For Administrative Use Only Not for Publication

January 18, 1967

TO : Director, National Communicable Disease Center

FROM : Chief, Smallpox Eradication Program

SUBJECT: Status Report #3

Status Report No. 1 (December 7, 1966) described the mission of the Smallpox Eradication Program (SEP). As noted, the West African Smallpox Eradication and Measles Control Program is a joint endeavor of the Agency for International Development and the United States Public Health Service. Financing of this program is provided by the Office of Regional Activities of the Bureau of Africa of the Agency for International Development (AID). Program responsibility within AID is vested in the Office of Institutional Development of the same bureau; day-to-day operational contact between SEP and AID is maintained through the Public Health Division of that office. The pertinent administrative structure is outlined below.

Agency for International Development (AID) - Administrator - William S. Gaud Bureau for Africa - Assistant Administrator - Edmond C. Hutchinson Office of Regional Activities - Director - Allan Loren Office of Institutional Development - Director - Robert L. Rupard Public Health Division - Chief - Arthur C. Curtis, M.D.

The detailed basis for collaboration between USPHS and AID in carrying out the West African Smallpox Eradication and Measles Control Program will be specifically defined in the Participating Agency Service Agreement (PASA) between the two agencies which is now being reviewed. Until this document is signed by both agencies, guidelines for relationships between the field staffs of the two agencies are provided in the "General Agreement Between the Department of Health, Education and Welfare and the Agency for International Development" of March 3, 1966. Section VII of the document, entitled "Operating Relationships," is reproduced in its entirety below:

"A. In the United States - General, technical and project services provided in the United States will be carried out by the Department in accordance with its established procedures.

B. Overseas

- Department personnel assigned overseas as members of an AID Mission under this Agreement will receive support, benefits and privileges on the same terms as they are provided to AID direct-hire personnel and as permitted under legal and AID regulatory requirements.
- Unless mutually agreed otherwise, the Department will utilize personnel on its rolls insofar as possible in providing services under this Agreement.
- Personnel of the Department detailed or assigned for duty overseas with AID under this Agreement will be administratively responsible to the

USAID Director or his designee on matters of personal conduct, public relations and general program and policy direction. Disciplinary action, if called for, must be taken by the Department. It is the responsibility of AID to notify the Department promptly of developments which might require such action.

- 4. With respect to project services, official communications on technical, professional and personnel matters may be direct or through AID channels at the option of the Department, provided that copies of communications sent directly will be simultaneously provided to AID mission and AID/Washington headquarters. Official communications dealing with AID program and policy matters will be transmitted through regular AID channels. With respect to staff services, all communications except personnel matters are through AID channels.
- 5. Problems that arise in the operation of service agreements will be resolved between the USAID Director or his designee and the Department's senior officer at the mission. In the absence of a mutually satisfactory solution the USAID Director may, if he deems it necessary, direct that his views be followed pending decision on the matter in Washington."

I. PERSONNEL

A. Headquarters Staff

 Leo Morris, Assistant Chief of the Smallpox Eradication Program since its inception, will join the staff of the Pan American Health Organization (PAHO) February 6, 1967. As an advisor to the National Campaign Against Smallpox in Brazil, Leo takes on the first PHS assignment made to the new Regional PAHO Program to eliminate smallpox from the Americas. After a brief orientation in Washington, the Morrises will be assigned to Rio de Janeiro.

While principally concerned with the development of surveillance and statistical aspects of the Pan American Health Organization effort, Leo is expected to advise on logistical and administrative matters as well. A staff of medical officers and statisticians is presently being recruited by PAHO to implement this program which will coordinate activities in eight countries with a total population of 150 million persons. Over half of this population resides in Brazil which is the major smallpox focus in the hemisphere.

Leo served as Assistant Chief to D.A. Henderson in the Surveillance Section of Epidemiology Branch. He participated in a number of short-term overseas assignments that included epidemic investigations of polio in Puerto Rico (1960) and Chile (1961); dengue fever in Puerto Rico (1963) and studies of smallpox vaccination by jet injection in Amapa, Brazil (1965). In 1960, Morris received a NCDC Award for superior performance in directing the Polio Surveillance Unit. Leo transferred to the Smallpox Eradication Program when it was created in January 1966. He recently conducted an evaluation in Nigeria of the jet injector training manual now being used in the West African Program and he developed and taught the course in Epidemiology and Biostatistics given to the operations officers in the program.

Donald Eddins of Statistics Section, Epidemiology Program, NCDC, will join the Smallpox Eradication Program later in the month to assume the responsibilities for directing the statistical activities of the Program.

- William DesPrez has joined the headquarters staff of the Smallpox Eradication Program as Supply Officer. In this capacity Bill will have primary responsibilities for procurement coordination.
- 3. New Recruit!!! Born to Claire and Bill White; a baby girl 8 lbs. 3-1/4 oz. at 1:32 p.m. January 14, 1967. Mother, baby, and presumably father, are doing well and are anxious to get to Africa.

B. Field Staff

There have been no changes from the previous report. All officers except the M.O. Cameroon and O.O.'s Ghana, Senegal and Upper Volta are on duty in Africa. Negotiations continue for signing of agreements with Senegal, Upper Volta and Gambia.

II. FIELD ACTIVITIES

A. Headquarters Activities

- Dr. Henry Gelfand spent January 12-13 at Carrville, Louisiana consulting on Epidemiology with the staff of the U.S. Public Health Service Hospital, Carrville. On January 11, he conducted recruiting interviews in New Orleans.
- 2. Dr. Ron Roberto was guest speaker at a January 10 Seminar on Smallpox and Smallpox Eradication, held in the Department of Preventive Medicine, University of Washington School of Medicine, Seattle. In addition he interviewed a number of SEP candidates in Seattle, San Francisco, and Los Angeles, January 9-13.

B. Regional Project Office Activities

- 1. The Government of Ghana plans to publicize smallpox eradication and measles control activities at an international trade fair to be held in Accra during the early part of February. A demonstration vaccination booth, where smallpox and measles vaccines will be administered by jet injection, is planned for the fair. The Regional Project Office has been asked to assist in the preparation and operation of this demonstration activity.
- 2. The OCEAC has invited SEP Headquarters, Regional Project Office, NCDC field staff and AID representatives (in OCEAC countries) to participate in an OCEAC technical meeting to be held January 30-February 3 in Yaounde, Cameroon. At this meeting the regional smallpox eradication and measles control activity will be discussed. NCDC participants will include the Chief, Smallpox Eradication Program and the Program Management Officer (from headquarters), the Director, Regional Project Office and other members of his staff, as well as NCDC field technicians and AID Affairs Officers from C.A.R., Chad, Gabon and Cameroon.

C. Country Activities

- Cameroon: The measles campaign is continuing with vaccine from previous allotments which is expected to be consumed in January 1967. The West Cameroon smallpox and measles program, involving 1.2 million persons, is to start early in 1967.
- Gabon: Mark LaPointe has visited the regional directors of the Grandes Endemies Service discussing the considerable problems presented by the sparse population and limited transportation facilities.

- 3. Ghana: See RPO Activities (Section IIB this Report).
- 4. Mauritania: The program for FY 1967 will be primarily concerned with the Hodh Oriental region. This area contains nearly 20 percent of the population of Mauritania. Two teams (possibly three) will vaccinate the 160,000 people of this region against smallpox and provide measles immunization to the estimated 25,000 children aged 1-6 years.
- 5. Nigeria: Pilot projects will be started in all regions and in the Federal District during late January and early February. No additional information has been received regarding the previously reported smallpox outbreak in the Eastern Region.
- 6. Upper Volta: Dr. Christopher D'Amanda is participating in an investigation of an outbreak of smallpox in the Dori region of northeastern Upper Volta (See Smallpox Morbidity below). Epidemic control activities are underway including mass vaccination. An assessment study is planned eight days following the completion of the Grandes Endemies Service mass campaign in the region.

D. Current Smallpox Morbidity (Table 1)

According to notifications received by the World Health Organization through December 15, 1966, 6,838 cases of smallpox have been reported from the 19 countries participating in the West Africa Smallpox Eradication/Measles Control Program. This compares with 5,783 cases reported during a comparable time period in 1965, an increase of 18 percent. The numbers of cases reported by country are shown in the table on the following page.

Upper Volta reported a December outbreak of at least 7 cases with one fatality in the northeast area of the country (Cercle of Dori) close to the border with Niger. The infirmier in Sebba (Cercle of Dori) performed 271 vaccinations and the Chief of the Grandes Endemies operation in the Cercle of Dori planned a mass campaign beginning December 27. Dr. Christopher D'Amanda, on temporary duty in Upper Volta, is participating in the campaign.

III. HOUSING

The following changes have been reported:

Nigeria: M.O. quarters in Western district have been leased by AID.

Niger: Housing has been obtained for the M.O. and O.O.

IV. PROCUREMENT

A. Measles Vaccine

A total of three shipments of measles vaccine was originally planned for fiscal year 1967. One shipment has already been distributed according to the figures in Tables 2 and 3.

The remaining fiscal year 1967 measles vaccine order will be in two shipments, one in late January and another in late February. This will complete the distribution of measles vaccine for fiscal year 1967 according to present plans.

A production lag resulted in reduction of the amount of vaccine shipped to Senegal in January. A number of cables have been received requesting further alterations in the procurement schedule for February. A summary of requested alterations as of this date appears in Table 4. In order to accommodate these requested changes and to assure sufficient supplies of vaccine for all countries, the following steps were taken.

- 1. The current shipment was altered to accommodate all requested <u>increases</u> and will be delivered as shown in Table 2 and 3.
- 2. The vaccine allotment for Nigeria was reduced sufficiently to compensate for the requested increases.
- 3. No other reductions were made in the February schedule.

The projected March shipment was altered to permit reconciling the changes mentioned above with the total amount of vaccine specified in the various ProAgs with one exception. The Nigerian vaccine total was reduced to provide 55,000 doses for Cameroon and 90,000 doses for CAR which were not originally included in the ProAg totals. In the event that the ProAg totals are not adequate for estimated usage during fiscal year 1967 and the first quarter of fiscal year 1968, the RPO should be so advised to permit adequate planning to meet these needs.

B. Smallpox Vaccine

The 1.6 million doses remaining from fiscal year 1966 orders were shipped to the RPO on December 31, 1966. The allocation of this shipment by the RPO has not yet been reported. A number of cables have requested changes in the projected distribution of smallpox vaccine as it appears in Tables 2 and 3.

The January shipment of smallpox vaccine (jet and multiple pressure) will proceed as indicated in Tables 2 and 3. Requested scheduling changes will be made in subsequent shipments when the distribution of the 1.6 million doses referred to above is known and when estimates of overall needs for fiscal year 1967 and the first quarter of fiscal year 1968 have been received.

C. Jet Injectors

Completed units should be ready for shipment at the rate of 100 per week beginning the first week in February. Delay has been due to labor problems of the subcontractor supplying gunstocks.

D. Vehicles

The 35 left-hand drive D-200 and W-200 Dodge trucks remaining undelivered will be aboard the African Grove sailing January 24 and should arrive according to the following schedule:

February 2 - Dakar - 3 W-200 for Mauritania 2 D-200 for Gambia 2 W-200 for Senegal 5 W-200 for Mali

February 12 - Abidjan - 6 D-200 for Ivory Coast 2 W-200 for Upper Volta

February 15 - Accra - 1 D-200 for Ghana

February 18 - Lagos - 6 W-200 for Chad 3 D-200 for Dahomey 1 W-200 for Gabon 4 W-200 for Niger Predelivery service has been performed on these trucks. Hereafter this will be done at destination in Africa as requested.

Three of the four International trucks for C.A.R. have been sent to subcontractor for installation of top racks and carrier boxes and should be ready for shipment soon.

J. D. Millar, M.D.

DISTRIBUTION

Director, NCDC

Executive Officer, NCDC

Chief, OIH, HEWS, Washington, D.C.

Professional Personnel, Smallpox Eradication Program

Dr. Del Ruthig, OIH, Washington, D.C.

Dr. A.C. Curtis, AID, Washington, D.C.

Dr. D. A. Henderson, WHO, Geneva, Switzerland

Dr. Hans J. Mayer, Intercountry SP Advisor, Monrovia, Liberia

Dr. A. D. Langmuir, Epidemiology Br., NCDC

Mr. G. Fordyce, AAPC, New York, N.Y.

Table 1

Reported Smallpox Cases in 19 West African Countries 1966*

| | Most Recent Reporting Date | Cumulati of Cas | | Comments - 1966 Incidence | | | |
|-----------------|-------------------------------|--------------------|--------|--|--|--|--|
| Country | in 1966 | 1966 | 1965** | | | | |
| Cameroon | April 30 | 3(r) | 0(r) | 2 cases reported from Division of Mayo- Danai and one case from Division of Margui-Wandala. | | | |
| C.A.R. | *** | 0 | 0 | | | | |
| Chad | *** | 0 | 74(i) | | | | |
| Congo(B) | April 3 | 2 | 63 | | | | |
| Dahomey | Nov. 29 | 467 | 163 | 145 cases reported from Circumscription of Allada, 58 from Circumscription of Ouidah and 52 from Circumscription of Aplahoue. | | | |
| Gabon | *** | 0 | 1 | scription of Aplanoue. | | | |
| Gambia | March 15 | 3 | 1 | 3 cases from Upper River Division. | | | |
| Gambia Ghana | June 10 | 12(i,r) | 6 | J cases from opper kiver bivision. | | | |
| Guinea | Nov. 26 | 15 | 52 | 9 cases reported from Kindia Region in week ending November 26. | | | |
| Ivory Coast | *** | 0 | 8 | in week ending november 20. | | | |
| Liberia | *** | 0 | 49 | | | | |
| Mali | Nov. 4 | 279 | 545 | 78 cases reported from Cercle of San, 72 from Cercle of Nioro, and 55 from Cercle of Dire. | | | |
| Mauritania | Aug. 11 | **** | 0 | Smallpox reported present in Cercle of Hodh Occidental as of August 11. | | | |
| Niger | Dec. 8 | 923 | 431 | 168 cases reported from Cercle of Niamey, 149 from Cercle of Tillabery, 132 from Cercle of Dosso and 108 from | | | |
| Nigeria | Nov. 19 | 4701 | 4310 | Cercle of Tera. Provinces Northern Western Mid-Western Lagos(City) Eastern 121 Lagos(Tity) 14 | | | |
| Senegal | *** | 0 | 0 | bastern 14 | | | |
| Sierra Leone | | 162(i) | 57 | 106 cases reported from Eastern Province. | | | |
| Togo | Dec. 4 | 197 | 10 | 157 cases reported from Circumscription of Nouatja. Of these, 132 cases have been reported since Sept. 5. | | | |
| Upper Volta | Dec. 22 | 74 | 13 | Cercle of Dori reported 7 cases, in- cluding one death. Three further cases reported directly to NCDC by Dr. D'Amand | | | |
| | Total | 6838 | 5783 | The state of the s | | | |

^{*} Reports received by WHO through Dec. 15, 1966

** Comparable time period in 1965

*** No cases reported to WHO through Dec. 15, 1966

**** See comments - 1966 incidence

(i) Includes imported cases

(r) Revised

Table 2
Operational Commodities and Supplies
Procurement Schedules by Country
OCCGE and Anglophone Countries
FY 1967

| Item and ETA Destination | Senegal. | Mauri- tania | Mali | Niger | Ivory Coast | Togo | Dahomey | Upper Volta | Gambia | Ghana | Nigeria | Total |
|-----------------------------|----------|-----------------|-------|-------|----------------|------|---------|----------------|--------|-------|---------|--------|
| A. Measles Vaccine(doses)* | | | | | | | 100 | | | | 00 | |
| 1. Jan. 1, 1967 (shipped) | 33 | 20 | 130 | 80 | 100 | 65 | 50 | 100 | 7 | 35 | 80 | 693 |
| 2. Feb. 1, 1967 | 150 | 25 | 118 | 90 | 100 | 65 | 50 | 121 | 36 | 35 | 177 | 967 |
| 3. Mar. 1, 1967 | 237 | 10 | 82 | 90 | 100 | 68 | 40 | 121 | 35 | 30 | 408 | 1,221 |
| Total | 420 | 55 | 330 | 260 | 300 | 198 | 140 | 342 | 71 | 100 | 665 | 2,881 |
| Jet | | | | | | | | | | | | |
| B. Smallpox Vaccine(doses)* | | | | | | | | | | | | |
| 1. By Jan. 31, 1967 | 500 | 120 | 600 | 400 | 320 | 310 | 300 | 500 | - | 170 | 550 | 3,770 |
| 2. " Feb. 28, 1967 | 800 | 110 | 700 | . 550 | - | 310 | 300 | - | 175 | 170 | 1,500 | 4,615 |
| 3. " Mar. 31, 1967 | 800 | 110 | 700 | 475 | _= | 270 | 165 | - | 161 | 160 | 2,000 | 4,841 |
| Total | 2,100 | 340 | 2,000 | 1,425 | 320 | 890 | 765 | 500 | 336 | 500 | 4,050 | 13,226 |
| Mult. Press. | | | | | | | | | | | | |
| C. Smallpox Vaccine(doses)* | | | | | | | | | | | | |
| 1. By Jan. 1967 | - | - | - | 75 | 350 | 45 | 85 | 700 | - | - | - | 1,255 |
| 2. " Feb. 1967 | - | - | - | - | 350 | - | - | 700 | 17 | - | - | 1,067 |
| 3. " Mar. 1967 | - | - | - | - | 300 | = | - | 600 | = | = | - | 900 |
| Total | - | - | - | 75 | 1,000 | 45 | 85 | 2,000 | 17 | - | - | 3,222 |
| D. Vehicles - D200 | | | | | | | | | | | | |
| 1. Oct. 1966(delivered | 6 | | | | 2 | | | | | | | 8 |
| 2. Nov. 1966 (shipped) | | | | | | 1 | 5 | 2 | | 2 | 9 | 19 |
| 3. Jan. 24, 1967 | | | | | 6 | | 3 | | | 1 | | 10 |
| 4. Feb. 1967 | | | | | | | | | | | 66 | _66 |
| | | | | | | | | | | | | |

Table 2 (continued)

| Item and ETA Destination | Senegal | Mauri- tania | Mali | Niger | Ivory Coast | Togo | Dahomey | Upper Volta | Gambia | Ghana | Nigeria | Total |
|---------------------------|---------|-----------------|------|-------|----------------|------|---------|----------------|----------|-------|---------|-------|
| 1. Nov. 1966(shipped) | | 2 | и | 4 | | | | | | | 6 | 16 |
| 2. Jan. 1967 | 2 | 2 | 5 | 4 | | | | 2 | 2 | | 10 | 28 |
| Total | | | | | | | | | | | | 44 |
| E. Jet Injectors | | | | | | | | | | | | |
| 1. Oct-Nov. 1966 | 10 | | 7 | | 2 44 | 10 | tente : | | 2- 10- 3 | 8 | 31 | 66 |
| 2. Jan. 1967 | 6 | 12 | 19 | 18 | 16 | | 15 | 4 | 8 | | 40 | 98 |
| 3. Feb. 1967 | | | | | | | | | | | 200 | 200 |
| 4. Mar. 1967 | | | | | | | | | | | 95 | 95 |
| Total | | | | | | | | | | | | 459 |
| F. Freezers | | | | | | | | | | | | |
| 1. Jan. 1967 | 12 | 8 | 13 | 9 | 1 | | | 6 | 4 | 2 | | 55 |
| 2. Feb. 1967 | | | | | | | 1000 | | | | 15 | 15 |
| 3. Mar. 1967 | | | | | | | | | | | 44 | 44 |
| Total | | | | | | | | | | | | 114 |
| G. Field Equipment(Units) | | | | | | | | | | | | |
| 1. Nov. 1966(shipped) | 8 | 5 | 9 | 8 | 8 | 1 | 8 | 4 | 2 | 3 | 15 | 71 |
| 2. Jan. 1967 | | | | | | | | | | | 76 | 76 |
| Total | | | | | | | | | | | | 147 |
| H. Motorbikes | | | | | | | | | | | | |
| Feb. 1967 | 6 | | 7 | 12 | 7 | 3 | 11 | | 2 | 2 | 64 | 114 |
| | | | | | | | | | | | | |

^{*} Vaccine dose in 1000's

Table 3

Operational Commodities and Supplies Procurement Schedule by Country OCEAC Countries FY 1967

| | | 2 (9 | 20 | | | | | |
|-----|------------------------------|---------|----------|-------|-------------|-------|-------|-------|
| | | | | | | | OCEAC | |
| Ite | m and ETA Destinat | tion | Cameroon | Chad | C.A.R. | Gabon | Hdq. | Total |
| Α. | Measles Vaccine(do | oses)* | | | | | | |
| | 1. Jan. 1, 1967 | | 46 | - | 30 | 20 | | 96 |
| | 2. Feb. 1, 1967 | | 100 | 74 | 45 | 20 | | 239 |
| | 3. Mar. 15, 1967 | | | 75 | 15 | 15 | | 105 |
| | Total | | 146 | 149 | 90 | 55 | | 440 |
| | | | | | 15 | | | |
| | Jet V | | | | | | | |
| В. | Smallpox Vaccine(| loses) | 570 | 400 | 160 | 100 | | 1,230 |
| | 1. Jan. 1967 2. Feb. 1967 | | 570 | 400 | 160 | 100 | | 1,230 |
| | | | | 245 | 126 | 87 | | 933 |
| | 3. Mar. 1967 | | 475 | | 120 | - 67 | | |
| | Total | | 1,615 | 1,045 | 446 | 287 | | 3,393 |
| | Mult. Press. | | | | | | | |
| C. | Smallpox Vaccine | doses)* | | | | | | |
| ٠. | Jan. 1967 | added? | 85 | 55 | 24 | 10 | | 174 |
| | | | | | | | | |
| D. | Vehicles-W500 | | 102 | | | | | |
| | Feb. 1967 | | 10 | | | 2 | | 12 |
| | -W200 | | | | | | | |
| | Dec. 1966 | | | 4 | | | | 4 |
| | Jan. 1967 | | | 6 | | 1 | | 7 |
| | Jan. 1707 | | | | | | | _ |
| | Total | | | | | | | 11 |
| | -D200 | | | | | | | |
| | Nov. 1966 | | 2 | | | | | 2 |
| | Dec. 1966 | | | | | 1 | | 1 |
| | Total | | | | | | | 3 |
| | -Internat | ionals | | | | | | |
| | Feb. 1967 | 9.0 | | | 4 | | | 4 |
| | | | | | | | | |
| E. | Jet Injectors Jan. 1967 | 至計 | 30 | 18 | 11 | 18 | 4 | 81 |
| | 7 | | | | | 4 | | |
| | A DE T | | | | | 7 | | |
| F. | Storage Freezers | 19 | | | | 8 | 2 | 23 |
| | Jan. 1967 | | 8 | 4 | my to be de | 0 | - | 23 |

Table 3 (continued)

| Item and ETA Destination | Cameroon | Chad | C.A.R. | Gabon | OCEAC Hdq. | Total |
|--|----------|------|--------|-------|---------------|-------|
| G. Freezers Jan. 1967 | 30 | 20 | 8 | 9 | 1 national | 68 |
| H. Field Equipment Dec. 1966 Jan. 1967 | 1 | 6 | 1 | 1 | | 7 2 |
| Total | | | | | | 9 |

ner

^{*} Vaccine doses in 1000's

Table 4

Requested Allotments of Measles Vaccine*
February 1967

| | Info. Rec'd | Est. Needs | Diff. from Status R#2 |
|-------------|-------------|------------|-----------------------|
| Senegal | No | 150 | 0 |
| Mauritania | Yes | 25 | +5 |
| Mali | Yes | 118 | +18 |
| Niger | No | 90 | 0 |
| Ivory Coast | Yes | 100 | 0 |
| Cogo | Yes | 30 | -35 |
| Dahomey | Yes | 50 | 0 |
| Jpper Volta | No | 121 | 0 |
| Gambia | No | 36 | 0 |
| Ghana | No | 35 | 0 |
| Cameroon | Yes | 100 | +55 |
| Chad | Yes | 32 | -42 |
| Gabon | No | 20 | 0 |
| Nigeria | Yes | 45 | -225 |
| C.A.R. | No | 45 | +15 |
| TOTAL | | 997 | -209 |

^{*} Vaccine doses in 1000's