

Insd. Dir.  
Sch. of Inst.  
ESP

January 31, 1963

Dear Mr. Van de Velde:

Thank you for your letter of January 30th. Unfortunately we have no pictures in our files that you ask for in your letter; however, at the time the computer was in operation, a commercial photographer did take pictures. We certainly have no objection to you writing to the photographer to purchase the pictures you want. His address is Alan W. Richards, Princeton, New Jersey.

Sincerely yours,

(Mrs. William Grander)  
Office of the Director

Mr. Louis R. van de Velde  
Advisory Engineer  
Washington Systems Center  
7900 Wisconsin Avenue  
Bethesda, Maryland

7900 Wisconsin Avenue  
Bethesda, Maryland

January 30, 1963

Institute for Advanced Study  
Princeton University  
Princeton, New Jersey

Gentlemen:

A colleague of mine, Mr. A. Robin Mowlem of the Space Systems Center, Federal Systems Division, IBM, and I are writing a book on computers for use in the high schools.

We should like very much to have a picture of Dr. John von Neumann and the IAS Computer that Burks, Goldstine and he designed. Could you send us one or two glossies indicating the credit line you wish us to use and the cost of the glossies which we wish to defray? Thank you.

Very truly yours,



Louis R. van de Velde  
Advisory Engineer  
Washington Systems Center  
IBM

ck Dist. Gen  
El Computer  
and sales of Dist. ERP

*Inst. Gen. Computer*

IBM

*Data Systems Division  
Product Development Laboratory  
P.O. Box 390, Poughkeepsie, New York*

*International Business Machines Corporation*

*Telephone: GLOBE 4-1000*

June 10, 1960

Dr. Robert Oppenheimer  
Institute for Advanced Study  
Princeton, New Jersey

Dear Dr. Oppenheimer:

Thank you for permitting us to examine the early records of the computer project. Although we did not find any information of the type which we are seeking, we nevertheless appreciated your courtesy in this matter. We also appreciated the assistance rendered to us by Prof. Montgomery and Mrs. Gorman.

Sincerely yours,

*C. P. Boberg*

C. P. Boberg  
Poughkeepsie Patent Operations

CPB:rms

CC: Dr. H. H. Goldstine, IBM Lamb Estate  
Mrs. Elizabeth Gorman, Institute for Advanced Study  
Prof. Deane Montgomery " " " "

*obl. Comp. Termination  
of Project*

THE INSTITUTE FOR ADVANCED STUDY  
PRINCETON, NEW JERSEY

August 26, 1959

TO: R.O.  
FROM: MCM

These are at long last the final papers on the Computer Cost Contract. They have been delayed this long pending disposition of all Government Surplus Property.

*M.*  
Mike

*Rs signed 8/27/59*

Dear Verna :

Thank you for your note and the letter from Mr. Catani.

I have answered the letter.

I shall be pleased to give you as much instruction as I can on how to handle future requests. I propose to do so sometime (one or two months) before I leave so that we have some time for "debugging the procedure" as we would say in our computer slang.

We have a complete list of ECP publications (multilithed) which makes things really easy and there is a little left over of supplies of reprints & other materials, above all records of technical, financial etc. nature. Where should they ultimately be stored ? The total is about 4 - 5 file cabinets.

There is no hurry; I do not plan to leave before the end of January.

Yours

*Hans J. Maehly*

Hans Maehly

Nov. 1959

**WOODS HOLE OCEANOGRAPHIC INSTITUTION**  
**WOODS HOLE, MASSACHUSETTS**

August 28, 1957

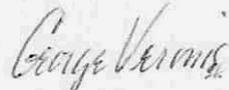
Dr. J. Robert Oppenheimer  
Institute for Advanced Study  
Princeton, New Jersey

Dear Dr. Oppenheimer:

When I left the Institute last year the plans for the computer were still somewhat tenuous. My most recent work requires the use of a computer, and I wondered if the ECP still exists and if it would be available for numerical work on a fluid instability problem. Would you be so kind as to let me know what the possibilities are for use of the Institute's computer?

Thank you.

Sincerely,



George Veronis

GV:slk

5 September 1957

Dear Dr. Veronis:

As you know, the operation of the computer was transferred to Princeton University July 1st of this year. Although the personnel and the purposes of the operation have not been changed, there have been some changes, rather for the worse, in the arrangements, particularly in the requirement of a \$70 an hour charge for machine time. I am enclosing the official announcement of the terms of operation. You should feel free to communicate directly with Dr. Maehly should you wish.

Sincerely yours,

Robert Oppenheimer

Dr. George Veronis  
Woods Hole Oceanographic  
Institution  
Woods Hole, Massachusetts

encl.

*Computer  
closing  
operations*

The Institute for Advanced Study  
Electronic Computer Project  
Princeton, New Jersey

C O P Y

March 2, 1956

Office of Naval Research, New York  
346 Broadway  
New York 13, New York

Attn: J. H. Levy

Gentlemen:

Dr. J. Weyl of your Washington office and I have had a conversation regarding the possibility of entering into a future contractual arrangement with your office for the purpose of providing a computational facility for the Princeton scientific community. On the basis of this conversation, I understand that you will be willing to entertain a proposal by us to this end.

I accordingly make the following firm proposal on behalf of the Institute for Advanced Study: For the sum of \$61,000 for the period 1 July 1956 through 30 June 1957, the Institute proposes to maintain and to operate its electronic computer on such problems of general scientific interest as arise in the community and seem worthy of solution. The Institute proposes to provide its machine, together with a maintenance and operating staff, as well as a small group of programmers, to assist in the preparation of problems.

On the attached sheet I give a detailed cost breakdown. You will, I am sure, understand that this breakdown is only approximate and is intended in the main to give you a picture of our present estimate of how our costs will be distributed. The precise allocation of funds will in all likelihood vary, depending upon our needs as they-become apparent to us.

The Institute for Advanced Study represents that it has not employed nor retained a company or person (other than a full-time employee) to solicit or secure this contract; and agrees to furnish information relative thereto as requested by the Contracting Officer.

Yours very truly,

J. Robert Oppenheimer, Director  
Institute for Advanced Study

HHGesg

cc: ONR/NY (5)

J. Weyl

M. Morgan, Jr.

Computer  
closing -  
operations

The Institute for Advanced Study  
Electronic Computer Project  
Princeton, New Jersey

C O P Y

March 2, 1956  
Contract DA-36-034-ORD-1646

Philadelphia Ordnance District  
127 N. Broad Street  
Philadelphia 2, Pa.

Attn: H.L. Wilson

Gentlemen:

On July 20, 1955, I had occasion to write you regarding an extension of our present Contract DA-36-034-ORD-1646. Since writing you that letter, the Institute for Advanced Study has re-evaluated its role in the computer field. On February 29 at a meeting of the Liaison Committee organized by the technical sponsors of the project, I explained to them in some detail our present views on this subject. Broadly speaking, I announced the intention of the Institute to disband the research engineering and the logical-mathematical activities as soon as was feasible and in the best interests of the Government, and to discontinue the meteorological group. Thus, the Institute contemplates the period 1 July 1956 to 30 June 1957 to be a period in which its engineering and attendant logical-mathematical activities are "phased out". It feels that this operation will require about six months.

In view of this situation, and with the understanding and informal approval of the representatives of the sponsoring Services, I now make the following firm proposal:

For the sum of \$54,000 for the period 1 July 1956 to 30 June 1957 (if you prefer, the term of the contract could be 1 July 1956 to 31 December 1956) we propose to prepare and furnish final reports on the mathematical and engineering work, and to proceed with the disbanding of the engineering logical-mathematical and meteorological research and development activities now being undertaken under Contract DA-36-034-ORD-1646.

The Institute wishes it understood that the attached cost sheet represents our present best effort to extrapolate into the future the rate of phasing out of the activities mentioned above. Since this is a difficult and uncertain task, the individual items cannot be regarded as exact. We reserve the right, if the situation demands, to make amendments in this cost sheet. The total price is, however, firm.

We will accept and sign a contract embodying the formal provisions and articles of our present contract. In this connection, we will communicate with you later about the disposition of such items of Government property now listed in Contract DA-36-034-ORD-1646, that we will no longer need.

- 2 -

Philadelphia Ordnance District

March 2, 1956

Since no new improvements, modifications or developments to the electronic computer machine at the Institute will be made during the period of the proposed contract, the Institute does not feel that it wishes to have included in the basic contract a clause comparable to Article I (Scope of Work), paragraph 17, in the existing contract.

Yours very truly,

J. Robert Oppenheimer, Director  
Institute for Advanced Study

HHGesg

cc: J. Weyl  
J. Prevas  
M. Andrew  
L. Cohen  
P. Gillon  
M. Morgan, Jr.

THE INSTITUTE FOR ADVANCED STUDY  
PRINCETON, NEW JERSEY

OFFICE OF THE DIRECTOR

2 May 1956

Dear Mr. Maass:

The time has come to make definite our arrangements for the termination of our employment of Dr. Charney. He has accepted a professorship at the Massachusetts Institute of Technology. Some of the relevant facts I need to set before you.

1. At present Dr. Charney receives from us a salary of \$12,500. Since he is the principal investigator, the Institute has, since the departure of Professor von Neumann, paid three-fourths of his salary, and charged one-fourth to the Government.

2. The contract between the Institute and the Office of Naval Research for Charney's work terminates June 30, 1956. A similar contract, to take effect July 1, 1956, has been negotiated between the Massachusetts Institute of Technology and the Office of Naval Research.

3. Charney has a letter of appointment ~~has~~ a member of the Institute until December 31, 1956. His appointment at M.I.T. could presumably become effective at any time after June 30.

4. For quite a long time, Charney has had in mind a prolonged scientific trip to Europe, and I have assured him that if he could work out the schedule for such a trip as a member of the Institute, we would be pleased to have him make it.

5. At the time when Charney decided that he would have to leave the Institute, he proposed that he complete his work here by May or June of this year, and take the long-planned trip to Europe during the summer and autumn; and asked whether the Institute would help him to carry out these plans. I said that we would try.

6. The Office of Naval Research thereupon agreed to pay Charney's salary during his trip, provided the Institute would pay for travel expenses. I agreed.

7. Yesterday Dr. Charney came to see me. For personal reasons (the death of his father) and even more because his work here is not completed, and cannot be completed for some months, he proposed to spend

- 2 -

the summer here, and to postpone his European trip until some future time--perhaps a year from now.

8. Dr. Charney hoped that there might be some method by which we could help him on his trip, even though he would not be in our employ at the time he would make it. Specifically, he suggested that we pay him a half year's salary for his work here this summer.

9. It was unclear to me whether we would have available, or could justify the use of Government funds, to carry out Charney's proposal, and I did not like the notion of his being simultaneously on our payroll and that of M.I.T. On the other hand, I do feel some sense of obligation, both to help him with his long-frustrated European plans, and to make his departure from the Institute as little disruptive as possible. He has been very considerate of us in his dealings.

10. I therefore propose to advise Charney--as in fact I have already done--to accept the appointment at M.I.T. as of July 1st of this year. I further propose that we give Charney, as termination pay, the sum of \$5,000; but not pay him directly for his work here this summer. It is for this proposal that I seek your approval. I think it justified by the facts set forth above; and by the brilliantly successful work that Charney has conducted at the Institute; and by the considerateness and courtesy with which he has conducted himself under difficult circumstances.

11. We have made provision for such termination pay in the budget approved at the last meeting of the Trustees. It would be an appropriate charge on the grant made to us by I.B.M., which I have allocated to the support of applied mathematics.

I regret that this is such a long story; I hope that my proposal will seem fair and proper to you.

A copy of the draft minutes of our last meeting is on its way to you. It was a good meeting, though we missed you.

I hope that your bad back has by now greatly improved.

Very sincerely,

Robert Oppenheimer

Mr. Herbert H. Maass  
100 Park Avenue  
New York, New York

Copy to Mr. Leidesdorf

THE INSTITUTE FOR ADVANCED STUDY  
PRINCETON, NEW JERSEY

OFFICE OF THE DIRECTOR

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Robert Oppenheimer

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100 Park Avenue  
New York, New York

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Robert Oppenheimer

Mr. Herbert H. Maass  
100 Park Avenue  
New York, New York

Copy to Mr. Leidesdorf



DEPARTMENT OF THE NAVY

OFFICE OF NAVAL RESEARCH

WASHINGTON 25, D. C.

IN REPLY REFER TO

ONR:416:JH:mp

Ser

7637

-3 APR 1956

Dr. Robert Oppenheimer, Director  
Institute for Advanced Study  
Princeton, New Jersey

Dear Dr. Oppenheimer:

It will be agreeable to the Office of Naval Research to accept the interim reports and publication on Dr. Charney's project (N6ori 13901) in lieu of a final report. We are taking this action to facilitate the closing of the contract by its scheduled termination date, 15 July 1956.

Sincerely,

A handwritten signature in cursive script that reads "Gordon G. Lill".

GORDON G. LILL

Head, Geophysics Branch

By direction of

Chief of Naval Research

Copy to:

Dr. Charney, Institute for Advanced Study  
ONR, New York

CABLE "AMPHYSICS"



# AMERICAN INSTITUTE OF PHYSICS

57 East 55 Street, New York 22, N. Y. • ELdorado 5-5850

March 30, 1956

Dr. H. H. Goldstine  
Institute for Advanced Study  
Princeton, New Jersey

Dear Dr. Goldstine:

The American Institute of Physics, on behalf of The American Physical Society, will handle press arrangements for the 1956 Washington meeting to be held April 26-28.

As Director of the Section on Information and Public Relations of the American Institute of Physics, I am now working to obtain reports on many of the papers scheduled for the meeting. This is in line with the Institute's policy of providing clear and accurate information about physics to the general public.

It has been indicated that your paper, "Some Techniques for the Solution of Elliptic Difference Equations on Large Scale Computers", may have particular interest for the press. Therefore, may I request that you do the following:

1. Will you kindly prepare a simple statement in lay language, about 600-800 words in length, of the gist of your paper?
2. Will you, in addition, send me the full text of your paper when it is available?

Since the meeting is just a short time away, I would appreciate receiving at least the statement just as soon as you are able to complete it.

Of course, I cannot guarantee that the press will use the material you present, but I feel confident they will show interest in it. We can guarantee accuracy and prevent distortions when we have more complete information to present to them.

I hope we shall have ample and accurate press coverage of the meeting. With your help, we can do a splendid job.

Sincerely,

EHK

Eugene H. Kone  
Director of Public Relations

EHK:lb  
cc :Director of  
Public Relations

COPY

COPY

DEPARTMENT OF THE NAVY  
OFFICE OF NAVAL RESEARCH  
WASHINGTON 25, D. C.

In Reply Refer To  
ONR:427:AJN:lsp  
NR 374-582  
Ser 7276

29 Mar 1956

Dr. Herman Goldstine  
The Institute for Advanced Study  
Princeton, New Jersey

Dear Dr. Goldstine:

We are pleased to inform you that your proposal on "High Speed Electronic Digital Computers" with the Office of Naval Research has been approved by the Electronics Branch and referred to the Contract Division for negotiation.

Since contractual negotiations are the function of the Contract Division, this notification of approval does not include authorization for contractual liabilities under the proposed contract.

The Contract Division of this Office will communicate with your Institute in the near future regarding negotiations of this contract.

Very truly yours,

(signed)

FRED D. RIGBY  
Head, Electronic Branch  
By direction of  
Chief of Naval Research

Copy to:  
ONR/New York

THE INSTITUTE FOR ADVANCED STUDY  
ELECTRONIC COMPUTER PROJECT  
PRINCETON, NEW JERSEY

March 28, 1956

Dear Jule:

I am writing to remind you that the Institute will need a final report on the meteorology work prior to the close of the contract on July 1. In fact, since it will be necessary to have this material typed, mimeographed and bound out of funds which terminate on July 1, it would be desirable that the report be in the typist's hands by June 1 at the latest.

For quite another reason, it would be good if it were finished within the next month or two. It seems to me quite possible that some, at least, of your people will find other positions very quickly and will leave quite soon. It would therefore be, I think, prudent to start on the preparation of this report almost at once.

Herman H. Goldstine

HEG:sg

cc: J.R. Oppenheimer ✓

Dr. J.G. Charney  
Institute for Advanced Study

March 28 , 1956

Dear Dr. Oppenheimer:

Many thanks for your letter of  
March 26 offering me the position of  
Acting Project Director, which I am  
happy to accept after having heard and  
discussed many details with Dr. Goldstone.

Besides the completion of Final  
Reports for the Government Agencies involved  
it will be my goal to convert this Institution  
(E.C.P.) into a service center by preparing  
a sufficient amount of service codes, manuals  
etc., in close operation with the remaining  
members of the staff, so that this machine  
may serve the future user from the beginning  
in an effective way. In addition, we hope to  
have enough stimulating scientific work to  
keep us reasonably busy...

Yours sincerely

Hans J. Machly

March 16, 1956.

To: R.O.

From: M.C.M., JR.

SUBJECT: Computer Transition.

~~Memorandum~~ Memorandum:

During your absence, a slight misunderstanding has arisen between Harry Smyth and Goldstein, largely occasioned by repeated rumors that the whole Computer Project was going to fold up much earlier than June, 1957; and to a small degree, I am afraid, because they got their feathers a bit ruffled in a couple of phone conversations.

- The essence of the disagreement was as follows:
1. Goldstein took the position that he might have trouble holding the key people (seven) to keep the thing going, and
  2. Smyth took the position that we had made commitments to both the government and the University to keep it going till June, 1957, and we had better stick by our commitments.

Unfortunately, both of them are correct, but there was no great need to say it.

The key people are as follows:

1. Bill Keefe - Maintenance Engineer, just raised in salary from \$6000 to \$8000. He is reasonably happy about everything and will almost certainly stay. He would be an almost replaceable loss.

2+3. Harold Small + Fred Smartt, Technicians; these men may very well be job-hunting at this point, but they are <sup>not</sup> so highly skilled that they could not be replaced, with some difficulty.

4+5. Hedy Kelberg + Irving Rabinowitz, Coders; no reason to believe that they will leave.

6. Bryant Teckerman, Mathematician; wants to stay ~~definitely~~, for at least six months.

7. Hans Maehly, Mathematician and probable Acting ~~the~~ Chief; certain to stay.

This is not too bad a picture.

This afternoon I visited both Herman G. and Harry Smyth, and I think I have everything back on the trolley. Hermann's unhappiness lay in the fact he did not want to mislead his employees about a future over which he had no control, and I assured him that no one was expecting him to do this. If we lost one or two of the people, we would just have to find others who could do the work.

And Smyth has my assurance that both you and I feel a strong obligation to ONR, and <sup>to</sup> the University to keep it rolling for another year, and we will do so.

There is no need for you to initiate anything further on this. This is for background only, in case one of them raises the subject with you.

It's going to be a long year!

Resp. Sub.

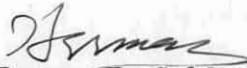
THE INSTITUTE FOR ADVANCED STUDY  
ELECTRONIC COMPUTER PROJECT  
PRINCETON, NEW JERSEY

March 12, 1956

Dear Robert:

This is a follow-up to my previous letter regarding the contract extension.

I went on Friday to a meeting at Aberdeen with del Campo and Prevas representing the B.R.L., and Gillon the O.O.R. I will not bother you with all the dirty details--the upshot of it, however, was that Gillon put up \$18,000, del Campo \$5,000, and we will have about \$12,000 surplus left over at the end of the fiscal year which can be applied to the new contract. This, together with the \$19,000 from the Air Force, is sufficient to provide what is needed.

  
Herman H. Goldstine

HHGesg

Dr. J. Robert Oppenheimer  
Institute for Advanced Study

Dr. Goldstine called with a question about the Computer budget. Up to now, the Institute has contributed 20%, in return for which the Govt. gave us title to equipment produced. As it is not expected that any will be produced next year, G. wonders if you wish to take this item out.

THE INSTITUTE FOR ADVANCED STUDY  
ELECTRONIC COMPUTER PROJECT  
PRINCETON, NEW JERSEY

March 7, 1956

Dear Robert:

I called Prevas at Aberdeen this morning to talk with him about property disposal and found out some quite amazing things regarding his views on the phasing out contract.

As you remember, Weyl had 'phoned to tell me of the arrangement he had made with Prevas--the Navy to contribute \$61,000 and the Army \$54,000. Of the \$54,000, \$19,000 was Air Force money. Prevas was apparently expecting Gillon to take about \$25,000 worth of this \$35,000, leaving Aberdeen to put up \$10,000. I pointed out to Prevas that Aberdeen was not acting in good faith, that Colonel DelCampo had agreed to support the phasing out operation, and that Prevas had agreed with Weyl as to the Army's contribution. I got, however, no where with Prevas. I then called Gillon, who had been present during my conversation with DelCampo, and received his assurance that he would talk to DelCampo. I shall hear from Gillon probably later today, at which point I will supplement this memorandum.

  
Herman H. Goldstine

HHG:sg

Dr. J. Robert Oppenheimer  
Institute for Advanced Study

THE INSTITUTE FOR ADVANCED STUDY  
ELECTRONIC COMPUTER PROJECT  
PRINCETON, NEW JERSEY

March 7, 1956

Dear Robert:

I have talked generally to Hans Maehly about the possibility of his directing the holding operation starting in the fall, and find that he is very much interested. I believe that he will be able to conduct this maneuver in a quite reasonable way. I shall, of course, be available to him.

I am trying now to dispose of all the property so that by the fall the operation will be purely the holding one we envisioned.

Maehly's salary is now \$6000. I suggest that a raise would be in order.

  
Herman H. Goldstine

HHG:sg

Dr. J. Robert Oppenheimer  
Institute for Advanced Study

THE INSTITUTE FOR ADVANCED STUDY  
ELECTRONIC COMPUTER PROJECT  
PRINCETON, NEW JERSEY

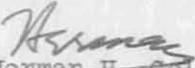
March 2, 1956

Dear Robert:

As you will see from the accompanying contractual proposals, and as you will recall from our conversation this morning, we have been asked by J. Weyl to prepare two proposals which, insofar as possible, are mutually exclusive and exhaustive as regards the subject at hand. Since Weyl contemplates giving future assistance to Smyth, he preferred to undertake the maintenance and operation phase of the program. This also works out well from the Ordnance point of view, since their interest is in terminating the other aspects of the work.

Weyl asked us to conform to a budgetary limit of \$61,000. This I have done, asking for no overhead from that contract. The balance of \$54,000 is, as you will see, put in to cover the phasing out operations on the engineering and mathematics. You will notice that I have suggested a six-month date for this. I do not think this is unseemly haste, and does provide for a reasonable rate of disbandment of personnel and dispersal of property. There is included in that budget an item of 40% overhead, which we could in an emergency use to pay for things involved in the hold operation.

Please feel free to make any amendments you desire in the proposals or budgets.

  
Herman H. Goldstine

HHG:sg  
Enclosures

Dr. J. Robert Oppenheimer  
Institute for Advanced Study

MINUTES OF LIAISON COMMITTEE MEETING AT THE  
INSTITUTE FOR ADVANCED STUDY

February 29, 1956

1. Attendance. The following persons were present at the Liaison Committee meeting which convened at 10:00 a.m., February 29, 1956, in the office of the Director of the Institute for Advanced Study:

J.R. Oppenheimer	
M.C. Morgan, Jr.	Institute for Advanced Study
H.H. Goldstine	
J.H. Pomerene	
J. Prevas	Ballistic Research Laboratories
J. Weyl	
A. Neumann	Office of Naval Research
M. Andrew	Office of Scientific Research, ARDC
L. Cohen	National Science Foundation
H.D. Smyth	Princeton University

2. Discussion. The meeting was opened by Dr. Oppenheimer who informed the group of a radical change in the thinking of the Institute regarding its role in the computing field. He indicated his belief that the large industrial companies had now assumed leadership in the engineering research and development of large scale computers. This being the case, he expressed to the group the Institute's determination to terminate its activities in this connection. He further announced that the meteorological group at the Institute was to relocate about the first of July at some other institution. He pointed out that what was left was then essentially a service computation laboratory doing a great deal of work for members of the Princeton University faculty and of the Institute. This being the case, Dr. Oppenheimer indicated the desire on the part of the Institute to divest itself of this responsibility, but to assure the Princeton scientific community of the continued existence of the facility. Dr. Smyth, speaking on behalf of the University, indicated the awareness of that institution of the importance of the computing facility. He indicated an interest in taking over the computing facility if this could be reasonably worked out by the University with the help, perhaps, of such agencies as the Office of Ordnance Research, Office of Naval Research, Office of Scientific Research, ARDC, and the National Science Foundation. Dr. Oppenheimer indicated that at least one other Princeton organization was interested in the computing facility and assured the group that it was the Institute's desire to arrange matters insofar as possible to benefit the entire community. He concluded by offering a budget which provided an orderly withdrawal of the Institute from the engineering phase of the computer field, permitting sufficient time for the preparation of final reports. In the same way this budget allowed for a cutback in the mathematical research phases of the work, and for the preparation of final reports in that connection as well. The balance of

-2-

his budget was for the maintenance and operation of the service facility. Dr. Oppenheimer announced that he would submit to the Philadelphia Ordnance District a new contract proposal for the period July 1, 1956 through June 30, 1957, together with his budget, and that each committee member would receive a copy of this proposal. He viewed this maintenance and operation phase as a holding operation.

3. Conclusions. The Service members of the committee met in session and agreed among themselves to provide support for the Institute program, as outlined by Dr. Oppenheimer, in the amount of \$115,000 for the period July 1, 1956 through June 30, 1957.

The meeting adjourned without plans for future sessions.

Herman H. Goldstine

THE INSTITUTE FOR ADVANCED STUDY<sup>37</sup>

ELECTRONIC COMPUTER PROJECT<sup>7</sup>

PRINCETON, NEW JERSEY<sup>7</sup>

March 2, 1956

Contract DA-36-034-ORD-1646

Philadelphia Ordnance District  
127 N. Broad Street  
Philadelphia 2, Pa.

Attn: H.L. Wilson

Gentlemen:

On July 20, 1955, I had occasion to write you regarding an extension of our present Contract DA-36-034-ORD-1646. Since writing you that letter, the Institute for Advanced Study has re-evaluated its role in the computer field. On February 29 at a meeting of the Liaison Committee organized by the technical sponsors of the project, I explained to them in some detail our present views on this subject. Broadly speaking, I announced the intention of the Institute to disband the research engineering and the logical-mathematical activities as soon as was feasible and in the best interests of the Government, and to discontinue the meteorological group. Thus, the Institute contemplates the period 1 July 1956 to 30 June 1957 to be a period in which its engineering and attendant logical-mathematical activities are "phased out". It feels that this operation will require about six months.

In view of this situation, and with the understanding and informal approval of the representatives of the sponsoring Services, I now make the following firm proposal:

For the sum of \$54,000 for the period 1 July 1956 to 30 June 1957 (if you prefer, the term of the contract could be 1 July 1956 to 31 December 1956) we propose to prepare and furnish final reports on the mathematical and engineering work, and to proceed with the disbanding of the engineering logical-mathematical and meteorological research and development activities now being undertaken under Contract DA-36-034-ORD-1646.

The Institute wishes it understood that the attached cost sheet represents our present best effort to extrapolate into the future the rate of phasing out of the activities mentioned above. Since this is a difficult and uncertain task, the individual items cannot be regarded as exact. We reserve the right, if the situation demands, to make amendments in this cost sheet. The total price is, however, firm.

We will accept and sign a contract embodying the formal provisions and articles of our present contract. In this connection, we will communicate with you later about the disposition of such items of Government property now listed in Contract DA-36-034-ORD-1646, that we will no longer need.

Since no new improvements, modifications or developments to the electronic computer machine at the Institute will be made during the period of the proposed contract, the Institute does not feel that it wishes to have

THE INSTITUTE FOR ADVANCED STUDY

ELECTRONIC COMPUTER PROJECT

Philadelphia Ordnance District

-2-

March 2, 1956

included in the basic contract a clause comparable to Article I (Scope of Work), paragraph 17, in the existing contract.

Yours very truly,

J. Robert Oppenheimer, Director  
Institute for Advanced Study

HHG:sg

cc: J. Weyl  
J. Prevas  
M. Andrew  
L. Cohen  
P. Gillon  
M. Morgan, Jr.

### COST AND PERFORMANCE BREAKDOWN SHEET

#### ENGINEERING GROUP

4 engineers (4 months)	Salaries	\$26,100
4 technicians "		
1 machinist "		
1 purchasing asst. (6 months)		
2 laborers (6 months)		

#### LOGICAL-MATHEMATICAL GROUP

4 mathematicians (4-6 months)	Salaries	10,000
1 coder (4-6 months)		

SECRETARY (1), (6 months) 2,000

40% overhead on wages and salaries 38,100

15,240

33,340

#### OTHER DIRECT COSTS

Travel, communications, etc. 660

TOTAL - - - - - \$74,000

The Institute for Advanced Study  
Electronic Computer Project  
Princeton, New Jersey

C O P Y

March 2, 1956  
Contract DA-36-034-ORD-1646

Philadelphia Ordnance District  
127 N. Broad Street  
Philadelphia 2, Pa.

Attn: H.L. Wilson

Gentlemen:

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- 2 -

Philadelphia Ordnance District

March 2, 1956

Since no new improvements, modifications or developments to the electronic computer machine at the Institute will be made during the period of the proposed contract, the Institute does not feel that it wishes to have included in the basic contract a clause comparable to Article I (Scope of Work), paragraph 17, in the existing contract.

Yours very truly,

J. Robert Oppenheimer, Director  
Institute for Advanced Study

HHGesg

cc: J. Weyl  
J. Prevas  
M. Andrew  
L. Cohen  
P. Gillon  
M. Morgan, Jr.

COPY

ORDNANCE CORPS  
BALLISTIC RESEARCH LABORATORIES  
ABERDEEN PROVING GROUND  
MARYLAND

Mr. Prevas/mes/21208

In reply refer to

4 January 1956

Dr. Herman H. Goldstine  
Electronic Computer Project  
Institute for Advanced Study  
Princeton, New Jersey

Dear Dr. Goldstine:

The next meeting of the Joint Services Liaison Committee on the Institute for Advanced Study computer research contract will be held at the Institute for Advanced Study, Princeton, New Jersey, on Wednesday, 29 February 1956, beginning at about 10:00 a.m.

The Institute for Advanced Study proposal for the renewal of the current contract DA-36-034-ORD-1646, which expires 30 June 1956, and related business, will be discussed. Copies of the renewal proposal have been sent to each committee member by IAS through the Philadelphia Ordnance District.

The undersigned, who will be Army Ordnance's Ballistic Research Laboratories' representative on the committee is looking forward to meeting the other members, and as current chairman in accordance with the rotation principal previously established, will be happy to clarify any questions regarding the forthcoming meeting.

FOR THE DIRECTOR:

Sincerely yours,

/s/ James Prevas

JAMES PREVAS  
Acting Chief, Computing Laboratory

Computer	50,000
Services	10,000
(Sec. Joint)	
Eng	20,000
Math	20,000
<hr/>	
	100,000
Contingency	15,000
	<span style="border: 1px solid black; padding: 2px;">115,000</span>

We have ONR math money  
\$ until Aug 57; this amounts to  
about 60,000 as of now & we spend  
at rate of 3000 per month now.

THE INSTITUTE FOR ADVANCED STUDY

ELECTRONIC COMPUTER PROJECT

MEMORANDUM

To: Dr. J. R. Oppenheimer

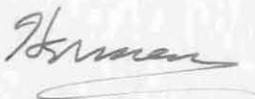
From: H.H. Goldstine

Date: February 21, 1955

On the accompanying sheet I have made up some moderately rough estimates of our present expenses and of our projected ones for the coming fiscal year. As you will see, I have assumed that the machine maintenance and operation group, as well as the service group, will continue in existence for 12 months. I have assumed also that the mathematicians, engineers, technicians and machinists will stay through the month of October. This will leave us with a group of 2-3 coders and programmers to keep the place alive.

On the basis of these assumptions, it would seem not unreasonable for us to ask a continuation at a budgetary level of about \$110,000 or \$120,000.

HHG:sg  
Enclosure



### CHARGES FOR COMPUTER OPERATION

Engineering group:		
Salaries	\$4,500/mo	
Research materials	2,000 "	\$6,500/mo
Machine maintenance & operation:		
Salaries	1,700/mo	
IBM rental, cards, etc.	1,600 "	
Electricity	400 "	
Office supplies, communications, etc.	170 "	
Insurance	100 "	4,000/mo
Mathematical Group (charged to Army contract)		
Salaries	2,330 "	
Office supplies, commun., etc.	170 "	2,500/mo
Service Group (janitorial, secretarial, etc.)		
Salaries	1,200 "	<u>1,200/mo</u>
TOTAL		\$14,200/mo
Estimated expenses for next contract:		
Salaries (7/1-11/1)	17,000	
Research materials	5,000	22,000
Machine maintenance & operation group (12 mos)		50,000
Mathematical group (7/1-11/1)		18,000
Service group (12 mos.)		<u>12,000</u>
TOTAL		\$102,000

COMPUTER OPERATION

Fiscal Year 1954-55

Payroll	\$113,100.00
T.I.A.A.	650.00
Social Security	1,650.00
Travel	500.00
Books, Periodicals, etc.	300.00
Research Materials (Equipment, Parts, etc.)	30,000.00
Office Supplies	2,600.00
Communications and Postage	1,400.00
Insurance	1,200.00
Equipment (Capital items such as machine tools)	2,700.00
Building Supplies	250.00
Heat, Light, Power and Water	<u>4,500.00</u>
	<u>\$158,850.00</u>

COMPUTER PAYROLL

July 1, 1955

1	Project Director	\$ 12,500.00
2	Staff Mathematicians	12,300.00
1	Chief Engineer and Purchasing Agent	9,600.00
1	Assistant Purchasing Agent	3,900.00
3	Engineers	19,000.00
2	Machine Operators	9,600.00
1	Machinist	4,600.00
1	I. B. M. Operator	2,400.00
4	Technicians	16,900.00
1	Janitor	3,000.00
1	Switchboard Operator	2,750.00
1	Secretary	3,900.00
1	Bookkeeper	2,650.00
2	Coders	10,000.00
		<hr/>
		\$113,100.00