709243

JUN 3 1953

Dr. Paul C. Aebersold
Director, Isotopes Division
Oak Ridge Operations Office
U. S. Atomic Energy Commission
Oak Ridge, Tennessee

Dear Paul:

I have your letter of May 29, 1953 regarding your proposed European trip.

On both occasions when your trip was discussed with the General Manager we obtained all the factors from all the interested parties and presented them to the General Manager. We were completely impartial in the matter and the decision was made by Mr. Boyer. Since this matter has been to him twice, we see no point in re-opening it.

You stated in your letter that the inference you drew from a statement made in our conversation was that the Production Division feels that you might use more restraint in your requests for trips. I can see how you might draw this inference but it should not be laid to the Production Division. I was merely stating a personal feeling and this did not in any way enter into the discussions with the General Manager.

This note is just to assure you that your position and the position of all interested parties was completely, accurately and impartially related to the General Manager on both occasions when this was discussed with him.

Very truly yours,

Neil J. Carothers
Deputy Director of Production

CC: Dr. Johnson
Dr. Bugher
Dr. Woodruff

P:Carothers:cm

6/2/53

1063305

MEMO ROUTE SLIP
Form AEC-98 (Rev. May 14, 1947)

☐ See me about this. ☐ Note and return. ☐ For concurrence. ☐ For signature. ☐ For action. ☐ For information.

TO (Name and unit)	INITIALS	REMARKS
Vanden Bulck		Paul and I had another long talk regardin his foreign travel request. I reiterated the position taken in my memo of April 2
TO (Name and unit)	INITIALS	REMARKS
Saperia	✓	to him, including the fact that we were in a position to reopen the question again. This, however, did not
TO (Name and unit)	INITIALS	REMARKS
		result from Paul's visit that he did not have "a frum" in the Washington Court" to plead his
FROM (Name and unit)		REMARKS
Gilpatric		case as did Mason. He (PCA) also wanted to know the criteria that were applied to the various requests for foreign travel & the basis on which his request was not approved. I have no
PHONE NO. / DATE		

USE OTHER SIDE FOR ADDITIONAL REMARKS

16—66667-1 U. S. GOVERNMENT PRINTING OFFICE

1063306

information on the specific criteria. He strongly feels that the denial of his request was a slap at him as a scientist and at the way he has operated the [illegible] program. (What most [illegible] refer to my mind is April 20 [illegible] the point)

Paul [illegible] at the [illegible], when we [illegible] not recommending two trips to Europe [illegible]. I tried to assure him that his request [illegible] in view of Manov's change of position. He is not [illegible] let the matter drop.

[illegible] no objection to [illegible] to the [illegible] as [illegible] in the [illegible] [illegible] April 10 [illegible] not [illegible]

MEMO ROUTE SLIP Form AEC-98 (Rev. May 14, 1947)		☐ See me about this. ☐ Note and return.	☐ For concurrence. ☐ For signature.	☐ For action. ☐ For information.
(Name and unit) S.R.S.	INITIALS [initials] DATE	REMARKS Sam As far as I am concerned this is a dead duck. Unless you feel otherwise I'll suggest that alternate		
TO (Name and unit) Van	INITIALS DATE	REMARKS d is OK with us. Van ✓		
TO (Name and unit)	INITIALS DATE	REMARKS		
FROM (Name and unit)		REMARKS		
PHONE NO.	DATE			

USE OTHER SIDE FOR ADDITIONAL REMARKS 16—56667-1 U. S. GOVERNMENT PRINTING OFFICE

1063307

STANDARD FORM NO. 64

Office Memorandum • UNITED STATES GOVERNMENT

TO : N. H. Woodruff, Assistant Manager for Operations, ORO DATE: May 12, 1953

FROM : P. C. Aebersold, Director, Isotopes Division PCA

SUBJECT: EUROPEAN VISITS AND ATTENDANCE AT 7TH INTERNATIONAL CONGRESS OF RADIOLOGY BY DR. PAUL C. AEBERSOLD

SYMBOL: OI:PCA

Reference is made to previous memoranda on subject dated March 19 and April 20.

A number of circumstances prompt me to resubmit the proposed trip for further consideration:

1. The writer's paper and the joint exhibit with the Division of Biology and Medicine have not only been accepted but have already been officially entered on the program. To be ready for the Congress the program had to go to press the last of April. Accordingly it may be too late to remove these listings from the final program.

2. The program will have more papers and discussions about radioisotopes and radiobiology than originally indicated. Although the completed program is not available the Secretary of the Congress has indicated that a number of sessions will be devoted to physical and medical problems related to radioisotopes. In fact, one session will constitute a summary of U.S. and European experience in radioisotope therapy.

3. Dr. George Manov will not now be representing the Isotopes Division. Accordingly the Isotopes Division will not be represented and the purposes outlined in the March 19 memorandum will not be achieved unless the writer's trip is approved.

4. Some persons originally approved by the AEC to attend the Congress have for personal or other reasons had to decline. Accordingly the number of AEC sponsored persons attending the Congress is apparently less than anticipated a month ago.

5. Possible modifications are suggested in the scope and travel expenses for the trip.

The combination of the first four circumstances above, I believe, calls for a review of the proposed trip. In view of the writer's 20 years experience in the field of radiology, his over 7 years supervising the radioisotopes program, his attendance at previous congresses back to 1937, and his being listed on the program of the present Congress, he finds it

very embarrassing personally that the trip has not yet been approved. A considerable number of radiologists and radioisotope users through the country have expressed surprise that the AEC has not granted approval for this trip. I wish to reiterate that it is in the immediate as well as long term interests of the AEC to approve the trip.

As pointed out previously, the travel budget of the Isotopes Division is quite adequate to cover all the expenses of the proposed trip without any interference with other activities of the Division. Further, as previously proposed, all time away from the office would be covered by accumulated annual leave. Nevertheless, I wish to offer a number of alternative means of covering the time and expenses of the trip:

a. AEC would cover all travel and per diem expenses, but the scope of the trip would be reduced to include only those visits most directly concerned with Isotopes Division operations, namely to Harwell, radioisotope users and processing firms in London, and the Congress in Copenhagen. Any other visits would be taken at the writer's own time and expense.

b. AEC would cover air transportation expenses only to London and Copenhagen. The writer would use accumulated leave to cover the time away from the office and pay all per diem and other travel expenses.

c. Same as b, except that travel to Europe would be by air coach. Expense to the AEC would be under $700.

d. The writer would pay all travel and per diem expenses and use accumulated leave to compensate for office absence.

Addressed to Lauson Folk

M. H. Woodruff, Assistant Manager for Operations, ORO
P. C. Aebersold, Director, Isotopes Division

May 12, 1953

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ORNL
2-7211

P. C. Aebersold, Director, Isotopes Division — April 22, 1953

N. H. Woodruff, Acting Asst. Manager, OSO

EUROPEAN VISITS AND ATTENDANCE AT 7TH INTERNATIONAL CONGRESS OF RADIOLOGY BY DR. PAUL C. ABERSOLD

Reference is made to your memorandum of April 20, 1953, on the above subject.

Production Division in Washington assures us that the contents of the memorandum of March 19, 1953, "European Visits and Attendance at 7th International Congress of Radiology by Dr. Paul C. Aebersold," from T. R. Jones to S. A. Szpirie has received full consideration by the Washington Headquarters Office.

As I indicated in our conversation of last Thursday, it was after this consideration that we were advised of the disapproval of your request. Consequently, I cannot concur with the position taken in your memorandum of April 20, that your request has not received full consideration. Further, I do not feel that the Manager, Oak Ridge Operations, is in a sound position to reopen this matter. This is not to be construed as a reflection upon the manner in which the program of the Isotopes Division has been handled or its achievement. Neither is this to be construed as an indication that the scope of the program of the Isotopes Division is to be modified.

In regard to the matter noted in the next to the last paragraph, we will initiate a request to the Washington Production and Research Divisions for a meeting to develop a general understanding regarding the respective functions of the Office of Industrial Development and Isotopes Division, in the Isotope Field. It would be helpful if you would propose an agenda for such a meeting.

N. H. Woodruff

cc: W. L. Davidson
P. M. McDaniel
M. J. Carothers

Woodruff:hrb

Dr. Woodruff

1063312

T. H. Johnson, Director of Research, Washington April 10, 1953
THRU: R. W. Cook, Director of Production, Washington

S. R. Sapiris, Manager, Oak Ridge Operations

REQUEST FOR FOREIGN TRAVEL - DR. PAUL C. AEBERSOLD

SYMBOL: O:MEW

Reference is made to the following memoranda (copies are attached):

1. March 6 to Dr. T. H. Johnson requesting foreign travel for Dr. George G. Manov;

2. March 20 to Mr. R. W. Cook forwarding a request for foreign travel for Dr. Paul C. Aebersold;

3. March 24 from Dr. Johnson returning to Oak Ridge an approval for Dr. Manov's foreign travel;

4. April 3 from Mr. Cook forwarding copy of Mr. Boyer's memorandum of March 30 noting that only one foreign travel request from the Isotopes Division would be approved and indicating no preference between Drs. Manov and Aebersold.

Dr. W. L. Davidson, Director of the Office of Industrial Development, has recently requested the transfer of Dr. Manov to a position in his office. We are agreeable to this transfer and understand a tentative date of May 1 has been set for the move.

In recommending approval of Dr. Manov's trip to Europe by memorandum of March 6 (during the summer of 1953), we noted Dr. Manov's contribution in improving the standardization technique in radioisotope utilizations and the relation of this work with his present duties of assisting domestic off-Commission users of radioisotopes with problems involving health safety including standardization of measurement. We felt that this trip would (1) be recognition of his excellent scientific performance in this field, (2) enable him to contribute to the meetings to be attended and (3) materially increase his usefulness in the future activities of the Advisory Field Service of the Isotopes Division.

However, in view of the pending change in Dr. Manov's assignment, we do not feel that it is proper to continue to support this recommendation of foreign travel for him. First, we would be placing ourselves in the peculiar position of recommending action on a person whose assignments are not the primary responsibility of Oak Ridge Operations. We believe that recommendations on the foreign travel should be handled by Dr.

Not Dispatched

Davidson who can more properly determine the value of the trip to the Commission from the standpoint of Dr. Manov's new assignment and the effect of the trip upon the program of the Office of Industrial Development. Second, in view of the early action expected on the reassignment, the Isotopes Division and its Advisory Field Service will not benefit as directly as it would if Dr. Manov were to continue the intimate direction to the Advisory Field Service program. Third, under the new assignment the financial arrangement for reimbursement for his travel expense would need to be handled at the Washington level.

In my memorandum to Mr. Cook, I expressed my concern about defense of two representatives of the Isotopes Division travel to Europe at approximately the same time. Nevertheless, I forwarded Dr. Aebersold's request to Washington because of the AEC wide nature of the Isotopes Division, and the possibility of a better evaluation of Dr. Aebersold's trip at the Washington level. My position at this time did not stem from doubt of the value of Dr. Aebersold's foreign travel to the Isotope Program. I noted that I had been highly impressed with the job Paul is doing.

In view of the change in circumstances I now recommend that Dr. Aebersold's request be approved and that Dr. Manov's request be referred to the appropriate Washington office.

This is based purely from considerations associated with the operation of the Isotopes Distribution Program. This in no way should deflect any credit from Dr. Manov for his excellent scientific achievements, and the value of this phase of our previous justification for his foreign travel.

I forwarded with my letter of March 20 a travel request to authorize Dr. Aebersold's trip. If these papers are not satisfactory for your review, please advise so that we can supply them at an early date. We are returning Dr. Manov's approved travel authorization with this letter.

S. R. Sapirie

Enclosure:
As noted

CC: R. W. Cook

Woodruff:sw

STANDARD FORM NO. 64

Office Memorandum • UNITED STATES GOVERNMENT

TO : T. H. Johnson, Director of Research, Washington DATE: April 10, 1953
THRU: R. W. Cook, Director of Production, Washington

FROM : S. R. Sapirie, Manager, Oak Ridge Operations

SUBJECT: REQUEST FOR FOREIGN TRAVEL - DR. PAUL C. AEBERSOLD

SYMBOL: O:NHW

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Davidson who can more properly determine the value of the trip to the Commission from the standpoint of Dr. Manov's new assignment and the effect of the trip upon the program of the Office of Industrial Development. Second, in view of the early action expected on the reassignment, the Isotopes Division and its Advisory Field Service will not benefit as directly as it would if Dr. Manov were to continue the intimate direction to the Advisory Field Service program. Third, under the new assignment the financial arrangement for reimbursement for his travel expense would need to be handled at the Washington level.

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S. R. Sapirie

Enclosure:
As noted

CC: R. W. Cook

Woodruff:aw

STANDARD FORM NO. 64

NHW

Office Memorandum • UNITED STATES GOVERNMENT

TO : N. H. Woodruff, Assistant Manager for Operations DATE: April 20, 1953

FROM : P. C. Aebersold, Director, Isotopes Division

SUBJECT: EUROPEAN VISITS AND ATTENDANCE AT 7TH INTERNATIONAL CONGRESS OF RADIOLOGY BY DR. PAUL C. AEBERSOLD

SYMBOL: OI:PCA

References: (1) memorandum of March 19, T.R. Jones to S.R. Sapirie on subject; (2) memorandum of April 9, W.L. Davidson to Mr. Boyer, subject; Proposed trip to Europe by Dr. George Manov.

As you know, the proposal for Dr. Manov's trip was originally prepared in the Isotopes Division and we assigned it priority over my own proposed trip. Justification was based primarily upon invitations to present information on standardization of radioisotopes before two international committees and to visit laboratories concerned with standardization. Since Dr. Manov was on our staff and it is of value to have a member of the Division familiar with the situation on standards, we felt we could support this. As other reasons for the trip, we indicated the gaining of information on types of activities being conducted for the Division by Dr. Manov. Attendance at the International Congress of Radiology was only an incidental item resulting from concurrence of one of the committee meetings with the time of the Congress.

The justification for my own trip was based upon the four purposes enumerated in reference (1). The details will not be rediscussed. I do wish to point out, however, that they are based upon my continuing need as director of this division and my responsibility for the expansion and success of the radioisotopes program, to keep abreast of a wide variety of items concerned with the production, distribution, use and control of radioisotopes, both here and abroad. Attendance at the International Congress of Radiology was also given as a reason because of my almost 20 years active experience in the field of radiology, as well as a written invitation from Dr. Fleming Norgaard, Secretary General of the Congress, to present a paper and exhibit. An additional reason was to continue liaison on radioisotope production and utilization established in earlier visits with atomic energy groups and isotope distribution committees in Europe. Finally it was pointed out that although Dr. Manov might also be traveling for the Isotopes Division his purposes and coverage were quite different and related to our different backgrounds and responsibilities. In other words the two trips should be considered as independent.

When Dr. Manov decided to join the Office of Industrial Development, it appeared obvious to everyone including Dr. Manov that he would no longer be taking the trip as a representative of the Isotopes Division, and that the Office of Industrial Development would be responsible for rejustifying and financing the trip (Evidence: Item 9 of reference (2)). This was not a withdrawal of our support, but a factual observation. We believe that the Office of Industrial Development is justified in asking for continuation of the approval granted for Dr. Manov's trip but not entirely on the reasons given in our original justification.

It then also seemed obvious that my proposed trip as a representative of the Isotopes Division should be reexamined as an independent matter. While it is true that Dr. Manov still proposes to cover items of standardization and isotope utilization, this will now accrue more to the benefit of the Office of Industrial Development than to the Isotopes Division. We will still need to have members of our own staff who will be intimately familiar with the situation both here and abroad on standards for radioisotopes, on practices concerning radiological safety, advisory field service, isotope utilization, etc. The purposes for my trip thus now stand out as independent.

Reference (2), Item 10, indicates that Dr. Manov's new duties will encompass "all peacetime applications of the atom". From the name of the office I presume this means all peacetime industrial applications of the atom. In the case of radioisotopes we have broader direct interests, which include the scientific, agricultural and medical uses being developed abroad.

I wish to correct certain statements in reference (2):

Item 6: Travel funds for both Dr. Manov's trip and mine were not to come from any "special" appropriation, but from our fourth quarterly allotment of travel for the Isotopes Division.

Item 8: We did not "withdraw" our endorsement. As noted in paragraph 4 above, the situation automatically changed. Dr. Manov would not be a member of the Isotopes Division and would not be traveling on Isotopes Division funds. Our endorsement was no longer required or asked for. As a matter of fact, as soon as the proposed transfer became known to me, I indicated to both Dr. Davidson and Dr. Manov that the Office of Industrial Development should be able to justify the trip on the basis of a different scope of interests, namely, to see the types and extent of industrial development of atomic energy taking place in Europe on other matters than radioisotopes. Item 10 would indicate this point.

Also Item 8: It is stated that "Dr. Aebersold informed me that he felt quite competent to make the technical presentations requested by the international bodies". This is a misunderstanding. Perhaps the last word of the quotation should have read "Congress". I said that if it were just a matter of presenting a paper or report already prepared, either Dr. Manov

or I could present one for the other, but that neither of us would prefer this, and that there was more to it than just presenting a paper. Actually, I have not followed the details of standardization, and could not immediately prepare or discuss in detail the report on the subject. Consequently the asserted statement is impossible for me to have made. I do however feel competent to cover adequately all aspects of the International Congress.

Although from the beginning both trips have had independent purposes, and would now in practice be independent, I was distressed to find that they were still tied together by reference (2) in presentation to the General Manager. While it is true that Item 11 a indicates the interests of the trip may "no longer be identical", nevertheless in the overall presentation the two trips are implicated together. Item 7, disapproval of my trip, was the action when Dr. Manov was given priority by us to represent the Isotopes Division. This disapproval, Mr. Sapirie assured me, came from the desire not to approve two from the same division and not on lack of merit. Dr. Davidson's memo should have referred solely to Dr. Manov's trip, indicating that my trip should be reexamined and resubmitted from OROO.

Nevertheless the two trips were tied together and both of them acted upon on the basis of the April 9 memo, before there was time for re-submission of my case from here.

We are concerned about this preference to a representative from the Office of Industrial Development, not because we are opposed to the trip, but because it is equally or more important that our Division be represented. We have a much wider interest than industrial developments, and even in the case of the industrial applications of radioisotopes, we still believe that this matter is primarily the function of this office. We have noted that the Office of Industrial Development is beginning to function in certain areas of the isotopes program that we have already been developing for many years. With Dr. Manov going to that office, and furthermore being approved by the General Manager to take the European trip, without at the same time approving a representative of the Isotopes Division, gives us further cause for concern.

It is to be reiterated that nothing stated or implied in this memo is adverse to the projected trip by Dr. Manov. We recommended the trip originally and still believe it is justified. We do not however think that it will represent the immediate nor all the variety of interests of the Isotopes Division. I therefore again wish my proposed trip to be fully considered as the representative of the Isotopes Division, and on the arguments set forth in reference (1).

It should be noted that it has been my practice not to take most of my annual leave when I have had an extended trip, and that my proposed trip this year could largely be covered by unused leave.

Paul C. Aebersold

CC: W.L. Davidson
P.W. McDaniel
N.J. Carothers
G.G. Manov
T.R. Jones

STANDARD FORM NO. 64

COPY

Office Memorandum • UNITED STATES GOVERNMENT

TO S. R. Sapirie, Manager, Oak Ridge Operations DATE March 24, 1953

FROM T. H. Johnson, Director, Division of Research

SUBJECT FOREIGN TRAVEL AT AEC EXPENSE - DR. GEORGE G. MANOV - ISOTOPES DIVISION

SYMBOL: R:AO:EWC

This is to advise you that the General Manager has approved the foreign travel at AEC expense of Dr. George G. Manov, Isotopes Division, as outlined in your memorandum dated March 6, 1953.

It is requested that, following completion of this travel, Dr. Manov submit a report of his travel. This report should cover those items which may be of interest to the Commission and its contractors.

Authorization of official travel for Dr. Manov is returned herewith.

COPY

R. W. Cook, Director of Production, Washington March 20, 1953

S. R. Sapirie, Manager, Oak Ridge Operations

REQUEST FOR FOREIGN TRAVEL - DR. PAUL C. AEBERSOLD

SYMBOL: M:SRS

Attached for your consideration is a request initiated by Dr. Paul C. Aebersold for European travel this summer to attend the Seventh International Congress of Radiology and visit atomic energy groups in Britain, France, Belgium, Denmark and Sweden. The memorandum accompanying the request covers fully the explanation of the purpose and justification for the visit.

I have not recommended approval of the request as I have already recommended approval of a similar request from Dr. George Manov of the Isotopes Division for European travel this summer to attend the Seventh International Congress of Radiology and visit several European institutions, in connection with his attendance at the Congress. Because of the sensitive nature of this type of expenditure and the limited travel funds available, I am not in a position to defend approval of two representatives of the Isotopes Division travel to Europe at approximately the same time. In addition, we are constantly having to exert pressure on the ORNL to limit the number of foreign travelers from that location and willprobably find that problem complicated some if it appears as if we are not practicing the same bestraint witnin our own organization. However, since the Isotopes Division performs an AEC-wide function, it would appear to be more appropriate to have the request evaluated at the Washington level.

I am highly impressed by the job that Dr. Aebersold has done and id doing in the Isotope Program and, therefore, would like to make sure that I am not doing him an injustice by stopping his request at this level.

S. R. Sapirie

Enclosure:
Memo Jones to SRS, 3-19 with encls.

Sapirie:mym

1063321

S. R. Sapirie, Manager, Oak Ridge Operations March 19, 1953

T. R. Jones, Executive Officer, Isotopes Division

EUROPEAN VISITS AND ATTENDANCE AT 7TH INTERNATIONAL CONGRESS OF RADIOLOGY BY DR. PAUL C. ABERSOLD

SYMBOL: OI:TRJ

Dr. Abersold proposes to visit Europe this summer for the following purposes: 1. To gain first hand information abroad on a wide variety of items concerned with the production, distribution, use and control of radioisotopes. 2. To present a paper and exhibit at the Seventh International Congress of Radiology to be held in Copenhagen, July 19-25. 3. To attend an International Symposium on Radiobiology, July 16-18 also to be held in Copenhagen. 4. To assist in continuing liaison on the unclassified peacetime uses of atomic energy already established with the atomic energy groups and isotope distribution committees in Britain, France, Belgium, Denmark and Sweden. These purposes are further defined below.

1. Information. Information would be sought on a wide variety of items of much interest for the proper carrying out of the U. S. isotopes distribution program, as follows:

a. Production

(1) Gamma ray sources. Much development has been undertaken, especially in Britain, of gamma ray sources. These include a variety of isotopes not yet exploited in the U. S., such as low energy emitters Tm 170, Am 241, Eu 155, Xe 133, and high energy emitters Eu 152-154, Tm 182, and Ir 192.

(2) Beta ray sources. Several European firms have devised unique ways of mounting beta ray sources, such as Sr 90, Ru 106, and Tl 204. It is indicated that the sealing procedures and hence the health safety aspects may be superior to those developed in the U. S.

(3) Alpha ray sources. Polonium is being used in a number of industrial devices abroad, and inasmuch as we soon intend to make reactor-produced polonium available for industrial uses in this country, we would benefit from first hand knowledge of how such production and distribution is being handled in Europe.

(4) Radioactive compounds. European commercial firms are now making radioactive compounds for tracer research as well as

for clinical use. One British distributor is developing a considerable U. S. business through an American firm as its agent. We should like to know more about the way this phase of the program is being developed and handled abroad. One item of particular interest is the control of purity. It has recently been found that certain C 14 compounds decompose rather rapidly as the result of their own internal beta irradiation. British considerations of this problem would be sollicited.

b. Shipment. The British are now making almost as many shipments per month as ORNL. They have made innovations in the packaging and manner of shipment which are of interest to us.

c. Economics. Stanford Research Institute is now making a study for the Commission of the economics of the production and sale of radioisotopes. It is of interest to learn the experience of the British in this regard, especially the degree of government subsidy on items to be distributed in the U. S.

d. Radiation effects. Much interest has developed in the U. S. on the use of radiation for the cold sterilization of foods and drugs. Waste fission products are a likely potential source of radiation for this purpose. Developments and studies along this line are also being undertaken abroad, and the experience there should be ascertained.

e. Regulations and controls. The Commission is now in the process of developing formalized regulations and standards to cover the wide variety of circumstances encountered in the distribution, handling and utilization of radioisotopes. Several countries in Europe have had considerable experience in government regulation of all radiation sources, including radioisotopes. Meetings with the atomic energy groups, isotope committees and public health officers of several of the main countries would be of much value in this regard.

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range of isotopes have been used in industrial radiography and thickness gages. Beta ray as well as alpha ray static eliminators are being more extensively exploited. Since American industry is now learning about these developments, and will either adopt them or import the materials or devices, we should be prepared for the problems to be encountered in the U. S. production, utilization and control.

2. Seventh International Congress of Radiology. Dr. Aebersold has been invited to present a paper and exhibit at this Congress. The paper would be on "Radioisotopes Useful in Radiology and Radiobiology". Preparation of an exhibit on "Radiological and Radioisotope Research Supported by the U. S. Atomic Energy Commission" has been viewed favorably by Drs. Bugher and Dunham of the Division of Biology and Medicine, as a joint exhibit with the Isotopes Division. The exhibit would be drawn on cardboard mounts, would be very inexpensive to produce and ship, and would require no additional funds than already provided for in the Isotopes Division's budget.

Dr. Aebersold has a long professional background pertinent to attending this Congress. He has been in radiological physics since 1935, is an Associate Fellow of the American College of Radiology, a member of the American Radium Society and is certified in radiological physics by the American Board of Radiology. A list of his other professional qualifications pertinent to the radiological field are appended. The Congress will include symposia and numerous papers on radioisotope measurement and use.

3. International Symposium on Radiobiology. This Symposium is to be held at Copenhagen just prior to the above Congress. Consequently attendance would require only three additional days. It will bring together key workers in the field of radiobiology from many countries and should give an excellent picture of the present status of this field. Many aspects of radiobiology directly involve radioisotopes or concern radiation damage and consequently are closely related to isotope utilization. In addition to this specific interest in radiobiology, Dr. Aebersold is a pioneer research worker in radiological physics and radiobiology. During the period 1934 to 1942 he was the key physicist for the first radiobiological work undertaken at the University of California Radiation Laboratory. He is author and co-author of a considerable number of publications in both radiological physics and radiobiology, including the first comparisons of the biological effects of 200 kv x-rays, 1000 kv x-rays and neutrons, first establishment of the differential effects of neutrons, first tissue dose measurements used as the basis for neutron protection, tissue dose measurements with radioisotopes, and depth dose measurements for various high voltage x-rays. Although now engaged in

administrative work, his contributions in discussions with workers in the field of radiobiology are still of value.

4. International liaison. Isotope distribution and utilization is still one of the major and most rapidly growing areas for international cooperation in atomic energy. The emphasis will rapidly change to reactors, but at the moment isotopes are a very active and appreciated area of cooperation. In addition to the British and Danish visits, very short visits are proposed to France, Sweden and Belgium. These have been indicated by Mr. John Hall to be of value to the functions of the Office of Special Projects. He also endorsed the proposed use of exhibits on peacetime programs of the Commission at International Congresses.

In 1950 Dr. Aebersold visited the atomic energy projects and official isotope committees of these same countries and established a desirable liaison with these groups. He has continued this liaison through correspondence and supplying of unclassified information related to isotope production and utilization. It is appropriate and it has been appreciated that the director of the U. S. isotopes program show direct personal interest in the development of the isotopes program in these countries cooperating with us. Many letters of gratitude and appreciation have been received. In view of the greatly increased activity in the atomic energy field in Europe since 1950, further personal liaison along the lines established in the previous visit would still be desirable. The visits this time would be for only a few days to each country to reestablish the personal liaison and direct cooperative attitude of the U.S.A.E.C. in this unclassified peacetime area of atomic energy.

A list is appended of proposed places and institutions to be visited, approximate days involved and purposes. A proposed itinerary is also appended to indicate the approximate number of days involved. Although many of these places were visited by Dr. Aebersold in 1950, the situation has changed materially since that time. Europe now has several sources of supply of reactor produced isotopes, a greatly increased number of users and a very accelerated program of industrial utilization. European firms now offer to American as well as European markets a wide variety of instruments, processed radioisotopes and industrial devices using isotopes. He proposes to give special attention to the secondary businesses related to isotope processing and usage.

In planning future production, distribution methods and control procedures in the United States, Dr. Aebersold considers it desirable to follow the progress in these activities in Europe. Although the Isotopes Division makes every effort through literature and correspondence to follow isotope developments in Europe, it is believed that

developments since 1950 have been so extensive as to warrant his firsthand visit to some of the most active groups.

Other Considerations. Although Dr. Manov of the Isotopes Division would be traveling in Europe at approximately the same time as Dr. Aebersold, the purposes of Dr. Manov's trip are independent and their backgrounds and responsibilities are different. The primary justification for Dr. Manov's trip is to assist two international commissions in the establishment of the proper units and standards for widely used radioisotopes. His visits to Harwell and to a few of the major institutions using isotopes would be to discuss problems of standards, measurements and radiological safety practices. In the few cases where both would visit the same institution the discussions would be along the lines of their respective specialties and responsibilities. Dr. Manov's attendance at the Congress is only incidental to the fact that one of the Commission meetings is held in connection with it, and he will attend only those few sessions of the Congress pertinent to his functions. Thus, although the two trips may be simultaneous this is only by coincidence in relation of the two international commission meetings with the time of the Congress. The trips are planned to avoid duplication of effort and for both to make efficient use of time in collecting different categories of information.

Dr. Aebersold's trip calls for being away a total of approximately 30 work days. Regarding time away from work he proposes to do as he did in 1950, namely not to use his full permissible annual leave. In 1950 he did not use [illegible] days of annual leave and lost it at the year's end. This partly compensated for the time taken by the trip. This year he plans not to use 15 days or more of leave. His office absence will thus not be significantly greater than normal absence on other trips plus the time permissable on annual leave.

During the proposed period of travel the Isotopes Division will be adequately staffed. By July, action on the major new work items of the Isotopes Division will have been formulated or completed. Most of these work items should be ready for consideration at the Advisory Committee on Isotope Distribution meeting May 18 and 19, and action begun on the recommendations immediately thereafter.

T. R. Jones

Enclosures:
1. Travel order
2. Proposed Itinerary
3. Qualifications
4. Proposed visits

Jones:rmj

PROPOSED ITINERARY

Paul C. Aebersold

Round trip by air.

		No. of Work Days
Leave Oak Ridge around June 27		
England June 29 - July 8		8
Travel	July 9	
France	July 10 - 14	3
Travel	July 15	
Denmark	July 16 - 25	8
Travel	July 26	
Sweden	July 27 - 30	4
Travel	July 31	
Belgium	August 1 - 5	3
Return Oak Ridge around August 8.		
Total work days away from Oak Ridge =		30
Total elapsed days away from Oak Ridge =		42

Paul C. Aebersold
Director, Isotopes Division, USAEC

Professional Qualifications

[redacted]

Research in Nuclear Physics, Radiological Physics and Biophysics, 1932-1942

Research and Administration, Atomic Energy Project, 1942-1953

Fellow, American Physical Society

Member, American Association for Advancement of Science

Member, American Association for Cancer Research

Associate Fellow, American College of Radiology

Certified Radiological Physicist, American Board of Radiology

Member, American Radium Society

Honorary Member, Rocky Mountain Radiological Society

Member, Committee on Nuclear Science, National Research Council

Member, Subcommittee on Safe Handling of Radioisotopes, National Committee on Radiation Protection

Secretary, USAEC Advisory Committee on Isotope Distribution

Member, Fifth International Congress of Radiology, Chicago, 1937

Member, Sixth International Congress of Radiology, London, 1950

U. S. Delegate, Fourth Inter-American College of Radiology, Mexico, D.F., 1952

Member, Radiation Research Society

[redacted]

PROPOSED VISITS BY DR. PAUL C. AEBERSOLD

PLACE	INSTITUTION	APPROXIMATE DAYS	PURPOSE
Copenhagen, Denmark	7th International Congress of Radiology	7 (July 19-25)	Present paper and exhibit. Obtain information on European developments in radiology and radiological physics. Discussions with European isotope users.
Aarhus, Denmark	International Symposium on Radiobiology	3 (July 16-18)	Information and discussion on radiobiological research in Europe.
Copenhagen, Denmark	Users of Isotopes from U. S.	During Congress	Observe developments with U. S. supplied isotopes.
Harwell, England	AERE	2	Observe and discuss workings of British isotope production and distribution, research and developments with isotopes. Discuss controls and regulations, training and promotion in isotope distribution.
Amersham, England	Radiochemical Center	1	Observe and discuss special processing, synthesis of labeled compounds preparation of sources, etc.
London, England	Royal Cancer Hospital Hammersmith Hospital Middlesex Hospital National Institute for Medical Research	3	Observe and discuss latest developments in isotope utilization in medicine and radiobiology. These are most active British groups in developing medical use of isotopes as well as in radiobiological and physics research.
London, England	Isotope Development, Ltd. M. Falk & Co., Ltd. E. K. Cole, Ltd.	2	Observe and discuss developments in industrial uses of isotopes. These companies are major consultants and service organizations in this field.

PROPOSED VISITS BY DR. PAUL C. AEBERSOLD

PLACE	INSTITUTION	APPROXIMATE DAYS	PURPOSE
Stockholm, Sweden	Aktiebolaget (AB) Atomenergi	1	Discuss production and distribution of isotopes, industrial utilization.
Stockholm, Sweden	Royal Institute of Technology Nobel Institute for Physics Nobel Institute for Medicine Wenner-Gren Institute Karolinska Institute	3	Observe and discuss developments in research, medical and industrial uses of isotopes. These are major Swedish users in these fields.
Brussels, Belgium	Fond National de la Recherche Scientifique University of Brussels Union Miniere	2	Observe and discuss developments in isotope utilization. Discuss future production and distribution problems.
Louvain, Belgium	Centre de Physique Nucleaire	1	Observe and discuss developments in isotope utilization. Discuss future production and distribution problems.
Paris, France	Commisariat a l Energie Atomique	2	Observe and discuss workings of French isotope production and distribution, research and development with isotopes.
	Institut du Radium de l' Universite de Paris Centre Nationale de la Recherche Scientifique Hospital des Enfants Malade Saphyme	2	Observe and discuss developments in research, medical and industrial uses of isotopes with major French users.

S. R. Sapirie, Manager
Oak Ridge Operations Office

R. W. Cook, Director of Production

REQUEST FOR FOREIGN TRAVEL - DR. PAUL C. AEBERSOLD

SYMBOL: PPC:JHL

Reference is made to your memorandum of March 20, 1953, Symbol M:SRS, subject as above, with which you transmitted a request initiated by Dr. Aebersold for European travel this summer in connection with the Seventh International Congress of Radiology and visits to various European countries.

For your information and guidance we are attaching a copy of Mr. Boyer's memorandum of March 30, 1953 which we feel is self-explanatory.

Enclosure:
Cpy ltr to Cook from Boyer, dtd 3/30/53 -
Subj/above.

Dr. Aebersold brought this in for your info. Has given copy to Mr. Sapirie. Mr. Sapirie will discuss with Mr. Cook informally when he is in Washington.

A.W.

R. W. Cook, Director of Production — March 30, 1953

M. W. Boyer, General Manager

REQUEST FOR FOREIGN TRAVEL - DR. PAUL C. AEBERSOLD

I have reviewed your memorandum of March 26 requesting foreign travel for Dr. Paul C. Aebersold. It is my recollection that approval has already been granted for Dr. George Manov, who is a member of Dr. Aebersold's organization. I am sure you are aware of the provision of the foreign travel bulletin (GM-T&T-5) covering foreign travel at AEC expense. You will recall that under the portion having to do with scientific meetings, it is Commission policy that "Managers of Operations will not submit foreign travel requests involving federal funds for more than one principal scientist or administrator from any specific department of a major laboratory in any one year unless special circumstances warrant it." It is quite possible that trips contemplated by Dr. Aebersold and Dr. Manov would not fall under this general classification. However, it seems to me that only under very unusual circumstances should we have two top men from a key operation making a trip to Europe in any one year.

I would suggest that you ask Dr. Aebersold to proceed on the basis of just one representative from the department making a European trip this year. I have no preference as to which member of the organization makes the trip.

C O P Y — C O P Y

Woodruff Copy

DRAFT

March 6, 1953

Leading File

TO: R. W. Cook, Director, Production, Washington

FROM: S. R. Sapirie, Manager, Oak Ridge Operations

SUBJECT: EUROPEAN VISITS AND ATTENDANCE AT 7TH INTERNATIONAL CONGRESS OF RADIOLOGY BY DR. PAUL C. AEBERSOLD

Dr. Aebersold proposes to visit Europe this summer for the following purposes: 1. To gain first hand information abroad on a wide variety of items concerned with the production, distribution, use and control of radioisotopes abroad. 2. To present a paper and exhibit at the Seventh International Congress of Radiology to be held in Copenhagen July 19-25. 3. To attend an International Symposium on Radiobiology July 16-18 also to be held in Copenhagen. 4. To assist in continuing liaison on the unclassified peacetime uses of atomic energy already established with the atomic energy groups and isotope distribution committees in Britain, France, Belgium, Denmark and Sweden. These purposes are further defined below.

1. Information Information would be sought on a wide variety of items of such interest for the proper carrying out of the U.S. isotopes distribution program, as follows:

a. Production

(1) Gamma ray sources Much development has been undertaken, especially in Britain, of gamma ray sources. These include a variety of isotopes not yet exploited in the U.S., such as the low energy emitters Tm 170, Am 241, Eu 155, Xe 133, and high energy emitters Eu 152-154, Ta 182, and Ir 192.

(2) Betay ray sources Several European firms have devised unique ways of mounting beta ray sources, such as Sr 90, Ru 106, and Tl 204. It is indicate that the sealing procedures and hence the health safety aspects may be superior to those developed in the U.S.

(3) Alpha ray sources Polonium is being used in a number of industrial devices abroad, and inasmuch as we soon intend to make reactor-produced polonium available for industrial uses in this country, we would benefit from first hand

knowledge of how such production and distribution is being handled in Europe.

(4) Radioactive compounds European commercial firms are now making radioactive compounds for tracer research as well as for clinical use. One British distributor is developing a considerable U.S. business through an American firm as its agent. We should like to know more about the way this phase of the program is being developed and handled abroad. One item of particular interest is the control of purity. It has recently been found that certain C 14 compounds decompose rather rapidly as the result of their own internal beta irradiation.

b. Shipment The British are now making almost as many shipments per month as ORNL. They have made innovations in the packaging and manner of shipment which should be of interest to us.

c. Economics Stanford Research Institute is now making a study for the Commission of the economics of the production and sale of radioisotopes. It is of interest to learn the experience of the British in this regard, especially the degree of government subsidy on items to be distributed in the U.S.

d. Radiation effects. Much interest has developed in the U.S. on the use of radiation for the cold sterilization of foods and drugs. Waste fission products are a likely potential source of radiation for this purpose. Developments and studies along this line are also being undertaken abroad, and the experience there should be ascertained.

e. Regulations and controls The Commission is now in the process of developing formalized regulations and standards to cover the wide variety of circumstances encountered in the distribution, handling and utilization of radioisotopes. Several countries in Europe have had considerable experience in government regulation of all radiation sources, including radioisotopes. Meetings with the atomic energy groups, isotope committees and public health officers of several of the main countries would be of much value in this regard.

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g. Industrial uses As is the case for medical applications, the industrial uses abroad parallel those in the U.S. but again the type and degree of exploitation is different. For example a wider range of isotopes have been used in industrial radiography and thickness gages. Beta ray as well as alpha ray static eliminators are being more extensively exploited. Since American industry is now learning about these developments, and will either adapt them or import the materials or devices, we should be prepared for the problems to be encountered in the U.S. production, utilization and control.

2. Seventh International Congress of Radiology Dr. Aebersold has been invited to present a paper and an exhibit at this Congress. The paper would be on "Radioisotopes Useful in Radiology and Radiobiology". Preparation of an exhibit on "Radiological and Radioisotope Research Supported by the U.S. Atomic Energy Commission" has been viewed favorably by Drs. Bugher and Dunham of the Division of Biology and Medicine, as a joint exhibit with the Isotopes Division. The exhibit would be drawn on cardboard mounts, would be very inexpensive to produce and ship, and would require no additional funds than already provided for in the Isotopes Division's budget.

Dr. Aebersold has a long professional background pertinent to attending this Congress. He has been in radiological physics since 1935, is an Associate Fellow of the American College of Radiology, a member of the American Radium Society and

is certified in radiological physics by the American Board of Radiology. A list of his other professional qualifications pertinent to the radiological field are appended. The Congress will include symposia and numerous papers on radioisotope measurement and use.

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4. International liaison. Isotope distribution and utilization is still one of the major and most rapidly growing areas for international cooperation in atomic energy. The emphasis will rapidly change to reactors, but at the moment isotopes are a very active and appreciated area of cooperation. In addition to the British and Danish visits, very short visits are proposed to France, Sweden and Belgium.

These have been indicated by Mr. John Hall to be of value to the functions of the Office of Special Projects. He also endorsed the proposed use of exhibits on peacetime programs of the Commission at International Congresses.

In 1950 Dr. Aebersold visited the atomic energy projects and official isotope committees of these same countries and established a desirable liaison with these groups. He has continued this liaison through correspondence and supplying of unclassified information related to isotope production and utilization.. It is appropriate and it has been appreciated that the director of the U.S. isotopes program show direct personal interest in the development of the isotopes program in these countries who are cooperating with us. Many letters of gratitude and appreciation have been received. In view of the greatly increased activity in the atomic energy field in Europe since 1950, further personal liaison along the lines established in the previous visit would still be desirable. The visits this time would be for only a few days to each country to reestablish the personal liaison and direct cooperative attitude of the U.S.A.E.C. in this unclassifed peacetime area of atomic energy.

A list is appended of proposed places and institutions to be visited, approximate days involved and purposes. A proposed itinerary is also appended to indicate the approximate number of days involved. Although many of these places were visited by Dr. Aebersold in 1950, the situation has changed materially since that time. Europe now has several sources of supply of reactor produced isotopes, a greatly increased number of users and a very accelerated program of industrial utilization. European firms now offer to American as well as European markets a wide variety of instruments, processed radioisotopes and industrial devices using isotopes. He proposes to give special attention to the secondary businesses related to isotope usage.

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Other Considerations. Although Dr. Manov of the Isotopes Division would be traveling in Europe at approximately the same time as Dr. Aebersold, the purposes of Dr. Manov's trip are independent and their backgrounds and responsibilities are different. The primary justification for Dr. Manov's trip is to assist two international commissions in the establishment of the proper units and standards for widely used radioisotopes. His visits to Harwell and to a few of the major institutions using isotopes would be to discuss problems of standards, measurements and radiological safety practices. In the few cases where both would visit the same institution the discussions would be along the lines of their respective specialties and responsibilities. Dr. Manov's attendance at the Congress is only incidental to the fact that one of the Commission meetings is held in connection with it, and he will attend only those few sessions of the Congress pertinent to his functions. Thus, although the two trips may be simultaneous this is only by coincidence in relation of the two international commission meetings with the time of the Congress. The trips are planned to avoid duplication of effort and for both to make efficient use of time in collecting different categories of information.

Dr. Aebersold's trip calls for being away a total of approximately 30 work days. Regarding time away from work he proposed to do as he did in 1950, namely not to use his full permissable annual leave. In 1950 he did not use 2½ days of annual leave and lost it at the year's end. This partly compensated for the time taken by the trip. This year he plans not to use 15 days or more of leave. His

office absence will thus not be significantly greater than normal absence on other trips plus the time permissable on annual leave.

During the proposed period of travel the Isotopes Division will be adequately staffed. By July, action on the major new work items of the Isotopes Division will have been formulated or completed. Most of these work items should be ready for consideration at the Advisory Committee on Isotope Distribution meeting May 18 and 19, and action begun on the recommendations immediately thereafter.

It is recommended that Dr. Asbersold's travel, as outlined, be submitted to the General Manager for approval.

CC: Bugher
English
Hall

COPY

T. H. Johnson, Director, Division of Research, Washington

March 6, 1953

S. R. Sapirie, Manager, Oak Ridge Operations

FOREIGN TRAVEL FOR DR. GEORGE C. MANOV

SYMBOL: OIP:GCM

The Isotopes Division has received a formal request from the International Commission on Radiological Units of the International Commission on Radiology inviting Dr. George C. Manov, Chief of the Advisory Field Service Branch, to present a report and discussion on the standardisation of radioisotopes used in medicine. This unclassified report would be presented during the week of July 12, 1953, in Copenhagen, Denmark, before the 7th International Congress of Radiology.

The invitation to Dr. Manov is in line with his previous experience at the National Bureau of Standards and with his present duties, since 1949, of assisting domestic, off-Commission users of radioisotopes with problems involving health-safety including standardisation of measurements. His 1947-48 field survey of techniques used by hospitals throughout the United States for assaying dosages of radioisotopes administered to patients was followed by the preparation and certification of the NBS Standard Samples of Iodine-131 and Phosphorus-32. These eliminated discrepancies of 600% that existed in 1947-48 in the analysis of the same sample of Iodine-131 by different hospitals. Periodic visits to approximately 800 institutions by Dr. Manov and his staff since 1949 and close cooperation with the Bureau of Standards have insured satisfactory uniformity in the analysis of radioisotopes of various kinds used in industry as well as in medicine.

It would appear that the situation in Europe with respect to the medical use of radioisotopes approximates that in this country in 1948-49. Dr. L. S. Taylor, Secretary for the International Commission, has outlined to Dr. Manov the type of information desired for presentation. A copy of Dr. Taylor's letter is enclosed.

The Isotopes Division has also received a letter from Professor F. A. Paneth of the University of Durham, England, inviting Dr. Manov to become an Advisory Councillor to the Joint Commission on Radioactivity of the International Council of Scientific Unions. He has also been invited to present a report on the status of the standardisation of radioisotopes at the meeting of the Joint Commission in Stockholm, Sweden, during the week of July 29. A copy of Professor Paneth's letter is enclosed.

This unclassified report has been prepared by Dr. Manov in his capacity as Chairman of the Subcommittee on Bet and Gamma Ray Measurements and St ndards of the Committee on Nuclear Science, National Research Council, and its proposed presentation at the Stockholm meeting has been approved by the National Research Council.

Drs. L. S. Taylor and Robley D. Evans, American members of these two commissions have suggested that it would be helpful if Dr. Manov could also visit the National Physical Laboratory, the Royal Cancer Hospital and possibly the Harwell Laboratory to discuss the standardization of radioisotopes. These discussions would also be unclassified.

The proposed trip would involve absence from the United States for a period of approximately five weeks, exclusive of travel time. A tentative itinerary is attached.

It is recommended that travel for Dr. Manov for the above-named purposes be approved.

S. R. Sapirie

Enclosures:

1. Travel Order
2. Cpy. ltr. fm. Dr. L. S. Taylor, 12/24/52
3. C y. ltr. fm. PCA to LST, 1/9/53
4. Cpy. ltr. fm. Prof. F. A. Paneth, 1/16/53
5. Proposed itinerary
6. "Professional Qualifications"

CC: John C. Bugher, AEC, Washington
R. W. Cook, AEC, Washington

COPY

U. S. DEPARTMENT OF COMMERCE
National Bureau of Standards
Washington 25, D. C.

Address Reply to
National Bureau of Standards

In your reply
refer to file 4.0

December 24, 1953

Dr. Paul C. Aebersold, Chief
Isotopes Division
U. S. Atomic Energy Commission
Oak Ridge, Tennessee

Dear Dr. Aebersold:

At a meeting of the International Commission on Radiological Units at Stockholm last September, it was agreed that at the forthcoming meeting of the Commission in Copenhagen, the week of July 12, 1953, we should receive reports on the status of radiation measurements and standards. Of particular importance in this connection is the status of such work in the United States where isotope usage exceeds that of any other country. One of the matters of particular concern to the Commission concerns the degree to which radioactive isotopes are properly measured and used in clinical, industrial and research organizations.

Since the Isotopes Division of the A.E.C. has played the leading role in this field for several years, it was especially desired that a report on the program be given before the Commission. This should include a discussion of the techniques which are employed by the isotope users, and the methods and techniques by which they control their therapeutic doses in comparison with the isotope standards that are supplied by the National Bureau of Standards or elsewhere. It was also pointed out that in other countries they are experiencing the same early growing pains which we did, namely, that the initial comparisons seem to be very spotty with regard to accuracy. A report dealing with the causes of these inaccuracies in measurement is called for.

It would appear that probably the most experienced person in this particular field would be Dr. George Manov of your division. The Commission would, therefore, like to invite him to present a comprehensive report on the present status of isotope measurements and measurement problems together with an analysis of the difficulties which were encountered here during the early stages of the program. This report should also include some discussion of the status of various isotopesstandards. It is hoped that a way may be found for your sending Dr. Manov to this convention since we feel that the United States, which presently holds the leadership in this area, should be in the position of presenting the strongest possible report on its experiences.

Similar reports will be presented from other countries in the isotope field. In addition, there will be reports on the status of other radiation standards in the X-ray, gamma ray, and beta ray fields.

Anything which you can do towards having Dr. Manov attend these meetings will, I am sure, be most appreciated.

Sincerely yours,
/s/ Lauriston S. Taylor
Lauriston S. Taylor, Chief
Atomic and Radiation Physics Division

1063342

UNIVERSITY OF DURHAM
(Durham College)

Professor of Chemistry:
F. A. Paneth, F.R.S.

Tel. 1785-7

Londonderry Laboratory for Radiochemistry
South Road,
Durham.

16th January, 1953.

Dr. C. C. Manov,
Chief, Advisory Field Service Branch,
Isotopes Division,
U.S. Atomic Energy Commission,
Oak Ridge,
Tennessee,
U.S.A.

Dear Dr. Manov,

It gives me great pleasure to inform you that the Joint Commission on Radioactivity of the International Council of Scientific Unions has decided to invite you to become one of our Advisory Councillors. You may know that the number of our Members is restricted to five delegates each from the Unions of Chemistry and Physics, but that we are entitled to co-opt Advisory Councillors. At present the following are serving in that capacity: J. Chadwick, O. Hahn, B. Karlik, S. C. Lind and A. Piccard. We very much hope that you will agree to join them.

Your participation at our last meeting in New York was greatly appreciated. From my correspondence with two of our members, Professor Robley D. Evans of the Massachusetts Institute of Technology and Dr. L. F. Curtiss of the National Research Council in Washington, I understand that you have paid further attention to the standardisation of radioisotopes. I am sure the Members and Councillors of our Commission will be interested to hear your new results and suggestions. You probably have heard that we intend to hold the next meeting at Stockholm, coinciding with the meeting of the International Union of Chemistry which is scheduled for July 29th to August 4th.

I am sorry I cannot promise you financial help from our Commission for your journey to Stockholm. The funds we get from UNESCO are meant for defraying the travelling expenses of the Members and are so restricted this year that I am not sure if we shall be able even to meet these expenses in full. In view of the importance of the work you are doing I very much hope that it will be possible for you to get financial support from your organisation.

With best regards,

Yours sincerely,

FAP:mda.

/s/ F. A. Paneth

C
O
P
Y

PROPOSED ITINERARY
for
George G. Manov

(Travel to Europe by boat if permissible; other travel by air)

		No. of Work Days
July 6-14	Travel, Oak Ridge to Copenhagen	7
July 15-17	International Commission on Radiological Units	3
	Travel, Copenhagen to London	
July 20-24	Harwell Laboratory Middlesex Hospital Royal Cancer Hospital National Physical Laboratory Hammersmith Hospital	5
July 27-31	Annual leave, if permissible; 5 work days	5
July 31	Travel, London to Stockholm	
August 3-5	Joint Commission on Radioactivity Nobel Institutes for Physics and Medicine	3
August 6-14	Travel, to Oak Ridge	7
	Total work days away from Oak Ridge	30
	Total elapsed days away from Oak Ridge	41

March 13, 1953