

JULY

digital

July 31, 1969

Raymond Spilman Industrial Design  
83 Morgan Street  
Stamford, Connecticut 06905

Attention: Mr. Raymond Spilman

Dear Mr. Spilman:

We were happy to receive your letter and associated material informing us of your impressive capabilities in the areas of industrial design, human factors, and marketing. It is interesting to learn how other members of the Industrial Designer Society apply their skills. I recall reading the Industrial Design article on sterilizers at the time it was published in 1965. It was and is a good solution.

However, we have an Industrial Design group responsible for human factors and appearance under my direction and an experienced marketing staff. We seldom have need for consultant help. In the event we do have an overload situation we will refer to our consultant designers file to choose the most appropriate designer for the purpose. Your resume will be a part of that file.

Thank you for your interest in our corporation.

Sincerely,



James Jordan IDSA

JJ/pc

cc: Ken Olsen ✓



7-28-69

Copy to Jim Jordan

# RSID

RAYMOND SPILMAN INDUSTRIAL DESIGN

July 24, 1969

Mr. Kenneth H. Olsen, President  
Digital Equipment Corporation  
146 Main Street  
Maynard, Massachusetts 01754

Dear Mr. Olsen:

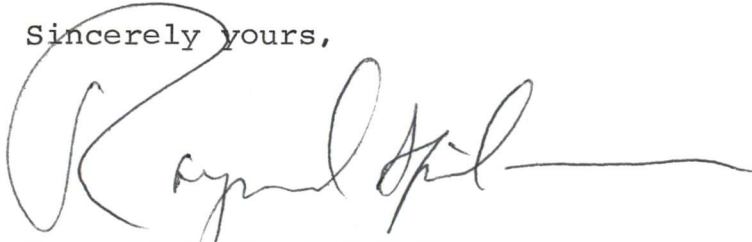
Is it possible that you might be considering re-designing your products, or perhaps you are contemplating new products? . . . Or a new Corporate Identity? We are experienced in Research and Design for the solutions to these tasks.

For example, we have recently worked with Wear-Ever, Worcester Pressed Aluminum and Androck, Inc., helping them re-evaluate their consumer products and their markets. Perhaps we could find a mutually beneficial area of service.

Since we come into your area about once a month for Androck, could we have the opportunity to discuss not only what we have done for others, but what we could do for Digital Equipment? Enclosed are a few pages from our brochure.

Would you be available for an appointment sometime during the week of August 25th?

Sincerely yours,



Raymond Spilman F IDSA

RS:j  
Enc:



Elsa

July 31, 1969

A. Roy Fogelgren, Vice President  
National Information Services Incorporated  
675 Massachusetts Avenue  
Cambridge, Massachusetts 02139

Dear Mr. Fogelgren:

As Manager of Programming, Mr. Olsen has referred your recent letter to me. I wish to thank you for your interest and the brochure on NIS.

It is our policy to do as much of our own software development as possible. From time to time we do find it necessary to seek additional help from outside our organization. I have placed your letter in our vendor file and will certainly give you our serious consideration should the need for us to seek additional help arise.

Yours sincerely,

Lawrence J. Portner  
Manager of Programming

LJP:gm



NATIONAL INFORMATION SERVICES

INCORPORATED

675 Massachusetts Avenue  
Cambridge, Massachusetts 02139

617-491-6810

RECEIVED

JUN 23 1969

KENNETH H. OLSEN

June 20, 1969

Mr. Kenneth Olson, President  
Digital Equipment Corporation  
Main Street  
Maynard, Massachusetts

Dear Mr. Olson:

It was recently brought to my attention that Digital has over 100 programmers on its staff. I am sure that, as with most companies, there is a constant need for more.

My associates and I recognized the large difference between supply and demand in EDP personnel. Therefore, one of the basic premises in founding National Information Services (NIS) was the utilization of the vast pool of talent existing in the Harvard/MIT community as an adjunct to our full time staff. This was the reason for establishing our corporate headquarters in Central Square, Cambridge.

One of the first acquisitions was that of Computer Programming Service and Information (CPSI), a company founded under Harvard Student Agencies to provide employment for students. This was an immensely successful venture, and, I might add, was done without full time management.

NIS is one of the most dynamic and rapidly growing computer companies in the Boston area capable of meeting all research and data processing needs. Other acquisitions include Star Printing Company and Becker Research Corporation.

I am telling you all this because I know NIS can play an important role in the development of Digital software systems and applications packages, and we can do it right in your own backyard. We can make available a previously untapped source of highly talented personnel. The screening process Harvard and MIT go through to select students and faculty would put most companies out of business because of the high cost. Most students are with us for four or more years (some go on to advanced degrees), which is higher than the industry average.

By supplementing our full time staff with students and faculty, we can provide unparalleled cost savings to our clients.



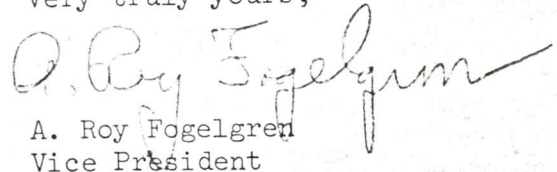
Mr. Olson, Page 2.

June 20, 1969

In summary, NIS can provide Digital with a local source of qualified personnel to design and develop software systems and application packages at economical costs. There is also the hidden benefit of acquainting tomorrow's leaders with Digital.

Enclosed is a preliminary brochure on NIS with selected resumes. I am looking forward to hearing from you so that we might investigate further a mutually beneficial relationship.

Very truly yours,



A. Roy Fogelgren  
Vice President

ARF/las  
Enclosure

DIGITAL EQUIPMENT CORPORATION

MAYNARD, MASSACHUSETTS

KENNETH H. OLSEN  
PRESIDENT

July 30, 1969

United States Department of Justice  
Immigration and Naturalization Service  
Burlington, Vermont

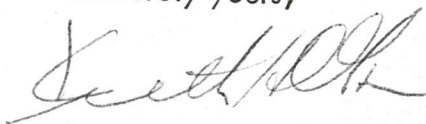
Gentlemen:

In June of 1967, we applied for and received a Training Visa for Mr. Nikolaus R. Pichler. A year ago, we had this visa renewed, and now we would like to apply for a Permanent Residence Visa for him.

When we had Mr. Pichler come to this country, our plan was to train him in our products and send him back to Germany to sell them there. We have, since then, found his background in cathode ray tube devices very valuable, and would very much like to have him stay on as an employee of Digital Equipment Corporation.

Digital Equipment Corporation started just twelve years ago, and now has 3,500 employees in Massachusetts, and a thousand in other parts of the world, and have grown to be one of the significant computer producers in this country. We feel the Company is making a contribution to the economy and good of the country, particularly in New England, and would like to have Klaus Pichler continue to be part of our team and make his contribution to our growth.

Sincerely yours,



Kenneth H. Olsen

KHO:ecc



JUN 28 1967

June 26, 1967

United States Department of Justice  
Immigration and Naturalization Service  
John F. Kennedy Federal Building  
Government Center  
Boston, Massachusetts

Gentlemen:

Mr. Nikolaus R. Pichler will be coming to Digital Equipment Corporation's  
Maynard Office for a year of training.

The training will be on our Digital Test Systems product line, and will consist of  
analog circuit design orientation, familiarization with packaging techniques and  
circuit-system integration. While undertaking this on-the-job training, Mr. Pichler  
will be working under the supervision of a Digital Test Systems senior engineer.

Upon completion of this training, he will return to our German Sales Office. The  
training is not available in our Sales Office in Germany.

Very truly yours,

Kenneth H. Olsen  
President

KHO:ccc

Enclosures



DIGITAL EQUIPMENT CORPORATION

MAYNARD, MASSACHUSETTS

KENNETH H. OLSEN  
PRESIDENT

July 28, 1969

Mr. Milton Collins  
Teradyne, Inc.  
183 Essex Street  
Boston, Massachusetts 02112

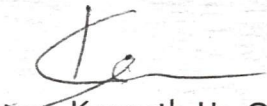
Dear Milt:

I was disappointed to learn that your letter of February 28th requesting reconsideration of the PCO retrofit costs, referenced in Irwin Jacob's letter of February 21, was not answered.

Apparently Irwin was unaware of the verbal agreement between Roger Handy and yourself concerning DEC's intent to install the ECO to correct the PC03 punch feed problem free of charge. We certainly intend to honor this commitment; however, for all PC8/I and PC8/L units, the cost to Teradyne will be those stipulated in Irwin's letter - namely, there will be no charge for those presently under contract; otherwise, \$100.00 per machine for the M710D module, plus standard hourly labor charges.

It is unfortunate that this matter dragged on for so long, but we are prepared to implement these changes at your convenience.

Sincerely yours,



Kenneth H. Olsen

KHO:ecc

cc: Mr. Nick J. Mazzaresse  
Mr. Irwin Jacobs  
Mr. Roger Handy



*7-2'*  
*Nick Mazzarese to take care of*  
**TERADYNE**

11 July 69

Mr. Kenneth Olson  
Digital Equipment Company  
146 Main Street  
Maynard, Massachusetts

Dear Ken:

Today the first Field Service Report was received for the work done on the PCO modification at Sylvania. This modification was requested by Teradyne.

I have authorized Teradyne to pay this bill, although I am perturbed that repeated requests for reconsideration of the costs involved were never answered.

You will recall that after Irwin Jacob's letter of February 21, 1969 was received that I wrote immediately and asked that DEC reconsider the costs since we had informed DEC over two years ago that this change was necessary. About one year ago I demonstrated to DEC programmers that PAL cannot work properly unless the fix was made. On March 19, I wrote Irwin Jacobs again. To date no acknowledgement or information regarding reconsideration has been received by Teradyne.

Attached is a copy of the letter and bill from DEC for the modification for your information.

Yours truly,

*Milton Collins*  
Milton Collins

cc: Alex d'Arbeloff  
Irwin Jacobs  
Cliff Pitz  
MC/lr



RECEIVED  
COMPUTER ENGINEERING

JUL 11 1969

TERADYNE

July 9, 1969

Teradyne, Inc.  
183 Essex Street  
Boston, Massachusetts 02100

ATTENTION: Mr. Milt Collins

Dear Mr. Collins:

Enclosed please find copy of Field Service Report indicating work performed on your computer system. This report has been completed to reflect actual charges. We would appreciate your forwarding this report to your Purchasing Department with the intent of generating a Purchase Order.

Please direct your Purchase Order to the Maynard Field Service Department, Attention: Cliff Pittz. Should you have any questions, do not hesitate to contact me. (Extension 2492 or 2491)

Sincerely,

*Cliff Pittz*

Cliff Pittz  
Maynard District Service Manager

CP/jb

Enclosures

OK to Pay

*Milt Collins*







digital

146 Main Street  
Maynard, Massachusetts

July 25, 1969

Mr. Bruce W. Tennant  
Marketing Administrator  
Battelle Development Corporation  
505 King Avenue  
Columbus, Ohio 43201

Dear Mr. Tennant:

I am responding to your letter of June 19, 1969 written to Mr. Ken Olsen regarding the "Coup par Coup" paper tape device. DEC actively pursues any devices which would improve its product line and would be very much interested in discussing with you the concept and limitations of your invention.

I have called your office and found you on vacation. I inquired about the discussion dates of August 4-15 which you had mentioned in your letter. I would suggest that we talk about the device further by telephone and tentively schedule a meeting for August 8.

Please call me as soon as you return so we may be able to determine the extent of our interest.

Sincerely yours,

*Edward B. Corell*  
Edward B. Corell

7-15 Joe H. Amour to answer

# The Battelle Development Corporation

505 KING AVENUE COLUMBUS, OHIO 43201 AREA CODE 614 TELEPHONE 299-3151

June 19, 1969

Mr. K. H. Olsen, President  
Digital Equipment Corporation  
Main Street  
Maynard, Massachusetts 01754

Dear Mr. Olsen:

By way of introduction, I represent The Battelle Development Corporation (BDC), a subsidiary of Battelle Memorial Institute of Columbus, Ohio. Battelle, a leader in the field of research; and BDC, as its invention-development subsidiary, are further explained in the enclosed brochures.

I am writing to you concerning an invention made by the Battelle Staff in the field of paper tape punching devices. This device, which we call "Coup par Coup" (French for Blow by Blow), has been under development for the past three years at Battelle's Geneva Laboratories.

"Coup par Coup" (CpC) described simply is an electromechanical device capable of converting a continuous rotary movement into a discontinuous (on command only) reciprocating stroke. Because of its extreme simplicity, it is very difficult to briefly describe with words. I have enclosed a schematic showing the various stages of operation of CpC.

Battelle's experts in mechanical devices have analyzed CpC and have compared it to the many card/tape punching systems available today. Listed below are a few of the significant features of CpC:

1. Extreme simplicity of parts. Very low manufacturing cost.
2. High speed of operation. Speed can be varied from 0-250 strokes per second.
3. High reliability. Test unit has performed 0.5 billion operations without error.
4. The device experience low inertial force changes; therefore, wear is minimal and noise is very low.



June 19, 1969

5. The size of the unit can be varied according to the task required. Enclosed is a photo of the eight-track tape puncher. This unit occupies a volume of 7cm x 7cm x 6cm.

BDC has funded research at Battelle-Geneva to demonstrate technical feasibility and has built operating prototypes. In addition, BDC has established the necessary patent protection.

In accordance with our standard practice, we are now seeking industrial licensees who have the capability to produce and commercialize this invention. We are contacting several selected companies to determine their degree of interest in utilizing this invention.

I would be interested in discussing the possibility of your organization becoming a licensee of this invention. A meeting could be arranged where this opportunity could be discussed in greater detail. We have set aside the periods of July 7-11 (when a member of the Geneva staff will be in Columbus) and August 4-15 for initial company discussions. If you are interested, a meeting could be scheduled during this time.

Please advise me if you are interested.

Sincerely yours,

*Bruce W Tennant*

Bruce W. Tennant  
Marketing Administrator

BWT/jd

Enclosures (3)



July 24, 1969

Professor Harry E. Gove, Director  
Nuclear Structure Research Laboratories  
The University of Rochester  
River Campus Station  
Rochester, New York 14627

Dear Harry,

Ken Olsen, who is presently on vacation, has requested that I respond to your letter of July 3. We were greatly disappointed to learn that the modifications to your PDP-6 monitor system were not completed in June as originally scheduled. We were fully aware that system improvements were necessary in order for visiting summer personnel to benefit from the increased capability of the upgraded system. There is absolutely no reason why the task should not have been performed as scheduled.

Two years ago, when we modified the standard TS monitor to incorporate one satellite PDP-8, we told you we would extend the monitor capability to provide access by multiple PDP-8's when the need arose. Since that time, of course, the PDP-6/10 monitor has been significantly improved, having grown in various stages from a 2 series to a 4 series monitor. Naturally, for the NSRL to take advantage of these overall improvements now requires that we check out the previous modifications on the 4 series monitor as well as implement the extensions. This represents considerably more effort than we customarily provide as part of our PDP-10 software support. However, because of our prior commitment coupled with our recognition of your accomplishments to date and your help in convincing Munich that a compatible PDP-10 system could best solve their problems, we are happy to provide you with the necessary 4 series modifications. We are simply concerned about the delay.



Dave Plumer, who made the previous modifications and who remains our most competent man today, has been assigned the responsibility to fulfill our obligation. By this time, I believe he has informed you of his plan. I assure you that he will adhere to the revised schedule. Rod Belden will assume responsibility for coordinating this effort.

Complex monitor software such as that supplied with the PDP-6/10 equipment continues to be improved and up-dated. To make the most effective use of the new monitor, we urge you to maintain a systems programmer on your staff. Thereby, our software support personnel can work closely with NSRL to insure that you are able to realize benefit from future improvements.

We are impressed with the skills of your lab and are pleased to hear of the papers which have been presented, describing the work at NSRL using the PDP-6. We look forward to seeing results of the effort of the Rochester and Munich systems.

Sincerely,

Roger Handy  
Regional Sales Manager

RH:sej

cc: Ken Olsen ✓  
Rod Belden  
Larry Portner  
Leo Shpiz  
Dave Plumer



THE UNIVERSITY OF ROCHESTER  
RIVER CAMPUS STATION  
ROCHESTER, NEW YORK 14627

*Roger Hardy*  
*cc: Dave Plummer*

NUCLEAR STRUCTURE  
RESEARCH LABORATORY

July 3, 1969

Mr. Kenneth Olsen, President  
Digital Equipment Corporation  
146 Main Street  
Maynard, Mass. 01754

RECEIVED

JUL 7 - 1969

KENNETH H. OLSEN

Dear President Olsen:

I ask for your help in resolving very serious problem we have in our dealings with your Soft-Ware Group. Eleven months ago, we purchased an additional 16K PDP 6 Memory and equipment to interface our second PDP8 to the PDP6. Since that time we have been negotiating with your software Department in an effort to modify our time shared monitor. The major problem has been that we do not possess either the listing or the Source tapes for the Time Shared Monitor provided in the original contract. Prior to last summer we had insufficient memory to assemble a monitor and Mr. David Plummer took all our original Source tapes back to Maynard when he assembled our original Monitor. Some time after that the library at Maynard misplaced one of these Source Tapes and it has not yet been located.

Our systems programmer, Mr. Harold Dixler, worked from September 1968 to April 1969 attempting to modify our present monitor. His problems are adequately described in the attached copy of his letter of April 23 to Mr. Rod Belden. As stated in his letter, Mr. Plummer promised to have a Mr. Agvald make the necessary changes to a 4.0 series monitor sometime during the month of April. At the Spring Computer Conference Mr. Dixler was introduced to a Mr. Bob Taylor who was replacing Mr. Agvald on this project. Mr. Leo Spitz visited Rochester to finalize the plans for Mr. Taylor to visit Rochester. On June the 24th both Leo Spitz and Bob Taylor visited Rochester and discussed the details of the changes required for the new monitor. They promised Mr. Taylor would deliver a 4.0 Monitor to test on our system during the week beginning July the 7th. On July 1st we called Mr. Taylor to confirm the date of his arrival and were informed that Mr. Plummer had withdrawn Mr. Taylor from this project. Further inquiries reveal that we would have to modify the Monitor ourselves.

This last minute reversal has placed us in a worse predicament than existed at the start of the negotiations 11 months ago. Messrs. Yonda and Bellenger, our Computer Engineer and Computer Technician, left us on April 1, 1969 to form a new company. Mr. Dixler has worked part time since then training a new system programmer. This new programmer has just been reclassified 1-A



and probably will be drafted in the near future. Thus, at the present time we are in a particularly vulnerable position in that even if we had all the Monitor Source Tapes we could not make the necessary modifications. The experimental program at the Nuclear Structure Research Lab has been severely restricted during the past six months due to the lack of an adequate Time Shared Monitor. We appreciate that DEC can not be expected to give unlimited software support. However, we would at least expect that we have one complete set of Monitor Source Tapes as promised in the original purchase contract. We have made every effort to make the necessary monitor modifications ourselves all to no avail due to difficulties we are not responsible for. It is particularly distressing to have DEC renege at this late stage after repeated promises to perform this task for us. This latest development requires your intervention to effect an early and satisfactory solution.

In the past we have been happy in our dealings with Digital Equipment Corporation. We have repeatedly praised and recommended our Data Acquisition system to many physicists throughout the world. It was our invitation to Dr. Skorka to have him use the Rochester system for six months that persuaded him to select the PDP10 system for Munich. The NSRL has an order with you for additional DEC Tape drives, an equipment proposal pending with the National Science Foundation requesting among other things \$148,000 worth of DEC Equipment hardware and a second proposal submitted to the Atomic Energy Commission which includes \$394,500 for computer equipment for data acquisition and accelerator. The laboratory is only a small part of the University of Rochester. We hope that our fruitful association with Digital Equipment Corporation can be continued into the future, in a spirit of reliance.

To decrease confusion I would like all future correspondence concerning the computer system directed to Dr. Douglas Cline who has a responsibility for our computer system. Would you also please send him a copy of your reply to this letter. I am sure that you want to know about our present predicament. I look forward to your answer to this problem.

Sincerely,



H.E. Gove  
Director and Professor  
of Physics

HEG:sb

DIGITAL EQUIPMENT CORP.  
Rochester Office

Attention of Mr. Rod Belden

Dear Rod,

I am sending to you, as requested over the telephone on Tues., Mar. 22, 1969, a description of the new monitor project for the PDP-6 computer at the Nuclear Structure Research Laboratory of the University of Rochester.

As you know, since Sept. 1968 the NSRL has had two PDP-8 computers interfaced to the lab's PDP-6 computer. Previously only one PDP-8 was so connected. The only remaining task that had remained to be done at that time was the seemingly easy job of providing a software change to the PDP-6 time-share monitor in order to accept the new PDP-8. This however, was not to be so easily accomplished.

Many obstacles came up in the ensuing months that have caused the project to still be incomplete. One major problem was the lack of effective communication through DEC at Maynard which caused much wasted time and money. As you are probably aware of, communicating with anybody at the main office is difficult enough, but to try and converse relevantly with David Plummer is a task of a greater magnitude. As an example, I was assured by David that patching our present monitor would do the job. As it later turned out this was impossible because he had neglected to leave us at Rochester an up-to-date listing of our monitor. To make matters worse, even if there was such a listing, he later told me it would be impossible without a reassembly of the monitor. Since the core of our PDP-6 was only 16k at the time this was quite impossible for me to do. Next David suggested I make the necessary changes in the monitor source tape myself and send it to DEC to be assembled. This might have been satisfactory except that we never had a copy of the monitor source tapes, and to confound the problem, the librarian at DEC said that there was no such source for our 2.8 monitor available.

Plummer then resourcefully advised me to try to make the Rochester modifications to the latest DEC PDP-6/10 monitor 2.18, again assuring me that this could quite easily be learned. After finally locating a source listing of the PDP-8 device coding changes for a PDP-6 monitor system with the aid of Peter Hurley, for the next few months I tried to initiate myself into the mysteries of the monitor BUILDER system. After two trips to Maynard, and the purchase of source tapes and listings, it turns out that it was still not possible to make the required monitor changes because it would be necessary to change the

4/23/69  
ROCHESTER

APR 25 '69

OFFICE



BUILDER program itself. Nobody else at DEC other than David seemed to be able to assist me past this last insuperable hurdle.

When I finally contacted Mr. Plummer again, after his being incommunicado in Australia for a month, he promised that something would be done to help. As he termed it, the PDP-6/10 monitor BUILDER system had become a "debacle", not only for us but for many others. With these comforting remarks he then promised to contact me again so that he could come to Rochester to make the changes himself to a new 4.0 monitor system. That was in March, 1969, and he said that the changes would be done in April. He never did call back and was almost impossible to reach again. Two weeks later I did contact him again, and this was when I learned that Hakan Agvald was put on our project and would do what David said needed to be done. I have yet to hear from him, even after calling DEC at Maynard a half dozen times.

By now the situation has become quite acute. The laboratory users have been clamoring for months for the extra PDP-8 terminal, especially since an extra 16k of memory has been added to the PDP-6. Since Tony Yonda has since left the laboratory, and I am only working part-time there, the laboratory director, Dr. Cove, has become anxious about the project. What is more, a great backlog of on-line experiments has built up in the past six months due to failures of our tandem accelerator. Now that it is in good condition again, the PDP-6 computer will be virtually dedicated to only on-line experiments plus one other user job. This would make it quite difficult to install and test a new monitor system unless something is done about it right away.

I am therefore asking for you to intercede for me with the proper channels to get this long overdue project completed. Furthermore, I think compensation should be made to the laboratory for the wasted time and the excess of \$300 spent on transportation and library purchases that have gotten us to this impasse. I realize that I should have gone through your office sooner, but I was misdirected by those at Maynard when the problem first came up. A solution is urgently needed!

Very truly yours,

*Harold Dixler*

Harold Dixler  
Systems Programmer, NSRL





July 23, 1969

Mr. George Lake  
Director Computing Center  
Natural Sciences Centre  
University of Western Ontario  
London, Ontario, Canada

Dear Mr. Lake:

Our president, Mr. Kenneth Olsen, has asked me to reply to your letter to him of July 9th. I have been PDP-10 Product Line Manager since prior to the time your PDP-10 order was placed and your installation is well known to me.

I can certainly understand how you might feel that you were being discriminated against because of the problems that you have encountered in your dealings with us. I would like to assure you, as strongly as I can, that such is not the case; in fact, quite the reverse is true. We entered into a rental agreement with the University of Western Ontario specifically because we considered an installation at the University to be important to our PDP-10 business in Canada. We felt it to be a sound business decision to make an exception to our general corporate policy of not renting equipment and all of us at Digital Equipment Corporation continue to feel that the decision was a sound one. As you pointed out in your letter to Mr. Olsen, prospective PDP-10 customers have signed orders with us as a result of discussions with you and observation of your system. There is no possible connection that I can draw between any problems that you've had with Digital and the fact that your system is on rental. There are no procedures or policies which make rental systems less attractive to anyone in the Corporation once the sale has been made.

Digital Equipment Corporation's reputation has been built largely upon a base of satisfied customers. I can only pledge to you that we will do our best to solve any problems that exist in our relationship with you so that we may once again count you among our satisfied customers.

By the time you receive this letter you should have received your copy of the reentrant monitor. There are a number of reasons why the monitor is late. In summary, they are internal shipping delays within our firm since its release for shipment on June 23. We have taken the following step to try to minimize this problem in the future: A postcard



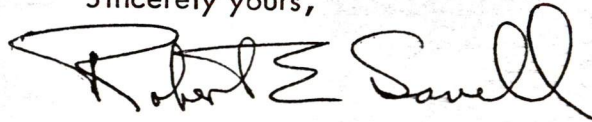
July 23, 1969

will be sent out at shipment time to alert customers that a shipment is due. In addition, all software support specialists will be instructed to check with their customers within a few days of shipment to make sure that the shipments have arrived. If not, they will take appropriate action to solve the problem.

The reason that your second disk has not been shipped yet is caused by the complications resulting from our inability to get a reasonable flow of disks from Burroughs Corporation, our disk supplier. Their failure to deliver disks in any reasonable quantity whatsoever from the middle of December until the middle of May resulted in cancellation and re-scheduling of many PDP-10 orders. This caused changes in the production schedule, sometimes on a daily basis, to compensate for these problems. The result of this process was that the delivery queue for the disks got out of its proper order. Our flow of disks from Burroughs is still very uncertain and the reject rate of these disks is still very high. I estimate that delivery will be another two to three weeks at our present rate of output.

Please do be sure that Jack Richardson is aware of any problems that may arise in the future. Should you require further assistance, please write or call me.

Sincerely yours,

A handwritten signature in dark ink, appearing to read "Robert E. Savell". The signature is fluid and cursive, with the first name "Robert" and last name "Savell" clearly distinguishable.

Robert E. Savell  
PDP-10 Product Line Manager

RES/bwf

cc: K. Olsen  
D. Doyle  
W. Segal  
J. Richardson



7-14-69  
*Copy to Win Handle to ans.*



# The University of Western Ontario, London, Canada

Faculty of Graduate Studies  
Computing Centre

July 9, 1969

Mr. K. Olsen,  
President,  
Digital Equipment Corporation,  
Maynard Mass. 01754  
U.S.A.

Dear Mr. Olsen:

I am writing you this letter (at some risk of being branded a chronic complainer) to express my deep concern at what appears to be discrimination against the PDP-10 installation in this university.

As you are no doubt aware we, in common with other DEC customers, have been anxiously awaiting release of the reentrant monitor for the PDP-10 to repair some of the faults in the older monitor. Our installation, in particular, has also been awaiting delivery of a second swapping disc ordered in June, 1968.

While attending a reception in honor of the opening of a new PDP-10 installation in Toronto yesterday, I discovered that the installation had received an official release of the new monitor some two weeks ago and further I noted that they had two discs in operation. We do not yet have the new monitor nor can we ascertain with any reliability the delivery date of our second disc. The installation in Toronto was placed on order some time after our own disc order and that PDP-10 was selected, in part, as a result of observation of the PDP-10 system here.

As an academic institution we perhaps complain more than is justified on some occasions. We are more prone to believe promises and expect our suppliers to live up to those promises than commercial organizations may be. We also recognize that as DEC's only major rental customer we are regarded as very much second class citizens by the company. I feel, however, that as the first PDP-10 installation in Canada we deserve rather better treatment than we have received to date.





# The University of Western Ontario, London, Canada

Faculty of Graduate Studies  
Computing Centre

(2)

I am aware of your problems in obtaining delivery of hardware from your vendors and the organizational problems involved in making major software releases. I also realize this letter can have little or no impact on our present situation. It is my earnest hope that in bringing this matter to your attention, we may expect better treatment on future occasions.

Yours truly,

G. T. Lake,  
Director, Computing Centre

FTL/ft

c.c.

Mr. D. Doyle, General Manager,  
Digital Equipment of Canada,  
Carleton Place, Ontario



digital

July 23, 1969

Dr. Ludwig Braun  
Brooklyn Polytechnic Institute  
333 Jay Street, Room 408  
Brooklyn, New York 11201

Dear Professor Braun:

I would like to take this opportunity to thank you for your order of two large TSS/8 systems and for the BASIC compiler you developed on your four PDP-8/I's.

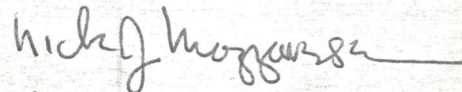
As you know, we have had problems with quantity production of the RF/RS08 disks. These problems are not yet fully resolved. Our current schedule has slipped further so that it does not appear possible to deliver your systems on the promised dates with RF/RS08 systems. Norman Doelling has proposed that in order to enable you to get your system on time for the Fall term, we construct one of your systems with a DF-32 (controller and disk) and two DF/DS-32 disks.

We believe that this will offer you the ability to start the program on schedule. The DF/DS-32's will be replaced with an RF/RS08 at the earliest possible time.

Mr. Glazer will be in contact with you concerning this proposed solution to your problem.

Thank you again.

Very truly yours,



Nick J. Mazzaresse  
Vice President  
Group Manager

NM/cs

cc: K. Olsen ✓  
N. Doelling  
E. Glazer



7-18 Arm Doelling to add over Dick's sig.  
POLYTECHNIC INSTITUTE OF BROOKLYN-GRADUATE CENTER  
ROUTE 110-FARMINGDALE, NEW YORK 11735-MYRTLE 4-5500

July 11, 1969

Mr. Kenneth Olsen, President  
Digital Equipment Corporation  
146 Main Street  
Maynard, Massachusetts 01754

Dear Mr. Olsen:

I hope that you will forgive my presumption in writing to you to ask for your assistance. I am responsible for the Huntington Computer Project (an NSF-funded project), whose purpose is to explore the ways in which computers may be used at the high-school level to improve instruction in biology, chemistry, mathematics, physics, and social studies. (I presented a paper at the Fall 1968 DECUS meeting describing the purposes of the project.)

This Spring, we made a decision to acquire two DEC TSS/8's to provide the computer service which our participating high schools need. We have arranged with the Call-a-Computer Company to lease these machines for one year. I made this decision, primarily because I am convinced that the TSS/8 is a machine which is ideal for high schools. Because the TSS/8 is a new machine, we, of course, are taking something of a risk; however, I am convinced that this risk is minimal, and I am certain that I will get support from your people to reduce the risk even further.

This project has received a great deal of attention from people all over the United States, and from Europe (including an iron-curtain country), and is considered at NSF to be a very important project. Many people expect that we will have a significant impact on the future of secondary-school education. Among other things, it is my hope that we will be able to demonstrate that the TSS/8 can serve high schools effectively.

My only real concern about my decision to use TSS/8's in our project this year is that we may not get our machines delivered on time. The school year starts in early September, but we cannot expect delivery of our two machines until September 15, and October 15, respectively. Neither Mr. Glazer nor Mr. Doelling of your corporation appear to have any great confidence in these delivery dates. Even if we do get our machines on



July 11, 1969  
Page 2

Mr. Olsen:

these dates, our project will be seriously delayed. If there is any slippage, we may jeopardize our chances for success.

Many of our high-school teachers still are uneasy about computers, and will be very disheartened by any delays, and by any start-up malfunctions which are likely to occur.

I should like to appeal to you for your help in getting as much improvement in our delivery schedule as is possible, so that we can get the project off to a smooth start in September.

I think that it is appropriate for me to point out that I have no complaints about either Mr. Glazer or Mr. Doelling. On the contrary, they have been most helpful to me during the past year, and have done everything within their capability to assist in the present situation. It is as much because of my confidence in them, as in the equipment, that we have decided on the TSS/8.

I am enclosing herewith a copy of a letter which you may find interesting. Dr. John Lehmann is our project supervisor at NSF.

I shall be happy to provide you with any additional information which you require, or to visit Maynard personally, if you feel that such a visit would be helpful.

Sincerely yours,



Ludwig Braun

Enc.

cc: Dr. Visich  
Mr. Eli Glazer  
Mr. Norman Doelling



F

DEPARTMENT OF ELECTRICAL ENGINEERING

June 18, 1969

Dr. John Lehmann  
Office of Computing Activities  
National Science Foundation  
Washington, D. C. 20550.

Dear John:

I thought that I should bring you up to date on our activities in the Huntington Computer Project. I should like to tell you about a couple of agreements we have reached which, I think, will be highly beneficial to our Project and its purposes.

First, we have decided to lease two 16-user Time-Shared 8's to supply our computer service for next year. We made a decision in favor of the Time-Shared 8 rather than the Hewlett Packard 2000 primarily because of the difference in cost. The TSS/8 costs approximately \$60,000 and the Hewlett Packard 2000 costs approximately \$95,000 for an equivalent configuration (whatever equivalent means). During the Spring Joint Computer Conference in May, I had the opportunity to work with both machines and found that the Hewlett Packard was significantly faster than the TSS/8; however, I do feel that the TSS/8 is fast enough to handle the computer activities that our high schools will carry out. While I was in the Boston area, Mr. Eli Glazer of Digital Equipment Corporation arranged for me to go to Maynard one evening where I had complete control of the entire time-shared 8 until about midnight. During this period, I ran up to eight terminals simultaneously with each terminal doing a variety of things under my control. I would have preferred running with twelve, but there were only eight terminals available. None the less, I am convinced that the TSS/8 will do the job that is necessary.

As a result of your expression of concern about the 12-bit word on the TSS/8 compared to the 16-bit word on the HP-2000, I explored the way in which arithmetic is done on both machines, and discovered that on the TSS/8, floating point arithmetic is done with three 12-bit words so that, in effect, there is a 36-bit word; whereas, in the HP-2000, the floating point word size is 32 bits because they string together two machine words. Undoubtedly one reason that the TSS/8 is significantly slower than the HP-2000 is that there is a 3-word fetch compared to a 2-word fetch. There are two aspects



of the speed of the TSS/8 which give me some cause to hope for significant improvements in its performance in our configuration next September. The first of these is that the extended arithmetic feature should be available for the TSS/8 by early Fall and I'm told that that should give us a factor of two, or more improvement in machine speed. The second, and perhaps more significant, speed improvement should arise because the configuration which we have ordered will have either 20- or 24-K of core. The TSS/8 requires 8-K of core for the operating system and compiler and allocates 4-K of core to each user. With a 20-K core, we could have three users simultaneously resident and executing.....and with a 24-K core, we could have four users simultaneously resident and executing. This means that, in effect, either three or four people simultaneously will have their own private PDP/8. I don't know what the statistics of this situation are, but I suspect that with 20 simultaneous users, there will not be very many times when more than four people will simultaneously be in execution.

As part of the deal for the TSS/8's, Digital has agreed to supply us with one full-time person who will be completely under our control. This person will be available to us for the entire school year. We have asked that this person, if possible, have high-school teaching experience and have some proficiency with computing. It appears likely that one of the teachers we had in our summer institute last summer, who has since left the Huntington Computer Project, may be available for this purpose. It will be this person's responsibility to maintain close contact with the teachers on an individual basis, help them write their programs, write programs for them, and otherwise guide them in the Project on a daily basis and smooth the path for them to make it easier for them to operate within the Project. We also have been given assurance by DEC that if any software developments are necessary, that they will provide us with some back-up.

In addition to the foregoing arrangement with DEC, we have concluded an agreement with Call-A-Computer to lease the two TSS/8's from them for 12 months. Originally, we had intended to lease the machines from a third party, Leasco Company, but have reached an agreement with Call-A-Computer which is preferable to that we could have arranged with the leasing company in several regards. First, because Call-A-Computer is a relatively large purchaser of DEC equipment, they are able to take advantage of a more substantial discount than most people have available. Although the actual lease price has not been finalized, we have been assured by Call-A-Computer that the discount benefit will be passed along to us at least in part. Second, C-A-C has agreed to locate our two machines on their premises in Melville, Long Island, and to provide the staff which is necessary for the operation of the machine at no extra cost to the Project. They have agreed also to absorb the maintenance costs -- costs which the Project otherwise would have borne. A third advantage which is related to the second is that the Project staff will not have to shoulder the responsibility for running



June 18, 1969

a computer center, a responsibility with which neither Dr. Visich nor I have any familiarity. A fourth, and perhaps subtle, advantage of this arrangement relates to the fact that C-A-C is simultaneously a large customer of DEC and a computer service bureau which is very much interested in the educational computer market in the future.

These things taken together, in my opinion, give us as much assurance as we have a right to expect, that our machines will work well and continuously. Another advantage to this relationship with C-A-C, in my mind, is the feeling of comfort which I have from two years of experience working with these people and of obtaining from them a great many assists which I had no right to expect nor to request. It is our intention during the school year to keep careful records of the performance of these two machines and to explore various ways of utilizing the additional core which I mentioned earlier. It is possible, for example, that machine performance may be improved more by using one of the 4-K segments of core to keep the system catalog core resident rather than as an additional user area. It is our hope that our experience with these machines next year will give some substantial indication of the degree to which machines like the TSS/8 might be applicable as stand-alone systems within individual school systems or among groups of school systems.

I hope that the arrangements which I have described above are acceptable to you. We certainly would be anxious to hear of any suggestions you may have for alternatives or for improvements in the arrangements which I have described.

I think that both Call-A-Computer and Digital Equipment Corporation will be making very substantial contributions to the success of this Project and I believe that there should be some significant recognition of these contributions. I have no idea what forms of recognition are appropriate in such cases; however, I hope that you will not object if we make special note of them in any presentation which we may make regarding this Project.

I hope that you will be able to visit us this summer during our summer workshop to see how things are going and to make suggestions regarding the future course of the Project. We will be running from June 30 through August 8, and would be delighted to have you visit us at any time during that period. Please let me know if you or anyone from your office will be visiting and we shall make arrangements for living accommodations (better ones than the one which we made for you last time, if you wish).

Sincerely,

*Lud*

Ludwig Braun  
Director  
Muntington Computer Project

CC: Dr. M. Visich



July 22, 1969

C  
O  
P  
Y

Mr. Irving Goldstein  
President  
David Warren Equities Corp.  
Suite 700-34 Fox Pavilion  
Jenkintown, Pennsylvania 19046

Dear Mr. Goldstein:

I want to thank you for your letter of July 3rd concerning your clients' interest in discussing acquisition possibilities with our Company. However, I feel that we have to give a negative answer to your inquiry.

We see the plans for DEC laid out quite clearly before us, and do not now see the need for making corporate ties.

Very truly yours,

Kenneth H. Olsen

KHO:ecc



DAVID WARREN EQUITIES CORP. *Suite 700-34 Fox Pavilion, Jenkintown, Pa. 19046*

AREA CODE 215 • 886-0460

July 3, 1969

IRVING GOLDSTEIN  
President

Mr. K.H. Olsen, President  
Digital Equipment Corp.  
146 Main Street  
Maynard, Mass. 01754

Dear Mr. Olsen:

Several of my clients, major New York Stock Exchange companies, have evinced interest in acquiring divisional spin-offs that would fit into their present or long-range corporate planning. My clients are in various fields of activity and their sales range is generally from \$25 million to \$1 billion.

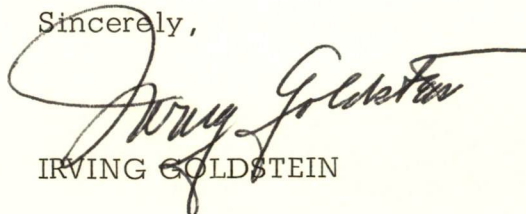
If your present management would care to divest themselves of a company or subsidiary, it is quite possible we could structure a plan that would warrant your consideration; one that could ultimately result in the best interests of your shareholders. The divested company would be placed in the best possible environment so that the business would prosper and the personnel involved would continue to have jobs and economic opportunity. These transactions could be made for cash or stock or a combination of both and primarily with the understanding that the present management would remain.

This, definitely, is not a blind proposal letter and I am not "fishing" for information. My interests and those of my clients are genuine as per the enclosed copy of the advertisement I recently placed in the Wall Street Journal.

I can assure you that any information forwarded will be held in strict confidence. If there is interest on your part to further explore this situation, I can arrange a meeting between principals at a time and place mutually convenient.

The courtesy of an early reply will be appreciated.

Sincerely,



IRVING GOLDSTEIN

IG:hg  
Encl.



BUSINESS OPPORTUNITIES

BUSINESS OPPORTUNITIES

**\$100,000,000.**

## **AVAILABLE FOR ACQUISITION**

Will purchase controlling interest or a company in its entirety for cash or stock or a combination of both.

Interested in only profitable and well-managed private or listed companies in any field.

Acquisition or merger could result in your joining a larger, stronger and diversified major listed company able to provide you with compatible interests, strengthen your company's operations and could very well prove to be one of the fastest and most sensible ways for your concern to increase its growth and earnings potential, net worth and the value of your company's stock.

Acquisitions must be made with the "blessings" of the present management, who must remain.

For evaluation, replies should include two sets of financial and product data, which will be held in strict confidence.

**BOX O-392, THE WALL STREET JOURNAL.**



July 22, 1969

C  
O  
P  
Y

Mr. Don Wallace  
President  
Don Wallace & Company  
1508 LTV Tower  
Dallas, Texas 75201

Dear Mr. Wallace:

I want to thank you for your letter of June 26 concerning your client's interest in merging with our Company. However, I feel that we have to give a negative answer to your inquiry.

We see the plans for DEC laid out quite clearly before us, and do not now see the need for making corporate ties.

Very truly yours,

Kenneth H. Olsen

KHO:ecc



# DON WALLACE & COMPANY

FINANCIAL AND MANAGEMENT CONSULTANTS

---

1508 LTV TOWER  
DALLAS, TEXAS 75201  
747-8375

June 26, 1969

Personal & Confidential

Mr. K. H. Olsen, President  
Digital Equipment Corporation  
146 Main Street  
Maynard, Massachusetts 01754

Re: Steel Service And Processing Center  
Interested In Merger Or Acquisition

Dear Mr. Olsen:

Our client is a multi-plant steel service center with extensively diversified steel processing facilities and capabilities all located in the Southwest. Annual sales are around \$7,000,000 with profits in the range of 2.75% net after depreciation, interest, income taxes and all reserves. The company has been in business well over fifteen years and has enjoyed a phenomenal growth.

The net worth of our client at fiscal year-end will be one million dollars with a superior credit rating. Short-term bank lines are adequate for current operations.

The key operating personnel are all young, dynamic and exceptionally qualified in their various areas of responsibilities. The average age of the operating management group is thirty-two. For a company of its size it has an unusually outstanding management group. The two controlling stockholders are active in the business and are fifty years of age. Their experience and management acumen is superior both in quality and quantity.

Our firm has been associated with this company more than a year and as a result of our analysis in depth we have determined that the long-term capital (equity or debt) available to the company is not sufficient to adequately take advantage of the many growth and expansion opportunities currently available to them.

We have therefore recommended to the controlling stockholders that we be permitted to seek a possible merger or acquisition with a much larger



Mr. K. H. Olsen, June 26, 1969, Page Two

firm who would have the necessary capital and aggressive management to help the company take advantage of these opportunities.

We have been instructed to proceed in this matter with the utmost secrecy for obvious reasons, both internal and external.

The company may be acquired for a figure which could include all stock, all cash or a combination thereof. It is the desire of the controlling stockholders that the acquiring company be aggressive and of sufficient size to immediately grasp the growth and expansion potentials currently available.

The acquiring company must be listed on one of the national stock exchanges. We would not object if the acquiring firm were in a completely different industry, so long as their management could recognize and assist in the implementation of the long-range expansion program which we have developed for our client. This program has been endorsed enthusiastically by the management of the company and their bank.

This letter is being addressed to you as a personal and confidential matter. We will not negotiate nor discuss any proposed merger or acquisition with anyone other than a senior principal of a prospective acquiring firm. Brokers or intermediaries will not be considered.

Don Wallace & Company has been in business in Dallas over fifteen years and our integrity, experience and capabilities will bear the most rigid investigation. Our bank references are available upon request. You would not be expected to pay any portion of our fee.

If your firm has a sincere interest in our client company, will you kindly address a letter to me marked "Personal and Confidential" outlining the extent of your interest. Please include a copy of your latest consolidated annual report in your reply.

Sincerely yours,



Don Wallace, President

DW:jy



July 18, 1969

Mr. Gerard L. Kearns  
Group Product Manager  
Analytical Department  
Picker Nuclear  
1275 Mamaroneck Avenue  
White Plains, New York 10605

Dear Mr. Kearns:

We are sorry to hear that you were so displeased with our new discount schedule. We decided to make this change after much consideration, and did it to more nearly reflect our cost. We never expected it would receive such negative reaction from you.

I want you to know that we took your letter seriously because we do have good financial control of our operation. At times, certain of our costs may be higher than the competition, but in return we believe we offer stability and capability that few of our 64 small computer competitors can offer.

We hope you will understand our situation in this matter, as we look forward to a continuing relationship with Picker Nuclear.

Sincerely yours,

Kenneth H. Olsen

KHO:ecc

cc: Mr. Nick J. Mazzaresse  
Mr. William Long  
Mr. Robert Jones, Cleveland Office



# PICKER NUCLEAR

EXECUTIVE OFFICES

1275 MAMARONECK AVENUE  
WHITE PLAINS, NEW YORK 10605  
914 948 0080

July 2, 1969

*7-14  
Bill Long to a reviewer*

**RECEIVED**  
JUL 7 - 1969  
KENNETH H. OLSEN

Mr. Kenneth Olsen, President  
Digital Equipment Corporation  
146 Main Street  
Maynard, Mass.

Dear Mr. Olsen:

On February 12, 1969 I wrote you concerning my belief that Digital Equipment Corporation no longer encouraged OEM accounts. I subsequently met with Mr. Mazzaresse and was assured that DEC had not adopted this philosophy.

I was shocked today at the new discount schedule for OEM's. Several DEC employees had stated previously that the revisions were aimed at eliminating extraordinarily high discounts to customers who purchase few machines. In reality, however, the new schedule severely discriminates against larger OEM accounts - in fact, the larger the quantity purchased, the greater the difference between the old and new prices.

Below are several examples of the impact of the new schedule:

<u>No. Units</u>	<u>Old</u>	<u>New</u>	<u>Change</u>	<u>Dollar Change Per Machine</u>	<u>Course Value Per Machine</u>	<u>Net Change Per Machine</u>
2	5	4	-1	-\$150	\$300	+\$150
5	10	7	-3	- 450	300	- 150
12	15	10	-5	- 750	300	- 450
20	18	13	-5	- 750	150	- 600
50	25	18	-7	-1050	80	- 970

I have assumed that the average machine has a list price of \$15,000.

The customer who purchases the fewest machines has the smallest reduction in discount and the largest number of courses per machines sold. A customer who buys 3 machines per year would pay \$150 more per machine but would receive courses (which he could probably sell) valued at \$300/machine. This customer, therefore, would be ahead \$150/machine.

**PICKER**



July 2, 1969

Picker Corporation, however, buys 50 machines per year and will have to pay \$1,050/machine more than at present. We could sell 13 courses or recover only \$80/machine for a net loss of \$970 per machine or \$48,500/year. I have compiled similar data for other quantities and am attaching a summary for your information and comments.

We must now once again seriously evaluate our long-term relationship with Digital. The previous discount schedule did not cover all of our costs. The new schedule will reduce our income by almost \$50,000 per year without reducing any fixed costs. We will have difficulty in passing these increases to our customers, since they know DEC have not increased the prices of the basic computers.

I would appreciate it if you could explain:

1. The rationale behind the discount changes.
2. The inclusion of courses.
3. The selection of the ratio of instruments sold/courses provided.
4. The unfair distribution of cost increases to OEM accounts compared to individual purchases.

Within the next two weeks, I will be contacting other suppliers of small computers in an effort to re-evaluate the use of the PDP-8 series in our systems. If you could provide me the information I have requested, it would greatly assist me in this evaluation.

Sincerely yours,

PICKER NUCLEAR,



Gerard L. Kearns  
Group Product Manager  
Analytical Department

GLK:av  
Attachment

cc: Dr. W. F. Loranger  
Mr. N. Mazzaresse  
Mr. R. Noonan  
Mr. B. Dewey  
Mr. R. Jones (Cleveland)



# EFFECT OF CHANGES IN DEC DISCOUNT AGREEMENT

<u>N</u>	<u>Old(%)</u>	<u>New(%)</u>	<u>(%)</u>	<u>Courses</u>	<u>Change in Cost (ave. 15,000/ Machine</u>	<u>Course Value</u>	<u>\$ Per Machine</u>	<u>Total \$ Change (n x \$) *</u>	<u>Total \$ Change (n x \$) **</u>
1	-	0	-	-	-	-	-	-	-
2	5	4	1	2	150	300	+\$150	+300	-300
3	5	4	1	3	150	300	+ 150	+450	-450
4	10	4	6	4	900	300	- 600	-2400	-3600
5	10	7	3	5	450	300	- 150	- 750	-2250
6	10	7	3	6	450	300	- 150	- 900	-2700
7	12	7	5	7	750	300	- 450	-3150	-5250
8	12	7	5	8	750	300	- 450	-3600	-6000
9	12	7	5	9	750	300	- 450	-4050	-6750
10-14 (ave.12)	15	10	5	10	750	300	- 450	-5400	-9000
15-24 (ave.20)	18	13	5	11	750	150	- 600	-12000	-15000
25-49 (ave.38)	22	16	6	12	900	100	- 800	-30400	-34000
50-99 (ave.75)	25	18	7	13	1050	50	-1000	-75000	-78750
100-199 (ave.150)	26	20	6	14	900	30	870	-130500	-135000

n = number of units

\* = assumes each course available is sold for \$300

\*\* = assuming no course sold



digital

July 17, 1969

Mr. Frank M. Dunnington  
Spectra-Physics  
1250 West Middlefield Road  
Mountain View, California 94040

Dear Mr. Dunnington:

Your letter of May 6th, to Mr. Ken Olsen, has been referred to me. I extend my apologies to you for the inconvenience you suffered and the rather bad impression you obviously received. To be perfectly honest, I was responsible for the entire situation, since I failed to contact Mr. Dewey as I had promised you I would do.

Although it is embarrassing, we are also appreciative of having such shortcomings pointed out since it assists us in being more aware of rendering a satisfactory service to the public.

Please accept my apologies and it is my sincere hope that our future associations will be sufficiently satisfactory to completely rectify this incident.

Sincerely,



Morton E. Ruderman  
Manager  
Biomedical Marketing

djc

cc: K. Olsen ✓

J. Leng



**digital**

INTEROFFICE MEMORANDUM

DATE: June 4, 1969

SUBJECT: MR. FRANK DUNNINGTON OF SPECTRA-PHYSICS

TO: Ken Olsen

FROM: Mort Ruderman

I did talk to Mr. Dunnington and to the Palo Alto Office. However, I forgot to call Brad Dewey and advise him of the arrangement. Mr. Dunnington is absolutely right as far as my participation, and he clearly identifies the shortcomings I made. I will write him an apology with a copy to John Leng and hope that John, or someone in the Palo Alto Office, will be able to straighten out the matter.

I am very concerned if we are doing this to many people that do not take the time to tell us about our shortcomings. I feel this is an opportunity to do something about such a situation, and we should work on it so that we do not give all customers the same impression we gave Mr. Dunnington.

Mort

djc



DATE: June 3, 1969

SUBJECT: Mr. Frank Dunnington — Spectra Hydrophysics

TO: Mr. Ken Olsen

FROM: Nick LoRusso

For some time now I suspected that there was a great deal of room for improvement in our customer relationships. Thanks to Mr. Dunnington, his specific instances give us something to work on. The area I am interested in, of course, is the accuracy of the direction that the customer's call takes. In one month to six weeks, I am hopeful that we will be able to set up an information center using existing Office Services Personnel. Prior to the establishment of this center, I plan to send a questionnaire to our office employees asking that they jot down the types of questions that they should be able to answer so that we may direct inquiries to the proper individual. This way, even if the call is misdirected, the called party may transfer the call to the Information Center who would then handle the call from that point on. Hopefully this will eliminate some of the criticism that potential customers such as Mr. Dunnington may have of Digital. Mr. Dunnington's letter to Personnel should have been answered within a day or two from the time it was received by Personnel. I thought I would follow up with Bob Lassen to see if we could install some dictating equipment to help our Personnel staff to be more productive and efficient.

I thought I would jot down some of my thoughts as I was reading Mr. Dunnington's letter. Our records show that on any given business day we have an average of fifteen Maynard based people traveling by air. If we are to assume that our key people use air travel, then allowing for other types of travel, illness, etc., we may have as many as 20 key people away from the plant each business day. Maybe our travel policy is too loose. Can we afford to have that many away during the business day?

I guess it may be considered impractical to have had a west coast sales representative travel here to Maynard for Mr. Dunnington's visit, but I note that at no time during the course of his visit was a salesman on the job.

With the organization growing as rapidly as it is, and responsibilities splitting and growing, we perhaps will always have a problem in dealing with customers. Are we then encouraging the establishment and growth of smaller competitor companies? Exposing our younger and inexperienced people to customers such as Mr. Dunnington may pay us dividends in their potential growth at some time in the future, but what do we do for now?

After reading this letter and discussing the problem with a couple of our Marketing people ( without referring directly to this letter ), we find that this happens all too frequently. In view of this, I wonder if it would be worthwhile to set up a sort of Visitor's Bureau. Our sales representatives could then notify the Bureau of the needs and requirements

June 3, 1969

of a visitor. The Bureau could then set up a meeting with the interested parties. Would it be worthwhile to reserve some space in the Mill Complex where we could set up the products for our visitors to view and use. The area could be staffed by highly experienced employees who are Marketing oriented. Pratt and Whitney Machine Tool set up what they called Centennial Hall, all visitors were directed to this hall where they could see the products and were able to direct their questions to experts. Naturally there was always a Marketing man on hand to answer delivery and price questions.

It is also my opinion that we should be big enough to thank Mr. Dunnington for his letter.

I hope my comments will be helpful to you.

*Nick*





Spectra-Physics  
1250 West Middlefield Road  
Mountain View, Calif. 94040  
Telephone (415) 961-2550

cc: Nick Mazzarese  
Win Hixle  
John Ling  
Nick Lo Russo  
Mort Ruderman  
Dick Clayton  
Bill Long  
Ted Johnson

RECEIVED  
MAY 12 1969  
KENNETH H. OLSEN

May 6, 1969

Mr. Kenneth H. Olsen, President  
Digital Equipment Corporation  
Maynard, Massachusetts 01754

Dear Mr. Olsen:

In view of the strong impression that I received during my recent visit to Digital Equipment, I thought you might be interested in my rather negative reactions.

The only other contact I have had with Digital was during the time I was with Jarrell Ash Company in Waltham, Massachusetts. At the time I decided to leave Jarrell Ash, I contacted the Personnel Department at Digital and sent a resume to your people as requested. Some two weeks later I was asked by mail to come in for an interview and it seemed that this could not take place for another ten days to two weeks. During this time, Spectra-Physics discovered I was interested in changing, contacted me and I flew to the west coast. I was interviewed, received and accepted an offer to head a new instrumentation area at Spectra-Physics, during the span of time while I was waiting for Digital to see me for an interview. The reaction time of Digital was considerably longer and even though they had a ten day lead and were only 15 miles away from my house, I was never able to get in and talk to your people.

After my recent day in Maynard, I had meetings with marketing managers at two major instrument companies and I queried them as to what systems they used. Both are users of the PDP 8 and they reported experiences roughly paralleling mine.

From this and from the attached report, I believe you can see why I have a great reluctance at this time to tie our requirements to the Digital systems.

Sincerely yours,

*Frank M. Dunnington*  
Frank M. Dunnington  
Product Manager  
Analytical Instrumentation

FMD:il  
Attachment

MEMORANDUM

TO: Dick Stark

April 23, 1969

FROM: Frank Dunnington

SUBJECT: TRIP TO DIGITAL EQUIPMENT CORPORATION  
MAYNARD, MASSACHUSETTS

Under normal circumstances I would not make a written report concerning the discussions and events leading up to the meetings at Digital Equipment Corporation. However, the circumstances preceding my visit and a rather interesting chain of events which took place over the past week with regard to this visit compel me to put some thoughts in writing.

Historically, we saw the large number of computer hook-ups at the Cleveland Meeting of Applied Spectroscopy Groups and at that time discussed again our desire to use both a time share and perhaps a small laboratory type of computer for the storage and file search procedures with the Raman unit. During the meeting I did not have the opportunity to meet or talk to any of the Digital people, therefore when Herb sent over the article on the computer applications, I felt it was necessary to contact at least one computer company and since Digital represented approximately 80 to 90% of the computers at the Pittsburgh Conference, I arbitrarily chose them. In addition, I was already scheduled to go to the east coast to interview my candidates in New Jersey and Baltimore. My first problem obviously, is to ascertain a telephone number and I checked out one of the ads in Analytical Chemistry for the small computer made by Digital. This provided me with the home office telephone number but no information about any local field office. I then tried to reach someone in a sales or marketing capacity who could make an appointment for me to discuss the various types of computers and help make a wise choice as to what Digital models would be best suited to our particular needs. This choice seemed to lie between PDP 8 and the PDP 12.

After reaching the switchboard at Digital in Maynard (Tuesday), I asked to speak to someone in the sales or marketing department concerning the application of small computers to analytical equipment. I obtained a secretary somewhere who informed me that the man I wanted to talk to (whose name escapes me at the moment) was in another department. We then spent some 10 minutes looking around the building for the correct department. When I finally reached another secretary, who seemed to know a little bit about what was going on, she informed me that everyone who was in a position to discuss this problem with me was either in a meeting



or in the plant, or out of town. However, she would take my name and number and have someone call me back. I later learned that the first gentleman was transferred to Germany about January.

Later on in the afternoon, after normal closing hours at Digital, I received a call from Mr. Mort Rudderman who apparently is Marketing Manager for the PDP 12. I say apparently since he did not identify himself to me either by name or title, although our girl who answered the phone did manage to get his name but was not sure of the pronunciation or spelling. Mr. Rudderman, after a very short conversation, stated that he thought the best procedure would be for me to meet with Mr. Brad Dewey and some members of his group, again no identification of title or job, and said that he would arrange for an appointment between Mr. Dewey and myself for Monday morning since that seemed to be the best time for me to be in Boston. He further stated that he would contact the west coast office in Palo Alto and have them deliver to me some information on the PDP 8 system since, in his opinion, this was the unit which we would probably require. He also stated the west coast people would confirm the appointment with me. On Thursday afternoon at nearly the close of our business hours, I finally gave up and called the Digital office in Palo Alto myself having heard nothing from them. The secretary there said that she recognized me, or at least seemed to and that I had an appointment in Maynard, however there was no one in the office in Palo Alto that could talk to me and that she could not promise to have anyone bring anything over to me.

On Friday morning she called me and said that she had checked with the home office in Maynard and I had an appointment with Mr. Brad Dewey for Monday morning. One of the local field men for Digital was going to stop by if it was convenient for me to see him at 10:00 with some information on the PDP 8 computer.

When the local salesman arrived, he had the information and a number of volumes published by Digital which are of marginal value in determining the computer system needed for the Raman. However they are of general interest to anyone having to purchase a small digital computer. It appeared that he had taken it upon himself, although he was primarily involved in the nuclear field and would not normally cover our account, since we were just down the street from him to pop over with the information since he felt that customer's calls require a follow-up. I might say that in the light of what followed in Boston, the secretary's confirmation of my appointment was perhaps a bit hasty, although she and the local salesman involved displayed the only initiative



and the only professional sales follow-up of anyone with whom I came in contact.

Upon arriving in Maynard on Monday morning at approximately 8:45, I discovered that Mr. Rudderman was at a two week meeting in Andover. His secretary knew absolutely nothing about my coming, furthermore Mr. Dewey was at the Federation Meeting in Atlantic City and his secretary and everyone in his office was totally unaware of my arrival. However, approximately a half an hour later, Mr. Rudderman's secretary came down and arranged for me to meet with Richard Clayton whose title appears to be Product Line Manager for the PDP 12. We briefly reviewed my requirements in his office and frankly the impression that I got was that I was an interloper taking up a great deal of his extremely valuable time. Without going into extensive detail as to the amount of memory required or the necessary calculations involved in the computer, this gentleman decided that it was apparent that the PDP 8 was the computer for me to use. He then located an assistant to Brad Dewey who was in charge of the meeting of the gaschromatographs to the PDP 8 computer and asked him to come up and join us. This gentleman, Mr. Charlie Spector, joined us and was told that the conversation that we had was primarily for the Product Manager's benefit since he knew nothing about Raman Spectroscopy but the PDP 8 was the proper computer. We then went downstairs to Mr. Dewey's office where we sat and discussed for approximately half an hour the requirements to mate the PDP 8 to the Raman system. These requirements were initially the amounts of storage required. In between this time, he had given me a very brief look at the equipment on the floor and asked if I wanted to look at the manufacturing areas. Frankly manufacturing did not interest me at this point. He waved at an aisle and said "this is a PDP 8, this is another kind of instrument", without any detailed description of what went on and frankly it may be an incorrect impression, however I definitely received the impression that he did not know what the hell his product did, how it worked or perhaps even what the names and correct titles of the various components were.

After this discussion with Mr. Spector, I have come to the conclusion the proper computer for us is probably the PDP 12 since the necessary functions in the PDP 8 will be rather expensive adding a large number of extras to it and the PDP 12 incorporates these extras as standard and therefore is much more likely to be a satisfactory unit for us. He then presented me, at my request, with a small, approximately 6 X 8 brochure which is six pages printed on nice heavy stock describing the PDP 12 and a price list.



It became also apparent at this time that Mr. Spector had other irons in the fire, namely an acceptance on a PDP 8 system for gas chromatography and that I was simply an annoyance. He did briefly discuss with me the discount schedule, again he requested assistance. There was at no time any push to discuss the prices, a quotation, or any attempt to sell me on the basis of his own equipment.

There were, however, a number of points made that if we wished to sell the Digital equipment that this is how we could go about it.

It would seem logical to me that if the PDP 12 was the system, that perhaps we should have gone back to the original man. We should have thrashed it out between the three of us, however there was no mention of this type of action.

I realize that our potential here at SP for the use of perhaps 10 PDP 12's or PDP 8's at a total cost of about \$30,000 apiece does not represent a significant portion of the Digital equipment forecast for these computers and since, obviously I was such an unimportant customer or potential customer, I felt that it would be best to take my leave and do some other business in Boston.

I had been given the name of a couple of the technical people in the Physics and Engineering Section by the salesman in California, but at this point I had such a bad taste in my mouth about Digital that I could see no reason to remain in the building any longer.

I am detailing this as simply the feelings of a potential customer when he encounters a classic text book case of incompetence in a sales and marketing department. I believe I commented to you that I found a company that was even more screwed up than we were. There is no question about it.

I was not doing very much for Digital Equipment on Monday and even if we used ten systems from Digital or somewhere else, this will not significantly affect their performance since they are planning on somewhere between 250 and 450 units per month. To put it bluntly, how the hell do they know whether I am going to use 10, 20 or 100 and what is going to happen next year and the year after that. My personal opinion is the guy that feels he's got it made and he's got the business locked up is the easiest guy in the

world to knock off. If this be a mark of the computer field, then they are going to get knocked off sooner or later and so are we in our own field of lasers.

I don't know the Varian systems are like and I don't know what Honeywell or anyone else has, but my impression when I went to Digital that this was the only intelligent way to go since they represented about 80% of the small computer market is radically different today. I could well have gone with a Digital system without even checking the rest of them in any more than a cursory fashion, but by god I am going to have an awful hard look at everybody else because my impression is that Digital does not care about its customers.



8/13  
Margaret had to have someone answer  
9/4 Jean-Claude to take care of

**HIGH ENERGY & NUCLEAR EQUIPMENT S.A.**  
Ronald S. Stiff - Managing Director

2, CHEMIN DE TAVERNAY, GRAND-SACONNEX, 1218 GENÈVE  
Phone (022) 34 17 07/34 17 05 - Telex: 23 429 - Telegrams: STIFFHENESA GENÈVE

Geneva, July 16, 1969 RSS/cg

The European Director (Marketing) Copy for information to:  
DIGITAL EQUIPMENT CORPORATION  
HOTEL INTERCONTINENTAL  
The President in the USA  
GENEVA

Dear Sir,

I am writing this letter to you whilst in Spain, although my secretary will send it to you from my Geneva office. Whilst at my Madrid office, and in my travels round Spain, I note that Hewlett Packard are well placed to sell several small computers mainly because they have a representative in Madrid. It is my opinion that the situation could be changed reasonably rapidly and we could probably sell one of your small computers, a PDP8 or a PDP9 very quickly and then several more subsequently, if we could act for you.

My principal computer consultant in Spain is responsible for computer engineering at the JUNTA (atomic energy establishment) and I also have a link with the ex-head of IBM in Spain who subsequently worked for about 6 months as head of LEASCO in Spain until they closed down their offices after buying over a French group with existing interests in Spain. Between us we think we could influence most of the small computer buyers in nuclear medicine, industry and for research. Would you please let me know by return of post, if possible, if you could be interested in coming to an arrangement with my organisation? Some brief details of the other well known British, American, Canadian and Italian companies for which we act, are enclosed.

We are in a very good position to handle all the servicing of your equipment but we would only be interested in collaborating with you if you are prepared to give us exclusive agency for Spain and, perhaps, also Portugal. If we can come to a suitable arrangement, we could discuss the possibility of using your computers as part of the industrial control systems we may also design and manufacture in Spain for use in other countries.

I have had contact with your organisation since your first started over in Europe and at that time, I was in touch with John Lang, who is now in the States after running the European operation for some years with considerable success. When I was in touch with him, I was the head of technical sales and liaison for the Nuclear Enterprises organisation which during my period of 7 years, became the largest and best known company in the radiation detector and precision measurement field in Europe. I resigned from the organisation 2 years ago to set-up my own small consultancy-agency operation in the South of Europe and to-date it has been a considerable success-

I would like to have called on you to discuss this matter in person, but I shall be tied-up here in Spain and Portugal for a few more weeks and then ./..

LABEN of Milan (Kicksorters) NUCLEAR ENTERPRISES of Edinburgh (Radiation Detection and Precision Measuring Equipment)  
SIMTEC of Montreal (Semiconductor Detectors and Electronics) C.S. ITALIA of Torino (Precision Printed Circuits)

I shall have a holiday on the Costa Brava. Obviously, these matters cannot wait until then and the computer order I have mentioned may well be placed elsewhere if we cannot get an arrangement extremely quickly. I can assure you our organisation has better connections in your field than any other Spanish organisation and you would be wise to rush us up-to-date literature, say 3 sets PDP8 series and PDP9, perhaps also PDP12, with up-to-date quotations showing maximum discount for exclusive agents. My secretary would telex me when this is received and would have instructions to pass on two sets to the appropriate people in Spain for further action. We would have to have some freedom in terms of quoting the delivered price because we have certain expenses to cover in the Spanish market area but I can assure you this would not reduce our chances of securing the initial or subsequent orders.

Finally, we would like to have your confirmation that you will back us with installations assistance and initial servicing until one or two of our people have completed your maintenance course. We ask for this undertaking although 2 or 3 of our people including my new chief engineer in Switzerland who will soon be arriving from England, already know your small computers and have designed interface systems for them on several occasions.

As I said before, I look forward to hearing from you by return.

Yours sincerely



Ronald S. Stiff

(For your information - we never had an answer here in Geneva. The hotel address is probably wrong .....)



## HIGH ENERGY & NUCLEAR EQUIPMENT S.A.

Ronald S. Stiff - Managing Director

2, CHEMIN DE TAVERNAY, GRAND-SACONNEX, 1218 GENÈVE  
Phone (022) 34 17 07/34 17 05 - Telex: 23 429 - Telegrams: STIFFHENESA GENÈVE

Geneva, July 4, 1969 RSS/cg

The European Director (Marketing)  
DIGITAL EQUIPMENT CORPORATION  
HOTEL INTERCONTINENTAL

GENEVA

Dear Sir,

Following my letter dated July 16th, I am writing briefly to tell you that our prospects in selling your small computers in Spain particularly are a good deal better than they were two weeks ago. I now have really excellent contacts with the ministry of education and I anticipate that if we can come to an arrangement, we shall be able to secure orders for quite a large number of your computers.

I look forward to hearing from you in the near future.

Yours faithfully



Ronald S. Stiff

c/c President of DIGITAL EQUIPMENT CORP, USA



WESTWOOD  
PUBLIC  
SCHOOLS

J.F. Tobin, Superintendent

R.N. Haven, Proj. Dir.  
R.D. Slagle, Asst. Dir.

PROJECT LOCAL

LABORATORY PROGRAM FOR COMPUTER-ASSISTED LEARNING

44 School Street

Westwood Massachusetts 02090

Telephone 617-326-3050

Lexington

Natick

Needham

Wellesley

Westwood

Board of Directors:

R.J. Fobert

W.M. Powers

R.H. Goodman

J.F. Tobin

A.A. Maffeo

July 15, 1969

Mr. Rick Merrill  
Digital Equipment Corp.  
Maynard, Massachusetts

Dear Rick:

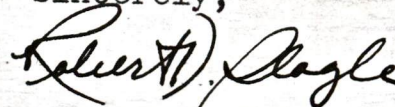
I thought you might appreciate reading this excerpt from our latest application for federal funds. It deals with FOCAL, especially Multi-user FOCAL, which we have currently loaded in our Needham High School TSS-8 system.

The lack of entries in Needham's logbook reflects a very reliable Multi-user FOCAL. In fact, it has been running smoothly without a crash since it was loaded June 6th. This is the kind of performance we users like!

We will be looking forward to more high quality innovations in FOCAL sometime in the future.

Thank you again for your fine work.

Sincerely,



Robert D. Slagle

File 001  
Enc.



Another very important advantage is the outstanding adaptability of Digital Equipment's software to use in teaching via computerized problem-solving. Frankly this was somewhat unexpected, as the project staff was considering, as one of the necessary trade-offs to get lower costs, a diminished capability in the area of available program writing facilities, i.e., the programming language and its implementation.

Much to our surprise, however, we have found the company's FOCAL programming system to be unusually well adapted to meet the needs of algorithmic instruction. In addition to the standard features offered by most time-sharing languages, it offers to LOCAL schools these advantages:

1. similarity to language used previously, thus facilitating retraining of teachers and students;
2. ease of learning making it applicable to a wide range of grade levels (at least 4-12); and
3. interpretive compiler and plentiful debugging aids optimize the efficiency of all student time spent at a terminal.



As indicated in item (1), retraining of teachers and students to use FOCAL was very easy. So similar were the old and new languages that the majority of this transition was accomplished on an individual basis through reading a handout which described the differences between the old and new languages. A copy of this handout accompanies the original copy of this report.

The project staff had anticipated that it would be occasionally necessary to purchase time from a commercial time-sharing service to run the very long and complex programs which students sometimes write for special projects. However, the newly implemented 7-user FOCAL system incorporates library and subprogram chaining facilities that obviate this requirement in all but extreme cases. As a matter of fact, a student connected to a 7-user system could write a program over 1000 lines long. This capacity will be strained very seldom indeed!

The library capability of the new 7-user FOCAL system also has the advantage of allowing a "building block" approach to the teaching of programming and mathematics concepts. This approach consists of having a student work with a concept until he understands it well and then entering this concept into his repertoire of tools to be used in working on more complex problems. For example, students may work on the theoretical basis of logarithms until they understand them. Part of this work would include the writing of computer programs to find the logarithms of numbers. However, once the theory is well understood, it is no longer necessary for the student to program all the steps required to find a logarithm each time he needs to use one. Instead, one of the student programs written at the earlier stage can be placed in a common library available to all students and used as necessary as a "tool of the trade". This building-block approach is very effective and is facilitated by the library capability of the new FOCAL system.



digital

July 10, 1969

Mr. Harry G. Webster  
Senior Vice President  
Third National Band of Hampden County  
Springfield, Massachusetts 01101

Dear Mr. Webster:

We are pleased to know that you are interested in news of our company. You have been put on the mailing list for the information that you requested.

In turn, I would like to be placed on the mailing list for Third Dimensions. Thank you.

Very truly yours,



Mark Nigberg  
Public Relations Manager

MN/jh



**THIRD NATIONAL**  
BANK OF HAMPDEN COUNTY  
SPRINGFIELD, MASS. 01101

June 26, 1969

Third Dimensions is interested  
in the news of your company . . . . .

Significant news of your company is included in the enclosed issue  
of Third Dimensions, an economic newsletter distributed locally  
and nationally by Third National Bank of Hampden County.

So that we may remain apprised of things your company is doing -  
expansion, new construction, new products, extension of markets,  
addition of employees, and the like - we would appreciate being  
added to your news release mailing list.

Incidentally, if you are not personally receiving Third Dimensions,  
a note to me is all that is needed to have your name placed on the  
mailing list.

Sincerely,

Harry G. Webster  
Senior Vice President

HGW/djg  
Enclosure



digital

July 8, 1969

Mr. E. B. Moran  
Outside Plant Engineer  
New England Telephone Company  
360 Cochituate Road  
Framingham, Massachusetts 01702

Dear Mr. Moran,

This letter is in reply to your letter to our President dated June 19, 1969.

Enclosed is a copy of a letter which I sent to Mr. Gordon Copp who handles this account for your Framingham Sales Office. This letter details our service requirements at our Leominster location.

In response to the aforementioned letter, a Mr. Lakso of the Outside Plant Engineering office in Fitchburg contacted me Tuesday morning, June 24th. I told Mr. Lakso the details of the June 4th letter to Mr. Copp and referred him for building details to a Mr. Spaund of Orangewood Development Corporation, the owners and builders of the building which we will be leasing. I have not heard from Mr. Lakso, so I imagine he and Mr. Spaund have exchanged the appropriate information. You or Mr. Young might want to check into this with Mr. Lakso however.

It is my understanding that many of the Cochituate Road offices concern themselves with engineering on a state-wide basis, so I will take this occasion to mention construction of a plant in Westfield, Massachusetts. For details on this plant, please contact Mr. Richard E. Slowey, Sales Manager - Northwest, at your 365 State Street, Springfield Office. He is in receipt of a letter dated June 2, 1969, containing a firm order from this company for telephone service in that building. The construction contact is Carlson Construction in Cochituate.

If you need any additional information from Digital Equipment Corporation with regards to either plant, please let me know.

Yours truly,

  
John E. McNamara  
Communications Engineer

cc: K. H. Olsen  
N. D. LoRusso

Encl. (2)





RECEIVED

JUN 26 1969

New England Telephone and Telegraph Company

350 Cochituate Road, Framingham, Massachusetts 01702

KENNETH H. OLSEN

E. B. Moran  
Outside Plant Engineer -  
Architect & Builder Service

Telephone:  
Area Code 617  
879-9265

June 19, 1969

Mr. Kenneth Olsen, President  
Digital Equipment Corporation  
146 Main Street  
Maynard, Massachusetts 01754

Dear Sir:

We have been advised that your firm intends to construct a factory in Leominster, Massachusetts.

It is the responsibility of this office to assist the Architect in laying out adequate conduit and space required for telephone equipment in the proposed building to insure that the most modern communication facilities can be accommodated.

May I request that you contact Mr. J. N. Young in the preliminary phase of the work. He can be reached (collect) at 879-9248. We will be available to assist you in any way we can.

I would appreciate an early contact in this matter.

Yours truly,

*E. B. Moran*  
Outside Plant Engineer  
Architect & Builder Service



June 4, 1969

Mr. Gordon Copp  
New England Telephone Company  
Box 694 196 Fountain Street  
Framingham, Massachusetts

Dear Mr. Copp,

It is my understanding from Mr. Jack Smith of our manufacturing group that the plant we will be leasing from Orangewood Development on Tolman Road in Leominster will be staffed as follows: a plant manager, a secretary, and two or three clerks. The work force will be about 120 maximum.

It is believed that most calls made to and from this plant will involve our Maynard plant. There will therefore be a requirement for two (2) " Stations-off-Premises " from the Maynard Mill PBX to the Leominster plant. These lines will appear on the plant manager's desk, his secretary's desk, and on each of the three clerks' desks, and on each of two wall-mounted keysets on the production floor.

In addition, three local **single party measured** business lines will be required. These lines should be arranged in a three line hunt group. These lines should appear on the plant manager's desk, his secretary's desk, and the three clerks' desks.

The Maynard Mill PBX lines will be used for inter-plant calls and for the receipt of misdirected long distance calls. All outgoing local and long distance calls will be placed on the Leominster lines and most incoming local and long distance calls will be received on the Leominster lines. For this reason, the Maynard Mill PBX lines are to be restricted from access to the Maynard Mill 7th ( Arlington ) and 9th ( Maynard ) level lines.

In addition to the services mentioned above, please survey the completed plant for the installation of public telephone booths.



Mr. Gordon Copp

-2-

June 4, 1969

A Model 33ASR ( light duty ) TWX machine is also desired with answerback code " DIGITAL LMSTR ".

We expect to occupy this building on October 1, 1969. I will send an office layout as soon as possible.

Yours truly,

John E. McNamara  
Communications Engineer

nep

cc: N'D.LoRusso  
Jack Smith



July 3, 1969

C  
O  
P  
Y

Professor Holste  
Volkswagenwerke  
Wolsburg, Germany

Dear Professor Holste:

During my recent trip to Europe, I was disappointed that I was unable to visit with you. The people in our German office have told me about several interesting projects in which we would like to cooperate with you.

I am sorry that circumstances did not permit a meeting, and I hope another opportunity will arise soon. Meanwhile, I will keep abreast of the progress of Volkswagen, as the car industry is of particular interest to us.

If you should ever visit the States, I would very much appreciate the chance to meet with you and show you our facilities.

Sincerely yours,

Kenneth H. Olsen

KHO:ecc

*Acc - Jean - Claude Peterschmitt*



digital

July 3, 1969

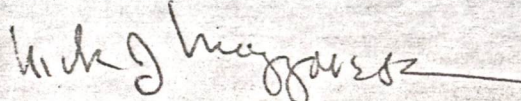
Mr. Thomas N. Trimble  
Apartment D-7  
1316 West Chester Pike  
West Chester, Pa. 19380

Dear Mr. Trimble:

Thank you for your letter of June 21, 1969, which Mr. Olsen has referred to us for answer. We are always interested in new ideas; however, the content of your letter is not specific or detailed enough for us to reach a decision as to whether or not we would be able to use your software system.

Therefore, we have asked Mr. Richard Grier, District Manager of our Philadelphia Office, to get in touch with you and arrange for a possible meeting to learn more about your basic software design.

Very truly yours,



Nick J. Mazzaresse  
Vice-President

NJM/bb

cc: Mr. K. H. Olsen ✓  
Mr. R. Grier



digital

# INTEROFFICE MEMORANDUM

DATE: July 3, 1969

SUBJECT: THOMAS N. TRIMBLE - ATTACHED CORRESPONDENCE

TO: Dick Grier

FROM: Nick Mazzaresse

cc: Ken Olsen ✓

As per the attached correspondence, would you please follow up with Mr. Trimble and see if his software system is something DEC would be interested in and let us know the results. Thanks very much!

NJM/bb

Enclosures 2



7-1-69 Nick - please answer  
cc - Partner  
- Cohen  
- Long

RECEIVED

JUN 25 1969

KENNETH H. OLSEN

Apt. D-7  
1316 West Chester Pike  
West Chester, Pa. 19380  
June 21, 1969

K. H. Olsen, Pres.  
Digital Equipment Corp.  
146 Main Street  
Maynard, Mass. 01754

Dear Mr. Olsen,

Would you be interested in a basic software design that would enable a 4K mini computer (with extended core and three or four new computer instructions) to compete with the large general purpose computers? The design I have developed over the last year would enable throughput on a mini computer of approximately  $\frac{1}{4}$  to  $\frac{1}{2}$  compared to the fast expensive computers. The data definition is similar to COBOL. The programming language is simpler and more powerful than COBOL or FORTRAN. The user language for operation is considerably simpler than IBM's or Univac's operating systems. Only the applications of sorting and matrix manipulation appear to be significantly slower than the  $\frac{1}{4}$  to  $\frac{1}{2}$  figure mentioned above.

I am confident I can sell you on the capability and efficiency of the software-hardware system. My background of 10 years in EDP includes compiler design, direct access storage, record handlers, and transaction initiated processing, as well as the usual batch process updating, sorting, and report generating.

If you are interested in procuring the software system, what incentive arrangements can be made such that my gain is proportional to the success of the basic design? I would be most interested in hearing from you.

Very truly yours,

*Thomas N. Trimble*

Thomas N. Trimble



July 3, 1969

Mr. R. L. Graham  
Chairman, Finance Committee  
International Conference on Properties of Nuclear States  
Chalk River Nuclear Laboratories  
Chalk River, Ontario, Canada

Dear Mr. Graham:

Mr. Olsen asked me to respond to your letter of May 8th suggesting that Digital Equipment Corporation might become an industrial sponsor for the 1969 International Conference on Properties of Nuclear States. Please excuse the extreme lateness of our reply.

We do not feel that Digital is in a position to provide financial support for the Conference. I am sure you appreciate the number of similar requests we receive from other professional conferences, and we have responded similarly to them. We do provide strong support of the academic and research communities in other ways, particularly through equipment gifts. We believe that this form of support is especially useful because our products are so frequently used in research activities.

Our best wishes for a successful Conference.

Sincerely,

Winston R. Hindle, Jr.  
Vice President

WRH/bwf

cc: Ken Olsen

bcc: Ken Larsen  
Denny Doyle





July 3, 1969

Professor J. F. Hart  
Head  
Computer Science Department  
The University of Western Ontario  
1142 Western Road  
London, Ontario, Canada

Dear Professor Hart:

I have been asked by Mr. Olsen to respond to your letter of June 16th. We are both very concerned by Digital's late deliveries to the University of Western Ontario, particularly so because we are indeed proud of your PDP-10 installation.

I understand your serious concern over the very late delivery of your PDP-8/I - KV8/I display system. The time required for the engineering development of this unit far exceeded our original estimates and all deliveries have been delayed the same amount of time. Your unit, which has now been shipped, maintained its proper place in the delivery queue throughout and was not delayed to satisfy another customer. I can only apologize for the problems this delay has caused you and the other KV8/I customers.

You have raised the question of the "branch operation syndrome," which is of course a potential problem for any firm, whether the branch is in Canada, Europe, or in the United States. We do strictly maintain a policy of complete equality among all branches in terms of delivery of equipment. Also, I think it is important to point out that our Canadian operation was one of the first outside of the United States to be established by Digital; it contains the first manufacturing facility established outside of our home plant in Maynard; and we are constantly striving to improve its rate of growth and ability to service our customers. Our Canadian Manager, Denzil Doyle, has consistently been able to attract a capable staff and we are quite pleased with their strong progress. If you can point out how they and we can be of more service to the University of Western Ontario, we would be most anxious to hear further from you.

You also questioned Digital's support of Canada's research effort and commented that IBM supported a CAI Fellowship. As a relatively young but rapidly expanding company, Digital has not yet felt able to support independent research anywhere outside of our home plant,



July 3, 1969

either in Canada or the U. S. However, we have tried in a number of ways to assist universities in their own research activities. In your own University, for example, we offered to deviate from our standard policy of outright sale and agreed to lease a PDP-10. Of the 75 installations of PDP-10 to date, this is still the only PDP-10 we have agreed to lease, and I hope you will accept this as an indication of our desire to assist you and the Canadian research effort.

Once again, we are most apologetic that our KV8/I was delayed so long. This is not any indication of a lack of interest in Western or in Canada, but a very poor job on our part of scheduling the completion of the engineering phase of that program. We are in fact very anxious to maintain a close relationship between the staffs of our two organizations.

Sincerely yours,

Winston R. Hindle, Jr.  
Vice President

WRH/bwf

cc: K. Olsen  
D. Doyle

bcc: T. Johnson  
N. Mazzaresse  
R. Savell  
D. Cotton  
R. Collings



6-26

Win Hindle to answer



The University of Western Ontario, London, Canada

Faculty of Science  
Department of Computer Science  
1142 Western Road

June 16, 1969.

Mr. K. Olsen,  
President,  
Digital Equipment Corporation,  
Maynard, Mass.,  
U.S.A.

Dear Mr. Olsen:

You will no doubt be aware of our department in connection with the installation of a PDP10/50 computer. In Canadian terms we belong to the top five universities in the area of Computer Science teaching and research.

This letter is in connection with serious problems associated with the installation of the PDP8I and KV8I display unit. Although the display was purchased on the strength of an early delivery date supplied by the Toronto office of Digital Equipment, we have been held up since last Fall with only part of the equipment installed.

This is all the more annoying since I, along with George Lake, Director of the Centre, was the prime mover in bringing the PDP10 to the University of Western Ontario. This step, which broke a long tradition of exclusive association with another manufacturer, was one of the major developments at this University since my arrival in 1959 as first Director of the Computing Centre.

What concerns me also is the decision which I must make concerning the relationship of CAI to the PDP10. We have ties with Dr. Suppes' group at Stanford which we plan to expand and as you know he uses the PDP10. But our association with DEC will not be profitable if the service shows no improvement.

over.....



Page 2

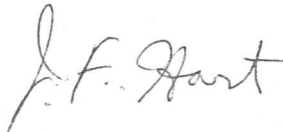
Mr. K. Olsen, President

June 16, 1969.

The question which I must ask myself is the extent to which we in Canada are suffering from the branch operation syndrome. As far as I know only I.B.M. has seriously considered supporting the Canadian Research effort by having a local research branch. I should point out also that I.B.M. is supporting our current research by offering a fellowship specifically for CAI.

From my association with NRC I am aware of the concern of the Senior Federal Civil Servants and the Government in this regard. With this background and considering the great commercial possibilities of educational technology, I think it is most important for us at Western to have some assurance that we can work together with your company.

Yours truly,

A handwritten signature in cursive script, reading "J.F. Hart".

J.F. Hart,  
Head,  
Computer Science Dept.

JFH:cs



July 3, 1969

Mr. E. O. Brown  
Vice President of Marketing  
Berkeley Scientific Laboratories, Inc.  
2332 Fourth Street  
Berkeley, California 94710

Dear Mr. Brown:

I wish to extend our apologies for any comments made by Digital Equipment Corporation personnel that appeared to be detrimental to your company, as expressed in your letter of May 28. I appreciate your bringing this information to my attention.

In answer to your referral of Ray Lindsay's comments concerning Berkeley Scientific's no longer offering clinical chemistry systems, I must tell you how this was explained to me. It was suggested to Ray, by a number of prospects, that Berkeley Scientific was no longer going to offer complete systems. As hindsight now, I am sure this was purely conjecture on their part, and Ray's only way of qualifying this was to ask, in confidence, whether it was true or not. The remark was directed as a question, not a statement, and I feel it was later misconstrued otherwise.

We are taking every step to correct this. I want to reemphasize that this is not our normal approach to doing business. Our approach is to promote and accent our product and capability, and not to be at all negative.

Concerning Berkeley Scientific as an important customer, my best response to that is a letter written by Win Hindle, Vice-President of our Biomedical Marketing, PDP-10, and PDP-12 Product Lines. His letter of April 26, 1968 (copy enclosed) to Dr. Wattenburg clearly stated our approach to the clinical laboratory market and indicated the support we would like to extend to BSL. At that time, we asked for any other alternatives or suggestions of how we might support you in any other manner, and we have not received an answer. I encourage you now to respond with any suggestions you might have where Digital could be of assistance.

Sincerely yours,

Kenneth H. Olsen  
President

KHO:ecc  
Enclosure





June 30, 1969

Mr. E. O. Brown  
Vice President of Marketing  
Berkeley Scientific Laboratories, Inc.  
2332 Fourth Street  
Berkeley, California 94710

Dear Mr. Brown:

This is in reply to your letter of May 28, 1969, addressed to Mr. Kenneth Olsen, and pertaining to an incident which happened at the DECUS meeting. Since the letter concerns my area of responsibility, it is appropriate that I answer it.

I can understandably see why BSL would be concerned and upset if, indeed, the remarks which you described in your letter are true. My specific inquiry was of the KUMC personnel as to whether or not BSL was still quoting expanded laboratory systems or withdrawing to provide a data acquisition system. A series of events and questions from various potential customers for approximately 2 months prior to the DECUS meeting prompted my inquiry. I also stressed the fact to the KUMC personnel that neither they nor I should make this known to other people unless, indeed, it was true. The reason KUMC was chosen was because both DEC and BSL had recently quoted them a system. Shortly after the DECUS meeting I was informed that you were still quoting expanded systems and promptly dropped the subject.

Please accept my apologies if the inquiry caused you undue concern or led you to believe that Digital Equipment Corporation had to revert to such tactics. DEC has never, nor will they ever condone such actions by any employee.

DEC has made a commitment to provide the Clinical Laboratories with a system to aid in various laboratory problem areas. Out of the multitude of OEM customers that DEC now has, many compete directly



Mr. E. O. Brown

June 30, 1969

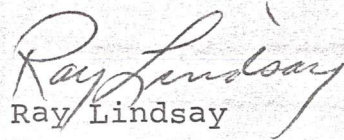
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with us and find no difficulty with our parallel efforts and/or relationship. DEC is open with all our OEM customers and offer them any assistance we can, such as our offer to BSL last year for our proposed system and software. DEC appreciates its OEM customers and is always open to constructive suggestions to keep this association the best possible.

If BSL feels that the relationship with DEC is not progressing satisfactorily, and have suggestions to improve this, I certainly look forward to discussing this with you.

Again, let me express my concern about the misunderstanding at the DECUS meeting, and hope that you now have a clearer picture of the incident.

Sincerely,

  
Ray Lindsay  
Manager  
Clinical Chemistry

djc

cc: K. Olsen ✓  
M. Ruderman



28 May 1969

RECEIVED

JUN 2 - 1969

KENNETH H. OLSEN

Mr. Kenneth Olsen  
President  
Digital Equipment Corporation  
146 Main Street  
Maynard, Massachusetts 01754

Dear Mr. Olsen:

An incident occurred at the recent DECUS Meeting that should be brought to your attention as it affects the reputation of the Digital Equipment Corporation as well as Berkeley Scientific Laboratories.

The University of Kansas Medical Center is planning to purchase a clinical laboratory data processing system and one of their staff members attended the recent DECUS Meeting. He was told by your Clinical Sales Manager, Mr. Ray Lindsay, that BSL was going out of the business of selling clinical systems and was planning to specialize in sales of data consoles only. This medical center staff member immediately confronted me at the Meeting with this information, and I was able to assure him that he received erroneous information from Mr. Lindsay.

Spreading such a rumor about BSL is tantamount to claiming that DEC is going out of the computer business and will hereafter sell only Flip-Chip modules. I am sure you realize that such a serious disparagement of our product and our company is a legally actionable misrepresentation of fact and constitutes an unfair and unjust competitive practice. At the present time, we know of no other instance where such practices have been employed. However, we must assume that such overzealousness has or will manifest itself with other prospective customers. Clinical laboratories constitute a fragile and highly sophisticated market. Irreparable, discriminating damage can easily be inflicted upon ourselves and our competitors through unwholesome publicity.

{ From my experience, I have found that sales personnel that resort to such unethical tactics are usually under extreme pressure because their sales are not measuring up to forecast. }

I do not know that this is the case in this instance, but perhaps it is time to review the policy decision for DEC to compete with BSL to supply complete clinical laboratory data processing systems with programming and specialty interfaces.

**BERKELEY SCIENTIFIC LABORATORIES, INC.**  
2332 Fourth Street • Berkeley, Cal. 94710 • (415) 841-8812

A Subsidiary of **TRACOR**



Mr. Kenneth Olsen  
Digital Equipment Corporation  
28 May 1969  
Page 2

I was told two years ago by your Biomedical Marketing Manager that the decision was made by DEC to compete with its OEM customer (BSL) because BSL could not compete with Spear and would not be able to meet the large demand for clinical laboratory systems. To date, both suppositions have proven false.

It would appear that wide-spread knowledge by other OEM accounts of this type of DEC policy to compete with their OEM customers could seriously jeopardize your other OEM business. I wonder if the volume of LINC-8 and PDP-12 sales to routine clinical laboratories warrants this possible alienation of OEM accounts?

In any event, the most important and immediate problem is to stop the unethical sales tactics which are damaging to both DEC and BSL. I hope that appropriate action can be taken to halt the irresponsible action on the part of one of your Sales Managers.

Very truly yours,



E. O. Brown  
Vice President of Marketing

EOB/jp



April 26, 1968

Dr. William Wattenburg, President  
Berkeley Scientific Laboratory  
2229 Fourth Street  
Berkeley, California 94710

Dear Dr. Wattenburg:

Mort Ruderman has discussed with me his conversations with you and your associates regarding DEC's plans in the clinical chemistry market. I would like to outline our current activities and future plans for this market and at the same time suggest how DEC might help to expand Berkeley Scientific Laboratory's capability to serve the same market.

The clinical laboratory system that DEC is able to install today is the result of the work done at the University of Wisconsin; as you know this system is now being used at Duke University and Bio-Sciences. We are in the beginning stages of marketing this on-line clinical laboratory system directly, because we believe that we must offer such a system to penetrate the market to the fullest extent. We expect to expand the present system to include a complete patient summary system (for the clinical laboratory only).

This system is implemented on the LINC-8 because the software has been written for this machine. However, we are making a commitment to program the entire system in the PDP-8 mode of the LINC-8. We do not anticipate having this completed for at least nine months, as we are well aware of the difficulties and unforeseen problems that may occur. We suggest that you might consider incorporating the LINC-8 into Berkeley Scientific's product line. To be more explicit, we feel that with the LINC-8 Berkeley Scientific Laboratory could be in a position to offer more capability than any other supplier. Your existing programs and hardware on the PDP-8 are proprietary to Berkeley Scientific. In our program all of the software on the LINC-8 is public; the new software that DEC is presently developing will of course be equally available to all DEC users. Were you to use a LINC-8, all DEC software for the Clinical Laboratory could be run, and in addition your proprietary hardware and software would be available to only your users.

As stated in Mort Ruderman's letter of February 1, 1967, to you, we would be willing to discuss modifications to the LINC-8 that would reduce the price to Berkeley Scientific. This coupled with a quantity discount would place Berkeley Scientific at a distinct advantage.



Dr. William Wattenburg, President

- 2 -

We believe that the clinical laboratory market is large and that an important part of the market will only be satisfied by a system supplied directly from a manufacturer. For this reason we strongly believe that DEC must offer a system directly. At the same time we are sure that both BSL and DEC can co-exist in this market because of the different product approaches of our two organizations.

We feel strongly the importance of Berkeley Scientific as a customer, but we also believe our current course of action is a wise business judgment in order to capture a larger segment of the clinical chemistry market. We feel that we are expanding this market for DEC and BSL by entering it in this way and that by cooperating we can satisfy the business objectives of both firms.

I would be pleased to discuss with you any alternatives to the plans I have outlined or any ways in which cooperation can be increased between our organizations.

Sincerely,

Winston R. Hindle, Jr.  
Vice President

WRH/bwf



DRAFT

Mr. E. O. Brown  
Executive Vice President  
Berkeley Scientific Laboratories, Inc.  
2332 Fourth Street  
Berkeley, California 94710

Dear Mr. Brown:

I am sorry for the delay in answering your letter of May 28th. However, I wanted to get more information from ~~Mr.~~ Mont Ruderman, Manager of Biomedical Marketing, and ~~Mr.~~ Ray Lindsay, Manager of Clinical Chemistry Marketing. I have also asked Mr. Lindsay to write you directly.

I <sup>wish to</sup> ~~sincerely~~ extend our apologies for any comments made by Digital Equipment Corporation personnel that appeared to be detrimental to your company, <sup>as expressed in your letter of May 28. this</sup> I ~~also~~ appreciate your bringing such information to my ~~our~~ attention, both now and in the future if such should occur.

In answer to your referral of <sup>Ray</sup> Lindsay's comments concerning Berkeley Scientific's ~~of~~ no longer offering clinical chemistry systems, I must <sup>tell you</sup> ~~explain~~ how this was explained to me. It was suggested to <sup>Ray,</sup> ~~Mr. Lindsay,~~ by a number of prospects, that Berkeley Scientific was no longer going to offer complete systems. As <sup>and</sup> ~~hindsight~~ <sup>Ray</sup> now, I am sure this was purely conjecture on their part, <sup>Mr. Lindsay's</sup> only way of qualifying this <sup>at all</sup> was to ask, in confidence, whether this was true or not. <sup>the remark directed</sup> It was <sup>as</sup> a question, and not ~~as~~ a statement, that this remark was made and I feel it was later misconstrued otherwise.

We are taking every <sup>normal</sup> step to correct this. I want to ~~re~~emphasize that this is not our <sup>normal</sup> approach to doing business. Our approach is to promote and accent our product and ~~our~~ capability, and not to be at all negative ~~or respond in any other way.~~

Concerning Berkeley Scientific, <sup>important</sup> as <sup>an</sup> ~~a~~ much valued customer, my best response to that is a letter written by <sup>Wen</sup> ~~Mr.~~ Hindle, Vice President in charge of the Biomedical Marketing, PDP-12 and PDP-10 Product Lines. His letter of April 26, 1968 (copy enclosed) to Dr. Wattenburg, ~~President of Berkeley Scientific Laboratories,~~ clearly stated our approach ~~into~~ the clinical laboratory market and indicated the support that we would like to extend to Berkeley Scientific Laboratories. <sup>of our</sup> We asked, <sup>we asked</sup> ~~at that time,~~ for any other alternatives, or ~~any~~



(draft to Mr. E. O. Brown - BSL)

suggestions of how we might support Berkeley Scientific in any other manner, and we have not received an answer. I encourage you now to respond with any suggestions you might have where Digital Equipment Corporation could be of any assistance. ~~We would be more than happy to review this proposal.~~

I have discussed this many times, with Mr. Mort Ruderman, Manager of Biomedical Marketing, and his approach is any request of Berkeley Scientific would be looked upon in such a manner as to give them most favorable consideration. He appreciates that Berkeley Scientific was in this market first, is an OEM <sup>customer</sup> of Digital Equipment Corporation, and if there is any way without withdrawing from the market place, he would appreciate entertaining these suggestions. We believe that the clinical laboratory market is a large one and an important part of this market will be satisfied by systems supplied directly by a manufacturer. It is for this reason that we entered the clinical laboratory market. However, at the same time, we feel that both Berkeley Scientific and Digital Equipment Corporation can coexist in this market because of the different product and system approaches of the two organizations.

I want to repeat that we feel strongly about BSL remaining a good customer, and will, as stated previously, entertain any suggestions you may have. We look forward to hearing from you, and if I, or any of the personnel at Digital Equipment Corporation can be of any assistance, please do not hesitate to contact me <sup>U.S.</sup>. I also give you the assurance that, as in your letter, we are doing everything <sup>trying</sup> immediately to correct any erroneous impressions obtained by prospective customers in the field, <sup>and to</sup> ~~and are doing everything to~~ have the correct message with our own international sales force.

Sincerely,

Kenneth H. Olsen  
President

enclosure



file  
February 1, 1967

C  
Professor William Wattenburg  
Berkeley Scientific Laboratories  
2229 Fourth Street  
Berkeley, California 94710

Dear Bill:

O  
I apologize for the long delay in answering your request for pricing of the stripped LINC-8. I am now able to give you prices for such a LINC-8 system.

P  
The LINC, as you know, is a complete system, both system software-wise and hardware-wise. It is the most approachable and easiest machine to use that is on the market today. Therefore, in the environment where unskilled technicians are called upon to be operators, its conversational powers and its approachability have significant advantages. The following is a breakdown of how we suggest reducing the price of the LINC-8 for OEM customers.

Y  

<u>TITLE</u>	<u>REDUCE COST</u>
Relay Register	
Removal of the relay register	\$200.
Replace data terminal panel with blank data terminal panel	600.
Reduced A to D: Eliminate low level analog preamplifiers and half the analog multiplexers	200.

This would reduce the cost of the LINC-8 to \$37,500., and would be discounted in DEC's Discount Agreement. The equivalent PDP-8 configuration would consist of the following:

PDP-8	\$18,000
Display scope	3,600
(LINC has pseudo character generator)	



Dual DECTape	\$12,100
EAE	3,500
CAB-8	1,050
Total	\$38,250

COPY

The LINC has hardware multiply (24 bits in approximately 32 microseconds). So, the equivalent PDP-8 would be \$38,250. The LINC has 6 sense switches set under program control to give significant interaction with the machine. The LINC also has auto loader features so the paper tape requirement is almost non-existent. As a matter of fact, all PDP-8 programs are on LINC tape.

Another suggestion is the modification of the LINC scope. It has 8 potentiometers on the front of it that are used as light pens, threshold detectors under program control, etc. If you were to modify the scope and do away with these 8 potentiometers we would be able to reduce the A/D by removing the remaining multiplexer cards, the sample and hold, and comparator card. This would reduce the price another 6 to 8 hundred dollars. There is excess room in the LINC-8 cabinet to house additional equipment, especially if the data terminal panel were now removed. Above the dual tapes there is room for two mounting panels, and under the table there is room for an additional two mounting panels.

Another area that might be of interest in the LINC mode of operation, is that the LINC has half-word instructions which, in some of your applications, would greatly reduce the size of both the programs and core storage. I am enclosing LINC literature which include the LINC-8 program manual which is extremely well written as a self teaching test. There are also 35 examples of typical applications.

I am also including the LINC-8 price list, complete LINC-8 software library, which obviously includes all the PDP-8 programs.

To date we have delivered 16 LINC-8 systems, two of them are in the San Francisco area, one at Stanford Research Institute, and one at Stanford Medical Center. There are presently two in the Los Angeles area, and we are now quoting June delivery.



February 1, 1967

I hope the foregoing information meets with your approval, and is both informative and interesting. If you have any additional requests, concerning other engineering modifications that we might suggest to the LINC-8, we would be more than happy to talk about these.

My purpose of this letter is to make you aware of the full capabilities of another product manufactured by Digital Equipment Corporation. If we can be of additional assistance, please do not hesitate to contact me.

Sincerely yours,

Morton E. Ruderman  
Manager  
Biomedical Marketing

MER:djc

cc: D. Barker  
K. Larsen

Enclosures



July 3, 1969

C  
O  
P  
Y

Mr. P. B. Alper  
Vice President  
M. R. Eason & Company, Ltd.  
635 Madison Avenue  
New York, New York 10022

Dear Mr. Alper:

I want to thank you for your letter of June 13th concerning your client's interest to merge with our Company. However, I feel that we have to give a negative answer to your inquiry.

We see the plans for DEC laid out quite clearly before us, and do not now see the need for making corporate ties.

Sincerely yours,

Kenneth H. Olsen

KHO:ecc



M. R. EASON & COMPANY, LTD.

*Financial Consultants*

635 MADISON AVENUE  
NEW YORK, N. Y. 10022  
MURRAY HILL 3-1143

June 13th, 1969

Mr. K. H. Olsen, President  
Digital Equipment Corp.  
Maynard, Mass.

Dear Mr. Olsen:

We have had an indication from the major shareholder of a company engaged in the manufacture of precision electromechanical devices, conductive plastic potentiometers and subassemblies in which potentiometers are combined with other devices, and also the production of instrument switches, that they would be interested in an "upstream merger" with a qualified candidate.

This fine company's volume is in excess of \$5,000,000.00. Sales and profits have increased annually.

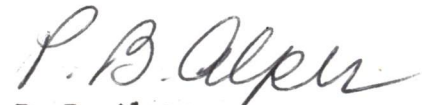
Management is young, aggressive, and their interest is not one of "sellout" but rather growth through broadened markets or integrated sources of supply that can be furnished by the acquiring company. They are interested only in a tax-free "pooling of interests" merger with an organization where the "plus" factors are obvious to both managements and shareholders.

If in principal you would be interested in exploring the possibilities of this acquisition candidate, we would be pleased to furnish you with complete details.

We look forward to your early reply.

Very truly yours,

M. R. EASON COMPANY, LTD.



P. B. Alper  
Vice President

PBA:dp



July 3, 1969

Mr. Jordan D. Lewis  
The Battelle Development Corporation  
505 King Avenue  
Columbus, Ohio 43201

Dear Mr. Lewis:

I feel very flattered to be invited to take part in the 136th Annual Meeting of the American Association for the Advancement of Science.

I'm afraid that I have to give a negative answer to your invitation because I don't expect to be free at that time.

Sincerely yours,

Kenneth H. Olsen

KHO:ecc

C  
O  
P  
Y



# The Battelle Development Corporation

505 KING AVENUE COLUMBUS, OHIO 43201 AREA CODE 614 TELEPHONE 299-3151

June 2, 1969

RECEIVED  
JUN 4 - 1969  
KENNETH H. OLSEN

Mr. Kenneth H. Olsen, President  
Digital Equipment Corporation  
146 Main Street  
Maynard, Massachusetts 01754

Dear Mr. Olsen:

The 136th annual meeting of the American Association for the Advancement of Science will be held in Boston December 26-31. The AAAS Section on Industrial Science will sponsor a symposium on "Managing the Growth of the Small Technical Company". We feel a presentation by you would be a valuable contribution to this symposium.

Should you be interested, we would ask that you prepare a 45-minute talk suitable for later publication. While we prefer to allow you maximum flexibility, emphasis should be placed on one or two problems you feel are keys to the evolution of a small, high-technology company into a growing firm with a solid foundation. Suggested topics include recognizing and developing management capabilities and adopting a marketing rather than a technical orientation.

Between 8,000 and 10,000 people are expected to attend the annual meeting, suggesting an attendance of approximately 300 at the symposium. We anticipate a majority of the latter will have a strong technical background and many will be facing the problems you will discuss.



Mr. Kenneth H. Olsen

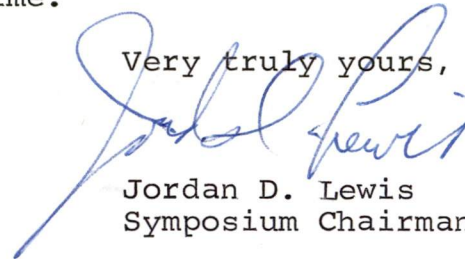
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June 2, 1969

We will have two speakers in addition to yourself and there will be a panel discussion following the talks. The symposium will be on the morning of December 29. For your information an outline of last year's meeting is attached.

I look forward to receiving your acceptance of this invitation. Many thanks for your time.

Very truly yours,

A handwritten signature in blue ink, appearing to read "Jordan D. Lewis", is written over the typed name.

Jordan D. Lewis  
Symposium Chairman

JDL:11

Enclosure



**INDUSTRIAL SCIENCE**

(1968)



## AAAS SECTION ON INDUSTRIAL SCIENCE

### Retiring Vice Presidential Address and Luncheon

MONDAY, DECEMBER 30

Grand Ballroom, Statler Hilton

12:00 noon Chairman: D. W. COLLIER (*Vice President—Research, Borg-Warner Corporation, Chicago*)

Speaker: ALLEN V. ASTIN (*Director, National Bureau of Standards*)

Evaluating Research Results—Before and After

### Continuing Education for Engineers— Policy and Operating Issues

Arranged by ZOLA BRONSON  
(*Staff Associate for Science Management Studies,  
Planning Organization, National Science Foundation*)

SATURDAY, DECEMBER 28

Lower Court Room, Statler Hilton

9:00 a.m. Chairman: ZOLA BRONSON

Report on an Exploratory Study of Continuing Education for Research Scientists and Engineers

RICHARD RENCK (*Associate Director, Social Research, Inc., Chicago*)

Continuing Education for Engineers—Policy and Operating Issues as viewed by:

Management

PAUL E. PURSER (*Assistant to the Director, Manned Spacecraft Center, NASA, Houston*)

ALBERT V. WILLETT, JR. (*Staff Consultant, Personnel Development Division, Employee Relations Department, E. I. DuPont de Nemours Co., Wilmington, Delaware*)

SHELDON DAVIS (*Vice President and Director of Industrial Relations, TRW Systems Group, Redondo Beach, California*)



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## SECTION ON INDUSTRIAL SCIENCE

### Academia

GEORGE J. MASLACH (*Dean, College of Engineering, University of California, Berkeley*)

ISRAEL KATZ (*Dean, Center for Continuing Education, Northeastern University, Boston*)

### 2:00 p.m. Professional Engineers

JAMES D. BOULGARIDES (*Manager, Business Systems and Operations, Douglas Missile & Space Systems Engineering Division, McDonnell Douglas Aircraft Company, Inc., Santa Monica, California*)

EDWARD H. FREIBURGHUSE (*Manager, Quality Control, Large Steam Turbine—Generator Division, General Electric Company, Schenectady, New York*)

### 3:00 p.m. Panel Discussion: Reconciliation of Sectoral Views

### 4:00 p.m. General Discussion and Questions from the Floor

The general purpose of this symposium is to identify, discuss, and reconcile the views of management, practicing engineers, and educators regarding their respective responsibilities for helping offset and overcome the technical obsolescence of the engineer; and to evaluate management's Continuing Education policies and practices vis-a-vis the engineers' expressed needs and appraisals of existing resources and opportunities for technical refreshing and updating. Both management and the engineer will respond to academia's views of its role and service responsibilities in Continuing Education. The importance of employee motivation for self-renewal and the effects of organization spirit on engineer responsiveness will be among the topics discussed. Basically, the operational and personal problems that affect Continuing Education resource utilization will be emphasized. Specific programs, education modes, and instructional mechanisms will be considered only peripherally. The overall objective is to develop an integrated understanding of organizational and individual Continuing Education needs, responsibilities, and problems in order to improve technical manpower utilization.

## Current State of Research Management

Arranged by GORDON K. TEAL

(*Vice President, Texas Instruments Incorporated, Dallas*)

MONDAY, DECEMBER 30

Embassy East, Statler Hilton

9:00 a.m. Chairman: GORDON K. TEAL

Research Management in the Mobil Oil Corporation

DAYTON H. CLEWELL (*Senior Vice President, Research and Engineering, Mobil Oil Corporation, New York*)



## SECTION ON INDUSTRIAL SCIENCE

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### Research Management in the Bendix Corporation

WINSTON E. KOCK (*Vice President and Chief Scientist, Bendix Corporation, Detroit*)

### Research Management in the International Business Machines Corporation

JERRIER A. HADDAD (*Vice President of Engineering, Programming and Technology, International Business Machines Corporation, Armonk, New York*)

The management of research as carried out in industry varies greatly from company to company. The approach is strikingly influenced by the nature of products or services produced, by the technology currently used, by international operations, and by other aspects of the business. The speakers will discuss research management in their particular companies, describing their business, the manpower resources, the organizational structure of the company, and the particular methods used in planning and initiating research and in carrying it over into the development of products and services. They will discuss modes of research interaction between different parts of their companies that contribute to staying ahead of competition and maintaining an acceptable profit.

### The Current State and Outlook for Research-on-Research

Arranged by D. W. COLLIER

(*Vice President—Research, Borg-Warner Corporation, Chicago*)

MONDAY, DECEMBER 30

Embassy East, Statler Hilton

2:00 p.m. Chairman: D. W. COLLIER

#### Some Pressing Problems in Research-on-Research

MERRITT WILLIAMSON (*Professor, School of Engineering, Vanderbilt University*)

#### Projects under Way on Research-on-Research

ALBERT RUBENSTEIN (*Professor, Department of Industrial Engineering, Northwestern University*)

#### A Behavioral Scientist's Viewpoint on Research-on-Research

HERBERT SHEPARD (*Yale University*)

#### Federal Scientist's Viewpoint on Research-on-Research

ZOLA BRONSON (*Staff Associate for Science Management Studies, Planning Program, National Science Foundation*)

#### Summary and Close

D. W. COLLIER

The session will have as its general purpose to bring the non-specialist up-to-date on what is being done and the outlook for im-



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## SECTION ON INDUSTRIAL SCIENCE

proving the research process and its management by means of research in the social sciences. Some of the pressing problems working research managers identify as needing research will be outlined. Then a review of current projects underway in this field will be given. A behavioral scientist will give his viewpoint on some approaches to improving the research environment. And finally, a representative of federal government science will express his viewpoint on what is and what needs to be done to further improve the field.

### RELATED SYMPOSIA

(Shown in order of listing in the Program)

Science and Public Workshop (K)

Technology and Values (L)

Systems Research in Organization and Management (L)

New Developments in Educational Technology (Q)

Relationship of Teaching and Research (Q)



Kenneth H. Olsen  
Letters Sent, July, 1969

TO:	FROM:	RE:	DATE:
Jordan D. Lewis Battelle Development Corp.	Ken Olsen	"no" to invitation to AAAS Annual Meeting	7/3/69
P.B. Alper M.R. Eason & Company	Ken Olsen	"no" to merge	7/3/69
E.O. Brown Berkeley Scientific Labs.	Ken Olsen	apology for detrimental comments made by DEC	7/3/69
Professor J.F. Hart U. of Western Ontario	Win Hindle	late deliveries	7/3/69
RL Graham International Conference on Properties of Nuclear States	Win Hindle	"no" to being sponsor	7/3/69
Thomas Trimble	Nick Mazzaresse	possible meeting between Trimble and Richard Grier	7/3/69
Professor Holste	Ken Olsen	apology for not seeing in Europe	7/3/69
E.B. Moran New England Tel. Co.	John McNamara		7/8/69
Harry G. Webster Third National Bank of Hampden County	Mark Nigberg	mailing lists (DEC and Third Dimensions)	7/10/69
Frank M. Dunnington Spectra-Physics	Morton Ruderman	apologies for inconveniences	7/17/69
Don Wallace Don Wallace & Co.	Ken Olsen	"no" to corporate ties	7/22/69
Irving Goldstein David Waræn Equities Corp.	Ken Olsen	"no" to corporate ties	7/22/69
Dr. Ludwig Braun Brooklyn Polytechnic Institute	Nick Mazzaresse	thanks for order of 2 TSS/8's	7/23/69
Prof. Harry E. Grove Nuclear Structure Research Laboratories	Roger Handy	PDP-6	7/24/69
Bruce W. Tennant Battelle Development Corp.	Edward B. Corell	possible meeting about "Coup par Coup"	7/25/69
Milton Collins Teradyne, Inc.	Ken Olsen	installation of ECO	7/28/69



TC:

RE:

DATE:

[illegible]



AUGUST



13/0 9-3

K. H. OLSEN

8/28/69

Norm:

Ken asked me to send you a copy of  
this and request that you follow up on it with  
Rod in a few days.

~~\_\_\_\_\_~~

Went up  
4  
saw him

Elsa



AUG 29 1969

DIGITAL EQUIPMENT CORPORATION

MAYNARD, MASSACHUSETTS

KENNETH H. OLSEN  
PRESIDENT

August 27, 1969

Mr. Robin Kranz  
Department of Teacher Education  
Syracuse University  
102 Waverly Avenue  
Syracuse, New York 13210

Dear Mr. Kranz:

Your brief description of the Office of Education Project at Syracuse University was of interest to us. As you can see from the enclosed brochure, we have a substantial number of educational users who have used our computers in diverse educational applications.

We would like to learn more about the area of computer management of instructional material. By copy of this letter, I have asked Mr. Rod Belden of our Rochester office to call on you to discuss the Project further and to suggest how our equipment might assist you.

Under separate cover, I have mailed you a copy of our latest brochure describing the PDP-8/I series of computers and our "Introduction to Programming" brochure, which is a complete description of programming the basic PDP-8 and its numerous peripherals.

Thank you for your interest in Digital Equipment Corporation.

Very truly yours,

Kenneth H. Olsen

KHO:ecc  
Enclosure - "Computers in the Classroom"

cc: Mr. G. C. Belden  
DEC - Rochester

*Elsa,  
This guy turned  
out to be a  
grad student  
with no funds  
CHALK ONE UP  
to goodwill  
Norm  
23 Aug*



*Form Daelling*  
*& Richard May to answer*  
*for Ken's signature*

SYRACUSE UNIVERSITY

SCHOOL OF EDUCATION | CENTER FOR THE STUDY OF TEACHING

102 WAVERLY AVENUE | SYRACUSE, NEW YORK 13210

August 8, 1969

Kenneth H. Olsen  
Digital Equipment Corporation  
Maynard, Mass.

Dear Mr. Olsen:

Enclosed is a copy of the Times profile that appeared in the Sunday financial section. I am sure that you may have a sufficient supply of the clippings and it is really the inferences that you have an interest in educational applications for computers, that has motivated this inquiry.

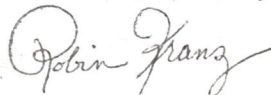
The Department of Teacher Education and others here at Syracuse University are working on a Phase Two study under the auspices of the U.S. Office of Education in an attempt to improve the quality of future teachers. The program, the feasibility of which is being studied, has two areas where the use of digital computing facilities would appear to be indicated.

The first of these centers is along conventional lines. That is, requirements exist for student record-keeping functions. These include such things as scheduling, test scoring, analyses, and so forth. The second and I feel more interesting area is concerned with some of the learning activities themselves.

A fairly heavy emphasis on the use of mediated instruction is planned for the proposed student activities in the program, much of which could be managed by a computer and its associated interfaces. It is this area of computer management of instructional materials as contrasted to the more currently popular computer assisted instruction (CAI) that may lend itself to small computer applications. Further, it is the adaption of the computer to the educator's needs rather than the educator's adaptation that we seek.

If the above outline of our interests are in line with the goals of your company, I would be happy to discuss them with you or your seconds at your earliest convenience. In any case, a copy of your current literature on the PDP series computers and available software packages would be appreciated.

Sincerely yours,



Robin Kranz  
Project Assistant

RK:sps



DIGITAL EQUIPMENT CORPORATION

MAYNARD, MASSACHUSETTS

KENNETH H. OLSEN  
PRESIDENT

August 27, 1969

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Department of Teacher Education  
Syracuse University  
102 Waverly Avenue  
Syracuse, New York 13210

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Very truly yours,

Kenneth H. Olsen

KHO:ecc

Enclosure

*"Computers in the Classroom"*

cc: Mr. G. C. Belden

DEC - Rochester



Norm Doelling  
+ Richard May to answer  
for Ken's signature

# SYRACUSE UNIVERSITY

SCHOOL OF EDUCATION | CENTER FOR THE STUDY OF TEACHING

102 WAVERLY AVENUE | SYRACUSE, NEW YORK 13210

August 8, 1969

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Digital Equipment Corporation  
Maynard, Mass.

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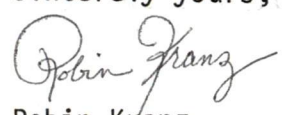
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Sincerely yours,



Robin Kranz  
Project Assistant

RK:sps



digital

August 26, 1969

Mr. Robert K. Straus  
Chairman  
Sun Litho  
7950 Haskell Avenue  
Van Nuys, California 91400

Dear Mr. Straus:

I am in receipt of your letter to Mr. Kenneth Olsen of August 14, 1969. On behalf of Mr. Olsen, I would like to take this opportunity to answer the questions contained in the letter.

At present Digital Equipment Corporation builds Typeset 8 systems to drive all photo-composition devices excluding the 505, 1010, Video Comp and the Harris Intertype CRT Fototronic. Typeset 8 systems include both hardware and software to drive the various photo-composition equipment such as Linofilm. They provide the user with the capability of block copy output by the use of stored formats. This is the type of system your people saw in operation at the Tucson Newspapers.

In order to output a page of display composition on present Typeset 8 systems, each ad requiring a different format may be linked together. The output from the photocomposing machine will have the first ad appearing at the top in block copy form followed by each additional ad in sequence. This requires the paste-up department to cut and place the blocks of copy in page format. This process is accomplished by defining the formats required, marking of copy by format number, punching unjustified tape and entering the punched paper tape into the computerized process. 99% of all computer processed ad copy is prepared by this method today. It is a compromise between the justifying display keyboards with maximum paste-up and the optimum system you describe in your letter. The trade-off has been one of economics, labor, speed, paste-up time equals x dollars capital expenditure. This equation may be filled in today on the following basis:

With one third to one-half of present perforator personnel you can gain 300 per cent in line processing



speed which will require one-half present paste-up time for a 55,000 dollar capital expenditure.

Computerized typesetting systems to provide the capability of page make-up including line and half-tones are not within present state of the art capability. This statement is based on the assumption that you desire to have the text, the line work and the half-tones to appear on a screen ready for reproduction on film or paper. To the best of my knowledge there is not commercially available a photo-composing machine with this capability.

Computerized typesetting systems are available that will output magnetic tape or punched paper tape that will position text in heads followed by body text, and leaving space for graphics and include footnotes. As you can see these systems have been built around magazines and book publishing work. Systems of this type including hardware and software, range from 200,000 to 1,000,000 dollars. To add the requirement of positioning ad copy on a single page where ads may number 18 or more per page in various sizes is a problem which has not been attempted by Digital Equipment Corporation. To the best of my knowledge it has not been attempted by any manufacturer. Phototypesetting machines which only approach the composing problem begin at 400,000 dollars. Positioning 18 ads to a page has multiplied present page composition problems by a factor of 6.

Computer hardware to process and store data for the optimum system is available. The problem presented by a system of this nature is a software problem. The order of magnitude presented by a program of this nature, I cannot at present define.

Systems of this type of sophistication cannot be supplied on a turn key basis such as our Typeset 8. These systems require the end user to provide technical capability in system layout and programming. Digital Equipment Corporation can supply you with the necessary hardware at an extremely competitive price. Our computer product lines range from the \$8,500 single user systems to the \$750,000 time sharing systems.

In summary I believe you can accomplish your present and future composition requirements with our Typeset 8. As a manufacturer we will support this system from installation to the training of personnel. It will provide you with economical display composition capability and at the same time, familiarize you with computer technology. With this familiarization you will be better prepared to decide whether you want the sophistication necessary to provide the capability of the optimum system.

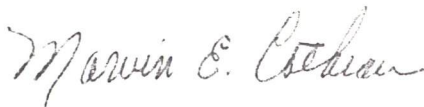


I trust I have understood the intent of your letter and furnished the answer to your questions. Having come from 14 years of calling on the newspaper and general printing trade in Southern California, I am familiar with Sun Litho. I will be in California attending the Newspaper Mechanical Conference during the week of Labor Day. I am scheduled to be in my office during the week of September 8 and I will be most happy to meet with you at that time.

Thank you for your letter and your interest in our computerized typesetting systems.

Very truly yours,

DIGITAL EQUIPMENT CORPORATION



Marvin E. Cothran  
Marketing Manager -  
Graphic Arts

MEC/kef

cc: Kenneth Olsen



8/20  
Mark Cochran to answer

## SUN litho

August 14, 1969

Mr. Kenneth H. Olsen, President  
Digital Equipment  
Maynard, Massachusetts 01754

Dear Mr. Olsen:

Our company specializes in web offset lithography on newsprint, mostly for large retail organizations such as Sears. We use Linofilm photo-type setting equipment from Mergenthaler, and we are reaching a point now where we are beginning to wonder whether we should purchase a computer.

The Mergenthaler representative out here suggested that we buy one of your computers and team it up with the new Mergenthaler 505 CRT typesetter, which they are importing from England. I think that we will probably do this in a year or two, but our decision to purchase the computer would be much expedited if it were possible for your computer to do a few other things besides what we have been told it can do now.

We were told that your computer's memory could store formats and save us a great deal of time in the mark-up that must precede any typesetting. Our people went over and observed what they are doing at the Tucson, Arizona newspapers with your computer, and were much impressed. However, they felt that since we do practically no straight matter at all, but almost entirely display advertising composition, we should perhaps wait until the computer can store all of the information needed to do a page layout, including the line drawings and the half-tones.

To illustrate what I am talking about, I am enclosing a couple of circulars that we have done recently for customers. We set about 200 pages a month of this type of composition, and we spend about \$300,000 a year doing it. Needless to say, we can afford to spend a good deal of money on a computer, if it will provide us with any significant economy on this operation.



# SUN litho

- 2 -

Is this too specialized a need to interest Digital Equipment? I would not think so, because most newspapers have the same problem, at least with local advertising.

I am going to be in the East after Labor Day, and I would be glad to stop in and see you, if you could give me a few minutes of your time.

Sincerely yours,



Robert K. Straus  
Chairman

Encl.



August 24, 1969

Mr. Luis J. S. Cavallone  
25 Bell Street  
Belleville, New Jersey 07109

Dear Mr. Cavallone:

Thank you for your interest in Digital Equipment Corporation.

We have, in the past, avoided other than direct representation in new areas, often based on the service aspect of our business. Our plans for South America are not clear at this point. I suggest that you do send in a description of your plans, and of the principals involved. We will be happy to consider your interests in reviewing our plans for Argentina.

Sincerely,

Theodore G. Johnson  
Vice President, Sales

TGJ:mr

cc: Mr. K. H. Olsen



*88*  
*Red Johnson to answer*

July 28, 1969

Digital Equipment Corp.  
146 Main St.  
Maynard, Mass.

Mr. President of Digital Equipment Corp.:

I know you are manufacturers of components for industrial digital control and of computers for automatic control.

The reason for writing to you is that after near eight years of working and studying in the U. S. in the thermomechanical field I will be going back to Argentina. Upon my return I will become associated with an electronics engineer of outstanding background in his field to start an enterprise that will cover electronics, automatic control for industry and thermomechanical projects.

As the economical situation of Argentina has shown a substantial improvement lately and as industry and their manufactured products have become more sophisticated we feel that there is a very lucrative future for the computer industry. This is the reason that prompts us to ask you if you would be interested in opening an agency in Argentina to market your equipment, and which would also be able to design complete control systems to suit any requirements.

My future partner, who lives in Argentina, will be in charge of the projects related to automatic controls and we feel that his background can satisfy very stringent requirements. We are young, dedicated engineers who look forward to work in challenging projects.

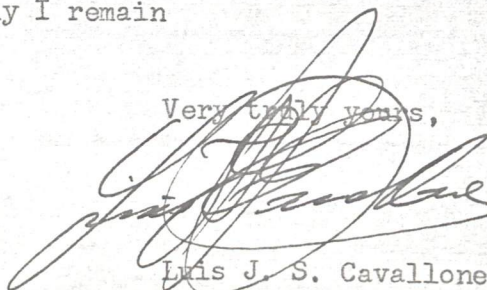
Should our services sound of interest to you we would be very happy to supply you with our "curriculum vitae" and references as you may request.

I will be travelling around the middle of September. My present address in the U. S. is:

Luis J. S. Cavallone  
25 Bell St.  
Belleville, N. J. 07109  
201 - 759 - 0925

Looking forward to your reply I remain

Very truly yours,



Luis J. S. Cavallone



digital

August 22, 1969

Mr. Arthur A. Natella  
Principal  
Lincoln High School  
Kneeland Avenue  
Yonkers, New York 10704

Dear Mr. Natella:

Mr. Olsen, President of Digital Equipment Corporation, has asked me to reply to your letter of August 4. We are in registration at this time and can only provide you with past annual statements. Our registration period will be over at the end of September.

Please feel free to contact us again if you need further assistance.

Cordially,



Mark Nigberg  
Public Relations Manager

MN/rdb  
cc: K. Olsen  
Enclosures



Mark Higherg to answer

LINCOLN HIGH SCHOOL

KNEELAND AVENUE

YONKERS, N. Y. 10704

ARTHUR A. NATELLA

PRINCIPAL

MILTON P. BARNHARD

ASSISTANT PRINCIPAL

166 Devoe Avenue

Yonkers, N. Y. 10705

August 4, 1969

Mr. K. H. Olsen, President  
Digital Equipment Corporation  
146 Main Street  
Maynard, Mass.

Dear Mr. Olsen:

I should be very pleased to receive a copy of the latest annual report of your company. I am at the present time revising a text book I wrote in 1966 — The Consumer and His Dollars (Oceana Publications, Dobbs Ferry, N.Y.), and would like to use your company's growth pattern as an example of a strong growth stock. The company I used in writing the original manuscript is still an excellent one — Long Island Lighting. However, since the statistics require updating for the new printing, I should like to replace the chart with figures that represent Digital Equipment's excellent progress over the past 5 or 6 years.

If you would prefer me not to mention the name of the company, I of course would abide by your wishes and would simply use the statistics without identification. Any help you can provide will be gratefully accepted — I should like to show comparative statistics for: earnings, growth in stockholders' equity, book value (if available); and any other comparative data which would illustrate how investment in a growth issue tends to enhance its intrinsic value as the company grows. Some companies show nos. of shareholders, gross receipts, net receipts, cost of operation and the like.

Many thanks for your kindness

Sincerely yours,  
Arthur A. Natella



August 20, 1969

C  
O  
P  
Y

Mr. M. J. Lyons  
Director of Corporate Development  
Transitron Electronic Corporation  
168 Albion Street  
Wakefield, Massachusetts

Dear Mr. Lyons:

Thank you for your letter of August 4th expressing an interest in discussing merger possibilities with Digital Equipment Corporation.

We see the plans for DEC laid out quite clearly before us, and do not now see the need for making corporate ties.

Sincerely yours,

Kenneth H. Olsen

KHO:ecc

cc: Mr. Theodore G. Johnson  
Vice President, Sales



*Plants:*

BOSTON / MELROSE  
ANDOVER / WORCESTER  
MASSACHUSETTS  
LAREDO / TEXAS  
NASHVILLE / TENNESSEE  
ANTRIM / NORTHERN IRELAND  
VERNON / FRANCE  
BERKSHIRE / ENGLAND  
AMSTERDAM / NETHERLANDS  
NUEVO LAREDO / MEXICO

*Subsidiaries:*

PHALO CORPORATION  
SHREWSBURY  
MASSACHUSETTS

ELECTRA / MIDLAND  
COMPANY  
KANSAS CITY / KANSAS

CALTYPE CORPORATION  
LOS ANGELES  
CALIFORNIA

FLORIDA  
TRANSFORMER  
COMPANY  
DE LEON SPRINGS  
FLORIDA

CONAIR, INC.  
GLENDALE / CALIFORNIA

CROWN INDUSTRIES  
OWEGO / NEW YORK

STEVENS  
MANUFACTURING  
COMPANY, INC.  
EBENSBURG  
PENNSYLVANIA

TRANS / CIRCUITS INC.  
FALLS CHURCH  
VIRGINIA

MILCOM  
PRODUCTS, INC.  
ROCHESTER  
NEW YORK

ELLSWORTH  
MANUFACTURING  
GROUP  
NORFOLK / VIRGINIA

GILBERT ENGINEERING  
PHOENIX / ARIZONA

METCRAFT PRODUCTS, INC.  
BALTIMORE / MARYLAND

PEERLESS  
PRODUCTS, INC.  
HAMDEN  
CONNECTICUT

ELECTRO CORDS  
CORPORATION  
LOS ANGELES  
CALIFORNIA

LEMCO  
LONDON  
ENGLAND

**TRANSITRON**

ELECTRONIC CORPORATION  
188 ALBION STREET • 617 / 245-4500  
WAKEFIELD, MASSACHUSETTS 01880

August 4, 1969

PERSONAL AND CONFIDENTIAL

Mr. T. Johnson, President  
Digital Equipment Corporation  
146 Main Street  
Maynard, Massachusetts 01754

Dear Mr. Johnson:

Transitron has made the decision to expand into the computer memory business, and our management has committed itself to a long range development program in your industry.

Our research identified you as an industry leader, and your organization as the most aggressive. We have, thus, taken the liberty of contacting you directly.

Transitron is a major electronics-based manufacturer, listed on the New York Stock Exchange, with production, engineering and marketing facilities throughout the United States and Europe. In recent years we have diversified our product mix and structured new divisional groups in different, but related, industries.

We would like to meet and discuss with you several concepts of a tax-free merger with present management continuing.

Please let me hear from you by phone or letter so that we may initiate a personal, confidential discussion.

Very truly yours,



M.J. Lyons  
Director of Corporate Development



digital

August 19, 1969

Mr. Emery Laskey  
Publisher  
ELECTRONIC NEWS  
7 East 12 Street  
New York, New York

Dear Mr. Laskey:

Thank you very much for your recent note of congratulations to Mr. Olsen, president of Digital Equipment Corporation, regarding our Company "going public."

For your information, Digital has been a public Company for several years, and I am sure your reference to "going public" was in regard to our recent offering of additional shares.

We have in the past worked very closely with both the editorial and advertising staffs of ELECTRONIC NEWS, and have enjoyed a warm and useful relationship with your publication. I am passing your letter on to our Advertising Manager, Mr. Gabe d'Annunzio, for his information.

Very truly yours,

  
Mark Nigberg  
Public Relations Manager

MN:meh

cc: K. Olsen  
G. d'Annunzio



digital

August 19, 1969

Mr. V. E. Vavra  
Director of Sales and  
Assistant Publisher  
N/C WORLD  
779 Roosevelt Road  
Building 4, Suite 300  
Glen Ellyn, Illinois

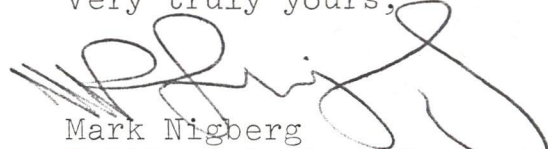
Dear Mr. Vavra:

Thank you very much for your recent letter about Digital  
Equipment Corporation addressed to our president, Mr. Olsen.

Mr. Olsen is very much aware of the problems associated with  
building our Company's image in its markets, and appreciated  
receiving your comments.

We are passing on your note to our Advertising Manager, Mr.  
Gabe d'Annunzio, for his information.

Very truly yours,



Mark Nigberg  
Public Relations Manager

MN:meb

cc: K. Olsen  
G. d'Annunzio



# N/C WORLD

"The machine tool people are not known to Digital Equipment, and Digital Equipment is not known to the machine tool people."

RECEIVED

August 8, 1969

AUG 11 1969

KENNETH H. OLSEN

Mr. Kenneth H. Olsen  
President  
Digital Equipment Corporation  
Maynard, Massachusetts 01754

Dear Mr. Olsen:

The above comment is a direct quotation made by Frank Long, Chief Electrical Engineer at W. F. & John Barnes Company in Rockford yesterday at a meeting in which they revealed a new automotive machining line to the press and to representatives of the three major auto builders.

As you probably already know, the Digital PDP 14 is the fixed program controller on the computerized transfer line and a PDP 8L computer monitors the controller and machining system.

Mr. Long went on to say how they had been looking for control and monitoring devices such as these for quite some time in order to make a common practice of including them in their equipment. (He never did say how they learned about Digital Equipment Corporation.)

I am certain that Allan Young's interview with you, which will appear in the October issue of N/C WORLD, will help to alleviate the lack of knowledge in this area by the machine tool builders and machine tool users.

I would also like to emphasize that advertising dollars invested in N/C WORLD would also aid your progress into this virtually untapped market -- the use of your small computers and computer-like devices in controlling and monitoring machine tools.

The circulation of N/C WORLD is made up of the right companies and the right individuals within those companies who should be made aware of the availability



Mr. Kenneth H. Olsen

August 6, 1959

Page Two

of your equipment to production with the most efficient operation.

Hopfully, we can be of service.

Cordially,

W. D. Norris  
Director of Sales &  
Manufacturing

W.D.



August 15, 1969

C  
O  
P  
Y

Dr. Gordon VanWylen  
Engineering Department  
University of Michigan  
Ann Arbor, Michigan

Dear Gordon:

I'm sorry I haven't been able to gather all the things together for you, as I've been out of the office almost continuously since I talked with you a week ago.

I'm enclosing a few printed things that will at least give you a picture of our Company even though they don't answer the particular things you asked for.

Sincerely yours,

Kenneth H. Olsen

KHO:ecc  
Enclosures

1968 Annual Rept.

Prospectus

First Manhattan Rept. by Edwin Leiker





August 15, 1969

Mr. William E. Gahr  
The Built Environment Corporation  
1656 33rd Street, N.W.  
Washington, D.C. 20007

Dear Mr. Gahr:

Thank you for your recent inquiry addressed to Mr. Ken Olsen.

The Canadian National Research Council milling machine application is indeed an intriguing one. Enclosed is a copy of a news release describing the application. Dr. D. Gospodnetic, Ship Section, Division of Mechanical Engineering at N.R.C. is the principal researcher and developer of the system. I'm sure he would be willing to furnish more information on the system.

DEC PDP-8 family computers are being used in over 4000 applications throughout the world. In the majority of these applications, the computers are used as a controller and data-taker in industry or scientific research. Our machines have been selected for these applications primarily because of their high speed, moderate cost, ease of programming and interfacing.

Enclosed is a brochure describing the PDP-8/I computer, along with a copy of our Control Handbook, and a brochure describing our Quickpoint Numerical Control Tape Preparation System.

Mr. William Kiesewetter of our Washington, D.C. office would be happy to discuss our computers, in detail, with you. He may be reached at 7100 Baltimore Boulevard, College Park, Maryland, 301-779-1100.

Very truly yours,

Howard O. Painter  
Product Marketing Manager  
PDP-8 Family

HOP:mw

Enclosures



8/3 Bill Long to answer

# THE BUILT ENVIRONMENT CORPORATION

1656 33rd Street, N.W., Washington, D.C. 20007

Telephone 202 337-1440

Reference

Date August 5, 1969

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

Dear Dr. Olsen:

As a new firm, we are in the business of developing building systems that are consistent with industrial principles. A housing system which we have been designing would involve considerable timber machines. To be effective and efficient, this pre-forming process must comply with strict quality standards which we would hope, could be eventually managed by a small computer.

Your firm has supplies the Canadian National Research Council with a PDP-8-1 to guide a milling machine for the production of ship hulls. A process such as this, that might control several machines -- milling, cut-off-routing-- could conceivably be very beneficial to a industrialized timber house process.

I would appreciate knowing more about your machines and their capabilities and would also be pleased if you could refer me to a contact in Canadian National Research Council who might be able to elaborate on their milling machine experiments.

Very truly yours,



Wm. E. Gahr

WEG/bbg



Ken  
digital

August 15, 1969

Rev. John R. Vigneau, S.J.  
Principal  
Xavier High School  
Concord, Massachusetts 01742

Dear Reverend Vigneau:

Your interest in Digital Equipment Corporation and our 8-Family computers has been brought to my attention.

Occasionally, Digital Equipment Corporation does indeed find itself in the position to make computers available to schools across the nation at reduced prices. We currently have a slightly used PDP-8/S computer with high speed paper tape reader (original purchase price \$13,995.) which we are offering at the reduced price of \$7,500. Should you be interested in the purchase of the 8/S at the reduced price, may I urge you to act quickly because machines made available at reduced prices do move rather rapidly.

As you are probably aware DEC has many small computers in secondary schools across the nation. Most of these schools are independent schools in the Northeast and suburban schools across the nation.

We hope you will be able to take advantage of the reduced price on the 8/S. When other machines at reduced prices become available, I will make it a point to make you aware of the reduced price.



Xavier High School  
Concord, Mass.

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Page --2--

When I can be of further help or furnish you with additional information on the 8-Family computers, please do not hesitate to call on me.

cc: K. Olsen ✓  
R. Eisenhower

Very truly yours,

*Richard May*  
Richard May

d



Ken

digital

August 15, 1969

Goertz Industrial Design, Inc.  
111 East 36th Street  
New York 16, New York

Attention: Beatrice Bank

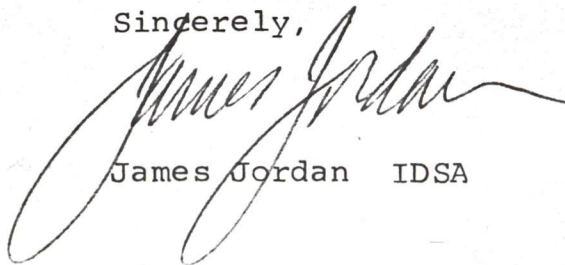
Dear Ms. Bank:

Thank you for your brochure and letter informing us of the considerable talents of Albrecht Goertz. I remember reading of his live-in design effort with Nissan some time ago. The result is quite successful. If, in the future, Digital Equipment Corporation requires the services of a designer with Mr. Goertz' experience in such a wide variety of products we will be certain to contact him. The Goertz folder will be in our Consultant Designers file for reference.

As in the case of many companies in the United States, Digital Equipment Corporation has an in-house design staff. Two staff industrial designers supply the necessary design input for a company which has grown from sales of \$25 million to \$90 million in the last four years. While we feel the internal designer is more capable of solving the detailed day-to-day design problems of the corporation, we also recognize the new-point-of-view contribution a consultant can make.

Thank you for informing us of Albrecht Goertz.

Sincerely,



James Jordan IDSA

JJ/pc

cc: Ken Olsen ✓



8/3 Jim Jordan to answer

GOERTZ

August 8, 1969

Mr. Kenneth H. Olsen  
President  
DIGITAL EQUIPMENT CORP.  
146 Main Street  
Maynard, Mass. 01754

Dear Mr. Olsen:

How to choose a designer -- how to evaluate his skills and techniques are deep concerns of manufacturers who must make these decisions.

We believe the results of a designer's work are his best arguments in offering his services.

Here enclosed is a condensed, visual record of Goertz' performances in recent years. In his proven ability to accomplish them, many of management's questions may be anticipated.

As design consultant to a company Goertz assumes the responsibility connected with the function and visual aspects of products and often acts as liaison between company operations here and abroad.

We would appreciate it if you would let us know whether or not a meeting with Mr. Goertz would be of interest to you.

Sincerely yours,

GOERTZ INDUSTRIAL DESIGN, INC.

*Beatrice Bank*  
Beatrice Bank

BB/jl  
enc.





August 14, 1969

Dr. Howard Yanof  
Medical Collidge of Ohio at Toledo  
P.O. Box 6190  
Toledo, Ohio 43614

Dear Dr. Yanof:

In an attempt to bring together all pertinent information concerning the Medical College of Ohio account with Digital Equipment Corporation I am listing the following points:

- I. Your change order of June 24, 1969
  - a. Requested items were deleted
  - b. Hewlett-Packard card reader was ordered
  - c. KE09 was shipped and installed
  - d. LT19 B and C scheduled for shipment August 1969
  - e. 3 - TU55's have been approved for loan and will be shipped Aug. 1969

We must take exception to paragraph 1, page 2 in that we will not place on order any of the module items or supplies kits until money is available to pay for them. If, as you have indicated in telephone conversations, you intend to cancell the HP card reader, the \$4500.00, less cancellation charges, will be applied to the module order. Delivery of these modules will then be 6 weeks ARO. Please inform us of your intentions as soon as possible to minimize any cancellation charges.

II. Delivery of RF/RS 09

Due to engineering difficulties this device is currently on engineering hold. We will make no delivery promise at this time. Your order, along with other orders for this device, have been placed on a delivery Queue. When the engineering hold is lifted, you will be assigned a delivery time in accordance with your Queue position. We will keep you informed of developments in this matter.

III. Delivery of PDP-12's

Your PDP-12's have been assigned delivery dates of September and October. As of this date these dates are firm and we do not anticipate further delays.



IV. Prints of CR03-B Controller

I have requested these drawings from Rob Katz and will forward them to you as soon as possible.

V. Payment of invoice on DEC 64025

Since your purchase order did not prohibit partial shipment we have, in accordance with our usual policies, installed all available equipment. According to our standard TERMS & CONDITIONS, paragraph 4, a partial payment is now past due on the equipment installed. Your attention to this matter will be greatly appreciated.

I will be happy to further discuss the above points with you at any mutually agreeable time.

Sincerely.

Ron Ginger  
Applications Engineer

cc: Ken Olsen  
Rob Katz  
Dick Clayton of DEC

Dr. H. Itonnoni  
Milt Blunk of MCOT

Enclosure:  
copy of Mr. Blunk's letter of June 24, 1969

RG/sd



MEDICAL COLLEGE OF OHIO AT TOLEDO • P. O. BOX 6190, TOLEDO, OHIO 43614

June 24, 1969

Mr. Ronald Ginger  
Digital Equipment Corporation  
3853 Research Park Drive  
Ann Arbor, Michigan 48104

Reference: Quotation C-108-108-283 Dated 1-22-69

Dear Mr. Ginger:

The following comments pertain to the delivery and installation of our PDP-9 and two (2) PDP-12's and also elaboration and modification of the above quotation. These changes are necessary due to revisions in our immediate needs and discrepancies, between our system configuration specifications and the quotation, overlooked by Digital Equipment Corporation and us until now.

Items which must be deleted from the quotation are:

ITEMS	DESCRIPTION	COST
9	12-bit Buffer with relays (w800)	\$1800.00
1	SP12-C Spare parts for PDP-12C	2500.00
4	SP-9 Spare parts for PDP-9	4000.00
	TOTAL	\$8300.00

Items which must be added to the quotation are:

DESCRIPTION	COST
Hewlett-Packard Card Reader for PDP-9	\$ 4500.00
KE09-Ext. Arith. Element for PDP-9	4000.00
LT19 B & C	900.00 *
A404 Module	130.00
A207 Module	45.00
H910KV Power Supply	280.00
2 Module Groups for PDP-12C	612.00 ★
2 Cables BC08B-10	240.00
H810 Wire Wrap Tools	99.00 *
H812 Wire Wrap Tools	10.50 *
DEC Supplies Kit	200.00
TOTAL	\$11016.50

\*Note that these items are in addition to the original quotation specifications.

★ module group for 12c

1-M101 - \$24

2-M206 - \$72

1-M103 - \$50

4-K161 - \$100

4-K681 - \$60

# 300



Mr. Ronald Ginger  
June 24, 1969  
Page 2

The net difference is \$2716.50, without regarding the discount applied to the 12-bit buffer, nor considering a discount which may be granted by any of the items added. This difference will be paid by the Medical College of Ohio at Toledo when, if ever, funds become available, per our conversations with Digital Equipment Corporation.

The third subject concerns items #9 and #10 on Processor II, the disks. The quotation indicates that DF32 will be loaned until the disks specified can be delivered. However, since the PDP-12's will not be delivered on time, we request that another provision be made which will enable us to have a form of mass storage available on the PDP-9 now.

That is, Digital Equipment Corporation loan three (3) TU55 tape transports in lieu of the DF32. Also, advance the three (3) TU12-8 tape transports (with Linc Tape/DEC Tape Option) which are designated for use on our two (2) PDP-12's. We will return the three tapes on loan when our disk arrives and transfer the three TU12-8's to the PDP-12's when they arrive.

In addition to the inconvenience caused by these modifications and the lack of ready facilities at our site due to internal complications of a new and growing institution, we offer our apologies. We are directing our efforts in attempting to "get our systems up and running!"

Sincerely yours,

Mr. Milton Blunk  
Assistant to the President

MB:njd

cc: Mr. Morton Ruderman  
Mr. Robert Katz



Elsa

August 13, 1969

Electronic Expeditors  
Termination and Excess Inventory Division  
14828 Calvert Street  
Van Nuys, California 91401

Attention: Mr. David J. Berns

Dear Mr. Berns:

Your letter dated July 31, 1969 to Mr. Kenneth Olsen regarding Electronic Expeditors' interest in selling our surplus inventory has been brought to my attention.

Unfortunately, at the present time, we do not have a requirement for your services. We will contact you, however, if one should develop in the future.

Thank you very much for your interest in working with Digital Equipment Corporation. If you should have any questions please let me know.

Very truly yours,

E. Thomas Cook  
Purchasing Supervisor

adw



*Henry Crouse to answer*

July 31, 1969



Mr. Kenneth H. Olsen  
President  
Digital Equipment Corp.  
146 Main Street  
Maynard, Mass. 01754

Dear Mr. Olsen:

Electronic Expediters is a specialist in the purchase and sale of excess inventory as may have been accumulated by your company and its divisions.

In addition to buying outright excess material, we also offer a plan for the orderly disposal of material that could be of great importance to your organization. This program is outlined as follows:

Electronic Expediters will receipt for the inventory assigned to them, inventory, sort, process, identify and catalog the material, both by vendors part number, as is practicable, and Digital Equipment Corp. part number

Electronic Expediters, by being selective, studying each item, and then offering it for sale to the best qualified buyers, would make it possible for each item to bring in the greatest amount of Revenue.

All expenses in connection with the sorting, identifying and handling, would be borne by Electronic Expediters.

All material received will be retained for thirty days and not be sold - so that should any requirements for this material by Digital Equipment Corp. develop during this period, it would be returned to Digital Equipment Corp. at 80% off their original cost.

After thirty days we would then proceed to sell this material for the best possible price - and should any requirements develop by Digital Equipment Corp., this material would then be returned to Digital Equipment Corp. at 60% off their original cost.

Digital Equipment Corp. would be guaranteed a given amount of money initially as a minimum recovery to them. This initial payment would become part of the total amount of money credited to Digital Equipment Corp. on the sale of the material. Sixty per cent of all monies recovered from the sales of any material would be returned to Digital Equipment Corp. with a statement of Sales for the month.

In essence, we propose to work for you and create for you a greater return on your excess inventory in a business-like manner. At present we have working arrangements with other companies as per the attached list and who can give you their opinion of this program.



Mr. Kenneth H. Olsen

-2-

July 31, 1969

For your perusal, I am enclosing a photo copy of one of our typical contracts.

Our books, records and warehouse will be open for verification and inspection to you or your authorized representatives at all times.

My summary, I am sure, leaves some questions unanswered. However, I am unequivocally ready to answer any direct question which you may have. Therefore, please call me at your convenience. I look forward to becoming part of your team.

Very truly yours,

ELECTRONIC EXPEDITERS  
Redistribution and Marketing Division



David J. Berns  
General Manager

DJB:hl  
Encls.

P.S. As a participant in this program you would be entitled to purchase the material of others, who are also participating in this program, at 40% below the standard quantity price.



digital

August 6, 1969

Dr. John S. Hanson  
Associate Professor of Medicine  
Mary Fletcher Unit  
Medical Center Hospital of Vermont  
Burlington, Vermont 05401

Dear Dr. Hanson:

Upon request of our Corporation President, Ken Olsen, I have been asked to account for the delay in delivery of the PDP-12 you have purchased.

All I can say is that we goofed! The urgency of the situation was not relayed to the people directly involved with handling the shipment. This, coupled with a misestimation of the transfer time from the shipping warehouse to Burlington, Vermont, are the reasons for the delay.

You deserve better service than what we have been giving you. We value your current business as well as your future potential, and we will take the steps that are necessary to be assured an incident similar to yours will not occur again.

It is unfortunate that your work has been delayed due to the somewhat shoddy performance on our part; however, Don Alusic, the cognizant sales engineer, will be in touch with you to see if there is any way we can help the situation through consultation with both our software and hardware experts within the region or at the plant.



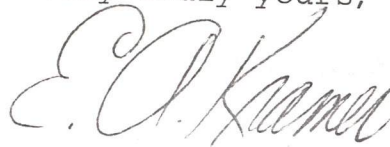
Dr. John S. Hanson

- 2 -

August 6, 1969

Again, let me apologize on behalf of Digital Equipment Corporation and state that this particular incident is definitely the exception and not the rule. I hope to have the pleasure of meeting with you again soon.

Very truly yours,



Edward A. Kramer  
PDP-12 Marketing Manager

EAK/bam

cc: Ken Olsen, President ✓  
Roger Handy, Regional Manager



7-18  
*Dick Clayton to ans.*

THE UNIVERSITY OF VERMONT  
COLLEGE OF MEDICINE  
BURLINGTON, VERMONT 05401

CARDIOPULMONARY LABORATORY  
DEPARTMENT OF MEDICINE  
MARY FLETCHER UNIT  
MEDICAL CENTER HOSPITAL OF VERMONT



RECEIVED

JUL 17 1969

KENNETH H. OLSEN

July 14, 1969

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

Dear Mr. Olsen:

As this letter is being written, the PDP-12 ordered by this laboratory has been sitting in a shipping warehouse in Burlington, Mass. for the past 16 days.

We originally saw the PDP-12 at Maynard last December prior to its January announcement, submitted a letter of intent, and entered a formal purchase order in January. At that time we were told we could expect April 15th delivery. When my systems programmer and I attended the first PDP-12 programming course in March, we were advised that our shipment date had been advanced to the end of May. After this date had come and gone the shipment was scheduled for the middle and then finally the end of June. Largely through the good efforts of Mr. Ed Kramer, the machine did leave Maynard June 28th.

The DEC Northeast Sales Division has been acutely aware during this entire period that earliest possible delivery was of prime importance to us. No one, of course, can make valid complaints about delays occasioned by engineering and production holdups.

However, it is inconceivable to me that a \$35,000 instrument can be allowed to sit in a warehouse for over two weeks after leaving your firm! Why, in view of our recognized urgent need, were not arrangements made guaranteeing direct and immediate delivery? Why, rather than our having to call DEC numerous times to check on shipping and routing, did not DEC follow up and check with us as to whether the machine had been received?

I would be very interested in your answers to these questions. They have not been forthcoming from other members of your company. Perhaps you would agree that the entire situation reflects poorly on Digital Equipment Corporation. I will certainly have to say as much to other potential DEC users at this university.

Sincerely,

John S. Hanson, M.D.  
Associate Professor of Medicine



August 5, 1969

C  
O  
P  
Y

Dr. George Kozmetsky  
University of Texas at Austin  
College of Business Administration  
Austin, Texas 78712

Dear Dr. Kozmetsky:

I very much enjoyed having breakfast with you last Thursday morning. I have passed on your ideas to our people so they'll be ready when we are approached by Applied Devices.

I was fascinated by your ideas and the ways in which you have influenced people. I'd like to suggest that one of your challenges as a teacher should be to generate more people who are creative, know how to concentrate and work hard, and are free to innovate. How do we get more people like you and General Doriot? This might be more important than all the operations research that we can ever force down people's throats.

Sincerely yours,

Kenneth H. Olsen

KHO:ecc





August 1, 1969

Mr. Richard T. Kleber  
Worcester Science Center  
21 Cedar Street  
Worcester, Massachusetts 01609

Dear Mr. Kleber:

I enjoyed our meeting the other day at the present headquarters of the Worcester Science Center. I was very excited about the plans for your new building and the possibility of using one of our computers in your shows.

After considering your plans, I would recommend the following computer system:

1	PDP-8/LE computer 4K memory and ASR33 Teleprinter	\$ 9,150.00
1	KD8L data break option	500.00
1	DW08A I/O conversion panel	1,500.00
1	TC01 DECTape control unit	7,400.00
2	TU55 DECTape transports	4,700.00
TOTAL		<hr/> \$23,250.00

Although this system gives you the same computer capability as is available at Strassenbergh Planetarium, it does not, however, include any special interfaces to the projectors and sound equipment, or any special software. My advice in these areas would be to work closely with the people at the Strassenbergh Planetarium. Although we are willing to provide you with both interface design and programming assistance, they should have much greater knowledge about your particular application of our equipment.



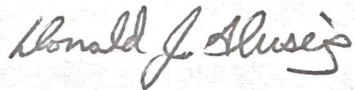
Richard T. Kleber

2

August 1, 1969

We will contact you in the near future to continue discussion of your application and your proposal to Ken\*Olsen. In the meantime, if you have any further questions, don't hesitate to contact us.

Sincerely,



Donald J. Alusic  
Applications Engineer

DJA:dpp

Enclosures

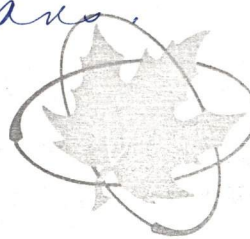
cc: Jackson F. Wilcox, Worcester Science Center  
K. Olsen, DEC ✓  
N. Mazzaresse, DEC  
R. Eisenhower, DEC  
R. Lane, DEC



<sup>6-26</sup>  
*Letter to have someone answer*

# WORCESTER SCIENCE CENTER

OWNED AND OPERATED BY THE WORCESTER NATURAL HISTORY SOCIETY



*7/7 Bob Lane talked  
with them on the  
phone. Salesman  
to visit, then  
Worcester Mass. 01602  
make  
recommendation  
to Nick.*

June 9, 1969

Mr. Kenneth H. Olsen, President  
Digital Equipment Corp.  
146 Main Street  
Maynard, Massachusetts 01754

Dear Mr. Olsen:

Our new Science Center has reached a stage of construction that makes it imperative for us to move rather quickly to a decision concerning the type of computer equipment to be installed in our Alden Omnisphere.

We understand our Omnisphere Director, Jackson Wilcox, discussed several aspects of our computer plans with you some-time ago. On a recent visit to the Strassenburgh Planetarium in Rochester, New York, he was quite impressed with their PDP-8 computer installation. Although, as he points out, our philosophy of computerized program presentation differs from theirs to some extent, we do agree on the desirability of a real-time computer within the planetarium. The diversity of programs we expect to offer increases the need for flexible effect-control.

It might be appropriate, at this point, to emphasize that the Alden Omnisphere is the first of its kind in the world. From the interest already expressed by other institutions, we believe several may either convert their present planetaria to the Omnisphere concept or construct similar new facilities. And the computer, of course, would be integral equipment in such facilities.



Mr. Kenneth H. Olsen

Page 2

June 9, 1969

Two of our lecturers will be full-time specialists on the Omnisphere staff. The others will be drawn from the group of educators attached to the regular Science Center staff. This will impose a further requirement on the effect-control system to permit full handling and control by non-engineers.

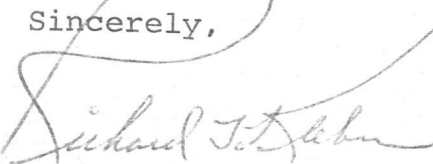
With some modification, we believe your PDP-11 computer will be ideal for our use. When mounted on the lecture console within the "theatre" - and with prominent product identification - the attention it would receive from audiences before and after program presentations could well have considerable advertising value for Digital, - particularly if descriptive literature was available for public distribution.

Would you consider making a PDP-11 available for permanent installation as an outright gift to the Science Center? In return, we would assure you our full cooperation in identifying the unit as such and permanently and publicly recognizing your company as the donor.

As you will gather from the enclosed material, the new Science Center represents much more than a static, single-faceted approach to the sciences. We believe it will provide one of the most comprehensive facilities of its kind in the world. Presently in an advanced stage of construction, its formal opening is planned for early in 1970. Because of its all-inclusive approach to the sciences, its central geographic location, and the area's historic commitment to scientific knowledge and technology, it is planned for a capability of a 1,000,000 visitors annually from many parts of the country.

The Digital PDP-11 is the unit we would like to use. Hopefully, the PDP-11 and the Omnisphere can be brought together in some sort of arrangement that will enable both to profit mutually from the wide public visibility and prestige factors provided by our Science Center.

Sincerely,



Richard T. Kleber  
Executive Director  
RTK/agf  
Enclosures



Kenneth H. Olsen  
Letters Sent, August, 1969

TO:	FROM:	RE:	DATE:
Dr. John S. Hanson Medical Center Hospital of Vt.	Edward Kramer	reasons for delay in delivery of PDP-12	8/6/69
Richard T. Kleber Worcester Science Center	Donald J. Alusic	recommendation of computers	8/1/69
Dr. George Kozmetsky Univ. of Texas	Ken Olsen	liked ideas, enjoyed having breakfast with him	8/5/69
Dr. John S. Hanson Medical Center Hosp. Vt.	Ed Kramer	apology for poor service	8/6/69
Electronic Expeditors Mr. David J. Berns	E. Thomas Cook	selling surplus inventory	8/13/69
Dr. Howard Yanof Medical College of Ohio	Ron Ginger	delivery of computers	8/14/69
Goertz Industrial Design Beatrice Bank	Jim Jordan	thanks for reference to designer	8/15/69
Rev. John R. Vigneau Xavier High School	Richard May	computers at reduced prices for schools	8/15/69
Dr. Gordon Van Wylen Univ. of Michigan	Ken Olsen	apology/enclosing printed matter	8/15/69
V.E. Vavra N/C World	Mark Nigberg	comments/building Company's image	8/19/69
Emery Laskey Electronic News	Mark Nigberg	acknowledgement/congratulations	8/19/69
M. J. Lyons Transitron Electronic Corp.	Ken Olsen	"no" to merger	8/20/69
Arthur A. Natella Lincoln High School	Mark Nigberg	annual statements	8/22/69
Luis J.S. Cavallone	Ted Johnson	plans for Argentina	8/24/69
Robert K. Straus Sun Litho	Marvin Cothran	computerized typesetting systems	8/26/69
Robin Kranz Syracuse Univ.	Ken Olsen	computer management of instructional material	8/27/69