



## INSTRUCTIONS

The approved Project Data Sheet summarizes basic data on the project and must provide reliable data for entry into the Country Program Data Bank (CPDB). As a general rule blocks 1 thru 16 are to be completed by the originating office or bureau. It is the responsibility of the reviewing bureau to assume that whenever the original Project Data Sheet is revised, the Project Data Sheet conforms to the revision.

**Block 1** - Enter the appropriate letter code in the box, if a change, indicate the Amendment Number.

**Block 2** - Enter the name of the Country, Regional or other Entity.

**Block 3** - Enter the Project Number assigned by the field mission or an AID/W bureau.

**Block 4** - Enter the sponsoring Bureau/Office Symbol and Code. *(See Handbook 3, Appendix 5A, Table 1, Page 1 for guidance.)*

**Block 5** - Enter the Project Title *(stay within brackets; limit to 40 characters).*

**Block 6** - Enter the Estimated Project Assistance Completion Date. *(See AIDTO Circular A-24 dated 1/26/78, paragraph C, Page 2.)*

**Block 7A.** - Enter the FY for the first obligation of AID funds for the project.

**Block 7B.** - Enter the quarter of FY for the first AID funds obligation.

**Block 7C.** - Enter the FY for the last AID funds obligations.

**Block 8** - Enter the amounts from the 'Summary Cost Estimates' and 'Financial Table' of the Project Data Sheet.

**NOTE:** The L/C column must show the estimated U.S. dollars to be used for the financing of local costs by AID on the lines corresponding to AID.

**Block 9** - Enter the amounts and details from the Project Data Sheet section reflecting the estimated rate of use of AID funds.

**Block 9A.** - Use the Alpha Code. *(See Handbook 3, Appendix 5A, Table 2, Page 2 for guidance.)*

**Blocks 9B., C1. & C2.** - See Handbook 3, Appendix 5B for guidance. The total of columns 1 and 2 of F must equal the AID appropriated funds total of 8G.

**Blocks 10 and 11** - See Handbook 3, Appendix 5B for guidance.

**Block 12** - Enter the codes and amounts attributable to each concern for Life of Project. *(See Handbook 3, Appendix 5B, Attachment C for coding.)*

**Block 13** - Enter the Project Purpose as it appears in the approved PID Facesheet, or as modified during the project development and reflected in the Project Data Sheet.

**Block 14** - Enter the evaluation(s) scheduled in this section.

**Block 15** - Enter the information related to the procurement taken from the appropriate section of the Project Data Sheet.

**Block 16** - This block is to be used with requests for the amendment of a project.

**Block 17** - This block is to be signed and dated by the Authorizing Official of the originating office. The Project Data Sheet will not be reviewed if this Data Sheet is not signed and dated. Do not initial.

**Block 18** - This date is to be provided by the office or bureau responsible for the processing of the document covered by this Data Sheet.

Indicative Budget  
(Refer Page 2, Action Memo, under Discussion:)

\$250,000 increment for extension to Regional Remote Sensing (West Africa) Project (WARS I, 698-0420)

1.	Additional Technical Assistance	<u>\$165,000</u>
a.	Photographic Engineer 7 person/months	90,000
b.	Remote Sensing Training Advisor 2 person/months	20,000
c.	Management Consultant 2 person/months	40,000
	N.B.: Above costs include travel, per diem, etc., with extensive travel within Africa for Management Consultant.	
	Fees, overhead, etc.	15,000
2.	Additional commodities for photo lab (supplies, spares and PC AT for CRTO computer for archiving and materials inventory)	<u>\$ 55,000</u>
3.	CRTO Photo Lab Engineer participant training	<u>\$ 15,000</u>
4.	Anglophone training session scholarships	<u>\$ 15,000</u>
	Grand Total	<u>\$250,000</u>

Summary of Project Authorization Amendments

<u>Number</u>	<u>Date</u>	<u>Funding</u>	<u>LOP</u>	<u>PACD</u>	<u>Nature and Rationale</u>
Original	09/14/77	\$750,000	\$1,851,000 2 yrs (or 5)	09/30/79	Phase I support
1	12/26/78	no change, re-schedule	\$1,851,000 for 2 years, phase I (\$4,324,000 for 5 years)	09/30/79	Change from SDP to ARD. Revise funding schedule.
2	03/14/80	+\$185,000	\$2,036,000	12/31/80	Extend duration and provide additional funding for Phase I. (Amendment based on 6/79 evaluation recommending extension by one year and additional funding - due to implementation delays in TA, commodity procurement, construction and African state support. Most problems resolved by 3/80.)
3	08/28/80	+\$254,000	\$2,290,000	04/31/81	Extend duration and provide additional funding for Phase I. (Continued implementation delays and additional commodity support, construction, "sensitization" and operating costs.)

<u>Number</u>	<u>Date</u>	<u>Funding</u>	<u>LOP</u>	<u>PACD</u>	<u>Nature and Rationale</u>
4	06/17/81	+\$235,000	\$2,525,000	12/31/81	Extend duration and provide funding for Phase I. (While progress made in training, user services and photolab, Phase I was not yet completed. The major reason for extending Phase I, however, was a major technical dispute over Phase II design between the Canadians and the French which delayed the design process requiring further extension of Phase I.)
5	12/21/81	no change	\$2,525,000	09/30/82	Extend duration at no additional cost. (Delays in authorizing Phase II and conforming PACD to termination date of T.A. contract. The T.A. contract period assumed continuation on into Phase II.)

<u>Number</u>	<u>Date</u>	<u>Funding</u>	<u>LOP</u>	<u>PACD</u>	<u>Nature and Rationale</u>
6	04/16/82	no change	\$2,525,000	06/30/82	Extend duration at no additional cost - as an interim measure. (Phase I objectives were achieved, however continued support was required to institutionalize these despite common agreement among donors (2/82) that a satellite receiving station was not feasible due to high recurrent costs.)
7	06/13/83	no change	\$2,525,000	03/31/84	Extend duration at no additional cost. (An interim extension to determine whether additional AID funding is appropriate for a three year period - based on favorable findings of a 6/83 evaluation. Inputs revised and new contractor selection required.)

<u>Number</u>	<u>Date</u>	<u>Funding</u>	<u>LOP</u>	<u>PACD</u>	<u>Nature and Rationale</u>
8	06/15/84	+\$850,000	\$3,375,000	12/31/86	Extend the duration and provide additional funding to maintain momentum while a follow on project is designed. (Based on the 6/83 evaluation, final support was considered and then modified to reflect continuing AID interest in the technology and the Williamsburg Economic Summit USG position that support would be continued. The extension provides for re-letting the T.A. contract, and that CPs and covenants pertaining to institution-building ("Africanization") be satisfied before disbursing TA funds.)

14 JUN 1984

*John  
Amundson*

ACTION MEMORANDUM FOR THE ACTING ASSISTANT ADMINISTRATOR FOR AFRICA

FROM: AFR/RA, ~~William H. Naylor, Jr.~~

SUBJECT: Extension of the West Africa Remote Sensing Project (698-0420)

Problem: The West African Remote Sensing Project, for which the current PACD is March 31, 1984, requires an additional 33-month extension to maintain momentum while a follow-on project is designed.

Background: The project was authorized in 1977 and was originally envisioned as a five-year, two-phase project. Phase One (1978-1979) called for the establishment of a regional remote sensing center (CRTO) in Ouagadougou to train Africans and to provide user assistance services. Phase Two (1980-1982) was to continue activities begun during Phase One while construction of a ground station was accomplished with financing by the French and the Canadians. The A.I.D. commitment was for training and development of a photo lab and did not include construction of a ground station. At present it is not clear whether the ground station will be built. The project also suffered numerous delays during the first two years in the recruitment of technicians and procurement of commodities.

The rationale for the extension of the PACD to March 31, 1984 was to keep the CRTO going at a reduced level while the Bureau undertook further review of an evaluation of the project carried out in March-April, 1983. This evaluation found that much had been accomplished in terms of the establishment of the photo lab and the training of Africans and that for the most part, the Phase One goals had been achieved. As a direct result of the project, two national remote sensing centers were established in Benin and Cameroon. On the other hand, there are still insufficient numbers of African staff recruited for the center and there is no assurance that CRTO will ever be financially viable without donor support. The evaluation suggested a partial solution in the form of a three-year extension during which U.S.-provided technical assistance would concentrate on increased marketing of CRTO's services and a more business-like approach to operations. On November 18, 1983, a project committee met to review the proposal set forth in the evaluation and consider a course of action concerning the CRTO. The committee concluded that the lack of assurance for the long-term financial viability of the CRTO was a serious consideration; African member states have not maintained expected levels of financial support and revenues from the product line are not at the magnitude which they could be. While CRTO is a focus of French political, technical and commercial interest, the photo lab has been, and remains, a purely U.S. operation. U.S. technology in this area is state of the art and the U.S. has predominate capability in photo engineering. Since the photo lab is central to CRTO's functions, CRTO's reputation and ability to operate would suffer severe damage if U.S. assistance were withdrawn. Without a continuously operating photo

lab the region would lose a valuable resource in support of a wide variety of development projects, and the major source of training for national programs would disappear. The U.S. might also bear the onus for the rapid deterioration of the CRTO. On the other hand, CRTO has yet to gather about it the necessary permanent staff to execute its functions and consequently must rely on expensive expatriate technical assistance.

The view of the project committee was that terminal assistance should be provided, in order to give CRTO time to search for an alternative source of technical expertise to operate the photo lab. However, at a meeting of senior Agency and Bureau officials held during the recent African Mission Directors Conference in Kigali, the importance of continuing support for remote sensing centers in LDCs was emphasized: at the Williamsburg Economic Summit the USG had stated a policy of continued support to these facilities. In the face of increasing demand for remote sensing technology on the part of African countries, the remote sensing centers in Africa remain the only accessible and cost-efficient sources of imagery.

Finally, we understand that the EEC, as part of a larger study of Sahel development issues, will be considering the role of CRTO in that context. The EEC expects to be able to speak to the potential future role of CRTO in a meeting planned for 1985, to which donors will be invited. It would be useful, therefore, for A.I.D. to extend the current project until the general framework for donor assistance to CRTO and a follow-on project becomes apparent.

Considering all of these factors, we believe that the best course of action would be to continue to support CRTO. The photo lab would receive the services of one technician and a limited amount of operational funds for a period of 33 months, contingent upon the assignment of a permanent African counterpart to the photo lab. The technician, a photo engineer, would assure the continued survival of CRTO by maintaining the high quality of the lab's product and the training function. Also a management expert would be provided to CRTO to upgrade business practices and billing procedures, contingent upon CRTO filling other critical, but presently vacant positions.

FPR Temporary Regulation 75, implementing P.L. 98-72, will require that the institutional contract for twenty-four months of services for both the photo engineer and the management expert be let competitively unless there is justification for a non-competitive procurement. Since a hiatus in the operation of the photo lab while this procurement occurs would prove critical to the survival of CRTO, 6-9 months of personal services of a photo engineer will be required for the interim period. It is estimated that the total endeavor would cost \$850,000 of FY 1984 funds.

PP Supplement

The following are supplemental to budgetary and implementation planning in the approved PP, as amended.

I. Budget (March 31, 1984 - December 31, 1986)

<b>Personnel</b>		<b>\$674,000</b>
Photo lab technician (9 mos)	80,000	
Photo lab technician (24 mos)	275,000	
Management expert (24 mos)	275,000	
Short-term consultants (9 weeks)	44,000	
<b>Training</b>		<b>\$ 74,000</b>
5 photo lab technicians	10,000	
Advanced applications workshop		
4 (3 mos) workshops x 8 students		
X \$2,000 =	64,000	
<b>Commodities</b>		<b>\$ 32,000</b>
Zoom Transferscope	12,000	
Microprocessor and software	20,000	
<b>Other Costs</b>		<b>\$ 50,000</b>
Materials/support (chemicals, paper)		
<b>Contingencies</b>		<b>\$ 20,000</b>
<b>TOTAL</b>		<b>\$850,000</b>

II. Method of Implementation and Financing

<u>Method of Implementation</u>	<u>Method of Finance</u>	<u>Approximate Amount</u> <u>(U.S. \$000)</u>
TA - AID PSC	Direct Pay	80
AID Inst. Contact	Direct Pay	614
		<u>694</u>
Training - HC reimbursement	Direct Pay	74
Commodities - Inst. Proc. Agency	Direct Pay	<u>82</u>
	<b>TOTAL</b>	<b>850</b>

This method of implementation meets the requirements established by a memorandum dated 12/30/83, "Payment Verification Policy Implementation Guidance."

### III. Implementation Schedule and Conditions Precedent

Because it is expected that procurement of an institutional contractor (required for commodity procurement and provision of short-term consultancies as well as provision of long-term technical assistance) will take a 6 - 9 month period, it is planned that USAID/Ouagadougou will arrange for the short-term services of an expert through a Personal Service Contract to maintain the operational capacity of the photo lab during that time.

In order to assure that the long-term technical assistance planned under this project will make a contribution to the institutional viability of CRTO through the development of qualified counterparts, the following conditions precedent will be incorporated into the grant amendment.

- a. Prior to any disbursement or the issuance of any commitment documents under the grant to finance long-term technical assistance in photo-engineering, the Grantee will furnish to A.I.D., in form and substance satisfactory to A.I.D.: (1) Evidence that the Centre Regional de Teledetection de Ougadougou ("CRTO") has hired and assigned to the project a full-time photo-engineering technician satisfactory to A.I.D.; and (2) A financial management plan for the succeeding five-year period, setting forth the financing of CRTO, based upon accurate projections of revenue from member states and other sources.
- b. Prior to any disbursement or the issuance of any commitment documents under the grant to finance the management expert, the Grantee Country will furnish to A.I.D., in form and substance satisfactory to A.I.D., evidence that the CRTO has filled vacancies in its authorized staffing plan.

If the foregoing conditions precedent have not been met by September 30, 1984, or such later date as A.I.D. may agree to in writing, A.I.D., at its option, may terminate the grant by written notice to the Grantee.

Also, a covenant will testify to CRTO's intention to undertake a campaign of publicity and marketing in order to (1) increase the financial contributions of member states and (2) enhance revenues from the product line through an increased workload. These conditions precedent and covenants are not included in the authorization.

#### IV. Amendments to the Logical Framework

A review of the original logical framework (Annex C of the PP), based upon experience since the inception of the project, suggests that while for the most part the framework remains valid and appropriate, modifications at the Purpose level are necessary.

1. The Project Purpose should be amended by deletion of the intent to establish a satellite data reception station for real time coverage of West Africa. When this purpose was established, the U.S. Landsat program had over 10 years to run; today Landsat V has projected life of only 3 years and there are no plans for future U.S. satellite programs. The French Spot system is not yet operational. Additionally, the estimated cost of establishing a reception station has risen by about 200 percent; authorization of this increased-cost over the three-year lifespan of Landsat V would be unreasonable. Special acquisition of real time data from Landsat V could be accomplished from U.S. sources when required. We believe that, despite the possibility of other donor interest in a reception station, AID should not associate itself with any such program.
2. Also at the Purpose level, the assumption is made that West African nations will be able to pay the high assessments levied for CRTO support. This has proven to be an unrealistic assumption, as highlighted by the 1983 evaluation of the project which pointed toward major critical financial shortfalls, stemming in large part from the inability of number West African nations to maintain an adequate level of funding support. Remote Sensing Centers by nature are not self-sufficient and while more efficient management and increased revenues will ameliorate to a limited degree CRTO's financial plight, it is clear that over the long-term, continued donor support for operational costs will be required if CRTO is to remain viable.

The responsible project officer is Val Mahan, AFR/RA.

#### Congressional Notification:

Congress was notified on March 16, 1984, of AID's intention to increase the LOP cost, extend the PACD and to obligate \$850,000 in FY 84. Congress initially objected to the notification; however on May 15, 1984, the objection was withdrawn.

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**Recommendation:** That you sign below to extend the PACD from March 31, 1984 to December 31, 1986 and that you sign the attached Project Authorization Amendment to increase the authorized level of funding for this project by \$850,000 from \$2,525,000 to \$3,375,000.

Approved: Mark Edelman

Disapproved: \_\_\_\_\_

Date: 6/15/84

Attachments: <sup>H</sup> Eight Amendment to Project Authorization  
Project Data Sheet

**Clearances:**

DAA/AFR:ARLove	<u>ARLove</u>	Date:	<u>4/7/84</u>
GC/AFR:BBryant	<u>BBryant</u>	Date	<u>1-16-84</u>
AFR/RA:WSherwin	<u>WSherwin</u>	Date	<u>6/4/84</u>
AFR/RA:MSebsibe	(draft)	Date	<u>6/4/84</u>
AFR/PD:GHazel	(draft)	Date	<u>3/28/84</u>
AFR/DP:GCauvin	<u>GCauvin</u>	Date	<u>6/4/84</u>
AFR/TR/SDP:MWard	(draft)	Date	<u>3/30/84</u>
AFR/PMR:TRattan	(draft)	Date	<u>3/28/84</u>
S&T/FNR:WFeldman	(draft)	Date	<u>3/30/84</u>
S&T/FNR:CPaul	(draft)	Date	<u>3/23/84</u>
PPC:APrintz	(draft)	Date	<u>3/23/84</u>
CM/ROD/AFR:SDean	(draft)	Date	<u>3/30/84</u>

AFR/RA:VMahan:rcj:02/28/84:0667Y:632-6951:revised 3/20/84:revised 5/16/84  
Revised:5/31/84:rcj (RM)

UNITED STATES INTERNATIONAL DEVELOPMENT COOPERATION AGENCY  
AGENCY FOR INTERNATIONAL DEVELOPMENT  
WASHINGTON, D.C. 20523

EIGHTH AMENDMENT

TO

PROJECT AUTHORIZATION

Name of Country/Entity: Africa Regional  
Name of Project: Regional Remote Sensing (Western Africa)  
Project Number: 698-0420 (formerly 625-0913)

1. Pursuant to section 103 of the Foreign Assistance Act of 1961, as amended, the Regional Remote Sensing (Western Africa) Project was authorized on September 14, 1977 and amended on December 20, 1978, March 14, 1980, August 28, 1980, June 17, 1981, December 21, 1981, April 16, 1982 and June 13, 1983. That authorization is hereby further amended as follows:

a. By deleting the authorization in its entirety and substituting the following therefor:

\*1. Pursuant to section 103 of the Foreign Assistance Act of 1961, as amended, I hereby authorize the Regional Remote Sensing Project for Western Africa, involving planned obligations of not to exceed \$3,375,000, in grant funds over a seven-year period from the date of authorization, subject to the availability of funds in accordance with the A.I.D. OYB/allotment process, to help in financing foreign exchange and local currency costs of the project.

\*2. The project will establish a regional remote sensing center in Ouagadougou, provide services to assist users of the center, finance training and develop a photolab.

\*3. The project agreement which may be negotiated and executed by the officers to whom such authority is delegated in accordance with A.I.D. regulations and Delegations of Authority shall be subject to the following essential terms and covenants and major conditions, together with such other terms and conditions as A.I.D. may deem appropriate.

a. Source and Origin of Commodities, Nationality of Services. Except as A.I.D. may otherwise agree in writing:

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(1) Commodities financed by A.I.D. under the project shall have their source and, except for motor vehicles, their origin in Upper Volta or in countries included in A.I.D. Geographic Code 941.

(2) Motor vehicles financed by A.I.D. under the project shall have their origin in the United States.

(3) Except for ocean shipping, the supplier of commodities or services shall have Upper Volta or countries included in A.I.D. Geographic Code 941 as their place of nationality.

(4) Ocean shipping financed by A.I.D. under the project shall be financed only on flag vessels of the United States or Upper Volta."

2. The authorization cited above remains in force except as hereby further amended.

Date: 6/15/84

Mark L. Edelman

Mark L. Edelman  
Assistant Administrator  
Africa Bureau

Clearances: As Shown on Action Memorandum

**PROJECT DATA SHEET**

1. TRANSACTION CODE

A = Add  
 C = Change  
 D = Delete

Amendment Number  
8

DOCUMENT CODE  
3

2. COUNTRY/ENTITY  
 AFRICA REGIONAL

3. PROJECT NUMBER

698-0420

4. BUREAU/OFFICE

AFR

08

5. PROJECT TITLE (maximum 40 characters)

Regional Remote Sensing (West Africa)

6. PROJECT ASSISTANCE COMPLETION DATE (PACD)

MM DD YY  
1 | 2 | 3 | 1 | 8 | 6

7. ESTIMATED DATE OF OBLIGATION  
 (Under "B." below, enter 1, 2, 3, or 4)

A. Initial FY 78

B. Quarter 3

C. Final FY 84

8. COSTS (\$000 OR EQUIVALENT \$1 = )

A. FUNDING SOURCE	FIRST FY <u>78</u>			LIFE OF PROJECT		
	B. FX	C. L/C	D. Total	E. FX	F. L/C	G. Total
AID Appropriated Total	770	-	770	3,375	-	3,375
(Grant)	( 770 )	( - )	( 770 )	( 3,375 )	( - )	( 3,375 )
(Loan)	( - )	( - )	( - )	( - )	( - )	( - )
Other U.S.						
1.						
2.						
Host Country						
Other Donor(s)						
<b>TOTALS</b>	<b>770</b>	<b>-</b>	<b>770</b>	<b>3,375</b>	<b>-</b>	<b>3,375</b>

9. SCHEDULE OF AID FUNDING (\$000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH. CODE		D. OBLIGATIONS TO DATE		E. AMOUNT APPROVED THIS ACTION		F. LIFE OF PROJECT	
		1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan
(1) FN	754	870		2,525	-	850	-	3,375	-
(2)									
(3)									
(4)									
<b>TOTALS</b>				<b>2,525</b>	<b>-</b>	<b>850</b>	<b>-</b>	<b>3,375</b>	<b>-</b>

10. SECONDARY TECHNICAL CODES (maximum 6 codes of 3 positions each)

290 | 190 | 710 | 980

11. SECONDARY PURPOSE CODE

12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each)

A. Code BRW  
 B. Amount 3,375

13. PROJECT PURPOSE (maximum 480 characters)

Through training and practical application services, to enable African development planners and resource managers to utilize LANDSAT and other satellite imagery in planning and monitoring a broad spectrum of agricultural, forestry, rangeland, ground water, and other resource development projects.

14. SCHEDULED EVALUATIONS

Interim MM YY | MM YY | Final MM YY  
0 | 6 | 7 | 9 | 0 | 3 | 8 | 3

15. SOURCE/ORIGIN OF GOODS AND SERVICES

000  941  Local  Other (Specify) 935

16. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of a \_\_\_\_\_ page PP Amendment)

This accompanies Project Authorization Amendment by which the PACD of the project is extended from 3/31/84 to 12/31/86. PP was previously revised by PAF Amendment No. 1 signed 12/20/78, Amendment No. 2 signed 3/31/80, Amendment No. 3 signed 8/28/80, Amendment No. 4 signed 6/17/81, Amendment No. 5 signed 12/21/81, Amendment No. 6 signed 4/16/83 and Amendment No. 7 signed 6/13/83.

17. APPROVED BY

Signature: William H. Naylor, Jr.  
 Title: Director, AFR/RA

Date Signed  
 MM DD YY  
0 | 5 | 1 | 6 | 8 | 4

18. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION

MM DD YY  
0 | 5 | 1 | 6 | 8 | 4

*7th  
amendment*

**23 JUN 1983**

**ACTION MEMORANDUM FOR THE ACTING ASSISTANT ADMINISTRATOR**

**From:** *William H. Naylor, Jr.*  
AFR/KA, William H. Naylor, Jr.

**Subject:** Regional Remote Sensing in West Africa 698-0420

**Problem:** Your approval is requested for an interim extension of the Remote Sensing Project PACD by nine months from June 30, 1983 to March 31, 1984. This extension would allow for a design effort to take place over the next three months to determine the appropriateness of AID funding of a further three-year effort with Centre Regional de Teledetection de Ouagadougou (CRTO). It also permits time for competitive selection of a new contractor if AID decides to continue its support of the project. A negative determination would allow time for an orderly phase-down to assure minimal disruption of CRTO operations due to our pull-out.

**Discussion:** The project was begun in 1978 and was originally envisaged as a five-year, two-phase project. The first two years (1978-1979) called for the establishment of a regional remote sensing center, (CRTO), to train Africans and to provide user assistance services. The second phase (1980-1982) was to continue activities begun during Phase I, the construction of a ground station by the Canadians and French and the training of counterparts. The Federal Republic of Germany entered the planning process in 1980 and offered to provide the antenna. The AID commitment was to training and photo lab equipment only and did not include the financing of ground station (Phase II) equipment. It does not appear that the ground station will be built in the near future and we are no longer engaged in the planning for one. The project suffered from numerous delays during the first two years - recruitment of technicians and procurement were major problems. Phase I was continually extended and funded incrementally to keep CRTO going while Phase II was being designed. The last obligation, \$235,000, was made in August 1981. Approximately \$250,000 remain as we reduced the number of U.S. technicians from three to one last June because counterparts were not officially designated (four advanced students worked unofficially as counterparts). Counterparts (including one of the advanced students) were designated last month with the exception of the photolab engineer for whom applications will be accepted through September. The mission advises that counterpart salaries will be paid by the CRTO and that all but the photo lab engineer will be on board in July.

The project was recently evaluated by the remote sensing expert from S&T/FNR and an independent consultant with several years experience in developing countries including Africa. The evaluation included visits to Senegal, Sierra Leone, Ivory Coast, Mali, Benin, Nigeria and Upper Volta. The evaluation concluded that with minor exceptions the Phase I goals had been achieved or exceeded. The accomplishments cited in the evaluation include:

1. Over 150 Africans trained in basic remote sensing and 45 given advanced training. Several have gone abroad for training.
2. Over 75 reports produced related to African development of which ten produced some revenue to the center.

3. An efficient photo lab established which has produced products to over 100 users.
4. Four Africans trained capable of replacing expatriate technicians in the future.
5. Creation of two national remote sensing centers in Benin and Cameroon as a result of CRTO training.

Visits to the West African states revealed that the project has had some success in promoting the technology although it has not been successful in every country.

1. CRTO students from Benin had returned and started their own national remote sensing center including a photo lab. They are using their training in forestry and geology and teaching at the university.
2. Cameroon was not visited but trainees at the CRTO said that they too had begun a center.
3. Sierra Leone is using remote sensing in water resources and geology and former trainees are teaching basic remote sensing to others.
4. Senegal is making limited use of the training and Mali is not using it at all.
5. Nigeria has sent forestry department personnel to the CRTO and they are using it in their work. However, some personnel are not using it.
6. In Upper Volta, the use of remote sensing, is not limited to African trainees. Donor agency personnel have learned how to use and apply it to their projects as well. The USAID/Cameroon engineer was in Ouagadougou for consultation with CRTO during the evaluation and Peace Corps foresters were using CRTO photo products in Upper Volta.
7. Several countries want their own remote sensing centers and Nigeria is planning to build a ground station.

The evaluation found that the work being done at CRTO is relevant to African development and cites examples of projects that would have been very expensive and time-consuming had satellite imagery not been available.

The evaluation also cited some serious constraints to wider use of the technology. Some of the major problems confronting former trainees who seek to use remote sensing when they return home include:

1. lack of funding to purchase imagery and other supplies needed to use it;
2. cancellation of projects that would have used remote sensing;
3. assignments to projects that do not use it;
4. lack of cooperation between ministries or agencies.

CRTO trainees are more likely to use their training in donor-financed projects or where the government is committed to using remote sensing. The evaluation recommends the inclusion of project management in CRTO training as a way of overcoming some of these problems.

Perhaps the most serious problem is that of future financial viability.

#### Operating Expenses:

African state contributions in 1981-1983 have totaled over \$365,000 but declined from \$198,000 in 1981 to \$123,600 in 1982. (Not all of the 1983 contributions have been received.) CRTO operating expenses were approximately \$340,000 in 1981 and were projected at \$580,000 in 1982. In reality the 1982 budget was cut to approximately \$305,000 because of declining African support. The CRTO has simply not been able to staff the center at the optimum level or provide adequate support to students. Upper Volta has provided support staff to the CRTO in addition to its cash contributions. AID support to the operating budget is approximately \$110,000 for the eighteen month period from January 1, 1982 to June 30, 1983.

#### Income:

Receipts from the photo lab and other services totaled approximately \$14,000. The photo lab alone should have earned \$40,000 from three major orders had CRTO limited work to on paying customers. The CRTO has not aggressively marketed its photo products and interpreting/consulting services. The evaluation suggests that the photo lab should gross at least \$100,000 per year. The total market for consulting and interpreting services cannot be accurately determined but from the number of users in Africa it should, if exploited, contribute to the CRTO's financial viability. The evaluation strongly recommends the assignment of a management expert to help the CRTO operate more like a business. This assistance will be included in a longer extension, if approved. Even then, there is no assurance that the CRTO will become financially viable. However, with better management more African support and broader donor support would probably be easier to obtain.

Conclusion: The evaluation recommends extensive changes in AID assistance for a three-year extension. These recommendations require considerable further review by AFR/RA, a new project paper, and a full ECPR before a final decision can be made. Since the photo lab is a key part of the operation, the CRTO is likely to cease functioning in the near future if AID support is withdrawn. The collapse of the CRTO would make it much more difficult for the countries in the area to obtain the training they need. It would also remove a valuable resource that supports a wide variety of development projects. In regard to the U.S. investment we would not consider it to be a complete loss if the project were not extended. Two national centers have resulted from our efforts. Those former trainees who continue to use their skills should generate considerable savings for their respective countries and for donors in projects that require resource inventories and mapping. An interim extension of nine months will also give the CRTO an opportunity to seek alternative financing should further AID support not be approved. We recommend the

addition of a short-term management consultant during this period to assist in developing a marketing, costing and billing program for CRTO. As pointed out above, no additional obligation is required because \$250,000 remains. The planned budget for this extension is as follows:

Technical Assistance

Photo lab engineer	\$100,000
Management consultant	30,000

Commodities

Photo lab supplies	35,000
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<u>Operating Budget</u>	63,000
-------------------------	--------

<u>Contingency</u>	<u>10,000</u>
--------------------	---------------

TOTAL	\$238,000
-------	-----------

- We will attempt to obtain a French-speaking management consultant through the Executive Service Corps.

The possibility of U.S. private sector involvement will be pursued during the interim period. Most major mineral and petroleum companies use remote sensing and the evaluation team believes that the U.S. private sector may be interested in collaborating with the CRTO. (We note that Chevron is cooperating in the East Africa Remote Sensing Project.)

Recommendations:

That you approve an extension of the project from June 30, 1983 to March 31, 1984.

Approver: AKL

Disapprove: \_\_\_\_\_

Date: Jun 17, 1983

Clearances:

AFR/RA:MLSebsibe ML  
 AFR/RA:WSherwin (draft)  
 AFR/DP:GCauvin MLKLS  
 S&T/FNR:CPaul (info)  
 AFR/SWA:WSaulters (info)  
 GC/AFR:LDeSoto (draft)

PROJECT AUTHORIZATION AMENDMENT

7-4

Name of Country/Entity: Africa Regional  
Name of Project: Regional Remote Sensing (West Africa)  
Project No: 698-0420

1. Pursuant to Section 103 of the Foreign Assistant Act of 1961, as amended, the Regional Remote Sensing (West Africa) Project 698-0420 (formerly 625-0913), was authorized September 14, 1977. That authorization is hereby further amended as follows:

The Project Assistance completion date is extended from September 30, 1982 to March 31, 1984.

2. The authorization cited above remains in force except as hereby further amended.

*AR Love* 4/13/83

A. R. Love  
Acting Assistant Administrator  
Bureau for Africa

Date:

21

**AGENCY FOR INTERNATIONAL DEVELOPMENT**  
**PROJECT DATA SHEET**

1. TRANSACTION CODE  C A = Add  
C = Change  
D = Delete

Amendment Number 7

DOCUMENT CODE 3

2. COUNTRY/ENTITY Africa Regional

3. PROJECT NUMBER 698-0420

4. BUREAU/OFFICE AFR/RA 06

5. PROJECT TITLE (maximum 40 characters) Regional Remote Sensing (West Africa)

6. PROJECT ASSISTANCE COMPLETION DATE (PACD)  
MM DD YY  
03 31 84

7. ESTIMATED DATE OF OBLIGATION  
(Under "B." below, enter 1, 2, 3, or 4)  
A. Initial FY 78 B. Quarter 2 C. Final FY 81

8. COSTS (\$000 OR EQUIVALENT \$1 = )

A. FUNDING SOURCE	FIRST FY <u>78</u>			LIFE OF PROJECT		
	B. FX	C. L/C	D. Total	E. FX	F. L/C	G. Total
AID Appropriated Total	770	-	770	2,525	-	2,525
(Grant)	( 770 )	( - )	( 770 )	( 2,525 )	( - )	( 2,525 )
(Loan)	( )	( - )	( - )	( - )	( - )	( - )
Other U.S.						
1.						
2.						
Host Country						
Other Donor(s)						
<b>TOTALS</b>	<b>770</b>		<b>770</b>	<b>2,525</b>		<b>2,525</b>

9. SCHEDULE OF AID FUNDING (\$000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH. CODE		D. OBLIGATIONS TO DATE		E. AMOUNT APPROVED THIS ACTION		F. LIFE OF PROJECT	
		1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan
(1)	754	870		2,525		-0-		2,525	-
(2)									
(3)									
(4)									
<b>TOTALS</b>				<b>2,525</b>		<b>-0-</b>		<b>2,525</b>	<b>-</b>

10. SECONDARY TECHNICAL CODES (maximum 6 codes of 3 positions each)  
290 190 710 980

11. SECONDARY PURPOSE CODES

12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each)  
A. Code BRW  
B. Amount 2,525

**BEST AVAILABLE DOCUMENT**

Through training and practical application services, to enable African development planners and resource managers to utilize LANDSAT and other satellite imagery in planning and monitoring a broad spectrum of agricultural, forestry, rangeland, ground water, and other resource development projects.

14. SCHEDULED EVALUATIONS  
Interim MM YY 6 7 9 3 8 3 Final MM YY

15. SOURCE/ORIGIN OF GOODS AND SERVICES  
 000  941  Local  Other (Specify) 935

16. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of a \_\_\_\_\_ page PP Amendment.)

This accompanies Project Authorization Amendment by which the PACD of Phase I is extended from 9/30/82 to 6/30/83. PP was previously revised by PAF Amendment No. 1 signed 12/20/78, Amendment No. 2 signed 3/13/80. Amendment No. 3 signed 8/28/80, Amendment No. 4 signed 6/17/81, Amendment No. 5 signed 12/21/81 and Amendment No. 6 signed 4/16/83.

17. APPROVED BY  
Signature: William H. Naylor, Jr.  
Title: Director, AFR/RA  
Date Signed MM DD YY 10/16/83

18. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION  
MM DD YY 10/16/83

*6th amendment*

**ACTION MEMORANDUM FOR THE ASSISTANT ADMINISTRATOR FOR AFRICA**

**From:** AFR/RA, Donald F. Miller *DFM*

APR 12 1982

**Subject:** Regional Remote Sensing Project/West Africa 698-0420

**Problem:** Your approval is required to amend the authorization for the subject project to extend the Project Assistance Completion Date (PACD) from September 30, 1982 to June 30, 1983.

**Discussion:** This is a multidonor project implemented by the Regional Remote Sensing Center (CRTO) in Upper Volta and supported by the governments of France, Canada and the United States. The purpose of the project is to enable development planners to utilize satellite imagery and aerial photography in planning projects in agriculture, forestry, hydrology and rangeland as well as monitoring natural resource trends. AID finances technical assistance, training and equipment in support of CRTO photo laboratory and in-country training programs.

The project was approved in 1977 with LOP funding of \$4.32 million of which \$2.525 million has been authorized and obligated for the first of the two project phases. The Phase I objectives, the establishment of a photo lab, training and user assistance programs, have been achieved. Phase II was to further institutionalize these programs, determine the feasibility of constructing a ground receiving station, and to construct and equip the receiving station, if it proved feasible. AID inputs during Phase II were to include assistance for training and photo laboratory operations. The impact of not having a ground station on the nature and magnitude of AID assistance is minor; the ground station would have required only small increases in photo lab equipment and training services. In Phase II, the French, Canadians and Germans were to construct and equip the satellite receiving station.

Plans for constructing the ground station were thoroughly discussed at a Donor/African Remote Sensing Technical Meeting held in France, February 23-25, 1982. It was concluded that the proposed station is not feasible, at least in the immediate future, because of the inability of donors or Africans to finance the high recurrent costs associated with the station.

Following the meeting AID sent a team to Upper Volta to assess project status and determine future assistance requirements. It was determined that greater African support was required to ensure African institutionalization of the CRTO and that all future AID funding should be directed toward this end. The CRTO's Regional Management Committee has been informed that the CRTO should fulfill specific staffing commitments in a manner satisfactory to A.I.D. prior to A.I.D. consideration of FY 82 and 83 funding for the project. These commitments are to be made prior to mid-June in order that the Project Paper Amendment can be written and reviewed before the end of the fiscal year.

*23*

In the interim a no-fund extension of the PACD to June 30, 1983 is required to retain the services of the A.I.D. contracted photo engineer whose contract expires in June 1982. This is necessary to provide continuity of technical assistance if African commitments are fulfilled and FY 82-83 funding is authorized. If these commitments are not fulfilled and future AID funding is not authorized, the contract services will ensure that the project can be terminated in an orderly manner.

Recommendation: That you sign the attached Project Authorization Amendment extending the PACD to June 30, 1983.

APPROVED: \_\_\_\_\_

DISAPPROVED: \_\_\_\_\_

DATE: 4.15

Clearances:

AFR/RA:NRMarsh \_\_\_\_\_

AFR/RA:EEButler \_\_\_\_\_

AFR/RA:MLSebsibe \_\_\_\_\_

GC/AFR:EADragon \_\_\_\_\_

AFR/SWA:WSaulters \_\_\_\_\_

AFR/DP:GCauvin \_\_\_\_\_ 4-8-82

DAA/AFR:WHNorth \_\_\_\_\_

AFR/RA:JCRe:ed/4/6/82:X20560

PROJECT AUTHORIZATION AMENDMENT

6th

Name of Country/Entity : Africa Regional  
Name of Project : Regional Remote Sensing (West Africa)  
Project No. : 698-0420

1. Pursuant to Section 103 of the Foreign Assistance Act of 1961, as amended, the Regional Remote Sensing (West Africa) Project 698-0420 (formerly 625-0913), was authorized September 14, 1977. That authorization is hereby further amended as follows:

The Project Assistance completion date is extended  
from September 30, 1982 to June 30, 1983.

2. The authorization cited above remains in force except as hereby further amended

4.16  
Date

F S Ruddy  
F. S. Ruddy

Assistant Administrator  
for Africa

B



*BTB  
amendment*

DEC 15 1981

**ACTION MEMORANDUM FOR THE ACTING ASSISTANT ADMINISTRATOR BUREAU FOR AFRICA**

**FROM:** AFR/RA, Edward E. Butler, Acting Director *EB*

**SUBJECT:** Regional Remote Sensing (West Africa), Project 698-0420, Project Authorization Amendment

**Problem:** Your approval is required to amend the authorization for the subject project to extend the Project Assistance Completion Date (PACD) from December 31, 1981 to September 30, 1982.

**Discussion:** The present PACD of December 31, 1981 was based on the assumption that the design work for Phase II of the project would be complete and the necessary authorization obtained to begin Phase II by January 1, 1982. It now appears that the necessary work for a Phase II authorization will be completed during the first quarter CY 82. The contract with the Spectral Data Corporation to provide technical assistance and procurement services does not expire until June 30, 1982. We intend to extend this contract for Phase II once authorization is obtained. In order to continue to make payments on the contract after December 31, 1981 it is necessary to extend the PACD as requested and amend the contract accordingly. Federal Regulation 41 Subpart 7 - 3.101.50(b) (5) states that amendments to contracts can not exceed the Project Assistance Completion Date. Therefore, an extension of the PACD is required in order to provide the incremental funding for the contract.

**Recommendation:** That you sign the attached Project Authorization Amendment extending the PACD to September 30, 1982.

Approved: *Edward E. Butler*

Disapproved: \_\_\_\_\_

Date: 12/21/81

**Attachment:**  
CFR-41-7

**Clearances:**  
AFR/RA:NRMarsh (draft) \_\_\_\_\_  
AFR/RA:MLSebsibe *mls*  
AFR/SWA:WSaulters (draft) \_\_\_\_\_  
GC/AFR:EADragon \_\_\_\_\_  
AFR/DP:GCauvin *GC*

Drafted by AFR/RA:JCRose:rg:12/14/81:X=28094

PROJECT AUTHORIZATION AMENDMENT

5<sup>207</sup>

Name of Country/Entity : Africa Regional  
Name of Project : Regional Remote Sensing (West Africa)  
Project No. : 698-0420

1. Pursuant to Section 103 of the Foreign Assistance Act of 1961, as amended, the Regional Remote Sensing (West Africa) Project 698-0420, (formerly 625-0913), was authorized on September 14, 1977. That authorization is hereby further amended as follows:

The Project Assistance completion date is extended  
from December 31, 1981 to September 30, 1982.

2. The authorization cited above remains in force except as hereby further amended.

12/31/81  
Date

*William J. Smith*  
W. Haven North

28

**PROJECT DATA SHEET**

2. COUNTRY/ENTITY  
Africa Regional

4. BUREAU/OFFICE  
AFR/RA

1. TRANSACTION CODE  
 C A = Add  
C = Change  
D = Delete

Amendment Number  
5

DOCUMENT CODE  
3

3. PROJECT NUMBER  
698-0420

5. PROJECT TITLE (maximum 40 characters)  
Reg. Remote Sensing (WA) Phase I

6. PROJECT ASSISTANCE COMPLETION DATE (PACD)

MM DD YY  
09 | 30 | 82

7. ESTIMATED DATE OF OBLIGATION  
(Under 'E' below, enter 1, 2, 3, or 4)

A. Initial FY 78 B. Quarter 2 C. Final FY 81

8. COSTS (\$000 OR EQUIVALENT \$1 = )

A. FUNDING SOURCE	FIRST FY			LIFE OF PROJECT		
	B. FX	C. L/C	D. Total	E. FX	F. L/C	G. Total
AID Appropriated Total	770	----	770	2,525	----	2,525
(Grant)	( 770 )	( ---- )	( 770 )	( 2,525 )	( ---- )	( 2,525 )
(Loan)	( )	( )	( )	( )	( )	( )
Other U.S.						
1.						
2.						
Host Country						
Other Donor(s)						
<b>TOTALS</b>	<b>770</b>	<b>----</b>	<b>770</b>	<b>2,525</b>	<b>----</b>	<b>2,525</b>

9. SCHEDULE OF AID FUNDING (\$000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH. CODE		D. OBLIGATIONS TO DATE		E. AMOUNT APPROVED THIS ACTION		F. LIFE OF PROJECT	
		1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan
(1) FN	754	870		2,525	-	1. Grant	2. Loan	1. Grant	2. Loan
(2)						-0-		2,525	-
(3)									
(4)									
<b>TOTALS</b>				<b>2,525</b>	<b>-</b>	<b>-0-</b>	<b>-</b>	<b>2,525</b>	<b>-</b>

10. SECONDARY TECHNICAL CODES (maximum 6 codes of 3 positions each)  
290 | 190 | 710 | 980

11. SECONDARY PURPOSE CODE

12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each)  
A. Code BRW  
B. Amount 2,525

13. PROJECT PURPOSE (maximum 480 characters)

Through training and practical application services, to enable African development planners and resource managers to utilize LANDSAT and other satellite imagery in planning and monitoring a broad spectrum of agricultural, forestry, angeland, ground water, and other resource development projects.

14. SCHEDULED EVALUATIONS

Interim	MM	YY	MM	YY	Final	MM	YY
	6	7	9			6	8

15. SOURCE/ORIGIN OF GOODS AND SERVICES  
 000  941  Local  Other (Specify) 935

6. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of a        page PP Amendment)  
This accompanies Project Authorization Amendment by which the PACD of Phase I is extended from 12/31/81 to 9/30/82. PP was previously revised by PAF Amendment No. 1 signed 12/20/78, Amendment No. 2 signed 3/13/80, Amendment No. 3 signed 8/28/80 and Amendment No. 4 signed 6.17/81.

**BEST AVAILABLE DOCUMENT**

17. APPROVED BY  
Signature: Edward E. Butler - Acting Director  
Title: AFR/RA  
Date Signed: MM DD YY  
12 | 09 | 81

18. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION  
MM DD YY  
12 | 09 | 81

*4th amendment*

**JUN 8 1981**

**ACTION MEMORANDUM FOR THE ACTING ASSISTANT ADMINISTRATOR, BUREAU FOR AFRICA**

**FROM:** AFR/RA, E. G. Ruoff *ER* Acting Director

**SUBJECT:** Regional Remote Sensing (West Africa), Project 698-0420, Project Authorization Amendment

Problem: Your approval is required to amend the authorization for Regional Remote Sensing (West Africa) Project 698-0420, to increase the total approved Phase I project funding by a grant of \$235,000 from the Agriculture, Rural Development and Nutrition appropriation (FAA Section 103). This will raise the Phase I funding from \$2,290,000 to \$2,525,000.

Discussion: This is a multidonor project supported by the Government of Canada, France, Upper Volta and the United States. The purpose of the project is to enable development planners to utilize satellite imagery in planning projects in agriculture, forestry, rangeland and hydrology, as well as monitoring natural resources. The project provides training and practical application service. When the project was approved in 1977 LOF funding was envisaged at \$4,320,000, of which \$1,851,000 was specifically authorized for Phase I. The remainder of the funds were to be used for Phase II which was to include the construction of a remote sensing receiving station. Subsequently the project has been extended. The first extension was authorized in March of 1980 and raised the authorized level from \$1,851,000 to \$2,036,000. The reason for the extension was due primarily to late implementation because of delays in recruiting U.S. technicians and difficulties in procurement. Phase I was extended again in August 1980, raising the current authorized level by \$254,000 to the current level of \$2,290,000. It was hoped that the additional funding would provide the necessary inputs to complete Phase I objectives by the end of April 1981.

However, while progress in training, user application and use of the photo lab has been made, Phase I has not been finished. Therefore we propose to extend the PACD to December 31, 1981 and to provide an additional \$235,000. A major reason for extending Phase I of this project a third time has been the problem of completing the Phase II design effort. During the Phase II design activities a major technical disagreement between the French and the Canadians over the configuration of the satellite receiving station took place. The issue was whether an integrated system or a dual system, i.e., one for Landsat (U.S.) and one for SPOT (French), would be used in the receiving station. Because of that disagreement certain Phase I activities, including technical training courses, were delayed in order to allow the implementation of both phases to mesh in an orderly manner. Following a meeting in Ouagadougou in April 1981 the differences over the receiving station were resolved and the design of the Phase II activities resumed. It was decided to utilize the dual system.

The design team consisting of French, Canadians, Germans, Americans and representatives from a number of African countries will meet in Ottawa in July to resolve technical differences and the design process for Phase II will be finished in September.

Reports from the Ouagadougou Mission indicate growing interest and support for the Regional Remote Sensing Center (CRTO). Although CRTO is a long way from being self-sufficient there are good indications of growing interest on the part of Africans in the use of remote sensing. Eleven countries are now members of the Regional Management Committee, and a dues schedule has been established. Three countries have paid dues or are in the process of making payment for a total of over \$120,000. Given the original project paper's projection of twelve members by 1983, this represents significant progress. Graduates of CRTO courses are currently using imagery provided by CRTO in a diverse number of projects and some countries have established their own photo labs for processing remote sensing data. Senegal is planning a METEOSAT station with help from the CRTO.

The following examples indicate how the project's outputs - trained personnel and imagery are being used: in Sierra Leone a survey for potential ground water was conducted by a CRTO trainee using CRTO imagery and aerial photography. In Ghana CRTO imagery is being used to survey potential irrigation and hydroelectric dam sites. Also in Ghana a CRTO trainee is using imagery for a coastal erosion study. A Ghanian is currently training to run a remote sensing photo lab in Ghana. In Liberia, a CRTO trainee of the Forestry Development Authority uses the imagery to monitor land use change. In Nigeria former trainees are using remote sensing in search of oil and ground water. In the Ivory Coast the Directorate of Regional Development uses remote sensing techniques. The Ivorian Teledetection Office, currently headed by a Frenchman will have a CRTO graduate for a Director at the end of this year. In Guinea a nationwide soil study project is being done by CRTO trainees. In Benin a geological map is being made and a forestry inventory is being compiled. The CRTO is working with Benin in designing a photo lab. In addition to the numerous new countries using remote sensing, several universities and international organizations, including UNDP, have consulted with the CRTO on projects.

African support for the regional center is expected to grow even faster as the economic benefits of using remote sensing data becomes more apparent. The sensitization process must continue to all CRTO personnel to promote the benefits of remote sensing to those countries that have not yet become members. To continue this effort the Center plans to spend an additional \$16,000 before the end of 1981. The CRTO has taken steps to be more responsive to the Anglophone countries by adding a two-month introductory course in English. The Center plans to spend approximately \$40,000 for training in FY 81. As a result of information obtained from former trainees the CRTO will hire an administrative assistant to handle day-to-day logistic needs of the training program. The electrical service problem of Ouagadougou continues to plague the Center. This problem has caused numerous difficulties especially in

keeping the photo laboratory chemicals at the required temperature. In order to overcome such problems a standby generator system is required. The cost of a generator was previously underestimated, and an additional \$100,000 is required to run the equipment and air-conditioning. Local operating costs for the remainder of 1981 are estimated at \$75,000. The total cost for extending Phase I will be approximately \$235,000.

Recommendation: That you sign the attached Project Authorization Amendment.

**Attachments:**

1. Project Authorization Amendment
2. Project Data Sheet

**Clearances:**

AFR/RA:MLSebsibe (draft)  
AFR/SWA:ICoker (draft)  
AFR/DR:RMacAlister (draft)  
DS/FNR:CWithington (draft)  
GC/AFR:LDeSoto (draft)  
AAA/AFR/DP:RStacy (draft)  
AFR/DP:EDonoghue (draft)

Drafted by AFR/RA:JCRose:rg:6/8/81:X-28094

PROJECT AUTHORIZATION AMENDMENT 4 ~~1~~

Name of Country/Entity: Africa Regional  
Name of Project: Regional Remote Sensing (Western Africa)  
Project No.: 698-0420

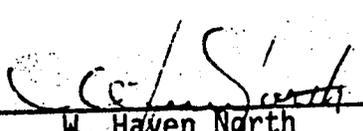
1. Pursuant to Section 103 of the Foreign Assistance Act of 1961, as amended, the Regional-Remote Sensing (Western Africa) Project No. 698-0420 (formerly 625-0913) was authorized on September 14, 1977. That authorization was subsequently revised by PAF II Amendment No. 1, signed on December 20, 1978, Amendment 2, signed on March 14, 1980 and Amendment 3 signed August 28, 1980. The Authorization Amendment of August 28, 1980 is hereby amended as follows:

a. Paragraph 1(a) of the amended authorization is deleted and the following language substituted therefor: The authorized funding for Phase I of the project is increased by \$235,000 to a revised total of \$2,525,000. Obligations are subject to the availability of funds and in accordance with the AID/OYB allotment process.

b. The Project Assistance Completion Date extended from April 30, 1981 to December 31, 1981.

2. The authorization cited above remains in force except as hereby amended.

Date: 6/17/81

  
W. Haven North  
Acting Assistant Administrator  
Bureau for Africa

Clearances:

AFR/DP: EDonoghue (draft)  
AFR/SWA: ICoker (draft)  
GC/AFR: LDeSoto *HD for*  
AFR/DR: RMacAlister (draft)  
DS/FSN: CWithington (draft)  
AFR/RA: EGRuoff *By*

Drafted by: AFR/RA: JCRose: awb: 6/3/81: EXT-28094

PROJECT DATA SHEET

1. TRANSACTION CODE

A = Add  
 C = Change  
 D = Delete

Amendment Number  
4

DOCUMENT CODE  
3

2. COUNTRY/ENTITY  
Africa Regional

3. PROJECT NUMBER  
698-0420

4. BUREAU/OFFICE  
AFR

5. PROJECT TITLE (maximum 40 characters)  
Phase I  
Regional Remote Sensing (Western Africa)

6. PROJECT ASSISTANCE COMPLETION DATE (PACD)

MM DD YY  
04 30 83

7. ESTIMATED DATE OF OBLIGATION  
 (Under 'B' below, enter 1, 2, 3, or 4)

A. Initial FY 78 B. Quarter  C. Final FY 82

8. COSTS (\$000 OR EQUIVALENT \$1 = )

A. FUNDING SOURCE	FIRST FY <u>78</u>			LIFE OF PROJECT		
	B. FX	C. L/C	D. Total	E. FX	F. L/C	G. Total
AID Appropriated Total						
(Grant)	( <u>770</u> )	( <u>--</u> )	( <u>770</u> )	( <u>2,525</u> )	( <u>--</u> )	( <u>2,525</u> )
(Loan)	( <u>--</u> )	( <u>--</u> )	( <u>--</u> )	( <u>--</u> )	( <u>--</u> )	( <u>--</u> )
Other U.S.						
1.						
2.						
Host Country						
Other Donor(s)						
<b>TOTALS</b>	<b>770</b>	<b>--</b>	<b>770</b>	<b>2,525</b>	<b>--</b>	<b>2,525</b>

9. SCHEDULE OF AID FUNDING (\$000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH. CODE		D. OBLIGATIONS TO DATE		E. AMOUNT APPROVED THIS ACTION		F. LIFE OF PROJECT	
		1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan
(1) FN	754	870		2,290		235		2,525	
(2)									
(3)									
(4)									
<b>TOTALS</b>				<b>2,290</b>		<b>235</b>		<b>2,525</b>	

10. SECONDARY TECHNICAL CODES (maximum 6 codes of 3 positions each)

290 190 710 980

11. SECONDARY PURPOSE CODE

12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each)

A. Code BR INTR TECH TNG  
 B. Amount -- --- --- ---

13. PROJECT PURPOSE (maximum 480 characters)

Through training and practical application services, to enable African development planners and resource managers to utilize Landsat and other satellite imagery in planning and monitoring a broad spectrum of agricultural, forestry, rangeland, ground water, and other resource development projects.

14. SCHEDULED EVALUATIONS

Interim MM YY 6 7 9 MM YY 6 8 1 Final MM YY 6 8 2

15. SOURCE/ORIGIN OF GOODS AND SERVICES

000  941  Local  Other (Specify) 935

16. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of a 2 page PP Amendment.) Project Authorization Amendment

This accompanies Project Authorization Amendment by which authorized Phase I funding is increased by \$235,000 to a total of \$2,525,000. \*PP was previously revised by PAF I. Amendment No. 1 signed December 20, 1978, Amendment No. 2 signed March 14, 1980, and Amendment No. 3 signed August 28, 1980.

17. APPROVED BY

Signature Donald F. Milver  
 Title Director,  
 AFR/RA

Date Signed MM DD YY  
06 18 81

18. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION

MM DD YY 3 4

*3rd  
Amendment*

**AUG 28 1980**

**ACTION MEMORANDUM TO THE ASSISTANT ADMINISTRATOR, BUREAU FOR AFRICA**

**FROM: AFR/RA, E. G. Ruoff, Acting Director**

**SUBJECT: Regional Remote Sensing (West Africa) Project 698-0420, Project Authorization Amendment**

**Problem:** Your approval is required to amend the authorization for the Regional Remote Sensing (Western Africa) Project 698-0420, to increase the total approved Phase I project funding by a grant of \$254,000 from the Agriculture, Rural Development and Nutrition appropriation (F.A.A. Section 103). This will raise the Phase I funding from \$2,036,000 to \$2,290,000 and delete references to superseded obligations' schedules.

**Discussion:** This is a multidonor project supported by the Governments of Canada, France, Upper Volta and the United States. The purpose of the project is to enable development planners to utilize satellite imagery in planning projects in agriculture, forestry, rangeland and hydrology as well as monitoring natural resources. The project provides training and practical application services.

When the project was approved in 1977, LOP funding was envisaged at \$4,320,000 of which \$1,851,000 was specifically authorized for Phase I. In 1978, the authorization was amended to allow the project to be funded from Regional rather than Sahelian funds and to reschedule obligations scheduled in the original authorization due to slippage in the implementation schedule. In 1979, an in-depth evaluation was conducted by an international team of experts who concluded that Phase I should be extended by one calendar year, and the Project Authorization was amended in March 1980 to increase Phase I funding by \$185,000 to the current authorized level of \$2,036,000 in order to permit Phase I to continue through December 31, 1980. In anticipation of the beginning of Phase II during FY 1980, obligations were rescheduled in the Amendment. Delays in the implementation of Phase I, as well as in the design process of Phase II, have now slipped the schedule an estimated four to six months. It now appears that Phase I can not be successfully completed prior to April 1981.

The initial delays in Phase I were due mainly to problems in recruiting the U.S. technicians, the construction of the photolaboratory and difficulties in procurement. All of the technicians are on board, and the photolaboratory is finished with the exception of a small annex. Phase I also calls for training activities and commensurate travel.

While progress during the last six months has been good, objectives will not be reached by the end of December. The Remote Sensing Center has requested additional funds to complete planned activities under Phase I.

35

To complete Phase I, the Center has requested funding for two additional workshops at a cost of approximately \$20,000; \$35,000 to conduct sensitization activities at the Center in Ouagadougou and through travel to African states; \$45,000 for a standby generator; \$13,000 for increased construction costs; \$30,000 for a multispectral viewer used to interpret LANDSAT images, and an estimated \$108,000 for operating costs (travel, fuel, electricity, etc.) through April 1981. The total cost for extending Phase I will be approximately \$251,000. We propose that the \$254,000 which was earmarked for Phase II in FY 80 be authorized for use in Phase I.

You are requested to sign a Project Authorization Amendment which will increase LOP funding for Phase I and which will delete the obligation schedule set forth in the previous amendments to the project authorization, since scheduling of planned obligations is no longer required in project authorization documents.

Recommendation: That you sign the attached Project Authorization Amendment.

**Attachments:**

1. Project Authorization Amendment
2. Project Authorization Amendment  
of March 14, 1980
3. Project Data Sheet

**Clearances:**

AFR/DP:RAStacy         
AFR/SFWA:JKelly         
GC/AFR:BKBarrington         
AFR/DR:RMacAlister        *BKAB*  
DS/ST:CPaul        *8/26/80*  
*8/26/80*

*K*  
Drafted by AFR/RA:JCrose:rg:8/25/80:X-28094

PROJECT AUTHORIZATION AMENDMENT

3<sup>rd</sup>

Name of Country/Entity: Africa Regional  
Name of Project: Regional Remote Sensing (Western Africa)  
Project No: 698-0420

1. Pursuant to Section 103 of the Foreign Assistance Act of 1961, as amended, the Regional Remote Sensing (Western Africa) Project No. 698-0420, was authorized on September 14, 1977. That authorization was subsequently revised by PAF II Amendment No. 1, signed on December 20, 1978 and Amendment 2, signed on March 14, 1980. The Authorization Amendment of March 14, 1980 is hereby amended as follows:

a. Paragraph 1(a) of the amended authorization is deleted and the following language substituted therefore: The authorized funding for Phase I of the project is increased by \$254,000 to a revised total of \$2,290,000. Obligations are subject to the availability of funds and in accordance with the AID/OYB allotment process.

b. Paragraph 1(b) of the amended authorization is deleted.

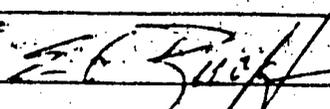
2. The authorization cited above remains in force except as hereby amended.

Date: August 20, 1980

Goler T. Butcher  
Goler T. Butcher  
Assistant Administrator  
Bureau for Africa

Clearances:

AFR/DP: RASTacy [Signature] 8/20/80  
AFR/SFWA: JKelley  
GC/AFR: BKBarrington [Signature]  
AFR/DR: RMacAlister [Signature] 8/20  
DS/ST: CPaul [Signature] 8/20

AGENCY FOR INTERNATIONAL DEVELOPMENT <b>PROJECT DATA SHEET</b>				1. TRANSACTION CODE <b>A</b> A = Add C = Change D = Delete		Amendment Number <b>3*</b>		DOCUMENT CODE <b>3</b>			
2. COUNTRY/ENTITY Africa Regional				3. PROJECT NUMBER <b>698-0420</b>							
4. BUREAU/OFFICE AFR				5. PROJECT TITLE (maximum 40 characters) <b>Phase I Regional Remote Sensing (Western Africa)</b>							
6. PROJECT ASSISTANCE COMPLETION DATE (PACD) MM DD YY <b>0 4 3 0 8 1</b>				7. ESTIMATED DATE OF OBLIGATION (Under 'B:' below, enter 1, 2, 3, or 4) A. Initial FY <b>7 8</b> B. Quarter <input type="checkbox"/> C. Final FY <b>8 2</b>							
8. COSTS (\$000 OR EQUIVALENT \$1 = )											
A. FUNDING SOURCE			FIRST FY <b>78</b>			LIFE OF PROJECT					
			B. FX	C. L/C	D. Total	E. FX	F. L/C	G. Total			
AID Appropriated Total											
(Grant)			( 770 )	( -- )	( 770 )	( 2,290 )	( -- )	( 2,290 )			
(Loan)			( -- )	( -- )	( -- )	( -- )	( -- )	( -- )			
Other U.S.											
1.											
2.											
Host Country											
Other Donor(s)											
<b>TOTALS</b>			<b>770</b>	<b>--</b>	<b>770</b>	<b>2,290</b>	<b>--</b>	<b>2,290</b>			
9. SCHEDULE OF AID FUNDING (\$000)											
A. APPROPRIATION	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH. CODE		D. OBLIGATIONS TO DATE		E. AMOUNT APPROVED THIS ACTION		F. LIFE OF PROJECT			
		1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan		
(1) FN	754	870	--	2,036	--	254	--	2,290	--		
(2)											
(3)											
(4)											
<b>TOTALS</b>				<b>2,036</b>	<b>--</b>	<b>254</b>	<b>--</b>	<b>2,290</b>	<b>--</b>		
10. SECONDARY TECHNICAL CODES (maximum 6 codes of 3 positions each)								11. SECONDARY PURPOSE CODE			
290		190		710		980		600			
12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each)											
A. Code		BR		INTR		TECH		TNG			
B. Amount		--		--		--		--			
13. PROJECT PURPOSE (maximum 480 characters)											
<p>Through training and practical application services, to enable African development planners and resource managers to utilize Landsat and other satellite imagery in planning and monitoring a broad spectrum of agricultural, forestry, rangeland, ground water, and other resource development projects.</p>											
14. SCHEDULED EVALUATIONS					15. SOURCE/ORIGIN OF GOODS AND SERVICES						
Interim	MM	YY	MM	YY	Final	MM	YY				
	6	7	9	6	8	1	6	8	2		
					<input checked="" type="checkbox"/> 000 <input checked="" type="checkbox"/> 941 <input checked="" type="checkbox"/> Local <input checked="" type="checkbox"/> Other (Specify) <b>935</b>						
16. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of a <b>3</b> page <del>XXXXXXXXXXXX</del> Project Authorization Amendment)											
<p>This accompanies Project Authorization Amendment by which authorized Phase I funding is increased by \$254,000 to a total of \$2,290,000. *PP was previously revised by PAF I Amendment No. 1 signed December 20, 1978 and Amendment No. 2 signed March 14, 1980.</p>											
17. APPROVED BY		Signature 				Date Signed MM DD YY <b>8 2 7 8 0</b>				18. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION MM DD YY <b>8 2 8 0</b>	
		Title Acting Director, AFR/RA									

*Sub amendment*

MAR 15 1980

ACTION MEMORANDUM

TO: AA/AFR, Goler T. Butcher

FROM: AFR/RA, E. Dennis Conroy *E. Dennis Conroy*

SUBJECT: Regional Remote Sensing (Western Africa) Project No. 698-0420  
Project Authorization Amendment

Your approval is requested to increase total approved Phase I project funding by \$185,000 from the Agricultural, Rural Development and Nutrition appropriation to Africa/Regional for the Regional Remote Sensing (Western Africa) Project No. 698-0420.

Discussion: This is a multi-donor project, which is supported by the Governments of Canada, France and Upper Volta as well as that of the United States. It was approved in 1977 with the purpose of enabling African development planners and resource managers to utilize Landsat and other satellite imagery in the planning and monitoring of a broad spectrum of agricultural, forestry, rangeland, ground water, and other resource development projects. The project provides training and practical application services.

A.I.D. LOP funding was envisaged at \$4,324,000 of which \$1,851,000 was specifically authorized for Phase I of the project. Authorization of the remainder was to be determined later, in the light of progress in attaining Phase I project objectives.

An in-depth evaluation was conducted in June, 1979, by an international team of experts who concluded that Phase I should be extended by one calendar year (i.e. through December 31, 1980). This reflected the team's consensus that progress had been impeded for a variety of reasons, none of which reflected adversely on the rationale for the project. The reasons were due mainly to delays in project implementation including, inter alia, the fact that it had taken more than a year to recruit and install the three A.I.D.-funded U.S. technicians at the project site; commensurate delays caused in procurement of A.I.D.-funded photographic equipment and material; failure of the local contractor to comply with the schedule for construction of A.I.D.-funded photolaboratory and archives buildings; the need to re-examine the effectiveness of the Regional Centre's training program; and slowness on the part of other African states to confer material as well as moral support to the Regional Centre's program. Since the June 1979 evaluation, however, there have been significant strides towards attaining Phase I objectives: all expatriate technicians are at post; much of the equipment needed for Phase I has arrived; the photographic laboratory is nearing completion; the Regional Centre has been recognized as a legal entity of the African Remote Sensing Council; and five West African states have joined together in forming a West African Regional Management Committee which will govern the future activities of the Centre.

In order to finance the additional year of Phase I, a budget has been prepared. The A.I.D. share is estimated at \$600,000 of which some \$334,000 will be

available from prior year funds and another \$80,000 has already been authorized from FY 80 funds under PAF II Amendment No. 1 signed December 20, 1978. The balance of \$185,000 would be drawn, if you approve, from those FY 80 funds intended for initial funding of Phase II of the project.

Recommendation: That you sign the attached Project Authorization Amendment.

Clearances:

AFR/RA:EGRuoff (draft)  
AFR/DP:JGovan AC  
AFR/SFWA:JKelly JK  
GC/AFR:EADragon EAD  
DAA/AFR:WHNorth \_\_\_\_\_  
AFR/DR:RMacAlister (subs)  
DS/ST:CPaul (subs) \_\_\_\_\_

AFR/RA:BWickland:ps:3/13/80:ext28094

HO

PROJECT AUTHORIZATION AMENDMENT

Name of Country/Entity: Africa Regional Name of Project: Regional Remote Sensing  
(Western Africa)

Number of Project: 698-0420

1. Pursuant to Section 103 of the Foreign Assistance Act of 1961, as amended, the captioned project for Africa/Regional was authorized on September 14, 1977. That authorization was subsequently revised by PAF II Amendment No. 1 signed on December 20, 1978. The latter is hereby amended as follows:

a. The approved funding for Phase I of the Project is increased by \$185,000 to a revised total of \$2,036,000 which is rescheduled as follows: FY 78 - \$770,000 (no change); FY 79 - \$1,000,000 (no change); FY 80 - \$266,000 (increased by \$185,000). The additional increment of grant funding approved for Phase I in FY 1980 is subject to availability of funds and in accordance with A.I.D. allotment procedures.

b. The project budget for Phase II, funding for which is not presently authorized, is revised downwards by \$185,000 to a revised total of \$2,288,000, and rescheduled as follows: FY 80 - \$254,000; FY 81 - \$1,000,000; FY 82 - \$1,034,000.

2. The authorization cited above remains in force except as hereby amended.

Date: March 14, 1980

Galer T. Butcher  
Galer T. Butcher  
Assistant Administrator  
Bureau for Africa

Clearances:

- A. AFR/RA:EGRuoff (draft)
- B. AFR/RA:EDConroy ED
- C. AFR/DP:JGovan ED
- D. AFR/SFWA:JKelly ED
- E. GC/AFR:EADragon ED
- F. DAA/AFR:WHNorth ED
- G. AFR/DR:RMacAlister (subs)
- H. DS/ST:CPaul (subs)

AFR/RA:BWickland:ps:3/13/80:ext28094

PROJECT DATA SHEET

1. TRANSACTION CODE **A** A = Add  
C = Change  
D = Delete

Amendment Number **2\***

DOCUMENT CODE **3**

2. COUNTRY/ENTITY  
Africa Regional

4. BUREAU/OFFICE  
AFR

3. PROJECT NUMBER  
698-0420

5. PROJECT TITLE (maximum 40 characters)  
Phase I  
Regional Remote Sensing (Western Africa)

6. PROJECT ASSISTANCE COMPLETION DATE (PACD)

MM DD YY  
1 | 2 | 3 | 1 | 8 | 0 |

7. ESTIMATED DATE OF OBLIGATION  
(Under 'B.' below, enter 1, 2, 3, or 4)

A. Initial FY **7 | 8 |** B. Quarter  C. Final FY **8 | 2 |**

8. COSTS (\$000 OR EQUIVALENT \$1 = )

A. FUNDING SOURCE	FIRST FY <b>78</b>			LIFE OF PROJECT		
	B. FX	C. L/C	D. Total	E. FX	F. L/C	G. Total
AID Appropriated Total						
(Grant)	( 770 )	( -- )	( 770 )	( 2,036 )	( -- )	( 2,036 )
(Loan)	( -- )	( -- )	( -- )	( -- )	( -- )	( -- )
Other U.S.						
1.						
2.						
Host Country						
Other Donor(s)						
<b>TOTALS</b>	<b>770</b>	<b>--</b>	<b>770</b>	<b>2,036</b>	<b>--</b>	<b>2,036</b>

9. SCHEDULE OF AID FUNDING (\$000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH. CODE		D. OBLIGATIONS TO DATE		E. AMOUNT APPROVED THIS ACTION		F. LIFE OF PROJECT	
		1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan
(1) ARDN	754	870	-	1,851	--	185	--	2,036	--
(2)									
(3)									
(4)									
<b>TOTALS</b>				<b>1,851</b>	<b>--</b>	<b>185</b>	<b>--</b>	<b>2,036</b>	<b>--</b>

10. SECONDARY TECHNICAL CODES (maximum 6 codes of 3 positions each)  
290 | 190 | 710 | 980

11. SECONDARY PURPOSE CODE  
000

12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each)

A. Code	BR	INTR	TECH	TNG
B. Amount	--	--	--	--

13. PROJECT PURPOSE (maximum 480 characters)

Through training and practical application services, to enable African development planners and resource managers to utilize Landsat and other satellite imagery in planning and monitoring a broad spectrum of agricultural, forestry, rangeland, ground water, and other resource development projects.

14. SCHEDULED EVALUATIONS

Interim	MM YY 6   7   9	MM YY 6   8   1	Final	MM YY 6   8   2
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15. SOURCE/ORIGIN OF GOODS AND SERVICES

000  941  Local  Other (Specify) 935

16. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of a 3 page PP-Amendment) Project Authorization Amendment increased by \$185,000 to a total of \$2,036,000. \*PP was previously revised by PAF I Amendment No. 1 signed December 20, 1978.

17. APPROVED BY

Signature: E. D. Conroy  
Title: Director, AFR/RA  
Date Signed: MM DD YY  
0 | 3 | 1 | 3 | 8 |

18. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION  
MM DD YY  
| | | | | |

DEC 13 1978

*1st amendment*

ACTION MEMORANDUM TO THE ASSISTANT ADMINISTRATOR, BUREAU FOR AFRICA  
FROM : AFR/RA, E. G. Ruoff, ~~Acting~~ Director  
SUBJECT: Regional Remote Sensing (Western Africa) Project 698-0420

Problem: We request that you approve amendment of PAFs I and II for the Regional Remote Sensing (Western Africa) Project 698-0420, (formerly Regional Remote Sensing/Upper Volta, 625-0913) to revise the scheduled obligation of funds over the life of the project.

Discussion: The original PAF II approved a total level of funds for Phase I of this project through FY 1978 of \$1,851,000, \$750,000 to be obligated in FY 1977, and \$1,101,000 in FY 1978. Of this amount only \$770,000 was obligated because of limited funding availabilities and project slippage. The slippage was due primarily to an extended period of contractor selection involving the technical assistance element of the project. In order that the United States component of this multi-donor project can be implemented as planned, and to provide time for a Phase I evaluation, we request that you authorize a revision of the funding schedule for the project as indicated in the attached PAF, Part II Amendment.

The amendment to Part II of the PAF also requests a decision to provide FY 1979 funding from Section 103 rather than from the Sahel Development Program. Because the FY 1979 Congressional Presentation indicates that the project will be funded from the Sahel Development Program, a Congressional notification will be required and Congressional Authorization requirements will be satisfied before obligation of FY 1979 funds. All clearing offices believe that funding for the project should be from Section 103 because the project is designed to assist all of West Africa, not just the Sahel.

Recommendation: That you sign the attached PAF II amendment which authorizes a new schedule for Phase I of the Project through FY 1980.

Attachment: a/s

Clearance:

AFR/DR:JBlumgart (draft)

AFR/DP:CWard

AFR/SFWA:DMiller *DM*

GC/AFR:EDragon

AA/AFR:WHNorth

Drafted by: *TR*

AFR/RA:EGRuoff, *TR* 12/11/78:X-28964

AFR/RA:BWickland

*113*

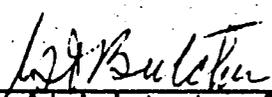
PROJECT AUTHORIZATION AND REQUEST FOR ALLOTMENT OF FUNDS

PART : II (Amendment No. 1)  
PROJECT : Regional Remote Sensing (Western Africa)  
PROJECT NUMBER: 698-0420 (formerly Regional Remote Sensing/Upper Volta 625-0913)

Pursuant to Part I, Chapter 1, Section 103 of the Foreign Assistance Act of 1961, as amended, I hereby authorize an amendment to the Project Authorization and Request for Allotment of Funds - Part II for the captioned project, executed on September 14, 1977, as follows:

The approved funding for Phase I of the Project (\$1,851,000), which was scheduled for obligation in FY 77 (\$750,000) and FY 78 (\$1,101,000), is rescheduled for obligation as follows: FY 78 - \$770,000; FY 79 - \$1,000,000; and FY 80 - \$81,000. The additional increment of grant funding approved for Phase I in FY 80 is subject to availability of funds and in accordance with A.I.D. allotment procedures.

The project budget for Phase II of the project, funding for which is not presently authorized, is revised as follows: FY 79 - \$00; FY 80 - \$919,000; FY 81 - \$1,554,000.

  
Assistant Administrator for Africa

Date

12/26/78

AGENCY FOR INTERNATIONAL DEVELOPMENT <b>PROJECT AUTHORIZATION AND REQUEST          FOR ALLOTMENT OF FUNDS PART I</b>		1. TRANSACTION CODE <input type="checkbox"/> A ADD <input checked="" type="checkbox"/> C CHANGE <input type="checkbox"/> D DELETE	PAF 2. DOCUMENT CODE: 5
3. COUNTRY ENTITY (Formerly Sahel Regional/ Africa Regional Upper Volta)		4. DOCUMENT REVISION NUMBER: <input type="checkbox"/> 1	
5. PROJECT NUMBER (7 digits) <input type="checkbox"/> 698-0420	6. BUREAU OFFICE A. SYMBOL: AFR B. CODE: <input type="checkbox"/> 06	7. PROJECT TITLE (Maximum 40 characters) <input type="checkbox"/> Regional Remote Sensing (Western Africa)	
8. PROJECT APPROVAL DECISION <input type="checkbox"/> A APPROVED <input type="checkbox"/> D DISAPPROVED <input type="checkbox"/> DE DEAUTHORIZED		9. EST. PERIOD OF IMPLEMENTATION YRS. <input type="checkbox"/> 0 <input type="checkbox"/> 5 QTRS <input type="checkbox"/>	

10. APPROVED BUDGET AID APPROPRIATED FUNDS (\$000)									
A. APPROPRIATION	B. PRIMARY PURPOSE CODE	PRIMARY TECH. CODE		E. 1ST FY <u>77</u>		H. 2ND FY <u>78</u>		K. 3RD FY <u>79</u>	
		C GRANT	D LOAN	F GRANT	G LOAN	I GRANT	J LOAN	L GRANT	M LOAN
(1) Orig. FN	754	876		(750)		(1101)		(1210)	
(2) Revis. FN				-		770		1000	
(3)				-					
(4)				-					
Revised TOTALS						770		1000	

A. APPROPRIATION	N. 4TH FY <u>80</u>		O. 5TH FY <u>81</u>		LIFE OF PROJECT		11. PROJECT FUNDING AUTHORIZED	
	D GRANT	P LOAN	R GRANT	S LOAN	T GRANT	U LOAN	1. ENTER APPROPRIATE CODE(S) 1. LIFE OF PROJECT 2. INCREMENTAL LIFE OF PROJECT	A GRANT B. LOAN
(1) Orig. FN	(766)		(497)					2
(2) Revis. FN	1,000		1554					
(3)								
(4)								
Revised TOTALS	1,000		1554		4,324			80

12. INITIAL PROJECT FUNDING ALLOTMENT REQUESTED \$000:			13. FUNDS RESERVED FOR ALLOTMENT.		
A. APPROPRIATION	B. ALLOTMENT REQUEST NO. <u>1</u>		TYPED NAME (Chief, SER, FM/FSD)		
	C GRANT	D LOAN	SIGNATURE		
(1) FN	770		DATE		
(2)					
(3)					
(4)					
TOTALS					

14. SOURCE ORIGIN OF GOODS AND SERVICES

000     941     LOCAL     OTHER 935

15. FOR AMENDMENTS, NATURE OF CHANGE PROPOSED.

(a) Change office, title, and project number. (Formerly Regional Remote Sensing/ Upper Volta, 625-0913)

(b) Readjust funding over life of project.

FOR PPC/PIAS USE ONLY	16. AUTHORIZING OFFICE SYMBOL	17. ACTION DATE	18. ACTION REFERENCE (Optional)	ACTION REFERENCE DATE
		MM DD YY		MM DD YY

ACTION MEMORANDUM TO THE ASSISTANT ADMINISTRATOR, BUREAU FOR AFRICA

FROM : AFR/DR, John L. Withers

SUBJECT : Upper Volta Regional Remote Sensing Project

PROBLEM : Approval of the attached Project Paper which includes life of project cost estimate of up to \$4,324,000, FY 1977-81, and approval to authorize financing of the costs of Phase I, \$1,851,000, FY 1977-78.

DISCUSSION: In December 1975 the Bureau for Africa approved the equivalent of a PRP, authorizing final design of a project in which the U.S. would participate with France and possibly other donors in establishing a regional remote sensing center in Ouagadougou, Upper Volta (see Annex A-1 for PRP approval message). The Bureau's action was based on the findings and recommendations of an AID team which, in October, had reviewed a number of remote sensing proposals for Africa and had made an assessment of the value of the technology for African development. The project was, accordingly, included in the Agency's FY 1977 Congressional Presentation, with FY 1977 funding requested for \$750,000.

Since that time, a number of developments and changes in approach have affected the design of the project.

1. The focus of the project is no longer mainly on the Sahel and on French as the medium of communication. While the center will give initial attention to the Sahel and its first programs will be in French, the project is scoped to serve some 30 countries (see map, Annex B-2) and will provide services in both English and French with a bilingual staff. It will thus serve both the Francophone and Anglophone countries of West Africa. Accordingly, the original concept of CILSS (Permanent Interstate Committee for Control of the Drought in the Sahel) as the institutional home of the project has been dropped in favor of a separate regional institution which would be linked to the Pan-African remote sensing program sponsored by the U.N. Economic Commission for Africa (ECA). The project will thus provide an additional linkage between the Anglophone and Francophone countries of West Africa.
2. The entry of Canada as a major donor in the project and the financier of the satellite reception station, (assuming a positive decision to move to Phase II) has finessed the earlier NASA/AID impasse on AID grant assistance for overseas

ground stations. Similarly, it has permitted France to remain an active and valuable participant in the program, though on a more modest scale than contemplated in their original proposal, due to subsequent budgetary difficulties.

- 3. The project has become an important component of the African Remote Sensing Program which has been formulated by ECA and endorsed by ECA's Council of Ministers in Kinshasa in March. A Pan African Remote Sensing Council is due to be established in February to serve as a policy and coordinating body on remote sensing matters in relation to the sub-regional centers such as have been established in Nairobi and is contemplated for Upper Volta.

I should like to emphasize that the design and planning of this project has been a collaborative, multi-lateral effort involving not only the three donors but representatives of the Government of Upper Volta (GOUV) and ECA. This effort has been conducted through the mechanism of a "Technical Committee" which has held four meetings since January and, at its most recent meeting in Paris last month, completed work on its Report, which is attached herewith. The Committee's Report embodies a consensus among the five parties as to the design of the program, the role each party plans to play, an agreed schedule of implementation, and an estimate of the costs by funding source.

Another important characteristic of the project is its phasing. Phase I permits the initiation of valuable training, demonstration and information activities, and the hoped for establishment of a regional institution, without the commitment of major capital investments. A decision to proceed to Phase II (which would include the receiving station) is not automatic but would be based on the accomplishments of Phase I, cost effectiveness studies, the status of regional arrangements, and the estimated potential of the project to achieve financial viability. If a Phase II decision appears too risky or premature, the continuation of Phase I activities would have a validity in their own right. Phase I stands on its own feet and is not simply a means of preparing for Phase II.

In the event of a positive decision, the donors will wish to reestimate the costs of Phase II, and the attached Project Paper will need to be amended accordingly. Hence, this memorandum request authorization for Phase I costs only.

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ISSUES: The Project Committee reviewed the Project Paper and Committee Report on August 22 and identified the following policy issues for consideration by the ECPR (in addition to the issues included in pages 7-12 of the Project Paper)

1. Possible Escalation in Cost of Ground Station

The Canadians have budgeted \$3.2 million for the receiving station (see page 48 of the Committee Report) on the assumption that it would have a capability to receive and process data from Landsat satellites equipped with a multispectral scanner (mss) similar to the mss used for Landsats A, B and C. However Landsat D, scheduled for launch in 1981, will be equipped with a more sophisticated, higher resolution scanning device (thematic mapper) which transmits data at a higher frequency than the mss. Ground stations equipped to receive data in the mss format will require modification in order to receive Landsat D data unless an mss is also included in Landsat D. It is estimated that an additional \$2 million would be required to construct the station in Ouagadougou with both capabilities.

User agencies (AID, Agriculture, Interior) and NASA have urged that Landsat D include themss so that existing foreign ground stations (Canada, Brazil, Italy, Iran) will not have to undergo costly modifications or become obsolete, but OMB has so far not agreed to include funding in NASA's FY '78 budget to give Landsat D mss capability. AID is planning to ask OMB to reconsider its position.

Proposed Position: This is an issue relating to Phase II of the program, not Phase I, and will come under consideration at the time the evaluation is conducted preparatory to a Phase II decision. That will not take place before next June, at the earliest. If there is a positive decision to proceed to Phase II, and Landsat D does not contain an mss, AID may wish to consider sharing with Canada all or part of the additional cost of the ground station. Such consideration would have to take into account NASA views on the matter.

2. Financial Viability of Project after Five Years. Some members of the Project Committee expressed skepticism that the center would generate sufficient revenues to become financially self supporting within five years. The Project Committee Chairman noted that this issue had

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been raised in a memorandum from AFR/DR to AA/AFR and discussed at a meeting with Mrs. Butcher and Mr. North on July 19, in preparation for AID's participation in the Paris meeting of the Technical Committee. At the July 19 meeting it was agreed that "AID is prepared to consider financing recurrent costs subject to the results of an evaluation of the program. Such an evaluation should ... among other things, assess the status and prospects of the financial viability of the program, including the likelihood of growing African support, and reach a judgment regarding the advisability of AID participating (with France and Canada) in financing a portion of the recurrent costs beyond Phase II."

Proposed Position: That AFR adhere to the above position.

APPROVED *[Signature]* *acting AA/AFR*  
DISAPPROVED \_\_\_\_\_  
DATE 9/14/77

- Clearances:  
AFR/DR, SKlein (draft)  
AFR/DR, JGraham (draft)  
AFR/SFWA, GEvans (draft)  
AFR/DP, GCauvin (draft)  
GC/AFR, STisa (draft)  
SER/ENGR, JRoyce (draft)  
TA/OST, CPaul (draft)  
NASA, JZimmerman (draft)  
AFR/SFWA, TLuChe (draft)  
AFR/RA, DBlane (draft)  
SER/CM/ROD, JAnderson (draft)

drafted by J.D. Blumgart  
09/13/77

*[Handwritten mark]*

# BEST AVAILABLE DOCUMENT

PROJECT AUTHORIZATION AND REQUEST FOR ALLOTMENT OF FUNDS

PART: II

COUNTRY: Upper Volta

PROJECT: Upper Volta Regional Remote Sensing Project

PROJECT NO.: 625-0913

Pursuant to Part I, Chapter 1, Section 103 of the Foreign Assistance Act of 1961, as amended, I hereby authorize a Grant to the government of Upper Volta ("Cooperating Country") of not to exceed Seven Hundred and Fifty Thousand United States Dollars (\$750,000) to assist, together with the governments of France and Canada, in financing certain foreign exchange and local currency costs of goods and services required for the project as described in the following paragraph.

The project consists (a), in Phase I, of establishing a Regional Remote Sensing Center, and support facilities, in the Cooperating Country that will provide training, user assistance services for countries in Africa, a program to familiarize African officials and managers with the potential uses of data derived from satellites and information and reference services, to which the United States will contribute financing for technical assistance, engineering and construction services for the support facilities, equipment, a portion of the operating expenses of the Center and training of African personnel in the United States and (b), in Phase II, continuing the operations of the Center and adding a Satellite Reception Center, the construction of which will be financed by the government of Canada (hereinafter referred to as the "Project").

I approve the total level of AID appropriated funding for Phase I of the Project of not to exceed One Million Eight Hundred Fifty-One Thousand United States Dollars (\$1,851,000), including the amount authorized above and an additional increment of grant funding of \$1,101,000 in FY 1978 subject to the availability of funds and in accordance with AID allotment procedures. Funding may be authorized for Phase II after an evaluation of Phase I.

I hereby authorize the initiation of negotiation and execution of the Grant Agreement by the Officer to whom such authority has been delegated in accordance with AID regulations and Delegations of Authority, subject to the following terms, together with such other terms and conditions as AID may deem appropriate:

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a. Source and Origin of Goods and Services

Except for ocean shipping, goods and services financed by AID under the Project shall have their source and origin in countries included in Code 941 of the AID Geographic Code Book and in the Cooperating Country, except as AID may otherwise agree in writing. Ocean shipping financed under the Grant may be procured in any eligible source country except the Cooperating Country.

b. Conditions Precedent to Disbursement

Prior to the first disbursement of funds under the Grant, or to the issuance of commitment documents with respect thereto, the Cooperating Country shall furnish to AID the following in form and substance satisfactory to AID:

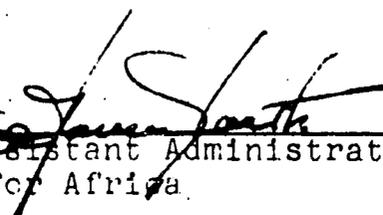
1. Documentary evidence of the establishment of a national remote sensing agency capable of carrying out the purposes of the Project pending the establishment of a Regional Remote Sensing Organization;
2. Evidence that the agreements between the Cooperating Country and the government of Canada and the government of France under which Canada and France are making contributions to the Project are fully effective and that conditions precedent to disbursement under such agreements, if any, have been satisfied.

c. Covenants

The Grant Agreement shall contain covenants providing in substance as follows:

1. The Cooperating Country shall operate and maintain the Project and, upon creation, shall transfer, upon terms and conditions satisfactory to AID, the Project to a Regional Remote Sensing Organization acceptable to AID.
2. The Cooperating Country shall use its best efforts to form a Regional Remote Sensing Organization that is legally, financially, technically and administratively qualified to accept transfer of the Project and to effectively operate and maintain the Project.

**BEST AVAILABLE DOCUMENT**

  
Assistant Administrator  
for Africa

Clearances as shown on Action Memorandum

ST1sa,GC/AFR:jn 23808

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AGENCY FOR INTERNATIONAL DEVELOPMENT  
**PROJECT AUTHORIZATION AND REQUEST  
 FOR ALLOTMENT OF FUNDS PART I**

1. TRANSACTION CODE  
 A ADD  
 C CHANGE  
 D DELETE

2. DOCUMENT CODE  
 PAF  
 5

3. COUNTRY/ENTITY  
**SAHEL REGIONAL/UPPER VOLTA**

4. DOCUMENT REVISION NUMBER

5. PROJECT NUMBER (7 digits)  
 625-0913

6. BUREAU/OFFICE  
 A. SYMBOL **AFR**  
 B. CODE  06

7. PROJECT TITLE (Maximum 40 characters)  
 Regional Remote Sensing/Upper Volta

8. PROJECT ACTION TAKEN  
 APPROVAL DECISION  
 A APPROVED  
 D DISAPPROVED  
 DE DEAUTHORIZED

9. EST. PERIOD OF IMPLEMENTATION  
 YRS  0  5  QTRS

10. APPROVED BUDGET AND APPROPRIATED FUNDS (\$000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	PRIMARY TECH. CODE		E. 1ST FY <u>77</u>		H. 2ND FY <u>78</u>		K. 3RD FY <u>79</u>	
		C. GRANT	D. LOAN	F. GRANT	G. LOAN	I. GRANT	J. LOAN	L. GRANT	M. LOAN
(1) FN	754	876		750		1101			
(2)									
(3)									
(4)									
TOTALS				750		1101			

A. APPROPRIATION	N. 4TH FY <u>80</u>		O. 5TH FY <u>81</u>		LIFE OF PROJECT		11. PROJECT FUNDING AUTHORIZED (LENGTH APPROPRIATE CODES) 1. LIFE OF PROJECT 2. INCREMENTAL LIFE OF PROJECT C. PROJECT FUNDING AUTHORIZED THRU <u>78</u>	GRANT	LOAN
	D. GRANT	P. LOAN	R. GRANT	S. LOAN	T. GRANT	U. LOAN			
(1) FN					1,851				
(2)									
(3)									
(4)									
TOTALS					1,851				

12. INITIAL PROJECT FUNDING ALLOTMENT REQUESTED (\$000)

A. APPROPRIATION	B. ALLOTMENT REQUEST NO.	
	C. GRANT	D. LOAN
(1) FN	750	
(2)		
(3)		
(4)		
TOTALS		

13. FUNDS RESERVED FOR ALLOTMENT

TYPED NAME (Chief, SER/EM/FCD)  
**Jean McColl**

SIGNATURE \_\_\_\_\_

DATE \_\_\_\_\_

14. SOURCE/ORIGIN OF GOODS AND SERVICES  
 000  981  LOCAL  OTHER 935

15. FOR AMENDMENTS, NATURE OF CHANGE PROPOSED

**BEST AVAILABLE DOCUMENT**

FOR PPC/PIAS USE ONLY	16. AUTHORIZING OFFICE SYMBOL	17. ACTION DATE MM DD YY	18. ACTION REFERENCE (Optional)	ACTION REFERENCE DATE MM DD YY

