advances, Inc., is aimed at making a profit by developing and manufacturing projects commercially. Grav heads SAL too.

"It was set up for the same reason as BDC," Gray says, "but it is supposed to make money. It hasn't yet, in its two years in existence. And, admittedly, it's an experiment. But it's an experiment that we're going to make work."

One hope is that the latest addition to the Battelle family of labs, the one at Hanford, will generate some useful ideas for SAI.

One product so far. This manufacturing, potentially taxpaying unit of Battelle sprang up from a contract the institute had with Bell Aerospace Corp. to develop a very tiny pressure gauge (1/20th of a millimeter thick) to put on a helicopter rotor blade. When Battelle completed its research, Bell couldn't find anyone to make the gauge. So it asked Battelle to make them, and SAI was high-risk period to the point where created to do the job.

Sales have not been spectacular. Gray says SAI has been able to sell some of the gauges to the National Aeronautics & Space Administration. and a few medical engineers have annual budget of \$1-million; it does mented favorably on its possibilities for use in surgical implants.

Oddly enough, it wasn't even Bell that bought the first gauges for use on helicopter rotors. Vertol Aircraft Corp. recently ordered 190 gauges for one of its suppliers.

In the works. Prospects look better, though. Gray anticipates sales of \$250,000 for SAI this year. Other products that hold promise of developed by Dr. Charles Faust of Battelle-Columbus. Gray says the an aerosol classifier, for lab use; a of books, a project sponsored by the gauge to measure corrosion electronically inside a closed vessel.

Like BDC, Scientific Advances, comb titanium sheet, recently taken Inc., serves all four Battelle Laborathe fact that our group leaders are over by Douglas Aircraft Co., Inc., tories. But Gray doesn't want to see either subsidiary get too large, or

"For example," he says, "if SAI's transducers should become a factor and Douglas has now put \$100,000 in the market and somebody should want it, we would spin it off without A third project was brought into a qualm. That's a way of spawning

BUSINESS February 6, 1965 Fifty cents

Below: A \$70-million research giant spanning the sciences and the globe - that's Battelle Memorial Institute under B.D. Thomas [Research]







RESÉARCH

A fast-growing lab regroups on the run

Dr. B. D. Thomas, president of Battelle, keeps the world's largest not-for-profit research institute on an even keel while it moves out across the world

As president of Battelle Memorial Institute of Columbus, Ohio, Dr. Bertram D. Thomas (cover and picture, right) has just completed a reorganization of what is now the world's largest not-for-profit scientific institute, spreading over the U.S. and Western Europe.

Thomas had to move fast in evolving a new management and laboratory structure. Just a month ago, Battelle added 63% to its size when it took over management and operation of the Atomic Energy Commis- I. Growth by stages sion's vast research labs at Hanford. Wash [BW Dec.26'64,p58]. And it lidn't have a great deal of warning that its bid would be accepted by EC

Until then, Battelle's European labs at Geneva and Frankfurt had been run out of Columbus headquarters, almost as projects rather than as branch operations. Then, says morning that it was impossible, if we won the bid to take over operation of the AEC labs in Hanford, to run them as a project, too.'

Now the two U.S. and two European operations are running substantially independently of each other, competing among themselves. Time will tell. "Science is a mas-

ter that defies a narrow viewpoint," says Thomas. "It prospers under the attitude of openmindedness." So he sees no guarantee that the institute's new structure is the ultimate. His mind is open on improvements that may be needed if Battelle is to flourish in a world in which scientific research has become a basic support to a healthy economy.

the Columbus headquarters but

Metallurgy is one of Battelle's strong fields of research. At left, plasma spraying is used to apply ceramics to a metallic nose cone.

equally at Battelle-Northwest, Battelle-Geneva, and Battelle-Frankfurt. "We're out to pass Battelle-Columbus in both sales and size within two or three years," says Clyde R. Tipton, Jr., one of the new managers at the Battelle-Northwest labs.

"I love to contemplate that," is

Thomas' reaction. He sees nothing sacrosanct in Columbus' traditional place on the top rung of the organizational ladder.

Battelle Memorial Institute was established in 1923 as a "testamentary trust" under terms of the will of Gordon Battelle, whose family had owned Columbus Iron & Steel Co., bought in 1917 by American Rolling Mill Co. (Armco Steel Corp. since 1948). Gordon Battelle and later, his mother left \$3-million worth Thomas: "I woke up to the fact one of stock to the institute, which now values its portfolio conservatively at \$17.9-million on a cost basis. Loomis Sayles of Boston helps the trustees manage this portfolio, which may be worth double the amount carried on

the books. Gordon Battelle's will directed that a self-perpetuating board of six trustees set up an institute for "doing creative research and the making of discoveries and inventions for the education of men." This language has always been interpreted as calling for continual contribution to industrial progress as well as the advancement of science through research and education.

The men who have run Battelle have sought, since the beginning, to However, management is bub- create an atmosphere in which the bling with confidence, not only at scientist or engineer can find an outlet for his individual creativity and imagination.

As Thomas sees it: "Battelle has an obligation to do its own scientific research and educate men as well as run a laboratory operation. Obvi- James G. Black is in charge of ously, as the institute has grown coordinating work in U.S. and abroad.



B. D. Thomas. Battelle's president, says a not-for-profit lab has to be big.



David C. Minton, Jr., directs the lab at Columbus, Battelle's oldest unit.





Stanley J. Paprocki, manager of Materials Engineering at Columbus: "We are trying to blend art and science."



J. W. Chastain, Jr., manager of Columbus Dept. of Physics, foresees direct competition with Battelle-Northwest.

people today, the means by which growing institute. And he had to set any not-for-profit research institute such terms can be satisfied have up his new program without destroy- today, especially one that accepts changed radically.

Step by step. In its first phase, Bat-been easy. telle's scientists concentrated on me- One obvious compromise is the science to work closely with industry. tallurgy, but changes began to be overlapping between Battelle-Co-250. Something happened again, says eration. Though they are adminiswhen the staff reached 1,500.

change took place when Battelle broke through the 3,300 mark just a munication is bound to be less than \$10.5-million. short year ago."

Even this was nothing like the latest reorganization, which became 1,800 people on the scientific staff at Hanford, including some of the best-trained, most sophisticated gadgeteers in the world.

II. The new setup

In building a new organization, Thomas had to take into account both the sharp increase in laboratory

from 50 or 60 people in 1934 to 5,600 staff and the global character of the worldwide operations as vital for ing "what we already had." It hasn't

perfect, too, between labs so widely separated, geographically

It might be desirable to consolistaff. Thomas accepts this as part of the staff of 400 at Geneva." a challenge.

mous," he says, "no research organi- Frankfurt (\$43/4-million in contract zation can be, either.'

part of the responsibility for national security. He sees also a new need for

Business abroad. Last year. Batnecessary as the staff grew to 200 or lumbus and the new Northwest op- telle as a whole did \$39.4-million worth of contract research, and Thomas, when the staff increased to tratively independent of each other, about 25% of it came from industry 600 or 700, and a third change in both will be competing throughout or government in 41 foreign counbasic organization imposed itself the U.S. and Canada for the same tries. This year, with the addition of industrial and government research Battelle-Northwest, sales will prob-"Then," Thomas adds, "a drastic contracts. Some duplication of costly ably total \$70-million. But overseas lab equipment is inevitable. Com- business will also climb-perhaps to

Battelle-Geneva and Battelle-Frankfurt are administratively autonomous and locally oriented. Accordcrucial with the addition of nearly date parts of the two operations, ing to James G. Black (picture, page making a stronger whole. But this 3), who is in charge of interlaborais out of the question, at least for tory relations and international businow, because of AEC's desire to ness: "There's not one American on maintain the unity of the Hanford Frankfurt's 790-man roster or on

Each of these labs can claim a "Just as no science is autono- market sphere of its own. Battelleresearch last year) has Norway, Thomas sees both large size and Sweden, Denmark, Holland, and

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Judminder Am

July 15, 1965

Mr. Robert S. Kohn Information Systems Engineering Division Battelle Memorial Institute 505 King Avenue Columbus, Ohio 43201

Dear Mr. Kohn:

Your recent letter to Mr. Olsen concerning time sharing has been referred to me. I would be pleased to meet with you to discuss our PDP-6 time shared computer. If you will telephone me a few weeks in advance of your plans, I will make every effort to see you.

For your information, I am enclosing a brochure that describes the software for time sharing the PDP-6.

Thank you for your interest in DEC.

Sincerely,

Harlan E. Anderson Vice President

HEA:ncs Enclosure: F-61B

cc. P. Biln

UNIVERSITY OF CALIFORNIA, BERKELEY

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SANTA BARBARA • SANTA CRUZ

COMPUTER CENTER

BERKELEY, CALIFORNIA

July 7, 1965

Mr. Harlan Anderson Digital Equipment Corporation

Dear Harlan:

At Dave Evans suggestion, I am writing to you on the following problem. I am editing a book for McGraw-Hill on Computers for Engineers. The enclosed material shows the other books in the series and a sketchy outline for the specific book.

I am looking for someone who is really up on the state of the art who can write the chapter on Arithmetic and Logical Circuitry. The whole book is conceived as being about 600 pages but the author of each chapter is being asked to use as many or as few pages as he needs to adequately cover the subject. I am hoping to have manuscripts (by Thanksgiving) by Christmas.

May I ask you to suggest someone from your organization who could do this job. If a couple of people would like to collaborate that would be fine too. There is an honorarium of two hundred dollars for the chapter.

> My address until August 22nd is: Escuela de In**genieria** Universidad Catolica de Chile Santiago, Chile

In view of the difficulties of communication with South America, I would be glad to depend upon your judgement and to tell whoever you propose, to go ahead with writing up the material.

Thanks for your help.

cerelv ustre Huskey

HDH/w

BOOK OUTLINE

Automatic Computers for Engineers

- 1. Introduction
- 2. Information Storage
 - a. Magnetic Core Memories
 - b. Thin Film Memories
 - C. ...
- 3. Arithmetic and Logical Circuitry
 - a. Integrated Circuits
 - b. ...
 - c. Organization of arithmetic units
 - d. ...
- 4. Digital Computing Systems
 - a. Desk Top
 - b. Batch Processors
 - c. Time-sharing systems
 - d. Special Purpose Systems
 - aa. Reservation Systems bb. ...
 - e. ...
- 5. Computer Languages
 - a. FORTRAN
 - b. COBOL
 - c. ALGOL
 - d. PLl (NPL)
 - e. ...
- 6. Analog and Hybrid Computer Systems a. ...
- 7. Engineering Applications of Computers a. ...

3

Oliver, B. M. (Hewlett-Packard) ELECTRONIC MEASUREMENTS AND INSTRUMENTATION

Fundamental principles Impedance measurement Voltage & current measurement Power measurement Frequency & time measurement Waveform measurement Oscilloscope Recorders Signal sources Steady-state measurements Square-wave & pulse testing Noise measurements Transducers Subaudio measurements Audio-frequency measurements Broad-baseband measurements (video) Rf measurements Transmission-line measurements Waveguide measurements Antenna measurements Microwave measurements Optical measurements Measurements on vacuum tubes Transistor & diode measurements Applications: medicine, chemistry, geology, nucleonics, industry, large-scale

Pritchard, R. L. (Stanford) SOLID-STATE ELECTRONICS

(C) Conventional diodes & transistors

- (D) Pnpn diodes & triodes²
- (C) Variable-capacitance diodes³
- (C) Tunnel diodes & related devices⁴
- (B) Integrated circuits1
- R. L. Pritchard (Stanford)
- J. F. Gibbons (Stanford)
- K. E. Mortenson (Rensselaer P. I.)
- ⁴E. M. Davis (IBM, Poughkeepsie, N.Y.)

Rechtin, E. (JPL-Caltech) TELEMETRY AND TRACKING

Deep-space comm.& tracking systems Elementary noise&filter theory² Servomechanisms with noisy signals² The phase-locked loop³ Linear detection $^4, 5$ Optimum receivers4,5 Acquisition & synchronization⁶ Coherent ranging⁷ Engineering a telemetry system⁵, 8, 9, 10 Engineering a command system⁵,9,10,11 Ground-station design Future trends¹² [All authors at JPL-Caltech] R. Goldstein M. Easterling E. Rechtin C. Gilchriest 9C. Kirsten 10R. Mathison 11J. Springett J. F. Koukol R. Tausworthe W. Lindsey W. Kendall

Schwan, H. P. (Pennsylvania) BIOELECTRONICS

- (D) Math.models of excitation & propagation in nerves¹
- (C) Pot.theory & equiv.gen.in EKG²
- (B) Control theory in biology³
- (A) Processing of biological data⁴
- (C) Acoustic energy & biol.materials⁵
- (B) Model studies of physics of mammalian circulatory system⁶
- (A) Electronic instrumentation for recording intracellular enzyme kin.
- (B) Basic & applied microwave biophys.⁸
- Fitzhugh (Public Health Service)
- D. B. Geselowitz(Pa.) & 0.H. Schmitt(Minn.)
- W. Jones (Northwestern)
- M. Eden (M.I.T.)

J. Stiffler

- W. J. Fry & F. Dunn (Illinois)
- A. Noordergraaf (Pennsylvania)
- B. Chance (Pennsylvania)
- ⁸H. P. Schwan (Pennsylvania)

Smit, J. (U. S. C.) MAGNETIC PROPERTIES OF MATERIALS

Concepts of magnetism Soft metallic materials Permanent magnets Ferrites at radio frequencies Square-loop ferrites Thin metallic films Magnetic tapes Ferrites at microwave frequencies Spin waves: coupling with phonons Antiferromagnetic resonance: high mag. fields(superconducting coils) Magneto-optic effects Electric & dielectric properties Ultrasonic transducers

Sutton, G. W. (G.E., King of Prussia, Penna.) ADVANCED ENERGY CONVERSION

- (D) MHD power generation¹
- (D) Thermionic energy conversion 2
- (D) Photovoltaic solar cell³
- (D) Thermoelectric power generation⁴
- (D) Fuel cells⁵
- G. W. Sutton (G.E. King of Prussia) E.Blue & J.H. Ingold (G.E., Pleasanton)
- J. F. Elliott (G.E., Syracuse)
- S. I. Freedman (G.E., Valley Forge)
- ⁵W. T. Grubb & L. W. Niedrach (G.E., Schenectady)

Trivelpiece, A. W. (U.C., Berkeley) PLASMA ELECTRONICS

- (A) Plasmas in nature⁶

- (B) Plasma diagnostics
- C. Oberman (Texas)

A. Bers (M.I.T.) W. Newcomb (U.C., Livermore) H. Furth (U.C., Livermore) P. Kellog (Minnesota) W. Kunkel (U.C., Berkeley) ⁸P. Chorney & M. Allen(Microwave Assoc.) S. Buchsbaum (Bell)

- SYSTEM THEORY

- (C) Stochastic systems¹,³

- (D) Stability theory⁷

- J. Carlyle (U.C.L.A.)
- K. Harrison (Utah)

- A. Letob (Moscow)
- ⁸M. Arbib (Stanford)

(B) Microscopic theory of plasmas¹ (B) Macroscopic theory of $plasmas^2$ (B) Oscillations & waves in plasmas³ (A) Plasma stability theory⁴ (B) Controlled fusion experiments⁵ (A) Laboratory plasmas⁷ (B) Plasma electronic devices⁸ (B) Plasmas in solid state⁹ A. W. Trivelpiece (U.C., Berkeley)

Zadeh, L. A. (U.C., Berkeley)

(C) Introduction to system theory¹ (D) Finite-state systems² (C) Differnetial systems¹ (D) Linear modular systems² (D) Large-scale linear systems⁴ (C) Decomposition principles⁵ (D) Some network interpretations⁶ (D) Control & automata theory⁸ L. A. Zadeh (U.C., Berkeley) A. Gill (U.C., Berkeley) A. Hoffman (IBM, Yorktown Heights) ⁶T. E. Stern (Columbia)

Volumes Under Discussion

Active circuits

Automatic control

Computers

Electric properties of materials

Electronic components, sensors, and transducers

Electronic materials processing

Electronic reliability and maintainability

Medical electronics

Nucleonics

McGraw-Hill .. 7

INTER-UNIVERSITY ELECTRONICS SERIES

Charles Susskind, Consulting Editor

STATUS REPORT, MARCH 1965

*Balakrishnan, COMMUNICATION THEORY +Bennett & Davey, DATA TRANSMISSION *Bennett, Schwartz, & Stein, COMMUNI-CATION SYSTEMS AND TECHNIQUES *Bracewell, RADIO PROPAGATION *Collin & Zucker, ANTENNA THEORY David & Denes, PERCEPTUAL COMMUNICATION *Ettenberg, MICROWAVE TUBES & DEVICES +Jamieson, IR PHYSICS & ENGINEERING *King & Oliner, MICROWAVE CIRCUITS Louisell, QUANTUM ELECTRONICS Luxenberg & Kuehn, PROGRAMMED ELECTRONIC DISPLAYS *Oliver, ELECTRONIC MEASUREMENTS & INSTRUMENTATION *Pritchard, SOLID-STATE ELECTRONICS Rechtin, TELEMETRY & TRACKING *Schwan, BIOELECTRONICS Smit, MAGNETIC PROPERTIES OF MATERIALS *Sutton, ADVANCED ENERGY CONVERSION *Trivelpiece, PLASMA ELECTRONICS *Under contract. +Published. THE FOLLOWING CODE is used in status designations of sections: (A) Approached (contribution requested) (B) Bound (contributor has bound himself to do it)

- (C) Commenced (contributor has commenced writing)
- (D) Delivered (final version is in senior author's hands)

Balakrishnan, A. V. (U.C.L.A.) COMMUNICATION THEORY

- (B) Introduction¹
- (D) Markov processes & applications²
- (D) Sequential detection theory²
- (D) Algebraic coding theory³
- (C) Detection theory⁴
- (C) Prediction & filtering theory
- (C) Signal representation theory
- (C) Basic information theory
- (A) Analog communication theory⁵
- (C) Adaptive methods in systems¹
- (A) Optical communication theory²
- (C) Nonparametric detection theory 6

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J. W. Carlyle (U.C.L.A.)

Bennett, W. R., & Davey, J. R. (Bell) DATA TRANSMISSION (publ. 1965)

Historical introduction Digital representation of information Electrical representation Frequency analysis of digital data Effects of restricted bandwidth Transmission impairments Baseband systems Amplitude-modulation systems Frequency-modulation systems Phase-modulation systems Comparison of modulation methods Past & present communication systems Reference carrier for synchr.detection Equalization of data channels Measuring the performance of systems Error control Idealized optimization theory

Statistics of digital signals

Bennett, W. R. (Bell), Schwartz, M. (P. I. B.), & Stein, S. (Sylvania, Waltham, Mass.) COMMUNICATION SYSTEMS AND TECHNIQUES PART I (Schwartz) (D) Intro.to stat.comm.theory (D) Appl.to digital communications

- (C) Cw communications: AM & FM PART II (Bennett)
- (D) AM and related cw systems
- (D) Angle modulation in cw systems
- (D) Pulse modulation systems
- PART III (Stein)
- (D) Basic binary comm. techniques
- (D) General analysis of single-channel binary systems in additive noise
- (D) Characterization of random channels
- (C) Diversity techniques
- (C) Optimum receiver structures for fading channels

Bracewell, R. N. (Stanford) RADIO PROPAGATION

- (B) Propagation in ionized media¹
- (B) Atmosphere & ionosphere²
- (B) Meteors
- (B) Aurora⁴
- (B) Whistlers⁵
- (B) Radar astronomy 6
- (B) Instrumentation
- R. N. Bracewell (Stanford)
- 0. K. Garriott (Stanford)
- L. A. Manning (Stanford)
- A. M. Peterson (Stanford)
- R. A. Helliwell (Stanford)
- ⁰₇V. R. Eshleman (Stanford)
- R. D. Egan (SRI)

Collin, R. E. (Case), & Zucker, F. J. (A.F.C.R.L.) ANTENNA THEORY (B) Fundamentals (B) Radiation patterns 2,3,4
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- (B) Large-aperture antennas⁷,8,9
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- (B) Environmental aspects¹²
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- R. E. Collin (Case) II. L. Knudsen & J. Hansen (Copenhagen) M. I. Skolnik (Electrical Comm.) A. Ishimaru (Univ. of Washington)
- T. T. Wu (Harvard)
- R. W. P. King (Harvard)
- F. J. Zucker (A.F.C.R.L.)
- °C. Sletten (A.F.C.R.L.) J. Brown (Univ. College, London)
- 10. Hessel (P.B.I.) 11A. Hessel (P.B.I.) 11B. G. Hemmendinger (Bell) 12S. Mittra (Illinois) 13A. Keienski (Herber)
- A. Ksienski (Hughes)

Cruz, J. (Illinois) FEEDBACK THEORY

- (B) Elements of feedback theory
- (B) Singleloop linear feedback systems
- (B) Application of feedback principles to network problems³
- (C) Linear multiloop systems⁴
- (B) Sensitivity of linear multivariable systems²
- (A) Invariance & feedback⁵
- (A) Signal distortion in nonlinear feedback systems
- (A) Stability in nonlinear systems
- J. B. Cruz, Jr. (Illinois)
- W. R. Perkins (Illinois)
- M. L. Blostein (McGill)
- ⁴I. W. Sandberg (Bell)
- B. N. Petrov (Moscow)

Perception and physiology Visual perception Auditory perception Decision processes in perception Finding the perceptual metric Perception and linguistics Role of semantics in perception Theories of speech production Acoustic theory of speech production Relation of linguistic, physiological, & acoustic factors in speech comm. Computing displays & programming lang. Purposeful data processing Automatic recognition & abstraction Adaptive or feedback processes in recognition Speech recognition Speech transmission Visual transmission

Ettenberg, M. (C.U.N.Y.) MICROWAVE TUBES AND DEVICES

- (B) Linear-beam tubes¹
- (B) Crossed-field tubes²
- D) Helical-beam tubes³
- (B) Parametric beam tubes⁴
- (A) Low-noise tubes⁵
- M. Ettenberg (C.U.N.Y.)

- (Acad. of Science, Moscow)

- ⁴_ER. Adler (Zenith, Chicago) M. Currie (Hughes, Malibu)

David, E. E., Jr., & Denes, P. (Bell) PERCEPTUAL COMMUNICATION

G. Dombrowski (Univ. of Connecticut) Z. S. Chernov & G. A. Bernashevsky

Jamieson, J. A. (Aerojet-General) INFRARED PHYSICS AND ENGINEERING (publ. 1964)

Historical survey Planck blackbody radiation law Distribution of IR absorbing gases Infrared backgrounds Detection of infrared radiation Optical system design Infrared optical materials Applied probability theory Operations analysis Random fluctuations Electronics of small signals Space filtering Hypothesis testing & inform.theory Detection systems analysis [Co-authors are:] J. A. Jamieson. R. H. McFee, R. H. Grube, & R. G. Richards (Aerojet-General); & G. N. Plass (Aeronutronic)

King, D. D. (Aerospace), & Oliner, A. A. (P.I.B.) MICROWAVE CIRCUITS

- (C) Transmission modes
- (C) Waveguide junctions & discontinuities
- (C) Directional couplers & hybrids
- (C) Components & applications
- (C) Nonreciprocal elements
- (C) Control circuits

Louisell, W. H. (Bell) QUANTUM ELECTRONICS

Theory of masers & lasers Laser-maser techniques Nonlinear optics Quantum theory of coherence, noise, & communication

Luxenberg, H. R. (Bunker-Ramo), & Kuehn, R. L. (Giannini Corp.) PROGRAMMED ELECTRONIC DISPLAYS

Image analysis System requirements System design Photometry Colorimetry **Optics** Cathode-ray tubes Projection systems Light-valve & dynamic projection devices Solid-state display devices Photosensitive media Hard copy Coding techniques & theory

July 19, 1965

Professor Harry D. Huskey Escuela de Ingenieria Universidad Catolica de Chile Santiago, Chile

Dear Harry:

I was very pleased to receive your invitation to have someone at Digital Equipment Corporation write a chapter on the Arithmetic and Logical Circuitry for your new book which you are editing. Unfortunately, I do not believe we have anyone on our staff who could give a balance treatment to this topic without extensive background research.

Thank you for considering us and I am sorry to have to respond negatively.

Sincerely,

Harlan E. Anderson Vice President

HEA;ncs

AMERICAN INDIANS, INC. 65 Charles Street Boston, Massachusetts

June 24, 1965

Dear Mr. and Mrs. Anderson:

We are very pleased to extend this invitation for the American Indian Festival Social Presentation to be held at the Georgian Room of the Statler-Hilton Hotel in Park Square, Boston, Massachusetts at 7:00 P.M., Friday, July 23rd, 1965.

The event will be in honor of the First American Indian Festival and several Chiefs and Queens will be presented at this historic occasion.

We request your donation of \$25.00 (per coupledress optional) be made payable to the American Indian Festival Fund and on receipt we will forward your reservation by return mail. The buffet and events planned will undoubtedly score highly in New England's Social Calendar of events. The proceeds will be used for much-needed scholarships, and for a Greater Boston Indian Cultural Center.

Respectfully,

M. J. Hardiman for American Indians, Inc.

American Indian Festival WAR MEMORIAL AUDITORIUM - BOSTON

SATURDAY - JULY 24, 1965

SUNDAY - JULY 25, 1965

After seeing this magnificant pageant you will share the feelings of former President John F. Kennedy when he said in part- (referring to the American Indians) - - - "their history is our history, and should be part of our shared and remembered heritage- - - American has much to learn about the heritage of our American Indians. - - Only through this study can we as a nation do what must be done, if our treatment of the American Indian is not to be marked down for all time as a national disgrace." - -

You will enjoy the music and narrated traditional dances of the Plain, Mountain, and Northeastern Woodland Indians unveiled as the only authentic presentation ever provided. Among the many attractions will be THE NAVAJO TRIBAL BAND, (directed by Mr. Birley Gardner, former member of the John Phillip Souza Band) whose members are the hand picked "elite corps" of the Navajo Reservation that embraces the states of Colorado, Utah. Arizona and New Mexico. The acreage is more than twice-the-size of Massachusetts.

THE THUNDERBIRDS, internationally recognized for the Wood-Water-Drum Social Dances, The Strawberry and Shaking-of-the-Bush Dances, as





well as the "Close to Nature", Dances-of-Prayer of the Hopi, and individualistic Grass and Rabbit Dances of the Sioux that led to our Western Square Dance format.

HELEN ATTAQUIN will thrill you with her presentation as one of three concert flutists in the world. Miss Attaquin is a direct decendent of Massasoit from whom our state derives its name as well as the center unit of the Commonwealth of Massachusetts great seal.

LEONDA, (who may be familiar to you as the guest star of "Talk of the Town", and other TV appearances and who appeared at the Worlds Fair), will have memorable vocal contributions that will be talked about for months to come.



Bostons' FRANK "RUSSELL" KIRBY, a Mohawk, who was in charge of the Flag Raising Ceremony for the highest steel girder of the Prudential Center, and the War Memorial Auditorium) will thrill you with his Eagle, Devil-Rejoices-Over-Fallen-Warrior, and traditional Medicine Dances.

DON EAGLE, (retired as the undefeated Heavy-Weight Wrestling Champion of the World) will regale you with narrations and legends, and his personal magnatism will long be remembered by young and old alike.

GREY SQUIRREL, a Medicine Man and his family, will lend unforgetable traditional and philosophical impact to the occasion.

TALL OAK, a Narragansett Indian (a direct decendant of Simeon Simon, President George Washingtons personal body guard, who is portrayed in the immortal painting "Washington Crosses the Delaware", will do the Calumet Dance in which the dancers body represents a peace-pipe, symbolizing the "Burying of the Hatchet", as well as the "Fish Dance" of the Iroquois, (often referred to as the "Original Charleston". Indians of the Sioux, Navajo, Iroquois, Mic Mac, Narragansett, Mohawk, Cherokee, Algonquin, and many other tribes from all over the nation, will be represented.

All of us share the honor and privilege of participating in the first AMERICAN INDIAN FESTIVAL of its kind in the world!

In keeping with the finest of New England traditions the American Indians cultural program will be launched where our founding fathers first established many of the cultural and religious principles that have such impact in our world wide democratic institutions of today.



July 20, 1965

Mr. M. J. Hardiman Ametican Indians, Inc. 65 Charles Street Boston, Massachusetts

Dear Mr. Hardiman:

I regret that I will not be able to attend the American Indian Festival Social Presentation to which you invited me in your letter of 24 June 1965.

Sincerely,

Vice President

Harlan E. Anderson

HEA:nes

LOgan 4-5561

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UNDRY & DRY CLEANING CO. INC.
31 east second st.
maysville, kentucky
July 19, 1965
Digital Equipment Corporation 146 Main Street Maynard, Mass.
Gentlemen,
As a stockholder of American Research and Development, we received last year a copy of your 1964 annual report.
I would appreciate a copy of the 1965 annual report as soon as it becomes available. I would also appreciate other information about the company and its products as might be available to its stockholders.
Sincerely,
Rakoden
R.A. Roden
Drive-In Customer Parking
1 hr. Dry Cleaning
3 hr. Shirt Laundry Family Laundry Service
"CRAVENETTE" Water-Repellent "BERLOU" Guaranteed Mothproofing
Box and Fur Storage
Decorator-Fold Drapery Service
A MARKEN A DRY OF ANIMA OF

1898

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OFLAU

VISIT OUR COIN-OPERATED LAUNDRY & DRY CLEANING VILLAGE

Gentlemen : Please send me your latest Inancial statements. I am a stockholder of american Research & Development. Thanks DONALD L. JONES 6225 XERXES AVE. No. MINNEAPOLIS, MINN.

July 22, 1965

Mr. R. A. Roden Modern Laundry and Dry Cleaning Co., Inc. 31 East Second Street Maysville, Kentucky

Dear Mr. Roden:

Thank you for your letter of July 19 requesting our 1965 Annual Report and information on our products.

Our 1965 Annual Report is presently in the editing stage and will be available shortly – at which time you will automatically receive a copy being an ARD stockholder.

We appreciate your interest in DEC, and trust the enclosed information will be useful to you.

Sincerely,

Harlan E. Anderson Vice President

HEA:ncs Enclosures: F-01, A-715, F-61, B-200, F-71, F-81, FLIP-CHIP Brochure, The DEC Story.

July 28, 1965

Mr. Donald L. Jones 6225 Xerxes Avenue North Minneapolis, Minnesota

Dear Mr. Jones:

Thank you for your recent note requesting our latest financial statements.

Our Annual Report is the only type of financial information which we release to the public and the expected date for completion of printing and mailing should be September 1st at which time you would receive a copy directly from the ARD stockholders listing.

We appreciate your interest in DEC.

Sincerely,

Harlan E. Anderson Vice President

HEA:ncs

equipment corporation

MAYNARD, MASSACHUSETTS TWinoaks 7-8822 TWX MAYN 816

August 2, 1965

Mr. Jonathan Fadiman, Manager Equipement Digital S.A.R.L. 65 rue du Faubourg, St. Honore Paris 8[°], France

Dear Jon:

The combined responsibilities of managing the PDP-6 Product Line and International Sales have made it impossible for me to personally devote the attention our foreign sales operations require.

In the future, I will be devoting my full attention to the PDP-6 Product Line. Ted Johnson has been promoted to Sales Manager. As such, he will assume responsibility for all field sales operations, both domestic and foreign.

Cur recent meeting in Maynard was extremely helpful to us, as we hope it was to you, and we are all enthusiastic about the progress and possibilities of our foreign offices. We are confident that our new product line organization and the coordination of our overall sales effort will strengthen our ability to support our various product efforts.

You will be hearing from Ted Johnson shortly on his plans and programs for sales and, in particular, the foreign sales operations. I know that you will give him your full cooperation and continued best efforts.

Sincerely,

andy

Harlan E. Anderson Vice President

HEA ncs cc: G. Huewe, R. Smart, J. Leng G. Moore, S. Olsen, T. Johnson

August 17, 1965

Mr. William MacGregor Digital Equipment of Canada, Ltd. 150 Rosamond Street Carleton Place Ontario, Canada

Dear Bill:

Mrs. Anderson and I will have to decline your kind invitation to attend the annual DEC-Canada outing on the 28th of August due to the distance and the time involved in travelling.

We are pleased to have been remembered for such a festive occasion and hope it is an enjoyable day for all.

Sincerely,

HEA:ncs

August 18, 1965

Mr. Harry S. Mann 37 Greenview Way Upper Montclair, New Jersey 07043

Dear Mr. Mann:

ncs

This letter is to confirm reservation made for a single room at the Colonial Inn, 11 Monument Square, Concord Center for an indefinite stay starting the night of Sunday, August 22.

May I be one of the first to say "Welcome" to Digital and will see you Monday morning.

Sincerely,

(Mrs.) N. Survilas Secretary to Harlan E. Anderson August 25, 1965

Vermont Research Corporation Precision Park North Springfield, Vermont

Attention: Mr. Prentiss L. Smith, Vice-President, Sales

Dear Prentiss,

Our discussion of August 19 concerned the disposition of three areas in a manner mutually beneficial to DEC and VRC: Purchase Order Contract No. 35658; the first unit released and delivered against that contract (formerly the Adams drum); and those drums remaining on the contract which have not been delivered. DEC's understanding of the agreements reached at that meeting are outlined below.

The first drum unit is to be exchanged for a new drum fitted with all the modifications agreed upon by DEC and VRC eg., filter assembly, stiffer actuator, logic wired external to the drum cabinet etc. In consideration for the above detailed exchange, DEC agrees to assume responsibility for up to \$1,000.00 for the logic wiring. VRC will submit a proposal covering the specifics and the charges to DEC as applicable.

Delivery of the replacement drum is intended to allow DEC to conduct a thorough evaluation to determine its suitability for DEC's requirements and to determine the possibilities of establishing a contract similar to 35658 with VRC in the future. No effort is to be expended toward production of the four remaining drums originally called for on the contract. The contract is formally terminated until such time as DEC and VRC may wish to establish a similar one on terms mutually agreeable at that time. Delivery of the replacement drum will fulfill VRC's obligations in regard to the contract except for those warranty obligations for which VRC and DEC have maintained agreement. In consideration, DEC agrees to report to VRC the evaluation results with the exchange drum, the order and amount of maintenance required by the unit and reliability data, on which heretofore DEC and VRC have been unable to reach agreement.

- 2 -

I trust you are in agreement with the above as representative of our discussion on August 19. Your acknowledgement via the enclosed carbon would be appreciated.

As emphasized during our discussion, DEC has a real need for this type of memory storage. Hopefully, evaluation of the new drum will prove it successfullin meeting that need.

Sincerely,

DIGITAL EQUIPMENT CORPORATION

Harlan E. Anderson Vice-President

cc: Mr. H. Taft Vermont Research Corporation

> Mr. W. Weeton W. E. Weeton Company

HEA : mw

KERfil

September 1, 1965

Mr. John T. Gilmore, Jr. Vice President Charles Adams Associates 575 Technology Square Cambridge, Massachusetts

Dear Jack:

Enclosed is the information sent to our branch managers on August 6, 1965 concerning the PDP-6 at Keydata. I would prefer that you not copy and distribute to your personnel this internal memoranda of ours but I did want you to know what information was in it.

I was sorry to learn of your decision about DECUS but I can understand the factors affecting your decision.

Sincerely,

Harlan E. Anderson Vice President

HEA:ecc

Enclosure: August 6 Statement on PDP-6 at Keydata

TO: All DEC Sales Office Branch Managers

The PDP-6 at Keydata (Adams Associates) has at their request been pulled out.

The basic reason for this situation is that we were unable to get the Adams machine up and running steadily in a short enough time. The machine was four months overdue. For a company such as Keydata, which depends on the earnings from its machine, this is a severe problem and they were not able to tolerate it.

As you know, an overdue period such as the above, while deplorable, is not exactly unusual in our industry. The reasons for our slowness in bringing the machine to a state of readiness are these:

- 1) This is the most extensive system we have ever sold and its very size created some problems, which took a while to solve.
- 2) At Adams' request, certain special items were supplied and these put considerable strain on our capabilities to meet the dates earlier agreed on.

You will almost certainly be asked about this incident by customers and potential customers so here's how to handle it:

- 1) Be very careful to say nothing negative about Adams Associates or Keydata.
- 2) Mention the above points frankly and without elaboration.
- 3) Point out that this is the first (and we trust the last) time this has ever happened to the PDP-6.
- 4) Mention other systems we have in and running, i.e.:

Project MAC U. of Western Australia Brookhaven Nat'l. Laboratory Rutgers University Lawrence Radiation Laboratory RAND Corp University of Bonn Aachen Physics Institute

Some of the lessons we have learned from this episode are already being translated into action.

- All modifications made on the Adams machine will be retro-fitted onto all other machines in the field as soon as possible. There will, of course, be no charge to any customer. These modifications will also be added to all present and future machines in production.
- In-house acceptance test procedures are being considerably toughened.
- 3) An advertising campaign will be launched in September with the specific intent of mentioning our important customers with highly reliable systems.

In closing, let me say that we expect lots of good to come out of all this - we have learned some lessons very well.

> Prescott Behn Marketing Manager Large Computer Division

PB/b

September 9, 1965

Mr. John McCarthy Computation Center Applied Mathematics and Statistics Laboratories Stanford University Stanford, California

Dear Mr. McCarthy:

At Mr. Anderson's request, I am enclosing a photocopy of the I.B.M. Consent Decree.

Sincerely,

(Mrs.) N. Survilas, Secretary to Harlan E. Anderson, Vice President

HEA:ncs Enclosure

September 27, 1965

Mr. John L. Merrill, Jr. Putnam, Coffin and Burr 141 Milk Street Boston, Massachusetts 02109

Dear Mr. Merrill:

Thank you for your letter of September 22, and for your continuous concern in DEC.

I have passed your letter along to our recently appointed Treasurer, Harry S. Mann who I am sure will be contacting you shortly.

Thank you again for your interest.

Sincerely,

Harlan E. Anderson Vice President

HEA:ncs cc: H. Mann 11.m



141 MILK STREET BOSTON, MASSACHUSETTS 02109 TELEPHONE 482-4400

September 22, 1965

Mr. Harlan E. Anderson, Vice President Digital Equipment Corporation 146 Main Street Maynard, Massachusetts

PUTNAM. COFFIN & BURR

INVESTMENT BANKERS

BOSTON . HARTFORD . NEW YORK

NEW YORK, AMERICAN AND BOSTON STOCK EXCHANGES

Dear Mr. Anderson:

I have now had an opportunity to study your recently released Annual Report. Needless to say, in reading this report a large number of questions come to mind, some of which you may feel that you cannot answer under present circumstances but others of which I am sure you would feel free to discuss with me.

I am, therefore, writing to inquire as to whether or not you would be willing to let me come out and visit with you for a half to three-quarters of an hour sometime at your convenience. Let me emphasize that I clearly understand that it may not be appropriate for you to answer certain questions but at the same time, I feel under obligation with respect to my continuous following of American Research to keep as well informed as circumstances permit.

Looking forward to hearing from you and in the meantime with best wishes, I remain

Sincerely,

John L. Merrill, Jr.

JLM/lg



THE JOHNS HOPKINS UNIVERSITY APPLIED PHYSICS LABORATORY

8621 GEORGIA AVENUE SILVER SPRING, MARYLAND

August 13, 1965

Mr. E.A. Anderson Vice President Digital Equipment Corp. Maynard, Mass.

Dear Mr. Anderson:

The Chesapeake Bay Area Chapter of ACM is planning a series of lectures on time sharing to be given in Baltimore in November 1965. The purpose of the series is similar in intent to the series presented by the Washington D.C. Chapter in March 1965. Through lectures and possibly demonstrations the latest developments in time sharing theory, software design, and equipment will provide the necessary background for individuals in the Baltimore area to assess the value of time sharing with respect to their own problems.

It is planned to have lecturers from the various companies designing time sharing systems each present one lecture in the series. I would greatly appreciate it if you could present one of the lectures in the series. Each lecture would last for two to three hours depending on whether a demonstration were included. Tentatively Tuesday evenings November 2,9,16,23, and 30 have been selected for the series. Please let me know if you will be able to participate in this series and which date, with possible alternates, would be most convenient for you.

Sincerely,

harles V. Bitterli

Charles V. Bitterli Chairman, Professional Development Committee

CVB:blb

August 26, 1965

Mr. Charles V. Bitterli Chairman, Professional Development Committee Applied Physics Laboratory The Johns Hopkins University 8621 Georgia Avenue Silver Spring, Maryland

Dear Mr. Bitterli:

Thank you for your letter of August 13 inviting me to present a lecture on time sharing for the Chesapeake Bay direa Chapter of the ACM in November.

I would be pleased to do this and would prefer the date of Tuesday, November 23 with Tuesday, November 16 as an alternate date. I would like to present a live demonstration using our Programmed Data Processor – 6 (PDP-6) system here in Maynard. I will need access to a teletypewriter with a TWX Prime line for this purpose.

I look forward to receiving further details as the time approaches. It would be helpful to have a list of names and organizations of those planning to attend when this information becomes available.

Sincerely,

Harlan E. Anderson Vice President

HEA:ncs

November 8, 1965

Mr. Charles V. Bitterli, Chairman Professional Development Committee Applied Physics Laboratory The Johns Hopkins University 8621 Georgia Avenue Silver Spring, Maryland

Dear Mr. Bitterli:

I am sorry that I will not be able to be at Johns Hopkins University to speak on time sharing as I had promised earlier. With your permission, I would suggest that Larry Portner who is in charge of the development work on time sharing software at DEC will be an excellent choice for your lecture series. He has played a keyrole in our PDP-6 system which he will plan to demonstrate to your group.

I apologize for the inconvenience this change may cause you, but I am sure you will receive a fine discussion of time sharing from Larry.

Sincerely,

Harlan E. Anderson Vice President

HEA:ncs

P.S. I have passed on to him our correspondence and you can look forward to hearing from him soon.

cc: L. Portner

H. E. ANDERSON

Remind Andy to reply on Monday 11/1/65

SM

DIGITAL EQUIPMENT CORPORATION



DATE November 8, 1965

SUBJECT University of Pittsburgh

TO H. Anderson

FROM N. Mazzarese

- E. Harwood
 - E. Harwood
 - J. Jones

<u>Problem:</u> University of Pittsburgh and other customers have indicated that wiring lists do not correspond with the status of machines. This requires clarification. The central processor is kept up to date on a machine by machine basis, however, the I/O portion is customized for each machine by both DEC and the end customer. Because of the difficulty in modifying the wiring list to compensate for this and because of the lack of utility, we have not attempted to do so.

<u>Solution:</u> It is our feeling that the customer need not have a wiring list which accurately represents his machine. The usefulness of wiring lists is strictly for Production and checkout purposes. We feel that the University of Pittsburgh was tracing wires because of the need for adequate documentation of I/O interface. To meet this need, we have completed a PDP-7 Interface manual which describes in detail how to connect extra gear to the computer (including such things as Pin numbers, loading rules and suggested interface modules). We feel that with this list there is no need for the customer to even look at the wiring list.

The PDP-7 interface manual will be available about the 29th of November.



LEARNING RESEARCH AND DEVELOPMENT CENTER

UNIVERSITY OF PITTSBURGH•PITTSBURGH•PENNSYLVANIA 15213 MAIN OFFICE: 302 AMOS HALL•PHONE 621-3500 EXT. 7226-7227 LABORATORIES: UPPER CAMPUS•PHONE 683-1620 EXT. 2422-23-24

October 25, 1965

Mr. Harlan E. Anderson Vice President Digital Equipment Corporation 146 Main Street Maynard, Massachusetts

Dear Mr. Anderson:

Several months ago, we acquired a PDP-7 Computer that we are preparing to use as the control device for an assortment of peripheral stations which are used for instructional research and development. I would like to say that we are quite pleased with the performance of the computer and with your organization's assistance in getting us started. Since, as a result of this installation, we are somewhat committed to DEC equipment, this good performance is quite gratifying to us. Our plans call for a fairly sizable increase in the amount of equipment involved, and we are naturally interested in maintaining effective working relationships with your Company.

There are two areas that have caused us some problems and annoyance, and I feel these should be brought to your attention for whatever that may be worth. Since receiving our computer, we have ordered approximately \$1,500 worth of additional modules and equipment. We generally order these as we discover the need for them, and hence desire delivery on the fastest possible basis. Our experience has been that, unless special requests are made for immediate shipment, the entire shipment may wait on one component that is not immediately available. Recently, we ordered several items of equipment and received partial shipment together with a shipment date on the remainder that was satisfactory to us. The shipment of the remainder of the order, however, was not accomplished on the stated date. It was not until almost one week later, as a result of our inquiries, that we discovered this would be delayed yet another week unless we could make a substitution for the part that was unavailable. It turned out that we could easily do this; and as a matter of fact, the substituted part (in this case a system panel) was easily changed to conform to the part we initially requested with about twenty minutes' work on our part. My point here is that we could have gained several days of system time within a tight schedule if your shipping department had notified either us or your representative in Pittsburgh as soon as they knew that the date would be missed and that such a substitute was possible.

Mr. Anderson

The second item that has caused us many hours of time and annoyance is the inadequate nature of the documentation associated with our particular computer. The reference and maintenance manuals are very good in describing the PDP-7 in general. However, the schematic and wiring lists for our particular installation are not only incomplete, but those that we have are inaccurate. For example, we have been unable to obtain an interpanel or interbay wiring list. Our schematics apparently are those used for some standard PDP-7 Computer and generally the mneumonics designating module locations do not correspond with those of our machine. In addition, the schematics show circuits that do not exist in our machine, ~ and our machine has circuits that do not exist on the drawings. The wiring list also seems to have panel designations that are three or four panels removed from the actual location of the wires within our computer. We have found in certain instances that the wiring lists are actually wrong; I assume this must result from changes made on the test floor that did not get reflected into an up-to-date wiring list. The state of this documentation has caused us many hours of tracing wires in the machine itself; and, to date, we have still been unable to feel confident that we know exact loadings on particular gates or exact routings of various circuits.

I do not want this letter to indicate that we are dissatisfied in any respect with either your computer or your services, but I felt these items should be mentioned as I feel it would be to the advantage of both parties if corrections can be made in our future dealings.

Thank you for your consideration and for the services both Maynard and your local office have provided us.

Very truly yours,

William W. Ramage

Director of Equipment Technology

/jnm

cc: Mr. R. A. Lindsay



		DATE	November 1, 1965
SUBJECT	Pittsburgh Complaints		
CC:	H. Anderson N. Mazzarese	FROM	Ed Harwood

The comments are identical to those I have received from other customers I have surveyed.

Most of his print problems are in the I/O area and this has always been a problem. The computer is prewired for some options and the wire list calls out these names. When the system requires other than the options called out on the wire list, these new options are inserted and the block schematics are changed accordingly. The wire list does not get changed.

nick What do you plan to do about it?

andy.
OCT 28 REC'D

H. E. ANDERSON

10/28/65

Stan,

I plan to reply to the attached on Monday, would appreciate any comments from you.

Andy

Millie Remisore to Gill Andy

DIGITAL EQUIPMENT CORPORATION



LEARNING RESEARCH AND DEVELOPMENT CENTER

UNIVERSITY OF PITTSBURGH • PITTSBURGH • PENNSYLVANIA 15213 MAIN OFFICE: 302 AMOS HALL • PHONE 621-3500 EXT. 7226-7227 LABORATORIES: UPPER CAMPUS • PHONE 683-1620 EXT. 2422-23-24

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Mr. Anderson . .

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Thank you for your consideration and for the services both Maynard and your local office have provided us.

Very truly yours,

William W. Ramade

Director of Equipment Technology

/jnm

cc: Mr. R. A. Lindsay

November 9, 1965

Mr. William W. Ramage Director of Equipment Technology Learning Research and Development Center University of Pittsburgh Pittsburgh, Pennsylvania 15213

Dear Mr. Ramage:

Thank you for taking the time to write me recently. I am pleased to hear you say that you are quite pleased with the overall relationship that has developed between our two organizations concerning your PDP-7.

We are sorry about not keeping you better informed on the status of your module order. Your comments have been brought to the attention of our Product Line Manager for modules. Within the last three months, we have increased our module production capacity almost by a factor of two and by January 1 anticipate that standard modules will be available for immediate delivery.

Concerning your PDP-7 problems with documentation, I understand Ed Harwood of DEC has been in touch with you. Briefly, our wiring lists are primarily for production purposes and are not suitable for the purpose you were using them. We have recently recognized the need for better documentation for I-O interfacing and have in preparation a PDP-7 interfacing manual which will include instructions on how to connect things to the computer. Detail information such as appropriate pin numbers, loading rules and suggested interface modules will be included. This manual is scheduled for completion about December 1 and I have requested that a copy be sent to you. In the meantime, I am enclosing a copy of the draft of this manual for your immediate use. We do not know of any specific errors in this draft, but would caution you in using it that it is not yet finished.

I want to express our appreciation to you for writing about these matters and hope that the above information will be useful to you.

Sincerely,

Harlan E. Anderson 7 Vice President

HEA:ncs Enclosure bcc: N. Mazzarese, R. Lindsay, S. Olsen

November 10, 1965

Mr. William Elfers Greylock and Company 294 Washington Street Boston, Massachusetts 02108

Dear Bill,

I was pleased to receive your announcement concerning the formation of Greylock and Co. and want to wish you success in this new undertaking.

Sincerely,

HEA:ncs

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

PROJECT MAC

Reply to: Project MAC 545 Technology Square Cambridge , Mass. 02139

Telephone: (617) 864-6900 x5851

November 19, 1965

Mr. Harlan Anderson Digital Equipment Corporation Main Street Maynard, Massachusetts

Dear Andy:

I enclose seven (7) copies of an old proposal which you submitted in the summer of 1964. We have treated these as company confidential documents, and my reason for returning them at this time is to relieve us of the need to safeguard this information.

I enjoyed our meeting the other day. I think we satisfactorily settled a number of issues that had been worrying several of us.

Sincerely,

Richard G. Mills Assistant Director

RGM/tlb

Enclosures - 7



November 23, 1965



Mr. Richard G. Mills Assistant Director Massachusetts Institute of Technology Project MAC 545 Technology Square Cambridge 39, Massachusetts

Dear Mr. Mills:



This is to acknowledge receipt of seven copies of DEC's Preliminary Proposal entitled, "Multi-Processor Time-Shared PDP-6 System" dated July 28, 1964.

Thank you for your attention in safeguarding the material .

Sincerely,

(Mrs.) N. Survilas, Secretary to Harlan E. Andesson, Vice President

ncs

November 24, 1965



Mr. David Mapes BioMetric Computer Center James K. Dobbs Research Building University of Tennessee 951 Court Avenue Memphis, Tennessee

Dear Mr. Mapes:

At Mr. Anderson's requests I am enclosing the following:

PDP-7 User's Handbook F-75 DECSYS-7 The DECTARE SYSTEM F-71 Descriptive Brochure GRAPHpad by Dave Brown and W. Long PDP-7 Program Library 12-22-64 and 4-28-65 DECtape Subroutines 4/22/65 PDP-4 Program Library - Type 57 Compiler.

Sincerely,

(Mrs.) N. Survilas, Secretary to Harlan E. Anderson, Vice President

ncs Enclosures

UNIVERSITY OF CALIFORNIA, BERKELEY

BERKELEY · DAVIS · IRVINE · LOS ANGELES · RIVERSIDE · SAN DIEGO · SAN FRANCISCO

SANTA BARBARA . SANTA CRUZ

DEPARTMENT OF MATHEMATICS

BERKELEY, CALIFORNIA 94720

November 26, 1965

Digital Equipment Corporation Maynard, Massachusetts

Gentlemen:

I received your interesting annual report as a stockholder of American Research and Development Corporation. It seems that your common stock is held at least in part by the public, but my broker cannot find any. Can you furnish me with information that will enable my broker, or me directly, to obtain a quotation, and afterwards buy some shares?

Thank you for your help.

Very sincerely yours,

Henry Helon

Henry Helson

December 3, 1965

Mr. Henry Helson Department of Mathematics University of California Berkeley, California 94720

Dear Mr. Helson:

Thank you for your letter of November 26, 1965 inquiring about public stock availability of Digital Equipment Corporation. That portion of our stock which is not owned by American Research and Development Corporation is owned by employees and management of the company and is not traded.

Thank you for your interest in DEC.

Sincerely,

Harlan E. Anderson Vice President

HEA:ncs



MARATHON ASSOCIATES, INC.

Counselors to Management

CINCINNATI . SAN FRANCISCO . NEW YORK

November 30, 1965

927 Provident Bank Building Cincinnati, Ohio 45202 Area Code 513 - Phone 621-1414

President Digital Equipment Corp. 146 Main Street Maynard, Massachusetts

PERSONAL & CONFIDENTIAL

Dear Sir:

A prominent corporation which is listed on the American Stock Exchange has retained us to assist them in helping their firm to grow and diversify their business. They are particularly interested in certain products which would fit in with their capabilities in production and sales.

Your company has attracted our attention due to the items which you manufacture. These should offer growth possibilities when combined with the abilities of our client.

Would you consider looking into some arrangement which might lead toward a merger of your company with this firm which we represent? If so, we would suggest the following procedure:

- 1. Write or telephone that you are willing to consider the proposal.
- 2. We shall then provide preliminary information to help you determine right away if you wish to proceed further.
- 3. If you believe there are some possibilities for further discussion, you can tell us what you have in mind and between us we can decide if there are possibilities for a worthwhile transaction.

Please keep in mind that we are retained by our client in this matter. Your company will not be under any obligation and we assure you of our complete integrity. If there is a mutual interest the name of our client can be revealed.

Any communication between us will be held in strict confidence. We assure you we are in earnest. Feel free to investigate us through your bank to assure yourself this is a legitimate inquiry. Won't you write or phone as soon as you have reached a decision?

Very sincerely yours,

MARATHON ASSOCIATES, INC.

J. L. Brown Vice President

JLB:BIC

December 6, 1965

Mr. J. L. Brown, Vice President Marathon Associates, Inc. 927 Provident Bank Building Cincinnati, Chio 45202

Dear Mr. Brown:

: . . ·

Your letter to Mr. Olsen, President of Digital Equipment Corporation has been referred to me for answer. We are pleased at the interest you have shown in contacting us but must point out that DEC is not available for sale or merger at the present time and any discussions along this line would be inappropriate.

For your general interest, I am enclosing a copy of our latest annual report which you may find interesting reading.

Sincerely,

Harlan E. Anderson Vice President

HEA:ncs Enclosure WILLIAM BIEL ATTORNEY AND COUNSELLOR AT LAW 30 BROAD STREET NEW YORK, N. Y. 10004

TELEPHONE HANOVER 2-1150

November 22, 1965

PERSONAL & CONFIDENTIAL

Digital Equipment Corporation 146 Main Street Maynard, Mass.

Attention: President

Dear Sir:

I represent a highly rated corporation which is interested in acquiring your company, either by capital stock or asset purchase.

It is the firm policy of my client to make acquisitions for cash, and to retain present management and corporate identity to ensure continuity of operation.

Under present tax conditions, the capital gain resulting from a sale may be more attractive to you and your associates than income which is subject to ordinary income taxes.

If you are interested in pursuing this subject, please advise me; or if you prefer, I should be glad to discuss this matter with you by telephone.

I am not acting as a broker, and there will be no fees or commissions paid by you in this connection.

All correspondence and information will, of course, be treated in strictest confidence.

Very truly yours,

William Biel

WB:ck

December 6, 1965

Mr. William Biel 30 Broad Street New York, New York 10004

Dear Mr. Biel:

Your letter to the President of Digital Equipment Corporation has been referred to me for answer. We are pleased at the interest you have shown in contacting us but must point out that DEC is not available for sale or merger at the present time and any discussions along this line would be inappropriate.

For your general interest, I am enclosing a copy of our latest annual report which you may find interesting reading.

Sincerely,

1

Harlan E. Anderson Vice President

HEA:ncs Enclosure

December 7, 1965



Mr. Armin Miller, President Data Disc Corporation 1275 California Avenue Palo Alto, California

Dear Armin:

It was a pleasure to have an opportunity to meet you recently in Las Vegas. I am enclosing with this letter a copy of the American Research and Development Corporation annual report which I think you may find interesting.

Sincerely,

Harlan E. Anderson Vice President

HEA:ncs Enc: ARD Report

December 10, 1965

Mr. Gerald Smith Manager of Engineering North America Staff International Telephone and Telegraph Co. 320 Park Avenue New York, New York 10022

Dear Gerry:

It was a pleasure to have a brief moment to chat with you during the Fall Joint Computer Conference last week and to learn of your new responsibilities with ITT Headquarters. Concerning the Avis need for new and improved hardware, I am very pleased that you have brought it to our attention. As you probably know, we do not normally take systems responsibility for a complete end user oriented computer system such as might be required. Because of this, I doubt if this is an area that we would be helpful to you in but we do appreciate your mentioning it to us.

I want to wish you every opportunity for success in your new undertaking at ITT and please feel free to visit us here at DEC whenever you are in the area.

Sincerely,

Harlan E. Anderson Vice President

HEA:ncs

INTERNATIONAL TELEPHONE AND TELEGRAPH CORPORATION

320 Park Avenue

NEW YORK, N. Y. 10022

December 7, 1965

Digital Equipment Corporation 146 Main Street Maynard, Massachusetts

Attention: Mr. H. E. Anderson, Vice President

Dear Harlan:

Our fleeting meeting at the Computer Conference did not permit me to discuss a problem I have that conceivably could be resolved by DEC. Did you know I left Indiana General last July? I am now with ITT Headquarters in New York, associated mainly with computer oriented aspects of our business. I would like to discuss with your people the possible systems that could be employed in mechanizing the field operations of Avis, a subsidiary of ITT.

The traffic and income growth of Avis is now surpassing their present manual administrative capabilities. A system is required that will permit solution of all or some combination of all the problem categories listed below for each Avis counter location.

- 1. "Instantaneous" credit verification
- 2. Preparation of the Rental Agreement at check-out
- 3. Termination of Contract at check-in
- 4. Recording of individual transactions for daily accumulation of accounting information

We would like to use presently available hardware so that any postulated system could be implemented within a minimal period.

If you feel that DEC could offer a solution, I would like to set up a meeting between us as quickly as possible. This is a very real need for Avis. My telephone number is (212) PL 2-6000, Extension 732.

Give my kindest regards to Ken.

Regards

Gerald Smith Manager of Engineering North America Staff

December 13, 1965

Mr. Robert A. Chadbourne Executive Vice President Associated Industries of Massachusetts 2206 John Hancock Building Boston, Massachusetts 02116

> Mr. William Hannon, Vice Chairman Boston Chapter of Industrial Designers Society of America

Dear Mssrs. Chadbourne and Hannon:

On behalf of Digital Equipment Corporation, I am pleased to accept the Certificate of Merit for the design of our PDP-8 computers.

l regret that it was not possible for me to be personally present at your annual meeting.

Sincerely,

Harlan E. Anderson

HEA:ncs



Associated Industries of Massachusetts

2206 JOHN HANCOCK BUILDING . BOSTON 02116

ROBERT A. CHADBOURNE EXECUTIVE VICE PRESIDENT

November 1, 1965

Mr. Harian E. Anderson Digital Equipment Corp. 146 Main Street Maynard, Massachusetts

Dear Mr. Anderson:

We regret that you were not present at the A.I.M. Fiftieth Annual Meeting to receive your Certificate of Merit personally from A.I.M.'s President.

Consequently, we are mailing your Certificate to you and again extend our heartiest congratulations.

Sincerely,

William Hannon

William Hannon, Vice-Chairman Boston Chapter Industrial Designers Society of America

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Robert A. Chadbourne Executive Vice President Associated Industries of Massachusetts

December 13, 1965

Mr. James E. Webb Administrator National Aeronautics and Space Administration Washington, D. C. 20546

Dear Mr. Webb:

Mr. Olsen has asked me to represent Digital Equipment Corporation at the NASA briefing of the computer industry. I look forward to this opportunity to learn more about NASA plans so that we might better understand NASA needs and ways in which we might participate more effectively.

Sincerely,

Harlan E. Anderson

HEA:ncs cc: Mr. John K. Koepf Industry Assistance Officer



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION Washington, D.C. 20546

OFFICE OF THE ADMINISTRATOR

DEC 7 1965

Mr. Kenneth H. Olsen President Digital Equipment Company Main Street Maynard, Massachusetts

Dear Mr. Olsen:

As you know, the computer industry is greatly involved in the national space program. During recent months, we have been reviewing our relationships with the industry, particularly in regard to major procurements of large-scale general purpose computing systems. As a result of this review, we are planning some positive actions to improve NASA's over-all approach to such procurements with the major objective of increasing competition throughout the industry.

As an initial step, we would like to convene key corporate officials of the principal companies involved in the manufacture of new generation computer systems, in order that we might outline our plans and provide an opportunity for an exchange of views. We have scheduled a meeting for this purpose on Tuesday, December 21, 1965, in the Program Review Center (Room 70059) of the NASA Headquarters Building, 400 Maryland Avenue, S.W., Washington, D.C.

We have planned this industry briefing in two parts. The morning session, from 10:00 a.m. to 12:00 noon, will concern itself with a review of our policy, intentions, and future plans to increase competition. The afternoon session, from 1:30 p.m. to 4:30 p.m., will deal with advance information concerning specific computer procurements which NASA is planning to undertake in the immediate future.

We hope it will be possible for you to attend the morning session, and to participate in whatever portion of the afternoon session you feel would be of interest. You might want to have one or two additional company representatives join you, since the briefing should be of interest both to your sales and technical personnel. In view of the number of companies participating, and the limitations on space, it is requested that not more than three representatives attend from each company.

I would like to have you and any senior officials who accompany you join me for lunch, following the morning session. This will provide an opportunity for me to meet with the senior executive officers, for a further exchange of views.

All of the arrangements for the December 21 meeting are being handled by NASA's Industry Assistance Officer, Mr. John K. Koepf. It would be appreciated if you would let Mr. Koepf know who will be representing your company. He may be contacted by telephone on Area Code 202, DUdley 2-8236.

Sincerely yours,

E Webb

James E. Webb Administrator

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Washington, D. C.

NASA INDUSTRY BRIEFING - COMPUTER PROCUREMENT

Tuesday, December 21, 1965

AGENDA

Morning Session (10:00 a.m. to 12:00 Noon)

- I. INTRODUCTION
- II. PRESENTATION OF NASA'S PLANS AND POLICIES AFFECTING FUTURE ADP PROCUREMENTS
 - Coffee Break
- III. QUESTIONS, DISCUSSION AND SUMMARY
- IV. CONCLUDING REMARKS
 - Luncheon
- Afternoon Session (1:30 p.m. to 4:30 p.m.)
 - V. INTRODUCTION
 - VI. LANGLEY RESEARCH CENTER ADP PROCUREMENT
- VII. MARSHALL SPACE FLIGHT CENTER AND SLIDELL ADP PROCUREMENT

VIII. CONCLUDING REMARKS

- George J. Vecchietti Director of Procurement
- Paul F. Fuhrmeister Chief, Analysis and Computation Division (Langley Research Center)
- Charles Bradshaw Deputy Director, Computation Laboratory (MSFC)

George J. Vecchietti

James E. Webb NASA Administrator

William Rieke Deputy Associate Administrator for Industry Affairs

H. E. anderrow

and Edmond C. Buckley Director, Office of Tracking and Data Acquisition

William Rieke

William Rieke

December 14, 1965

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Mr. Kenneth T. Schaaf Department of Commerce Management Institute The University of Wisconsin 432 North Lake Street Madison, Wisconsin 53706

Dear Mr. Schaaf:

Thank you for your letter of December 6 inquiring about time sharing and particular the PDP-6 computer. Our computers are used primarily for scientific and control purposes. The enclosed literature is, of course, oriented toward these applications.

Concerning general sources of information on time sharing and computer utilities, I would like to point out that there was a study group of the Harvard Graduate School of Business Administration who worked on this general subject. I am sorry that I do not have the names of the members of this group nor whether their information has been published. However, I am sure you can get information about the group by contacting Phil Matthews, Research Assistant, Harvard Business School, Soldiers Field Road, Boston, Mass., 02163.

I hope that this information will be useful to you.

Sincerely,

Harlan E. Anderson Vice President

HEA:ncs Enc: F-61B F-61

The University of Wisconsin

UNIVERSITY EXTENSION DIVISION 432 NORTH LAKE STREET

MADISON, WISCONSIN 53706 MANAGEMENT INSTITUTE

DEPARTMENT OF COMMERCE

December 6, 1965

Mr. Harlan Anderson Vice President Digital Equipment Corporation Maynard, Massachusetts

Dear Mr. Anderson:

I am now in the introductory stages of a study of computer timesharing and the trend toward computer utilities. Your PDP-6, which I read about in Business Week (March 14, 1964; A Computer That Grows With You), seems to be the type of equipment which would be used in a time-sharing system.

Would it be possible for me to obtain a copy of any literature which you may have on the PDP-6 and time-sharing? Also, since I am just in the introductory stages of this study, I would appreciate hearing of any other sources of information on time-sharing and computer utilities.

Sincerely,

Kenneth T. Schaaf

Kenneth T. Schaaf

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December 16, 1965

Mr. John K. Koepf Industry Assistance Officer National Aeronautics and Space Administration Code KD-2

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Washington, D. C. 22546

Dear Mr. Koepf:

As mentioned in our telephone conversation this afternoon I am enclosing my photograph and brief biography. In addition, I have enclosed information on Digital Equipment Corporation which I thought you might find interesting.

Sincerely,

Harlan E. Anderson Vice President

HEA:ncs Enc: Photograph Biography Annual Report

Harlan E. Anderson

Harlan E. Anderson is Vice President, Director and a co-founder in 1957 of Digital Equipment Corporation of Maynard, Mass., a leading producer of generalpurpose digital computers.

He received his bachelor's degree in engineering physics in 1951 and his master's degree in physics in 1952, both from the University of Illinois.

Following his graduate work, he joined the staff of Massachusetts Institute of Technology's Lincoln Laboratory, where he worked on the design of computers and circuitry for use with SAGE, the defense against attack by manned bombers. He left Lincoln in 1957 to help found Digital.

The firm has grown from the original two employees to 950 and from the original single location to 13 regional and district offices in this country and subsidiary firms in Canada, England, France, Germany, and Australia.

Mr. Anderson is General Chairman of the 1966 Spring Joint Computer Conference to be held in Boston. This is one of the largest technical meetings of the nations computer industry and is sponsored by the American Federation of Information Processing Societies.

December 22, 1965

Professor Daniel Teichroew, Head Division of Organizational Sciences Case Institute of Technology University Circle Cleveland 6, Ohio

Dear Dan:

Thank you for your recent letter and for sending me a copy of the paper on Data Display Systems in Business.

I am enclosing a copy of our Annual Report covering fiscal year ended July 3, 1965.

Sincerely,

HEA:ncs Enc: Annual Report Harlan E. Anderson Vice President



UNIVERSITY CIRCLE CLEVELAND 6, OHIO SWeetbriar 5-1000

CASE INSTITUTE OF TECHNOLOGY

Division of Organizational Sciences

16 December 1965

Mr. Harlan E. Anderson Vice President Digital Equipment Corp. Maynard, Massachusetts

Dear Harlan:

Thank you for the copy of the annual report of the American Research and Development Corporation, I found it very interesting and quite impressive. I notice that it indicates that the Digital Equipment Corp. issues annual reports; if a copy is available, I would appreciate receiving one.

I have been out of town and have not been in touch with Armin during the last week and therefore, I am not up to date on whether anything has transpired. However, the possibility of an association appears to me to be both mutually benificial and promising. I hope something can be worked out.

As an indication of my general interest in the field of Data Processing and Application of various computer devices, I am enclosing a copy of a paper on Data Display Systems in Business which you might find of interest.

Best regards,

Daniel Teichroew, Head Division of Organizational Sciences

DT:lek



December 7, 1965

Professor Daniel Teichroew Case Institute of Technology Cleveland, Chio

Dear Dan:

It was a pleasure to have an opportunity to meet you recently in Las Vegas. I am enclosing with this letter a copy of the American Research and Development Corporation annual report which I think you may find interesting.

Sincerely,

HEA:ncs Enc: ARD Report Harlan E. Anderson Vice President

December 22, 1965

Mr. William H. Congleton, Vice President American Research and Development Corporation 200 Berkeley Street Boston 16, Massachusetts



Dear Mr. Congleton;

I am enclosing (per Andy's request) correspondence between Professor Daniel Teichroew and Andy along with the attachment – the Stanford Graduate School of Business Bulletin #3.

"A Very Merry Christmas"

(Mrs.) Nancy Survilas Secretary to Harlan E. Anderson

Enclosures

December 28, 1965



Mr. Vincent N. DiPrima Book Division Fairchild Publications, Inc. 7 East 12th Street New York, New York 10003

Dear Mr. Di Prima:

I have received your letter of December 17, 1965 concerning current financial information about DEC. Enclosed please find two copies of our current Annual Report which will provide you with the necessary details. I would like to call your attention to the fact that Mr. Harry S. Mann has joined the company recently and is now our Treasurer. In addition, the number of employees has increased to approximately 1000.

I hope that this information will assist you in updating your entry for Digital Equipment Corporation in your new Electronic News Financial Fast Book and Directory.

Sincerely,

Harlan E. Anderson Vice President

HEA:ncs Enc: (2) Annual Reports

Book Division, Fairchild Publications, Inc. 7 East 12th Street, New York, N. Y. 10003/212 ALgonquin 5-5252

December 17, 1965

Mr. Harlan E. Anderson Vice President and Treasurer Digital Equipment Corporation 146 Main Street Maynard, Massachusetts

Dear Mr. Anderson:

We are currently compiling company listings for the 1966 edition of Electronic News Financial Fact Book & Directory.

In order to list the latest available financial and corporate information for your company, we need two copies of your current annual report.

As you know, financial data on all publicly-owned companies is available from the Securities and Exchange Commission. However, we'd prefer to obtain this information from you rather than pick it up from SEC.

Will you please send these to our address below and add us to your mailing list to receive annual, semi-annual and quarterly financial statements in duplicate.

We've enclosed a copy of your listing as it appeared in the 1965 edition of Electronic News Financial Fact Book & Directory. If you find any errors or omissions in this listing for your firm, please let me know.

Thank you in advance for your assistance.

Cordially,

Vincent N. DiPrima Assistant Manager

VND:gw

Our address:

Vincent N. DiPrima Book Division Fairchild Publications, Inc. 7 East 12th Street New York, N. Y. 10003

December 28, 1965

Major James Webster National Security Agency R424 Fort Meade, Maryland

Dear Major Webster:

I would like to take this opportunity to thank you for the time you spent with me last Monday discussing the PDP-8 computer that you have purchased. These types of interviews are very important and useful to DEC management in sampling the total performance of our company in meeting the needs of customers such as you.

Upon returning to our factory, I checked into your module order which included the 4217 module which you urgently needed. This was shipped last week and by now you should undoubtedly have it.

Thank you again for your cooperation.

Sincerely,

HEA:ncs

NEW YORK OFFICE 39 CORTLANDT STREET NEW YORK, N. Y.

Ben Janower and Associates, Inc.

FINANCIAL AND MANAGEMENT CONSULTANTS 34 HAZELWOOD DRIVE JERICHO, NEW YORK 11753 OVERBROOK 1-0152

December 23, 1965

Att: The President Digital Equipment Corp. Maynard, Massachusetts 01754

Dear Sir,

As Financial and Management Consultants we assist our clients in mergers and acquisitions.

We are working very closely with several large listed firms who are seeking to acquire companies such as yours.

They have specifically discussed your kind of firm as a possible interest.

We were wondering if we might pursue this further in complete confidence.

Sincerely, BEN JANOWER & ASSOCIATES INC.

Ben Jacober

Ben Janower President

BJ:cj

December 29, 1965

Mr. Ben Janower, President Ben Janower and Associates, Inc. 34 Hazelwood Drive Jericho, New York 11753

Dear Mr. Janower:

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Your letter to the President of Digital Equipment Corporation has been referred to me for answer. We are pleased at the interest you have shown in contacting us but must point out that DEC is not available for sale or merger at the present time and any discussions along this line would be inappropriate.

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For your general interest, I am enclosing a copy of our latest annual report which you may find interesting reading.

Sincerely,

HEA:ncs Enc: Annual Report Harlan E. Andesson Vice President