

# **Evaluation of the Regional Road Maintenance Training Center at Lome , Togo**

**Prepared under  
Contract No. AID/SOD/PDC-C-0160  
Work Order No. 5  
June 1980**

**DIMPEX ASSOCIATES, INC.  
New York - Washington, D.C.**

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## Executive Summary

The Regional Road Maintenance Training Center, Lome, Togo, has operated since 1970 under the auspices of the Entente Council, offering skill training in important fields of road maintenance and repairs for public service professionals, mainly from Public Works Departments, from Entente member states. Through 1977 many non-Entente countries sent trainees to the Center. AID assistance to the Center began in 1965 and terminated in 1976.

The Center's facilities consist of class rooms, maintenance and training shops for automotive repairs, automotive electricity, machine tools, spare parts management, diesel and gasoline engines and soils analysis, and motor pool garages. Dormitory accommodations can house 152 students and a dining hall provides space for 60. All of the facilities are maintained in first-class condition.

In 1978 the Center's training division undertook an extensive curriculum review to upgrade courses and achieve equivalence of Center diplomas for civil services purposes with traditional national baccalaureate diplomas. All course work was expanded from 11 to 18 months, organized into two, October to June academic years, divided by two months on-the-job training in student countries of origin and one month's vacation. A concomitant requirement to upgrade faculty accompanied this reorganization. The Center's Administrative Council approved the changes in April 1978; endorsement of the diplomas by the Entente Ministers of Public Services followed in May 1978. The first courses under the new program began in October 1979.

Between 1967 and 1979 (October) attendance dropped sharply from over 100 students per year to about 60, due in great measure to the diploma problem and discontinuance of non-Entente country participation. The Center's Administrative Council has set tentative goals of 135 entering students each year (three students per country for each of the Center's nine courses) for a total student body of 270; any non-Entente students would be in addition to the 270 or would fill slots for which Entente countries did not nominate. The 1979 entering class numbered 50; October 1980 enrollment will probably be 45 for a total enrollment of 95. The low numbers are more a function of insufficient qualified faculty than lack of qualified students.

In priority order, the Center identifies its requirements for fully installing the new program as follows:

a. Expatriate faculty for seven specific skill fields accompanied by scholarships for young Africans in formal teacher training methodology; these prospective faculty members would return and displace the expatriates after an appropriate transition.

b. Updating of reference materials, training aids and fixed shop and rolling motor pool equipment consistent with the new Center curriculum.

c. Expansion of physical facilities by doubling dining hall capacity and adding 100 dormitory spaces. Eight classrooms will be added (to the current eight) in increments of two per year financed from the Center's operating budget.

The Center's Director General will report to the Administrative Council in October 1980 on the prospects for adding a well-drilling training program.

Current support from other donors is limited to French financing of three expatriate faculty and Dutch partial financing of two expatriates.

Conclusions. U. S. assistance terminated before resolution of diploma equivalence and operating protocol issues, both of which were settled in 1978-79. Implementation of the revised curriculum is being impeded by a lack of qualified faculty and, to a certain degree, by outdated and insufficient training aids, reference materials and shop equipment. Entente country subsidies will support a student body of about 100; if the members increase beyond that level the subsidies will have to be raised or donor assistance arranged. Among potential donors are the World Bank, the European Development Fund and possibly the German, Dutch and French governments.

Recommendations. It is recommended that AID consider a technical assistance project to provide RRMTTC with expatriate faculty (U. S.), participant training for both African faculty and Entente students, commodities in the form of fixed shop and rolling motor pool equipment, reference books, handbooks, training aids and catalogues and selected short-term advisory services in management review and evaluation and follow-up of Center graduates. Entente Secretariat and AID personnel should increase their interest and association with Center activities and alumni. In addition, endeavors should be undertaken by the Center to solicit more interest and assistance from the donor community. RRMTTC requests for additional infrastructure should be discouraged until the revised program is operating effectively, and Entente training requirements in road maintenance are better forecast. The addition of a well-drilling course should not be considered until the Center has achieved the objective of implementing the revised curriculum for road maintenance training.

## I. INTRODUCTION

A. Under the terms of Work Order No. 5, Indefinite Quantity Contract No. AID/SOD/PDC-C-0160, dated April 23, 1980, AID requested DIMPEX Associates, Inc., (1) to evaluate the qualitative and quantitative training effectiveness and regional performance of the Regional Road Maintenance Training Center (RRMTC or CERFER - Centre Regional de Formation pour Entretien Routier - The designation used by Entente Council member states and their functionaries) since November 1966 when U. S. assistance terminated and (2) to recommend appropriate future AID action. A copy of Work Order No. 5 is attached.

B. Thomas C. Irvin, Senior Evaluation/Program Specialist, undertook the assignment for DIMPEX Associates, Inc. Mr. Irvin worked in the project area from April 25 through May 29, 1980, performing primary and secondary research in four of five Entente Countries. A list of all individuals contacted is attached (Attachment 2). While in Upper Volta and Niger RRMTC Administrative Council members suggested that rather than interview former trainees, Mr. Irvin concentrate on interviewing current trainees at RRMTC, attending the first courses under a curriculum reorganization instituted in October 1979. At RRMTC, Mr. Irvin received valuable support from Messrs. Stephen Grant and Lyle Weiss, both of REDSO, in reviewing Center activities. On May 20, 1980, Mr. Grant traveled to Cotonou to conduct appropriate interviews of Council members and former RRMTC graduates. The contributions of Messrs. Grant and Weiss supplemented and confirmed to a measurable degree the findings of Mr. Irvin.

## II. CENTER STATUS AT TERMINATION OF U. S. ASSISTANCE

A. Wolf & Co. Report, Section 2, Summary of Major Findings and Recommendations, inter alia, concludes that with minor exceptions every important action proposed in the 1974 PAR and 1975 PROP (Revised) on RRMTTC had been taken (i.e. in November 1976):

1. Africanization of staff
2. Effective operational and budgetary controls
3. Installation of equipment use and preventive maintenance systems
4. Repair and sale of usable property
5. Revision of courses to include more practical training.
6. Prompt payment of contributions by Entente states

B. Elsewhere in the same Section appears the observation that key institutional outputs were developed in the last 18-24 months of the project, that is, after the 1974 PAR and consistent with the 1975 PROP revision. Among the factors assisting project achievement, first mention is given to AID imposition of implementation conditions for disbursement in 1974-1975.

C. Wolf & Co. recommended that an American advisor remain at the Center through CY 1977.

D. Also in Section 2, Wolf & Co. evaluators addressed the fundamental issues of the Center's financial outlook and its purpose. On the financial side, revenues looked promising from a combination of Entente state contributions and an investment budget from tuitions of non-Entente state students, other donor support and services rendered by the Center. RRMTTC's purpose was forecast in a very limited objective of practical training of technicians in skills associated with road maintenance. It is noteworthy that the evaluation mentions without comment that the Center developed no common standards, experienced no competition for training slots and conferred no financial advantage (e.g., civil service mobility) to graduates through diplomas awarded. These two important factors - finance and purpose - plus a third, the absence of a formal operational protocol between the Republic of Togo and RRMTTC -- which is not even mentioned in the Wolf & Co. report -- began to weigh heavily on RRMTTC's effectiveness, both qualitative and quantitative, as early as the first post-AID year, i.e. 1977. The chronology in Section III below develops the details of this course of events.

E. The AID contractor at RRMTTC during the period 1970-1976, Aero-Ford, made a series of recommendations for future actions as a part of its final report in March 1977; these are summarized here:

1. Continue library acquisitions to maintain pace with technical advancements.
2. Augment audio-visual equipment with a VTR system to be used in teaching and to record non-technical, yet standard lectures.
3. Follow a rigid program of accounting for equipment use amortization and replacement, involving rolling stock, fixed shop tools and automotive and other training aids.

4. Up-date training aids systematically and assure their integration into classroom work.
5. Up-date instructors' knowledge of new equipment and technology through short-term training at or near the Center.
6. Develop a trainee recruitment program among the public sector in non-Entente member states and the private sector wherever to assure a full, annual quota of trainees and consequent supportable trainee costs.
7. Maintain continuous budget review of operating costs of training by specialty during the first five years to insure flexibility in covering unanticipated costs and charges resulting from rates of inflation.
8. Adhere rigidly to proposed amortization schedules.
9. Impose a realistic system of internal controls to reduce management costs, assure disposition of excess property and regulate spare parts stocks.
10. AID should consider continuing for six months the services of a technician to develop and initiate the program foreseen above (sub-paragraph 9).

**N.B.** Results, or absence thereof, on the above are discussed throughout this narrative report with the exceptions of 5, 7, 8. On 5, the departure of faculty made this impractical. No. 6 was not followed because of preoccupation with the revised curriculum. A formal amortization plan has not been followed, rather a varying percentage of the total budget. Budget management (No. 7) has been practiced to a degree, however, inflation has more than wiped out any savings that might have been realized.

### III. THREE YEARS OF POST-AID EXPERIENCE, NOVEMBER 1976 TO OCTOBER 1979

A. RRMTC began its first year of post-AID operation with a well-planned and constructed physical plant and an adequate administrative staff. The faculty consisted of eleven trained Africans competent to teach three courses for mechanics, three courses for equipment operators, two courses for general road maintenance technicians and one course each for automotive electricians, fuel injection engine specialists, spare parts technicians and soil analysis technicians. Three French expatriates supplemented the African teaching staff in the fields of diesel injection/hydraulics, electricity and general road maintenance. The machine shop, motor maintenance shop, soils analysis laboratory, spare parts warehouse and engine repair shops provided ample training, demonstration and operating opportunities for practical experience in a full range of road maintenance skills. The arrival by mid-1977 of heavy equipment purchased under the AID project provided the Center with a well-equipped motor park containing an excellent cross-section of road maintenance vehicles; a number of non-U. S. vehicles (and training aids) provided adequate analogues with equipment available in most Entente and some non-Entente countries. Modern training aids and equipment plus appropriate handbooks and manuals were available for classroom instruction and demonstrations and independent student study. A system of local contracting with Center equipment served as a source of revenue for the Center's investment fund and provided valuable practical training for all students, particularly the equipment operators and mechanics. Student tuitions from non-Entente countries contributed to the investment fund and trainees themselves brought outside views to the general school experience.

B. The matter of the Center's purpose came under serious scrutiny during 1977, especially the fact that Center graduates achieved no particular gain in terms of advancement upon returning to their countries and offices of origin. This prompted the Center's Training Section to undertake a review of the entire curriculum toward gaining of equivalence for RRMTC diplomas for civil service purposes with traditional national diplomas the baccalaureate level. This necessitated expending the training courses to two years duration, introducing additional theoretical instruction, while retaining the same emphasis on practical experience, and examining students individually on all course work. In the process, some courses had to be eliminated as not susceptible to such modification. As a result, the soils analysis technician course was dropped at the end of 1977. For a similar reason, the basic equipment operators course was dropped at the same time, although it had also been found to be uneconomical and to duplicate training available in national training centers. The equipment operator foreman course was offered for the last time in 1978. (Dropping the operator courses also reduced Center revenues from outside contracting).

C. In April 1978, the RRMTC presented and received Council approval for a completely reorganized program. Academic years were changed from January-November to October-June. All courses would cover two academic years, split by two months on-the-job, practical training in each student's country of origin and one month vacation. All students would be required to

pass a standard Center entrance exam for their specialty and be at least 35 years of age. Technical experience and/or school diplomas would vary among specialties. In order to achieve the expansion of training from 11 months (the duration of the longest prior courses) to 18 months, technical French language, mathematics and industrial design receive the major emphasis. The following standard courses constituted the Center's new catalogue (technical experience included with each specialty):

1. Cycle A offered courses for heavy equipment mechanics, spare parts technicians and sheet metal/welding technicians. Each applicant should hold a BEPC certification (completion of first four years of secondary schooling) and have three years practical experience or have five years of practice experience alone.
2. Cycle B comprised courses in automotive repair and maintenance, road maintenance and spare parts warehouse management:

- a. All mechanics would follow a standard program the first academic year and then select an option among automotive mechanics, automotive electricity or automotive hydraulic systems. Each applicant should hold a CAP certificate (from a vocational training school at approximate BEPC level).

- b. Road maintenance offered road maintenance technician and surveyor options. Applicants should hold a BEPC certificate (or equivalent) CAP certificate or have completed the second class in a non-vocational secondary school system.

- c. Spare parts warehouse managers should have the same qualifications as Road Maintenance applicants.

D. In May 1978, the Entente Ministers of Public Service met and approved equivalence between the diplomas foreseen under the revised RRMTTC curriculum and traditional national diplomas for civil service requirements.

E. Despite the activities underway to revamp the RRMTTC program, no non-Entente member countries sent candidates to the Center for training in 1978. Because of the calendar, the RRMTTC Administrative Council decided that the first courses under the new curriculum would be introduced in October 1979.

F. During the remainder of 1978, after approval of the new program, attention turned to preparation of a new Center pay statute consistent with upgraded requirements for faculty and to negotiations of an operating protocol between the Republic of Togo and RRMTTC. The basic motivations for the latter were two-fold: to confer regional status on the Center with all the associated privileges and benefits and, as a consequence, make conditions of service at the Center more attractive to potential faculty from all Entente countries. The personnel statute received Administrative Council endorsement in late 1978 and the protocol was signed and introduced in January 1979.

G. RRMTC approached the inauguration of an essentially restructured and very ambitious new program beset by many obstacles:

1. A March 1979 request via the Entente Secretariat to the European Development Fund for assistance in expatriate staff and training of African Faculty remained unanswered. Expatriate instructors had been requested (one each) in the following specialties: Road Construction; Industrial Design; Diesel Motors; Topography, Hydraulic Transmission; General Shop Mechanics (Shop Foreman); and Reinforced Concrete and General Construction Procedures (total of seven personnel). Training grants for Africans would stress teaching methodology for selected technical university students (with two years training) to join the RRMTC staff after teacher training and displace the expatriates after an appropriate transition period. Candidates would be nominated by Entente countries to cover the same skill areas for which expatriates were foreseen.

2. The request to EDF reflected several developments that occurred between 1977 and 1979. Of the 11 trained faculty members at RRMTC at the end of 1976, only three remained in October 1979 plus the three French expatriates. The others had left for more beneficial positions in the private sector (partly due to the Center's outdated pay schedule) or because their qualifications did not meet requirements under the new program. Efforts to recruit replacements from Entente States failed at least in part because of the absence of an operational protocol designating the Center as a regional institution and affording faculty certain beneficial perquisites. A concurrent drop-off in student body paralleled the erosion in faculty quality which in stop-gap situations was bolstered by the employment of part-time outside instructors or worsened by the temporary use of former trainees who occasionally were less qualified than their students. From a student body of 123 (15 non-Entente) in 1976 the members dropped to 114 (15 non-Entente) in 1977 to 82 (all Entente) in 1978 and 63 in 1979.

3. The March 1979 RRMTC announcement of courses to be offered in the 1979/80 academic year listed Heavy Equipment Mechanic, Sheet Metal/Welding Technicians and Spare Parts Technicians in Cycle A and Mechanics, Road Maintenance Technicians and Surveyors in Cycle B. Of some 165 applicants, the selection board, meeting in July chose 52 for attendance in only four classes; sheet metal/welding and spare parts had to be dropped primarily for lack of faculty plus unavailability of welding tools and expendable and non-expendable supplies associated therewith. In part, this situation grew out of difficulty of communication between the former RRMTC Director General, who had assumed important additional duties within the Republic of Togo government and Center staff, who were unable to resolve matters related to arrival of scheduled expatriates and faculty from Entente States and acquisition of required tools and expendable supplies. As a consequence, the Center opened its doors for the new program in October 1979 to trainees in Heavy Equipment Mechanics, Road Maintenance Technicians, Mechanics (15 in each) and Surveyors (limited to 5).

4. Turning to the financial side, the Center's situation was fairly healthy. For the 1979 budget year (ending December 31), the Center's revenues were estimated at CFA 162,797,535 versus estimated expenditures of

CFA 143,023,149, leaving a balance of CFA 19,774,386 to be carried over into the new year. The reserve account established in October 1977 at a level of CFA 100 million, drawing 6.5% interest, remained intact; negotiations were expected to raise the interest rate by perhaps as much as 2% per annum. Rental of equipment to public and semi-public agencies produced revenues estimated at about CFA 20 million. Each Entente state's contribution of CFA 20 million went toward costs of Center operations; at the advertized rate of CFA 1,125,000 per student per year in the Center's March 1979 announcement of courses, this subsidy would finance about 17 students per country.

On the other hand, the Center no longer had revenues from non-Entente students nor from other donor scholarships (last French contributions were in 1976; last German in 1978).

5. Here it should be noted that the Center's annual accounts are audited by the Republic of Togo Audit Service and certified for review by the Administrative Council at its annual meeting. At the same meeting, the Council reviews budget performance for the current year and the Director General's estimates of expected revenues and expenditures for the remainder of the year (usually October, November and December). A review of Council meeting minutes for October 1978 and the Director General's Report of November 1979 revealed that budget operations receive serious attention and review by the Center's management board.

#### IV. CURRENT STATUS (BEGINNING OCTOBER 1979)

A. A new Director General assumed management of the Center in September 1979. His first report to the Administrative Council in November 1979 reflected a thorough study of Center problems and an engagement to transform the Center into an effective training resource for public works professionals from Entente and non-Entente countries. In order of appearance in the Report, the following issues were addressed:

1. Trainers. The expectation of training of young Africans, as described above in Section III G, is highlighted. In order to launch the 1979/80 year, authority was granted to increase the number of part-time instructors and to allow the Center's Chiefs of Services to teach without pay (The Council did authorize honoraria for this work).

2. Country quotas of trainees. The Council approved in 1978 a quota of three students per country per course ( $27 \times 5 = 135$  or a total of 270 when the Center achieved full operation; this would also limit each first and second year course to 15 students per class).

3. Training materials. Requirements lists amounting to an estimated cost of CFA 103,553,000 were calculated as follows:

Materials and Tools for Mechanics Courses	59,415,000
Materials for Road Maintenance & Topography	30,000,000
Publications for all disciplines	14,138,000

4. Expansion of Dining Hall, Classrooms and Dormitories. The dining hall accommodates 60 students, sufficient for the 1979/80 academic year, but in theory should be doubled to deal with a student body of 270. In 1980/81, assuming 135 new students, enrollment would be 185 (50 second year and 135 first year), thus requiring three sitting's. Dormitory space, now at 152, should be expanded to a minimum of 250. The Center had eight classrooms and needed a minimum of eight more to be added two per budget year, the first foreseen in CFA 8 million included in the budget under investment in 1980. A March 1979 estimate of costs for expansion was as follows:

Dormitory (additional 80 places)	CFA 53,639,180
Dining Room (additional 60 places)	9,688,267
Four class rooms & one film projection room	20,269,188

B. Later in November 1979, the Entente Secretariat requested European Development Fund authorization to apply CFA 90 million, remaining from an original 1974 grant to construct the present dormitory, to cover the above expansion. In early May 1980, the EDF responded unfavorably to the request, but suggested that the funds could be used for training. As of late May, no proposal had as yet been prepared by the Center.

C. Prior to the arrival of the new Director General, the Entente Secretariat proposed in March 1979 the mounting of a short duration (minimum of four years), high impact well-drilling training program at RRMTC. RRMTC was suggested because some aspects of the course, e.g., diesel motors, hydraulic systems, fuel pumps, electricity, were already in the curriculum there. Under the proposal, the Entente Fund would seek to provide a full-time specialist/instructor and to finance a drilling rig (with rotary and hammer-down-the-hole capabilities). During the four years, about 30-40 technicians and 10-20 team chiefs would be trained with roughly equal distribution among Entente countries. Annual training of eight-ten months duration would be given in two stages, the first for six-seven months. The top one-third in this class would continue into stage two for two-three months and become team chiefs. At its 1979 annual meeting, the RRMTC Council reviewed the proposal and directed the Director General to prepare a report on the matter for consideration at the next meeting (scheduled for October 1980).

D. The well-drilling proposal was reviewed in the course of this evaluation with representatives of the RRMTC Council and other Entente official contacts plus donor representatives. Reactions ranged from mild interest to no comment, pending the Director General's report. None of the countries have developed data on needs for well-drilling technicians as confirmed by a sampling of national development plans and, in the case of Niger, Entente and C.E.A.O. proposals for rural water projects. In two countries, Upper Volta and Togo, rig manufacturers, e.g., Ingersoll - Rand, are offering training for crews. In the latter country, all reasonable training requirements are being met or foreseen within the scope of EDF, AID and West African Development Bank water projects plus a study now underway for a possible German program. RRMTC has no capability to design the program beyond planning inputs from its regular courses. At present, Center managers wonder where they would hold the classes, given their limited teaching space, and what additional training materials might be required for subjects not in the RRMTC curriculum. In all fairness, they have been preoccupied with their own current requirements and anticipate devoting time to the matter during the upcoming academic break. In any event, 1981 would be the earliest that any program could be started. Finally, a Dutch study of water resources, details as yet unavailable, may address this same aspects of this program.

E. All RRMTC Council members have great expectations regarding the Center's new program, but most calculate three-five years for realization. Again, none of them could offer exact requirements for road maintenance training beyond observations that public works departments suffer from a lack of skilled technicians at levels between basic technical know-how and trained engineers. This gap is what the new RRMTC program is designed to fill. With possible exceptions in some aspects of training offered in the Ivory Coast, none of the national training centers or capabilities duplicate offerings at RRMTC. Every country, except Togo, does offer training programs for public works functionaries. By and large, the courses are restricted to basic, manual skills or to supporting skills, e.g., helpers for surveyors, mechanics, electricians, hydraulics mechanics. As a general rule, the courses are three months in duration and may extend to six. For example, equipment

operators formerly trained at RRMTTC are trained exclusively at the national level. The question of requirements may best be addressed by the fact the Entente countries readily contribute CFA 20 Million on an annual basis, primarily to cover the Center's costs of training successful candidates from their own public works departments. The quota system discussed above foresees 27 trainees from each country or a total entering class of 135 each year. RRMTTC with its present infrastructure could not accommodate these numbers in any event.

F. The Frejacques report (July 1976), mentioned in the Wolf & Co. evaluation, sets average annual requirements for skills then taught at RRMTTC at 98. Eliminating courses dropped since 1976 reduces the figure to 76. Entente Secretariat and some RRMTTC councilors suggested this level may still have sufficient validity to be used for planning purposes. Thus a more realistic planning figure might be two rather than three students per class per year per country or 90 students per year. This would offer the selection committee some flexibility in matching numbers of students per class consistent with available faculty and current classroom, dormitory, and dining hall space. Several other advantages, particularly important during the transition period to a full, new program, are:

1. Some courses might be offered only every other year
2. Should a member country not nominate its full quota of 18 students, the open slots could be distributed by course among other countries in a fashion that would assure equitable distribution and optimum class size.
3. Experience gained could be applied to justify in more explicit terms Entente country specific training requirements and consequently the need for additional infrastructure (N.B. for the 1980/81 academic year), for example, probably 45 new students will be enrolled because of faculty limitations. This means that current accommodations will suffice. Even if 90 new students as suggested above, were to be admitted in 1981/82 for a total enrollment of 135, the facilities are ample. In the meantime, more accurate estimates of requirements might point toward 1982/83 or even 1983/84 for completion of justifiable infrastructure additions. As pointed out in the Director General's report cited above, annual additions of two classrooms for a total of eight are already being foreseen in the operating budget, thereby limiting the potential need for outside assistance to dormitory and dining hall accommodations).
4. Transitional expatriate instructor priorities and associated training of African faculty could be planned more effectively to assure effective Center operation and integration of African faculty upon completion of training.

G. The February 20, 1980 RRMTTC announcement for 1980/81 classes included Heavy Equipment Mechanics, Spare Parts Technicians and Sheet Metal/Welding Technicians (all Cycle A) and Mechanics, Road Maintenance Technicians and Surveyors (all Cycle B). Based on available faculty, the academic year

will include six second year courses: Heavy Equipment Mechanics; General Automotive, Electricity and Hydraulics options under Mechanics; Road Maintenance Technicians and Surveyors; and three first year courses: Heavy Equipment Mechanics; Spare Parts Technicians and Sheet Metal/Welding Technicians. In terms of faculty, RRMTTC has three Togolese, fully licensed and two Togolese, not licensed, but experienced, three French expatriates, two Dutch expatriates, one a physical scientist/mathematician, the other a mechanics trainer (both arrived in February 1980 on two year, renewable contracts; basic salaries are paid by RRMTTC and Dutch top-off); a Nigerian instructor in spare parts and a Voltaic instructor in sheet metal are expected to join the staff during the academic break. To complete faculty requirements, RRMTTC will employ part-time instructors in the following fields; soils analysis and road lay-out (topography) for Road Maintenance Technicians; commercial mathematics for Spare Parts Technicians; and industrial design for second year Mechanics and first year Sheet Metal/Welders and Parts Clerks. Other part-timers will teach such general topics as administrative and labor law.

H. Given the current static annual contributions, the question arises about the source of funding for additional students. Here there are several possibilities, the first being the national budgets as suggested by at least one Council member. Another possibility is the revival of non-Entente country participation, which during the total 1965-1976 period averaged about 30% of total enrollment. The most potent possibility, however, may be the donor community. The Germans and French once offered scholarships and might be approached again. The World Bank which is financing both road construction and maintenance projects throughout the Entente might be encouraged to allocate a certain portion of funds for training at RRMTTC as a part of its bilateral programs. Local IBRD representatives suggested the matter be raised at the policy level in Washington. EDF may also wish to support some RRMTTC Trainees.

I. Togo itself offers a very interesting case. Within the scope of current negotiations with the World Bank on a feeder road program, a requirement exists for training some 70 technicians in basic road maintenance skills. Togo, as noted above, has no national public works training center. The EDF program in roads also contains training requirements that could possibly involve training at RRMTTC as well as more basic training. EDF has already responded to RRMTTC's November 1979 request to build Center facilities by stating that residual funds from a prior grant may only be used for training. Looking at the new RRMTTC curriculum reveals a continued high in-put of practical, on-the-job training. Perhaps the basis for a salutary compromise exists here. In return for conducting basic training classes for Togolese national requirements, RRMTTC might be able to gain access for its own students to EDF and World Bank project sites as a part of their practical training. And in the bargain, RRMTTC might also realize some funding for individual trainees in its own regular courses. All this obviously would be subject to concurrence among all parties beginning with the Center's Administrative Council and with the participation, if appropriate, of the Entente Secretariat. Similar possibilities should be explored with EDF in other Entente countries.

## V. RRMTC VIABILITY

A. The RRMTC physical facilities and grounds are very well maintained. The motor pool provides cover for all major pieces of equipment, i.e., trucks, graders, bulldozers, fork lifts; one WW II - vintage dump truck, one Berliet tractor and two fuel trailers (now used or rented for water trailers) are not under cover nor is a Mack tractor with low-boy trailer. The machine shop is well-organized and several stationary tools were in use by instructors and students; one section will undergo revamping during school vacation for use in the upcoming sheet metal/welding course. An engine shop, containing about two dozen different models, is well laid out and maintained. The same applies to the automotive maintenance shop which has all the usual bays plus pits for oils changes and undercarriage repairs; the tools are under lock and key in a well-organized room with wrenches, sockets and other tools mounted on walls by dimension and set; a check-out system is followed. The electrical shop follows a similar pattern; although the testing and teaching equipment is not new, the French technician assured that everything is in working order. The spare parts warehouse has an effective cardex and parts bin system enabling fairly rapid location of parts. The soils laboratory is housed separately with adjacent classrooms (with the discontinuation of a soils analysis course the lab is currently underutilized, however, the Road Maintenance options require considerable work in this field). The regular classrooms are adequately equipped, including drawing boards, as appropriate, furniture and blackboards, and provide sufficient space for training aids.

B. The training aids, handbooks, manuals and equipment reflect the era in which they were provided. Most of the engines used for teaching theory and providing practical experience have generally been replaced in the open market, although some provide useful analogues to equipment still in use in many public works motor pools. The VTR equipment supplied as the last equipment under the AID project arrived in country in about November 1978, but has never been used. Voluminous files in the AID Lome Office reflect unsuccessful efforts to acquire a few cables missing in the original shipment and apparently not received subsequently, all of which are vital to use of this excellent training device. Efforts have been launched again to fill this gap (see under Recommendations for associated needs).

C. The new program is impressive and, as mentioned previously, ambitious. The RRMTC Chief of Training Services describes the documentation as dynamic and in need of qualified faculty critique for each course as taught as well as modifications in the form of deletions or additions, expansions or contractions and even fundamental reworking. First year work should bring all students to an equal skill level; in the second year practical experience will predominate.

D. Students from each of the current classes were assembled for their critique; some were especially selected because of prior attendance at RRMTC under the old regime. All were satisfied that the quality of training showed great promise; most were being exposed to material new to them that

substantively added to their knowledge. The alumni found a marked improvement between current course work and that offered under the old program. The students cited a few instances where instructors were merely presenting the material rather than really teaching it, but credited this more to the shortage of faculty than to any inadequacy in the material. Some criticism was directed at the lack of opportunity for field work, which they anticipated would increase in their second year; similar concern was expressed about the two months OJT between academic years. A major problem is reference books, handbooks and manuals which are in short supply or, in some cases, outdated. This limits each student's prospects for self-study.

E. RRMTTC faculty needs are adequately specified in the request to the European Development Fund for teaching assistance (Section III C 1 above) The skills listed therein can be considered current weaknesses, being temporarily met through part-time instructors.

F. In the administrative area, the Centers gives evidence of being adequately managed. When asked about internal controls to effect better management practices and consequent savings, staff members all mentioned inflation as the principal bar to reduced management costs. Among Togolese staff, the pay schedule received criticism, but even more so from the few staff members from other Entente states who cited the extreme high cost of living in Lome, particularly in housing rents and leases. The Director General has placed this matter before the Administrative Council, which approved a 15% supplement as a temporary measure for CY 1980. This pay scale problem becomes crucial if the Center expects to retain its current staff and faculty and, more importantly recruit and retain new faculty. Reproduction equipment is also in short supply, especially to provide students with copies of reference materials in available library holdings.

G. In the training and equipment areas, much of what the Center works with is vintage. For example, most of the engine shop models are outdated and should be replaced, retaining only a few analogues with rolling stock still operating in Entente countries. In the spare parts warehouse, a practical exercise for trainees could be a complete inventory and segregation of parts between those related to Center equipment, those related to disposed equipment which the Center occasionally services as a practical exercise for trainees and those for which the Center has no use. The latter should be disposed of and any revenues applied to replenishing needed items or set up in a separate demonstration section for trainees. All shop equipment of every variety should be studied for relevance to the revised training courses and replaced with relevant models. The same applies to motor pool rolling stock; Mack International may provide a source for some such equipment (see Recommendations).

H. The Director General just completed a tour of Entente countries, meeting with Center Administrators and Public Works Department officials. The visit fell on the eve of examinations for the 1980/81 academic year. The purpose was to lay ground work for future working relations and planning Center activities. Also foreseen is contact with non-Entente

countries to encourage resumed participation. Some letters have been forwarded to such countries as Gabon and Cameroon (former RRMTIC supporters), but no applications had been received by mid-May. A more systematic program is foreseen.

I. The observations contained in this section were discussed with representatives of Louis Berger, International who have been working with Togo Ministry of Public Works. Their views generally coincided with those of the Dimpex evaluation and REDSO supporting personnel.

## VI. CONCLUSIONS

A. AID assistance to RRMTC terminated without attention to Entente state recognition of Center diplomas for civil service purposes and to completion of an operational protocol between the Republic of Togo and RRMTC. Resolution of these two fundamental issues has pre-occupied the Center during the entire post-AID period, which has been one of contraction rather than expansion. Now that the issues are resolved, the Center again finds itself in transition and beset with problems of recruitment of both trainees and faculty.

B. Financially, RRMTC is a viable institution at an enrollment level of approximately 100 by virtue of Entente country annual contributions which cover most of the current operating costs. Management of Center affairs goes forward under adequate administrative and budgetary procedures and practices. The Center's personnel requirements are met by a wholly African staff, except in the Training Division which has significant shortages of faculty and in which expatriates continue to function. Center shop areas are well-maintained as is motor pool rolling stock, all in accordance with basic maintenance practices. Buildings and grounds are in excellent shape.

C. Full-time instruction capacity is limited in seven basic fields which affect all nine courses in the curriculum. Requests for outside assistance have not yet been met, thus necessitating the employment of expensive, part-time instructors.

D. Current Shop equipment, tools, training aids, handbooks, manuals reference books and motor pool rolling stock are outdated to a considerable degree in the context of the new curriculum. This, in turn, may reduce relevance of some practical training and impede the achievement of higher quality graduates foreseen as the product of the latest reorganization. Sufficient analogues are available for some outmoded equipment still in use in Entente countries.

E. The recent personnel pay schedule may encounter limitations in meeting demands of more highly qualified faculty and senior staff needed to implement and support current Center goals and objectives. This produces concomittant effect in lack of readiness of qualified Entente personnel to join the Center in staff or faculty positions.

F. Given the limitations on accommodations and classrooms, operation of the Center with an enrollment of around 150 for two-three years would offer breathing space during which qualified faculty can be employed and the new curriculum installed and revised through classroom presentation and testing. A basis of projecting future training requirements may be found in an analysis of all applications for the new courses and in turn become the justification for any future expansion of infrastructure.

G. Possibilities exist among various donors to finance trainees at RRMTTC. Such assistance is necessary if RRMTTC is to operate above its current enrollment (e.g. approximately 100 for 1980/81) and ultimately to expand. Some Entente countries may wish to finance from their national budgets, trainees over and above those supported by the current annual subsidy. Alternatively, Entente members may wish to consider raising the annual subsidy. Readiness of non-Entente countries to resume training must await the results of renewed contacts and encouragement.

H. The effectiveness of RRMTTC as a training resource to meet Entente and other countries' road maintenance and associated development activities has never been tested. No formal evaluation and follow-up system for Center graduates has assessed such factors as impact, nature and extent of contribution to enhanced home country operations or assumption of supervisory, multiplier-effect positions.

I. The suggestion for mounting a well-drilling program seems diversionary in a period when the Center should be fully engaged in re-orienting itself to enhanced pursuit of goals and objectives for which it was conceived. Absence of technical expertise among faculty and potential pressure on classroom and other facilities could combine to impede needed progress in inaugurating the new curriculum in road maintenance and associated skills.

## **VII RECOMMENDATIONS**

A. The following recommendations, in priority order, provide various options for possible AID assistance and suggest some courses of action that appear relevant:

1. AID should consider an assistance package for RRMTTC in the following areas for a period of up to five years:

a. Provide up to two expatriate instructors--skills to be agreed with RRMTTC--to assist the Center during the transition period into the revised curriculum. One of the two should be skilled in the methodology of teacher training and curriculum development.

b. Provide participant training in teaching methodology for up to five Africans - one from each Entente country - technically qualified in faculty skills vital to RRMTTC. Each participant should enter into a written engagement to teach for at least five years on return; some Council members recommended ten years.

c. Provide participant training for Entente country nominees for regular RRMTTC training.

d. Review and replace, as appropriate, equipment and associated tools, handbooks, manuals and training aids in the various RRMTTC shops. Material should probably be in French language, if possible. Decision process on this program should be linked to the revised Center curriculum.

e. Review and replace outdated motor pool rolling stock. In this regard, Mr. Nikolas Steel-Jessop, International Service Engineer, Mack International, Box M, Allentown, PA 18105 may be able to assist by arranging Mack participation under a program for placing representative Mack equipment in non-commercial locations in developing countries.

f. Review the reference book, tool and training aid requirements list in the Center Director General's November 1979 report and consider a positive response, particularly on items of U. S. origin.

g. Provide selected short-term advisory assistance for up to three years in such fields as general Center operations and management and evaluation and follow-up of RRMTTC graduates.

h. Provide training for an RRMTTC nominee in both the operation and use for instructional purposes of the VTR equipment provided under the previous AID program. Procurement of missing items, mentioned in the report narrative, should be pursued independently.

2. The Entente Secretariat and AID should increase their relationship with RRMTTC through regularly scheduled visits. In particular, RRMTTC needs assistance in the preparation of documentation for donor community consideration, i.e., format, justifying data, timing, cost estimating.

3. AID should resume attendance at annual Center Administrative Council meetings.

4. AID Missions in Entente countries should seek out RRMTTC graduates for assistance in appropriate bilateral activities. Missions should also encourage promising candidates for RRMTTC training whether in public works departments or in other public agencies with motor repair and maintenance facilities. Graduates for prior RRMTTC programs should be encouraged to seek attendance at RRMTTC again.

5. AID Washington should approach World Bank officials with a view to including training at RRMTTC in IBRD negotiations with Entente countries on road construction and maintenance projects. Possible contacts are Mr. Jeremy Lane and Mr. Peter Ludwig, both of whom work in the West Africa Engineering Division.

6. AID should not consider any proposals for additions to infrastructure. Center facilities are adequate for immediate and near future needs. Expansion should await the development of statistical data on Entente country requirements, which should evolve from systematic Center review of the annual examination process and cooperation with Entente country officials or an actual census conducted by Public Works Departments.

7. AID should view any proposals for well-drilling training at RRMTTC more in terms of diversion of valuable resources from an already full schedule of activities in road maintenance than as a priority contribution to the development of water resources. At a later date, such a course might add a useful and beneficial dimension to the Center's training in mechanical skills.

8. RRMTTC administrative council and Entente Secretariat, if appropriate, should initiate contacts with other donors such as EDF and IBRD regarding training of Entente country nationals for their road construction and maintenance projects in exchange for RRMTTC access to donor project sites for its own training requirements.

9. Equipment and outdated training AIDS (e.g. old diesel engines) for which the Center has no use should be disposed of and any revenues applied to replenishing needed items.

## ATTACHMENTS

1. AID Work Order No. 5 dated April 23, 1980
2. List of Persons Contacted/Briefed/Interviewed
3. RRMC Provisional Operating Budget, CY 1980
4. RRMC Trainees, 1977-1979
5. RRMC Trainees, 1979-1980
6. RRMC Organization Charts
7. List of Reference Materials

LIST OF PERSONS CONTACTED/BRIEFED/INTERVIEWED

ABIDJAN

1. REDSO

Gordon Evans, Director, REDSO/WA  
David Dibble, Deputy Director, REDSO/WA  
Charles Christian, Deputy Director, REDSO/WA  
Leroy Wagner, Project Manager, REDSO/WA  
Eunice Reddick, Assistant Project Manager, REDSO/WA  
William Mulcahy, Program Officer, REDSO/WA  
Ronald Rogers, Assistant Program Officer, REDSO/WA  
Stephen Grant, HRD Officer, REDSO/WA  
James Hradsky, Transportation Economist, REDSO/WA  
Dale Davis, Engineer, REDSO/WA  
James Ito, Controller, REDSO/WA  
Kenneth Kowalchek, B & F Officer, REDSO/WA  
Lyle Weiss, Engineer

2. Entente Fund

Charles Mann, Economic Development Advisor  
Francois Revel, CERFER Project Manager  
Jean Ruche, Economist  
Mark Weber, Financial Management Advisor

3. Ivory Coast Dept. of Public Works

Adeh Remy, Adm'n. Council of CERFER

4. I B R D

Snorri Helgrimsen, Transportation Projects Coordinator

5. Private Sector

Claude La Roche, Louis Berger International

**OUAGADOUGOU**

**1. USAID**

**Richard Meyer, Director**  
**Abraham Hirsch, Regional Affairs Advisor**  
**Josiah Royce, Regional Affairs Advisor**  
**Larry Dominessy, Rural Development Advisor**  
**(Rural Water/Roads Project Manager)**  
**John Hope, Agriculture/Forestry Advisor**  
**Gary Byllesby, Acting Controller**

**2. Upper Volta Department of Public Works**

**Ouedraogo Malick, President CERFER Admin. Council**  
**Toure Zakaria, Admin. Council Member**

**3. Private Sector**

**Nikolas Steel-Jessop, International Service Engineer,**  
**Mack International, Allentown, Penna.**

**NIAMEY**

**USAID**

**Merl Baker, Project Manager**

**Charles Sadler, Assistant Program Officer**

**Niger Department of Public Works**

**CESSI Amadou, Admin. Council Member**

**BAKO Garba, Admin. Council Member**

**QUESSEINI Hassan, former Admin. Council Member**

RRMTC

SOGNONVI Kokou, Director General

DIOGO Kodji, Chief of Admin.

KOSSI-AWOUDI Yawo, Chief of Training

NANGO Claude Julien, Chief of Material Services

Roger Jouveau, French instructor

Michel Lafaye, French instructor

DOSSOUMOU Salamon, Benin, Road Maint. Tech. - 2d Course

EGBEMIKPON Maximilian, Benin (Adj. Chef) Gen. Mech. - 3d Course

AKARA Bawa Togo, HE Mech. CERFER Empl.

TUENA Paul Marie, H. Volta, Surveyor, first time

ANAGO Kuodjodji, Surveyor, first time

LOME

USAID

John Lundgren, AID Rep.  
Ray Fontaine, Project Manager  
Robert Ritchie, Program Officer

Min. of Pub. Works - RRMTA Adm. Council Members  
AYEVA Nassourou, Director of Public Works  
WOGOMEBU Kokou, Technical Consultant

EEC Development Fund, Togo  
Reinhard EBERSBERG, Chief of Road & Water Projects

COTONOU - Stephen Grant

AID - Paul Geyl, Gen. Development Officer

Min. Pub. Works

SANTOS Fernandez, Adm. Council Member

Former RRMTIC students:

JOHNSON A. Gilbert	Mechanic/1	3/7/79 - 12/20/79
HOUNHA S. Antoine (overlapped new program)		" "
KPOTIN Claude	Mechanic/2	1976/77
GODONOU G. Marie P.	Pump Injection	1966-67
	" " /2	1976

RRMTC PROVISIONAL OPERATING BUDGET - CY 1980

PERSONNEL COSTS

Off of DG	5 650 829
2 Expatriate instructors	3 911 606
1 PH technician	1 546 884
1 Plumber	340 517
Part time instructors	2 444 000
Admin. Service (20 persons)	11 127 463
Training Service (19 persons plus 3 FAC no charge)	12 685 865
Materials Service (19 persons)	11 195 784
Controller (5 persons)	4 470 201
	<hr/>
	53 373 149

Part time Instructors

Construction materials	140 hrs	
French	70 hrs	
Admin. law	35 hrs	
Labor legislation	35 hrs	
Physical Sciences	100 hrs	
Ind Design (mechanics)	210 hrs	
" " (genl. autom. mech.)	210 hrs	
	<hr/>	
	800 hrs x 2,000	1 600 000

Outside Training

Welding at CNPP	50 hrs x 4,000	200 000
Meteorology	15 hrs) fixed rate	200 000
Machining (lathe work)	60 hrs)	
Doctor		300 000
Dispensary aid		144 000
		<hr/>
		2 444 000

NON-PERSONNEL COSTS

**Student Maintenance**

Insurance	350 000	
Stipends	20 000 000	
Medical expenses	1 800 000	
Maintenance of quarters	2 300 000	
Field exercises	500 000	
Sports equipment	300 000	25 300 000

**Duties and Taxes**

Direct taxes and duties		
Other taxes (regist. fees)	150 000	
Customs duties	500 000	650 000

**Labors, Furnishings and External Services**

Maintenance of grounds, offices & repairs	5 000 000	
Vehicle & heavy equipment repairs	1 500 000	
Studies, research & techn. documents	100 000	
Insurance premiums	900 000	
Shop furnishings	2 500 000	
Office furnishings	3 000 000	
Spare parts & tires/tubes	8 000 000	21 000 000

**Transportation & Transfers**

Fares & travel of students	4 000 000	
Fares & travel of personnel	1 000 000	
Freight & drayage	100 000	5 100 000

**Divers Management Expenses**

Publicity	900 000	
Post & Telecom.	900 000	
Water & Electricity	3 500 000	
Gas, oils & Lubricants	6 000 000	
Admin. Council Conference	3 000 000	
Sanitation & cleaning service	500 000	
Sundry and fixed costs	8 000 000	23 900 000

**TOTAL**

Personnel  
Investment\*

<u>75 950 000</u>
53 373 149
<u>13 700 000</u>
143 023 149

consists of CFA 8 Million for two  
classrooms and CFA 5.7 M for amortization.

REVENUES

Receipts

Entente member contributions	100 000 000
Participation by other countries	3 750 000
RRMTC Revenues - Machine rentals/repair shop	20 000 000
Amount to be drawn from carry-over	19 273 149
(based on regular personnel pay scale + 15%)	<u>143 023 149</u>

N.B. Balance of CFA 169 797 535 (EOYB 1979) less CFA 143 023 149 (OYB 1980) leaves CFA 19 774 386 from which balancing figure is drawn. Actual CY 1979 expenditures must await audit by Republic of Togo Audit Service.

RRMTC GRADUATES - 1977 - 1979

<u>1977</u>	<u>SPECIALTY</u>	<u>ATTENDED</u>	<u>GRADUATES</u>
	Parts Clerk	25	17
	Operator Forman	11	10
	Mechanic/I	12	11
	Mechanic/II	14	13
	Road Maint. Foreman	14	12
	Fuel Inj. Systems	6	6
	Auto Electrician	7	7
	Machine Tools	3	3
	Equip. Operator	7	7
	Mechanic Foreman	15	11
<b>TOTAL</b>		<u>114</u>	<u>97</u>

<u>1978</u>			
	Road Maint. Foreman	14	12
	Parts Clerk	29	21
	Operator Foreman	8	8
	Fuel Inj. Systems	8	8
	Auto Electricity	8	8
	Mechanic/I	15	15
<b>TOTAL</b>		<u>82</u>	<u>72</u>

<u>1979</u>			
	Mechanic/I	15	12
	Mechanic/II	10	8
	Road Maint. Foreman	13	13
	Fuel Inj. Systems	8	7
	Parts Clerks	17	15
<b>TOTAL</b>		<u>63</u>	<u>55</u>

TRAINING IN NEW RRMTc PROGRAM

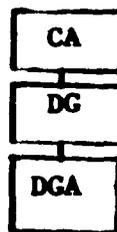
1979/80 ACADEMIC YEAR

	<u>SURVEYORS</u>	<u>MECHANICS</u>	<u>R. MAINT.</u>	<u>HE MECHANICS</u>	<u>TOTAL</u>
Benin	1	2	4	5	12
Ivory Coast	-	-	5	-	5
Niger	-	5	1	2	8
Togo	2	5	1	4	12
U. Volta	2	3	4	4	13
	<u>5</u>	<u>15</u>	<u>15</u>	<u>15</u>	<u>50</u>

N.B. One each from Ivory Coast and Upper Volta did not report for training.

**ORGANIGRAMME PROPOSE**

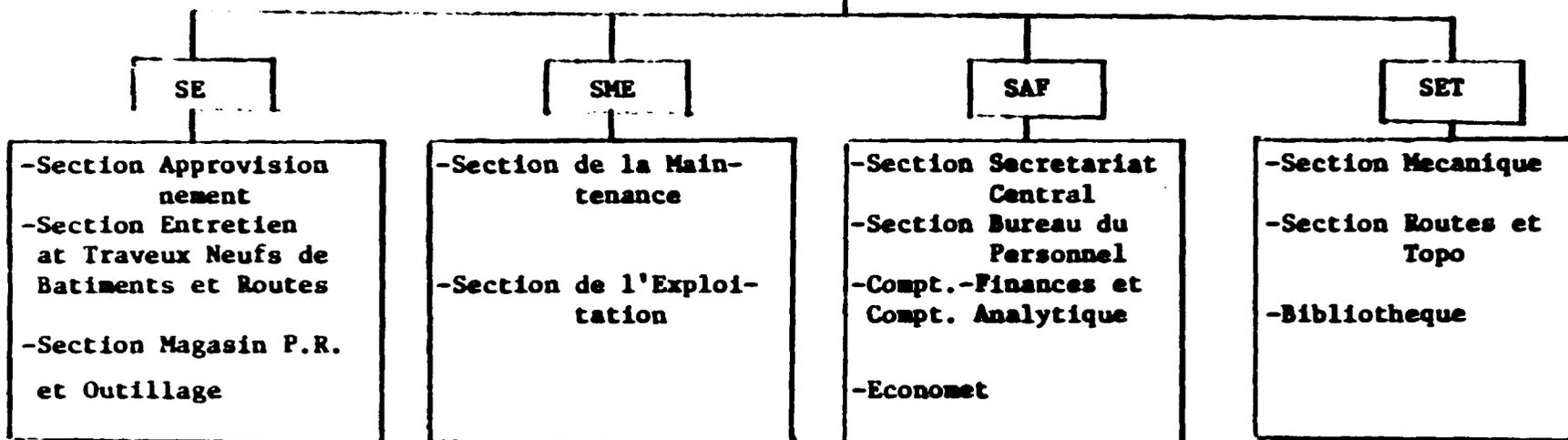
SD - Secrétaires Direction  
SG - Surveillant Général



SD  
SG

Frais Personnel	
(1) :	87 511 529
(2) :	65 173 323
(3) :	57 715 149

(Cumulativement chef d'un service)



) Less Chefs  
) des 3 Services  
) vices dispenseraint  
) cumulativement  
) des cours

SE - Service de l'Equi-  
pement

SME - Service de la Main-  
tenance et de l'Ex-  
ploitation

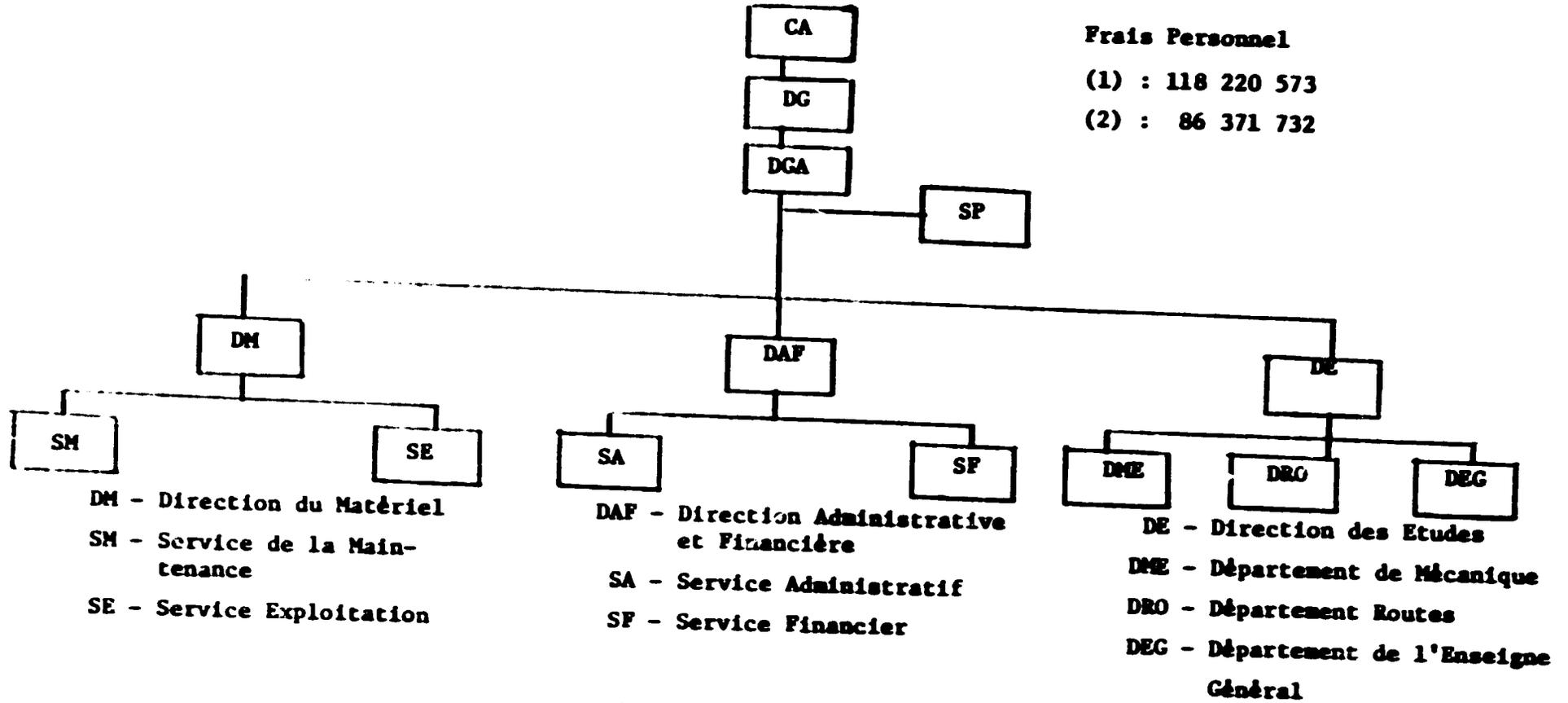
SAF - Service Administra-  
tif et Financier

SET - Service des Etudes

- (1) Nouvelles grilles des salaires et indemnites
- (2) Ancienne grille des salaires + 15% et anciennes indemnites
- (3) Chefs de Service actuels assurant interim de SME, SAF, SET dans la condition (2)

**NOUVEL ORGANIGRAMME APPROUVE EN OCTOBRE 1978**

- 32 -



- (1) Nouvelles grilles salaires et indemnités
- (2) Ancienne grilles salaires + 15% et anciennes indemnités.

## References List

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- \* Frajacques Report dated July 1976  
Wolfe & Co. Evaluation Report dated Nov. 26, 1976 - 48 pages w/atchmts (4 pages)
  - \* IGA Inspection Report dated Jan. 24, 1977 - 2 pages  
Aero-Ford Final Report dated Mar. 1977  
Wolfe & Co. Memo dated May 31, 1977 - 2 pages w/atchmts (9 pages)
  - \* New CERFER Programs dated May 1978  
Abidjan 9781 (1978 - Oct. 20), sub: FY80 CP for Entente Fund
  - \* CERFER, Minutes of 13th Meeting of Ad. Council on Oct. 23-24, 1978  
(Transmittal to EF dtd. Oct. 5, 1979) (At Entente Secretariat)
  - \* Annual Report 1978, EF Aid & Loan Guaranty Activities
  - \* EF Agreement between CERFER & Rep. of Togo dtd. Jan. 9, 1979
  - \* Field Trip Report, Roy Wagner, Jan. 30, 1979  
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EF Note: CERFER dtd. Mar. 23, 1979  
Role of the Entente Fund..., M.M. Tank, Apr. 16, 1979 - 126 pages
  - \* CERFER Letter on Adm. Regmts, Apr. 16, 1979
  - \* CERFER Letter w/Wagner Questionnaire and Tables of Graduates for 1977-78  
dtd. May 3, 1979
  - \* EF Council 20th Anniv. Report of Major Results Achieved, May 1979
  - \* CERFER Adm. Council Report, Aug. 29-30 1979
  - \* CERFER Report of Activities & Prov. Finan. Report, Sept.-Nov. 1979  
EF Note: Regmts for Expansion of CERFER Facilities dtd. Nov. 1979
  - \* EF Memo for Record dtd. Jan. 1980
  - \* Grant/Dibble Memo, CERFER, dtd. Mar. 20, 1980
  - \* CERFER Communique dtd. February 20, 1980  
announcing course competition for the 1980/81 academic year.
  - \* Documents left with REDSO Project Manager along with draft report.