

Columbia University in the City of New York | New York, N.Y. 10027

SACKLER FUND LABORATORY

6 Low Memorial Library

14 April, 1967

Prof. Elizabeth K. Ralph
Applied Science Center for Archaeology
The University Museum
33rd and Spruce Streets
Philadelphia, Pa. 19104

Dear Professor Ralph:

Mr. Stuckenrath, whom I met at the Archaeology Seminar last night, might have mentioned a proposal I raised in the course of our conversation. This was not exactly off the top of my head, but rather a matter I have been considering for some years and have raised the question with Prof. Dyson over a year ago. The proposal is for some formal arrangement of joint study on the part of our two still rather distinct operations.

The Sackler Fund Committee which provides the support for the Sackler Fund Laboratory has authorized me to explore such possibility. Dr. Sackler, who set up the Sackler Fund is also favorably disposed toward such a joint venture. I should like to make some specific suggestions in that respect and believe a meeting in person would be more useful than an attempt to handle the matter by correspondence.

I am aware that you spend most of your summers in the field and at the moment have no notion of your likely departure date. I can be available from Wednesday 31 May to Friday 2 June or from Monday 5 June to Wednesday 7 June. It would be best to explore the feasibility of such a venture as far as possible in advance of the date on which you have to submit a budget. Mr. Stuckenrath indicated your budget is made up rather late in the fall.

Please indicate your pleasure at your earliest convenience.

Cordially,

William Samolin
William Samolin,
Director

Specific proposal

April 19, 1967

Dr. William Samolin, Director
Sackler Fund Laboratory
6 Low Memorial Library
New York, New York 10027

Dear Dr. Samolin:

Thank you for your letter of April 14th. Unfortunately, I am planning to leave for Italy within a few weeks, and to make matters worse, Dr. Rainey is away and will not return until the middle of May.

Because of these comings and goings, I think it would be much better if you could send some specific suggestions for collaboration in writing. Hopefully, I could read them before I depart and then leave them here for Dr. Rainey's comments.

With best regards,

Elizabeth K. Ralph

EKR/gm

January 18, 1967

Mr. Robert E. Sanders
Technical Planning & Communications
EG & I Inc.
130 Robin Hill Road
Golete, California 93017

Dear Mr. Sanders:

Thank you for your letter of January 13. We are looking forward to your visit and demonstration.

I may have confused matters by writing from the Department of Physics. Our thermoluminescence work is in the University Museum at the above address. My two telephone numbers are EV 6-7400 and 594-8168.

Sincerely yours,

EKR:pc

Elizabeth K. Ralph

4/11/72

Mrs. John M. Sadler
2404 Charlemagne Circle, Pittsburgh, Pennsylvania 15237

March 30, 1972.

Dear Miss Ralph,

The article about the archaeological devices, in the Saturday Review, was most interesting. I agree that such devices may take some of the "romance" out of digging, but the time saved is well worth it to an armchair archaeologist like me who is horrified at the thought that she may live out her whole life before some of the answers are found. I'm not too old yet, but still I say, "Let's get going!"

My reason for writing is primarily to offer a

suggestion. My readings
have convinced me that
there may indeed have been
many pre-Columbian
European visitors here in
America. But no one seems
to be doing serious work
in this field. Would your
device pick up that myster-
ious underground building
beneath the Newport tower,
Newport, Rhode Island, which
aerial photos indicate is
there? The Newport city
fathers are touchy about
their "Colonial" tower, but
many people believe that the
structure is the top of a
buried building (church?),
either Viking or Irish.
How I would love to know!
Perhaps you are the person
to find out!

Yours truly,
Pat Sadler
(Mrs. John M. Sadler)

April 11, 1972

Mrs. John M. Sadler
2404 Charlemagne Circle
Pittsburgh, Penna. 15237

Dear Mrs. Sadler:

Thank you for your letter of March 30th. Unfortunately, the Newport Tower has been disturbed too much by modern additions so that we cannot detect anything under it with our magnetometers.

I was there about five years ago with Dr. Kidder to give a "staged" TV performance. At that time there was a massive iron fence around the tower which is very much more magnetic than any buried structure that we would be seeking, and causes such a magnetic field that we cannot even work near it.

At that time, both Dr. Kidder and I concluded that the only hope of finding an earlier structure near or under the Tower is by excavation. However, as you mentioned, there is the problem of the city fathers.

Sincerely yours,

Elizabeth K. Ralph

EKR:sj

November 11, 1963

Prof. H. D. Sankalia, Director
Deccan College
Post-Graduate and Research Institute
Poona 6, India

Dear Prof. Sankalia:

Thank you very much for sending me a copy of your excellent publication entitled "Prehistory and Protohistory in India and Pakistan, 1962".

I have enjoyed reading it, but since I am not an archaeologist, it is more appropriate for it to be reviewed by Dr. George F. Dales, Jr., the Assistant Curator of our new South Asian section in the University Museum. Dr. Dales is glad to do this and will write to you in the near future.

Sincerely yours,

Elizabeth K. Ralph

EKR/ek

Techun pua

March 19, 1965

Dear Mario:

I am happy to tell you that the combined charcoal from the Ranchon site, will be run this weekend and I should be able to send you results early next week.

With very best wishes to you *and* your wife,

Sincerely yours,

Alfred Kidder II
Associate Director

Dr. Mario Sanoja
Departamento de Arqueología
Universidad de los Andes
Merida, Venezuela

AKII/vg



UNIVERSIDAD DE LOS ANDES
FACULTAD DE HUMANIDADES Y EDUCACION
MERIDA - VENEZUELA

Merida. 4/3/64.

Dear Dr. Kidder:

Both samples belong to the Ranchon site. One comes from level five (5), the other one from level 4 (labeled Zancudo). The combination is meaningful since level 5 and 4 seems to form a single unit. They belong to the same geological strata and there are so many resemblances in the cultural material, that we are thinking to put all the material together.

Unfortunately this is the only charcoal sample we have, since this strata of sand is so humid that it doesn't allow the preservation of perishable material.

I appreciate very much your letter and hope the sample will work very well.

Sincerely yours



Mario Sanoja.

Head of Anthropological Research.

Arch Techniques

December 14, 1966

Dr. Mario Sanoja, Head
Dpt. Anthropology
Facultad de Humanidades y Educacion
Universidad de Los Andes
Merida, Venezuela

Dear Dr. Sanoja:

Listed below is the radiocarbon date for your sample of charred corn cob and seeds from El Tiestal, Mound E-1. The first date given is calculated upon a half-life value of 5568 years, as required for publication in Radiocarbon; the second date is calculated with a half-life value of 5730 years, a more recent and accurate value which generally corresponds more closely to archaeological estimates.

P-1211. El Tiestal, Mound E-1, level 6.
A.D. 1496 ± 45 (5568 half-life)
A.D. 1482 ± 46 (5730 half-life)

P-1211 is significantly different from SI-120 from the same level (74 ± 34 years = 2.2 sigma), and, of course, earlier. We would appreciate your comments on this date and your permission to publish the date in our next annual date list to appear in Radiocarbon.

Sincerely yours,

Robert Stuckenrath, jr.
Radiocarbon Laboratory

cc: Dr. A. Kidder II ✓

SRI

Saturday Review Industries

380 MADISON AVENUE, NEW YORK, N.Y. 10017

700,000
~ March 15⁻⁴⁵

212-682-2000
ext 323

January 30, 1972

Miss Elizabeth Ralph
MASCA
University Museum
University of Pennsylvania
Philadelphia, Pa.

Dear Miss Ralph:

After typing up my notes from our interview the other day, I had two questions which I thought might take a little research on your part (I hope not very much), so thought I would send them by mail. If you could let me have an answer to them as soon as possible, I think they will add some interesting dimensions to the story.

1. Could you list the sites you have visited to use archeological tools since joining the University Museum?

2. In one story you supplied me, the number of carbon 14 dates MASCA has published (this was a '69 article) was given as "over 1000". Do you know what the figure would be today--and for approximately how many institutions were these figures supplied?

I am going to talk to Dr. Bass tomorrow and hope he can supply me with some interesting data on Gravina. I really enjoyed our interview the other day and am enthusiastic about working on the story, which is now tentatively planned for a spring issue.

Regards,

Barbara Ford

Barbara Ford

P.S/. I have just thought of another statisticstype question. Is a figure available for the number of thermoluminescence dates MASCA has published?

February 17

Miss Ralph:

I hasten to send this off to you for corrections, as I am sure errors have crept in as I describe the many technological processes used by MASCA.

As seems to be usual in editorial offices, we are up against a deadline, so could you please return this with all possible haste--if you could make the corrections the day you receive it and send it back to us that day, it would be wonderful. Or perhaps you might prefer to call us, giving us the corrections over the phone. My new number (we have moved to another office) is 212-682-2000, Ext. 323.

I enjoyed by two trips to the MASCA offices and Dr. Bass' office and hope to come back someday soon and explore the University Museum at my leisure.

Regards,

A handwritten signature in cursive script that reads "Barbara Ford". The signature is written in dark ink and is positioned above the typed name.

Barbara Ford

May 8, 1970

Betty L. Schlossman
330 West 58th Street
New York, New York 10019

Dear Miss Schlossman:

Dr. Rainey has asked me to reply to your letter of May 3rd. I have enclosed three reprints in which some of our work with magnetometers is described.

Unfortunately, Varian Associates has not manufactured more of the precision cesium units (see reprint from Geoexploration), but they have made a few with a simplified audio-dial readout. This is called the V-4971 Portable Search Magnetometer and it sells for \$5750.00.

Also, just recently the Schonstedt Instrument Company (1775 Wiehle Avenue, Reston, Va. 22070) has started to manufacture a fluxgate gradiometer, Model GMB-2. The whole unit weighs only about 5 pounds and it costs \$2400.00.

There are a number of metal detectors available commercially, all of which have quite limited depth penetration. The one with which we are familiar is the Model T-20 made by Fisher Research Laboratory, Inc., 1975 University Avenue, Palo Alto, California. *Cost about \$140.*

I suggest that you contact the manufacturers in regard to adaptation of these instruments for underwater use.

Sincerely yours,

Elizabeth K. Ralph

EKR/mm
Enclosure

BRIARCLIFF COLLEGE
BRIARCLIFF MANOR
NEW YORK
10510

330 West 58th Street
New York, New York 10019
May 23, 1970

Elizabeth K. Ralph
Museum Applied Science Center for Archaeology
The University Museum
33rd and Spruce Streets
Philadelphia, Pa. 19104

Dear Mrs. Ralph:

Thank you so much for your prompt and informative answer to my letter. I have been reading the articles you sent with great interest and appreciate so much your help.

Sincerely, yours,

Betty L. Schlossman

Betty L. Schlossman



Science Applications, Incorporated
P.O. Box 2351, 1250 Prospect Street, La Jolla, California 92037 (714) 459-0211

3 April 1972

Miss Elizabeth Ralph
Associate Director, Museum Applied Science
Center for Archeology
University of Pennsylvania
Philadelphia, Pennsylvania

Dear Miss Ralph:

I have been reading Barbara Ford's article in the March 18 Saturday Review describing MASCA'S Application of Physical Measurement Techniques to Archeology. Several of us here at SAI were impressed with the sensitivity of the techniques, especially that of cesium magnetometry.

Barbara Ford's article indicates that you can sense small non-metallic objects at depths of up to twenty feet by perturbations of the surface field. This implies to us a state-of-the-art far more advanced than we had believed. Is the article exaggerated, or is it true and accurate? And if it is true and accurate, would you refer us to technical literature describing the technique.

Sincerely yours,

Science Applications, Inc.

Dr. Martin Sperling

MS:lm

cc: Barbara Ford, c/o Saturday Review, Inc.,
380 Madison Avenue, New York 10017

SRI

Saturday Review Industries

380 MADISON AVENUE, NEW YORK, N.Y. 10017

April 5, 1972

Miss Elizabeth Ralph
MASCA
University Museum
University of Pennsylvania
Philadelphia, Pa.

Dear Miss Ralph:

Dr. Sperling of Science Applications, Inc. sent us a copy of his letter to you and I wonder if we might have a copy of your reply to him for our files?

Many thanks.

Regards,



Barbara Ford
Consultant

April 8, 1972

Dr. Martin Sperling
Science Applications, Inc.
P.O. Box 2351, 1250 Prospect St.
La Jolla, Calif. 92037

Dear Dr. Sperling:

In regard to our cesium magnetometers, I have enclosed a reprint from Geoexploration in which the precision units are described, and also one from Science.

On the plain of Sybaris, which is magnetically quite, we did detect deposits of roof tiles and pottery at depths of five meters (16½ feet). These deposits were about 10 cm thick, and the magnetic anomalies were no doubt caused mainly by the slabs of roof tiles which were more massive than the pottery. When used in the differential mode, these magnetometers have a maximum sensitivity of about 0.05 gamma.

In the Saturday Review article, Barbara Ford did mention that we could detect objects, but did not mention small objects. It probably would have been better, if I had advised her to write "deposits of objects."

Except for a few little slips of this nature, the article is quite accurate.

Sincerely yours,

Elizabeth K. Ralph

EKR/ek

CC: Mrs. Barbara Ford
Saturday Review Industries
380 Madison Avenue
New York, New York 10017

BROOKHAVEN NATIONAL LABORATORY
ASSOCIATED UNIVERSITIES, INC.

UPTON, L. I., N. Y.

TEL. YAPHANK 4-6262

REFER:

DEPARTMENT OF
CHEMISTRY

March 10, 1961

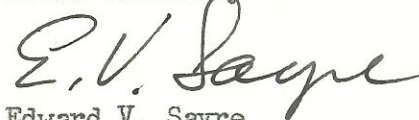
Dr. Elizabeth K. Ralph
Department of Physics
University of Pennsylvania
33rd and Walnut
Philadelphia, Penna.

Dear Miss Ralph:

When we met at the Institute of Fine Arts some weeks ago, I promised to send you a fragment of charcoal which was taken from the solar boat discovered a few years ago along side the pyramid of Cheops. I am at last sending you a small specimen which you may keep. We have retained about three times the enclosed amount, some more of which probably could be available to you if you have need for it.

It was a pleasure meeting you. I'm sorry there was not more time to discuss your research in carbon dating and related fields.

Yours sincerely



Edward V. Sayre

EVS:eam
enc.

March 16, 1961

Dr. Edward V. Sayre
Department of Chemistry
Brookhaven National Laboratories
Upton, Long Island
New York

Dear Dr. Sayre:

It was indeed a pleasure meeting you at the Institute of Fine Arts, if only for so short a time. I am returning the charcoal fragment of the solar boat, with many thanks for your thoughtfulness. Any C-14 dating on our part would require at least ten grams of the material and, since there is evidently not that much available, perhaps you had best keep all the bits together.

Very truly yours,

Elizabeth K. Ralph

EKR:rs

SCAIFE FOUNDATION

Techniques

May 7, 1965

Dear Charlie:

Even though I have so far failed to interest the Scaife Foundation in more support to the University Museum, I am a very persistent fellow, and right now I have a most specific request because of a bind we are in, here in our Applied Science Center for Archaeology (ASCA).

A Ford Foundation grant to support the work of ASCA has been held up indefinitely by the new Chief of the Humanities Division, and without that we are caught very short in the development of the new rubidium magnetometer which proved so successful at Sybaris last fall. The first step in making that a practical instrument for archaeology, is to develop a small, light-weight, portable digital counter to be used with two sensors. This is an adaptation of the instrument now used in satellites. We have agreed to split the cost of this development with Varian Associates in Palo Alto, and our share is \$15,000. Of this amount I have received \$5,000 from friends of the Museum here, and I expect \$5,000 from the Wenner-Gren Foundation in New York. So I am very much in need of the last \$5,000 to keep this development going. We hope to make the original test of the new equipment in Arizona in July and then return it to Sybaris, in Italy, in the fall for the really difficult tests. The astonishing thing about this new equipment is that we can precisely locate structures two to five meters deep, and it operates at four times the speed of the proton magnetometer. From Sybaris we expect to move to Helice in Greece, to search for that famous Classical Greek city which was buried much the same way Sybaris was, about a century later. As you may know, George Bass is trying a water-proofed proton magnetometer developed by Oxford, off the Turkish coast this summer. This one is much less sensitive, but at least it is ready for undersea experiments.

II

I expect to be around until the end of May, then in Italy during June and in Alaska during July and August where I have taken over the direction of a site for Brown University to pinch hit for one of my students who died in an automobile accident. Certainly, it will seem strange to return to the Arctic after all these years.

My best to Dan and Dick and to yourself,

Regards,

Froelich Rainey
Director

Mr. Charles E. Ford
Sarah Mellon Scaife Foundation
325 William Penn Place
Pittsburgh 19, Pennsylvania

FGR/vg

December 18, 1969

Dear Professor Säve-Söderbergh:

You will undoubtedly be hearing from David O'Connor, Lanny Bell, Henry Michael, and so forth in the Applied Science Center about our plans for the research and radiocarbon dating in Egypt and the Mediterranean, but I do want to add that I am very keen to go ahead with this in any way you wish, and even though that grant does not come through the Smithsonian Institution for counterpart funds in Egypt we can most certainly advance money from the Museum here pending a decision by the Smithsonian. I have no doubt the money will be available--it is just a question of when and in the meantime, if you want to draw any funds on our joint project, I can simply send them from here.

I do not know quite how to present this business since we are all involved in an international operation including many institutions, but on the other hand, how do we express the special joint purpose of the University Museum and your institution with you in charge. Can you give me any sort of scheme for this so that I can spell it out both for the Smithsonian Institution and our Board of Managers. There is nothing urgent about this but it is a kind of formality in which I need your guidance.

Also, I sent a letter to Marinatos in Athens who is now director of antiquities for Greece and to Platon in Crete asking them to send us short-lived organic materials like charred beans from

/cont'd...

Professor T. Säve-Söderbergh
University of Uppsala
Uppsala, Sweden

-2-

December 18, 1969

Thera and olive pits from Kato Zacro. I haven't heard a single word from either one although Marinatos told me in September that he would certainly be sending the beans. Can I write to them both saying that you will be there sometime this winter to collect such things in our joint international project? As we thought, this material probably just will not show up unless somebody is on the spot to pick it up.

Do let me know what I can do from this end to facilitate our plans.

All the best,

Froelich Rainey
Director

FR/j

P. S. We did get a beautiful sample of charred grains from Israel from a Bronze Age site but that is about all so far that applies to our project.

FR



Uppsala Universitet
INSTITUTIONEN FÖR EGYPTOLOGI

Gustavianum

S-75220 UPPSALA

31.5.1979

Dr. Elizabeth K. Ralph

MASCA

University Museum F 1

University of Pennsylvania

33rd and Spruce Streets

Philadelphia, Pa. 19104

Dear Dr. Ralph,

On June 21 I am giving a lecture at the Art Institute of Chicago and when we are in the States my wife and I would like to profit from the occasion and visit the University Museum of Pennsylvania and your institute. It would be very nice to meet you again after all these years since the C14 congress at Uppsala, and I am ashamed to admit that I have never been to Philadelphia where the university once a very long time ago offered me a chair.

We shall presumably arrive in Philadelphia in the middle of the week 25 - 30 June, arriving from Lexington and Washington where we shall visit some friends.

We hope that you will be in Philadelphia at that time and that we shall have the opportunity to seeing you.

With kindest regards from us both,

Sincerely yours,


Torngny Sävve-Söderbergh

ALLEN G. SCHIEK, D.D.S.
3716 PHILADELPHIA PIKE
CLAYMONT, DELAWARE

SY 8-6374

March 21, 1966

Elizabeth Ralph, Assistant Director ASCA
University Museum
Philadelphia, Pennsylvania 4

Dear Miss Ralph:

May I congratulate you on the realization of your prediction of a structure at the east end of the Caleb Pusey House, Upland, Pennsylvania.

Excavation of the area has given physical proof of your geohm prediction of an extension to the east of the existing building.

I would be happy to have you visit the site again and suggest photographs, drawing, or both to support your findings.

Sincerely,



Allen G. Schiek, D.D.S.

AGS: jm

April 6, 1966

Allen G. Schiek, D. D. S.
3716 Philadelphia Pike
Claymont, Delaware

Dear Dr. Schiek:

Miss Ralph is in Italy at present and I have taken the liberty of answering your letter of March 21. I am sure that she would be most pleased to know that the results of her instrument survey have been so fully supported by archaeological fact.

When Miss Ralph returns in July I will certainly bring your letter to her attention.

Sincerely yours,

Martha E. Rhoads

October 4, 1966

Dr. Allen G. Schiek
3716 Philadelphia Pike
Claymont, Dela.

Dear Dr. Schiek:

Many thanks for your kind letter of March 21, 1966. It is always rewarding to learn that an instrument survey has been successful.

I am back in the U.S.A., at last, and should be happy to discuss the results of the Caleb Pusey House survey with you and to revisit the site if the excavation is still open after so many months have elapsed.

Sincerely yours,

Elizabeth K. Ralph
Associate Director

ALLEN G. SCHIEK, D.D.S.
3716 PHILADELPHIA PIKE
CLAYMONT, DELAWARE 19703

SY 8-6374

October 21, 1966

Miss Elizabeth Ralph
Museum of Applied Science Center
for Archaeology
33rd and Spruce Street
Philadelphia, Pennsylvania

Dear Beth:

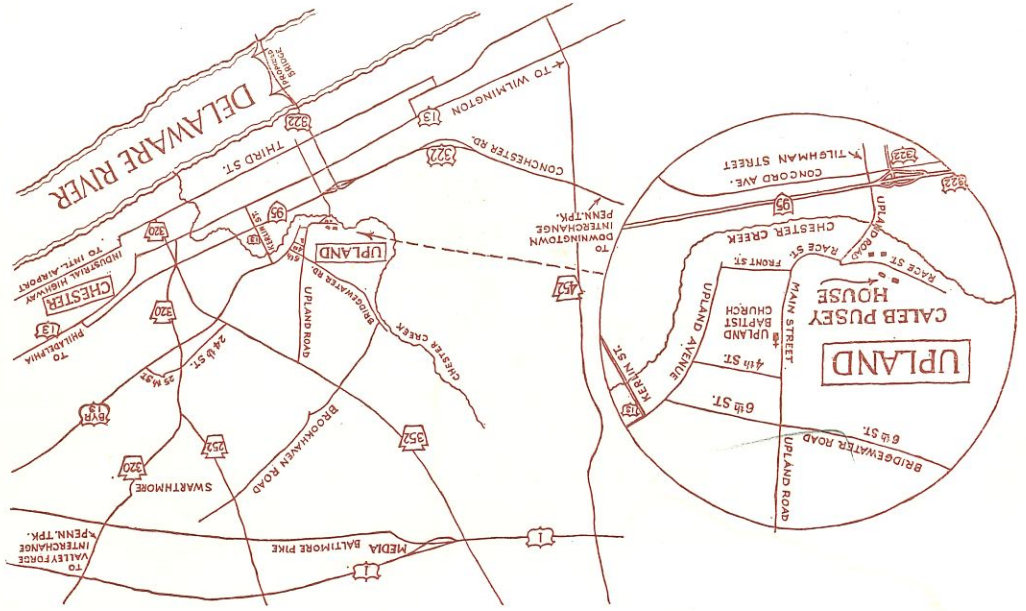
We would like to have you visit the Pusey House site. Mrs. Schiek and I would be delighted to have you visit us Saturday, October 29 and go to the Pusey House with us, on Sunday, October 30, to see the excavation and laboratory.

Sincerely,



Allen G. Schiek, D.D.S.

AGS:jm



Woodcut of Caleb Pusey's 1683 House at Upland, Pennsylvania, appeared in Sherman Day's book in 1843. He copied from an earlier sketch.

THE FRIENDS OF THE CALEB PUSEY HOUSE, INCORPORATED
(*A Restoration in Progress*)

INVITE YOU TO AN OPEN HOUSE

ON SATURDAY, OCTOBER 29 OR SUNDAY, OCTOBER 30, 1966

FROM ONE TO FIVE



SEE THE SEVENTEENTH CENTURY FURNITURE GIVEN BY THE WELCOME SOCIETY,
THE 1790 LOG HOUSE, THE 1849 SCHOOLHOUSE—MUSEUM, AND
THE OLD BARN FROM LANCASTER COUNTY, RE-ERECTED BY THE AMISHMEN



THE ANNUAL MEETING WILL BE HELD AT THE UPLAND BAPTIST CHURCH
THIRD AND MAIN STREETS, UPLAND, PA.

ON SATURDAY, OCTOBER 29, 1966

AT THREE O'CLOCK

Map Overleaf

October 24, 1966

Dr. Allen G. Schiek
3716 Philadelphia Pike
Claymont, Delaware 19803

Dear Dr. Schiek:

Thank you very much for your kind invitation to visit you on October 29th and to see the Pusey House on October 30th. Unfortunately, I have promised to help with some inventory - taking this weekend - both Saturday and Sunday so that I cannot accept.

I should like to see you and the Pusey House, but the problem is when. I am scheduled to do two field surveys in November in Massachusetts, but the weekends for these have not yet been decided. Since I have been away from home for so long and I live in the opposite direction (near Princeton), I have a great deal to do there on Sundays when I don't have to go on field trips, etc. Saturday morning or afternoon would be a more convenient time for me, but I suppose that Sunday is better for you.

When I know more about the field trips. I'll write or telephone to see if we can get together at the Pusey House.

Please extend my thanks to Mrs. Schiek.

Sincerely yours,

Beth Ralph

ER/bs

April 3, 1974

Dear Mr. Schilardi:

I have your letter of March 20 and hasten to say that I have not yet proposed the work in Paros to Bullitt because the day after you were here Mrs. Bullitt was in an automobile accident and quite seriously injured. Bullitt has been in the hospital much of the time with her during the last few days. However, she seems to be coming out all right and I should be able to discuss it with him shortly. In any case, I am so much interested in this job which is so reminiscent of Sybaris that I feel sure we will be able to get the instruments and the operators there in September one way or another. Hence, you can advise Professor Kontoleon that the Applied Science Center is very much interested in the job and will almost certainly get a crew there in September.

All best wishes,

Froelich Rainey
Director

Dr. Demetrius U. Schilardi
PRINCETON UNIVERSITY
Department of Art and Archaeology
McCormick Hall
Princeton, New Jersey 08540

Princeton University

DEPARTMENT OF ART AND ARCHAEOLOGY

MCCORMICK HALL, PRINCETON, NEW JERSEY 08540

D.U. Schilardi
March 30, 1974

Dr. Froelich Rainey
The University Museum
University of Philadelphia
33rd and Spruce Streets
Philadelphia, PA. 19174

Dear Dr. Rainey ,

It was a great pleasure for me to meet you in person during last week in the University Museum. As a matter of fact I had tried to get in touch with you earlier at the end of December 1973, but I was informed that you were away on a trip abroad. Prof. Young with whom I first discussed the project was kind enough to offer me suggestions ; he immediately tried to put me in touch with you.

I was extremely pleased to see that you would like to contribute your invaluable help by arranging a survey on Paros with members of the Museum and the magnetometer. I hope that you will be able to overcome financial difficulties and perhaps even convince Mr. Bullitt on the significance of the project. I will personally oversee so that full recognition be given to your efforts.

There certainly ^{are} a few more details to be arranged. I would like to have one more appointment with you as soon as further developments permit an objective view on the whole matter.

I received a letter from Prof. Kontoleon two days ago. Times change...His scientific approach is entirely different. I am sure that he will bring a new life to the Greek Archaeological Service. Very soon you will discover that a new era will appear where well-founded international cooperation will be a reality.

I will be very happy to meet you and discuss details of the Paros project in the near future.

Please have my best wishes and thanks,
sincerely yours

D. U. Schilardi

Demetrius U. Schilardi

Wle

Princeton University

DEPARTMENT OF ART AND ARCHAEOLOGY

D.U. Schilardi

MCCORMICK HALL, PRINCETON, NEW JERSEY 08540

March 12, 1974

Ms Elizabeth Ralph
Univ. of Pennsylvania
Philadelphia, PA.

Dear Miss Ralph,

Four months ago I got in touch with Prof. R. Young in order to coordinate an effort to locate the capital of ancient Paros, which is buried under thick deposits of humus, the action of two rivers flowing through the area. In that meeting Prof. Young suggested that I should meet with you and with the director of the University Museum Mr. Rainey in order to discuss the problem.

In the last few years I have been working on the Island, collecting various data that regard ancient settlements and cemeteries. The results have been very good and some of the finds have been published in the AAA for 1973 in preliminary reports. My work is under the auspices of the Greek Archaeological Service and the Society. Presently I try to collect financial contributions in the USA so that an excavation with experimental trench digging can be started.

However in the last years my interest has been increasingly attracted by the prospect of concentrating the efforts in order to locate the civic center of ancient Paros. The walls of the city have been preserved in a good condition so that at least we know where to focus our attention. Unfortunately, this does not imply that the center can be easily located. As I said there are thick layers of humus and other difficulties, so that I come to believe that the search can be facilitated by the experience and the equipments that you have applied in the expedition to Sybaris and elsewhere. I would like to discuss this matter with you so that we see if there is something that we can do on the project.

In the past years there have been many archaeologists who tried to work on the subject. Unfortunately, none of them was able at the end to get the final approval of the Archaeological Service. Now that Prof. N. Kontoleon is the General of Antiquities and he happens to be extremely well-qualified to appreciate the project, I would like to proceed in coordinating the effort for the survey. Prof. Kontoleon will want to help us, if we arrange the details.

I would be extremely happy to know how you view the problem. Please let me know if and when I can meet you in Philadelphia.

With my best wishes,
Sincerely yours

D. U. Schilardi

Demetrius U. Schilardi

BRIARCLIFF COLLEGE
BRIARCLIFF MANOR
NEW YORK
10510

ASCA

Please reply

330 West 58th Street
New York, New York 10019
May 3, 1970

Dr. Froelich Rainey
Director
University Museum
33rd and Spruce Streets
Philadelphia, Pa. 19104

Dear Dr. Rainey:

I have heard from my colleagues that you have had experience using the magnetometer and the Underwater metal detector. I am currently doing some research on these two instruments and would like to find out as much information about them as possible.

I would appreciate it so much if you could tell me of any published references on the use and manufacture of these instruments and also where they might be purchased. Any information you might be able to give or any suggestions where I might get this information would be most appreciated.

Please write to my 58th Street address above.

Yours truly,

Betty L. Schlossman

(Miss) Betty L. Schlossman,
Assistant Professor

✓
THE SCHOOL OF AMERICAN RESEARCH
SANTA FE, NEW MEXICO

January 18, 1961

Dr. Elizabeth K. Ralph
Research Associate
University of Pennsylvania
Philadelphia 4, Pennsylvania

Dear Dr. Ralph:

I hasten to thank you for your extremely helpful letter concerning the laboratory techniques our institution is interested in, in connection with archaeological research.

You gave exactly the kind of information we need, and I consider your letter the most helpful of many I have received. I am therefore extremely grateful to you for troubling to write, and I hope that we may some day return the favor of your interest.

Cordially yours,



Edward Weyer, Jr.
Director

October 17, 1980

Dr. D.J. Schove
St. David's College
Beckenham
Kent, England

Dear Dr. Schove:

The article that you requested from Radiocarbon Dating is enclosed.

I just talked with Peter Kuniholm, and he told me that the x-ray plots of the Turkish series do not exist at this time.

Sincerely yours,

Elizabeth K. Ralph

EKR/jkw

Enclosure

ST. DAVID'S COLLEGE

29, SOUTH EDEN PARK ROAD, BECKENHAM, KENT, BR3 3BQ Tel: 01-777 5029
and at JUSTIN HALL, WEST WICKHAM, KENT BR4 0QS Tel: 01-777 5852 (Day)

Principal: D. Justin Schove, Ph.D., M.Sc, F.R.Met.S F.R.G.S., F.R.A.S.

11th November, 1980

Dr E.K. Ralph,
Faculty of Arts and Sciences,
Department of Physics,
University of Pennsylvania,
Philadelphia, 19104,
USA.

Dear Dr Ralph,

Thank you for your letter of October 20 and the interesting enclosures. I have not had a reply myself from Dr Kuniholm but I am very interested to know whether his work is being extended and whether a series for recent centuries is now available. Also if I can find somebody interested in X-ray plots are specimens obtainable in your department please?

We are holding a Workshop on Varves (plus Ice-cores and Tree-rings) at Bedford College, University of London in late May 1981. Emphasis will be on series over 1000 years long. We should be interested to have your suggestions about speakers.

Yours sincerely,



P.S. Is there any more news on Mays timber-
is it possible to get ^{14}C dates on
turps or sapwood?

UNIVERSITY of PENNSYLVANIA

PHILADELPHIA 19104

Faculty of Arts and Sciences

DEPARTMENT OF PHYSICS

November 24, 1980

[SCHOVE]
Dr. D. Justin Shove
St. David's College
29. South Eden Park Road
Beckenham, Kent BR3 3BQ
ENGLAND

Dear Dr. Shove:

In reply to your letter of 11th November, I am writing to say that Peter Kunilholm is continuing his work with dendrochronology in Turkey (during the summers) but I do not know about his recent progress.

For x-ray plots, we could send you a section of Sequoia gigantea that spans the period of A.D. 500 to 200 B.C. However, we have no funds for shipping it.

In regard to your Workshop, my best suggestion for a speaker is Wesley Ferguson, Laboratory of Tree-Ring Research, University of Arizona, Tucson, Arizona 85721.

I shall be glad to hear the news about Maya timber. It is possible to obtain ^{14}C dates on twigs and sapwood.

Sincerely,

Elizabeth K. Ralph

EKR:bac

November 8, 1961

Mr. Hyman Schultz
Box 154
Whitmore Laboratories
Pennsylvania State University
University Park, Pa.

Dear Mr. Schultz:

I enjoyed meeting you and seeing your lab on Sunday. In regard to your contamination studies, I am sending 4 samples from Cape Krusenstern, Alaska. The pertinent information for these is given on the 3 enclosed sheets.

For known-age control samples, I am sending a piece of our standard lab Oak sample and 3 sequoia sections, as described on their labels. The last correspond to our lab nos. P-346, 387, and 375.

I have also enclosed a reprint of our AJA article in which our 5800 half-life value is discussed.

Best of luck with your project. It shouldn't be long before you obtain some results, and I shall be eager to hear them.

Sincerely yours,

Elizabeth K. Ralph

EKR/ic

C
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P
Y

Box #154 Whitmore Labs.
The Pennsylvania State University
University Park, Pennsylvania

[NOV 1961?]

Dr. Elizabeth K. Ralph
Department of Physics
University of Pennsylvania
Philadelphia 4, Pennsylvania

Dear Dr. Ralph:

We have received the samples you kindly sent us in good order and wish to thank you for them. They should prove invaluable for our contamination studies. I will send you the fractions as soon as I separate them. It will probably be a few weeks until I can proceed with the chemical work as we are still working on the counting system. I have been able to improve my results by varying both the high voltage and discriminator setting. At present, I am trying to get modern and dead counts and simultaneously look at the energy spectrum. I was planning to try the system out on a sample of some peat from a nearby bog that I already have before running those you sent me. The peat is quite plentiful, very complex and has been dated for Dr. Kovar, the paleobotanist whom Dr. Matson mentioned.

It was a pleasure meeting you on your visit here, and I hope you will get a chance to visit us again. In any case, I will rush those samples to you as soon as I get them separated.

Very truly yours,

Hyman Schultz

Hyman Schultz

Box 154 Whitmore Laboratory
The Pennsylvania State University
University Park, Pennsylvania
February 26, 1962

H. SCHULTZ

Dr. Elizabeth K. Ralph
University of Pennsylvania
Department of Physics
Philadelphia 4, Pennsylvania

Dear Dr. Ralph;

As you have probably heard, Dr. Currie has left Penn State for the National Bureau of Standards, and we are trying to finish up as rapidly as possible. I would like to take this opportunity to advise you as to what we have done and what we intend to do in the near future.

Both our conversion system and electronics seem to be in working order at present. We hope to clear up the details of getting our dating system working within the next two weeks. I have worked on some of the samples you so kindly sent and have separated approximately 5 grams of carbon from your charcoal sample taken from house No. 24 (P404) and approximately 2.5 grams of cellulose from P400. Samples of both have been submitted for carbon-hydrogen analysis. As the amounts separated are not sufficient to accommodate your system, we have decided to date them here in order to expedite matters.

Dr. Matson has given us three of his Jarmo samples (Nos. 53, 54, and 55) for treatment and dating. These samples are of interest from both an archeological and dating standpoint. They were dated by Dr. Rubin of the U.S. Geological Survey and there is apparently some discrepancy in the results. The three samples appear to be sand with flecks of ash and charcoal scattered throughout. Preliminary investigation revealed that No. 54 had the following approximate composition: 33% carbonates, 4% moisture, 59% insoluble inorganics, and 4% carbon-containing substances.

We think these samples would respond to treatment for elementary carbon; but unfortunately, as they have such a small amount of carbon, the sample size required is too large for my system to handle and conversion to CH_4 in small amounts would take quite a long time with our present setup. I would be extremely

2.

grateful if you would consent to date these samples after pre-treatment in order to expedite matters. If you would consent to date the samples, I would ship them to you as soon as I could complete the treatment and would be glad to send any additional information you would require. In any case, I shall keep you informed as to the samples I have already treated and plan to date.

Yours truly,

A handwritten signature in cursive script, reading "Hyman Schultz". The signature is written in dark ink and is positioned above the typed name.

Hyman Schultz

February 28, 1962

Mr. Hyman Schultz
Box 154, Whitmore Laboratory
The Pennsylvania State University
University Park, Penna.

Dear Mr. Schultz:

It is a temptation to accept samples for dating, especially, from friends at nearby universities, but there are several reasons why we prefer not to date the samples from Jarino, They are as follows:

- 1) Jarino is not of urgent concern to nor directly related to the studies of the staff of the University Museum.
- 2) We have a backlog of, at least, two years dating time of samples already submitted.
- 3) Samples from Jarino have been dated by other laboratories. If there are inconsistencies in the results, we feel that it would be better for the laboratories concerned to date more, or if tackled, by a new group, a very extensive series should be dated.
- 4) Samples with low organic carbon contents should be avoided, if possible, unless a way is found to separate the bits of charcoal before burning.
- 5) If it is essential to date samples with such low carbon contents, they can be done more easily in a small counter for which smaller quantities may be burned.

I was glad to hear that you were making good progress in your lab, and shall look forward to seeing the results of your Arctic sample separations.

Sincerely yours,

Elizabeth K. Ralph

EKR/deh

C
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P
Y

305 Thurston Avenue
Cornell University
Ithaca, New York 14850
March 15, 1965

Dr. Elizabeth K. Ralph
Associate Director
Applied Science Center for Archaeology
The University Museum
University of Pennsylvania
33rd and Spruce Streets
Philadelphia, Pennsylvania

Dear Dr. Ralph:

I am currently a senior in the College of Arts and Sciences at Cornell University, majoring in chemistry. This spring semester I have enrolled in a course in interpretive archeology given by Prof. Robert Ascher of our Anthropology Department.

In a discussion today with Prof. Ascher about a term paper for his course, the subject of radioactive carbon dating was brought up. Since I am very interested in the work being done in this field, he suggested that I correspond with you about the possibility of visiting your laboratories in Philadelphia during our spring recess. Would it be possible for me to make such a visit on Wednesday, March 31st and to speak briefly with you at that time about an appropriate research topic for my paper? If this date is not convenient for you, I could certainly come on Monday, Tuesday, or Thursday of the same week.

Sincerely yours,

Thomas S. Schultz
Thomas S. Schultz

March 22, 1965

Mr. Thomas S. Schultz
305 Thurston Avenue
Cornell University
Ithaca, New York 14850

Dear Mr. Schultz:

Thank you for your letter of March 15th.
We'll be glad to see you here Wednesday, March
31st.

While there is the usual morning panic be-
tween 9:00 and 9:30, may I suggest you drop by
in the morning since more of our staff will be
on hand then-- hopefully with more answers to
your questions.

The C-14 lab is in the basement of the David
Rittenhouse Laboratory, Rooms BW4 and 6 at the
foot of stairway 3, southeast corner of 33rd and
Walnut Streets.

Sincerely,

Robert Stuckenrath, jr.
Radiocarbon Laboratory

January 31, 1964

Mr. E. Schumann
4141 Jackson Drive
Whitemarsh, Pennsylvania

Dear Mr. Schumann:

It has been suggested to me that it would be unwise for you to undertake part-time employment in view of the low grades which you have received for courses in Physics.

Therefore, it is with regret that I am withdrawing my offer of employment in our C-14 laboratory.

Sincerely yours,

Elizabeth K. Ralph

EKR:ek

SOUTHERN METHODIST UNIVERSITY

DALLAS, TEXAS 75222

April 23, 1969

DEPARTMENT OF ANTHROPOLOGY

Dr. Elizabeth K. Ralph
University of Pennsylvania Museum
Philadelphia, Pa.

Dear Beth:

How are things going at Sybaris? I expect by this time that you've given the magnetometer quite a test.

I have had an inquiry from a retired physicist here in Dallas as to the name of anyone working with magnetometers in this area. He has evidently constructed a bleeper type (after Aiken) and is trying to find someone to help him work out the bugs. If you happen to know of anyone in Texas, working with a magnetometer, I would appreciate your dropping me a card.

Why don't you come out to Taos, New Mexico this summer and run some tests. I will be running a summer field school at the Fort Burgwin Research Center. We will be working at a 700 room pueblo with underlying pit structures.

Nancy sends her regards. Will we see you at the SAA in Milwaukee?

Sincerely,

Jim

James V. Sciscenti
Assistant Director
Fort Burgwin Research
Center

JVS:hg

*Perhaps, he would have
something for the Newsletter.*

Shutler
Dept. of Archaeology
Nevada State Museum
Carson City, Nevada



THIS SIDE OF CARD IS FOR ADDRESS

Dr. Elizabeth K. Ralph
Department of Physics
Philadelphia 4,
Penn.

University of Pennsylvania

Nov. 9, 1961

Dear Dr. Ralph:

Just a note to thank you for the reprint of your paper "C-14 Dates for Sites in the Mediterranean Area," by D. L. Kohler and Elizabeth K. Ralph.

I hope to come East after the first of the year, and may have a chance to stop in and finally meet you.

Sincerely,

Dick

April 29, 1969

James V. Sciscenti
Assistant Director
Fort Burgwin Research Center
Department of Anthropology
Southern Methodist University
Dallas, Texas 75222

Dear Jim:

It was good to hear from you. We are more or less finished at Sybaris, but I hope to leave in a few weeks for other sites in Italy and Yugoslavia.

About the bugs in a bleeper, I don't know of anyone in Texas. If he wants to write to Marfin Aitken (Research Laboratory for Archaeology and the History of Art, 6 Keble Road, Oxford), he would probably be glad to make suggestions. The adjustments to detect the proton precession for the first time are quite tricky. If he has relays in his circuit, they have to have very fast action, that is, flip very quickly at the end of the polarizing cycle in order to pick up the small precession voltage when it is close to its maximum.

Another expert is Sheldon Breiner, GeoMetrics, Palo Alto, California, (415-321-7610). It would be best for him to telephone to him because Shelly never writes letters.

I would like to see you and Nancy at Taos, but my summer schedule is already crowded.

With best regards,

Elizabeth K. Ralph

EKR/mrb

December 15, 1967

Dr. James V. Sciscenti
Principal Investigator
Anthropology Research Center
Southern Methodist University
Dallas, Texas 75222

Dear Jim,

It was good to hear from you. Recently, I, too, was thinking of that beautiful unspoiled country at the Buttes site and of our happy although unsuccessful days in the field.

Congratulations upon your new appointment. Last year I discussed your interests with Dr. Kidder and he had a site in Central America in mind that, I think, would have appealed to you, but unfortunately, the organizer was unable to find funds for the project.

The University Museum would like very much to excavate in Pakistan and two years ago, George Dales, Curator of the South Asia section, did some preliminary digging at Mohenjodaro. Ever since then he has been trying to negotiate with the authorities in Pakistan to continue there and at other sites, but now no permits are being given for USA-sponsored excavations because "we" are so unpopular there. Also, George said that he thinks it is too late for work at Tarbela, that is, it may already be inundated.

Perhaps, you can think of some other place in the world where our two Universities can cooperate.

Merry Christmas to you and your family.

With best regards,

Elizabeth K. Ralph

EKR/abn

929 S. Floyd Rd.
Richardson, Texas 75080

December 10, 1967

Dr. Elizabeth K. Ralph
Assistant Director
University of Pennsylvania Museum
Philadelphia, Pa.

Dear Beth,

Merry Christmas from the Sciscenti Family.

At this season last year, we were all happily away from the traffic and noise of both Philadelphia and Tucson, at the Buttes site. Things have changed for us since then, as I am currently administering the Salvage Archaeology program for the Anthropology Research Center, Southern Methodist University.

A short article recently appeared in the December 1 issue of TIME magazine. The gist of the news article was that there are plans for the construction of an extremely large dam on the Indus River at Tarbela, some 50 miles northwest of Rawalpindi. This project will be sponsored by the World Bank and the dam may very well be built by an American firm, George F. Atkinson Co., of San Francisco.

I know the University of Pennsylvania has for several years been engaged in research in West Pakistan. Has the University of Pennsylvania made any plans for salvage archaeology at Tarbela, such as was carried out as part of the Aswan Dam Project in Egypt? The Fort Burgwin Research Center, (an affiliate of Southern Methodist University), of which I will be assistant director, would be interested in participating in a joint program for Salvage within the reservoir of the Tarbela Dam. Plans for the construction are fairly advanced, though bids for the project have not been submitted. Perhaps tentative brochures ought to be made.

I would appreciate your comments on this as well as on the possibilities of a joint operation.

Best Regards,

Jim

James V. Sciscenti
Principal Investigator
Anthropology Research Center
Southern Methodist University
Dallas, Texas 75222

*Non-Permits for USA
Too late*

*George
Can you help me
answer this?
Beth*

nks:JVS

929 S. Floyd Rd.
Richardson, Texas 75080
December 10, 1967

Mexico
New CS
Expt. in collab
w. Engineers from
Vannan

Dr. Elizabeth K. Ralph
Assistant Director
University of Pennsylvania Museum
Philadelphia, Pa.

Dear Beth,

Merry Christmas from the Seiscenti Family.

At this season last year, we were all happily away from the traffic and noise of both Philadelphia and Tucson, at the better site. Things have changed for us since then, as I am currently administering the Salvage Archaeology program for the Anthropology Research Center, Southern Methodist University.

A short article recently appeared in the December 1 issue of TIME magazine. The gist of the news article was that there are plans for the construction of an extremely large dam on the Indus River at Tarbela, some 50 miles northwest of Rawalpindi. This project will be sponsored by the World Bank and the dam may very well be built by an American firm, George F. Atkinson Co., of San Francisco.

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I would appreciate your comments on this as well as on the possibilities of a joint operation.

Best Regards,

James V. Seiscenti
Principal Investigator
Anthropology Research Center
Southern Methodist University
Dallas, Texas 75222

12/10/67

April 16, 1968

Dr. Irwin Scollar
Rheinisches Landesmuseum
53 Bonn
Colmanstrasse 14-16
Germany

Dear Dr. Scollar:

Thank you for your kind letter of April 10th. I was sorry to learn that you cannot take your measurement bus out of Germany.

We are grateful too for your offer to test some soil samples. I have sent a copy of your letter to Alan McPherron with the thought that if I can't get to the site in Yugoslavia before the end of June, perhaps he can. It may not be possible to excavate, however, until September so that perhaps, only surface samples will be available at this time.

I should like very much to visit your laboratories. At the moment, I am supposed to be in Greece, Iran, and Ireland -- all in June, so I'll have to see how things work out.

With best regards,

Elizabeth K. Ralph

EKR/abn

UNIVERSITY OF CALIFORNIA, BERKELEY

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



SANTA BARBARA • SANTA CRUZ

CIVIL ENGINEERING
Geotechnical Engineering

BERKELEY, CALIFORNIA 94720

January 22, 1967

Miss Elizabeth K. Ralph
Applied Science Center for Archaeology
The University Museum
University of Pennsylvania
33rd and Spruce Streets
Philadelphia, Pennsylvania

Dear Miss Ralph:

Very many thanks for the information in your recent letter concerning the soil conditions in the vicinity of Helice. I most certainly appreciate the description you were able to provide.

Sincerely yours,

H. Bolton Seed

H. Bolton Seed
Professor of
Civil Engineering

HBS/na

Scottish Research Reactor Centre

Director: Professor H W Wilson, BSc, PhD, FInstP, FRSE

Our Ref: HWW/38.6c

East Kilbride, Glasgow, G75 0QU

Your Ref:

Tel: EAsT Kilbride 20222

Telex: 77588

20th June, 1972

Miss Elizabeth K. Ralph,
Department of Physics,
University of Pennsylvania,
Philadelphia 19104, U.S.A.

Dear Miss Ralph,

As you will note from the accompanying invitation card to the opening ceremony of the carbon dating building we have had to delay the actual opening considerably. I don't know whether it will be possible for you to attend but I should be delighted if you could do so.

I do hope that your new scintillation counting equipment is giving satisfactory results and look forward to seeing you on this occasion or, if it is quite impossible, in the near future.

Yours sincerely,



H. W. Wilson.

Dr. D.D. Harkness

September 4, 1972

Professor H. W. Wilson
Scottish Research Reactor Center
East Kilbride
Glasgow G75 0QU
Scotland

Dear Professor Wilson:

Thank you for your invitation to the Opening Ceremony of your Radiocarbon Dating Laboratory on September 28th.

By good fortune, I think that I shall be able to attend. I am scheduled to be in Iran on the 4th of October, and if that plan does not fall through, I can come to Scotland en route with a few days to spare to take care of some business in Rome.

I have been very remiss in thanking Dr. Harkness for the helpful information which he sent, but hope to thank him personally.

With best regards,

Elizabeth K. Ralph

EKR/ek

Scottish Research Reactor Centre

Director: Professor H W Wilson, BSc, PhD, FInstP, FRSE

East Kilbride, Glasgow

Tel: EAst Kilbride 20222

Telex: 77588

Our Ref:

Your Ref:

Miss E.K. Ralph,
Museum of Applied Science
Centre for Archaeology,
University of Pennsylvania,
Philadelphia,
Pennsylvania 19104, U.S.A.

14th September, 1972

Dear Miss Ralph,

We look forward to your visit to the Reactor Centre on Thursday 28th September.

The programme for the opening of the Radiocarbon Building will be as follows.

- | | |
|----------------|--|
| 10.00 - 10.30 | Coffee |
| 10.30 | Opening ceremony followed by tour of radiocarbon laboratory and other Centre facilities. |
| 12.30 for 1.00 | Luncheon |
| 2.15 onwards | Further visits to Reactor Centre laboratories will be arranged. |

Transport to the Centre and back to town and airport will be arranged to meet the needs of guests as far as possible. To this end, please inform Mrs. Mills at the Reactor Centre, as soon as possible, if you will require transport.

A map showing main routes is enclosed to assist those using their own transport. A brochure describing the facilities at the Reactor Centre is also enclosed, for your information.*

Yours sincerely,

H. W. Wilson.

* P.S. A brochure describing the radiocarbon laboratory is in preparation but is not yet to hand.

UNIVERSITY OF CALIFORNIA, BERKELEY

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



SANTA BARBARA • SANTA CRUZ

CIVIL ENGINEERING
Geotechnical Engineering

BERKELEY, CALIFORNIA 94720

February 10, 1967

Miss E. Ralph
University Museum
University of Pennsylvania
Philadelphia, Pennsylvania

Dear Miss Ralph:

In a discussion this morning concerning geophysical and geological conditions in the Gulf of Corinth, Professor Frank Morrison suggested that you might be able to provide me with some information or sources of information concerning the soil conditions in the vicinity of Helice. I am particularly interested in the nature of the soils overlying bedrock in this vicinity.

I would be most grateful for any information you could send me along these lines.

Sincerely yours,

A handwritten signature in blue ink that reads "H. Bolton Seed".

H. Bolton Seed
Professor of
Civil Engineering

HBS/na

February 17, 1967

Prof. H. Button Seed
Dept. of Civil Engineering
University of California
Berkeley, California

Dear Professor Seed:

In regard to the soil conditions in the vicinity of Helice, I find myself somewhat embarrassed. I spent a week there, but since I am so uneducated in these matters, I find it difficult to describe the soils in proper terms.

The plain of Helice is a small alluvial plain. The soil in the region just inland from the coast is somewhat sandy and is light and fine-textured. The beds of the rivers are rocky (similar to Italian "torrenti") and stones have been transported by the rivers onto the beach and into the water, at least, as far out as one can see through the clear water. The soil is very fertile in comparison with other parts of southern Greece. The plain is now covered with vineyards.

The surrounding hills, as I remember, consist of red magnetic earth with some gravel. It appeared to me very similar to the soil found in the hill regions of southern Italy. Frank Morrison could tell you the proper name of this type of soil. Without irrigation it is good for growing olive trees.

I hope that this layman's description will be of some use to you.

Sincerely yours,

Elizabeth K. Ralph

EKR/deh



THE AMERICAN MUSEUM OF NATURAL HISTORY
CENTRAL PARK WEST AT 79TH STREET, NEW YORK, NEW YORK 10024

January 24, 1968

DEPARTMENT OF ANTHROPOLOGY

H. L. Shapiro, Ph.D.
Chairman

Junius B. Bird, D.Sc.
Curator of S. American Archaeology

Gordon F. Ekholm, Ph.D.
Curator of Mexican Archaeology

Margaret Mead, Ph.D., D.Sc.
Curator of Ethnology

Robert L. Carneiro, Ph.D.
Associate Curator of S. American Ethnology

Colin M. Turnbull, M.A. (Oxon), D.Phil.
Associate Curator of African Ethnology

Stanley A. Freed, Ph.D.
Associate Curator of N. American Ethnology

Richard A. Gould, Ph.D.
Assistant Curator of N. American Archaeology

Philip C. Gifford, Jr., B.F.A., M.A.
Scientific Assistant

Priscilla C. Ward, B.S.
Scientific Assistant

Bella Weitzner
Associate Curator Emeritus of Ethnology, Consultant

Clarence L. Hay, A.M.
Research Associate

Robert Von Heine-Geldern, Ph.D.
Research Associate

Walter A. Fairservis, Jr., Ph.D.
Research Associate

Louis Dupree, Ph.D.
Research Associate

F.H. Osborn, Litt.D., Sc.D., LL.D.
Honorary Associate

Antoinette K. Gordon
Associate

Carin Burrows
Associate

Edgar M. Queeny, A.B.
Field Associate

Donald S. McClain, M.A.
Field Associate

Charles F. Brush, M.A.
Field Associate

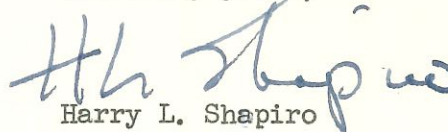
Miss Elizabeth K. Ralph
MASCA Newsletter
The University Museum
33rd and Spruce Streets
Philadelphia, Pennsylvania 19104

Dear Miss Ralph:

I have been aware for some time of the possibility of the magnetic dating of pottery and had been considering using pots found in burial caves in Africa for this purpose. The report in MASCA of your work at Elis prompts me to write for your expert opinion. The problem I am concerned with hinges on the ability of dating crania by the pots that contain them. The pots themselves were presumably made at some distance from the caves to which they were brought. As the caves became filled, burials would be made in other adjacent caves. If these various pots could be arranged by periods of fifty or 100 years, they could provide essential information for my research.

I would appreciate your assessment of the value of the magnetic dating technique under these circumstances. If there are additional items of information you need before offering an opinion I may be able to supply them.

Sincerely yours,


Harry L. Shapiro

jc

January 25, 1968

Dr. Harry L. Shapiro
Department of Anthropology
The American Museum of Natural History
Central Park West at 79th Street
New York, New York 10024

Dear Dr. Shapiro:

In my opinion, there is not much hope of arranging your pots from Africa within periods of 100 years by means of magnetic dating. There are two phases of magnetic dating - namely, vector (declination and inclination) changes and intensity changes. Both seem to be cyclic but of differing periods - about 500 years for vector, and more than 3000 for intensity changes. Since the vector changes are more rapid and due to the fact that it is easier to measure intensity changes, dating by means of vectors can be more precise. However, these measurements can only be made on pots, bricks, etc. that have not been moved since firing, that is, ones which are still oriented as they were when they were fired.

For your pots, this seems to eliminate vector dating and only intensity changes are left. As far as I know, I don't think that the precision which you desire could be obtained. Also, since it is not now known whether or not magnetic changes have been the same all over the world, I think that it would be necessary to measure some control samples of known age to arrive at absolute dating. If only a comparative sequence were desired, this might not be necessary.

Before giving up this idea, however, I suggest that the best one to contact is Ing. Dr. Sc. Vaclav Bucha, Geofyzikalni ustav Akademie Ved, Prague, Czechoslovakia. He has had more success with measurements of remanent magnetic intensity than anyone else. In addition to the information you sent to me, it would be helpful to include the location in Africa and an estimate of the age range of the pots.

February 22, 1972

Dear Mr. Sharp:

This is a simple statement of the research carried out with your support last year in Mexico and Guatemala.

The University Museum, through its Applied Science Center, is carrying out experiments in aerial photography in an attempt to improve our current methods. This aerial reconnaissance of the Peten Peninsula and near Guadalahara last February not only added to our experiments but was of great help in determining where we should excavate, in terms of our regular excavating program.

We are deeply grateful to you for making this assistance possible.

Sincerely,

Froelich Rainey
Director

Mr. Hugh R. Sharp, Jr.
9140 duPont Building
Wilmington, Delaware 19801

31 Democharous
Athens 601
July 7, 1968

Miss Elizabeth Ralph
University Museum
34 th & Spruce Streets
Philadelphia, Pa.

Dear Miss Ralph:

In connection with possible further radio-carbon analysis of wood samples now underwater at Kenchreai, I would most appreciate your advice in order that we might avoid contamination in their removal and storage. Your advice will be most appreciated if we could hear from you before August 1, for our excavation season is quite short.

Yours sincerely,

Joseph W. Shaw
Joseph W. Shaw

Best regards to Ellen Kohler.

July 16, 1968

Dr. Joseph W. Shaw
31 Democharous
Athens 601, Greece

Dear Dr. Shaw:

In regard to your samples of wood from Kenchreai, there is not too much danger of contamination. If you have fresh water available, it would be a good thing to soak and wash them thoroughly but this is not essential. If you can dry them in the sun without their being exposed to much modern dust, that would be helpful too.

I have enclosed copies of our standard sheets on sample and information requirements.

I wish that I could see your site again, but I had to finish up in Greece this year in mid-June in order to do a small job in Ireland, and am now back here for the rest of the hot-humid summer.

With best regards,

ER/rs
Encls.

Beth Ralph

March 13, 1968

Mrs. Robert Shaw
11622 W. Martha Drive
Wouwatosa, Wisconsin 53226

Dear Mrs. Shaw:

Thank you for your letter and for the information about "The Edgar Cayce Story." Unfortunately, the possible connection between the Island of Santorini and ancient Atlantis was publicized by some erroneous news releases.

Prof. Marinatos, who was in charge of the excavations, has not suggested that there is any possible connection. Important finds of the period of 1500 B.C. were made, but there was nothing to indicate that this island may have been Atlantis.

Sincerely yours,

Elizabeth K. Ralph

March 6, 1968
Dear Elizabeth Ralph;

I read an article in the Milwaukee Journal March 4, 1968 - concerning the trial diggings of Prof. Marinatos, Vermorel and yourself at Santorini.

It interested me very much because I just happened to be reading "The Edgar Cayce Story" by Gina Curminara. It's many mansions - in paper back.

All through the books are mentioned, past life readings of people that lived in the time of the Atlantis.

According to the readings certain unopened chambers

in the Great Pyramid, in Egypt, may someday disclose full records of the history and civilization of the lost continent of Atlantis. They were supposed to be brought there by some inhabitants that fled, at the time of the third and last cataclysm about 9500 B.C.

He also referred to the island of Bimini off Miami, Florida as an Atlantean mountain peak.

According to Cayce - the Atlanteans had reached a much higher peak of scientific efficiency than we have. Their Electricity, radio, T.V., air travel, subs, and harnessing of solar and atomic power were highly advanced. Their heating

lighting and transportation techniques were more efficient.

If you care to check the book for yourself, this information is on page 67 in the article "Harma in suspension."

So many of the life readings given were tested and found true. This sounds strange but it would certainly be worth looking into.

Let me know what you think about it.

Yours sincerely,
Mrs. Ruth Shaw
116 22 W. Martha Dr.
Wauwatosa, Wis.
53226

UNIVERSITY of PENNSYLVANIA

PHILADELPHIA 19104

The Faculty of Arts and Sciences

DEPARTMENT OF PHYSICS

March 29, 1979

Dr. Payson D. Sheets
Department of Anthropology
University of Colorado
Boulder, Colorado 80309

Dear Payson,

With the assumption that all the dates listed were 5568 1/2-life A.D./B.C. values (as the case of TX 2323 and 2324, which we were able to check in Radiocarbon) the first thing to do is convert back to 5568 1/2-life B.P. dates. Then these B.P. dates are multiplied by 1.03 to convert to 5730 - 1/2-life dates. Next subtract 1950 from the B.P. 5730 1/2-life dates to change to A.D. - B.C. dates. Finally look up corrections in a MASCA tables.

We hope that this answers your questions.

Sincerely yours,

Barbara Lawn
Elizabeth K. Ralph

BL:EKR:bac

TABLE . RADIOCARBON DATES

*Be sure these are
incorrectly done
↓*

<u>NUMBER</u>	<u>EVENT DATED</u>	<u>RADIOCARBON DATE AND RANGE</u>	<u>MASCA-CORRECTED DATE AND RANGE</u>
ELS -40	Ceren House, Laguna Caldera Eruption. <i>5568 1/2-life</i>	<i>5730 1/2-life</i> AD510+135, AD375-645	AD590+135, AD455-725
	<i>1440 ± 135 B.P.</i>	<i>1480 ± 140 B.P., A.D. 470</i>	<i>A.D. 560 ± 140</i>
Tx3113	" " " "	AD100+360, 260BC-AD460	AD160+360, 200BC-AD520
	<i>1850 ± 360 B.P.</i>	<i>1910 ± 370 B.P., A.D. 40</i>	<i>A.D. 120 ± 380</i>
Tx3119	" " " "	AD380+110, AD270-490	AD450+110, AD340-560
	<i>1570 ± 110 B.P.</i>	<i>1620 ± 110 B.P., A.D. 330</i>	<i>A.D. 400 ± 110</i>
Tx3120	" " " "	AD440+390, AD50-830	AD540+390, AD150-930
	<i>1510 ± 390 B.P.</i>	<i>1560 ± 400 B.P., A.D. 390</i>	<i>A.D. 480-460 ± 400</i>
Tx	" " " "		
Tx	" " " "		
Tx	" " " "		
Tx3116	Historic Canal at Cambio (Pit 12, Fea. 4).	AD1690+80, AD1610-1770	AD1600+80, AD1520-1680
	<i>260 ± 80 B.P.</i>	<i>270 ± 80 B.P., A.D. 1680</i>	<i>A.D. 1610, 1530 ± 80</i>
Tx3121	Feature 8 of Text Pit 19 (336-1V) at Cambio, "Lower" or Middle Classic.	AD580+100, AD480-680	AD640+100, AD540-740
	<i>1370 ± 100 B.P.</i>	<i>1410 ± 100 B.P., A.D. 540</i>	<i>A.D. 610 ± 100</i>
Tx3123	Feature 15 of Pit 16 (336-1T5&6), Cambio.	AD440+90, AD350-530	AD540+90, AD450-630
	<i>1510 ± 90 B.P.</i>	<i>1560 ± 90 B.P., A.D. 360</i>	<i>A.D. 440 ± 90</i>
Tx2323	Earlier Ilopango eruption(?), no artifact associations.	550BC+100, 650BC-450BC	600BC+100, 700-500BC
	<i>2500 ± 100 B.P.</i>	<i>2580 ± 100 B.P., 630 B.C.</i>	<i>770 ± 100 B.C.</i>
Tx3114	Ilopango Eruption.	AD10+50, 40BC-AD60	AD90+50, AD40-AD140
	<i>1940 ± 50 B.P.</i>	<i>2000 ± 50 B.P., 50 B.C.</i>	<i>A.D. 50 ± 50</i>
Tx3122	" " " "	AD320+70, AD250-390	AD400+70, AD330-470
	<i>1630 ± 70 B.P.</i>	<i>1680 ± 70 B.P., A.D. 270</i>	<i>A.D. 360-320 ± 70</i>
Tx2324	" " " "	20BC+60, 80BC-AD40	AD70+70, AD1-140
	<i>1970 ± 60 B.P.</i>	<i>2030 ± 60 B.C., 80 B.C.</i>	<i>A.D. 40-20 ± 60</i>

(Note: Following 6 dates run by the German Federal Institute for Geosciences and Natural Resources, all dating the Ilopango Eruption; courtesy H. S. Weber.)

264	<i>5568</i> <i>1690 ± 85</i>	<i>5730</i> <i>1740 ± 90 B.P.</i>	<i>A.D. 210</i>	<i>A.D. 270 ± 90</i>
2534	<i>1660 ± 95</i>	<i>1710 ± 100 B.P.</i>	<i>A.D. 240</i>	<i>A.D. 320-290 ± 100</i>
2535	<i>1525 ± 70</i>	<i>1570 ± 70 B.P.</i>	<i>A.D. 380</i>	<i>A.D. 450 ± 70</i>
5001	<i>1450 ± 310</i>	<i>1490 ± 320 B.P.</i>	<i>A.D. 460</i>	<i>A.D. 550 ± 320</i>
5002	<i>1590 ± 70</i>	<i>1640 ± 70 B.P.</i>	<i>A.D. 360</i>	<i>A.D. 440 ± 70</i>
5004	<i>1925 ± 125</i>	<i>1980 ± 130 B.P.</i>	<i>130 B.C.</i>	<i>A.D. 60 ± 130</i>

TABLE . RADIOCARBON DATES

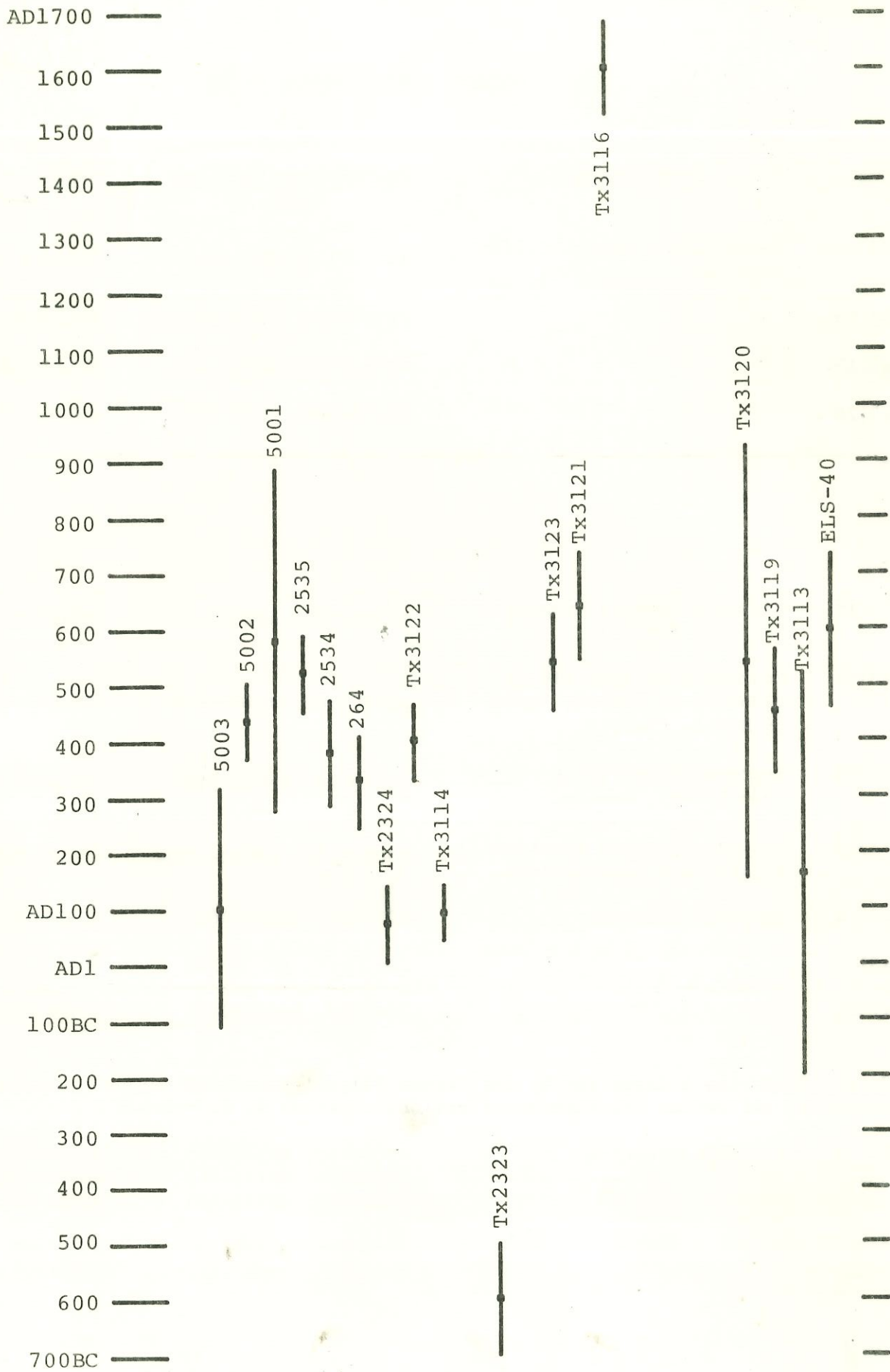
*I'm sure these are
incorrectly done*
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Tx3119	" " " "	AD380+110, AD270-490	AD450+110, AD340-560
Tx3120	" " " "	AD440+390, AD50-830	AD540+390, AD150-930
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Tx3122	" "	AD320+70, AD250-390	AD400+70, AD330-470
Tx2324	" "	20BC+60, 80BC-AD40	AD70+70, AD1-140

(Note: Following 6 dates run by the German Federal Institute for Geosciences and Natural Resources, all dating the Ilopango Eruption; courtesy H. S. Weber.)

264	Ilopango Eruption.	AD260+85, AD175-345	AD330+85, AD245-415
2534	" "	AD290+95, AD195-385	AD380+95, AD285-475
2535	" "	AD425+70, AD355-495	AD520+70, AD450-590
5001	" "	AD500+310, AD190-180	AD580+310, AD270-890
5002	" "	AD360+70, AD290-430	AD440+70, AD370-510
5004	" "	AD25+125, 190BC-AD235	AD100+215, 115BC-AD315

MASCA-CORRECTED RADIOCARBON DATES



UNIVERSITY OF COLORADO
AT BOULDER
BOULDER, COLORADO 80309

DEPARTMENT OF ANTHROPOLOGY

15 Mar 1979

Dear Beth,

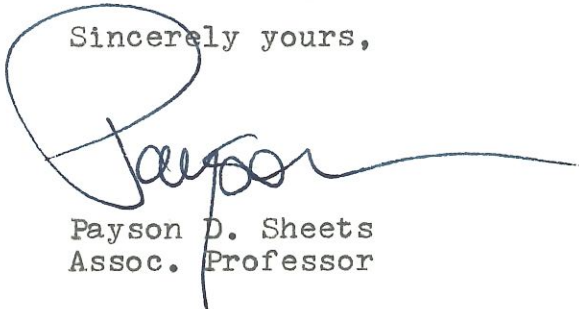
Help!!! I wonder if I could ask you a large favor. Two colleagues and I have been MASCA-correcting our C-14 dates, and we are not agreeing on how to do it, i.e. we are getting different results from the same tables. Might you, or someone at MASCA, be able to help us? The dates for which we need corrections are listed on the enclosed table.

And in addition, we have the following three:

1. 1375 ± 55 BP
2. 645 ± 135 BP
3. 625 ± 50 BP.

Your assistance in this would be GREATLY appreciated. Thanking you in advance for any assistance you may be able to render, I remain,

Sincerely yours,



Payson D. Sheets
Assoc. Professor

JOHN D. SILCOX
PHILADELPHIA, PA.

November 5, 1952

Department of Archaeology
Museum of University of Penna.
Philadelphia, Pa.

Gentlemen:

Would you please forward to me such information as is available to the public on the radioactive isotope Carbon 14. I desire this to use in a research paper on that subject.

I have heard Dr. Rainey mention that you have a machine which determines the age of archaeological discoveries, during the program "What in the World".

I would appreciate as much information as you are able to send to me about this machine. Should there be any charge for information of this type, I would appreciate it is you would advise me in advance and I will be glad to forward payment to you before you mail. Thank you in advance.

Cordially yours,

M.E. Silcox

M.E. Silcox
6408 Morris Park Rd.
Phila. 31, Penna.

November 10, 1952

Mr. M. E. Silcox
6408 Morris Park Rd.
Philadelphia 31, Penna.

Dear Mr. Silcox:

Your letter of November 5, addressed to the Department of Archaeology has been referred to me.

The subject of archaeological dating by the carbon fourteen method is described most adequately in a book entitled Radiocarbon Dating by Willard F. Libby, the originator of the method (Published in 1952 by the University of Chicago Press, Chicago 37, price \$3.50). In the book, references are given for most of the papers which have been published on this subject.

If you are interested in carbon fourteen in general, I recommend a book entitled Isotopic Carbon by Calvin, Heidelberger, Reid, Tolbert, and Yankwich, published by John Wiley and Sons (1949), price \$5.75. I believe that both of these books can be obtained from the Philadelphia Book Company, 22 North 9th Street.

Sincerely yours,

Elizabeth K. Ralph