

MEMORANDUM CIRCULAR
NO. 40

Pursuant to the Letter of Instruction No. 13-A of the President of the Philippines, dated September 29, 1972 and the provisions of Act No. 3846, as amended, the following guidelines are hereby promulgated to provide appropriate and effective implementation of the relevant provisions of Department Order No. 4 and 37, series of 1972 and 1973 respectively, concerning the required equipment and operation of Radio Training Stations:

1. In order to provide sufficient time for any vocational school to select and acquire SSB and VHF/UHF transceivers for their respective training stations, the final deadlines on or before which said requirements must be complied with are the following :

For SSB Transceiver : On or before December 31, 1973

For VHF/UHF Transceiver : On or before the start of school term
1974-75

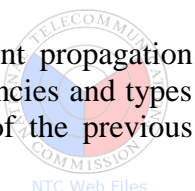
2. To facilitate communication contact between and among Radio Training Schools, the following calling periods, which shall be indicated in their respective station licenses, shall be observed by the training stations regularly :

9:00 AM - 10:00 AM

3:00 PM - 4:00 PM

7:00 PM - 8:00 PM

3. All SSB and VHF transceivers required for training purposes shall conform with the corresponding technical specifications for those equipment, copies of which are attached herewith.
4. The Radio Training Schools shall select and procure the required SSB and/or VHF/UHF transceivers from Radio Dealers offering brands that are officially approved by this Office for the purpose.
5. In order to establish the compatibility of the SSB equipment in usage and to ensure that the assigned frequencies are workable, every Radio Training Station shall communicate with other schools using their respective SSB transceivers and net in particular with station (4DA-1-GUZ) of Guzman Institute of Electronics at Manila.
6. To provide greater opportunity for students to study the different propagation characteristics of appropriate radio channels, the following frequencies and types of emission are hereby allocated for training purposes in lieu of the previous group of assigned frequencies :



5220.0 KHz.	0.1A1,	3A3J	- Fixed Operation
7520.0 KHz.	0.1A1,	3A3J	- Fixed Operation
9952.5 KHz.	0.1A1,	3A3J	- Fixed Operation
10117.5 KHz.	0.1A1,	3A3J	- Fixed Operation

This Circular shall take effect immediately.

CEFERINO S. CARREON
Acting Director



RADIO TRAINING SCHOOLS SSB TRANSCEIVER SPECIFICATIONS

GENERAL CHARACTERISTICS

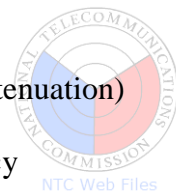
1. Frequency Range : 2.0 – 15.0 MHz. (Minimum)
2. Number of Channels : Four (4)
3. Crystal Controlled per channel
4. Temperature Range : 10 deg. centeg. to 60 deg. centeg.
5. Type & Bandwidth of Emissions : 3A3J (USB) and 0.1A1 (CW)
6. Percentage of Modulation : 100% (Maximum)
7. Must be provided with metering for plate power input indication
8. Simplex (press-to-talk) operation.

TRANSMITTER CHARACTERISTICS

1. Output Power : 100 watts PEP (Maximum power input)
2. Frequency Stability : 50 parts/million Hr.
3. Audio Fidelity : 300 – 3000 Hertz at 3db
4. Unwanted Sideband Attenuation : 50db (Minimum)
5. Distortion Products : More than -35db below Tone Level of two-tone Test Signal at rated PEP Output

RECEIVER CHARACTERISTICS

1. Modes of Reception : Single Side Band Suppressed Carrier : Continuous Wave (Unmodulated)
2. Sensitivity : At least 1 Microvolt for 50 MW Output with 10db signal plus N/N radio
3. Selectivity : 3.0 Khz. (Maximum Bandwidth for 3db Attenuation)
4. Spurious Response : At least 50 db below desired input Frequency



5. Audio Output : 3 Watts (Minimum)
6. Audio Fidelity : ± 1 db 300-3000 Hertz
7. Audio Distortion : Less than 2.5% (0.1 Khz. At 50 MW Output).



RADIO TRAINING SCHOOLS VHF TRANSCEIVER SPECIFICATIONS

GENERAL

1. Frequency Range : 148 – 150 Mhz.
2. No. of Channel : Two (2) Channels (Minimum)
3. Crystal Controlled per channel
4. Temperature Range : 10 deg. centeg. To 60 deg. centeg.
5. Type & Bandwidth of Emission : 16F3 ; 1.7F1
6. Duty Cycle : Receiver - 100% Transmitter - 20%
7. Must be provided with appropriate metering for plate power input indication.
8. Nominal Operating Voltage : 220 VAC (Base operation) ;
12VDC (mobile); appropriate dry cell
voltage for handheld operation.

TRANSMITTER

1. Output Power : 25 watts (Maximum)
2. Frequency Stability : 20 parts per million (Hertz)
3. Audio Response : within +1 and –3db of 6db/octave pre-emphasis,
300 to 3000 Hertz.
4. Frequency Deviation : ± 5 Khz. (16F3)
5. Spurious and Harmonic Emission : 50db
6. FM Noise : - 70 db

RECEIVER

1. Channel spacing : 25 Khz.
2. Sensitivity : 0.50 microvolt or less (20db Quieting)
3. Selectivity : - 80 db (EIA SINAD)



4. Spurious and Image Rejection : -80db
5. Audio Response : within + 1 and – 5db of 6db/octava de emphasis,
300 – 3000 Hertz.
6. Audio Output : 2 watts at less than 10% distortion.



Clarification of Clearances and Information Sheets to be submitted to the Radio Control Office as Prescribed in Memorandum Circular No. 39 dated November 30, 1973

I. CLEARANCES

- (a) The officers of a company, corporation or association basically required to secure and submit clearances are the President/General Manager, Vice-President/Assistant General Manager, and the staff officer(s) or supervisor(s) directly responsible in the supervision, use or operation of communications.
- (b) A character clearance/record check issued by any of the agencies indicated in the subject Memorandum Circular will be accepted.
- (c) Clearance(s) that may be issued by any PC Provincial Command or NBI Regional Office, whether for an individual or a group of individual, will be accepted.
- (d) Active members of the Armed Forces of the Philippines and police forces of local governments, as well as personnel of low-enforcement agencies of the National Government are exempted from clearance requirement, provided a certification stating that said member is in the active service and provided further that there is no pending case against such member, is submitted by his immediate superior.

2. INFORMATION SHEETS

- (a) The officers who will accomplish and submit the prescribed Information Sheet are the officers mentioned in Item 1(a) above, in addition to the clearance requirement, and the members of the Board of Directors of the company, corporation or association concerned. Said Information Sheet shall be accomplished with their own handwriting and all appropriate blanks therein are properly filled up, answered and duly signed by the individual concerned.
- (b) If an officer or member of the Board required to accomplish and submit the Information Sheet is not available at the time of the submission of the application, a letter to that effect must be submitted with a statement that the same will be submitted later as soon as the individual concerned becomes available.



3. Both franchise holders and their end-users shall submit the required clearances and information sheets in accordance with the subject Memorandum Circular No. 39, as herein clarified, for applications for licenses of radio stations used and operated by end-users.

CEFERINO S. CARREON
Acting Director

