



TOGETHER
for a sustainable future

OCCASION

This publication has been made available to the public on the occasion of the 50th anniversary of the United Nations Industrial Development Organisation.



TOGETHER
for a sustainable future

DISCLAIMER

This document has been produced without formal United Nations editing. The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries, or its economic system or degree of development. Designations such as “developed”, “industrialized” and “developing” are intended for statistical convenience and do not necessarily express a judgment about the stage reached by a particular country or area in the development process. Mention of firm names or commercial products does not constitute an endorsement by UNIDO.

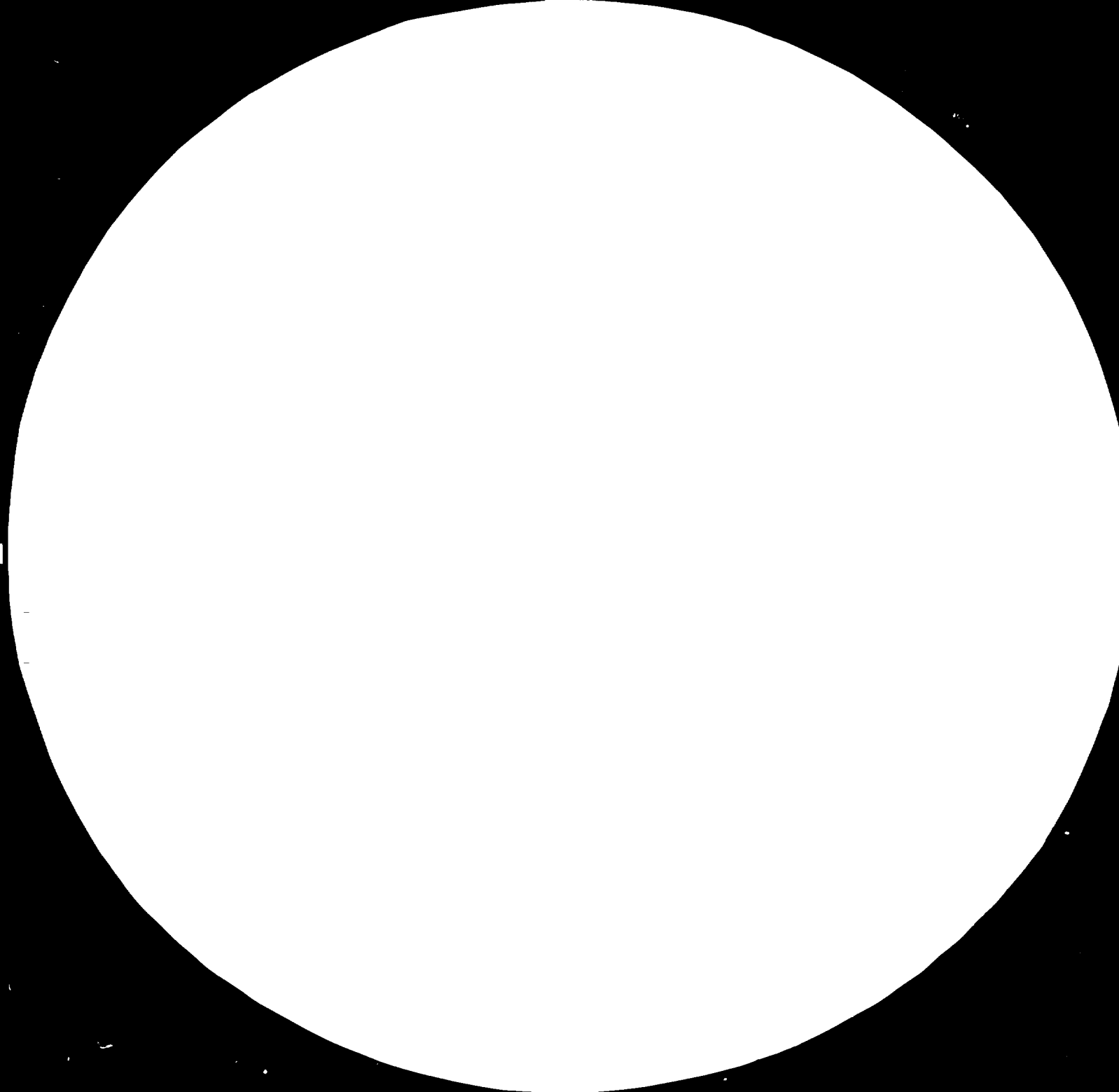
FAIR USE POLICY

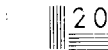
Any part of this publication may be quoted and referenced for educational and research purposes without additional permission from UNIDO. However, those who make use of quoting and referencing this publication are requested to follow the Fair Use Policy of giving due credit to UNIDO.

CONTACT

Please contact publications@unido.org for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at www.unido.org





Resolution Test Chart
1.0 1.1 1.25 1.4 1.6 1.8 2.0 2.2 2.5



Comerint

11646

ESCOLA CENTRAL DE PETROLEOS N'GUNZA - ANGOLA

UNIDO Contract n° T81/51

Project n° DP/ANG/81/001

Activity code: 10.20.32.1

003023

I N D E X

	Pag.
INTRODUCTION	1
1. TEACHING ACTIVITIES IN THE PERIOD 1/7/81 - 31/12/81	2
2. OTHER TEACHING ACTIVITIES	3
3. OTHER ACTIVITIES	5
4. ANGOLAN PERSONNEL	6
5. RELATIONS WITH OIL COMPANIES	7
6. THE ECP'S PROSPECTS AS A CENTRE AT THE SERVICE OF THE COUNTRY	8
A.1 TRAINING THE TRAINERS	9
A.2 THE SERVICE OF ORIENTATION	9
A.3 DESIGN AND PRODUCTION OF TEACHING MATERIAL	10

INTRODUCTION

This report refers to the management activities concerning the N'Gunza ECP in the period 1/7/81 to 31/12/81 and carried out as per contract No T81/51. Project No DP/ANG/81/001 - Activity code: 10.20.32.1.

The most important characteristic of this period was the start-up of new courses. The services estimated at 49 man/months concerned assistance in managing the ECP, holding the courses, and such other activities as assistance in selecting the trainees, researching the oil companies' training requirements, etc.

The situation at the time of the previous report can be summarized as follows:

- 4 courses and 2 series of on-the-job training underway
- training/up-dating of the monitors underway
- the need to continue training maintenance and administrative service personnel
- the advisability of establishing suitable and stable ways and means of facilitating the relationship between the ECP and the oil companies.

1 TEACHING ACTIVITIES IN THE PERIOD 1/7/81 - 31/12/81

1.1 Theoretical courses concluded:

- Instrumentation technicians (13 trainees)
- Production operators (16 trainees)
- Outside operators (15 trainees)
- Texaco general technical course (16 trainees).

1.2 Courses begun:

- Mechanical fitters (14 trainees)
- Rotary machine mechanics (17 trainees)
- Vehicle motor mechanics (16 trainees)
- Depot and terminal operators (17 trainees).

1.2.1 Courses begun before 30/6/81 and still being held:

- Course for electricians (10 trainees)

1.3 On-the-job training concluded:

- Electricians (11 trainees)
- Chemistry laboratory operators (11 trainees).

1.4 On-the-job training underway:

- Instrumentation technicians (13 trainees)
- Production operators (16 trainees)
- Outside operators (13 trainees).

2. OTHER TEACHING ACTIVITIES

2.1 Accounting course

In collaboration with the Ministries of Finance and Education, an accounting course was organized and begun to train company accountants. It started on November 16th and will last 6 months. 1 month to bring the participants to the same level and 5 months of actual course (30 trainees).

2.2. Course for trainees from Texaco

A preliminary practical course was held in the ECP laboratories and workshops to train mechanical workers for platforms, electricians and instrument technicians.

11 trainees attended the course, the purpose of which was to provide all the theoretical/practical knowledge necessary to be able to follow the practical part of the later course on specific plants.

2.3 Experimental preliminary course for instrumentation trainees

At the end of the theoretical training cycle at the ECP, "pilot" preliminary on-the-job training was given to 4 trainees.

The training consisted of two phases: the first held at the Petrango Refinery in Luanda, the second at the Texaco production plants in Soyo.

This training made it possible to experiment practically the usefulness of a preliminary course, "guided" by the theory instructor himself, as an introduction to the following on-the-job training.

3. OTHER ACTIVITIES

3.1 Trainee selection

The trainees to follow the courses in the second phase were selected in October.

This required a considerable amount of work both because of the large number of candidates examined 136. Of these, 114 were selected between Luanda, Soyo and Bengala, plus 11 Sonangol workers, 5 Petrangol workers, 2 Cabinda Gulf workers and 4 Tanzanians (on scholarship) sent to the ECP by the Ministry of Petroleum.

3.2 Training requirement analysis

An analysis of the requirements for qualified personnel and those to be recycled was made in order to be able to plan the training in the oil companies working in Angola over the three year period 1981-1983.

3.3 Practical guides for on-the-job training

Practical guides were prepared for the industrial electrician and the pneumatic instrumentation technician courses.

The contents of these guides ensure that the instructors of the companies follow the pre-established training programme.

4. ANGOLAN PERSONNEL

In order to avoid increasing the ECP teaching personnel excessively, it was decided not to incorporate the teachers of specific subjects in the school structures, but to use them only in the periods when the courses regarding their subjects were held. For this reason, only the teachers of electricity, chemistry, mathematics, physics and mechanics are working in the school at the moment.

Furthermore, a course for 18-20 persons to be held at the school is being studied. Its purpose is to train the teaching personnel necessary to hold the programmed courses, as well as to guarantee a certain number of persons attached to the various companies and who be required to follow the on-the-job training part of the courses.

5. RELATIONS WITH OIL COMPANIES

A liaison office has been opened in Luanda to aid relations between the ECP and the oil companies and to control and/or coordinate the on-the-job training.

A full-time UNIDO technician has been attached to this office and has an Angolan working alongside him.

6. THE ECP'S PROSPECTS AS A CENTRE AT THE SERVICE OF THE COUNTRY

Now that the 2nd construction phase has been concluded, the operative structure of the ECP is among the most highly qualified in Angola. At this point, the problem is to exploit its potentialities in such a way that the costs/benefits ratio justifies the sacrifices made by the country to set the Complex up.

We think that, from this point of view, there is both the possibility and the urgency to enlarge the Escola's activities, without changing the original objective of training qualified technical personnel for the entire oil sector.

Awaiting contributions and suggestions from persons with specific spheres of competence, we will limit ourselves at the present time to pointing out certain aspects that lend themselves to development.

A.1 TRAINING THE TRAINERS

This is a strategic point for all programmes (present and future) in vocational and technical instruction sectors and it is the obstacle which causes many, even well-designed, activities to come to a halt.

Because of its structures, the ECP could provide programmes of this type in the mechanical, electrical, chemical and instrumentation fields, beginning with pilot and experimental activities.

A.2 THE SERVICE OF ORIENTATION

Activities and projects can minimize costs and the risks of unsuccessful results if they manage to meet "demand" flows which are consistent with company requirements.

It is therefore important for the structure of an "Observatory" to be based on the dynamics of the world of labour, capable of analysing trends, quantifying requests, and integrating different sectors by forming groups of uniform professional needs.

The Observatory will provide both the ECP and the users with suggestions regarding the directions to take, leading to fast and effective programmes.

A.3 DESIGN AND PRODUCTION OF TEACHING MATERIAL

This is another of the present deficiencies holding back part of the Angolan educational and training activities.

With its instruments, and using the UNIDO Experts, the ECP could begin considering training teachers and material (written, audiovisual) designers, making the first experimental moves to produce these materials.

Albino Guiana
Info to

ESCOLA CENTRAL DE PETROLEOS - N'GUNZA

COURSE FOR INSTRUCTORS

18/20 persons

Input level - 9th/10th class with two years' work experience

Total duration: 8 months

COURSES	MONTHS							
	1 ST	2 ND	3 RD	4 TH	5 TH	6 TH	7 TH	8 TH
TEACHING METHODOLOGY	—————▶							
GENERAL MECHANICS		—————▶						
SPECIALIZED MECHANICS				—————▶				
SPECIALIZED MECHANICS				—————▶				
SPECIALIZED MECHANICS				—————▶				
WELDING		—————▶						
REFINING		—————▶						
PRODUCTION		—————▶						
ELECTRICITY		—————▶						
INSTRUMENTATION		—————▶						
ON-THE-JOB TRAINING ON THE COURSES BEING GIVEN						—————▶		
HOLIDAYS						—————▶		



B-921

