

VAN CAMP FOUNDATION

Division of Van Camp Sea Food Company

739 Golden Park Avenue, San Diego 6, California

December 29,

1961 033-425
8 JAN 1962

Admin.
1. Fish.
2 Ocean. <i>GB</i>
T. Sec.
Libr
Clerk

Dr. George F. Humphrey
President of SCOR
C.S.I.R.O.
Division of Fisheries and Oceanography
Post Office Box 21
Cronulla, N.S.W., Australia

Dear George:

I have a letter that I wish to write to someone and I do not know exactly to whom amongst several it should be addressed. Accordingly I am addressing it to you and sending copies to the several persons noted at the end of the letter in the hopes that the ideas expressed in it will not fall on totally barren ground.

I recently spent some days in Aden and in Mogadiscio inquiring into fishery matters. In Aden I spent some time with V. J. Hinds, the fishery officer there who has had experience as well in the same capacity in formerly British Somalia and in Tanganyika. In Mogadiscio I spent some time with Scotty Napier the ICA fishery officer in Somalia for the past five years, a man known to me as experienced in practical fishery matters. In addition I had a numerous documentation in various conditions of classification from various agencies and governments. Finally I was able to discuss these matters with Dr. David Hall and Frank Williams at the East African Marine Fisheries Research Organization in Zanzibar.

The upshot of this reading, conversations and observations is a conviction on my part that (1) fishery resources of the Gulf of Aden and immediately adjacent waters are sufficiently abundant to support commercial fisheries whose yield would be consequential to the economies of the several political units and peoples of South Arabia and to Northern Somalia.

2. That markets are available in the outside world for some of these products on a scale large enough to warrant the increase of fisheries in the area to supply them.

3. The technological, educational, and other problems in the way of doing this are formidable but not incapable of solution.
4. The increase in fish yield in the area would contribute importantly not only in the economy of the peoples living there but to the political stability of the area.
5. That further knowledge of oceanic processes in the area would contribute to the establishment of such fisheries, and
6. That this further knowledge of oceanic processes could be accomplished at reasonable cost as a normal fallout from the Indian Ocean Expedition.

My trouble is that this is only an idea; I do not know how or by whom it should be examined and possibly put in train; and I have no more time available than to set it out in cursory fashion to a variety of people who may be concerned with such matters in at least a peripheral manner.

The Fish

While the variety of fishes available in the area is numerous, as they normally are in tropical seas, three sort at least appear to be sufficiently abundant to form the bases of substantial new or enlarged fisheries. These are the Sardinella, Scomberomorus, and two species of Thunnus. I am aware that there appear to be substantial quantities of crayfish, which are almost as negotiable as gold in the world fishery markets, but I do not refer to them here. The other three are pelagic fishes and it may be certainly stated, on the basis of experience elsewhere, that their availability and abundance are sensitive to change with change in the ocean environment, are related to change in thermocline depth and sharpness in particular, and are probably interrelated with each other.

The Market

If Sardinella can be laid down at ten dollars per ton in reliable volume at a modern reduction plant in the area the meal produced by that plant can compete on what is almost an insatiable world market for fish meal and oil. This is the approximate present price at one port in the area where it is estimated that the catch this year will be about 10,000 tons produced with quite primitive means. The fish are mostly air dried on the sand of the beach now and used for camel fodder. While I have nothing

G. Humphrey

-3-

December 29, 1961

against camels I feel that the end use of these excellent proteins might be upgraded in man's scale of values.

If frozen yellowfin tuna 20-80 pounds in weight, frozen solid, can be stored in frozen warehouse there in condition suitable for shipment and subsequent canning any reasonable quantity of it (measured in tens of thousands of tons) can be sold on the world market for \$250-\$275 per ton, and the long term market prospects are favorable. This is so far above the price in the area now paid for raw material to air-dry as to seem fantastic to the local inhabitants. Three small tuna canneries now operate with some difficulty on the Somalia side of the Gulf. Whether the economics of the tuna canning, especially in view of the shortage of fresh water, make growth of this branch of the industry practical I could not say without detailed study, but the frozen tuna export market would obviously be profitable. The frozen tonggol tuna (the other abundant species) would sell for somewhat less, but I believe above \$200 per ton steadily, prepared for shipping in condition fit for canning as noted above for yellowfin. These are the two species of tuna in the area in abundance.

What that abundance is no one could tell you, but somewhere in the tropics where a canoe fishery can catch 10,000 tons of Sardinella in a season within two or three miles of a village one can safely say that there are enough yellowfin to support a successful tuna fishery.

The Spanish mackerel - Scomberomorus commersonii, is said by the fishery officers to be one of the most abundant pelagic fish in the area. This is an excellent fish which freezes and ships well. I am not sufficiently well acquainted with the chilled or frozen fish trade, particularly in Europe, to give you useful information on the economics of shipping sharp frozen Spanish mackerel steaks from the Gulf of Aden to Europe or elsewhere, but the growth in frozen fish consumption in the northern hemisphere is so rapid that I could not envision an adequate market for this fine fish not being available.

Technological, educational and other problems:

The fisheries of the area are now prosecuted mostly by fishermen untrained in modern methods of volume production, using for the most part unmotorized dugout canoes and scarcely less efficient craft of a little larger size, primitive gear used in primitive fashion, and almost entirely within two or three miles of the beach (and not much further than that from the village). Accordingly the variability of the harvest in any particular village may be very large from year to year.

G. Humphrey

-4-

December 29, 1961

One would assume that this is related to the varying strength and duration of the two monsoons and intervening calm periods. While an understanding of the latter would not mend troubles arising from the former, it might be that no modernization of fishing operations in the area is possible without some better way of estimating whether commercially profitable quantities of fish are likely to show up steadily in a particular area in stable quantities. The expansion of the tuna canning trade in northern Somalia has been vexed by the tuna, or the bait, not showing up within the narrow reach of the fishing crew of the village for a season or two, which results in the small cannery going broke. This would not indicate that the tuna, or the bait, did not turn up ten or twenty miles down the beach in satisfactory volume.

Economic and political stability

Approximately 1% to 2% of the Hadramout, Muscat and Oman, I am told, are arable and the rest is not mainly because of lack of water. There is no excess water upon which additional irrigation schemes of consequence can be founded. Oil has not been found in substantial volume despite extensive search. There are no known exploitable resources ashore of consequential size. The economy of the area has deteriorated rather than bettered in this century. One cannot readily see any resource available with which to aid the economy except in the sea. As a matter of fact the Seyyids of the area founded their empires of old on sea trade, not the land.

The north coast of Somalia has almost wholly a pastoral, nomadic economy which is no better than that of Arabia across the water except in one respect - it has never been much better so nothing else is expected, whereas the slave, ivory, and incense trade once made south Arabia rich and important.

The most casual reader of newspapers will realize the strategic nature of this area of the world and the desire to keep political stability there, which would not appear to be practical without economic betterment of the people.

Ocean Research and Fish Production

What a fisherman must have to keep his cost per ton of production down, and his operations profitable, is as stable and consistent catches as are possible. It is unlikely that commercial fish production will be

G. Humphrey

-5-

December 29, 1961

feasible in the Gulf of Aden during the south-west monsoon and until the fishery is much more sophisticated than at present, for the reason that the small boats now used cannot stay in the water during that heavy weather, and there is no harbor safe in a southwest monsoon east of Aden and Berbera respectively. Accordingly the catching has to be done in the northeast monsoon and the intervening periods of calm. One needs to do this with maximum efficiency, and better prediction of monsoon cycle itself would be a boon to the fishery (this year, for instance, the normal cycle seems to be badly upset).

While I know precisely nothing about it in Arabia, I would hazard the guess from experiences in West Africa that the concentrations of Sardinella inshore which, in season, form the most abundant fish in the catch, is dependent upon upwelling behind promontories or is related to bottom features and wind direction and strength in some way. Sardinella, in our experience, do not surface in 80°F or more water but then stay lower in the water, schooled above the thermocline. This is where the Russians are trawling them by the thousands of tons off West Africa.

The experience of the Japanese and ourselves on a world-wide basis is that the larger tunas available to long-line and hand-line fisheries (almost the sole tuna producing gear used in the Gulf of Aden presently) lie just above the thermocline, or are most concentrated there, or are in some close way related in availability to thermocline depth. Do not press me too hard on why. We know more than we understand about it just yet.

The way the natives hand-line and long-line tuna in north Somalia indicate that the same is true there and that the natives developed an ingenious if crude bathythermograph a long while ago. A number of canoes go out from the village in the pre-dawn. Their hand-lines are marked like a lead line so that they know how much line they have out. Each canoe ties a rock on the end of its line which is attached by a slip knot so that a jerk will free the rock from the baited hook. One lowers his sinker to 20 fathoms, the next to 30 fathoms; the next to 40 fathoms; etc., (they fish on occasions to depths of 80 fathoms). The first one to catch a tuna signals to the others and they all adjust the depth of their hooks to that depth, which is where the tuna are for that day.

G. Humphrey

-6-

December 29 , 1961

Hand-lining for tuna is too crude and expensive in labor for volume production. Long-lining is much more efficient for the same sizes of fish, and can be done from small, simple craft. But you can't experiment around as above to find out where the thermocline (and fish) are. Once you have shot your gear you are committed for that day (the fishing day under the tropic sun in unsheltered craft is short).

I cite the above only to indicate that some very simple ocean research (as done on the "Naga" expedition to the Gulf of Thailand) has the likelihood of being very beneficial to fishery development in the Gulf of Aden area, and that along this line even an understanding of the fluctuations or pattern of thermocline depth in itself might be a major boon to the fisheries. A better understanding of mixed layer circulation and basic productivity down the Oman-Muscat coast and across the mouth of the Gulf to Socatra and Cape Guardafui with the monsoon changes would perhaps permit one enough knowledge upon which to hazard the development of fisheries out more than two or three miles from the beach with some what more sophisticated craft.

At present there is not, to the best of my knowledge, a bathythermograph in the Gulf of Aden. Hinds has a good little vessel, the "Gulf Explorer" at his service and would like very much to have a bathythermograph. Furthermore he has a European skipper who could use it intelligently. His appropriations are too tight to afford one just now.

Reasonable Cost

If you will glance at Bob Snider's most recent Indian Ocean Expedition Charts you will note that the Gulf of Aden is crowded with presumptive research ship tracks from the Indian Ocean Expedition. My set has not yet arrived from the shipment I made from Rome, but I remember the German and British tracks, and that EAMFRO's vessel is intending one East-West section through the area. A number of vessels are passing through coming from Europe to the Indian Ocean via Suez. Nearly all are intending to make at least some stations as they transit the Gulf of Aden.

If someone were interested in applying this information to the fishery problems in the Gulf of Aden and worked at it energetically I would be most surprised if he could not talk each, or most, of these expeditions leaders into taking more shallow stations or at least bathythermograph casts through the area, if he could show a good reason for wanting it done. I know the Germans to be interested particularly in the area, and the

G. Humphrey

-7-

December 29, 1961

interest of Her Majesty's Government in enhancing the economic welfare of the nineteen odd states of the Aden Protectorates is obvious.

Whilst in the area I was shown a project in fishery oceanography being prepared by the Government of Somalia for submission to the Special Fund of the United Nations. This envisioned the expenditure of \$1,350,000 over a period of three years. A major element of the cost was \$570,000 for the vessel. The idea was an oceanographic reconnaissance of the north Somalia coast the first year; the northern half of the south Somalia coast the second year; and the continuation along the south Somalia coast the third year.

I could not in good conscience recommend to anyone a project so conceived at this stage of history. In the first place there is not a harbor in the whole of Somalia into which such a vessel could repair for shelter; in the second place the vessel would not likely get as much oceanographic work done along the Somali coast as will come for free during the Indian Ocean Expedition; in the third place I doubt that an oceanographic reconnaissance of the Somalia coast as set out in the project would produce as much good even for Somalia as a full reconnaissance of the whole Gulf of Aden and particularly its eastern approaches; fourthly I do not know of a soul in the Somalia Government who could adapt such information to practical purposes. The fishery, the Government, the people are not yet in a state of sufficient sophistication to, by themselves, make use of the findings.

On the other hand I believe that a small staff set up somewhere whose sole purposes were to entice Indian Ocean Expedition vessels to extend their observations in the Gulf of Aden along some consistent pattern, to bleed Gulf of Aden information from passing ships, to collate Gulf of Aden ocean and fish information and relate it to the pelagic fish resources of the area, to put in and keep in operation ashore recording station or two here and there from Socotra to Bab-el-mandeb and back to Mukula or even further east, and to generally hustle ocean and fish information and try to make sense of it could be very cheaply done and produce good out of all proportion to its cost. Without knowing a thing about it I would guess that such a team looking for read-outs of oceanographic data in the Gulf of Aden area from the National Oceanographic Data Center in Washington, D. C., or the IGY World Data Center A at College Station, Texas would start their work with surprisingly large nest eggs.

G. Humphrey

-8-

December 29, 1961

I would expect that an energetic director of such an operation who had enough money at his disposal with which to buy a bathythermograph and winch could entice Val Hinds into sending his little "Gulf Explorer" here and there in the Gulf of Aden in the most useful fashion to patch up the holes left by the big research ships transiting the area.

I would not expect that such studies would be translated into production directly by the native fishermen on either side of the Gulf. Instead I would expect it to provide the basis of estimation by outsiders as to whether or not it would be a good gamble to come in and invest in the development of the fisheries. At the very least it would provide such fishery officers as Hinds and Napier with a body of knowledge upon which they could better found their slow, frustrating, but important actions.

Where such an operation should be based I do not know. Despite the tourist brochures, Aden has come a long way from its purported start in life as the Garden of Eden. Yet it has Hinds and his staff of Adenese and a couple of Europeans at hand for comfort and such assistance as they could give. All research ships going through the area will probably stop in there for rest and recreation (what a surprise they will get) or bunkering. About 500 merchant men call in for bunkering each month and a consistent ship visitation program with opportunity for radio communication with them would produce a great deal of useful information from these merchant vessels. Aden has the only real harbor from Karachi to Mombasa. If I had a free hand and the money to do it with I believe I would look into the possibility of setting up my staff in Aden.

On the other hand David Hall is getting his East African Marine Fisheries Research Organization in Zanzibar back on its feet after a year of being without a vessel able to keep at sea, and other severe financial restrictions. Both his large and small vessel are now assured of being refitted and made seaworthy. His large vessel will be making at least one pass through the Gulf of Aden during Indian Ocean Expedition. He will be having new and larger laboratory facilities built at Zanzibar. His finances at long last appear to be on a secure footing, and with Tanganyika' independent and apparently quite stable politically one envisions that this station's worst transition times are over.

The Governments of Kenya, Zanzibar and Tanganyika are not wealthy. They take the quite normal view that since they are providing a fair amount of the money for EAMFRO, and need their own marine fisheries developed, that EAMFRO should confine its activities reasonably close to their home waters.

G. Humphrey

-9-

December 29, 1961

On the other hand I was most pleasantly impressed by Hall, his small staff and their situation. Here is a good seed on a bleak coast (scientifically speaking) which should be nurtured. We speak glibly in world conferences about the desire of establishing tropical marine research stations, Here is one that is established, has clawed its way to survival, is the tougher for having done so, and in my view warrants support and nourishment from the scientific community. Support means to them money, staff and the ability to do work.

Zanzibar is out of the way for sustained work in the Gulf of Aden, but I could see no reason if a project could be put together to work as I have suggested in the Gulf of Aden, why this could not be run as a field station in Aden by Hall and Company out of Zanzibar, plane connections are good and frequent. After all Schaefer, out of headquarters in San Diego, operates field stations over longer distances and under more crude circumstances quite satisfactorily out of Puntarenas, Costa Rica; Taboga Island, Panama; Guayaquil, Ecuador; and Paita, Peru - none of which are exactly Garden's of Eden either.

In passage through Paris on the way back I suggested such a project in a cursory fashion to Warren Wooster. Obviously such a project is an ideal one for collaboration between UNESCO and FAO, but I am not such a visionary as to suggest this just yet. Warren did not immediately discard the idea and thought of it in terms of a large EPTA scheme, which is about the size I envision for it.

In passing through New York I discussed the idea, also in a cursory fashion, with Paul Marc-Henri at Special Fund. He also did not discard the idea out of hand and thought of it in terms of a small Special Fund size project.

Since Warren and his UNESCO superiors want a Special Fund Project in Oceanography and also in the African area, there may be a deal here that can be put together.

As a matter of fact conversations with various Special Fund officials over the last year or so has left me with the impression that they would much like to help out you Indian Ocean Expedition folks with some money if they could just get some of your long hairs to admit that there might be some practical issue from ocean research. They have terms of reference with which they are required to comply like most of us other toilers in other vineyards.

G. Humphrey

-10-

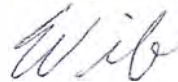
December 29, 1961

If you want to do SCIENCE in capitals then you must get your money from source that fund such operations, and of course you are doing pretty well working that side of the street. On the other hand if you are prepared to admit for the good of the cause and the sake of the arguement that your research in the Indian Ocean might accidentally lead to the development of fisheries, aid navigation, or predict rains that might help farmers in adjacent lands, then you will get an attentive ear at Special Fund. These are good people, handle their business effectively and efficiently, are most flexible in their reactions, and most earnestly interested in doing a useful job with their money. And they have a big pot of dough.

I have no further time to belabor this idea or work on it. The best I can do is set the idea down on paper and send it around to others to do something about, or discard, as they think best. Accordingly I am sending copies to everyone else I know who might take in such a waif and nurture it to health and vigor, to wit: Dr. Bohnecke, Dr. Snider, Dr. Meseck, Dr. Deacon, Dr. Wooster, Dr. Hickling, Dr. Spilhaus, Dr. Finn, Dr. Hall, Dr. Revelle, Marc-Henri, McKernan, Maxwell, Wakelin, and Hinds.

Sincerely yours,

VAN CAMP FOUNDATION



W. M. Chapman
Director

WMC:reb

739 Golden Park Avenue, San Diego 6, California

December 29, 1961

Dr. David Hall
East African Marine Fisheries Research Organization
Post Office Box 668
Zanzibar

Dear Dr. Hall:

I enjoyed very much the morning spent with you at your laboratory. On my return through Rome I found that Hjalmar Kristjanson had already sent to you the written material on the construction of tuna purse-seines which I had promised to send you so I will not do so. The only other assistance along this line that I could suggest is the following: The Van Camp Sea Food Company has in West Africa a very competent man in the construction and use of modern tuna purse-seines as well as other aspects of tuna and bait catching in tropical waters. I do not know whether the company would consider it worth their cost to send Mr. Tasso over for a few days to give you a hand with some advice, whether his time schedule would permit of this, or whether you would consider it to be useful. However if you would consider it to be useful I would be prepared to recommend such action to the company.

Attached you will find a copy of a self-explanatory letter to Dr. George Humphrey relating to fishery oceanography in the Gulf of Aden area. I do not know that anything will come of it. I don't know that I have any more time available than simply to write down the idea and circulate it to such persons as may have an interest and ability in implementing it. Since your organization is referred to I thought it would be at least courteous to send you a copy.

As a matter of fact there are two sources of personal irritation that I am relieving by this action. The first is the determined lack of interest heretofore among the SCOR to admit of the possibility that the Indian Ocean Expedition might sully its eschuteon by here and there providing information that might be useful in developing the fisheries around the Indian Ocean. The second is the piously expressed wish in SCOR, IOC, and elsewhere that we should have more ocean research establishments in the tropics while at the same time a going outfit like yours is permitted to wither on the vine for lack of adequate support. The letter to Humphrey, and its circulation, is aimed at relieving a little both sources of irritation.

VAN CAMP FOUNDATION

Dr. Hall

-2-

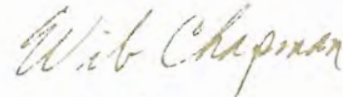
December 29, 1961

I may say also, that Val Hinds at Aden impressed me. He is not a gentle or retiring soul, but a more gentle or retiring one would have expired long since in his circumstances. He is a long way from expiring, but he could use a helping hand or at least a friendly shoulder to lean on once in awhile. I grant you that he doesn't have any high regard for scientists, but on the other hand so far scientists have not done much to forward the solution of what often must look to him like insuperable problems in his bailiwick. I would like at least to see somebody get him a bathythermograph and winch to use on his "Gulf Explorer."

The best of the New Year to you and yours. Give my regards to the Williams'. I did not stop in to see Dr. Hickling when I came through London. By this time I was so travel weary that I attended to necessary business and climbed on the next available plane for home, family and Christmas.

Sincerely yours,

VAN CAMP FOUNDATION



W. M. Chapman
Director

WMC:reb

VAN CAMP FOUNDATION

Division of Van Camp Sea Food Company

739 Golden Park Avenue, San Diego, California

January 2, 1962

FILE	033-425
	10 JAN 1962
Admin.	
Fish.	
Ocean	
T. Sec.	
Libr	1962
Clerk	

Dr. C. F. Hickling
Fishery Advisor
Department of Technical Cooperation
Colonial Office
Great Smith Street
London, S.W. 1

Dear Dr. Hickling:

After attending the IOC meeting in Paris, the SCOR meeting in Monaco and the FAO Conference in Rome I took a trip down along the East Coast of Africa. In the course of this I had an opportunity for good chats with your fishery officer, V. J. Hinds, in Aden and with Dr. Hall and his staff in Zanzibar. I was most pleasantly impressed by both in their quite different jobs. Both are doing difficult jobs under most unattractive circumstances and I liked the attitude with which each was tackling his task. Both suggested that I stop in and visit with you in London, but by the time I got that far I was so tired out with travelling that I attended to necessary business and got out on the next available plane for home and Christmas with my family. I hope to stop by and see you on a future occasion.

In the course of this trip an obvious opportunity to make some localized fisheries use of the vast resources being put into the Indian Ocean Expedition occurred to me. This is set forth in the attached copy of a letter to Dr. George Humphrey, President SCOR.

I do not know whether anything will come of this. I have no more time' to put to the matter than just to write down the idea and circulate it to a variety of persons who might have an interest in implementing it, in the hopes that it might strike root somewhere. You will note that I have sent a copy to Dr. George Deacon of NIO.

I assume that your office, perhaps, has the most direct interest of any of these persons in such a project and also assume that you do not have the funds or personnel to put it into effect, even if you should think it a good idea. This is the main purpose for circulating copies of the letter to persons in agencies that do have more adequate funds for such purposes.

VAN CAMP FOUNDATION

Hickling

-2-

January 2, 1962

Somewhere along the line I hope that Hinds at least gets a bathy-thermograph and winch to use on his "Gulf Explorer". I agree with him that the instrument would be most useful to his work.

Sincerely yours,

VAN CAMP FOUNDATION

W.M.C.
W. M. Chapman
Director

WMC:reb

739 Golden Park Avenue, San Diego 6, California

January 3, 1962

PERSONAL

Dr. Warren Wooster
Department of Oceanography
UNESCO
Place Fontenoy
Paris, France

Dear Warren:

Attached is a copy of a letter to George Humphrey, for lack of a better addressee, on the Gulf of Aden scheme we talked about. I still like the idea. I like it even better with the twist of letting Hall and company at EAMFRO run it. That outfit deserves some support and you might want to look closer at them with that in mind, with or without benefit of this scheme. Hall impressed me. He is working the hard side of the street in a part of the world where science is spelled with a very small s.

I chatted with Townley and Marc-Henri about this. The latter is much impressed with Indian Ocean Expedition and would like much to help around the edges of it. If anyone would just write up a project in terms of its practical results so he could o.k. it the fellow who wrote up the project could do all the science he wanted with the money. Marc-Henri liked this little scheme as an example and this may be a chance for you to get your mitts on a Special Fund Ocean Research scheme in Africa. Just to be on the safe side I am sending a copy of the letter to the competition too, but they will likely do nothing. As a matter of fact I would like nothing better than for you and FAO to use some of Special Fund's money to put this scheme afoot using Hall's EAMFRO already existing skills and experience.

I wish I had some time to play with this scheme, but as usual I am working at a dead run.

Saw Maurice Blackburn at Hubb's last night and he is terrifically enamored of your joint book on fishery oceanography. So am I. If the two of you get on the stick your first draft will be ready just in time to use as the report of the SCOR Working Group on Fishery Oceanography. If you don't that sterling group will have so tightly defined all terms that you will have to rewrite several chapters. At any rate Maurice is

VAN CAMP FOUNDATION

Dr. Wooster

-2-

January 3, 1962

enthused, is not going on expedition this year, so has time to write. I told him the only reason you had not replied was that you were busy drafting the introductory chapters.

The best to Polly and the kids. Send me your new home address. The troll dolls from Copenhagen went over well.

Sincerely yours,

VAN CAMP FOUNDATION

W.M.C.
W. M. Chapman
Director

WMC:reb

p.s. Townley says he will probably see you in Paris during January. This is a number one boy and I would like very much to see you hit it off well together. Much can be accomplished in your field if this happens. wmc

January 3, 1962

Mr. Donald L. McKernan, Director
Bureau of Commercial Fisheries
Department of the Interior
Washington 25, D. C.

Dear Don:

I discussed briefly with you and Vernon some ideas I had about getting some useful results from the Indian Ocean Expedition in the Gulf of Aden area. These are now set forth in some greater detail in the attached copy of a letter to George Humphrey. I do not have sufficient interest in the area or time available to push the idea any further than this. I am quite sure that Vernon would not appreciate me pushing him into another ocean yet, at any rate. Nevertheless I submit the idea to your joint attention for what it may be worth. It hurts me to see so much research effort and dollars going into Indian Ocean Expedition without getting some fishery use out of it where that can be had at little extra cost.

Come to think of it I probably should have sent this to Tommy Austin rather than to you fuddy-duddies in the first place. Maybe you will pass it along to him.

Sincerely yours,

VAN CAMP FOUNDATION

W. M. Chapman
W. M. Chapman
Director

WMC:reb

VAN CAMP FOUNDATION

Division of Van Camp Sea Food Company

739 Golden Park Avenue, San Diego 6, California

January 3, 1962

Mr. Paul Marc-Henri
Special Fund
United Nations
New York, New York

Dear Sir:

After discussing the Gulf of Aden scheme with you I mulled it over in my mind some more and set down the results of this cogitation in a letter to Dr. George Humphrey, President of SCOR, a copy of which is attached hereto for your background information. Since SCOR at present has a fairly clear title to the Indian Ocean I felt that this was as good a way to launch the scheme as any other. Just to be on the safe side I have sent copies of the letter to others who might have some interest in the matter, on the so far successful working thesis that if you shake all of the bushes in sight something might fall out that was not expected. I have no time available at present to spend in pushing this scheme, so have just cast it forth upon the waters to see what may happen.

It was good talking with you again. I hope you will not let the cares of the world further delay the preparation of your book on Africa. Like Ralph says, how are the rest of us going to get our books written until we have an authoritative text to lean upon and crib from?

Sincerely yours,

VAN CAMP FOUNDATION

W.M.C.

W. M. Chapman
Director

WMC:reb

VAN CAMP FOUNDATION

Division of Van Camp Sea Food Company

739 Golden Park Avenue, San Diego 6, California

January 3, 1962

Dr. G. E. R. Deacon, Director
National Institute of Oceanography
Wormley, Godalming, Surrey
England

Dear Dr. Deacon:

Attached you will find a copy of a letter to George Humphrey suggesting a small scheme in fishery-oceanography in the Gulf of Aden. The idea seems to me to be a sound one but I do not have the slightest idea how it is to be put afoot and have no more time to put to it than just set down the idea. Since your vessels will be transiting the area, and Her Majesty's Government has very obvious interests in the subject, I have sent a copy to you for such attention as you may care to give it. As you will note, I am sending a copy to Dr. Hickling also.

I was most pleasantly impressed by Hall and his small staff at the East African Marine Fisheries Research Organization in Zanzibar, more perhaps by their attitudes than anything else. I suggest that this is a nucleus capable of growing into better things that might be most useful to you as an outpost in the Indian Ocean, if nurtured and assisted somewhat. I also suggest that if a bathythermograph and winch could be got to Hinds, the Fishery Officer at Aden, you might find the yield of data worth the investment. This is a good, hard-driving lad even though no avid scientist.

It was good meeting with you and Dr. Currie and having the chance to become better acquainted with you. I was so tied up with other business when I returned through London just before Christmas that I had no time to get down to your laboratory. I hereby serve fair warning, however, that I am liable to drop in on you unexpectedly sometime during the coming year.

The best of the New Year to you and yours,

Sincerely yours,
VAN CAMP FOUNDATION

W. M. C.
W. M. Chapman
Director

WMC:reb

VAN CAMP FOUNDATION

Division of Van Camp Sea Food Company

FILE	033-425
10 JAN 1962	
Admin.	
Fish.	
Ocean.	<i>GA</i>
T. Sec.	
Libr	
Clerk	

739 Golden Park Avenue, San Diego, California

January 3, 1961

Honorable James E. Wakelin, Jr.
Assistant Secretary
Department of the Navy
Washington 25, D. C.

Dear Jim:

I am quite aware that I owe you at least a courteous acknowledgement on several things, but this letter is concerned with another matter.

After the SCOR and FAO meetings I continued on down the east coast of Africa to Cape Town and back up the west coast through western Europe again and home just in time for Christmas. In the course of these travels an idea occurred to me whereby with little added cost the Indian Ocean Expedition cruises through the Gulf of Aden might be made to yield some information of value to the development of fisheries in the area. Accordingly I have set down these considerations in a letter to George Humphrey, a copy of which is attached hereto for your background information.

I realize that this is outside your immediate purview but felt that in your role as Chairman of the Inter-agency Committee on Oceanography you should be kept advised.

It was good being with you in Paris. The best of the New Year to you and yours,

Sincerely yours,

VAN CAMP FOUNDATION

W.M.C.

W. M. Chapman
Director

WMC:reb

VAN CAMP FOUNDATION Division of Van Camp Sea Food Company

739 Golden Park Avenue, San Diego 6, California

January 3, 1961

Dr. Arthur E. Maxwell
Office of Naval Research
Navy Department
Washington 25, D. C.

Dear Art:

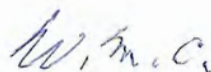
In my perambulations down the East African coast an idea occurred to me whereby something useful might be got out of the Indian Ocean Expedition at little extra cost. I realize the concept of usefulness does not add any weight, and may even detract from its application to that sterling (or rather dollar) undertaking, but at any rate I have put the idea into a letter to George Humphrey, of which a copy is attached for your background information, and cast it forth upon the water.

Not being too clear as to what U.S. Navy objectives may be in the area (the Admiral's often seem to differ from my views on appropriate naval strategy) I am not sure this is of any interest to you, but send it along any way.

Many thanks for the Defant opus. My struggle now is to keep possession. My second son is just starting graduate school in Marine Biology at UCLA and great holes open on my personal library shelves every time I go on a trip. I should have sent him to Pritchard, or some other place suitably removed from my book shelves.

Sincerely yours,

VAN CAMP FOUNDATION



W. M. Chapman
Director

WMC:reb

VAN CAMP FOUNDATION

Division of Van Camp Sea Food Company

FILE 033-45

Admin.

Fish.

Ocean

T. Sec.

Libr

Clerk

139 Golden Park Avenue San Diego, California

January 3, 1962

Mr. Hilmar Kristjonsson, Chief
Fishing Gear Section
Food and Agriculture Organization
Viale delle Terme di Caracalla
Rome, Italy

Dear Hilmar:

I returned to find my desk covered with windrows of correspondence which I have been flailing through vigorously. I seem to remember some where along the line in the last few days referring to you in one of my answers and spelling your name the Norwegian way, Hjalmar. If I should have sent a copy to you I trust you will not be offended. I am not very good at names or spelling. This is why I am pleased that my friends have come to call me Wib. I can both spell and remember most three letter words.

I appreciated getting the copy of your letter to Hall. In the meantime I had chatted with him in Zanzibar. He is a good man trying to do much under pretty rough circumstances and I am sure we all should do what we can to help him. He is an outpost on a very lonely frontier, and whether or not he succeeds in his undertakings is a matter of more than casual importance to a good many of us who are interested variously in marine science, in fish production, in political stability in West Africa, or in the simple Christian tenet of helping out a good man in a tough situation.

Hall's decision to subsidize the Greek with a tuna purse seine, a power block and some other help is perhaps a more adventuresome proposition than even he realizes. A good deal of money is involved in this gear, and how the webbing is laid out and put together is a matter of prime importance to whether the whole thing works or is money down the drain. This will be a big enough piece of Hall's total budget to be of some importance to the success of his whole activity in the eyes of his present financial supporters. The people in Tanganyika, Kenya and Uganda are really interested in fresh water fish any way and do not have much faith in the ocean's ability to produce proteins. As a matter of fact I do not have an abiding faith in that particular stretch of ocean producing a hell of a big volume of fish either, except maybe shrimp in the south.

4. Kristjonasson

-2-

January 3, 1962

You are kind to inform him that I am an expert on tuna fishing. The facts are that I am expert in it in much the same way I am with much else in the broad array of things with which I customarily deal. By this I mean I know nothing practical or useful about it, and have learned this to my own satisfaction. If I laid out a tuna purse seine for Hall's Greek I would be pleasantly surprised if it caught water.

The Van Camp Sea Food Company does have several men who are exceedingly expert in this sort of thing however. One of these is John Tasso, stationed presently in West Africa with headquarters at Sierra Leone I believe you know him. Another is Harold Morgan, whom I do not think you have met yet, who is presently and temporarily with John.

I do not like to butt in on Hall's business without invitation. I could not in all honesty tell the VanCamp Sea Food Company that sending one of its experts for a few days to Zanzibar and Dar-es-Salaam would lead to any more benefits to it than a favorable entry in St. Peter's ledger, because I doubt that there are more tuna in the Zanzibar channel-Mafia Island area than the East Africans can eat with relish themselves. I would not recommend to either StarKist or Van Camp the expense of sending a large purse seiner there in our present state of knowledge. Nevertheless I have written to Hall suggesting that if he would like to have an expert come over for a few days I would recommend to the company that it invest as much in good will as to send Tasso over from Sierra Leone for a few days to case the joint.

What worries me in my ignorance is that the boys here make their seines with about one tenth the depth of the length and nobody builds a tuna seine less than 350 fathoms long because you have to have a reasonably long rag to get around the fast moving schools. This would yield you a seine a little less than 35 fathoms deep. This would actually fish down to 20-25 fathoms. The Zanzibar channel and the area north of Mafia Island where the most numerous schools are sighted most frequently is pretty shallow, with not much of it more than 25 fathoms deep. I assume also that there are coral heads around and about that would shallow up that depth here and there in what might be a fashion disastrous to a tuna seine.

I am not sure that an enlarged lampara, or some other form of ring net, with quite different proportions than a regular tuna purse-seine as used here is not what is wanted. But this is all far beyond my practical limits of expertize and I would hesitate to even raise these doubts until someone in whom I had faith, such as Tasso or Morgan, had a look at the situation.

VAN CAMP FOUNDATION

L Kristjonasson

-3-

January 3, 1962

On another subject, I quite agree with you on the toughness of the situation in Somalia. I am recommending to the Van Camp Sea Food Company that it forget about that country until somebody builds some harbors, the government sobers up and settles down and forgets about taking on Hailie Selassie, and other things. Also I have told the Special Fund people that I could not in good conscience recommend to them favorably the project in fisheries oceanography in the form submitted by the Government of Somalia. I have also warned Meseck to look closely at his hole card before advising any of his Germans to build a tuna cannery there. One of the best ways I know of losing money rapidly is to build a tuna cannery in a place in the tropics before you have an assured source of raw material - which there is not presently at any point in Somalia.

Nevertheless I do not like to submit such negative reports. I am perfectly convinced that there are sufficient volumes of tuna available in the eastern part of the Gulf of Aden to support a substantial industry both in the Hadhramot and North Somalia, especially if supported by harvesting other resources in the area too. Also the civilized world can hardly, at this stage of history, let Somalia subsist solely on its herds of goats, sheep and cows (although that is, I am convinced, precisely what 99 out of 100 Somali would best like). The winds of change, as Mr. McMillan's ghost writer puts it, are wafting at least gently on the Horn of Africa too. The land resources of North Somalia and South Arabia are miserably sparse. The sea resources give promise of being adequate enough to be of some importance to the economy of the area.

On the basis of what little I know (and I believe I have had available all of the copious literature on the subject) I do not have enough information to warrant anyone putting much money investment in the area. Nevertheless there is too much information to simply ignore. As a compromise there has occurred to me a project in fishery oceanography in the Gulf of Aden which could be undertaken at small cost on top of work that will take place as part of the Indian Ocean Expedition anyway. I have set this out in a letter to George Humphrey, of which a copy is attached for your background information. I would like to have your personal reaction when you get the leisure. I have sent copies to Finn and Holt also. I do not know what will be done about it, but I hate to see a good idea go to waste - so I have circulated copies of the letter to Humphrey to all hands I know of who might be interested in the subject or be able to influence somebody to do something about it.

VAN CAMP FOUNDATION

Kristjonasson

-4-

January 3, 1962

By a most pleasant coincidence I ran into Jon Johnson Sunday night at the Regent Hotel in London and got a chance not only to renew acquaintance but catch up on affairs in Iceland (I had had a most pleasant chat the day before with Arni Fridricksen in Copenhagen). The next day I had more time to talk with Jon Olaf than I ever had had in Rome. I am convinced that some time I should come to Rome when there is no conference and no rush and just sit for a week or ten days bothering you people in FAO with questions.

It was nice meeting you and your wife again. The best of the New Year to you and yours.

Sincerely yours,

VAN CAMP FOUNDATION

W.M.C.

W. M. Chapman
Director

WMC:reb

VAN CAMP FOUNDATION Division of Van Camp Sea Food Company

739 Golden Park Avenue, San Diego 6, California

January 3, 1962

Dr. G. Meseck
Ministerialdirigent/im
Bundesministerium fur Ernährung, Landwirtschaft und Forsten
Hamburg, Altona 1,
Federal Republic of Germany

Dear Dr. Meseck:

After leaving you in Rome I went down along the east coast of Africa, back up the west coast, and through Rome, Paris, Copenhagen, London, New York, Washington, and arrived home the day before Christmas reasonably weary from travel. My desk was stacked rather high with ten weeks of accumulated mail which contained considerable published information and a letter from you. This letter is not in acknowledgment or answer to those (which I will get at soon) nor is it intended as a comment on Somalia, about which I intend to write you a brief report shortly. Instead it is solely for the purpose of sending you a copy of a letter written to Dr. George Humphrey respecting an idea for what might be some useful fishery oceanography work in the Gulf of Aden area in connection with the Indian Ocean Expedition.

Knowing your interest in the area I thought that you would be interested in the contents of the letter. It also gives me an opportunity to explain why I have not been answering my mail, and to wish you and yours a Happy New Year.

Sincerely yours,

VAN CAMP FOUNDATION

W.M.C.
W. M. Chapman
Director

WMC:reb
cc: Humphrey

January 3, 1962

Dr. Roger Revelle
Scientific Assistant to the Secretary
Department of the Interior
Washington 25, D. C.

Dear Roger:

After the FAO conference I took a run down the east coast of Africa as far as Cape Town and then returned up the west coast and again through western Europe (incidentally going up with Warren to Copenhagen upon hearing the news of Anton's sudden death).

In the course of these travels an idea occurred to me whereby at relatively little cost Indian Ocean Expedition could turn out some added fishery values in and around the Gulf of Aden. This idea is set forth in the attached copy of a letter to George Humphrey. It is sent to you for your background information. You will note that I am sending copies to McKernan, Maxwell and Jim Wakelin as well. It seems like a good idea to me but I have no time available to put in on pushing it so I am casting it forth upon the waters to see what may happen.

Best of the New Year to you and yours,

Sincerely yours,

VAN CAMP FOUNDATION

W.M.C.

W. M. Chapman
Director

WMC:reb

VAN CAMP FOUNDATION Division of Van Camp Sea Food Company

739 Golden Park Avenue San Diego 6, California

January 3, 1962

Dean Athelstan F. Spilhaus
Commissioner, U. S. Century 2/
1214 16th Street, N. W.
Washington, D. C.

Dear Dr. Spilhaus:

Attached you will find a copy of a self-explanatory letter to George Humphrey. This is sent to you for your background information as chairman of NASCO, the national committee for SCOR. It irritates me to see so much research effort put into Indian Ocean Expedition without every effort being made to put it to good use where that can be done with little added effort or cost. Accordingly I have cast this small idea forth upon the waters to see what might happen. I may have others later.

Sincerely yours,

VAN CAMP FOUNDATION

W.M.C.

W. M. Chapman
Director

WMC:reb

VAN CAMP FOUNDATION Division of Van Camp Sea Food Company

739 Golden Park Avenue San Diego 5, California

January 3, 1962

Dr. D. B. Finn, Director
Fisheries Division
Food and Agriculture Organization
Vialle Terme di Caracalla
Rome, Italy

Dear Don:

Attached is a copy of a letter to George Humphrey concerning an idea about a joint oceanography-fishery scheme for the Gulf of Aden which is self-explanatory. I think the idea itself is a sound one but I do not know who should implement it or whether the political and inertial problems can be overcome. Hilmar Kristjonsson and Sidney Holt have some ideas about the area and this might at any rate excite their curiosity. Accordingly I am sending it along for you to have a look at. I have no time to fiddle with it further.

Sincerely yours,

VAN CAMP FOUNDATION

W. M. C.

W. M. Chapman
Director

WMC:reb

VAN CAMP FOUNDATION

739 Golden Park Avenue, San Diego 5, California

FILE 083-425

15 JAN 1962

Admin.

2 Fish.

Ocean

T. Sec.

Libr

1962

Clerk

January 4

Dr. M. B. Schaefer, Director
Inter-American Tropical Tuna Commission
Scripps Institution of Oceanography
La Jolla, California

Dear Benny:

This arises from your letter of 11 December to Dr. Sette. I returned to civilization from the wilds of Africa and western Europe only on 23 December. This will deal with my activities as a member of the Committee on Implementation, EPOC, on this trip.

One hundred copies of the EPOC report on a cooperative program of study of the Eastern Tropical Pacific Ocean were tabled at the recent Intergovernmental Oceanographic Commission meeting at UNESCO House in Paris in October. The supply was exhausted in a matter of minutes and there was a request for more. As a matter of fact they went so fast I did not get a chance to grab some extra copies that I wanted for special purposes. Accordingly McKernan wired Howard to air express more. These were received by Dr. Wooster after the conference was over and he informed me in mid-December that he was using this supply to fill requests for the report that were still coming in.

Prior to the conference Dr. Wooster had prepared a translation into Spanish of the introductory sections of the report, and this was circulated to the conference as a background document.

The EPOC program was considered by IOC and included its Resolution 3 in the following manner:

"Recommends for earnest consideration by such states as may desire to participate in the cooperative programs, each of the following proposals (initiated by the membership indicated below) as parts of a general study of the world ocean"

- b) Cooperative Program of study of the Eastern Tropical Pacific Ocean (EPOC and IATTC)."

Dr. Schaefer

-2-

January 4, 1962

"Recommends that an initiating member or body, in consultation with the Bureau and with the assistance of the Secretariat, convene a working group consisting of all interested members and bodies to explore avenues of planning, coordination and cooperation (including consultation with appropriate national and international organizations) to prepare specific programs, and to take appropriate and early actions with a view that all aspects of oceanographic study should be taken into account where possible, and that all their findings be fully published upon the completion of each program." - - - - -

The reason for the sponsorship by EPOC and IATTC as listed in this first Recommend clause was that Dr. Wooster, in view of the hazy corporate existence of EPOC, felt that a more finite body should be also listed as a member body initiator. Since no branch of the United States Government, much less the United States delegation to IOC had had a chance to examine the EPOC report up to that time the chairman of the U.S. delegation (Secretary Wakelin) quite properly felt that it was not within the terms of his instructions to put the United States forward as the initiating body. Accordingly since IATTC was formally present at the conference, Dr. Wooster decided that it as an initiating body along with EPOC (of which several representatives were present) would be most appropriate.

As Rapporteur of the working group of the conference which considered oceanographic investigations having an international scope, I can report that the EPOC report received most encouraging commendations during the deliberations of that group. For instance it was pointed out that the proposals laid before the conference fell into three broad categories:

1. Those which were fully and competently planned (into which only the EPOC plan fell) and which only required financing and implementation.
2. Programs well conceived by bodies perfectly competent to draw up integrated plans like the above, but in a stage requiring a year or so of consultation before this could be done (such as the North Atlantic and North Pacific Synoptic Survey's initiated by the United States), and
3. Ideas only, ~~in~~ initiated by bodies which would need assistance even in drawing up adequate programs (such as the Gulf and Caribbean study)

Dr. Schaefer

-3-

January 4, 1962

It may be noted also that Commodore Ryzhkov, Chairman of this working group and a member of the Russian Delegation, made an extended comment on his appreciation of the excellence with which the EPOC Report and Program had been conceived and presented. He said that his country was most favorably impressed by this overall concept of investigation and in particular wished to consider participation in this program.

In talking with Dr. Wooster upon my return through Paris in mid-December he asked me when it was intended by EPOC and IATTC to convene the working group of all interested members and bodies to explore, in consultation with appropriate national and international organizations, avenues of planning, coordination and cooperation, etc., as called for in Recommend clause 2 of Resolution 3 as cited above.

His comments indicated to me that since this program was more fully advanced in its planning than any of the others brought forward, and also was of interest to so many member countries of IOC, that he was interested in getting this mechanism of consultation set in motion on this project as a precedent setting trial of the mechanism. I also rather assumed that he was prepared to assist representatives from poorer countries in the region with travel funds to attend such a conference, if that proved to be necessary and desirable. I also assumed that this presumptive conference on EPOC would not be considered by him to be unattractive to his schemes to establish an oceanographic center in Central America and to encourage and stimulate ocean research in the Latin American countries bordering the eastern Pacific.

Since I am not sure that I have interpreted his comments and thinking correctly I am sending a copy of this letter to him so that he can correct my interpretations of his thoughts and comments as needful directly to you.

I told him that I was not able to give any information or commitment on plans for such a conference but would transmit the request for information to you, as Chairman of the Committee on Implementation and Director of one of the initiating bodies, and to Dr. Sette, as Chairman of the other initiating body. I have now done so.

I do put forward for your consideration, however, the calling of a conference among interested bodies within the purview of Recommend paragraph 2 of Resolution 3, as cited above. There would appear to me to be some desirability to having such a conference prior to the next meeting of IOC which will be held in the last week of September, 1962 in Paris.

C. Schaefer

-4-

January 4, 1962

I call to your attention that representatives of many of the interested countries and research agencies, both national and international, who will be attending the World Tuna Conference to be convened by FAO at the Scripps Institution of Oceanography in La Jolla in early July, 1962. It might be that with the normal attendees to that conference, augmented by some travel money for a few others, one could have a quite satisfactory conference on Implementation of the EPOC Tropical Pacific Program just following that, or in conjunction with it. This appears to be especially appropriate in that the Tuna Conference is being convened by FAO, and FAO is the administrative body for the Special Fund Projects in Fisheries in Chile, Ecuador and Peru.

After the IOC I went to the meeting of SCOR in Monaco. In view of the fact that nearly all the members of SCOR had been either at IOC, or had had copies of the EPOC report directly from you, I did not attempt any further proselyting, but merely tabled a copy of the EPOC report with a note on it saying that those interested in receiving a copy of it could do so by writing directly to you.

I had rather extended discussions about this program with Columbus Iselin (and Art Maxwell) the first evening in Monaco. Columbus was quite commendatory about the program in general and the way in which it had been conceived. His one solid criticism was that it should be broken down into what part of the program was to be carried out by what agency, and what laboratory was going to do that piece of the work, what money they were already spending on that sort of work in the area, and then a new calculation made of the new money that was needed. He said that just for the hell of it before he died he would like to see one good oceanographic program competently laid out and conducted and on the basis of honest accounting.

I replied to him that his New England conscience, if carried to such extremes, would louse up the whole world oceanographic business, that we had every intention, nevertheless, to carry out precisely his recommendation, but this had to be carried out as the next step. We could not tell what agency or laboratory was going to do what until we found out what part each wanted, and was prepared, to carry out. Having found that out we could then add in what money they were already spending in the area and come up with a more "honest" reckoning of total costs. But this was the next step in the procedure and there had not yet been time to carry it out.

Dr. Schaefer

-5-

January 4, 1962

I gathered (a) that you had told him substantially the same thing, (b) that he was reasonably satisfied, and (c) as one of the older, prime oceanographic promoters in the world his protestations about "honest" accounting was primarily for the record, and that he wished us well as entrepreneurs learning the ropes.

Also late one night there came from George Deacon what I considered to be a confession from the soul: "Chapman, says he, when I speak about these ignorant fishery fellows I want you to know that I am speaking about my own and not about you EPOC fellows." I do not think a finer compliment could have been paid to the EPOC program or organization. The good Dr. Deacon does not wear himself out heaving bouquets at the odd fishery fellow.

Lastly, Gerry Howard had sent fifty copies of the EPOC program to Ursula Duffus in Rome. The U.S. delegation distributed these to the other delegations comprising the Fishery Committee of the FAO General Conference and spoke some explanatory words. No action was requested or taken. Peculiarly enough a fellow who read it and commented favorably to me on it was the Yugoslav delegate with whom I became friendly, and who was by profession a fishery economist.

In passing through Washington hurriedly just before Christmas I heard on various grapevines (a) that Undersecretary of the Interior, Jim Carr, was on his ear because a bunch of outsiders were setting up his ducks in a row and intending to spend his dough without consulting with him, (b) that he didn't have any new oceanography dough anyway because the Bureau of the Budget had just cut his throat which he didn't know because they had done it so skillfully that he didn't feel it, and he hadn't shaken his head yet, and (c) that the EPOC scheme would have to take its place behind the Indian Ocean Expedition, the Tropical Atlantic Program, the Hawaiian Biological Laboratory Program, an Investigation of the Red Canals of Mars, and various other odds and ends of oceanography around and about.

However these are details of the nature with which any competent Chairman of a Committee on Implementation is prepared to cope, and I am certain that Dr. Sette's confidence in your ability to cope with such has not been misplaced.

Along with other members of the Committee (Bjerknes, Menard and, ex-officio, Sette) I am sending copies of this to Spilhaus, Revelle, Wakelin McKernan, Herrington, Maxwell, W. Wooster, Humphrey and Finn in order to remind all hands that the EPOC Committee on Implementation in its lower

VAN CAMP FOUNDATION

Dr. Schaefer

-6-

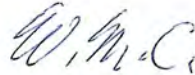
January 4, 1962

eschelons is boring steadily from within and without (mostly without money for implementation). This is also to remind Herrington that he had better get on the stick in respect of the diplomatic aspects of this implementation procedure.

I assume that Commodore Ryschkov is a man of his word and that the Russian interest will get us the funds we need as it has done for the ^vastonauts and others.
λ

Sincerely yours,

VAN CAMP FOUNDATION



W. M. Chapman
Director

WMC:reb

VAN CAMP FOUNDATION

FILE	033-425
JAN 1962	
Admin.	
Fish.	(O)
Ocean.	(O)
January 5, 1962	
Libr	
Clerk	

Dr. Günther Böhnecke, Secretary
Special Committee on Oceanic Research
34 Never Wall
Hamburg 36, Germany

Dear Dr. Böhnecke:

I did not arrive home until December 23, which accounts for my not having answered your letter of 28 November more promptly. My desk is a mass of unanswered correspondence that accumulated during the nine weeks that I was gone, my files are in a more confused condition than even normal. I find that I promised to give a paper at an industry-government symposium here on January 8 that I had forgotten about, and the paper for which I have not written: and I require to prepare for the trip to India within three weeks, as well as write the paper for that, prior to which I must reduce these other matters to some semblance of order. I put these excuses forward as reasons why I am not answering your letter with more precision. However I wish to get you off such information as I have readily available because if I do not do this much now, I will not get it done for another two months.

1. The headquarters of CCTA/CSA is at Lagos, Nigeria, Private Mail Bag 2359. The Director-General is Mr. Claude Cheysson, a quite remarkable and able French national. This organization has no marine research facilities of its own, nor is that contemplated in the future. As presently constituted it is an agency by the black countries of sub-Saharan Africa designed to promote cooperation among them in scientific and technical matters of common concern. Amongst the fields it has chosen to augment by its assistance is "Sea Fisheries and Oceanography."

2. The Inter-African Coordinator for Sea-Fisheries and Oceanography for CCTA/CSA is Dr. E. Postel, who does this work (and quite energetically, I may add) as a contribution service. His place of employment and address is O.R.S.T.O.M. (my rough recollection of the French "Organization Recherche Scientifique et Technique d'Outre-Mer"), 24 Rue Bayard, Paris, France.

Dr. Böhnecke

Dr. Postel has more information on the Tropical marine research stations of Africa than I have and I assume that his files are in better order than mine. Accordingly I am sending a copy of this letter to him in the hopes that he will correct any errors or omissions that I have made in it.

Dr. Postel also has no research facilities at his disposal in Tropical Africa. His title quite accurately describes his function in this respect. As coordinator however he has been quite active, and his efforts have been fruitful. Through his energies CCTA, CSA convened a Symposium on the Sea Fisheries and Oceanography of East Africa in Cape Town in September, 1960; a Symposium on the Sea Fisheries and Oceanography of West Africa in Monrovia in early December 1960; and a Symposium on African Thunnid^A in Dakar in mid-December, 1960.

Out of resolutions adopted at the second and third of these conferences grew what is now called the "Guinea Year." Since this is still growing I shall give you only its bare outlines and refer you to Dr. Postel and to Mr. Vernon Brock, Bureau of Commercial Fisheries, Department of the Interior, Washington 25, D. C. for more precise and continuing information.

This started as two quite separate ideas: (1) a trawling survey of the West African continental shelf from Mauritania to Angola which would include oceanographic as well as fishery and other biological observations; and (2), quite separately, an oceanographic reconnaissance of the Gulf of Guinea which would include observations pertinent to an understanding of the occurrence and variability of pelagic fishes (primarily tunas and Sardinella).

There was no intention of these campaigns being undertaken simultaneously. As a matter of fact no money, men or facilities were in sight with which to undertake either at the end of 1960. However both of these seeds fell on fertile ground, have sprouted and are now growing rather vigorously side by side. ICA of the United States (now called A.I.D., Agency of International Development in a reorganization) is prepared to underwrite a good share of the cost of the trawling expedition phase of this, and Mr. Brock, on behalf of the U.S. Government, is aiding Dr. Postel and others in the programming of the project. A meeting was held under the auspices of CCTA, CSA in Lagos in August 1961 for pulling together loose ends, among Postel, Brock and the directors of several of the laboratories to be referred to below. The French Government has pledged certain assistance also, including bolstering the scientific staffs at Abidjan and Pointe Noire during the campaign to work up samples more rapidly. I.R.S.T.O.M. is prepared to give its full cooperation.

Dr. Böhnecke

-3-

January 5, 1962

In the meantime McKernan, Director, Bureau of Commercial Fisheries has taken an energetic interest not only in this program but in the offshore Gulf of Guinea program. In this he has been aided and abetted by Admiral Stephan, U.S. Navy Hydrographer, in most practical ways such as with ship time and technician personnel. You met both of these gentlemen at the IOC conference as members of the U.S. delegation.

Now it is planned that both of these campaigns will be undertaken simultaneously and in a coordinated fashion during calendar 1963. The offshore campaign is still growing however, It has caught the fancy of American Academic institutions as well, including the Wood's Hole Institution, the Chesapeake Bay Institute, the University of Miami, and Texas A. and M. Accordingly it now looks as if the oceanic phase of this will not be confined to the Gulf of Guinea, as originally conceived, but will be a multi-ship, multi-organization expedition extending across the entire Tropical Atlantic. Indeed conversations I had in Cape Town during this recent trip indicate more than a casual interest in coordinating their activities in the South-East Atlantic during 1963 with the above noted program so as to extend comparable observations of the Tropics down along the coast of South-West Africa and the Union of South Africa.

While the planning of this, which has now become extensive, program of ocean research is still in a nascent state work under it at sea is already under way. Technicians from the Bureau of Commercial Fisheries and U.S. Navy Hydrographer have already been, and are currently, at sea on ships of the U.S. Navy in the area making oceanographic observations. This will continue to grow during calendar 1962. In the meantime Mr. Brock has brought in the experienced oceanographer Dr. Thomas Austin from Hawaii to Washington to begin the drawing together of Tropical Atlantic oceanographic data to the end that the survey when fully started in calendar 1963 can proceed with maximum efficiency.

I leave you to Dr. Postel and Mr. Brock, however, for the accurate details of this venture.

3. Federal Fisheries Service, Private Mail Bag No. 2529, Lagos Nigeria. This laboratory is under the direction of Mr. F.R. Johnson. It is a fishery development station and until the past year or so has been confined to internal and strictly coastal investigations because it had no vessel with which to get to sea. Its staff (Longhurst,

Dr. Schneck

-4-

January 5, 1962

Mann, and one other, aside from Nigerians being trained) are biologists, economists and technologists. Longhurst, a quite capable biologist, has joined the staff this year, having come from Sierra Leone, and sea work is beginning. They have a quite small inshore vessel of their own. Longhurst was just heading for sea, when I was there earlier this month, on a ship of the Nigerian Navy which he now has the use of periodically. The station has under construction in England an 80 foot research vessel which will be delivered to them in late January 1962 and which will enable them to expand their sea work and variety of oceanographic observations.

4. O.R.S.T.O.M. has a station at Pointe Noire Republic of the Congo (Brazzaville). It has a thirty meter vessel and I believe a smaller one. Most of the oceanographic observations that have been made in the eastern Gulf of Guinea have resulted from the work of this station. The reports of its scientific results are to be found in "Revue des Travaux de l'Institut des Peches Maritimes" published at 59 Rue Raymonde-Poincaré, Paris XVIIe.

I have not had an opportunity yet to visit the station. I do not know its correct address or the name of the Director. I understand there is some shift in senior personnel in prospect any way. At any rate for further details you will have to rely upon Dr. Postel, or upon Dr. Delais, Director of Ocean Research, O.R.S.T.O.M., 24 Rue Bayard, Paris.

5. Centre d'Etudes des Peches du Dahomey, B.P.383, Contonou, Dahomey. The person with whom I was acquainted there was Dr. Louis Vincent-Cuaz, a French national. I do not know what vessel equipment they have or what laboratory facilities, but I am acquainted with drift bottle work that Dr. Vincent-Cuaz did from a Dahomey vessel of some sort in the Gulf of Guinea. I was told in Lagos, when I came through in mid-December, that Dr. Vincent-Cuaz was no longer there, but my informants did not know whether the absence was temporary or permanent. The other person I have met from this station is M. Urlain Mehinto, Assistant technique de Peches Maritime, the same station. Mr. Mehinto is an African. I am not acquainted with the stage of his academic training.

6. Sea Fishery Service, Ministry of Animal Husbandry, B.P.1849, Abidjan. Republic of the Ivory Coast. The energetic Chief of this division is Mr. A. Lassarat, a French national. Working with him is M.E. Marchal, a biological oceanographer whose address is Service Océanographique, B.P.35, Abidjan. As at Pointe Noire, regular oceanographic observations are made in the area offshore the Ivory Coast. I do not know the sort of vessel they have available but it is at least

Dr. Böhnecke

-3-

January 1, 1962

adequate to permit them to make observations one hundred miles or more offshore. I am much impressed by the ability of these two young men and there are others on the staff, amongst whom are P.G. Rancurel, with whom I have not become acquainted.

7. Accra, Ghana. Unfortunately I am unable to find the proper address in Accra of the Fishery Service Laboratory, although I have visited it. Mr. Harrison a British national is in charge; Mr. Rawson, another British national is his second in command; there are two or three other expatriate experts. There have been two Ghanese students at the University of Washington, Seattle, the past year, on post-graduate training. I think all Ghanese effort presently is on fishery development, but there is such vigor in this that I expect them to initiate oceanographic observations before long. The Government of Ghana has submitted to the Special Fund of the United Nations a project to establish an Oceanographic Institute in the University of Ghana and I expect that this will go forward in due time.

You will remember that Ghana has joined IOC and that there was a young man from the University of Ghana representing that government at the Paris meeting. I do not remember his name and have not yet unpacked my papers from that meeting. You can find his name more quickly than I can, and I am sure that correspondence with him will yield you information on the situation in Ghana more complete than I can give you.

Ghana had under construction in England four modern purse seiners and two modern trawlers which will begin to be delivered in the spring. This will put them in the oceanography business willy-nilly because both the Tuna and the Sardinella these vessels are designed to catch occur in those latitudes in close relation to the thermocline most of the year, and they must begin finding out where that is more exactly if the vessels are to operate satisfactorily.

8. Freetown, Sierra Leone. Dr. Watts, a British national, is in charge of the Fishery Service there and is the remainder of a West African Fishery Research Organization initiated in the early 1950's by the British Colonial Office, but broken up upon the coming to Independence of Sierra Leone, Ghana and Nigeria. What facilities Dr. Watts has remaining I do not know. He was on home leave when I was there this spring.

9. Conakry, Guine'e. The only man I have met from there was M. Diallo Djubril, Director du Service des Peches Maritimes,

Dr. Bohnecke

-6-

January 5, 1962

an African whose academic qualifications I do not know and expect are not deep. Dr. Meseck will be able to inform you better on the situation in Guinea than I can.

10. There was formerly a station of O.R.S.T.O.M. at Dakar, Senegal. Postel was stationed at Dakar for a time after the war and started quite a bit of oceanographic work in connection with tuna observations. This station, now operated by the Government of Senegal, continues to make inshore hydrographic observations. M. J. Gousset, B.P.6045, Dakar Etoile, Senegal, is the Oceanographer-Biologiste in charge. They have quite a nice small laboratory and a small vessel suitable for work reasonably close to shore. The Government of Senegal has not been able to support this station adequately since independence. I believe that O.R.S.T.O.M. is now planning to aid again in building up the work here by sending in additional trained personnel and, I believe, a more adequate vessel. For the time and detail of these changes you should, however, inquire of Dr. Postel or Dr. Delais at O.R.S.T.O.M. in Paris.

I must say that I have been impressed by the vigor and depth shown in ocean research developments in West Africa. I rather expect that the work attendant to the "Guinean Year" will cause the whole ocean research establishment on the West coast of Africa to blossom forth. It is still in a rather primitive stage, but it shows all the elements of rapid growth.

As you know there are three quite good Universities on this coast, the one in Ibadan, Western Region Nigeria, the one at Accra, and the one at Dakar. The first two have not yet made their weight felt in marine research, but I believe that in the next two or three years they will begin to do so, in each instance urged on by Special Fund Fishery Projects, the one concerned with Western Region, Nigeria having already been approved, and the one in Ghana having the likelihood of being approved, perhaps in amended form, during 1962.

The situation at the Université Dakar is different. At this center is the Institut Français d'Afrique Noire (IFAN) which antedates the University and is the oldest and deepest rooted research organization in West Africa. Its Director is a quite remarkable scientist of the older school, Dr. Th. Monod. He has interests which are specific and at the same time cover a broad spectrum of natural science. Amongst other things he is a quite competent ichthyological osteologist, and there

Dr. hnecke

-7-

January 5, 1962

are not so many of us busy in this field of research in the world just now. He is a Professor of the Museum National d'Histoire Naturelle and a member of CSA. He is a driving force behind Dr. Postel, Mr. Cheysson, the Guinean Year, and all sorts of activities in the area. As much through the inspiration and drive of Dr. Monod as anything else I expect ocean research activities at Dakar to move forward. IFAN has a Marine Biological Section with laboratories at Gore'e just off Dakar under the direction of a quite competent ichthyologist, Dr. J. Cadenat.

From this account I have left out the University of Liberia at Monrovia because I know little about it. I do know Mrs. Agnes Cooper-Dennis who is a well trained biologist (trained at Columbia University, New York) and head of the Department of Biology. She and her students are working on the life histories of marine fishes in Liberian waters, as well as of Polypterus. What contribution they can make to general ocean research I do not know. My impression is that the Government of Liberia is presently more slow footed in the support of science than some of the more newly independent countries in the area, who impress me with their drive, if not sophistication and knowledge. The chief of the Bureau of Fisheries, Department of Agriculture and Commerce, Monrovia is Mr. Albert Kini Freeman.

It may be noted that the Portuguese are doing a good bit of research in marine fisheries in West Africa, principally out of Angola. The most active person in this that I know is Dr. P. G. da Franca, Director Centro de Biologia Piscatoria, Rua Dr. Antonio Candido 9, Lisbonne 1, Portugal. What vessel and laboratory facilities they have in Angola I do not know.

On the east coast there is nothing in the ocean research field from Port Suez to Laurence Marques that I know of, except the East African Marine Fisheries Research Organization, but this is a good one and perhaps actually has more ocean research to its credit than any of the stations I have referred to above in West Africa except Pointe Noire and Dakar. It is located centrally at Zanzibar (P.O.Box 668) and its present Director is Dr. D. N. F. Hall, a British national.

After some Quite excellent years of work this organization fell on hard times associated with the political instability of these last two or three years. The station has two research vessels, a small one M.V. "Research" capable of inshore localized work, and a large one M.V. "Malahine" quite capable of long range work anywhere in the western Indian Ocean. Unfortunately neither of these vessels was capable of

Dr. Bohnecke

-8-

January 5, 1962

making it to sea this year, and there was no money with which to repair them and make them seaworthy. Under these conditions of uncertain finances and future the excellent young staff has suffered depletion - one member to South Africa, one to New Zealand, one scheduled to return to England in June, etc.

This situation now appears to have passed its nadir and one can expect a solid regrowth under the capable hand of Dr. Hall. Tanganyika, Kenya, Zanzibar, and the Colonial Office (or I think more properly now the Department of Technical Development of the British Government) have committed themselves jointly to a budget which will see both vessels repaired and recommissioned this year, a new laboratory built at Zanzibar this year, and the staff replenished. With Dr. Hall is Dr. Bruce, a crustacean specialist. I believe he has no oceanographer just now, but is looking and expecting.

O.R.S.T.O.M. has an ocean research station at Nossi Bé, Republic de Malagasy. It, like the stations at Pointe Noire, Noumea, Abidjan and Dakar have done good, if some what localized, ocean research. I think one can almost say the best in the tropical ocean between them. Dr. Michel Angot has recently transferred to this station from Noumea. What vessel facilities they have I do not know, but I do know Mike Angot as a quite able research scientist particularly in basic productivity, and expect the station to gain stature from his presence.

At Lorenzo Marques there is an ocean research station about which I know nothing. Dr. Francisco, I believe is the name of the Portuguese national working there. He was trained at the Scripps Institution of Oceanography (at which Angot also spent some post-graduate time).

Next to the south is the South African Association for Marine Biological Research under the direction of Dr. David H. Davies at Durban. The address is the Oceanographic Research Institute 2 West Street, Durban, South Africa. This is really a quite new organization actually beginning in mid-1959. It centered around a new public aquarium, the admission for which it was hoped would pay for it itself and support some research too. Peculiarly enough this has happened. Also there has been support from the University of Natal and from the South African Council for Scientific and Industrial Research. A new set of quite comfortable and adequate laboratories have been just completed and occupied. The institution

VAN CAMP FOUNDATION

Dr. Bohnecke

-9-

January 5, 1962

has no sea going vessel of its own yet, but this is planned for. In the meantime in cooperation with the South African Department of Fisheries the latter's large "Afrikana II" is placed at the disposal of Davies and staff from time to time for basic productivity cruises and other work to the east of Durban in the Indian Ocean.

I am much impressed by the vigorous growth potential of this quite new organization. Hall, Davies, Angot and Francisco were planning a meeting in Laurence Marques in early January, as you no doubt know, to plan their joint work in the south western Indian Ocean.

I am sorry that I do not have more time to make a better report to you upon these matters, but perhaps I have given you leads through which you can obtain better knowledge by your own correspondence.

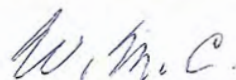
As I travelled down the coast of East Africa I could not help but be struck by the opportunity of obtaining a good deal of needed and valuable fishery development information in the Gulf of Aden and environs at small extra cost as a dividend from work going on anyway in Indian Ocean Expedition. I have incorporated my views on this matter in a letter to Dr. Humphrey, of which a copy is attached for your background information. I do not know whether anything will come of this, but at least I have cast my bread upon the water.

I spent too much time in Africa and in consequence am now badly squeezed for time. It is still my intention, however, to go to the Symposium on Scombroid Fishes at Mandapam Camp, India in January. I had rather planned to go to Ceylon on the way back (or while in the vicinity) in any event. Accordingly, if all this works out, I will be only too pleased to drop in and chat with V. Basnayake and his colleagues as you suggest.

Again, please pardon the haste of this reply's writing, and the slowness in responding. The best to you and yours for the New Year.

Sincerely yours,

VAN CAMP FOUNDATION



W. M. Chapman
Director

WMC:reb

Ref. 033.425
GFH/DKE

10 JAN 1962

The Director,
Van Camp Foundation,
Division of Van Camp Sea Food Company,
739, Golden Park Avenue,
SAN DIEGO 6,
CALIFORNIA U.S.A.

Dear Wib,

Many thanks for including me on the list for
your letter about the Gulf of Aden.

Despite your paragraph 3 on page 9, I think this
is peculiarly a subject for FAO (probably in consul-
tation with UNESCO, although SCOR would be in it if
really necessary). There seem to be two main problems.

1. To get as much data of the right type from
the area during the Indian Ocean investigations
2. To have these data (and others) assembled
and interpreted for the purposes of the project.

I am prepared to write this to FAO and UNESCO
but this action should be deferred until you get replies
from the others and have a chance to sift out something
concrete.

Yours sincerely,

GFH

(G.F. HUMPHREY)
President of SCOR

Marine Biological Association of India

Patron-in-Chief:

H THE GOVERNOR OF MADRAS

Patrons .

THE HON'BLE MINISTER FOR LOCAL ADMINISTRATION
AND FISHERIES, MADRAS STATE.

THE VICE-CHANCELLOR, ALIGARH MUSLIM UNIVERSITY.

THE VICE-CHANCELLOR, ANNAMALAI UNIVERSITY.

THE VICE-CHANCELLOR, KERALA UNIVERSITY.

MARINE FISHERIES P. O.,
RAMANATHAPURAM DIST.,
(SOUTH INDIA)

Dated... 16th January... 1962

SYMPOSIUM ON SCOMBROID FISHES

Dear Sir,

As desired by Dr. W.M. Chapman from whom you would have heard already, I am sending under separate cover (by air mail) a copy of the abstracts of the papers read at the Symposium on Scombroid Fishes held at Mandapam Camp from 12th to 15th January, 1962 under the auspices of the Marine Biological Association of India. I trust you will find the abstracts interesting.

Yours sincerely,


(E.G. Silas)
CONVENER

Dr. George Humphrey,
President,
Special Committee on Oceanic Research,
C.S.I.R.O.,
Box. 21,
Cronulla,
Sydney,
AUSTRALIA.

FILE	033. 425
	29 JAN 1962
Admin.	
Libr	
Clerk	



VAN CAMP FOUNDATION

1000 Van Camp Blvd. San Diego, California

FILE 033-425
25 JAN 1962
Admin.
25 1 Ocean <i>CB</i>
T. Sec.
Libr.
Clerk

1000 Van Camp Blvd. San Diego, California

January 22, 1962

Mandapam Camp
Marine Fisheries P.O.
Ramanathapuram District
(South India)

Dr. Warren S. Wooster, Director
Department of Oceanography
UNESCO
Place Fontenoy
Paris, France

Dear Warren:

This is straight out a plea for money. Eight thousand dollars.

*"With a quite ridiculous
I would think that this is a
matter only for FAO in the
UN family but such was
letters sent to so many people, one
a newspaper."*

Dr. Jones, Dr. Silas, and their staff have done a first rate job of getting papers together for this "Symposium on Scombroid Fishes." Their abstracts list eighty five papers, but a fair number have been received since they published this, and some that are abstracted in it have been withdrawn (as noted). I reckon that they have a net of about ninety papers. They believe that their manuscript pages will work out to about 1,200 printed pages and that the illustrations, distribution maps, etc., which are numerous will be on top of that. The cost of printing 1,000 copies of this whole lot, they believe, will run them not more than \$10,000. They can raise, \$2,000 of this themselves locally. This leaves them \$8,000 short.

They also reckon that they could get back a good sized chunk of the \$8,000 by selling the resulting books at cost, which they would wish to do. But they do not have the funds available to back the deal. They will take money in any form. An outright grant and free copies or a loan and copies for sale at cost, or any combination, thereof. They point out that a loan in hard currency would be difficult to recover except in rupees.

This symposium has nothing to do with the Government of India. It is being put on entirely by the Marine Biological Association of India. This consists of the research workers here and the odd stranger who joins, a total present membership of about four hundred. You are welcome to join if you have a good character and cash. It is a non-profit organization. The patron-in-chief is H.E. the Governor of Madras. Patrons include the Honorable Minister for Local Administration and Fisheries, Madras State; the Vice-Chancellor,

✓

Dr. Wooster

-2-

January 22, 1962

Aligarh Muslim University, the Vice-Chancellor, Annamalai University. They are an impressive hard working group. Their income is only from subscriptions. For a new organization they have come a long way.

I am asking Dr. Jones to air mail off to you, and the other recipients of this letter, a copy of his booklet on Abstracts of Papers so that you can see the scope of the material covered. There are, you will note, papers from outside the area, including a paper by Postel on the tunas of North Africa, by Suda, Akira and Shiohama on the albacore of the North-west Pacific, by Bas on Scombridae of the Spanish coast and the Spanish Mediterranean, Clemens and Roedel on mackerel and tuna in the eastern Pacific, by DeMoraes on the tuna fishery of Brazil by Rivas on the Atlantic tunas, by Schaefer on the trends in tuna investigation of the Pacific Ocean. There are a number of generalized papers such as that of Boesman on the Scombroid types in the Leiden Museum, by Blanc and Bauchot on the Scombroide of the Museum of Natural History, Paris, by Dick on the Scombroid fishes in the Museum of Comparative Zoology, Harvard University, and Miyanoto's Summary of Studies on Tuna Resources carried out at Nankai Laboratory, Japan, as well as mine on Recent Trends in World Tuna Production and some problems arising therefrom (which arrived too late to be covered by this publication of abstracts.) There are other papers by Maurice Blackburn, Gerry Howard and others in the latter category which I have not seen even in abstract.

The great bulk of the contributions, however, are by workers around the Indian Ocean, or in Japan, or in the United States, on the Scombroid fishes and fisheries of the Indian Ocean. The coverage is broad and deep. I have no hesitation in saying that there is more good research on the Scombroid fish and fisheries of the Indian Ocean included in this collection than has appeared totally in the literature heretofore. The bulk of contributions are by workers of the Central Marine Fisheries Research Institute, India, and mostly by workers here at Mandapam Camp. Nevertheless, there are quite valuable papers from workers outside India on Indian Ocean matters, such as those of Talbot and J.L.B. Smith from South Africa, Williams (an excellent paper) from East Africa, Morrow (of Alaska) on the marlins, sailfish and spearfish of the Indian Ocean, Deraniyagala on the large beaked Scombroids of Ceylon, Johklaas of Ceylon on the Scombroid fishes and fisheries of the Maldive Islands, Mimura of Japan on tuna long-lining in the Indian Ocean, Pathansali on the Scombroid fishery in Malaya, Whitley on the Scombroid fishes of Australia and New Zealand, and Baissac of Mauritius on the Scombroid fishes of Mascarene waters.

Mr. Wooster

-3-

January 22, 1962

The breadth of coverage is good: systematics, morphology, life history stages, distribution, population studies and composition of stocks, food and feeding habits, bait fish resources, growth and mortality, reproduction, behaviour, plankton and productivity, fisheries, catch statistics and catch per unit of effort, bibliography and species synopsis, research, conservation, and general economics.

I think that there would be little hesitation in saying that the Scombroid fishes (billfishes, swordfishes, seerfishes, mackerel, and tunas) are, and will be, the economically most important fishes of the Indian Ocean. The relevance of this whole group of papers to the Indian Ocean Expedition is at once apparent because if that enormous activity is to have any relevance to the development of the latent fisheries resources of the Indian Ocean at all, then that relevance will be primarily directed toward the Scombroid fishes, as being the most truly oceanic of fishes here in their distribution.

For the persons other than fisheries people engaging in the Indian Ocean Expedition and administrators, entre preneurs and the general interested public who are interested in that Expedition, there nowhere exists a source book which would remotely compare with the combined papers of this Symposium if they were published.

As a matter of fact there is entirely too much wealth of papers and material included here to be the proper object of a Symposium. It is quite impossible to cover it in the few sessions of time allotted here. It can be skimmed over only in the most cursory fashion. This is reference book material to be put on the shelf and used for years.

The Dakar Symposium on African Tunas in December 1960, was marked by a paucity of materials, and a generous selection of ideas, because very little was known of the West African Tunas and their fisheries. The Hawaiian Symposium on Tunas was marked by a wealth of materials presented by sophisticated researchers of the United States and Japan in particular who were on the forefront of tuna research. There the discussions amongst the workers was perhaps even more important than the papers That they had submitted.

Wooster

-4-

January 22, 1962

This Mandapam Camp Symposium is quite a different matter indeed. In all new areas of investigation there is a great deal of brush to be chopped and land to be cleared before one can see the size and shape of the problems requiring sophisticated inquiry. The Indian Ocean is large and varied; the stocks of scombroid fishes in it are large and numerous; the fisheries upon them are important; primitive and highly varied. The correspondence among workers in different parts of the area is poor and slow because of the costs and difficulties of transportation.

The essence of this Symposium then, is not the discussions at it but the wealth of collected background material which by some means must be made available to all the research workers who are now active in this field and who will come as this field of investigation grows, as it must do.

In essence what is wanted is \$8,000 and it is wanted quickly. The volume can be published and distributed within six months of the time that assurance is received that the money will be forthcoming. It would be highly desirable if this were done so they would be available prior to the FAO World Conference on Tunas to be held this summer in La Jolla. At any rate it would be useful if all the workers in the Indian Ocean Expedition could have copies. I would like to have one myself, and for most submitted papers there is only a single copy with illustrations.

This is not very much money, but I do not know how to raise it quickly. You have some money available for such purposes so I am directing this letter to you. Art Maxwell has money of this sort so I am sending a copy to him. John Lyman is going to have some money, so I am sending a copy to him. Jack Marr will have some money for Indian Ocean work, and this is certainly a good use for some of it, so I am sending a copy to him as well as Brock and McKernan. There is the possibility that A.I.D. is finally getting cranked up so that it can do something so I am sending a copy to Herrington. I do not know whether Bob Snider or Dick Ryther have any money of this sort, but on the odd chance that they may have I am sending copies to them and also to Athelstan Spilhaus, who may very well have his hands conveniently close to a set of purse strings. These are the only people I know who have, or may have, this sort of money or know where

Dr. Wooster

-5-

January 22, 1962

it is to be found. The trouble with such a shot-gun operation as this is that everyone will get hit by a buckshot or two, but nobody will get hurt bad enough to drop. I will be on tour in the back currents of this sector of the world for the next six weeks or so and will be able to do nothing more about this until I surface again sometime in early March. I am appointing you as a committee of one to look into it.

If you have the dough write and tell this to Dr. Jones and advise the others to whom this is being circulated. If you have a piece of it, see if somebody else can dredge up the remainder. If you have none of it, see if somebody else does have. I would appreciate it if you would conduct correspondence directly with Dr. Jones, with copies to me. My secretary is forwarding copies of mail received at my office prior to February 10 to me at Singapore, and I would like to have some idea by that time how this thing is going.

SCOR at its last meeting discussed actively (a) using Indian Ocean Expedition to stimulate the development of all branches of ocean research around the Indian Ocean, (b) the high desire of establishing a good ocean research station in the Tropical area and (c) the great virtue in supporting groups of active research workers as opposed to governmental agencies.

It was not wholly clear to me how much of this was talk and pious intentions and how much was real desire and determination to act. In any event I am sending copies of this to George Humphrey, George Beacon, Bohneke, Columbus Iselin and Roger Revelle also in the hopes that one or more might be stimulated by it. I am sending a copy to Jim Wakelin also, just in case IGO of the U.S. Government might be interested.

It was my contention at Monaco (subsequently mentioned in my letter to Humphrey on the Gulf of Aden situation, in reference to Hall's EAMFRO at Zanzibar) that one did not wish to contemplate the establishment of new tropical ocean research stations until one thoroughly examined and exhausted the possibility of getting more good out of the ones that existed. Hall's station at Zanzibar is an excellent example of a grossly under-financed tropical ocean research station well able to be helped and expanded to good effect.

UNESCO

Dr. Humphrey
There is like
Rockford Springs
to do the job
Vaux and Robbins

Kesteven

NS/9/52.012

WSW:dnr

2 February 1962

? 425

To : Mr. M. Adiseshiah, Assistant Director General
Through : Professor V. Kovda, Director, Department of Natural Sciences
From : Dr. W.S. Wooster, Director, Office of Oceanography

Subject: Regional marine science project in western north Indian Ocean

The attached project results from consideration of the attached report of Dr. W.M. Chapman (Chairman of the SCOR Working Group on Fishery Oceanography) and from discussions with Mr. Ralph Townley of Special Fund. The project is too small for Special Fund and too large for Regular Program or EPTA. Mr. Townley believes, however, that the project is a desirable substitute for a Special Fund proposal presented by Somalia.

I believe it would be useful for Unesco to stimulate the development of this project for the following reasons:

1. It is a logical extension of our sponsorship of the Indian Ocean Expedition into a field of potential economic application.
2. It is a very efficient and inexpensive method of obtaining useful information through the use of existing facilities.
3. It would establish the rôle of Unesco in the application of oceanographic research to problems of economic importance.
4. It would provide useful experience in active interagency cooperative between Unesco and FAO.

Although I am convinced of the technical soundness of this project, it is not clear to me how it should be financed. I would therefore appreciate your advice on how to proceed.

W.S. Wooster

PROPOSAL FOR REGIONAL MARINE SCIENCE PROJECT IN WESTERN NORTH INDIAN OCEAN

1. Purpose of project

Investigation of environmental conditions and processes affecting the pelagic fisheries of the region.

2. Countries involved

Aden, Somalia, East Africa (Kenya, Zanzibar), Tanganyika

3. Nature of project

During the period 1961-1964 many research vessels will be operating in the western north Indian Ocean as part of the International Indian Ocean Expedition (see attached chart). With possibly slight modification of their scientific programs, these vessels can provide much of the basic environmental data necessary for evaluation and understanding of the pelagic fisheries potential in the region. For example, the distribution, abundance and availability of the important food fish of the region are undoubtedly related to the changing monsoons and their effect on the horizontal and vertical circulation in the surface layer and on the distribution of temperature, salinity, nutrient elements, phyto- and zoo-plankton, etc.

At the same time, active fisheries programs in Aden, Somalia and Zanzibar, if adequately supported, can obtain much of the fisheries data which must accompany the meteorological and oceanographic data from the IIOE, in any overall analysis of the fishery oceanography of the region.

It is proposed that a competent fisheries oceanographer and an assistant be based either in Aden or Zanzibar, to:

1. Explore the best ways of obtaining and using pertinent data on IIOE vessels.
2. Obtain for analysis other pertinent oceanographic and meteorological data from the region.
3. In cooperation with local authorities (university, fishery, meteorological, maritime) establish network of observational points to obtain data on weather, coastal oceanographic conditions, fish landings, etc.
4. Provide equipment, where necessary, to such observation points, fishing vessels, etc., to amplify coverage of area.
5. In cooperation with local marine scientists, to analyze all available information from the fisheries oceanographic point of view.

4. Estimated costs

Experts (senior, 1/24; junior, 1/24)	\$67,000
Transportation	6,000
Equipment	<u>27,000</u>
Total	\$100,000

NB: Close coordination of this project with the work of FAO, AID and other agencies operating in the area is essential.

VAN CAMP FOUNDATION Division of Van Camp Sea Food Company

739 Golden Park Avenue, San Diego 6, California

February 6, 1962

Davac, The Phillipines
28 January, 1962

Dr. G. Böhnecke
Special Committee on Oceanic Research
International Council of Scientific Unions
34 Never Wall
Hamburg 36, Germany

FILE 033-425
12 FEB 1962
Admin.
2 Fish.
1 Ocean. <i>90</i>
Sec.
Libr
Dr. ^{lerk}

Dear Dr. Böhnecke:

Prior to leaving San Diego for India I had no time to write to Dr. Basnayake respecting your letter of 28 November nor that I was intending to visit him in Colombo pursuant thereto. Furthermore my travel plans for after the Symposium at Mandapam Camp were not sufficiently firm when I left so that I could have advised him of my expected time of arrival had I had the time to do so.

In the event, I spent the week of 15-21 January touring various fishing ports in South India and arrived in Colombo from Madras on the afternoon of Sunday, 21 January. The next morning I set out to locate Dr. Basnayake. I found him at last in a branch of the University of Ceylon attached to the large public hospital on Kissy Road in Colombo. Dr. Basnayake is a youngish (about forty) specialist in human physiology. He is Professor in the Department of Physiology of the University. He had a lecture to give at eleven a.m. so that our first meeting was brief. He expressed himself as delighted that SCOR had sent someone down to talk with them, and we arranged that I should meet with their whole group the following evening at five p.m.

Before proceeding further some note on current events in Ceylon may be useful. The principal export products of Ceylon are tea, copra, and rubber. She requires to import substantial necessities, fish being among her substantial import items. The world markets for tea, copra and rubber are all depressed, and have been for some little time. Thus Ceylon's earner's of foreign exchange are not earning very well, and her expenditures of foreign exchange for other than necessities have had to be curtailed drastically.

Dr. Böhnecke

-2-

February 6, 1962

The economic stresses brought about by the above, and the Government's attempts to deal therewith, have occasioned decreased real earning power of the Ceylonese laborer. As a consequence there has been continuous labor unrest for some period of time, strikes of stevedores, then taxi drivers, then bank clerks, then this, that and the other thing. This continued labor unrest has contributed further to the unsatisfactory condition of the economy noted above.

In view of the fact that no consistent uptrend is foreseen in the world prices of tea, copra and rubber no short term relief is in sight for the above condition. Ceylon is a small country. It has a population of only about 10,000,000 persons (25% less than the small State of Kerala in South India). Its economy is largely agricultural. Its agricultural trends do not seem to me to be in a very advanced state. The economic burdens of independence as a sovereign nation are substantial. As with so many brave new countries only time, and information beyond my scope, will tell whether the local economy is strong enough to bear these burdens.

My reason for mentioning these matters is only to emphasize that when the Government of Ceylon, and the Ceylon Academy for the Advancement of Science, say they have no money they are not just crying poor mouth. Every drain on foreign exchange, no matter how slight, is closely guarded against; the Government also does not have money for necessary internal expenses.

Some other odds and ends of incidental information gleaned from a variety of persons talked to in Colombo may be useful in a background way before describing our meeting.

A few months ago the Ceylon Academy for the Advancement of Science had been under sharp attack by the Colombo press, and through letters to the editor, under the charges that it did little to Advance Science and practically nothing to Advance Ceylon. They had annual meetings at which they fussed at each other, but at which little contribution to science was brought forward, and in between annual meetings the Association was comatose. - - Or so the complaints went.

In reaction to this public criticism some of the younger men in the small scientific community attempted to breathe life into the Association and it was thus that young Dr. V. Basnayake became General Secretary of the Association and the Association became interested in SCOR and The Indian Ocean Expedition.

Dr. Bohnecke

-3-

February 6, 1962

Dr. Basnayake has no experience with, or particular interest in, the ocean or research connected therewith, but this Indian Ocean Expedition did seem to him and the others to provide a rallying point around which interest might be developed in the Ceylon Academy for the Advancement of Science. Accordingly he initiated correspondence with you, and set about stirring up what interest he could in the subject in Colombo.

They approached the Government of Ceylon to see if they could be participants in the Indian Ocean Expedition and if they could put themselves forward as the Ceylonese National Committee for SCOR. There was a considerable amount of discussion, and some reluctance, in the Ceylon Government concerning this but finally they were given permission to do so under the strict instruction that they were in no fashion to commit the Government of Ceylon to the expenditure of so much as a rupee, and they could not expect any financial support in any amount from the Ceylon Government for their own activities in respect thereof.

Having this grudging and restricted permission they nevertheless went forward attempting to stir interest among affected Departments of the Ceylonese Government. Amongst these was the Department of Fisheries. It was the letter in reply from the Director of Fisheries which occasioned Dr. Basnayake's letter of 25 October. In it the Director had suggested the possibility of floating equipment (trawler's, patrol boats, exploratory fishing vessels) being available for sea work in connection with the Indian Ocean Expedition.

Tuesday morning I met with Mr. deFonseca, the Director of Fisheries for Ceylon, and three of his scientific staff: Dr. A.C.J. Weerekoorn, the Director of Investigations; Dr. T. P. Goonewardene, the biologist working on Scombroid fishes (tuna, seer fishes, sail fishes, and the like), and Dr. N. N. de Silva, the hydrologist.

Mr. deFonseca I had known before on the delegation of Ceylon to Law of the Sea Conferences at Geneva in 1958 and 1960. He has no scientific background, but is a trained administrator and civil servant. Prior to his present tour of duty he was what is known in Ceylon as a Government Officer, the equivalent of the District Officer in India and Pakistan and under the old British Administration, i.e., a post which ordinarily included both judicial and administrative functions to some extent. He has been Director of Fisheries now for a little more than four years and, I am told, is a quite capable one. Without going into details I will say that anyone who can stay on top of the job of being Director of Fisheries in Ceylon the past four years has ability beyond the normal.

Dr. Bohnecke

-4-

February 6, 1962

de Fonesca has, purportedly, been vexed by a research branch which was equipped with some reasonably well trained personnel which did not, however, accomplish much that was useful, for lack of any research program, direction or responsibility. Accordingly all hands worked at what they personally wanted to do, or not much at all. There was a reluctance for the research workers to get off the beach and do work in a regular manner at sea. There is no possibility of working on the indigenous fishing craft, which are very narrow dugout native canoes. There was not much incentive or desire to get to sea on the patrol craft, or the few larger fishing craft which come in recent years as an adjunct of the "Colombo" plan.

Dr. Weerekoon has just recently come aboard as Scientific Director of the Department of Fisheries' research program and I am told that he is a firm handed administrator from whom a good deal is expected, and from whom some sense of direction is already coming. I know nothing of his training background. My conversations with these people did not leave me with the impression that they had any great comprehension of the relation of meteorology or oceanography to their problems of pelagic fish availability, or that they were about to charge out to sea to find out more about it.

Dr. Weerekoon's started his conversations a little testily by saying that they had heard a good deal about plans to train their scientists by taking them aboard the research vessels of the Indian Ocean Expedition, of the considerable benefits in understanding of fish availability problems that would result from the work of the Indian Ocean Expedition, and the amount of general cooperation that was intended. Then they had heard nothing further from anyone connected with SCOR until I had showed up. What was the matter?

I explained my lack of connection with SCOR, and my reason for coming out of my way to consult with them and be useful in whatever way I could be. He calmed down and said he would be along to the meeting that evening. We then fell to talking about tuna, the Symposium at Mandapam Camp, and related subjects and all hands warmed to the discussion which seemed to be of real interest to them.

In the afternoon I went down to look at the vessels in question. The trawlers consist of two of what the British would call mid-water trawlers, steampropelled and a little on the old side. I only saw one. The other has been undergoing annual repairs for sometime. These two vessels go

Dr. Böhnecke

-5-

February 6, 1962

back and forth from Colombo to the Wadge Bank, which lies just off the tip of South India (Cape Cormorim). They average not quite two trips per month. They do not go elsewhere, nor do I think that they are likely to be available to go elsewhere. Their catches are rather a key ingredient of a government sponsored fishery nexus which includes a freezing plant; a distribution scheme, local ice box sales points, chilled lorries, retail outlets, etc. Without commenting on the overall practicality I can say that the two trawlers are a necessity to it. They are not fitted with any scientific gear, nor do I believe that any scientists regularly, if at all, accompany the trips, I am not at all sure that they would be encouraged to do so.

The two "Canadian type" exploratory fishing vessels were not in evidence, both also apparently being under repair. There were two small Japanese long-liners in the fishing harbor which are a part of a Japanese - Ceylon scheme to train Ceylonese fishermen and increase the local fisheries yield. They are manned primarily by Japanese crews and they are used for the production of tuna (disposed of in the above noted nexus) not in any slightest way for research. I did not see any of the "patrol" craft. I was told that one of the scientists had once initiated the occupation of a regular hydrographic station for surface parameters using one of these vessels in the outer Colombo harbor, but he had only gone on the first trip and had thereafter left it to the vessel's complement to take the readings. The readings they took, I was told, bore no necessary relation to the condition of the sea and the program petered out.

As the above might indicate, I am not sanguine about the voluntary effort that might arise from the Ceylon Department of Fisheries to enhance the Indian Ocean Expedition. I think fisheries science and administration are still somewhat apart in that area, and that there is little capacity for voluntary contribution of a useful sort, although this might well be developed in a complementary fashion to other programs going on in the offshore area if anyone had the energy or interest in working at this development.

That evening there were unseasonably heavy tropical rains with thunder storm and I suppose as much as an inch and a half, or even two inches, of rain may have fallen on Colombo in a rather short period of time. Nevertheless, Dr. Basnayake arrived in his little Austin through the storm to pick me up on schedule and take me to the meeting place.

Dr. Böhnecke

-6-

February 7, 1962

The meeting place was a small L shaped one story building sitting in an open clearing which was more or less of a morass due to the rains which were still going on. Dr. Basnayake explained to me that this new building was what would be the gate keeper's, or watchman's, house for a larger building for the Ceylon Academy of Science that would appear in the adjacent field in due time if all went well.

Gathered in this room, besides Dr. Basnayake and myself, were Commodore Rajan Kadirgamat, Captain of the Ceylon Navy (while I am not certain, I believe that he is commanding officer of the Ceylonese Navy); Dr. M.S. Tambich, Lecturer in Botany, University of Ceylon; Dr. A.N.S. Kulasinghe, Deputy Chief Engineer, Colombo Port Commission; Dr. C.H.L. Sitimanne, Deputy Government mineralogist, Department of Mineralogy; Dr. D.J. Jayasinghe, Director, Department of Meteorology; and Dr. Ladi Ekanayaki, Assistant Director, Department of Meteorology.

Dr. Basnayake waited to see whether anyone would show up from the Department of Fisheries through the storm. When nobody did by the time tea was over, the meeting got under way.

The first item was a letter from Dr. Snider and one from you inquiring as to whether the group in Ceylon was to act as an ad hoc committee for Ceylon with respect to the Indian Ocean Expedition or whether it was prepared to act as a Ceylonese National Committee for SCOR on a continuing basis. Dr. Snider had set out the financial aspects of the latter. In view of the fact that this group had no money whatever to spend for this purpose except from their personal pockets, which I do not believe are very deep either, they were on the verge of instructing Dr. Basnayake to respond that they would act only as an ad hoc group.

This did not seem to me to be fully in the best interest of this group nor of SCOR. Accordingly I reviewed for them briefly the financial situation of SCOR, the voluntary nature of the National Committee contributions to SCOR had been discussed at the Monaco meeting, and the general desirability (in my view) of constituting themselves as a full National Committee as they had received the permission of the Government of Ceylon to do. I told them that it was my personal opinion that their participation as a full National Committee was more important to SCOR for the present than such money as they might be able to bring to the support of the Secretariat.

This information was received by the group with obvious relief. They reversed their decision and instructed Dr. Basnayake to respond that they would serve as a National Committee from Ceylon. I hope that I did not incorrectly inform them.

L Böhnecke

-7-

February 6, 1962

The second topic was tide gauges. There is presently one tide gauge operated in Colombia by the Port Commission. Commodore Kadirgamar inquired as to what was involved in putting in a tide gauging station. Dr. Kulasinghe gave him an outline of how this was done. Commodore Karirgamar said that if someone would provide him with drawings and blueprints of how to go about this he had the shop facilities and labor available to put such a station into operation except for such non-Ceylonese materials as a good clock work. If the exotic equipment and knowhow were provided he would be prepared on behalf of the Navy to install and operate such a station on the east coast at Trincimalee and on the north coast at Jaffna.

Dr. Kulasinghe said that aside from the Colombo station, which was under his charge, he was also prepared to put in a station of the same sort at Galle on the southwest coast. He thought that somewhere in warehouses there was a suitable spare clock work mechanism. If he could locate this, put it in repair, and establish the Galle station at no cash cost to the Port Commission, he was prepared to do so.

After a considerable amount of discussion as to the form in which the data from the tide gauges were to be reported it was decided that the simplest thing all the way around was to make photostats of the traces and send them along to Dr. Rossiter so that he could take such means as he desired from them. This subject was concluded by a decision to inform Dr. Rossiter of these facts.

My personal opinion is that if Dr. Rossiter or someone else is interested in having proper tide gauge stations installed at Jaffna, Trincomalee and Galle, and see that the Colombo station is operating properly, then they had better make a trip to Ceylon for that purpose, take these people by the hand, and lead them along the proper paths. Commodore Kadirgamar is a most enthusiastic fellow and will do what he can to be of assistance, but he obviously knows no more about installing a tide gauge properly than I do.

The third subject to be brought up was meteorology. The two meteorologists present seemed to me to know their business quite thoroughly and be solidly interested in doing everything they could to be helpful and cooperative.

With respect to radiosonde they said that they were quite prepared to send equipment aloft twice a day or every day if they had the equipment or the money with which to acquire it. But the cost of sending a shot

Dr. Böhnecke

-8-

February 6, 1962

was 100 rupees (about \$21.00 U.S.). They had only sufficient funds to take a radiosonde probe every other day. They would continue to do this and report the data to wherever it was wanted. If somebody provided funds or equipment for more frequent probes they would do the same for those.

There was a considerable discussion between Commodore Kadirgamar and Dr. Jagasinghe as to how meteorological observations from ships at sea were to be received and reported to the Bombay Meteorological Center for IOE if and when the latter were established. There seemed to be a good deal of uncertainty among the two as to how this was done just now and how it was to be done in the future.

The Ceylonese Navy was in the process of taking over recording weather and other reporting from ships at sea from the Royal Navy, and the Commodore was prepared to see that the Ceylonese Navy reported this properly to wherever it was to be reported. There appeared to be uncertainty as to where the reports were to go to and from whence they were to come. A question arising from the latter was whether the Navy was to take responsibility for receiving at sea observations from military vessels only or from both Navy and commercial carriers, or whether the Department of Meteorology was to undertake the monitoring and reporting of observations from commercial ships at sea.

It was pointed out that the responsibilities of Ceylon for such reporting covered a wide swathe of ocean stretching from South India to Antarctica. I gathered the impression that very little attention was directed to obtaining such observations from any ships at sea at the present time, and that such observations as were monitored was not very likely to get on the world reporting system.

Nevertheless Kadirgamar and Jayasinghe were both most enthusiastic about the possibilities of them expanding these sources of information. They have the radio equipment, operators, and channels. In this also I think that it will be necessary for someone knowledgeable in this branch of the business to come down to Ceylon and get the system organized and working if it is really desired to get adequate reporting from ships at sea recorded in Ceylon and transmitted properly to appropriate centers. It would appear to me that this is one of the more practical things that Ceylon could do to assist the Indian Ocean Expedition without the expenditure of money and within their capabilities.

Dr. Böhnecke

-9-

February 6, 1962

Jayasinghe brought out the fact that the island station at Male in the Maldives was dead as far as he was concerned. They had trained some young Maldivians to take meteorological observations but after they had been back in the islands for awhile the Maldivian authorities had fired them on the alleged grounds that they were faking the observations instead of making them. As Jayasinghe pointed out, he could train any Maldivians sent to him, but he could not make them honest.

Kadirgamar said that if he was doing it he would not bother with the Maldivian's anyway. The Royal Navy had an establishment at Gan Island in the southern Maldives and if an island station were wanted in that sector of ocean then it should be set up at Gan Island and manned by the Royal Navy.

I cannot agree more with the Commodore. Without going into any detail, confidential reports I have seen and conversations I have had indicate that the governmental and social background of the Maldivian Sultanate is not quite so conducive to the conduct of scientific research as that of Haroun Al Baschid was.

The fourth subject to be taken up was the harbor facilities.

It comes down to something like this: If the vessels are government vessels or working for governments on bona fide ocean research, and particularly if this Indian Ocean Expedition can be said to be under the aegis of UNESCO and therefore practically a United Nations operation, then there will be no trouble in giving these special harbor facilities if the Ceylonese Navy knows sufficiently in advance what vessels are likely to call in at Ceylon, their size and characteristics, and about when they are likely to arrive as well as what special services they are likely to require.

I gathered that if this previous liaison was not available so that the local National Committee could pave the way then the local customs authorities would be expected to be their normal sticky selves. If such liaison were established, however, Kadirgamar said he had docking facilities under his direct charge at Trincomalee which would readily handle most research ships and where under the sheltering arm of the Ceylon Navy much in the way of cooperation could be extended which might be difficult for the civil authorities to arrange. He pointed out that a Swedish research vessel had been in the previous year and that they had had a difficulty in giving her all services requested. But they had known in advance about her and her needs.

Dr. BShnecke

-10-

February 7, 1962

While it was not flatly stated I gathered that there was no great enthusiasm for being hospitable toward Russian vessels whether under guise of research or not, because of the normal activities of such vessels in propagandizing in the direction of subverting the local government. A Russian whale catcher was in a short time ago for this purpose. The activities of Viatiaz along shore and in ports of India during her last Indian cruise was not appreciated by the Indian Navy, and apparently Indian Navy, Ceylon Navy, and Royal Navy are still in pretty close rapport regardless of what their respective Foreign Offices are up to at the moment.

I might add along this same line that I was informed in Zanzibar in December that the riots there of last spring in which there were sixty six dead were felt by the authorities to be rather directly traceable to "Vitiiaz" stop in there on her last cruise, and if she never stopped in Zanzibar again it would be soon enough for them.

Having disposed of these points the meeting then wanted to know what Ceylon could do along the biological line. This was presumeably what I should have been able to advise them on, but I must say that I was at a loss to advise them and so told them. I am not acquainted with what plans Dr. Ryther has in this area of the world and for me to give advice that might not fit in with his or other programs would seem to me to be out of place. I suggested to Dr. Basnayake that he get in contact by letter with Dr. Ryther and learn of his plans by letter.

Furthermore, I could not suggest things that could be done by the Department of Fisheries with the vessels available to them. Certainly it would not be difficult to lay out a simple research program for them to undertake which would produce information of great value to the development of their fisheries and dovetail in most usefully with the offshore work to be undertaken by Indian Ocean Expedition. This could be done even with a relatively small amount of sea time by local scientists - but a minimum of time at sea on their part in a regular manner would be required as well as some bits of equipment (bathythermographs, plankton nets, larvae trawls, winches, etc.,) which I saw nowhere in evidence nor the money to obtain which was locally available.

Dr. Böhnecke

-11-

February 7, 1962

If one is to have observations taken in these parts that are to be useful biologically then there has to be some follow through of coordination with what is going on elsewhere, and at least in South India. There requires to be personal contact amongst the people in different parts. I doubt very much that the inshore regime of Ceylonese waters is to be as much use biologically to the Ceylonese as the general meteorological and oceanographic pattern of the Indian Ocean north of 20°S. latitude, and particularly of the Bay of Bengal and Arabian Sea, and especially of the South Indian area and the area between Ceylon and the Maldives and Ceylon and the Nicobars.

The primary fishery resources available to Ceylon are pelagic (swordfish, mackerels, tunas, sardines, etc.,) the transient conditions of the inshore waters are of little guidance in predicting what such fishes are going to do. It would have been misleading for me to have laid out any scheme of inshore research which they might have usefully undertaken to intermesh with the program offshore when I do not know that there is going to be any "program" offshore with a sufficiently consistent pattern to be useful in dealing with biological populations larger than planktonic, and in fact, personally doubt that there will be.

Accordingly, I felt that it was both politic and honest not to lead them on with any elaborate program which they might mount with the ship's pro-offered by Mr. deFonseca in his letter to Dr. Basnayake. I was not sure that those vessels would be actually available, or suitable for much research if available; that the Ceylonese biological investigators were much interested in getting out on the sea; or that there were any group of biological investigators associated with the Indian Ocean Expedition who were sufficiently interested in this sector of the Indian Ocean to put in the time that would be required to get a program initiated in Ceylon.

Accordingly, I played this rather closely and did not elaborate on what might or might not be capable of being done in this respect, and kept the conversations as general as I could conveniently do.

Commodore Kadirgamar was particularly interested in the structure of the thermocline and its variability as to depth, as all Navy men seem

VAN CAMP FOUNDATION

Dr. Böhnecke

-12-

February 7, 1962

to be these days. I asked him whether it would be practical for his Navy ships to occupy regular lines of bathythermograph observations perpendicular to the Ceylon coast at regular intervals rather than take random casts in the course of their normal running around. He said that this would be thoroughly practicable if there were some good reason for it and a program to tie into.

On this note the meeting, which had lasted well over an hour, came to an end with them all being most profuse in their thanks to me for having come by and chatted with them. As Dr. Basnayake drove me back to my hotel he said my visit had been inspirational to them and that they would be able to go forward much more securely now. He then pointed out to me what I had heard from other sources, and reported above, of the critical role this SCOR activity might well play in the viability of the Ceylon Academy for the Advancement of Science as an overall entity. At last they had their teeth into something worthwhile.

All of this bothered me more than somewhat. My discussions with them were far from inspirational. As a matter of fact, I purposely kept them in as low a key as possible so as not to over-excite them with any feeling that a large well-organized presence was about to step up and give them the inspirational assistance that they obviously did need in ocean research. Their remarks of thanks, which went well beyond normal politeness, was a measure really of their feeling of isolation from the rest of the scientific world and their strong desire to be an intimate part of it.

This is a good group of people. Each of the people at this meeting were eager and enthusiastic to do something useful and to get into the swim if they just knew what to do and when to do it. Furthermore, the Navy fellow and the meteorologists in particular have much to offer. I have a distinct feeling that if anybody wanted to work with the Fishery people some they could be brought into the fold. The only people internationally that the Fishery people have contact with are FAO people who work with them in Ceylon. Without UNESCO and FAO being in concert in Paris and Rome one cannot expect the field men ten thousand miles away to be.

Dr. Böhnecke

-13-

February 7, 1962

I must say that the above experiences are somewhat disturbing to me as have been the experiences I have had along the East African coast and in India since our meeting in Monaco. However, I am presently going through Indonesia, Malaya, Thailand and Burma after having been in Hong Kong and the Phillipines and I shall postpone any general discussion of this uneasiness until this trip has been completed.

Sincerely yours,

VAN CAMP FOUNDATION

W. M. Chapman
Director

WMC:reb

cc: Wooster
Humphrey
Snider
Spilhaus
Ryther

FOR INFORMATION

425

GH

FILE 033
12 FEB 1962
Admin.
Asst.
Assoc. <i>GH</i>
T. Sec.
Libr.
Clerk

PERSONAL

14 February 1962

Dear Wib:

In answer to your letter of 22 January, I don't have \$8000 that can be used for publication of the "Symposium on Scombrotoxic Fishes". I wish I did. It would be fun to see the reaction of our Roman friends. Aren't they organizing a world tuna conference for which this would be valuable background information?

I had \$5000 for the publication of Indian Ocean data, lost it in a recent pruning necessary because of salary increases. By the end of the year, we might be able to scrape together a thousand or so out of savings, but I don't see how any firm commitment for even this could be made before autumn, which is too late for your purposes.

I would be happy to serve as a committee of one for almost any of your varied and Machiavellian schemes, but not this one. Isn't the bonito, which I can't distinguish from a gill-raker, a member of this Scombrotoxic club?

I hope your exposé of SCOR is effective.

Sincerely,

Warren S. Wooster

Dr. W.M. Chapman
 Van Camp Foundation
 739 Golden Park Avenue
 San Diego 6, California

cc: G.F. Humphrey

FOR INFORMATION

VAN CAMP FOUNDATION

Division of Van Camp Sea Food Company

739 Golden Park Avenue, San Diego 6, California

FILE 033.425
MAR 1962
Adm.
Fish.
Ocean. <i>GB</i>
T. Sec.
Libr.
Clerk

18 February, 1962
Djakarta, Djawa

(San Diego, California
March 5, 1962)

Dr. George F. Humphrey
President of SCOR
C.S.I.R.O.
Box 21, Cronulla
Sydney, Australia

Dear George:

My faithful amanuensis in San Diego forwarded to me a copy of your letter of 10 January (along with much else) which reached me here this week. There are a number of things to discuss:

1. This trip

I had intended a trip of reasonable length and simplicity, to Mandapam Camp, Ceylon, Singapore, Sydney to see you, and home via New Zealand, Fiji, Hawaii. It has turned out quite the contrary. From Singapore I went to Hong-Kong, Manila, then to Davao where I boarded ship and toured through the Celebes Sea, Makassar Strait, Java Sea, South China Sea, for eight days back to Singapore. From there I came directly here, where I have been now for ten days. Tomorrow I go by plane via Surabia to Manado in Northern Celebes where I stay for a week, returning Surabaiya. From there I spend most of the following week by car through Bali, Lombok, and back through east, central and south Java to here, where it is planned I will reach 8 March. About two days later I leave for Medan in North Sumatra and will be in that vicinity for about one week, emerging at Singapore on, or about 15 March.

This week I received a wire from the authorities at Aden requesting me to come back through there to check out some things. Subject to approval from home, which I expect to be forthcoming, I shall do so and at the same time pick up some odds and ends in India that too fast a trip left untied, and do some chores elsewhere in southeast Asia, as well as pick up some threads in Europe, New York and Washington to the end that when I reach San Diego finally I can stay until mid-September, a desideratum which becomes more entrancing with the passage of each day here.

✓

VAN CAMP FOUNDATION

Dr. Humphrey

-2-

March 5, 1962

Accordingly my tentative schedule beyond Singapore runs presently like this:

19 March	Kula Lumpur, Malaya
20	Penang, Malaya
21-22	Pa PhuKet, Siam
23-24	Bangkok, Siam
25-26	Rangoon
27-28	Calcutta
29-30	Dehli
31	Bombay
1-2 April	Bombay
3	Ratnagir
4-5-6	Cochin and probably Trivandrum
7	Return to Bombay
8 thro 13	Aden and vicinity
14-15	Cairo
16 Rome	
17	Paris
18	New York
19-20	Washington, D.C.
21	San Diego

There is, I hope, a week in this that can be sweat out including two or three days prior to leaving Singapore, and my aim is to arrive home one week earlier than stated. On the other hand travel is sufficiently irregular and uncertain in these parts that there is always more time slippage than I anticipated, so I am allowing for this in what I hope is a realistic fashion.

I am sending copies of this to Bohnecke and Wooster and the purpose for doing so is that if anyone of the three of you have any chores I can do for you along the trail let me know % Tom Chambers, 11 Ewart Park, Singapore 10 on or before 15 March. The visit with the people in Colombo on Dr. Bohnecke's suggestion seemed to be a useful exercise. I sent him a report on it from Manila or Davao (working out of a briefcase through a secretary in San Diego has certain elements of uncertainty, such as the possibility of a hotel porter, or postal clerk stealing the stamps, or military censors, which I find to my surprise still exist, throwing the whole thing in the burn file).

Dr. Humphrey

-3-

March 5, 1962

In Kuala Lumpur I shall hope to see Dr. S. Y. Lin, FAO, in Bangkok, Alan Tubb, FAO Regional Director, and Dr. Nye Boon Indrambarya, in Rangoon, UKim, Director of Fisheries, in Dehli, Dr. N.V. Pannikar, Permanent Secretary for Fisheries, in Bombay, Dr. Kulkarni, Director of Fisheries for Bombay State; I simply did not have time to case the joint thoroughly in Cochin - Trivandrum and wish to spend about three more days doing so. I shall check in with Finn and Company in Rome for one day and go to Paris that night; find out what Wooster has been up to in the interim, and why not; probably spending an extra day there to check in with Postel and Delais at ORSTOM (can't let interest in West Africa lag); spend a day at Special Fund in New York; spend two days with McKernan, Maxwell, Revelle, Lyman, etc., in Washington, and thus home.

For trade purposes I would be obliged if the three of you would keep this itinerary and objectives to yourselves.

2. Gulf of Aden Project

Your comments were appreciated. I shall be in considerably better position to advise you what is profitably to be done after all answers are in and I revisit the place. Hickling has been through since then and may have picked up, or left, some ideas too. I may stop by London and check in with him. We have been playing leap-frog all over the Indian Ocean this past month but I have missed connecting with him. My observation is that FAO has no capabilities in this direction whatever. They have even lost Laevastu now.

What keeps recurring to me with greater and greater insistence is that the United Nations family really has no mechanism for attending to the problems of that three fourths of the world that is salt water. The FAO-IOC-UNESCO Department of Oceanography - Special Fund - EPTA combination is simply bad government in this respect which is not doing the job, and organizationally is too unsound to be expected to do it. I am getting to be more of a WOO enthusiast by the day, but more of that later.

3. Indonesia Marine Science

I am much impressed with the eagerness, drive, enthusiasms and abilities which I have run into here so far. Since I will probably report to you further on it later I will only run over high spots in somewhat telegraphic style for now.

VAN CAMP FOUNDATION

Dr. Humphrey

-4-

March 5, 1962

There is an Indonesian Council of Science (Madkelis ILMU Pengetahuan Indonesia). It is expected that by next month this will be organized into cabinet rank under Professor Sarwondo, presently of the University of Indonesia at Bogor, who will have the rank of Minister.

There has been newly established under this a National Committee on Oceanographer, the Chairman of which is Lt. Col. Wardiman, Chief, Hydrographic Office, Indonesian Navy, and the Vice-chairman of which is Dr. Gatot Rahardjo, Director, Marine Research Institute. I have conferred with both of these gentlemen and it appears that a meeting with the full committee is being set up with me when I return here 9 March.

The Marine Research Institute has not got bad quarters now - down by the fish market and aquarium. It is Hardenberg's old place and I believe you have seen it. An expansion of harbor activities there, however, will eliminate the site in good time and it is anticipated that the Institute will be removed to more commodious and less noisome location at Tjilindjing (the other side of Djakarta). It is hoped that this will be accomplished this year, but appropriations have not yet been secured.

The Institute had a two hundred ton vessel the "Samudra" but this now requires extensive over haul. It is at least half promised that ICA will put 2,000,000 ruppias for this purpose so that the vessel will be operational again before year end. I intend urging this along.

The Institute is getting a six hundred eighty ton research vessel worth \$850,000 U.S. from Japan on war reparations which will be called "Jalanidi". This is under construction in Japan presently and delivery is expected in October of this year. With this I am told comes \$350,000 U.S. worth of hydrographic and laboratory equipment. The latter is supposed to begin arriving next month.

I met the lad Soejatno who is coming down to go cruising on your "Diamantina"; two others were out on Scripps "Stranger" before she left; one will go to Hawaii for three years training in June, another is already there training under Doty.

The Department of Fisheries and Department of Fisheries Promotion are ring-leading a proposal for the establishment of an Academy for the Fishing Industry, Secondary High School for the Fishing Industry, and Primary High School for the fishing industry to be integrated with the University of Indonesia somewhat along the Japanese system and assigned to train

Dr. Humphrey

-5-

March 5, 1962

everything from navigators to physical chemists. I have examined curricula, plans, etc., and find them pretty good.

I have not drawn a sufficient bead on meteorological radiosonde and tide gauge stations yet to make a sensible report, but intend to before I leave. I understand the former is in fair shape because of air navigation needs, although there is not a marine meteorologist yet in a nation that is mostly salt water. I understand that the tide gauge situations is not in as good shape but is due for mending.

There is the feeling oft expressed here that the Dutch purposely kept them off the sea and ignorant of it for three hundred and fifty years, and by God they are now going to build it into a maritime nation come hell or high water, as it should be. I am not the one to say they will not. They have brains, drive, will power, and determination. They badly need advanced text books, advanced scientific equipment and Ph.D. types to come teach them what to do with them. I am happy to see that they have got out of the idea of a six to eighteen month tour abroad as being what makes an expert. They are shifting onto a basis of three to five years abroad on top of the best education that can be had here.

These are good people with sound aspirations which I intend to help them achieve.

4. Fisheries Oceanography

I thought you had saddled me with a lemon that was going to be mostly hard drudge-work with little reward. My secretary sent me a fistfull of preliminary answers to my letter of 25 December which did not start to get in the mail before 13 January, and I must say that I am amazed by the preliminary returns and who they are coming from. One gets the impression that a wide variety of people have been doing a lot of thinking about these matters for some time with no way to express their views and that our Working Group has sprung something that gave them a target to spray their thoughts at. One of the useful gimmicks in my letter apparently was to promise to keep their identity as to the writer confidential.

If the quality of the replies hold up to the preliminary sample I propose to circulate the whole lot sans identification, upon my return in order to stimulate further thought and reply.

VAN CAMP FOUNDATION

Dr. Humphrey

-6-

March 5, 1962

I finally got letters written to my Working Group colleagues which I mailed to my secretary from Trivandrum in late January. If she got them this project should be well underway.

Remember, anyone of the three of you can catch me % Tom Chambers, Singapore, prior to 15 March. But if you do write please send a copy to my home address too, in case of miscarriage.

Sincerely yours,

VAN CAMP FOUNDATION

A handwritten signature in cursive script that reads "W. M. Chapman". To the right of the signature, the initials "reb" are written in a smaller, simpler hand.

W. M. Chapman
Director

WMC:reb

cc: Bohnecke
Wooster

Ref. 033.425
GFH/DKE

9 - MAR 1962

Dr W.M. Chapman,
C/- Tom Chambers,
11, Ewart Park,
SINGAPORE 10.

Dear Wib,

Your letter of February 18 from Djakarta reached me today.


I shall be in Rome with ICSU and FAO on April 9, in Paris with the IOC Bureau on 10-12, in London with SCOR Executive-UNESCO Office of Oceanography (C/- ASLO, Africa House, Kingsway - HOLborn 3422) on 13-19 and then Moscow, Copenhagen, Switzerland, and Japan returning to Sydney early in May. This should give us a chance to meet without much disruption. If you are a week early we could meet in Paris, if you are on time, instead of going Paris - New York try Paris - London - New York. I am sure Warren would like to see you also.

Your impression of the working group replies is the same as mine, somehow you have unlocked a lot of pent-up feelings.

The Indonesians would not let us call there to pick up Sujatno so we shall have to wait for a few months for things to settle.

Hope to see you soon.

Yours sincerely,


(G.F. HUMPHREY)
President

Copy to San Diego

Dr G.F. Humphrey
President, SCOR
C.S.I.R.O.
Box 21, Cromulla,
SYDNEY AUSTRALIA

Dear George,

I have yours of 9 March. In an attempt to circumambulate the cause which attributed to a letter of mine dated 18 February reaching you on 9 March, I am mailing this to you directly with the request that your secretary, in her good time, would strike off a copy and send it to me in San Diego for purpose of record. This will plague you and your secretary with what my faithful anemensis puts up continually.

For more weeks than thy faithful servant deserved in penance for sins of both commission and omission, I have been in Indonesia, matters purportedly pertaining thereto or Singapore (a reasonably civilized derelict of Empire). Indonesians in some depth (or at least the aristocratic Javanese centering on Jogdjakarta for origins) feel more keenly about Irian Barat and the current encounter with the Dutch than persons outside that unfortunate country can readily realize. Soejatro was most disappointed in not being able to go with you, as are all of those directly associated with this action. He has been placed by Wooster and Co. on "Vityaz" which calls in June, and of course will be admitted. As a matter of fact the Russians have double-crossed Warren again, as is their want. After he pleaded with them to accept Soejatro and they finally acceded grudgingly, they unilaterally invited three other Indonesians along without advising Warren, who discovered this in Indonesia, I can't say I like the breed.

Warren and I accidentally joined forces in Djakarta in the second week in March, met with their newly established Committee on Oceanography and, between us, I believe have the Indonesian oceanographic effort and intention reasonably well bracketed. My observation of Wooster in action there elevated my respect for him, which was probably already too high.

At long last I am homeward bound. Tomorrow I will be in Pedang. Then Phuket, Thailand (expressive of my present appreciation of the current scene). Then Bangkok to confer with Tubbs and Co. Then Delhi to parley with Pannikar. Then to Bombay for dealings with Kulkarni and some chores for Wooster. Then to Cochin for business and back to Bombay. Then presumptively on 5 April to Aden. What happens in Aden is not precisely under my control as I may require to visit the Hadhramaut which would occupy some days extra. I have some chores to do in Cairo which should take one day or at most two.

Accordingly I may miss you in Rome, and I have a day or two of chores to do there. I have no desire to be in Paris whilst the august fathers superior of IOC are in session, although I would most dearly relish an honest French meal after weeks of nasi putih and assorted condiments. My present schedule, which is malleable, calls for me arriving London Saturday 14 April, and I doubt that I will catch you up sooner.

Accordingly would you leave word with Don Finn in Rome where you are likely to be staying in London. I have no idea where I will end up there. Recent visits to London have seemed to coincide with the occasion of marrying off of royal stock, livestock exhibitions, Whitsun Tuesday, or other such occasions which caused the gentry to flock to L-

and occupy all hotel rooms. I expect this to happen again on 14 April, which will probably turn out to be the anniversary of the Ides of March in Britain. I continue to be amazed by the reaction to your terms of reference on fishery oceanography. If we have done nothing else we have relieved a flatulence in the mantis oceanographique which cannot help but be of salutary effect. I may say that your brief reply to Gushing (I have not received a copy of his original yet, but it stirred Wooster so it must be interesting) opened a slightly different vista to me too. My secretary had about one pound (perhaps as much as a kilo) of further replies to my enquiry of 25 December awaiting me when I headed Singapore. I have not yet digested them. If I do prior to departing Bangkok I will ship them on to you to lighten my luggage and edify you.

I continue to find those reactions enormously interesting. Furthermore, I begin to detect threads of reason flowing through the mass and elements of cohesion which we may be able to weld into some suitable synthesis which would hold water for a time. If we do reach that point I shall expect you to put it in your succinct lucid phraseology.

After visiting 35 developing countries in rapid succession over less than a year I am about to unburden on you a synthesis of the problems involved in developing sea fisheries.

Regards,

W.M. Chapman

P.S. Should your secretary be so inclined she might forward copies of this for information to Bohnecke and Wooster.

P.P.S. Soong Min Kong, Director of Fisheries, Malaya, showed me the circular from Dr Hall, EAMPRO, Zanzibar, this morning to which may be attributed the current condition of my spleen. For reasons which I am unable to explain to you clearly the demise of that group hurt me deeply personally. They were a good gang knocking themselves out on the frontier of science and civilization, and they have been wiped out.

P.P.P.S. Should you for any reason wish to communicate, I can be reached until 9 April G/- V.J. Hinds, The Fishery Officer, Secretary, Flat, Aden.

Ref. 033.0425
GFH/DKE

Dr W.M. Chapman,
C/- V.J. Hinds,
The Fishery Officer,
Secretary,
FLAT ADEN

Dear Wib,

Now that your letter of March 22 has been typed, I have read it and sent copies to you, Bohnecke, and Wooster.

I am glad that you enjoyed the area near Australia. I shall reach London from UNESCO, Paris, on the night of April 12 or 13 and stay at the Tavistock Hotel, Tavistock Square. A message there or at Australian Scientific Liaison Office, Africa House, Kingsway (HOLborn 3422) will find me. I hope we can have a few minutes together.

I have just learned that U.S.S.R. has given me a visa so I shall go there from London.

Hoping to see you.

Yours sincerely,



(G.F. HUMPHREY)
President

Copy of letter
sent to F.A.O.
Rome