

**BIBLIOGRAPHIC DATA SHEET**1. CONTROL NUMBER  
PN-AAH-8482. SUBJECT CLASSIFICATION (695)  
NC00-0000-0000

## 3. TITLE AND SUBTITLE (240)

Program for International Training in Health; semi-annual report, Oct. 1979 - March 1980

## 4. PERSONAL AUTHORS (100)

## 5. CORPORATE AUTHORS (101)

N. C. Univ. Medical School

## 6. DOCUMENT DATE (110)

1980

## 7. NUMBER OF PAGES (120)

20p.

## 8. ARC NUMBER (170)

610.73069.N864-79/80

## 9. REFERENCE ORGANIZATION (130)

N.C.

## 10. SUPPLEMENTARY NOTES (500)

## 11. ABSTRACT (950)

## 12. DESCRIPTORS (920)

Development  
Evaluation  
Information centers  
Paramedic trainingAssessments  
Instructional materials  
Health training  
Medical personnel

## 13. PROJECT NUMBER (150)

14. CONTRACT NO.(140)  
AID/ DSPE-C-005815. CONTRACT  
TYPE (140)

## 16. TYPE OF DOCUMENT (160)

610.73069  
N 864  
Oct. 1979 -  
Mar. 1980

PN-AAH-848

**PROGRAM FOR INTERNATIONAL TRAINING IN HEALTH**

The University of North Carolina at Chapel Hill  
School of Medicine

Trailer 16, Daniels Rd. (272H)  
Chapel Hill, North Carolina 27514  
S. Mills, Editor

Cable: INTRAH, Chapel Hill, N.C.  
Telephone: (919) 966-5636

# SEMI-ANNUAL REPORT

October 1, 1979  
through  
March 31, 1980

Contract AID/DSPE-C-0058



T A B L E   O F   C O N T E N T S

	Page
INTRODUCTION . . . . .	1
TRAINING UNIT . . . . .	2
EVALUATION UNIT . . . . .	6
EDUCATIONAL MATERIALS UNIT . . . . .	10
PUBLICATIONS UNIT . . . . .	13
ADMINISTRATIVE UNIT . . . . .	15
APPENDIX 1 (Organizational-Personnel Chart)	
APPENDIX 2 (Program Advisory Committee)	

## INTRODUCTION

During its first six months, the INTRAH program has concentrated on laying firm organizational and operational groundwork for a major effort in paramedical training development. With the encouragement and support of AID/W and a number of USAID missions, and in cooperation with institutions in the U.S. and abroad, INTRAH has widely announced the availability of its resources, conducted initial assessments of training needs, established protocols for training program implementation and evaluation, and opened channels of coordinative communication with appropriate agencies.

There have been some frustrating problems of communication and organization during this reporting period, but no more than would normally accompany the introduction of a new developmental assistance program of INTRAH's focus and scope. As this report indicates, the INTRAH staff and our colleagues in the U.S. and in the Africa/NENA regions have nevertheless applied themselves productively to undertaking their challenging task.

For purposes of clarity, the activities of this six-month period are reported through the functions of the INTRAH Units (e.g., training, evaluation, etc.). Within each Unit report, the format contains Core Activities relevant to Chapel Hill, U.S.-based, and Field Activities. Each Unit also projects its activities for the period April 1 - September 30, 1980.

## T R A I N I N G   U N I T

Since the beginning of the INTRAH program, the Training Unit's activities have focused on two main areas: the assessment of training needs in various African and NENA countries, and the planning of training programs. In addition, a special effort has been made during these first months to define Training Unit goals and procedures, identify training strategy, and develop appropriate tools to monitor the training activities.

The following activities include those for which the Training Unit had the leadership, as well as those made in collaboration with other INTRAH Units.

### Core Activities

Since October 1st, 1979, the Training Unit's core activities has been to:

- Work with the Evaluation Unit in the development and design of INTRAH needs assessment tools.
- Work with the Evaluation Unit in redefining and prioritizing needed information from needs assessment instruments for training and evaluation purposes.
- Work with the Evaluation Unit to develop the format for the report-  
ing of country needs assessment.
- Participate with other Units in a series of meetings for the purpose of setting INTRAH goals, policies and procedures, and developing a work plan for program planning and implementation.
- Develop a system to schedule and monitor the progress of training programs and the involvement of training staff and consultants.
- Develop discussion papers that will lead to the planning and staffing of Field Offices and sub-regional training resources.
- Evaluate training requests from individuals and U.S., African and NENA potential subcontractors.
- Contact and visit U.S. institutions involved in the training of paramedical personnel in order to establish linkage for collaboration.

## U.S.-Based Activities

Because INTRAH's program philosophy is to develop training capabilities in Africa and NENA countries, most training activities will take place on-site; U.S.-based training will be kept to a minimum and decrease as the program progresses.

For this first 6-month period, the Training Unit has been involved in the following:

- Initiating the development of a pool of consultant-resources (internationally) for later use in the program. This is an on-going process.
  - The Director of Training visited the Margaret Sanger Center in New York City to explore with the Associate Executive Director the possibilities for future collaboration. (February 22, 1980)
  - The Director of Training planned and negotiated a contract with the International Training Department at the University of California at Santa Cruz for an 8-week "Clinical Family Planning Training Program" for nine Rwandese nurses. (February 25, 1980)
  - The Training Unit staff participated in the debriefing and evaluation of the "Critical Training Skills Workshop" held in Egypt in November, and established plans for further collaboration with the Institute of Public Service, University of Connecticut. (February 29, 1980)
  - The Director of Training visited the Center for Population Activities in Washington, D.C. to determine the usefulness of its program in management and training of trainers for INTRAH purposes. (March 14, 1980)
  - The Training Associate initiated the planning of a three-day seminar on the "Role of Family Planning in Primary Health Care" to be held in Turkey. At the planning meeting was the General Director of Population Planning at the Ministry of Health in Ankara, Turkey. (March 31 to April 1, 1980)
- Initiated procedures for the training of a candidate from Yemen in a 3-month "Clinical Training, Management and Leadership Skills"

program at the University of Connecticut. (April 21 to July 11, 1980)

### Field Activities

The Training Unit's field activities since October 1st, 1979 has been:

- The Training Associate led the Turkey needs assessment team in Ankara, Turkey. (January 28 to February 9)
- The Director of Training conducted a training needs assessment together with negotiations in Rabat, Morocco. (March 22 to April 2, 1980)
- The Director of Training conducted in Tunisia the assessment of training needs and explored the possibility of Tunisia becoming the first French-speaking regional training site for INTRAH. (April 2-12, 1980)

### PROJECTED ACTIVITIES April 1 - September 30, 1980

Based on training needs assessment results and the expressed needs and interests of Africa and NENA health authorities, the Training Unit projects its activities with regard to the planning, staffing, implementation and/or evaluation from April 1st, 1980 to September 30th, 1980.

#### Core

- INTRAH Planning Meeting in Chapel Hill. (May 29-30, 1980)
- Start the development and design of Trainer and Trainee Manuals in the areas of communications and training of trainers. (May 1980)
- Program planning and work plan design for Morocco, Turkey, Tunisia, Kenya, Somalia, and Ghana. (May 1980)
- Planning session with three tutors from the National Welfare Center of Kenya, in training at Connecticut University. The session will focus on the planning and administrative arrangements of a training for trainers workshop in Kenya. (July 1980)
- Program planning session to develop training plans and strategies for Syria, Jordan, Sudan and Botswana. (August 1980)

### U.S.-Based

- Visit to the University of California at Santa Cruz to assess the clinical training in family planning being provided to nine nurses from Rwanda. (April 1980)
- Planning meeting with the Pathfinder Fund to develop a training and technical assistance program to be jointly implemented in Rwanda by Pathfinder and INTRAH. (April 1980)
- Meeting with the Pathfinder Fund to explore possibilities of collaborating in a training program for Yemen. (April 1980)
- Training program planning sessions with Santa Cruz International Training staff to develop work plan activities for Zaire, Benin, and Niger. (August 1980)

### Field

- Three-day seminar on "The Role of Family Planning in Primary Health Care", in Ankara, Turkey. (June 3-5, 1980)
- Three-week management workshop in Kenya. (June 1980)
- One-week program planning session in Morocco. (June 1980)
- One-week program planning session in Tunisia. (June 1980)
- Three-week training for trainer's workshop in Kenya. (August 1980)
- Three-week communications workshop in Morocco. (September 1980)
- Three-week training for trainers and curriculum development workshop in Morocco. (September/October 1980)
- Three-week master trainers workshop in Tunisia (September/October 1980)
- Participation in the Pan-African Conference on the role of paramedical personnel in the delivery of family planning services in Sierra Leone. (September 1980)

In addition to the above, it is expected that the Training Unit staff will be involved in other training needs assessment visits.

## EVALUATION UNIT

The INTRAH Evaluation Unit activities (Core, U.S.-based, Field) during the period October 1, 1979 - March 31, 1980, concentrated upon developing and implementing needs assessment and overall evaluation protocols, organizing the Unit, and establishing relationships with other INTRAH Units.

### Core Activities

Most activities concerned developing needs assessment protocols. Initial plans, including instrumentation for conducting country-specific needs assessment activities in as many as twenty countries, were submitted to AID/W for approval. A proposal to field-test the instruments and to determine the feasibility of the needs assessment strategy was also approved. Upon completion of the field test, preparations began for full scale needs assessment efforts scheduled between January and March, 1980. Instruments were revised with the assistance of the Training Unit. (October - December 1979)

In conjunction with the needs assessment efforts, the Evaluation Unit initiated a search to locate and collect already existing baseline data on the countries to be visited by core staff. This data would provide an introduction to the countries, corroborate information recorded on the needs assessment instruments, and supply data where none existed after the analysis of the assessment forms. The Unit relied primarily on the library resources of the University of North Carolina, including the Carolina Population Center, background material from the files of the AHTIP and documents, conference reports, etc., from the files of INTRAH core staff and their colleagues. When available, such reports as the UNFPA training needs assessment reports were included. The result of this work is a collection of country-specific bibliographies, convenient to all members of INTRAH. The Evaluation Unit foresees this kind of research and practical presentation of findings as a continuous process throughout the course of the program.

Needs assessment plans and activities were significantly curtailed in January -March as a result of communication problems which resulted in a reticence on the part of some USAID missions to grant clearances for INTRAH needs assessment teams. The clearances that were eventually obtained restricted

the scope of needs assessment activities. The Evaluation Unit streamlined the original data collection forms and developed information reporting procedures better suited to the new situations. INTRAH staff members who traveled to Turkey, Egypt, Ghana, Kenya, Somalia, Morocco, and Tunisia were oriented to needs assessment procedures. (January - March 1980)

Important preliminary work related to the organization of the Evaluation Unit was undertaken in this period. This work included:

- establishment of a budget
- assignment of a full time research assistant
- separate meetings with the Training Unit, the Data Management Group (Dept. of Biostatistics, UNC-CH), and the Health Service Research Center (UNC-CH), to explore procedures for establishing INTRAH's record-keeping system
- development of techniques for the Evaluation Unit and other INTRAH staff to record and evaluate events that affect INTRAH operations as they occur
- construction of a draft of the total range of evaluation activities based upon goals, objectives, and specific tasks,

Significant efforts were made to build and maintain proper collaborative relationships with other INTRAH units.

- A policy statement that formally declared the relationship between Evaluation and other INTRAH Units required by the Evaluation Unit in order to function properly was circulated to all INTRAH staff members.
- Evaluation staff located and compiled background information required by the Training Unit for a conference planned in Turkey.
- An expert on program evaluation, Dr. Malcolm Parlett, served as a consultant to the Evaluation Unit and aided in its development role.

#### **U.S.-Based Activities**

In February 1980, the Evaluation Coordinator spent three days with administrative and training staff members of UNEX in Santa Cruz, California, to discuss evaluation-related aspects of subcontracts held between UNEX and

## INTRAH.

- One day was spent briefing UNEX staff members assigned to visit Senegal and Mali on the needs assessment forms and procedures.
- Two days were spent with other INTRAH staff members in negotiation of a training subcontract with UNEX for Rwandese health workers. Special attention was given to the evaluation and record-keeping responsibilities UNEX will assume as part of the overall contract.

### Field Activities

The Evaluation Coordinator traveled to Kenya and Egypt between November 24 and December 3, 1979 to meet with USAID mission and host country officials to discuss the INTRAH program, and to determine the feasibility of conducting the needs assessment. Drafts of the needs assessment forms were shared with officials and in some cases were field tested. The idea of having INTRAH teams return to gather country-specific information was acceptable to everyone who was interviewed.

### PROJECTED ACTIVITIES April 1 - September 30, 1980

#### Core

- Needs assessment-related activities will continue. Information collected by traveling staff will be processed and developed into a format that will support decision-making. Opportunities will be explored for collecting more data during trips made in this time period. Information gaps that appear as available data is analyzed will receive special attention as opportunities arise for further information collection.
- Further organization of the Evaluation Unit will proceed. The record-keeping system will be established--probably passing through a simple interim phase first, and then moving into a more sophisticated phase. Procedures for evaluating immediate outcomes of all INTRAH-sponsored activities will be developed. The various roles and objectives of the Evaluation Unit will be prioritized as

required.

- Training materials in areas of evaluation will be developed for use in Africa and NENA.

#### U.S.-Based

- Selected U.S.-based subcontractors will be visited to determine the appropriateness of their record-keeping and evaluation procedures. In some cases subcontract training will be observed and evaluated.

#### Field

- The Evaluation Unit will be involved in collecting needs assessment information in countries scheduled to be visited during the next period that were not visited between October 1, 1979 and March 31, 1980.
- The Evaluation Unit will be directly involved in the evaluation of all training activities to be conducted during this period.
- The Evaluation Unit will assist in the establishment of field office/field training sites and will respond to host country needs for training in evaluation.

## E D U C A T I O N A L   M A T E R I A L S   U N I T

The primary function of the Educational Materials Unit is to coordinate the INTRAH activities which involve the development of training materials, and to develop in-country capabilities to produce and use indigenous'y-authored training materials.

### Core Activities

The Educational Materials Unit has engaged in the following activities during the period October 1, 1979 to March 31, 1980:

- Contacting other organizations (U.S. and international) involved in developing training programs and/or training materials for paramedical/non-physician health workers in MCH/FP in order to obtain information on their programs and teaching materials.
- Reviewing sample training materials and communication techniques for possible use or adaptation of content or format.
- Developing a mission statement clarifying the Unit's role in INTRAH vis-a-vis other program Units.
- Developing and managing a budget.
- Participating in programmatic policy decision-making.
- Organizing and systematizing an INTRAH library collection which consisted of books, periodicals, articles, manuals, and other references from two former international programs. It also included researching, including computer scans for possible new acquisitions, as well as consulting and coordinating INTRAH needs with the Carolina Population Center library and the Health Sciences library. (The INTRAH reference room became part of the Publications Unit in March, 1980.)
- Assisting in organizing and researching the country bibliographies for the Evaluation Unit.
- Writing, designing, and printing the INTRAH brochure, INTRAH "Guidelines", and maps.
- Designing and printing INTRAH logo and stationery.
- Assisting in interviewing and hiring process for INTRAH core staff.
- Initiating a system for up-dating INTRAH staff on new research and developments in MCH/FP relevant to our work.

### U.S.-Based Activities

(See previous page)

### Field Activities

- The Deputy Director and Educational Materials Coordinator went to Somalia as part of the needs assessment and information program plan. (March 13-27, 1980)
- The Deputy Director and Educational Materials Coordinator went to Kenya as part of the needs assessment and information program plan. (March 28-April 12, 1980)

### PROJECTED ACTIVITIES April 1 - September 30, 1980

During this period, the Unit plans to:

- Cooperate with the INTRAH Training Unit in the preparation of materials for use in planned training activities.
- Identify samples of training materials which might be useful in countries assessed to date and make recommendations to appropriate country authorities.
- Continue developing coordination with other organizations involved in development of training programs and materials for paramedical/non-physician health workers.
- Continue the review of sample training materials and techniques and MCH/FP resources.
- Continue contributions to INTRAH library.
- Continue technical support to INTRAH (illustrations, charts, cover designs, etc.).
- Continue INTRAH staff update on MCH/FP.
- Develop a slide show (English and French) as the INTRAH introduction (to complement the INTRAH pamphlet the Publications Unit is developing).
- Support upcoming training activities by developing training materials

on various aspects of MCH/FP and educational and training methodology. Also, contribute to designing and conducting workshops that involve visual aids or training materials development.

U.S.-Based

(See previous page)

Field

- The Educational Materials Unit will be directly involved with Africa/ NENA countries that request and require instructional support.

## P U B L I C A T I O N S   U N I T

The Publications Unit of INTRAH was initiated during the latter part of March, 1980. The Unit has worked on organizing, clarifying, and defining its goals and purposes and putting them into effect.

### Core Activities

Publications will be responsible for the final editing, designing, printing, and distribution of technical communications, (i.e., semi-annual reports, project reports, etc.) and promotional material (i.e., brochures, pamphlets, manuals, etc.).

- Copies of the current INTRAH brochure have been sent to USAID missions, and to UNC-CH and other U.S. institutional faculty.
- A cover for reports is being designed.

The Publications Unit will manage and has continued organizing an information center, including a reference room, for INTRAH staff and visitors.

- The reference room at the present time contains catalogued teaching and reference materials in Family Planning and Maternal Child Health, Education, Basic Texts, Country Information, and Catalogues.
- Publications will manage requests from staff for books and journals.

The Unit has developed and managed a publications budget and participated in program decisions.

As the various INTRAH Units create training packages, monographs, conference materials, etc., Publications will act as a coordinator in whatever capacity is most suitable, i.e., design, production, distribution.

### U.S.-Based Activities

(See above)

### Field Activities

Currently the Publications Unit is acting as a liaison for former AHTIP publications, which are being printed and distributed by AMREF in Nairobi,

Kenya. These publications include 215 self-instructional units in family health, "Topical Outlines in Family Health" for Medicine and Nursing-Midwifery, a "Manual of Case Studies in Family Health," "Writing Self-Instruction," "Use of Self-Instruction," and catalogues describing the above for both medicine and nursing.

These publications have been translated into French at the Chapel Hill offices, and will also be sent to AMREF, Nairobi, Kenya for printing and distribution.

There has been interim sharing of French materials with USAID/Morocco, for their distribution in-country.

<p>PROJECTED ACTIVITIES April 1 - September 30, 1980</p>
--

Core

- Publications will edit, lay-out, print, and distribute the semi-annual reports of April and September.
- A pamphlet fully describing INTRAH resources and priorities will be written/designed and completed by the summer.
- The reference room will be expanded to contain more current information and resources.

U.S.-Based

(See above)

Field

- Distribution lists for AHTIP materials will be updated.
- Procedures with AMREF for distribution will be reviewed and solidified.
- Coordinating publications activities for the INTRAH units will continue
- Preliminary groundwork for an international journal on paramedical training will be started.

## A D M I N I S T R A T I V E   U N I T

### Core Activities

#### Organization and Staffing

The INTRAH domestic organization essentially is patterned as diagrammed in the July 16, 1979, proposal. Subordinate to the Director and Deputy are five cooperating sub-units: Training, Evaluation, Educational Materials, Publications and Administration. (An organizational-personnel chart is provided in Appendix 1.)

All key UNC/CH positions are filled. Two are now categorized as "acting", pending compliance with the UNC/CH Affirmative Action Program. Public advertising for the position of Training Associate (NENA) will continue until June 15, 1980.

Planning for INTRAH overseas staffing is in process, with recruitment timed to major training plans, field office locations, and AID concurrences.

A Program Advisory Committee has been constituted by the Dean, School of Medicine. The Committee, chaired by Associate Dean Eugene Mayer, School of Medicine, meets periodically to review INTRAH policy, plans and progress. To date, the Committee has met on Dec. 5 and 17, 1979, January 10, 1980, and March 11, 1980. (See Appendix 2 for the Committee membership.)

#### Facilities

The State of North Carolina is now completing lease arrangements for permanent INTRAH office space at 208 North Columbia Street, in Chapel Hill. Occupancy is projected for June/July 1980. In the interim, the School of Medicine has provided temporary on-campus space.

#### Procedural Guide

Basic INTRAH Unit objectives, management and support procedures are available in manual form to the INTRAH staff.

#### Subcontracting

Subcontracts placed, with AID approval, include:

- University of Connecticut  
(Nov. 1, 1979 - Dec. 24, 1979)                      \$ 11,124

University of California, Santa Cruz (Jan. 1, 1980 - Dec. 31, 1980)	185,108*
University of California, Santa Cruz (Mar. 10, 1980 - June 30, 1980)	<u>74,189</u>
TOTAL	\$270,421*

- Planning toward small business/minority subcontracting has included:  
Reviews of PL 95-507 and literature related thereto.
- Contact with 18 category 8(a) firms. (December 1, 1979)
- Visit to Small Business Office, AID Central Operations Division.  
(February 22, 1980)
- Further contact with AID Small Business Office.  
(March 6, 1980)
- Request for Procurement Automated Sources System (PASS) data from  
the U.S. Small Business Administration in Atlanta.  
(March 27, 1980)
- Contacts with the State of N.C. Minority Business Development Agency  
in Raleigh. (March 28, 1980) (There are continuing contacts with  
the UNC/CH Contracts Administrator on this matter.)

INTRAH currently has working lists of potential subcontractors, including several in the 8(a) category.

#### Finance

To provide for the orderly collection of costs accruing to this contract, INTRAH has established the following major accounts. Within each account, fiscal data is further recorded by object class codes per the State chart of accounts:

- Overseas reserve
- Administration
- Training Unit
- Evaluation Unit
- Educational Materials Unit
- Publications Unit

---

\* Contract with Univ. of Calif. subject to amendment, AID concurrence and additional funding.

- Subcontracts
- Subcontracts (minority business)
- DBA and subcontract audits
- Conferences
- Participants/Trainees
- Advisory Groups

**U.S.-Based Activities & Field Activities**

(See above)

**PROJECTED ACTIVITIES  
April 1 - September 30, 1980**

Core

- Assist Evaluation Unit in plans for computerizing data resulting from training/evaluation efforts.
- In conjunction with the INTRAH Budget Committee, reprogram budgets as obligating experiences may require.

U.S.-Based

- In conformity to INTRAH work plan, execute and secure AID approval for additional training subcontracts.
- Complete INTRAH standard Invitation for Bid (IFB) format for use in expanding subcontract potential with small business/minority agencies.
- Continue liaison efforts with AID Small Business Office.

Field

- In collaboration with the INTRAH Training Unit and AID, the Administration Unit will initiate arrangements to establish and support overseas field offices.
- As required, establish accounts for overseas field offices and/or country activities.

PROGRAM FOR INTERNATIONAL TRAINING IN HEALTH

Financial Status as of March 31, 1980

<u>Category</u>	<u>Budget</u>	<u>Expended and Encumbered</u>	<u>Balance</u>
	<u>9/30/79 6/30/81</u>	<u>9/30/79 3/31/80</u>	<u>as of 4/1/80</u>
Salaries	789,628	91,899	697,729
Consultants	91,750	0	91,750
Fringe Benefits	269,056	10,509	258,547
Overhead	360,862	41,654	319,208
Travel/Transport	634,125	52,126	581,999
Other Direct Costs	432,382	19,052	413,330
Equip/Supplies	263,425	3,820	259,605
Subcontracts/Participants	<u>838,825</u>	<u>270,421</u>	<u>568,404</u>
Total:	3,680,053	489,481	3,190,572

- Sources:
1. UNC/CH Contract/Grant Expenditure Summary Report
  2. INTRAH Subcontracts

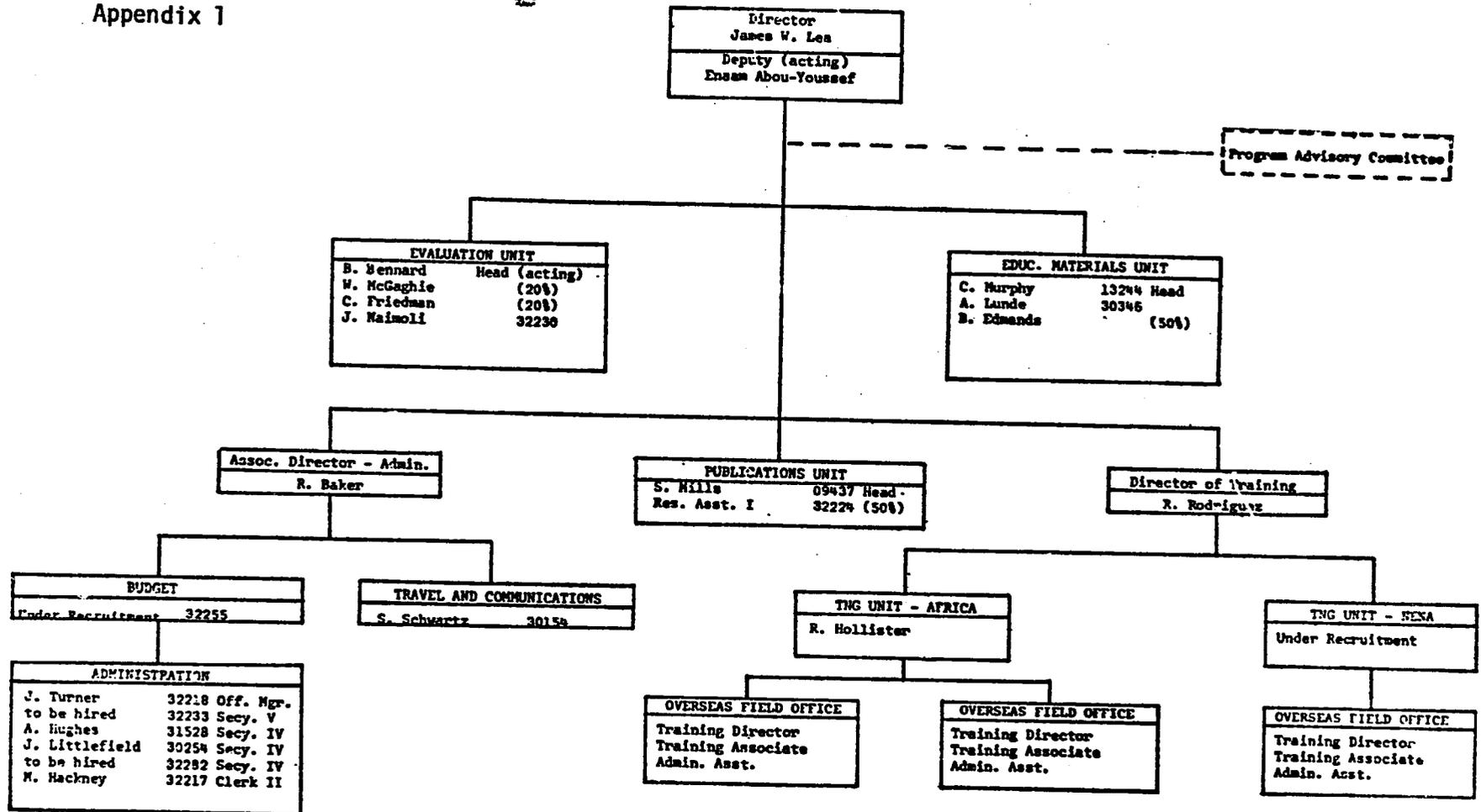
Notes: In addition to the \$489,481 above, INTRAH records reflect an additional \$74,902 "in transit".

Prepared: April 16, 1980



PROGRAM FOR INTERNATIONAL TRAINING IN HEALTH (INTRAH)

Appendix 1



**Appendix 2**

**PROGRAM FOR INTERNATIONAL TRAINING IN HEALTH**

**Program Advisory Committee  
(as of March 31, 1980)**

**Dr. Charles Harper**  
School of Public Health/Community Services

**Dr. Thomas Bacon**  
Medical School/Area Health Education Centers

**Dr. Ingrid Swenson**  
School of Nursing

**Dr. Merrel Flair**  
Office of Medical Studies

**Dr. Phil Sloane**  
Family Medicine

**Dr. Barbara Kramer**  
Division of Health Affairs

**Dr. Alan Cross**  
Medical School/Pediatrics

**Dr. Bernie Machen**  
School of Dentistry

**Dr. Eugene Mayer**  
School of Medicine

**Dr. Charles Pulliam**  
School of Pharmacy

**Dr. Charles Hendricks**  
Obstetrics/Gynecology

**Dr. Will Edgerton**  
Medical School/Psychiatry

**Dr. Thomas Barnett**  
Medical School/Medicine

**Dr. Paul Biggers**  
Medical School/Surgery

**Dr. Betty Cogswell**  
Carolina Population Center