

MEMORANDUM CIRCULAR

No. 16-11-2004

SUBJECT: RULES AND REGULATIONS GOVERNING RADIO TRAINING SCHOOLS (RTS) OFFERING COMMUNICATIONS TECHNICIAN COURSE (CTC)

Pursuant to Act 3846, as amended, E.O. NO. 546, Department Order No. 7 and 23, the National Telecommunications Commission (NTC) hereby promulgates the following rules and regulations governing RTS offering Communications Technician Course.

I. GENERAL PROVISIONS

- 1.1 No person, firm, association or corporation shall offer a two-year Communications Technician Course without first securing a Certificate of Accreditation from the NTC.
- 1.2 All certificates or diplomas issued by a non-accredited RTS shall not be honored by the NTC.

II. REQUIREMENTS FOR ACCREDITATION

- 2.1 Administrative Requirements
 - 2.1.1 Letter of Intent
 - 2.1.2 Duly accomplished information sheets of the Board of Directors if corporation.
 - 2.1.3 Feasibility study identifying the required capitalization in opening up a RTS
 - 2.1.4 Proof of financial capability
 - 2.1.5 Ownership
 - ?? Corporation – Articles of Incorporation issued by the Securities and Exchange Commission (SEC)
 - ?? Single-Proprietor – Registration of business by the Department of Trade and Industry (DTI)
 - 2.1.6 Business Permit
 - 2.1.7 Proposed Course Curriculum
 - 2.1.8 Class Programs/Timetables

- 2.1.9 List of Instructors and corresponding application for Permit to Teach
- 2.1.10 Proof of Ownership of lot and building or valid lease contract.
- 2.2 Technical Requirements
 - 2.2.1 Laboratory and Test Equipment
 - 2.2.2 Textbooks and magazines
 - 2.2.3 Permit to Purchase
 - 2.2.4 Permit to Possess
 - 2.2.5 Construction Permit
 - 2.2.6 Radio Station License
 - 2.2.7 Accreditation Certificate

III. COURSE

The course shall be a two (2) year Communication Technician Course. Graduates of this course may qualify to take the First Class Radiotelephone Operator's Examination conducted by the Commission.

IV. SUBJECTS

The subject matter to be taken up under the Communications Technician Course shall include the following minimum requirements:

- 4.1 Knowledge on the elementary principles of electricity.
- 4.2 Detailed knowledge on the practical operation, adjustment and repairs of radiotelephone, broadcast and telecommunications equipment.
- 4.3 Knowledge in the operation of apparatus used for direction-finding bearings, as well as the general knowledge of the principles of operation of other apparatus generally used for radio navigation.
- 4.4 Knowledge in the installation, calibration of equipment and apparatus used in telecommunications facilities.
- 4.5 Detailed knowledge on radio laws and regulations, both Local and international.
- 4.6 Knowledge on the basic tools commonly used in radio, broadcast and telecommunications equipment.
- 4.7 Detailed knowledge on antenna fundamentals as well as its type, classes and applications.
- 4.8 Knowledge on computer fundamentals specifically on basic computer concepts and familiarization of the common computer peripherals.
- 4.9 Knowledge on the basic operations of radio communications equipment specifically on portable, mobile and point-to-point radio.
- 4.10 Knowledge in the analysis and operations of different transmission media used in communication.

- 4.11 Knowledge in the elementary principles of electronics, semiconductor devices and electrical performance of the circuit and signal processing.
- 4.12 At least 240 hours “on the job training” to expose students to actual works in the chosen field of specialization, i.e., telecommunications, broadcast, radio.

V. ENTRY STANDARDS

- 5.1 At least high school graduate.
- 5.2 Good moral character.

VI. COURSE INTAKE LIMITATIONS

- 6.1 The class must not exceed 35 students for lecture instructions.
- 6.2 There shall be a maximum of 6 students in a group for practical training or laboratory work.

VII. TEACHING FACILITIES AND EQUIPMENT

- 7.1 Classrooms shall be at least 42 square meters for 35 students and equipped with necessary and required facilities.
- 7.2 Classroom facilities shall include a whiteboard/blackboard or flipchart and an overhead projector. Audiovisual materials such as videos, slides, tape recorders, etc. shall be available when needed.
- 7.3 For the practical training, adequate working space is required. The space must accommodate the following equipment:
 - a. Oscilloscope (3)
 - b. Signal Generator (3)
 - c. Multi-tester (7)
 - d. Soldering Iron (7)
 - e. Pliers (7)
 - f. Breadboard (7)
 - g. AC/DC variable power supply (7)
 - h. Spectrum analyzer (3)
 - i. Computer sets (3)
 - j. AM/FM, SSB, DSB trainer kit (1)
 - k. Telephone trainer kit (1)
 - l. Antenna trainer kit (1)
 - m. Telecommunications switchboard (1)
 - n. Frequency filter trainer kit (1)
 - o. PAM, PCM, TDM Trainer kit (1)
 - p. Signal tracer (1)
 - q. Tone generator (1)

VIII. TEACHING AIDS AND TEXTBOOKS

The required teaching aids and textbooks shall be provided by the school and shall cover thoroughly the subject matter prescribed under this Circular.

IX. COURSE CERTIFICATE OR DIPLOMA

A certificate or diploma attesting to the fact that a student has successfully completed the course shall be issued by the RTS to a student after completion of the course program.

X. FACULTY REQUIREMENTS

An individual who possesses any of the qualifications provided below shall be qualified to teach in radio training schools:

- 10.1 Graduate of electrical, electronics or radio engineering courses from universities or schools of good standing.
- 10.2 Holders of the degree of Bachelor of Science in Education with at least two (2) years specialized knowledge and training related to the course.
- 10.3 Duly licensed first/second class radiotelephone/radiotelegraph operators who have at least five (5) years satisfactory service as radio operators in any private or government institutions.
- 10.4 Persons who have been in the government service with at least three (3) years experience as technical inspector.

XI. DELIVERY OF INSTRUCTIONS

Instructors shall follow the prescribed course timetable, detailed teaching syllabus and lesson plan or instructor's guide for the course program.

XII. SUBMISSION OF REPORT

All duly accredited RTS shall at the end of each semester, furnish the Commission with the names of students who have enrolled during the semester and the names of those who have successfully completed.

XIII. ISSUANCE OF CERTIFICATE OF ACCREDITATION

- 13.1 RTS shall be granted a Certificate of Accreditation after complying the necessary requirements provided in this Circular.
- 13.2 Certificate of Accreditation may be issued for a maximum period of three (3) years.

XIV. RADIO STATION LICENSE NECESSARY FOR THE OPERATION OF RADIO STATIONS USED FOR TRAINING PURPOSES.

- 14.1 All radio communications equipment used for training purposes must be covered with radio station license.
- 14.2 Licensed radio operators must only operate all duly licensed radio stations.
- 14.3 Radio station license may be issued for a maximum period of three (3) years but not to exceed the validity of the Certificate of Accreditation.

XV. CONDUCT OF INSPECTION

- 15.1 The NTC technical staff shall conduct inspection prior to approval of Certificate of Accreditation to verify RTS conformance with the standards specified in this Circular.
- 15.2 All non-conformances found shall be noted and made known to the authorized officials of concerned RTS.
- 15.3 RTS with noted deficiencies shall be given a grace period of thirty (30) days to correct the deficiency and shall notify the Commission of its compliance. The Commission shall conduct a re-inspection after the grace period.

XVI. FREQUENCIES FOR THE USE OF RADIO TRAINING STATION

The following frequencies are current allocated and used of radio training stations:

2639 KHz/5220 KHz	-	J3E
2835 KHz	-	General Calling, J3E
7520 KHz	-	Calling and Working, J3E
149.19 MHz	-	Calling and Working, F3E
149.25 MHz	-	Calling and Working, F3E

XVII. RENEWAL OF CERTIFICATE OF ACCREDITATION AND RADIO STATION LICENSE

- 17.1 Renewal of Certificate of Accreditation and radio station license must be filed three (3) months before its expiration date.
- 17.2 Inspection shall be conducted at any reasonable time prior to approval of renewal of certificate/license to ensure RTS continuous compliance with the standards specified in this Circular.
- 17.3 Late filing of application not beyond six (6) months from date of expiration shall be collected a surcharge of 50% of the

certificate/license fee; beyond six (6) months but not more than one (1) year shall be collected a surcharge of 100%, and so on.

- 17.4 In case of non-filing of application for renewal, the Commission shall not recognize the diploma/certificate issued for the training conducted after the expiration of the Certificate of Accreditation or License.

XVIII. GROUNDS FOR DENIAL, DISAPPROVAL OR REVOCATION OF A CERTIFICATE OF ACCREDITATION

- 18.1 Failure to comply with any of the requirements mentioned in Section II of this Circular.
- 18.2 Failure to comply with the provisions of existing radio laws and regulations affecting RTS.
- 18.3 Non-compliance with the standards mentioned in this circular.
- 18.4 Non-payment of required fees.

XIX. FINES AND PENALTIES

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| 19.1 | Illegal purchase/possession of radio transceiver | PHP 2500.00
(per unit) |
| 19.2 | Illegal installation (per station) | |
| | 19.2.1 with permit to purchase/possess | PHP 3000.00 |
| | 19.2.2 without permit to purchase/possess/
construct (per violation) | PHP 4000.00
(with forfeiture of equipment) |
| 19.3 | Illegal operation (per station) | |
| | 19.3.1 with permit to purchase/possess/construct | PHP 4000.00 |
| | 19.3.2 without permit to purchase/possess/
construct (per violation) | PHP 5000.00
(with forfeiture of equipment) |
| | 19.3.3 allowing the operation with an unlicensed radio operator
(station covered with an appropriate permit/license)
per violation | PHP 4000.00 |
| | 19.3.4 allowing the operation with an unlicensed radio operator
(station not covered with an appropriate permit/license)
per violation | PHP 5000.00
(with forfeiture of equipment) |
| | 19.3.5 use of unauthorized frequency (station covered by an
appropriate permits/license) | PHP 4000.00 |
| | 19.3.6 use of unauthorized frequency (station not covered by an
appropriate permit/license) per violation | PHP 5000.00
(with forfeiture of equipment) |
| 19.4 | Operating without valid Certificate of Accreditation and radio
Station license (per violation) | PHP 4000.00 |

19.5 For failure to install appropriate radio facilities as required. PHP 3000.00

XX. FEES

Filing Fee (Upon filing of application)	:	PHP	200.00
Permit to Purchase (per unit)			
VHF/UHF	:	PHP	96.00
HF/SSB	:	PHP	120.00
Permit to Possess (per unit)			
VHF/UHF	:	PHP	60.00
HF/SSB	:	PHP	96.00
Construction Permit	:	PHP	500.00
Inspection Fee (per year)	:	PHP	500.00
Radio Station License (per year)	:	PHP	1,000.00
Certificate of Accreditation fee (per year)	:	PHP	3,000.00

XXI. REPEALING CLAUSE

Any circular, memorandum, order or parts thereof inconsistent with the provisions of this circular shall be deemed amended or superseded

XXII. EFFECTIVITY

This Circular shall take effect fifteen (15) days after publication in a newspaper of general circulation and three (3) certified true copies furnished to the UP Law Center.

Quezon City, Philippines, **November 9, 2004.**

(sgd)
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RONALD OLIVAR SOLIS
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