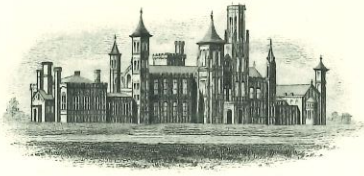


1/6/60

Mexican dig

UNITED STATES NATIONAL MUSEUM
BUREAU OF AMERICAN ETHNOLOGY
ASTROPHYSICAL OBSERVATORY
NATIONAL ZOOLOGICAL PARK



SMITHSONIAN INSTITUTION
Washington, U.S.A.

NATIONAL GALLERY OF ART
NATIONAL COLLECTION OF FINE ARTS
FREER GALLERY OF ART
INTERNATIONAL EXCHANGES
DIVISION OF RADIATION AND ORGANISMS

Dear Fro:

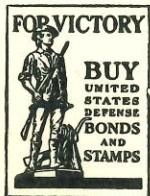
I have just returned from the meetings in Mexico where I saw Bernal and Case and talked to them about the project. They were favorably disposed and indicated that there would be no trouble about permits. Bernal is apparently the one who issues the permits.

I asked Wetmore who is vice chairman of the research board of the N.G.S. about funds and he turned me down. Said that they would not regard this as a "whole" project and that it should be part of a full fledged dig. I guess he was not in the proper mood. I don't know where funds could come from as that is the only one I have my finger on.

As for expenses I estimate 400 dollars for plane fare for 2. (200 each for the round trips) A car costs from 16 to 20 dollars a day. \$600? for 30 days. Four diggers for 30 days @ 200 would be \$240. \$30 a day subsistence etc. The whole thing would come to 1800 or 2000. I am disappointed that the N.G.S. lead did not come through

Sincerely

MATT



Stirling
Marion
Research

January 14, 1960

Dr. Eusebio Dávalos Hurtado, Director
Inst. Nac. de Antropología e Historia
Cordoba 45
México 7, D.F.

Dear Dr. Dávalos:

I am enclosing with this a copy of a request for a permit to work in Cerro de las Mesas and Tres Zapotes, addressed to Dr. Bernal.

I enjoyed the meetings in Mexico City very much, but everyone was so busy I did not have much opportunity to visit at that time, but hope I will be able to see you again shortly.

Marion and I wish to thank you again for the delicious luncheon at the Museum. We enjoyed meeting your wife and hope you will both visit us in Washington. Marion regrets she cannot accompany me on this trip but must remain in Washington as our daughter is in school here.

Best regards.

Sincerely,

M. W. Stirling
Research Associate

January 14, 1960

Dr. Ignacio Bernal, Director
Dept. Monumentos Prehispanicos
Inst. Nacional de Antropologia e Historia
Cordoba No. 45
México 7, D.F.

Dear Dr. Bernal:

You may recall that during the recent meetings in Mexico City, I spoke to you of a project that Dr. Froelich Rainey, Director of the University Museum, Philadelphia, and I had been considering, of using an electronic device at Cerro de las Mesas and Tres Zapotes to test its practicability in locating buried monuments.

Since my return to Washington, Dr. Rainey has informed me that the money and equipment is now available, the University Museum having appropriated \$2500.00 for the project. The plan is to conduct the work from February 9 to March 9 of this year. No excavations are contemplated other than those necessary to expose the objects which we hope may be located. We have selected the two sites named because of the general absence of naturally occurring stones. We plan to hire only a small crew such as might be necessary to assist in handling the equipment and to do the required digging.

I am therefore making formal application to the Department of Monumentos Prehispanicos for permission to do this work during the period designated. The expedition will be under the combined auspices of the Smithsonian Institution and the University Museum.

I have not worked in Mexico since 1946 and therefore am not too familiar with the necessary procedures. If you feel that the project is worth while, I would plan to arrive in Mexico City on the first of February, in order to complete arrangements and prevent loss of time. The working period is restricted since Dr. Rainey cannot leave before February 9 and must return on March 9.

I realize that the time is short before the work can begin, but I could not make application earlier since the funds have just become available.

I would appreciate receiving from you any information as to procedures, that might facilitate completion of the permit, should you decide that it be granted. Please respond to my home address:

3311 Rowland Place, N.W.
Washington 8, D.C.

I enjoyed very much attending the meetings in Mexico City and wish to congratulate you on the efficient job you did as Chairman.

With best personal regards to yourself and my many friends in the Instituto, I am

Sincerely yours,

M. W. Stirling
Research Associate

PRESERVATION

COPY 03/27/2014

PERSONS APPLYING BY MAIL WILL INSURE CORRECT DELIVERY OF THEIR TOURIST CARDS BY ENCLOSING A LARGE SELF-ADDRESSED ENVELOPE STAMPED.

APPLICATION FOR MEXICAN TOURIST CARD
MEXICAN CONSULATE
2511 P. S. F. S. Bldg.
Philadelphia 7, Pa.

Fee for Tourist Card \$3.00 U.S. Cy.

T. C. No. _____
No. Series _____

Date January 21, 1960

PLEASE PRINT

I hereby wish to make formal application for TOURIST CARD to visit MEXICO and solemnly declare that the information given below is correct:

PRINT FULL NAME Frederick Gladstone Rainey Age 52
(Married women should also give maiden name)

Male () Female () Single () Married () Divorced () Widow-er ()

CITIZENSHIP _____ By birth () by naturalization ()

PROOF OF CITIZENSHIP Passport No. 1364418

PLACE OF BIRTH Black River Falls, Wisconsin Occupation Archaeologist
City or Town State

RESIDENCE Valley Forge, Pennsylvania Telephone NI 4-9289
Number Street City

PURPOSE OF TRIP Research Approx. Length of Stay in Mexico one mo.

MEANS OF TRANSPORTATION: Train () Bus () Plane () Auto ()

APPROXIMATE AMOUNT OF MONEY THAT I WILL CARRY WITH ME: \$ 1,000.00

Children under 15 years of age accompanying the undersigned:

<u>Names</u>	<u>Age</u>	<u>Relationship</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

NOTICE: TOURIST CARD must be used within 3 months from date of issuance and is valid for a period of 6 months stay in Mexico from date of entry. The Tourist FEE IS NOT REFUNDABLE under any circumstances. I hereby do declare that the above statements are true and correct, that I shall not engage in any business or remunerative work during my stay in Mexico, and also take cognizance of the fact that the Mexican Immigration Laws establish penalties for persons found guilty of making false declarations concerning the nature of their trip to Mexico.

Frederick Rainey
(Signature)

PROOF OF CITIZENSHIP MUST BE PRESENTED AT, OR SENT TO, THIS OFFICE AND CARRIED BY PASSENGER DURING TRIP. (SUCH AS: BIRTH CERTIFICATE, VOTING CERTIFICATE, PASSPORT, ARMY OR NAVY DISCHARGE CERTIFICATE, SWORN AFFIDAVIT, NATURALIZED CITIZENS MUST SUBMIT THE NATURALIZATION DOCUMENT.)

Stirling

January 27, 1960

Dr. Mathew Stirling
3311 Rowland Place, N.W.
Washington 8, D.C.

Dear Matt:

Thanks for yours of January 19th. The resistivity gear has arrived and I will get Ralph to show me how to use it. It looks like a cinch.

Glad to hear you have air mattresses and mosquito nets for me as well. I should think we would get blankets in Mexico and save a nuisance of carrying them. What about your wife, isn't she accompanying us?

I have reservations with Eastern Airlines on February 10th and will thus be in Mexico City that afternoon, also with a Mexican Tourist card and apparently everything is set. Gloria tells me that she sent you \$1,000. and so I guess everything is arranged, except the Mexican permit. Let me know if there is anything else I can do.

Regards,

FR:ah

Froelich Rainey
Director

SMITHSONIAN INSTITUTION
BUREAU OF AMERICAN ETHNOLOGY
WASHINGTON 25, D. C.

January 19, 1960

Dear Fro:

Just a line with a few odds and ends.

I have air mattresses and mosquito nets for both of us. Have not decided whether it would be cheaper to buy blankets in Mexico rather than pay excess air rates on them. As for medical supplies, I can get what we need - halizone tablets, chloromycetin, insect repellent, etc.

I think all you will need to get into Mexico is a tourist card which is easy to get. You will need a smallpox vaccination certificate also. Since I represent the government, I will get a special passport, which is more formal, since we are not actually "turistas." Mexico does not issue visas for regular passports. I will bring a Leica camer and a Zeiss Icon for black and whites. One can get film in Mexico as easily as here.

If you see the Mexican Consul you might find out if you need special papers to bring in and out the electronic device. If it is of U. S. manufacture, you won't need anything to bring it back to this country as I understand it. Foreign made equipment should be registered with American customs before leaving this country.

I would recommend that you bring laced boots to wear, as they are the best protection against ticks, which used to be the biggest pest in these sites.

You might send me the \$1000.00 now, so I will have it on hand. (I won't spend any till the permits are assured.)

I have plane reservations to leave on February 1, which should give me time to make necessary advance arrangements.

Marion joins me in sending best regards.

Sincerely,

Matt

Matt

Mexican
Research

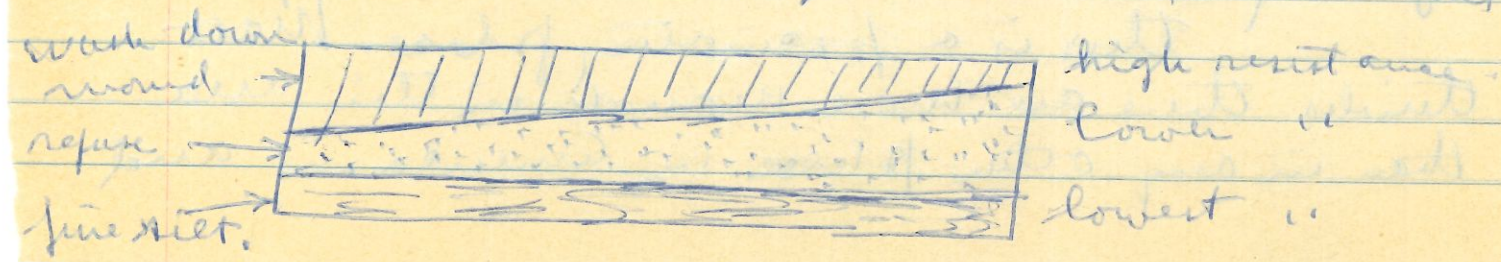
To Adelberto
Tejeda

Ignacio delo Blase
Cere Cruz, Mex.

Feb. 22

Dear Ted,

I wish we had a geophysicist with us on this job. We can locate stela which give us a higher resistance but the trouble is, changes in soil strata also give us a change in resistance and so we have learned that a high resistance reading does not certainly locate a stone. Hence we have had a lot of "dry holes". But for changes in strata its marvelous - for example in one cut through a mound we had this!



Now I know how to use it for locating cistern
strata but we are still puzzling about how
to spot mounds - oddly enough our
conductivity here is running several times
as high as examples given in the instrument
book and I don't know why. We can make
200 readings a day and cover a lot of
ground. The thing certainly works but like
C-14 it is no simple tool to be used
without cracking your head. But there is
no doubt in my mind now that it should
be a regular tool in any dig. Also I'm
getting ideas as to how it can be improved.
This is a promising place. Matt
thinks there are more mounds in this area
than in any other place in America - and

after driving about the country and I would
guess more than any other place in the world!

Because of the the big irrigation project the
land is being cleared and now literally
thousands of mounds show up. There are
many sites right in this area that were
unknown when Matt was here before. And
the planes are bringing in loads of objects
which they are now finding. Certainly some
fascinating things - which we are
buying - and I hope your recent experience
in mind - there is a way!

We have been digging only about 5 days
and today was the first in the grave. We hit
one of those "spirit trees" today which looked
(using only 12 men)

like a sewer pipe in 11 sections. But
no burial as yet.

Everything is going fine. Not a bad
place to stay about 20 minutes from the
site. A kind of frontier town with broad
streets and horses tied in droves by the
each store and bar. Cowboys, cattle,
wag, corn, palms, and a flat land
full of mounds.

If Percy is still in Philadelphia
will you call him, and also Lane Eckert,
to say the machine is working and we are
having a very good show. We should
be here until the 4th or 5th and I fly up to
N.Y on the 6th. We may spend a day with
the machine at Testafacan just for

(with the machine)

some different experience but we will
stick at this site as long as possible.

Hope things are going well there.
Please give everyone, and particularly
the girls, my very best. Tell Wiley the
Vera Cruz cigars are the best yet.

(I guess I still look fairly young
since one of the cowboys came around the
other day to suggest he introduce me to
some of the girls of Ignacio! - Best in Mexico
he says!) But I am sticking to the cigars
for my amusement, no ice for Martinis -
and the wine is bad.

Regards
720

~~After a heavy rain the 14th station. But
No burial at night.~~

~~Every time I go to the site. Not a bad
place to stay about 20 minutes drive from
the site. It is a funny little town full
of cowboys and horses. We work from
7 until 3:00 and then knock off for the
day. Doing a lot of work of the
site.~~

4
out

March 16, 1960

Mr. H. E. Barnes
48 East Textile Road
Ypsilanti, Michigan

Dear Mr. Barnes:

I have just returned from Mexico where I have been trying out the Model 274M Michimho resistivity apparatus at an archaeological site. We were primarily interested in locating stone monuments which are about 60 inches high and 30 inches in maximum diameter and buried only a few feet under the surface. We were working at a site called Cerros de las Mesas, not far from Vera Cruz, which is in an area with fine clay silts and no natural rock at all. We found our conductivity running very high as compared to your examples, that is 8 to 15 units at one meter depth on the 10 to the minus 2 setting of the dial. We made probably 1500 readings in an area about 100 meters square and got some very puzzling results.

Setting our pins a meter apart we got an increase in resistivity of two or three units when straddling a buried monument, but at a distance of two meters apart, on the pins, almost no increase in resistance could be observed. Moreover, there was a light dry mantle of soil, normally about half a meter deep and we found that when this mantle increased to one meter we got resistance equivalent to one of the monuments. Hence our attempt to locate these monuments was indecisive.

However, we soon learned the machine worked beautifully in identifying archaeological strata which we measured down to three meters. We also found that a cluster of burial urns gave us enough resistance to be detected. Also, underground structures, such as plaster walls, gave us an increased resistance.

In two artificial mounds, measured at depths up to two meters, we got several points of unusually high resistance, but upon excavation we found absolutely no explanation for the high resistance. Furthermore, trying this apparatus out at the great site of Teotihuacan, near Mexico City, I found it simply would not function at all. There we tried on a low mound which was filled with a rubble of vulcanic rock and under extremely dry conditions. Below one meter the needle was very sluggish and our readings made no sense at all.

We have expeditions operating all over the world and I feel sure this equipment can be invaluable to us, but I would like to know a great deal more about how it operates and what are its limitations. Also, I would like to know if it might be possible to rewire this so the current is more directional, thereby possibly fixing the location of obstructions in the soil more precisely. As you probably know, such equipment has been used in archaeology by Professor Case, at Oxford, and by Professor Lerici, in Italy, but I do not know what alterations in the apparatus they have made. I shall be meeting with Lerici in Italy this Spring to compare notes, but in the meantime we are sending this machine with one of our expeditions to Iran.

Mr. Inman, at the Associated Research Company in Chicago, was of no help to us at all, simply referring all questions to you. Any advice you can give us about this equipment would be very much appreciated and if at all possible I should like to go over our experiment with you in detail to see if there is any possibility of adapting this more particularly to archaeology. I hope I may impose upon your interest in this equipment to obtain some assistance from you.

Very best wishes,

FR:ah

Froelich Rainey
Director

JOSE BROCKMANN
GERENTE


HOTEL RITZ
MEXICO, D.F.

Storing CR -
Raney
reservatory

Feb. 11 -

Dear Ted,

Matt has changed our plans so that we will first concentrate on Cerro de las Mesas (Paso del Bote) near Ignacio de la Hlave about 75 miles S.W. of Vera Cruz. Jo Henry said she was going to stop off to see how we were doing on her way to Sandunas so will you please tell her of our change of plans so that she is not hunting for us at Tres Zapotes!

Also my sister Viva Amill is teaching at the American Institute this month in Vera Cruz and has an apartment in Edificio Bahía Veracruz Phone

39-35

R E P R E S E N T A N T E S

E X T R A N J E R O S

HENRY UTELL
EXECUTIVE OFFICE:
ESSEX HOUSE
NEW YORK - 19

HENRY UTELL
MIDWEST OFFICE:
55 EAST WASHINGTON STREET,
CHICAGO - 2

HALL WILSON
616 WILSHIRE BOULEVARD
LOS ANGELES 17, - CALIF.



HOTEL RITZ
MEXICO, D.F.

JOSE BROCKMANN
GERENTE

She will know where we are if anyone
urgently needs to get in touch with us.

Later we may move to Los Zapotes
but Matt thinks Cerro de las Mesas
is a better bet for our testing.

Everything is fine and we are
off tomorrow. Wonderful sunny weather
and nice to be here -

The best
Fro

R E P R E S E N T A N T E S E X T R A N J E R O S

HENRY UTELL	HENRY UTELL	HALL WILSON
EXECUTIVE OFFICE:	MIDWEST OFFICE:	616 WILSHIRE BOULEVARD
ESSEX HOUSE	55 EAST WASHINGTON STREET,	LOS ANGELES 17, - CALIF.
NEW YORK - 19	CHICAGO - 2	

Stirling Mexican
Fry

February 4, 1960

Mr. Luis A. Reilly
Calle Niza 6-205
Mexico City, Mexico

Dear Mr. Reilly:

Matt Stirling is at the Ritz Hotel and I will be arriving there in the afternoon, on February 10th. We should get off on the 12th for Tres Zapotes. You will remember I suggested that you drive down and see how our electronic equipment works out. We ought to be on the site for two or three weeks.

Has anything developed on the archaeological film business? If there is anything I can do while I am in Mexico, please let me know.

Very best wishes,

FR:ah

Froelich Rainey
Director

PRESERVATION COPY 03/27/2014

ASSOCIATED RESEARCH Incorporated



Manufacturers, Engineers, Consultants

1738 WEST BELMONT AVENUE • CHICAGO 18, ILLINOIS • PHONE CORNELIA 7-4880

Butcher
will you send a copy

Argel Temple
JTB

1 May 1961

Dr. Rainey
University of Pennsylvania
Museum OLMEC Research Fund
33rd and Spruce Street
Philadelphia 4, Pennsylvania

Dear Dr. Rainey:

We have just heard from the Oriental Institute here in Chicago that your department has printed some of the results using our "Michimho" resistivity instrument in your Mexican exploration. The Institute advised that this was taken from a publication entitled "Expeditions from 1958-1960".

As we understand the "Michimho" was referenced and the results of its use are discussed, we would sincerely appreciate receiving a copy of the particular paper dealing with this. We hope we may hear from you soon, and thank you very much in anticipation of receiving this report.

Very truly,

ASSOCIATED RESEARCH, INCORPORATED

Richard W. Inman

RWI/mlt
17

not 204 mailed
5/11/61
HJB