OPTIONAL FORM NO. 10
MAY 1962 EDITION
GSA GEN. REG. NO. 27
5010-107

UNITED STATES GOVERNMENT

Memorandum

TO : The Record

DATE: January 11, 1966

FROM : Henry M. Gelfand, M.D.

SUBJECT: Tour Report: West Africa, 18 November-17 December, 1965

INTRODUCTION:

(1) Purpose of the tour was to acquaint 18 West African countries (Cameroon, Central African Republic, Chad, Dahomey, Gabon, Gambia, Ghana, Guinea, Ivory Coast, Liberia, Mali, Mauritania, Niger, Nigeria, Senegal, Sierra Leone, Togo, and Upper Volta) with the proposed USAID supported 5-year program for smallpox eradication and measles control, to determine their interest in participating, and to meet and become personally acquainted with the principal responsible authorities.

(2) In addition to the writer, the tour team consisted of Dr. D. A. Henderson of CDC, Dr. A. Clayton Curtis of AID Washington, and Dr. Warren Winkelstein of the University of Buffalo Medical School.

(3) The team toured together for the majority of the time but separated on occasion. The first principal stop was at Ouagadougou, Upper Volta, to participate in the Ministerial Meeting of the OCCGE nations (Dahomey, Ivory Coast, Mali, Mauritania, Niger, Senegal, Togo, and Upper Volta), 20-28 November. From there Drs. Curtis (CC), Henderson (DAH), and Gelfand (HG) proceeded to Lagos, Nigeria, while Dr. Winkelstein (WW) went to Liberia. After these visits, the four team members rejoined in Yaounde, Cameroon to participate in the first Technical Meeting of the OCCGEAC nations (Cameroon, Central African Republic, Chad, Congo, and Gabon), 7-11 December. From there CC returned to Washington via Paris, DAH went to Geneva and London, WW visited Guinea, and HG visited Sierra Leone. WW and HG departed Dakar for the United States on December 17. In summary, during the course of this trip 16 countries were contacted, either directly or through their representatives at the two meetings. Only Gambia and Ghana were not approached.

(4) Attached is a list of all significant persons contacted by team members during the course of this trip. Tour reports on Liberia and Guinea by Dr. Winkelstein are appended as Attachment 2.

GENERAL IMPRESSIONS:

(1) This trip was a preliminary reconnaissance to acquaint governments with a proposed program and to determine their interest in participating, and to develop some basic impressions and understanding of this part of

the world of the political situation, of the organization of preventive medical services, of the people responsible for administering those services, and of the American Mission personnel in the various countries. In addition, more definitive plans for proceeding in the development of the overall program could be developed in the context of the actual country situations. As a result of this trip, many misconceptions of ours have had to be corrected and ideas about programs and their scheduling have had to be changed.

(2) The tour was highly successful in providing the type of background necessary for planning future activities and in the invaluable personal contacts that were made. The team was hospitably received by everyone, and the proposed program was well received everywhere.

(3) In those countries where measles vaccination programs are being or have been approved, past experience has been somewhat prejudicial to future program activities. Delays in receipt of vaccine and equipment, the provision of vehicles and some equipment inappropriate to the African environment and not infrequent failures in communication of plans and intentions have raised doubts as to our ability to manage effectively in the future. There is still confusion in the minds of many about the relationship, and the differences, between the old ad hoc measles vaccination program and the proposed long-range program.

(4) Smallpox eradication in the area is feasible and the proposed program can be successful. The political decision to achieve continental eradication has been made repeatedly by the African nations and it remains only to implement this decision. Not unexpectedly, theoretical plans, conceived in Atlanta and Washington, will have to be modified. Time given for the preparatory phase will have to be extended, country priorities may have to be changed, and the modus operandi will have to be more specifically adapted to individual countries.

(5) Measles vaccination is very popular and eagerly sought by most of the West African countries. There is considerable concern, however, about the strain of measles vaccine to be used and about the AID position that the recipient nation may not specify its choice of either Edmonston B or Schwarz strain. Furthermore, questions have been raised about the continuation of measles vaccination after termination of the 5-year program.

(6) It is apparent that there will be great need for flexibility in the program and adaptability to the different conditions in different countries. There are differences in the organization and operation of the preventive medical services among the various nations, particularly as between the francophone and anglophone countries. Furthermore, there

are vast differences in the effectiveness, sophistication, and the geographical extent of coverage of these preventive medical organizations. In many countries it may not be possible to take full advantage of the economy introduced by jet gun vaccination technology; continued dependence on the multiple pressure technique may be required to a varying extent.

(7) Technical assistance must be provided to each of the individual countries participating in the program. Assessment and surveillance activities, as we expected, are universally lacking, and must be introduced; for many countries this will be the principal function of the technical assistant, of greater importance than his general role as an adviser. In some countries, however, the technical assistant will actually operate the program, in practice if not in name. Under all of these varying circumstances, great tact and diplomacy will be necessary. Technical assistance will also be required for many administrative purposes, particularly in the area of equipment maintenance.

(8) The training of U.S. personnel to be assigned to West Africa must be very carefully considered. Perhaps the first 6 months of the assignment will have to be considered as training and orientation before we can expect substantial operational returns from our personnel. Proficiency in French by those assigned to the francophone countries has been emphasized repeatedly. In addition to technical knowledge, U.S. personnel will have to develop an understanding of local social mores and official protocol.

(9) Regionalization of the program as a principal is absolutely necessary. In order to support this concept, an area office in Lagos must be strongly supported and the personnel assigned there will have to be carefully selected on the basis of professional ability, experience and maturity. The area office must provide support to our personnel assigned to the individual countries, both professionally and administratively. It must also be possible to shift personnel and equipment from country to country as circumstances indicate.

(10) A strong support organization in Atlanta is also a necessity. Many of the difficulties and embarrassments presently encountered in the measles program in West Africa result from the lack of a simple and responsive administrative mechanism for answering the requests of field personnel. An attitude must be developed in Atlanta that it is not just "headquarters" but that more importantly, it exists for the purpose of supporting the field.

(11) Specifications for equipment of all kinds, including vehicles, inoculation equipment and field accessories, must be very carefully considered.

(12) Coordination between the PHS, WHO, UNICEF and other organizations must be assured.

CONCLUSIONS AND RECOMMENDATIONS

(1) Prospects for Future Programs:

(a) The OCCGE and the OCCGEAC countries may be considered as a unit since they have similar organizations of the preventive medical services, i.e., the Services des Grandes Endemies, a mobile team disease control service frequently under direct control by expatriates. In these countries, the Service des Grandes Endemies is organized into automonous Secteurs each under the direction of a doctor. In each Secteur mobile teams perform the functions of investigation and surveillance as well as of treatment and vaccination. In addition there are fixed installations, whose principal function is the treatment of leprosy but which also play a large role in morbidity reporting. The Secteurs cover the entire country in each instance, but they vary greatly in extent and population and, therefore, in the intimacy of contact with the people. The goal is to have a mobile team visit each village once annually but this is often impossible, and in some places the visits are no more than once in two or three years. In practice, very isolated areas are often untouched.

The program of Service des Grandes Endemies normally is organized far in advance, sometimes for a three year period. There is reluctance on the part of the Directors to modify this program since it has a long tradition and a well-developed method of operation that is understood by their workers and by the public. This reluctance is particularly great in those countries where the service is best developed and coverage most complete, such as in Ivory Coast, Upper Volta, Chad, and Cameroon. In these countries the Directors cannot see how they can change their programs for the purpose of smallpox eradication; they are convinced that they are doing everything possible at the present time within the limits imposed by budget and personnel. Specifically, they cannot see how jet gun technology can add anything. It was pointed out by one Director, for example, that when a team visits a village and has the capability of examining 400 people for leprosy, 400 is the limit for vaccination; the capacity to vaccinate 1,000 or 2,000 with a jet gun is immaterial. Furthermore, reluctance was expressed to divorcing smallpox immuniation from the polyvalent program of the mobile teams. In some areas smallpox vaccination is popular and sought by the people. If 400 people come out for smallpox vaccination, they can simultaneously be examined for leprosy. If vaccination were not offered perhaps only 200 would appear for leprosy examination.

Our program in such countries, therefore, may have to be limited to strengthening the existing services, and principal dependence on the multiple pressure technique may have to be retained. In some instances, our material support might best be applied to the developing of additional mobile teams for more frequent and systematic coverage with jet guns introduced for local epidemic control.

In such countries as Mali, Mauritania, and Niger, where the G.E.'s are weakest and preventive medical services are poorest, mas vaccination activities have the greatest applicability. The principal difficulty in these countries, however, will be reaching the large nomad groups. These are very isolated, have no permanent headquarters, and are very difficult to reach. Their extensive travels make them a continuing source of transmission. They are probably sufficiently extensive in numbers to provide an endemic focus of smallpox.

Our relations with OCCGE are very good and we should have the active cooperation of that organization. However, it should be noted that just prior to our departure from Dakar we were informed that Dr. Lambin, Minister of Health of Upper Volta and President of the OCCGE, was removed. It cannot be stated at this time what this implies with respect to our future relations with the organization.

A specific problem arose at the OCCGEAC meeting. Mr. Gokana, Minister of Public Health of Congo (Brazzaville), objected strenuously to the exclusion of Congo (B) from our proposed program for "reasons other than medical." He declared that the OCEAC must reject the American proposal, or he would recommend to his government the withdrawal of his country from the organization. This might lead to its breakup. After a great deal of discussion, a compromise resolution was passed recommending that the organization appeal through diplomatic channels to USAID to request the inclusion of Congo (B). After this has been circulated and approved by the ministerial members of the OCEAC, it will be transmitted to the United States. Since it is very unlikely that assistance will be offered by USAID to Congo (B), it is very possible that we will be unable to work with OCEAC as an organization, but will have to restrict ourselves to bilateral relations with the individual four countries where we hope to have programs.

In general, in the nations comprising the OCCGE and OCCEAC areas there exists well-developed public health organizations with long traditions. Many of them are directed by expatriate Frenchmen. Some provide very complete and efficient coverage of their populations but some are much less well developed. In all instances, however, these are the organizations with which we will have to work. We shall have to adapt our programs to theirs.

(b) Nigeria

Prior to our departure on this tour, Nigeria was considered to be the focal point of the future smallpox eradication effort and a particular problem because of its size and large population. We were very pleasantly surprised, therefore, to meet Dr. Ademola, Senior Health Officer in the Nigerian Federal Ministry of Health, in Ouagadougou and to learn from him of the very advanced state of planning for a smallpox eradication program in Nigeria. He had, in fact, composed a letter addressed to USAID, CDC, and WHO which was awaiting only his return to Lagos before mailing. This letter stated Nigeria's intentions, indicated Nigeria's financial limitations, and appealed for material and technical assistance. The Nigerian government was fully prepared to fund all necessary local costs. Furthermore, a specific problem, which we had discussed in Atlanta, had already been considered and in large part automonous in health matters, and have their own very independent Ministries of Health. However, they have now formed a loose association called the National Health Council which is composed of the four Regional and the Federal Ministers of Health. This group has acknowledged that communicable disease control, and smallpox eradication specifically, is essentially a federal responsibility and have granted, in principle, the federal government authority to direct such programs if they are also federally supported.

Detailed discussions in Lagos with Dr. Ademola and other Ministry of Health officials, and Dr. Nugent, WHO country representative, substantially confirmed these statements. The Nigerian authorities appeared to be eager for our early return to work with them on the development of a collaborative program and a Project Agreement, and are anxious for the actual vaccination operations to start as quickly as possible. Dr. Ademola concurs in the proposed schedule to be described below. The Nigerian authorities are also in complete accord with our tentative plans to establish our Area Office in Lagos, as discussed below.

(c) Liberia

Liberia was visited by Dr. Warren Winkelstein. This country now is engaged in a smallpox control program assisted by WHO. Very little could be learned about it in detail, and it appears likely that it is disorganized and ineffective. The authorities are, however, very interested in our possible support and will probably agree with any reasonable suggestions that we make. It is probable that technical personnel that we assign to Liberia will, to all intents and purposes, run the program themselves.

(d) Sierra Leone

Sierra Leone was visited by the writer. The preventive medical activities of this country are organized on the basis of a network of fixed installations to which are assigned health inspectors who are responsible for a specific area surrounding each installation. Coverage of the Hinterland is admittedly poor. The smallpox vaccination program is not well organized, and even good approximations of coverage are not available. The Sierra Leone authorities are eager to accept our assistance and to embark on a program as quickly as possible. They were disappointed when informed that planning and preparations would occupy a considerable amount of time and that vaccination could not possibly start before sometime in 1967. Only very reluctantly do they appreciate the need for this delay for planning purposes, and it will be necessary, but difficult, to restrain their enthusiasm next year. As in Liberia, technical assistance will be greatly welcomed, and our personnel will probably, in effect, direct the program themselves.

(e) Guinea

The preventive health services in Guinea are organized along the same lines as in the other francophone countries. The nature of our relationship to them will also be similar but greatly complicated by the very difficult political situation. Guinea is under strong Communist influence, and although our assistance will be welcomed it will fall under many restrictions. A high level of tact and diplomacy will be necessary.

(f) Gambia and Ghana

These two countries were not visited on this trip. Visits should be made as early as possible, certainly before the 18 nation conclave in association with the next World Health Assembly.

(2) Measles Vaccination Programs

In most of the OCCGE and OCEAC countries measles vaccination programs are in progress at the present time. Guinea also has a current measles program, but Senegal had opted not to have such a program and Gabon was delayed and will not be able to start until the five-year program is begun. All countries which presently have measles programs desire that they be continued. They have reluctantly accepted the principle that they may not specify the type of vaccine (Edmonston B or Schwarz) that will be provided. The measles programs have been accepted as special mass efforts. In many instances this has resulted in the temporary suspension of all other activities of the Service des Grandes Endemies.

In Nigeria, a dispute still rages locally as to the acceptability of Edmonston B vaccine for mass use in the country. Many people would, therefore, not find our program acceptable if we could not guarantee that Schwarz strain was to be provided. A proposal was made for a pilot study in Lagos in which the Edmonston, Schwarz, and Beckenham strains would be compared. Even this suggestion was rejected by Drs. Montefiore and Hendrickse who are very influential advisors. Dr. Ademola is continuing to investigate the possibility of putting on such a field trial, and, if he is successful, CDC assistance, in the form of an advisor, the loan of jet guns, and the donation of necessary vaccines, has been promised. A large-scale measles program in Nigeria is, therefore, a completely open question at the present time.

A similar disagreement exists in Sierra Leone and the authorities are also interested in putting on a pilot comparative program. The writer undertook to inquire whether CDC could give assistance similar to that offered to Nigeria, but no promise was made. It is my opinion that even without a pilot study Sierra Leone eventually will request a measles program.

(3) Attitude of American Embassies and AID Missions

In several of the American Missions, the proposed program was not enthusiastically received. Health activities have been played down almost everywhere, not because there is objection to them as such, but because it is felt that they could absorb all of the U.S. assistance resources available. The Ambassadors and AID Mission directors were, therefore, concerned first about the effect of our program itself and second about the precedent it may set for future programs in the health area. They were all very considerably relieved to learn that our proposed program would be funded completely independently and would be a contract-type activity that would impose no great administrative burden.

One point of difficulty, strongly expressed by each American mission, remained unsolved, and will continue to plague us in the future. There was uniform objection to the established AID principle that technical assistance programs must not include payment of local costs. It was strongly emphasized that in each of the West African countries local resources were extremely limited. This limitation is often without regard to foreign exchange problems; they simply don't have the financial resources, in either local or foreign currency. Whenever a new program is introduced it must get its local support at the expense of some other program; it is often not possible to increase the total amount of local funding. The support of the measles/smallpox program, therefore,

is most likely to result in the diversion of funds from other health programs, or even the diversion of funds from agriculture, industry, transportation, etc. The Ambassadors emphasized, therefore, that it is essential for us to construct our programs in such a way that there will be minimum penalty imposed on other programs. In fact, several stated that they would be carefully scrutinizing our activities to insure that we do not interfere with other economic development programs.

Other than for these general concerns, we found the American Mission personnel to be cordial and cooperative. I think we can expect every assistance from them in the future. It was pointed out, however, that, as a PASA activity, we were independent. We may take advantage of assistance that is offered to us, but on the other hand neither are the missions required to provide it nor are we obligated to accept it. Our personnel may procure their own housing or they may utilize embassy housing arrangements, our vehicles may be maintained (upon payment of a contract fee) at mission garages or we may make our own private arrangements, etc. Our only legal limitations, therefore, are those related to the overall authority of the Ambassador to establish political policy guidelines.

(4) Relations with WHO and UNICEF

Because of the need to maintain confidentiality regarding the proposed program prior to its formal announcement, the WHO regional office in Brazzaville, and its personnel in the field in different West African countries, knew nothing about our program prior to our arrival. We met and talked with the WHO country representative to Upper Volta in Ouagadougou, Dr. Paes-Leme, and Dr. Geller, Public Health Adviser to Togo. Dr. Geller cabled Brazzaville to inform the Regional Office of the nature of our business and to request that either Dr. Trosse or Dr. Blanc, both Communicable Disease Advisors, should meet us in Yaounde, Cameroon for more detailed discussions. Subsequently, we were met by Dr. Blanc in Yaounde and spent several pleasant hours discussing the separate PHS and WHO programs. In brief, WHO activities consist of the following: In about May of this year Brazzaville was instructed to prepare detailed eradication plans for each of the countries in the West African area, including cost estimates. In order to do this a very theoretical prototype program was developed for a hypothetical country of one million population. The personnel, vehicles, vaccine, and miscellaneous supplies required for that population were calculated. Thereafter, this rather rigid formula has been applied successively to a number of countries, and, taking into consideration existing health structures, programs have been recommended. These have been submitted to Geneva. The Regional Office has assigned a single individual, Dr. Hans J. Mayer, to this task. He is stationed in

Monrovia, Liberia. On questioning Dr. Blanc about such details as the method of assessment, the provision for "mopping up", the action to be taken in the event that an emergency interrupts routine activities of the teams, etc., it became apparent that very little thought had been given to such matters. It appeared that the programming that is being done is largely an exercise in cost estimating. However, in addition the Regional Office is attempting to get as much detailed and up-to-date data as possible on the occurrence of smallpox in recent years in the countries of this area.

We suggested to Dr. Blanc that it would be very desirable for me to meet with Dr. Mayer at my next stop in Sierra Leone. He cabled this recommendation to Brazzaville. The Regional Office agreed, Dr. Mayer was notified, and he met me in Freetown several days later. We spent many hours together and were able to exchange information and views. Dr. Mayer is an experienced public health worker in Africa but is new to the West Coast having arrived only in March 1965. Thus far, he has prepared estimates for eradication programs in Sierra Leone, Upper Volta, Ivory Coast, Liberia, Guinea, Mali, and Nigeria. He has spent several weeks in all of these countries and has become reasonably acquainted with their health programs and facilities. Dr. Mayer appeared to be genuinely distressed with the thought that we were proceeding independently with the same goal in mind, and felt that this was not only wasteful but would also be very confusing to the country concerned. He appeared to be very anxious to cooperate with us or even to consolidate our two efforts if he were authorized to do so by the Regional Office. He was anxious that we make use of all of the information that he has accumulated, but said that it was against Brazzaville regulations for him to make any of his reports available to us without permission. However, if I were to visit him at his office in Monrovia, he would informally permit me to examine these reports and would discuss their contents with me. He urged that I do visit him at the beginning of my return tour next year, and hoped that we would be able to get clarification at the highest level of the relations between PHS and WHO so that we could work together in the future.

In Freetown also, I met with Mr. Gobbe, an area representative of UNICEF stationed in Dakar. A very friendly and cooperative person, he discussed the very large experience that UNICEF has had in the provision of vehicles, and other equipment, to countries in West Africa and of the difficulties in maintenance and repair. He suggested that it would be very useful for us to establish a liaison with UNICEF headquarters in New York and with the various UNICEF representatives in West Africa.

(5) Area Office

The suggestion that we establish an area office in Lagos, staffed by medical epidemiologists, administrators, an equipment specialist, a statistician, a public health educator, and a virologist, was discussed with the American Mission in Lagos, with Nigerian officials, and with Dr. Nugent, WHO country representative in Nigeria. All agreed that this was not merely a desirable thing to do, but was probably absolutely essential to the success of the entire mission. Also, all agreed that Lagos was the logical site for such an office because of its central location, its airline connections with many of the other countries in the area, its numerous and well-developed physical facilities, and because it is the capital of the focal country of the area. There were no administrative objections on the part of the American Mission or of the Nigerian officials with which the suggestion was discussed.

Lagos is a booming city, very crowded, and very expensive. It was suggested, therefore, that we consider a site in the suburban community of Yaba. This is the location of the Smallpox Vaccination Laboratory, the Lagos Medical College and Hospital, and the laboratory of WACMR (West African Council of Medical Research). The latter is a large, government-owned compound, originally established by the Rockefeller Foundation, and is largely unused at the present time. Dr. Ademola has had his eye on this site for some time as a potential location for the development of a Communicable Disease Center of Nigeria. There are empty buildings here that could be used for offices, and empty residences that could be made available to our staff. The possibility of establishing our Area Office in this compound must be further explored. Mr. Edward Sheridan, Assistant Executive Officer of the AID Mission, suggested for housing a site known as Palm Grove, located a few miles north of Yaba and between the latter and Ikeja Airport. There are many Americans living here since all of the staff of WACASC, a regional supply depot of the State Department, are housed here.

Mr. Sheridan kindly prepared for us a detailed cost estimate for the establishment and support of our Regional Office for the first year in Lagos. His estimate is based on local knowledge and can authoritatively be used in the development of the PASA. He emphasized the many complicated arrangements that will have to be investigated and negotiated before we can expect to move in staff and establish a working headquarters. He urged that we assign a competent and experienced administrator to Lagos as quickly as possible in order to give him 3 to 6 months to work on many of these detailed arrangements.

(6) Vaccine Production in West Africa

We visited the Smallpox Vaccine Laboratory in Lagos on a number of occasions. It is a modest but entirely adequate facility, reasonably well equipped, and run in a reasonably competent fashion by an experienced senior technician, with the assistance of a newly assigned virologist, and under the overall supervision of Dr. Uku, pathologist for the Central Medical Laboratories. It is producing both a lanolated product in 20-dose tubes and lyophilized vaccine in 20- and 100-dose ampoules. They hope to achieve a production rate of 20 million multiple pressure doses per year and are close to this level now; the current packaged stockpile is between 15 and 20 million doses. The vaccine is produced on sheep, potency is tested on chick embryos, and rabbits are used for testing for pathogenic contamination. Local records indicate an average virus titer of 10^8 pock-producing units per ml. and an average of 200 bacteria per ml. -- well within minimum WHO requirements. Potency and sterility are said to be checked by the Lister Institute in London, with agreement. The high level of bacterial contamination may be mainly the result of dust particles carrying gram-positive spore-bearing rods. The area around the laboratory is unpaved and vehicles driving by raise clouds of dust. Some of the rooms are air conditioned but the windows are not air-tight, but some of the rooms are not air conditioned and windows are kept open. With a fairly moderate expenditure, the walkways surrounding the laboratory rooms could be enclosed and made dust-free. Dr. Henderson is exploring with WHO the possibility of their financing such structural improvements.

Because of its relatively high bacterial contamination, vaccine produced in Lagos is not suitable for jet injection use. At the present time this vaccine is used for multiple pressure vaccination in Nigeria and, by purchase, in several other West African countries. If we provide jet gun vaccine, Nigerian-produced vaccine would presumably be available for use elsewhere in the program where multiple pressure technique is to be employed. The question of bartering American vaccine for Nigerian for use elsewhere was not discussed with Nigerian officials. Dr. Nugent of WHO indicated, however, that there would be no objection on the part of WHO.

A large facility for the production of freeze-dried smallpox vaccine has been established at the Pasteur Institute in Dakar. To the best of our knowledge, however, production is not yet underway. Authorities in Guinea are unhappy about the facility in Dakar, since they were promised a number of years ago by WHO that the latter organization would support the development of a production facility in Conakry. Guinea is still quite insistent that it produce its own vaccine and this may represent a problem in the future.

(7) Jet Guns

Reference has been made above to problems related to the potential use of jet guns for smallpox vaccination. Mass campaigns, where jet guns can easily be employed, at least for large population concentrations, will probably be readily acceptable in Nigeria, Liberia, Sierra Leone, Mali, and Niger. Even in these countries, there is probably an important role for multiple pressure technique in many of the smaller, isolated communities, for mop-up vaccination, and for maintenance vaccination of the newborns. In many of the other countries, jet gun technology may play a more limited role. The authorities in these countries have organized programs which include routine smallpox vaccination, which they may be very reluctant to disband or interfere with. With tact and patience, it may be possible to modify their stand somewhat and to find a useful, though limited, role for the gun. This should not be unduly pushed, however, and we should not make a fetish of the jet gun.

Experience with the measles program in many countries has indicated that training has often been inadequate and that maintenance has not been sufficiently emphasized nor practiced. The guns have often gone rapidly out of order as a result of mishandling, and little attempt has been made to put them back into service by major repair. Another important difficulty has been the limited availability of replacement parts. A careful study of past experience should be made and a record of replacement needs, in the past and in the future, should be maintained. A fully adequate depot of replacement parts should be available in each country and in the Lagos Area Office.

It is probably necessary that we decide upon and provide only a single model of the jet gun, preferably the Ped-O-Jet. Electric generator-operated guns are impractical and their use should definitely be abandoned.

(8) Vehicles and Their Maintenance

Vehicles have represented one of the major frustrations and embarrassments in the past Measles Vaccination Program. Difficulties have been encountered in several major areas.

Mass programs in the field cannot be conducted without vehicles. Delivery at the scheduled time is absolutely essential; we must be very careful not to make promises that cannot be kept and to qualify all of our promises as appropriate.

The type of vehicle provided is of the utmost importance. The large International Harvester trucks provided in the past have been fraught with problems. Where diesel engine vehicles were provided, there has been no one available with the knowledge to maintain and repair them. Where gasoline engine IH trucks have been provided, there has been frequent complaints about their heavy fuel consumption (about 8 miles per gallon). These trucks are often too large and heavy for the roads in the countries where they have been used. They are not strong enough for the conditions of use, and the rear of the chassis has frequently become detached, necessitating major structural repair and improvement. Much of the built-in equipment has been of improper design, the refrigerator not working while the vehicle is in motion, the reserve fuel cans badly placed and susceptible to ignition and explosion, the fixed mounting of the loud-speakers making them useless, etc., etc. Some of the remaining equipment has been wasteful because it is useless under field conditions; the built-in sinks and the windshield water squirters are not used. This vehicle was universally condemned in the strongest terms, and its procurement and provision should be stopped immediately. The model of vehicle to be provided must be determined by careful canvas of the desires, needs, and facilities in each individual country. In some places small jeep-type vehicles would be suitable, in others jeep station wagons, in others larger trucks. In some countries, and in the area as a whole, several models may be necessary.

There is no ideal American manufacturer of vehicles for African use, but care can be exercised to choose the least undesirable make. (The most universally wanted vehicle is the Land Rover. An attempt should be made to see if there is any possible way of getting around the requirement that only American-manufactured articles may be procured.) In Nigeria we were told the Chevrolet was the most common American make and maintenance and repair facilities and spare parts were most readily available. In Cameroon we were told that Chevrolets were rare, and that Ford might be the least of all evils.

Spare parts for any American-made vehicles will not be found locally. It is, therefore, essential that depots of spare parts be established in each individual country and in the Area Office in Lagos. A best guess will have to be made for the prestocking of such depots, because we were informed that manufacturer suggestions often do not match West African experience. The planning of such spare parts stocks must, therefore, be kept flexible and we must be prepared to modify the inventory by experience.

Maintenance and repair of vehicles is very poor under the best of circumstances in West Africa. It is necessary, therefore, that we provide training and supervision for minor maintenance and for major repair facilities. The latter will probably have to be set up with our financing and direction. It might also be desirable for us to provide training for the drivers.

(9) Other Equipment

Built-in refrigerators have not proved to be desirable in the past. Removable refrigerators with brackets for securing them to vehicles would be most desirable. Refrigerators must be kerosene operated. Since these are not available from American manufacturers, they may be procured elsewhere. Field equipment, tents, cots, stoves, eating utensils, etc., provided for the measles programs in the past, have been characterized as being more appropriate for tourists than for rugged field use. This inventory must be carefully reviewed and developed in consultation with people experienced in the West African bush. We must also remain flexible and modify our inventory as dictated by experience.

Vaccination certificates have been found to be desirable; people cherish them and they are a valuable inducement to vaccination. The large gaudy design used in the past is very good. However, if vaccination certificates are used, it is essential that they be sufficient in number. In Chad only one fourth as many certificates were provided as vaccine doses, resulting in marked and openly expressed disappointment.

(10) Personnel

Of the many important facets of the personnel problem, only a few of the more general can be discussed here.

It has been repeatedly emphasized that our people in the field must be hard working, adaptable, ingenious, technically competent, self-effacing diplomats. It is probably more important that they be ingenious, adaptable, and tactful than that they be professionally brilliant. It is essential that they be patient and relatively resistant to frustration. Youth may be a handicap, but it may be overcome by the demonstration of the characteristics mentioned above.

The training of our personnel in the U.S. prior to shipment to West Africa must be comprehensive, and sufficient times must be devoted to it. Training is required in several areas: 1. Professional: This includes the epidemiology of smallpox and measles, diagnosis, vaccines, methods of vaccination, jet gun maintenance and repair, assessment, surveillance, etc. 2. Administrative: relations with Atlanta headquarters, Lagos Area Office, AID, American Missions, WHO, UNICEF, national governments (including instructions in tact and diplomacy), records and reports, travel, housing and other personal affairs, salary and per diem arrangement, etc. 3. Language: For those assigned to French speaking countries, knowledge of the language sufficient to participate in all ordinary and technical conversations.

4. Social and cultural: West African history and political development, the rudiments of West African social anthropology, geography, personal relations with Africans, expatriate Americans, and third nationals.

Training in the U.S. will take a minimum of 2 months for those not needing French training, and as much longer as necessary for those requiring the latter.

The Operations Officer member of our country teams will be an extremely important person. Undoubtedly, a large part of his activities will have to do with equipment-supply, maintenance, maintaining spare part depots, training and trouble shooting. It would be very useful if this man were a mechanical Jack-of-all trades, knowing something about automotive vehicles, refrigeration, and electrical generators, as well as jet guns. He may also be required to be responsible for the housekeeping functions of our missions--rental and maintenance of personal and business housing. These individuals must be exceptionally stable types; they must be carefully selected.

Secretarial assistance may be locally obtained, but obviously provision for such must be included in our PASA. Wives of local American or other expatriate Europeans with secretarial experience can usually be found, and these can be supplemented with African clerical staff for typing and other tasks under supervision.

(11) Program Planning and Scheduling

The development and effective launching of a program of the magnitude envisaged in a period of 6 months is an heroic undertaking. To develop fully detailed plans of operations for each of these diverse countries would require a year or more of work by a fairly substantial team. A general plan and direction, however, can be evolved within the comparatively brief period allowed which can then be elaborated upon by personnel assigned to the separate countries. The present impetus can thus be maintained. However, the PASA to be written by AID must be as general and flexible as possible, allowing for maximum latitude in timing, funding, and personnel. Also, our commitments to the individual countries must be kept general; we must avoid as much as possible specific promises and specific demands.

The following is presented as a tentative program for determining requirements and writing project agreements in West Africa during the next four months. It must be emphasized that this is the shortest possible schedule; it is quite possible that actual experience will force a longer period of time.

Week Beginning	Action	
Jan. 17, 24, 31	*HG, RH, #3	Dahomey (Togo Alternate)
Feb. 7	HG	Nigeria
	RH	Ivory Coast
	#3	Chad
Feb. 14	HG	Nigeria
	RH	Upper Volta
	#3	Chad
Feb. 21	HG	Nigeria
	RH	Mali
	#3	Central African Republic
Feb. 28	HG, RH, #3	Confer in Lagos
March 7	HG	Confer in USA
	RH	Togo (or Dahomey)
	#3	Comeroon
March 14	HG	USA
	RH	Niger
	#3	Gabon
March 21	HG	OCCGE Meeting in Upper Volta
	RH	Mauritania
	#3	Senegal
March 28	HG, RH, #3	Confer in Dakar
	HG	Ghana, Gambia
	RH	Return to USA
	#3	Guinea
April 4, 11, 18	HG, #3	Return visits as required
April 25	HG, #3	Return to USA

* HG - Henry Gelfand, RH - Ralph Henderson, #3 - to be recruited.

The initial three weeks in Dahomey would permit us to acquire a reasonably detailed understanding of the operations of the Grandes Endemies, all 3 members of the field team working together in order to agree on a common approach, and to write a prototype Project Agreement for that country. Thereafter, the three persons would separate, Gelfand spending 3 weeks in Nigeria because of its size and geographic variations, and the other 2 spending lesser times (usually one week) in a number of countries. They would confer in Lagos during the week of February 28 in order to discuss the problems that had appeared during the preceding 3 weeks and in order to prepare a consolidated statement for Gelfand to carry back for consultations in Atlanta and Washington. This document would provide a beginning basis for constructing the PIO/T and PASA. Meanwhile Henderson and #3 would continue country visits, Gelfand returning and attending the OCCGE meeting in Bobo Dioulasso during the week of March 21. On March 28, after a brief conference in Dakar among all three, Henderson would return to the U.S. and Gelfand and #3 would complete the roster of countries. Gelfand's visits to Ghana and Gambia would be brief ones, for the purpose of initial contact with the authorities in those two countries to acquaint them with the program and to give them notice of the meeting we hope to call in April. For three weeks beginning the week of April 4, Gelfand and #3 would make return visits to individual countries as required for the purpose of answering questions that had developed in the writing of the Pro Ags. On April 25 Gelfand and #3 would return to the USA.

During the visits made on the above schedule, Pro Ags would be drafted for each of the countries. Hopefully, these would be in such a form that further negotiations would be the responsibility of the AID Missions or the AID Affairs Officer of the embassies, and that they could be signed promptly after the PASA is approved. The final PIO/T and PASA would be written on the basis of the information accumulated, and we could appear at the World Health Assembly meeting in Geneva armed with an almost completely formulated provisional program.

It has been mentioned above that a senior administrative officer should be detailed to Lagos to start work on the project of creating an Area Office. It would be most useful if this person could be in Lagos during the week of February 28 in order to participate in the conference of the team at that time. He could then start his administrative inquiries and arrangements with greater understanding of the overall problem.

Attachment 1

Significant Persons in West Africa

A. NATIONALS (including expatriates)

1. CAMEROUN

HAPPI, Dr. C. - Commissaire General a la Sante Publique

GARRIGUE, Dr. S. (Fr.) - Chef du Service des Grandes Endemies

ELOM, Dr. - Adjoint au Chef du Services des G.E.

BROTTES, Dr. (Fr.) - Directeur del' Institut Pasteur

LABUSQUIRE, Med. Lt. Col. (Dr.) - Secretaire General del' OCCGEAC

2. CENTRAL AFRICAN REPUBLIC (CAR)

MOUSSA, Dr. B. - Directeur de la Sante Publique

JONCOUR, Dr. (Fr.) - Directeur du Service des G.E.

CHIPPAUX, Dr. (Fr.) - Directeur del' Institut Pasteur

3. CHAD

ZIEGLER, Dr. (Fr.) - Directeur du Service des G.E.

GRUVEL, Dr. (Fr.) - Veterinaire a l'Institut Veterinair de Farcha

4. CONGO (BRAZZAVILLE)

GOKANA, - Ministre de la Sante Publique

LOEMBE, Dr. - Directeur des Affaires Sociales

DEMARCHI, Dr. - Directeur del' Institut Pasteur

5. DAHOMEY

BIO, Daniel - Ministre de la Sante Publique et des Aff. Soc.

GANGBO, Dr. S. - Directeur du Service National des G.E.

6. GABON

MARTINAZZO, Dr. (Fr.) - Directeur du Service des G.E.

7. GUINEA

KAROUNA BABA - Inspecteur General, Ministere de la Sante Publique

SOUMAH, Dr. Roger - Director, American Division, Bureau of Cooperation, Ministry of Foreign Affairs

8. IVORY COAST

KOFFI, Dr. N'dia - Ministre de la Sante

SERIE, Dr. - Premier Nimistre Technique

RIVES, Dr. (Fr.) - Directeur des G.E.

9. LIBERIA

BARCLAY, Dr. Edwin M. - Director General, National Public Health Service

HOFF, W. H. - Dpt. Director, General, Nat'l Public Health Service

TITUS, Dr. J. B. - Publ. Hlth. Advisor, Nat'l PHS

REBER, Dr. Earl W. (Amer.) - Director, Liberian Inst. Tropical Medicine

10. MALI

DOLO, Dr. Somine - Ministre de la Sante

SOW, Dr. Cheik - Directeur des G.E.

11. MAURITANIA

SIDI, Mohamed Diagana - Ministre de la Sante

RIOUX, Dr. (Fr.) - Directeur de la Sante

12. NIGER

BANA, Dr. - Directeur de la Sante Publique

13. NIGERIA

MAJEKODUNMI, Dr. M. A. - Minister of Health

ASIODU, P. - Permanent Secretary (MOH)

OTOLORIN, Dr. M. - Chief Medical Advisor

ADESUYI, Dr. S. L. - Dpty. Chief Medical Advisor

AMAH, Dr. D. J. - Principal Health Officer

ADEMOLO, Dr. G. Adeyemi - Seniour Health Officer

ADENYI-JONES, Dr. O. - Medical Officer of Health, Lagos

WRIGHT, Dr. Robt. D. (Amer.) - Prof. Prev. Med., Lagos Med. Coll.

SHOFOLNI, Dr. W. - Asst. " " " " " "

UKU, Dr. - Pathologist, Central Medical Laboratory

NWACHUKWU, M. S. O. - Incharge, Smallpox Vaccine, Lab

ALOZIE, Dr. - Virologist, " " "

COLLISS, Dr. Robt. (Irish) - Prof. Pediatrics, Lagos Med. Coll.

AUDU, Dr. - Assoc. " " " " "

OGUNBI, Dr. O. - Lecturer in Microbiology, " " "

MONTEFIORI, Dr. D. (Br.) - Virologist, Ibadan Med. Coll.

HENDRICKSE, Dr. R. G. (Br.) - Pediatrician, Ibadan Med. Coll.

14. SENEGAL

BADJI, EL Hadji - Directeur de Cabinet, Ministere de la Sante

LACAN, Med. Col. (Dr.) (Fr.) - Directeur des G.F.

CHANBON, Dr. L. - Directeur del' Institut Pasteur

15. SIERRA LEONE

ROGERS-WRIGHT, C. B. - Minister of Health

MAURICE-JONES, - Permanent Secretary, MOH

BOYE-JOHNSON, Dr. H. E. - Chief Medical Officer

THOMAS, Dr. Alexander - Dpty. Chief Med. Off.

15. Cont'd

CUMMINGS, Dr. Evellyn - Principal Med. Officer, Western Area

DAVIS, Dr. Marcella - Senior Med. Officer, Western Area

HOTOBAH-DURING, Dr. A. - Principal Med. Officer, Western Province

16. TOGO

EDORTH, Dr. - Directeur des G.E.

17. UPPER VOLTA

LAMBIN, Dr. Paul - Ministre de la Sante

SANSARRICQ, Med. Cdt. (Dr.) H. (Fr.) - Directeur des G.E.

RICHET, Med. Gen. (Dr.) P. (Fr.) - Secretaire Gen. del' OCCGE

WOILTOCK, Albert (Fr.) - Adjt. Adminastratif del' OCCGE

RIDET, Med. Col. (Fr.) - Directeur du Centre Muraz

GATTEF, Med. Capt. (Fr.) - Chef de la Section documentation, Centre Muraz

B. AMERICAN MISSIONS

1. CAMEROUN

BARROWS, Leland - Ambassador

ATWELL, Donald - Program Officer

LEPINSKI, Felix - AID Affairs Officer

QUINTERO, Donald -

PETERS, Dr. Gerald - Peace Corps Physician

DAYMON, Henry - Asst. Consul, Douala

2. CHAD

NOWICKI, Dr. - AID School Health Advisor

MILLS, Miss Mary - AID Nursing Advisor

3. GHANA

PINDER, Frank - Chief of AID Mission

4. GUINEA

SALES, Pierre L. - Acting Director, AID

DICKERSON, Peter - Program Analyst, AID

5. LIBERIA

BROWN, Ben Hill - Ambassador

NOOTER, Robert H. - Director, U.S.O.M.

HERRON, Isom H. - Health Education Advisor

WATSON,Dr. Wm. - Director, Peace Corps

6. NIGERIA

MATHEWS, Elbert - Ambassador

McDONALD, Donald - AID Mission Director

MOSSLER, Robert - Dpty. AID Mission Director

GULLICK, Clarence - Asst. Mission Director (Program)

BRECHER, Frank - AID Program Officer for Operations

BEESON, Dr. Harold - State Dept. Regional Med. Officer

SHERIDAN, Edw. - AID Asst. Executive Officer

7. SIERRA LEONE

CORRY, Andrew U. - Ambassador

SPIGLER, Donald - Dpty. Chief of Mission

SPENCER, Robert - Asst. Comptroller

GEORGE, Clark - AID Affairs Officer

MILLIGAN, Dr. John P. - AID Education Advisor

BROOKS, Dr. Talin - Peace Corps Med. O.

SHEIBER, Dr. Steven - Asst. P.C. Med. O.

TAYLOR, Genge - Director, Peace Corps

HURWITZ, Abner - AID Demographic Advisor (Census Bureau)

8. UPPER VOLTA

ESTES, Thomas S. - Ambassador

SHERWIN, Walter - AID Affairs O.

LEBUDIE, Thomas - Finance Officer

NEWCOMER, Richard - USIS

c. WHO -- UNICEF

1. REGIONAL OFFICE

QUENON, DR. Alfred (Dah.) - Director

AKWEI, Dr. (Ghana) - Asst. Director

TROSSE, Dr. Frederick (Austrian) - Reg. C.D. Advisor (incl. SP)

BLANC, Dr. Michel (Fr.) - Reg. C. D. Advisor (Incl. Quarantine)

MOUMOUNI, Dr. Adjou (Dah) - Reg. P. H. Advisor

2. CAMEROUN

TORFS, Dr. M.E.F. - P. H. Planning Advisor, Cam.

RALINORO, Dr. - WR for Cameroun

3. GHANA

DJUKANOVICH, Dr. - WR for Ghana

4. IVORY COAST

PUYET, Dr.-WR for IC

5. LIBERIA

KARUNARATNE, Dr. V. J. - WR for Lib., S.L., Guinea

MAYER, Hans J. - Intercountry SP Advisor

SUNDER RAO, Dr. A. R. - Malaria Advisor

6. NIGER

PIERRENOEL, Dr. - WR for Niger, Upper Volta

7. NIGERIA

NUGENT, DR. D.A.W. (Br.) - WR for Nigeria

8. SENEGAL

BONNAUD, Dr. - WR for Senegal, Mauritania

GOBBE, A. H. - Regional UNICEF Rep., Dakar

9. SIERRA LEONE

NAIR, Dr. - WR for Sierra Leone

WONG, Dr. T. H. - Yaws and Smallpox Campaign

10. TOGO

FLAHAUT, Dr. - WR for Togo, Dah.

GELLER, Dr. - P H Planning Advisor

11. UPPER VOLTA

PAES-LEME, Dr. Carlos (Brazil) - PH Advisor, U.V.

D. MISCELLANEOUS

VERNIER, Med. Gen. Insp. - Dir. Div. Coop. Sanitaire et Sociale, Paris

AJOULAT, Dr. L. P. - Dir. Centre Nat. Educ. Sanit. et Soc., Paris

VAUCEL, Dr. - Dir. Des Instituts Pasteur Outre Mer

FREIDEL, Mr. - Institut Merieux, Lyons

LEKIE, Dr. - (Public Health Officer) Congo (Leopoldville)