KZ5MP

I August 1967

HEADQUARTERS UNITED STATES SOUTHERN COMMAND

QUARRY HEIGHTS, CANAL ZONE

ctions Soverning Amsteur Radio

e de la companya de l

to do skyon deeded who are reposit for a filter translating for an unitarity of the filter \underline{I} and \underline{I}

COVERNIA DE LA COLOR DE LA COL

AMATEUR RADIO SERVICE

WITHIN THE CANAL ZONE

egnadoratifo es ceregadas la AUGUST 1967 enclosadas a la Estandado es de como estado e

COORDINATOR OF AMATEUR RADIO ACTIVITIES
OFFICE OF THE DIRECTOR, COMMUNICATIONS-ELECTRONICS, J-6

te detered in the startion log in the same member as char extend the

any changes or exceptions made by FCC are also applicance to consti-

notiss toateme we to brondon in and can't prixee, noting

Coordinator of Amateur Radio Activities
Office of the Director, Communications-Electronics, J-6

SC (G) 1 August 1967

SUBJECT: Transmittal of Instructions Governing Amateur Radio Service

TO: All Canal Zone Radio Amateurs

- l Inclosures 1 and 2 to this letter are the latest revision of rules and regulations pertinent to Canal Zone Amateur Radio Operations, and a call book of Amateur Radio Licensees in the Canal Zone.
- 2. A summary of major revisions to the rules is presented below for your convenience:
- This will not affect expiration dates on existing licenses. Novice licenses, of course, remain valid for only one year.
- b Identification requirements have been eased to permit "Tail-ending" as used in contest-type and DX operation.
- c. References to Maritime Mobile have been eliminated since this operation is (and always has been) prohibited. Mobile operation on ships or boats in Canal Zone waters is not affected by this change. Outside the 3-mile limit a KZ5 call sign can not be used. Use of an FCC call sign should be in accordance with current Federal Communications Commission Rules.
- d. Full names of persons using phone patch facilities must be entered in the station log in the same manner as that of any other person speaking into the microphone of an amateur station.
- e. VOX (voice-operated-transmit) operation will not be used in connection with phone patches since the operator must retain full control over the emission. Remember, the operator of the station bears <u>full</u> responsibility for the on-the-air conduct of anyone using his transmitter.
- f. Clarifies policy on banned countries. Points out that Canal Zone policies on this subject are identical with those of FCC. Any changes or exceptions made by FCC are also applicable to Canal Zone stations.

SUBJECT: Transmittal of Instructions Governing Amateur Radio Service in the Canal Zone

3. An administrative change, not reflected in the revised rules, affects persons holding operator only licenses. Call signs will not be issued to new applicants. Further, current license records are being screened to identify operator-only licensees who presently hold call signs. J-6 intends to notify each of these persons that his call sign is being withdrawn. The sole additional requirement for a station call sign remains the "Permission to install a radio station" signed by the premises custodian. This statement has appeared on the amateur license application for years and does not involve any change in policy.

C. R. COGGIN LTC USAF

is, clas bambacana ascessa, vac. a

Wilke of the Wilerton Jan

AMATEUR RADIO SERVICE WITHIN THE CANAL ZONE

- 1. This book of instructions governing amateur radio service within the Canal Zone is published and distributed by United States Southern Command for instruction and compliance of all holders of, or applicants for, Canal Zone amateur radio licenses.
- 2. New editions are published periodically which incorporate changes which have taken place since the last edition. This book supersedes all previously published editions and is effective as of 1 August 1967.
- 3. Queries or comments regarding this publication may be addressed to:

Coordinator of Amateur Radio Activities Office of the Director, J-6 United States Southern Command Quarry Heights, Canal Zone

TABLE OF CONTENTS

| 1.10 | DEFINITIONS | | | | | | | |
|------|--|--|--|--|--|--|--|--|
| | 1.11 1.12 1.13 1.14 1.15 1.16 1.17 | Amateur Portable Station Amateur Mobile Station | | | | | | |
| 1.20 | GENERA | GENERAL | | | | | | |
| | 1.21 1.22 1.23 | Who May Operate an Amateur Station Scope of Operator Authority Order of Suspension | | | | | | |
| 1.30 | AMATEU | AMATEUR OPERATORS' LICENSES AND PRIVILEGES | | | | | | |
| | 1.31 1.32 1.33 1.34 | Application for Amateur Operator License Classes and Privileges of Amateur Operator Licenses Availability of Operator License | | | | | | |
| | 1.36 1.37 1.38 1.39 | Duplicate License Renewal of Amateur Operator License License Term Temporary License | | | | | | |
| 1.40 | EXAMINATIONS | | | | | | | |
| | 1.41 1.42 1.43 1.44 1.45 1.46 | When Examination is Required Recognition of FCC Amateur Operator Licenses Examination Elements Examination Requirements Manner of Conducting Examinations Examination Credit Examination Procedure | | | | | | |

| 1.50 | AMATEUR RADIO STATION LICENSE | | | | | |
|------|--|---|--|--|--|--|
| | 1.51 1.52 1.53 1.54 1.55 1.56 1.57 1.58 1.59 | Eligibility of Corporations or Organizations Location of Station License Period Authorized Apparatus Removal of Amateur Station License Availability of Station License Revocation of Station License Modification of Station License | | | | |
| 1.60 | APPLICATION FOR OPERATOR AND STATION LICENSE | | | | | |
| | 1.61 | Application for License Forwarding Applications | | | | |
| 1.70 | CALL SIGNS | | | | | |
| | 1.71 | Assignment of Call Signs Transmission of Call Signs | | | | |
| 1.80 | PORTABLE AND MOBILE STATIONS | | | | | |
| | 1.81 1.82 1.83 | Requirements for Portable and Mobile Operation Special Provisions for Portable and Mobile Operation Special Provisions for Non-Portable Stations | | | | |
| 1.90 | USE OF | AMATEUR STATIONS | | | | |
| | 1.91 1.92 1.93 1.94 1.95 1.96 | Point of Communications No Remuneration for Use of Station Broadcasting Prohibited Radiotelephone Tests Codes and Ciphers Prohibited One Way Communications Special Provisions regarding Radio Teleprinter Transmissions | | | | |
| 2.00 | ALLOCATION OF FREQUENCIES | | | | | |
| | 2.01 | Frequencies and Types of Emission for Use of Amateur Stations | | | | |
| | 2.02 | Individual Frequency Not Specified Types of Emission | | | | |
| | | | | | | |

2.10 EQUIPMENT AND OPERATION

- Maximum Authorized Power 2.11
- Power Supply to Transmitter 2.12
- Purity and Stability of Emissions 2.13
- Modulation of Carrier Wave 2.14
 - Frequency Measurement and Regular Check 2.15
 - 2.16
 - Retention of Logs 2.17 and the mater a secretary and at solvens

2.20 SPECIAL CONDITIONS

- Additional Conditions to be Observed by Licensee 2.21
- 2.22 Restricted Operation
- Second Notice of Same Violation 2.23
- 2.24 Third Notice of Same Violation
- 2.25 Answers to Notice of Violation
- 2.26 Prohibited Transmissions
 2.27 Damage to Apparatus
- 2.28 Fraudulent Licenses

2.30 RADIO AMATEUR CIVIL EMERGENCY SERVICE (RACES)

- 2.31 Purpose
- Eligibility Company of the Company o 2.32
- 2.33 Public Action Signals
- 2.34 Civil Defense-Disaster Control Instructions
 - 2.35 Plan for Controlled Operation
 - 2.36 Definition
- 2.37 Affiliation

APPENDIX I - Extracts from General Radio Regulations (Cairo Revision)

APPENDIX II- Extracts from Radio Regulations Annexed to the International Telecommunication Convention (Atlantic City, 1947)

APPENDIX III-Instructions for Completing Form A-J6-67

APPENDIX IV -Application for Amateur Radio Privileges (Form A-J-6-67)

INSTRUCTIONS GOVERNING AMATEUR RADIO SERVICE WITHIN THE CANAL ZONE

- 1.11 Basis and Purpose. These Instructions are designed to provide an amateur radio service having a fundamental purpose as expressed in the following principles:
- a. Recognition and enhancement of the value of the amateur service to the public as a voluntary non-commercial communication service, particularly with respect to providing mergency communications.
- b. Continuation and extension of the amateur's proven ability to contribute to the advancement of the radio art.
- c. Encouragement and improvement of the amateur radio service through instructions which provide for advancing skills in both the communication and technical phases of the art.
- d. Expansion of the existing reservoir within the amateur radio service of trained operators, technicians, and electronics experts.
- e. Continuation and extension of the amateur's unique ability to enhance international goodwill.
- 1.12 <u>Amateur Service</u>. The term "amateur service" means a radio service carried on by amateur stations.
- 1.13 Amateur Operator. The term "amateur operator" means a person interested in radio technique solely with a personal aim and without pecuniary interest, and holding a valid license issued by this command authorizing him to operate licensed amateur stations.
- 1.14 Amateur Station. The term "amateur station" means a station used by an amateur operator. It embraces all radio transmitting apparatus at a particular location used for amateur service and operated under a single instrument of authorization.
- 1.15 Amateur Portable Station. The term "amateur portable station" means an amateur station that is so constructed that it may conveniently be moved from place to place for communication, but which is not operated while in motion.
- 1.16 Amateur Mobile Station. The term "amateur mobile station" means an amateur station that is so constructed that it may conveniently be transferred to or from a mobile unit or from one such unit to another and is ordinarily used while such mobile unit is in motion.

- 1.17 Amateur Radio Communications. The term "amateur radio communications" means radio communications between amateur stations solely with a personal aim and without pecuniary interest.
- 1.18 Remote Control. The term "remote control", as applied to the amateur radio service, means control of transmitting equipment of an amateur station from an operating position other than one at which the transmitter is in view and immediately accessible; except that, direct mechanical control or direct electrical control by wired connections of an amateur transmitter from a point located on board any vessel or vehicle on which such transmitter is located shall not be considered remote control within the meaning of this definition.

1.20 GENERAL

- 1.21 Who May Operate an Amateur Station. An amateur radio station may be operated in the Canal Zone only by a person holding a valid amateur license issued by this command. Such a station may be operated by the licensee only in the manner and to the extent provided in his amateur license. Persons other than the licensee, when operating such station, may operate it only to the extent and in the manner authorized to the licensee of the station and not exceeding the operating authority of such person's own amateur license. When an amateur station is used for telephony, the station licensee may permit any person to transmit by voice, provided that during such transmission call signs are announced as prescribed by paragraph 1.72 below and provided a duly licensed amateur maintains actual control over the emission, including turning the carrier on and off for each transmission and signing the station off after each communication with each station has been completed. In this connection, voice operated transmit (VOX) will not be employed by an unlicensed person, including those on the local end of a telephone patch.
- 1.22 Scope of Operator Authority. Amateur licenses are valid only for the operation of amateur stations duly licensed by this command and, on a temporary basis, for operation of experimental stations (except those which would operate in a proposed or established radio service) in the experimental service licensed by this command for operation exclusively on a frequency or frequencies above 450 megacycles. Such services must be performed without compensation, direct or indirect, paid or promised.

1.23 Order of Suspension. An order of proposed suspension shall contain a statement of the grounds and reasons for such proposed suspension. All communications relating to such an order shall be effected directly between this command and the operator licensee, with an information copy thereof furnished to the Governor of the Canal Zone, the Army, Navy, Air Force, or Federal Aviation Agency as appropriate. All amateur operations by the licensee shall cease upon receipt of an order of suspension, and from that time he shall have fifteen days in which to submit to this command a written explanation showing cause why his license should not be modified or revoked. Upon receipt of such explanation, this command may affirm, modify or revoke the order of suspension. If no written explanation is forwarded to this command within the fifteen day limit specified, the order of suspension shall be affirmed and the license immediately revoked. When a license is revoked, it shall be forwarded to this command without delay. Nothing contained herein shall prevent the immediate revocation of a license where the licensee has violated the provisions of Articles 1.95 or 2.26 below, or has permitted another person to do so.

1.30 AMATEUR OPERATORS' LICENSES AND PRIVILEGES

1.31 Classes of Amateur Operator Licenses

- a. Amateur Extra Class.
- b. Advanced Class (previously Class A). Not issued new.
- c. General Class (previously Class B).
- d. Technician Class.
- e. Novice Class.
- 1.32 <u>Eligibility for License</u>. The following persons are eligible to apply for the various classes of amateur licenses:
- a. Amateur Extra Class. Any citizen of the United States residing in the Canal Zone, who at any time prior to receipt of his application by this command has held for a period of two years or more a valid amateur license issued by this command or the Federal Communications Commission, excluding licenses of the Novice or Technician classes.
- b. Advanced Class. Any citizen of the United States residing in the Canal Zone, who at any time prior to receipt of his application by this command has held for a period of a year or more an amateur license issued by this command or the

Federal Communications Commission, of either Advanced or Class "A". New Advanced class amateur operator licenses will not be issued. However, Advanced class (or Class "A") licenses may continue to be renewed as set forth in Article 1.37 below.

- c. General Class. Any citizen of the United States residing in the Canal Zone.
- d. <u>Technician Class</u>. Any citizen of the United States residing in the Canal Zone.
- e. Novice Class. Any citizen of the United States residing in the Canal Zone, except a former holder of an amateur license of any class issued by any agency of the United States Government, military or civilian.
- 1.33 Application for Amateur Operator License. Refer to Articles 1.61 and 1.62 below for information on preparation, forwarding, and approval of applications for amateur licenses.

1.34 Classes and Privileges of Amateur Operator Licenses

- a. Amateur Extra Class. All authorized amateur privileges including such additional privileges in both communication and technical phases of the art which this command may consider appropriately limited to holders of this class of license.
- b. Advanced Class. All amateur privileges except those which may be reserved to holders of the Amateur Extra class license.
- c. General Class. All authorized amateur privileges except those which may be reserved to holders of the Extra and Advanced class licenses.
- d. Technician Class. All authorized amateur privileges, in the amateur frequency band 50 to 54 megacycles, 145 to 147 megacycles, and in the amateur frequency bands above 220 megacycles.
- e. <u>Novice Class</u>. Those amateur privileges as designated and limited as follows:
- (1) The d.c. plate power input to the vacuum tube or tubes supplying power to the antenna shall not exceed 75 watts.

- (2) Only the following frequency bands and types of emission may be used, and the emissions of the transmitter must be crystal controlled.
- (a) 3700 to 3750 kilocycles, radiotelegraphy using only type Al emission.
- (b) 7150 to 7200 kilocycles, radiotelegraphy using only type Al emission.
- (c) 21.00 to 21.250 megacycles, radiotelegraphy using only type Al emission.
- (d) 145 to 147 megacycles, radiotelegraphy or radiotelephony, using types of emission set forth in Article 2.01 (9) below.
- 1.35 Availability of Operator License. The original license of each licensee shall be kept in the personal possession of the licensee while operating an amateur station. When operating an amateur station at a fixed location, however, the license may be posted in a conspicuous place in the room occupied by the station. The license shall be available for inspection by any authorized representative of this command, except when such license has been filed with application for modification or renewal thereof; or has been mutilated, lost, or destroyed and application has been made for a duplicate license in accordance with the provisions of Article 1.36 below. No recognition shall be accorded to any photocopy of an amateur operator license.
- 1.36 <u>Duplicate License</u>. Any licensee applying for a duplicate license to replace an original which has been lost, mutilated, or destroyed shall submit with the application the mutilated license or a statement setting forth the facts regarding the manner in which the original license was lost or destroyed. If the original license is found subsequent to receipt by the licensee of the duplicate license, either the duplicate or the original license shall be returned immediately to this command. In the case of loss or mutilation of FCC licenses, correspondence and application for issuance of duplicate will be directly with the FCC.

1.37 Renewal of Amateur Operator License

a. An amateur operator license, except the Novice class, may be renewed upon proper application stating that the applicant has lawfully accumulated a minimum total of either two hours operating time during the last three months

or five hours operating time during the last twelve months of the license term. Such "operating time", for the purpose of renewal, shall be counted as the total of all that time between the entries in the station log showing the beginning and end of transmissions as required by Article 2.16a below, both during single transmissions and during a "sequence of transmissions" as provided in this section. The application shall include, in addition to the foregoing, a statement that the applicant can send by hand key; i.e., straight key or any other type of hand-operated key such as semi-automatic or electronic key, and receive by ear in plain language messages in the International Morse Code at a speed not less than that which was originally required for the class of license being renewed.

- b. Application for renewal of an amateur operator license may not be filed earlier than sixty days prior to the date of expiration, and not later than a grace period of one year after such date of expiration. During this one year grace period, an expired license is not valid. A renewed license issued upon the basis of an application filed during the grade period will be dated currently, and will not be back-dated to the date of expiration of the license being renewed.
- c. The renewal application shall be accompanied by the applicant's amateur license.
- d. Renewal Applications shall be governed by applicable instructions in force on the date the application is filed.
- e. The applicant shall qualify for a new license by examination if the requirements of this section are not fulfilled.
 - f. The Novice class license will not be renewed.
- g. When renewing FCC licenses, the applicant will follow the rules established by the FCC. The renewal application and necessary fee will be forwarded directly to the FCC.

1.38 License Term

a. Amateur operator licenses (except Novice class) are normally valid for a period of three years from the date of issuance of a new or renewed license. Novice class is normally valid for a period of one year from the date of issuance. Canal Zone licenses granted on the basis of FCC licenses will

not be valid in excess of one year beyond the expiration date of the FCC license.

- b. Modified and duplicate licenses shall bear the same date of expiration as the licenses for which they are modifications or duplicates.
 - c. FCC license term is five years.
- 1.39 <u>Temporary Licenses</u>. Temporary Canal Zone operator licenses can be issued to qualified U.S. citizens who reside in the Canal Zone while on temporary duty in the Canal Zone under the following conditions:
- a. Person has in his possession a valid FCC license of General class or higher.
- b. Person has made necessary arrangements to operate a specific licensed Canal Zone amateur station.
- c. Person is familiar with the current instructions governing amateur radio service within the Canal Zone and can so demonstrate.
- d. Temporary licenses can be obtained by personal visit of the applicant to the office of the coordinator (Building 150, Quarry Heights) for verification of the applicant's FCC license. Licenses will be issued for a three month period with provision for one extension only. Persons issued temporary Canal Zone licenses will notify the coordinator of expected date of departure from the Canal Zone so that licenses can be cancelled as of the departure date.

1.40 EXAMINATIONS

- 1.41 When Examination Is Required. An examination is required for the issuance of a new amateur license and for a change in class of operating privileges. However, credit may be given for specific or all elements of examination as provided in Article 1.46 below.
- 1.42 Recognition of FCC Amateur Operator License. An applicant who holds a valid amateur license issued by the Federal Communications Commission will not be required to take an examination if the privileges being requested are the same as those authorized by the class of FCC license held. Exception: Conditional class FCC licenses are not recognized in the Canal Zone. Prior to granting of amateur privileges to holders of FCC Conditional class, applicants are required to complete Elements 1B and 2B as described in paragraph 1.43 below. To qualify for this recognition of the FCC license, the applicant must submit his FCC license with his application for the Canal Zone license. Photocopies or other reproductions of licenses are not acceptable.

- 1.43 <u>Examination Elements</u>. The examinations for amateur operator privileges will comprise one or more of the following examination elements:
- a. Element 1A. Beginner's code test. Code test at five words per minute, sending and receiving.
- b. <u>Element lB</u>. General code test. Code test at thirteen words per minute, sending and receiving.
- c. <u>Element 1C</u>. Expert's code test. Code test at twenty words per minute, sending and receiving.
- d. <u>Element 2A</u>. Basic law, Rules and regulations essential to beginner's operation, including sufficient elementary radio theory for the understanding of those rules.
- e. Element 2B. General regulations. Provisions of treaties, statutes, radio theory as applicable to modern amateur techniques, and rules and regulations affecting all amateur stations and operators.
- f. Element 2C. Advanced amateur practice. Advanced radio theory and operation as applicable to modern amateur techniques, including but not limited to radiotelephone, radiotelegraph and transmissions of energy for measurements and observations applied to propagation, for the radio control of remote objects, and for similar experimental purposes.
- 1.44 Examination Requirements. Applicants for original licenses will be required to pass examinations as follows:

| Class of License | ELEMENTS | | | | | |
|------------------|----------|----|----|----|--------|----|
| | lA | 18 | lC | 2A | 2B | 2C |
| Amateur Extra | | χ | χ | | X X | χ |
| Novice | X | | | X | | |

- 1.45 Manner of Conducting Examinations. All examinations for Canal Zone amateur licenses and privileges shall be conducted by personnel authorized by and at locations and times specified by the Coordinator of Amateur Radio Activities, J-6, United States Southern Command, Quarry Heights, Canal Zone (telephones 82-6232 or 82-5126).
- a. Effective 1 July 1965, J-6 USSOUTHCOM became an examination point for FCC General class amateur licenses. The FCC examinations for General Class privileges are used

as a basis for granting Canal Zone General class licenses. The following procedures apply:

- (1) When a new applicant applies for an FCC General class amateur license, he will also be applying for a Canal Zone General licensess. Both the Canal Zone and FCC application forms will be completed, and a fee of \$4.00, payable to the FCC, will be required to accompany the FCC application. Applications will be processed and examination administered by J-6 personnel. The FCC General class examination will be used in all cases where an applicant is requesting General class privileges. The answer sheet, code test results, FCC application, and license fee will be forwarded to the FCC Field Engineering Office in San Juan, Puerto Rico for grading and processing. Upon notification by FCC that applicant has passed the examination, J-6 will issue Canal Zone license and call sign. FCC San Juan office will forward the applications to the FCC Gettysburg office where the FCC license will be issued and mailed directly to the applicant.
- (2) The designation of J-6 as an FCC General class examination point in no way affects the requirement for or validity of Canal Zone General class licenses. Current Canal Zone General class licenses remain valid and will be renewed upon normal expiration.
- (3) Holders of Canal Zone General class licenses who desire to take the FCC General class examination may arrange to do so by calling J-6 for an appointment and completing the examination and application requirements as outlined in subparagraph (1) above. As in the case of new applicants, completed answer sheets, etc. will be forwarded to the FCC San Juan office for further processing.
- b. The complete FCC General class examination (both code and theory) will be required prior to issue of a Canal Zone General class license to holders of FCC Conditional class.
- 1.46 Examination Credit. In addition to the provisions of Article 1.42 above, examination credits will be given as follows:
- a. An applicant for a higher class of amateur license who holds a valid amateur license issued upon the basis of an examination by this command or the Federal Communications Commission will be required to pass only those elements of the higher class examination that were not included in the examination for the amateur license held when such application is

filed, except that credit will not be allowed for Conditional class licenses issued by the Federal Communications Commission in accordance with FCC "absentee" provisions as apply to the FCC Conditional class license (Section 12.44, FCC Rules Governing Amateur Radio Service), and except further that in the case of a license issued by the FCC, applicant must be able to prove bonafide operation under said FCC license and under appropriate FCC jurisdiction.

opplicant's ability to transmit by hand key and to receive

- b. No examination credit, except as herein provided, shall be allowed on the basis of holding or having held any amateur or commercial operator license.
- 1.47 Examination Procedure. Examinations will not be given without prior appointment. Appointments may be made by calling Quarry Heights 6232 or 5126. When taking an examination for an amateur license, or for additional amateur privileges, the applicant shall write in longhand; pen and ink or pencil may be used. Code tests will be written or hand-printed with either pen and ink or with pencil. Applicants unable to comply with these requirements because of physical disability may dictate their answers to examination questions. If the examination or any part thereof is dictated, the examiner shall certify the nature of the applicant's disability and the name and address of the person(s) taking and transcribing the applicant's dictation.
- a. Grading of Examinations. Code tests are graded as "passed" or "failed", separately for sending and receiving tests. Failure to pass the required code test for either sending or receiving will terminate the examination; code test must be successfully completed prior to taking the written examination. Seventy-four percent is the passing grade for written examinations. For the purpose of grading, all elements other than element 2C required for a particular license will be considered as a single examination, and element 2C will be considered as a separate examination.
- b. Eligibility for Re-Examination. An applicant who fails an examination for amateur privileges will not be eligible for another examination for such privileges until a period of at least thirty days has elapsed. No credit will be given for any element which may have been successfully completed during the preceding examination.
- c. <u>Code Test Procedure</u>. The code test required of an applicant for amateur radio license, in accordance with the provisions of paragraphs 1.43 and 1.44 above, shall determine

the applicant's ability to transmit by hand key and to receive by ear, in plain language, messages in the International Morse Code at not less than the prescribed speed. Code tests must be free of omission or other error for a continuous period of at least one minute during a test period of five minutes, counting five characters to the word and counting each numeral or punctuation mark as two characters. If furnished by applicant, any type of hand-operated key, such as a semi-automatic or electronic key, may be substituted for the straight key furnished by the J-6 examining office for the code sending test.

1.50 AMATEUR RADIO STATION LICENSE

1.51 Eligibility

- a. Any citizen of the United States residing in the Canal Zone who holds a valid Canal Zone amateur radio license or a valid amateur radio license issued by the Federal Communications Commission (other than FCC Conditional class) is eligible to apply for a Canal Zone amateur radio station license.
- b. Any citizen of the United States residing in the Canal Zone who, although he is not a licensed amateur radio operator, has been approved of by the Governor of the Canal Zone, the Commander United States Army Forces Southern Command, the Commander United States Naval Forces Southern Command, Commander United States Air Forces Southern Command, or the Chief, IATCS, Federal Aviation Agency as the official in charge of an amateur radio station established for training purposes in connection with activities of the above agencies. Trustees for such stations not holding valid amateur operator licenses are not authorized to operate the station for which they are trustee. Application for such organizational license makes provision for designation of an operator in charge. This must be an individual holding at least a General class amateur license.
- c. United States citizens who reside in the Republic of Panama may be granted a Canal Zone license providing a licensed Canal Zone radio amateur acts as his sponsor. The sponsor must agree to being a sponsor and must sign the application as sponsor. His primary function is to provide a point of contact who will always know how to reach the licensee by mail or telephone.
- (1) Holders of such sponsored licenses are bound by these instructions in all other respects.

- (2) Amateur operation is authorized only in the Canal Zone, from the sponsor's station, as guest operator of another fixed station in the Canal Zone, or from a mobile station (except aeronautical mobile) while in the Canal Zone.
- 1.52 Eligibility of Corporations or Organizations to Hold License. Except as provided in Article 1.51 above, an amateur station license will not be issued to a company, corporation, association, or organization, nor for their use, except that in the case of a bonafide amateur radio organization or society, a station license may be issued to a licensed amateur operator as trustee for such society.

1.51 Location of Station

- a. Amateur station licenses will be granted to operate only such stations that are located and operated within the boundaries of the Canal Zone proper. In no case shall any amateur station, including any remote control point or portable amateur station, be established or operated outside the Canal Zone.
- b. Only one fixed location will be authorized and designated in the license for each amateur station. Unless remote control of the transmitting apparatus is authorized, such apparatus shall be operated by a duly licensed amateur operator present at the location of such apparatus.
- c. The granting of authority to operate by remote control is contingent upon the filing of a proper application, supported by:
- (1) A showing of the applicant's control of the control point as well as of the remotely controlled transmitter.
- (2) A description of the means which will be employed to control the transmitter.
- (3) A statement indicating that the equipment for monitoring the transmissions is available at the control point.
- (4) A statement of the precautions which will be taken to prevent access by unauthorized persons to the premises on which the controlled transmitting apparatus is located.
- (5) A showing of possession of the necessary control lines between the transmitting apparatus and the control point.

- 1.54 <u>License Period</u>. The license of an amateur radio station is normally valid for a period of three years from the date of issuance of a new or renewed license, except that an amateur station license issued to the holder of a Novice class amateur is normally valid for a period of one year from date of issuance. Modified or duplicate licenses shall bear the same issue date and expiration date as the licenses for which they are modifications or duplicates.
- 1.55 <u>Authorized Apparatus</u>. An amateur station license authorizes the use under control of the licensee of all transmitting apparatus at the fixed location specified in the station license which is operated on any frequency or frequencies herein allocated to the amateur radio service. This license also authorizes the use under the control of the licensee of portable and mobile transmitting apparatus operated at other locations in the Canal Zone.

1.56 Renewal of Amateur Station License

- a. An amateur station license may be renewed upon request when such request is filed not more than sixty days prior to date of expiration of such license and not later than a period of grace of one year after such date of expiration. During this one year period of grace, an expired license is not valid. A renewed license issued upon the basis of an application filed during the grade period will be dated currently and will not be backdated to the date of expiration of the license being renewed.
- b. The renewal application shall be accompanied by the applicant's amateur radio license card.
- c. Renewal applications shall be governed by applicable rules in force on the date when application is filed.
- 1.57 Availability of Station License. The station license of each amateur station, or a photocopy thereof, shall be posted in a conspicuous place in the room occupied by the licensed operator while the station is being operated at a fixed location, or shall be kept in his personal possession. When the station is operated at other than a fixed location, the station license or a photocopy thereof shall be kept in the personal possession of the licensee (or a licensed representative) who shall be present at the station while it is being operated as a portable station. The station license shall be available for inspection by any authorized United States Government official at all times while the station is being operated and at other times upon request made by an authorized representative of this command, except when such license has been

filed with application for modification or renewal thereof, or has been mutilated, lost or destroyed, and application has been made for a duplicate license in accordance with the provisions of Article 1.36 above. The posting of the special Amateur Radio Station License issued by this command in a conspicuous place in the location occupied by the licensed operator while the station is being operated will satisfy the "posting" requirements of Article 1.57.

- 1.58 Revocation of Station License. An order of revocation shall contain a statement of the grounds and reasons for such proposed revocation. All communications relating to such an order shall be effected directly between this command and the station licensee, an information copy thereof being furnished to the Canal Zone Government, Army, Navy, Air Force or FAA officials concerned.
- a. All amateur operations at the station shall cease upon receipt of an order of revocation, and from that time the station licensee shall have fifteen days in which to submit to this command a written explanation showing cause why his license should not be modified or revoked. Upon receipt of such explanation, this command may affirm, modify, or revoke the order of revocation.
- b. If no written explanation is forwarded to this command within the lime limit specified in subparagraph 1.58a above, the order of revocation shall be affirmed and the license immediately revoked.
- c. When a station license is revoked, it shall be forwarded to this command without delay.
- d. Nothing contained herein shall prevent the immediate revocation of a station license when the licensee has violated the provisions of Article 2.26 below or has permitted another person to do so.
- 1.59 Modification of Station License. Whenever this command determines that public interest, convenience and necessity would be served or any treaty ratified by the United States would be more fully complied with by modification of any amateur station license, either for a limited time or for the duration of the term thereof, such station license shall be modified.

1.60 APPLICATION FOR OPERATOR AND STATION LICENSE

1.61 <u>Application for License</u>. Formal application will be prepared in accordance with instructions contained herein when applying for a new, modified (change in address or location

of station), renewed or duplicate license for an amateur radio station and/or an amateur radio operator license.

- a. Form A-J6-(67), Application for Amateur Radio Privileges, will be used when the applicant is applying for an individual amateur radio station license, an amateur radio operator license, or both.
- b. Form B-J6-(67), Application for Organizational Amateur Radio Station License, will be used when applying for an organizational license or amateur radio club station license.
- 1.62 <u>Forwarding Applications</u>. Completed applications will be forwarded direct to:

Coordinator of Amateur Radio Activities Office of the Director, J-6 Headquarters United States Southern Command Quarry Heights, Canal Zone

Incomplete applications will be returned without action.

1.70 CALL SIGNS

1.71 <u>Assignment of Call Signs</u>. The call signs of amateur stations will be assigned by this command from the block of calls KZ5AA to KZ5WZ, inclusive. A request for a specific assignment within the above mentioned block may be granted if such call is unassigned and available for assignment. No call sign will be reassigned until any former assignment has expired for at least two years.

1.72 Transmission of Call Signs

- a. (1) The operator of an amateur station shall transmit the call sign of the station or stations being called (or may transmit the generally accepted identification of the network), or shall identify appropriately any other purpose of a transmission, followed by the authorized call sign of the station transmitting:
 - (a) At least once every ten minutes; or
- (b) At the beginning and end of each transmission of more than three minutes duration; or
- (c) The call sign of the transmitting station only may be sent at the end of a single transmission which represents a completed communication (i.e. TAIL ENDING)

- (2) The required identification shall be transmitted on the frequency or frequencies being employed at the time and, in accordance with the type of emission authorized thereon, shall be by either telegraphy using the International Morse Code. teleprinter, or telephony. In addition to the foregoing, when a method of communication other than telephony, teleprinter or telegraphy using the International Morse Code is being used or attempted, the prescribed identification shall also be transmitted by that method.
- b. In addition to complying with the requirements of subparagraph a above, an operator of an amateur station operated as
 a portable or mobile station using radiotelegraphy shall transmit
 at least once during the communication that the station is being
 operated portable (mobile) in the Canal Zone. When telephony is
 used, the call of the station shall be preceded by the words,
 "This is..." or the word "From..." instead of the letters "DE.."
 followed by announcement that the station is being operated portble (mobile) in the Canal Zone.

Example: Portable (mobile) amateur radiotelephone station operating in the Canal Zone would call a fixed, mobile or portable station as follows: "W2ABC, W2ABC, W2ABC, this is (or the word from) KZ5WX, KZ5WX, KZ5WX operating portable (mobile) in the Canal Zone."

- c. When telephony is used, the transmission of call signs prescribed by subparagraphs a and b above may be made by the person transmitting by voice in lieu of a duly licensed operator, provided the licensed operator maintains the control required by Article 1.21 above.
- d. When telephony is used, phonetic aids may be employed to identify the call sign of the station.

1.80 PORTABLE AND MOBILE STATIONS

1.81 Requirements for Portable and Mobile Operation

a. Within the Canal Zone, an amateur station may be operated as either a portable or mobile station on any frequency authorized and available for the amateur radio service, except that mobile operation is not permitted from aircraft. Notice of such operation in accordance with the provisions of subparagraph c below shall be given to the Coordinator of Amateur Radio Activities, Office of the Director J-6, United States Southern Command, Quarry Heights, Canal Zone.

- b. When outside the limits of the Canal Zone, an amateur radio station may not be operated as portable or mobile using a Canal Zone call sign.
- c. Notice of Operation. Whenever an amateur station is, or is likely to be, operated for a period in excess of 48 hours away from the fixed transmitter location specified on the station license without return thereto, the licensee shall give advance written notice of such operation to the Coordinator of Amateur Radio Activities, requesting permission for this type operation. A new notice is required whenever there is any change in particulars of a previous notice or whenever operation away from the authorized station continues for a period in excess of one year. The notice required by this section shall contain the following specific information:
 - (1) Name of licensee.
 - (2) Station call sign.
 - (3) Authorized fixed transmitting location.
- (4) Portable location(s), or mobile itinerary as specifically as possible, temporary fixed transmitter location, or new permanent fixed transmitter location.
- (5) The dates of beginning and end of each period of operation away from the location specified in the station license.
- (6) The address at which, or through which, the licensee can be readily reached.
- (7) In the case of mobile operation, the license number of the vehicle in which the mobile station is installed and operated.
- (8) If the location of the proposed operation will be within any Panama Canal Company/Canal Zone Government building, the above notice shall be routed through the Governor of the Canal Zone.
- 1.82 Special Provisions for Portable and Mobile Operation. Nothing in these Instructions is to be interpreted as permitting operation of a portable or mobile amateur radio station under conditions where such operation is prohibited under the rules and regulations governing navigation of the Panama Canal and adjacent waters.

- 1.83 <u>Special Provisions for Nonportable Stations</u>. The specific provisions of these Instructions relative to portable stations are not applicable to a nonportable station, except that:
- a. An amateur station that has been moved from one permanent location to another permanent location may be operated at the latter location in accordance with the provisions governing portable stations (including written notice to this command) for a period not to exceed two months, but in no event beyond the expiration date of the license, provided that a formal application for modification of license to change the permanent location has been submitted to this command.
- b. The licensee of an amateur station who changes residence temporarily and moves his station to a temporary location associated with his temporary residence, or the designated officer of an organization which changes the normal location of its amateur station to a different and temporary location, may use the station at the temporary location if the station is to remain there for a period of not more than two months, and the following requirements are met:
 - (1) The provisions of Article 1.51 above are fulfilled.
- (2) Advice written notice shall be given by the amateur station licensee or licensee-trustee to this command.
- (3) Similar notice shall be given for each change in station location and for transfer of the station to the former permanent location, before the transmitting apparatus is operated.
- c. When the station is operated under the provisions of Article 1.83 a and b above, the calling procedure specified in Article 1.72 above shall be used, including the transmissions required by Article 1.72 b and c above.

1.90 USE OF AMATEUR STATIONS

1.91 Point of Communications. An amateur station may be used to communicate with other amateur stations, except that in emergencies or for test purposes, it may also be used temporarily for communication with other classes of stations licensed by the Federal Communications Commission and with United States Government Stations. Amateur stations may also be used to communicate with any radio station other than amateur which is authorized by the Federal Communications Commission or this command to communicate with amateur stations. Amateur stations may also be used for transmitting signals, communications, or energy

to receiving apparatus, for the measurement of emissions, temporary observation of transmission phenomena, and radio control of remote objects, for similar experimental purposes, and for the purposes set forth in Article 1.96 of these Instructions.

- 1.92 No Remuneration for Use of Station. An amateur station shall not be used to transmit or receive messages for hire, nor for material compensation, direct or indirect, paid or promised.
- 1.93 Broadcasting Prohibited. Subject to the provisions of Article 1.96 of these Instructions, an amateur station shall not be used to engage in any form of broadcasting; that is, the dissemination of radio communications intended to be received by the public directly or by intermediary or relay stations, nor for the re-transmission by automatic means of programs or signals emanating from any class of station other than amateur. The foregoing provision shall not be construed to prohibit amateur operators from giving their consent to the rebroadcast by broadcast stations of the transmissions of their amateur stations, provided that the transmissions of the amateur station shall not contain any direct or indirect reference to the rebroadcast.
- 1.94 Radiotelephone Tests. The transmission of music by an amateur station is forbidden; however, single audio-frequency tones may be transmitted for test purposes of short duration for the development and perfection of amateur radiotelephone equipment.
- 1.95 Codes and Ciphers Prohibited. The transmission by radio of messages in codes or ciphers in domestic and international communications to or between amateur stations is prohibited. All communications, regardless of type or emission employed, shall be in plain language except that generally recognized abbreviations established by regulation or custom and usage are permissible, as are any other abbreviations or signals where the intent is not to obscure the meaning, but only to facilitate communications.
- 1.96 One-Way Communications. In addition to the experimental one-way transmissions permitted by Article 1.91 above, the following kinds of one-way communications, addressed to amateur stations, are authorized and will not be construed as broadcasting:
- a. Emergency communications, including bonafide emergency drill practice transmissions.
- b. Information bulletins consisting solely of subject matter having direct interest to the amateur radio service as such.

- c. Round-table discussions or net type operations where more than two amateur stations are in communication, each station taking a turn at transmitting to other station(s) of the group.
- d. Code practice transmissions intended for persons learning or improving proficiency in the International Morse Code.
- 1.97 Special Provisions Regarding Radio Teleprinter Transmissions. The following special conditions shall be observed during the transmission of radio teleprinter signals on authorized frequencies by amateur stations:
- a. A single channel five unit (start-stop) teleprinter code shall be used which shall correspond to International Telegraphic Alphabet Nr 2 with respect to all letters and numerals (including the slant sign or fraction bar), but special signals may be employed for the remote control of receiving printers or for other purposes, in "figures" positions not utilized for numerals. In general, this code shall conform as nearly as possible to the teleprinter code or codes in common commercial usage in the United States.
- b. The nominal transmitting speed of the radio teleprinter signal keying equipment shall be adjusted as nearly as possible to the standard speed of 60 words per minute and in any event within the range 55 to 65 words per minute.
- c. When frequency-shift keying (type Fl emission) is utilized, the deviation in frequency from the mark signal to the space signal, or from the space signal to the mark signal, shall be less than 900 cycles per second.
- d. When audio-frequency-shift keying (type A2 or type F2 emission) is utilized, the highest fundamental modulating audio frequency shall not exceed 3000 cycles per second, and the difference between the modulating audio frequency for the mark signal and that for the space signal shall be not less than 900 cycles per second.

2.00 ALLOCATION OF FREQUENCIES

2.01 Frequencies and Types of Emission for Use of Amateur Stations

a. Subject to the limitations and restrictions set forth herein and in Article 2.03 of these Instructions, the following frequency bands and types of emissions are allocated and available for amateur station operation:

- (1) 1800 to 1825 KCS and 1875 to 1900 KCS. Use of this band is on a shared basis with the loran system of radio navigation and other governmental services. The use of these frequencies by amateur stations shall not cause harmful interference to the loran system of radio navigation or governmental services, nor shall such use be a bar to expansion of the loran radio navigation service. Such use and the limitations and conditions of such use as set forth herein shall be considered temporary in the sense that they shall remain subject to cancellation or revision, in whole or in part, without hearing, whenever this command shall deem such cancellation or revision to be necessary or desirable in the light of the priority within this band of the loran system of radio navigation. Such operation is restricted to type Al or A3 emission; power input to the plate circuit of the tube or tubes supplying power to the antenna shall not exceed 500 watts day, 200 watts night.
 - (2) 1900 to 2000 KCS. Not available for use.
- (3) 3500 to 4000 KCS. Use of this band is restricted to amateur radio stations as follows:
- (a) 3500 to 4000 KCS, using type Al emission and on frequencies 3500 to 3800 KCS, using type Fl emission.
- (b) 3750 to 4000 KCS, using type A3 emission and narrow-band frequency or phase modulation for radiotele-phony.
- (4) 7000 to 7300 KCS, using type Al emission; and on frequencies 7000 to 7200 KCS, using type Fl emission; and on frequencies 7075 to 7150 and 7200 to 7300 KCS using type A3 emission or narrow-band frequency or phase modulation for radiotelephony.
- (5) 14000 to 14350 KCS, using type Al emission; 14000 to 14200 KCS and 14300 to 14350 KCS, using type Fl emission; and on frequencies 14100 to 14350 KCS, type A3 emission or narrow-band frequency or phase modulation for telephony.
- (6) 21.0 to 21.45 MCS, using Al emission; 21.0 to 21.25 MCS, using type Fl emission; and 21.1 to 21.45 MCS, using type A3 emission and narrow-band frequency or phase modulation for telephony.
- (7) 28.0 to 29.7 MCS, using type Al emission and, on frequencies 28.1 to 29.7 MCS, using type A3 emission and narrow-band frequency or phase modulation for radiotelephony and, on frequencies 29.0 to 29.7 MCS, using special emission for frequency modulation (radiotelephone transmissions and radiotelegraph transmissions employing carrier shift or other frequency modulation techniques).

- (8) 50.0 to 54.0 MCS, using types Al, A2, A3, and A4 emission and narrow-band frequency or phase modulation for radiotelephony and, on frequencies 52.5 to 54.0 MCS, special emission for frequency modulation (radiotelephone transmissions and radiotelegraph transmissions employing carrier shift or other frequency modulation techniques).
- (9) 144 to 148 MCS, using types $A\emptyset$, Al, A2, A3, and A4 emission and special emission for frequency modulation (radiotelephone transmissions and radiotelegraph transmissions employing carrier shift or other frequency modulation techniques).
- (10) 220 to 225 MCS, using types A \emptyset , Al, A2, A3, A4, F \emptyset , Fl, F2, F3, and F4 emission. In this band the amateur service shall not cause harmful inteference to the government radiopositioning service.
- (11) 420 to 450 MCS, using types A \emptyset , A1, A2, A3, A4, A5, F \emptyset , F1, F2, F3, F4, and F5 emission. In this band the amateur service shall not cause harmful interference to the government radio positioning service.
- (12) 1215 to 1300 MCS, using types $A\emptyset$, A1, A2, A3, A4, A5, $F\emptyset$, F1, F2, F3, F4, and F5 emission. In this band the amateur service shall not cause harmful interference to the government radiopositioning service.
- (13) 2300 to 2450 MCS, 3500 to 3700 MCS, and 5650 to 5925 MCS, using types AØ, Al, A2, A3, A4, A5, FØ, F1, F2, F3, F4, F5, and pulse emission. Operations in the frequency bands 2300 to 2450 MCS and 5650 to 5925 MCS are subject to such interference between 2400 and 2450 MCS and between 5775 and 5925 MCS, respectively, as may result from emissions of industrial, scientific and medical devices on the frequencies 2450 and 5850 MCS, respectively. In these bands the amateur service shall not cause harmful interference to the government radiopositioning service.
- (14) 10000 to 10500 MCS, using AØ, Al, A2, A3, A4, A5, FØ, Fl, F2, F3, F4, and F5 emission. In this band the amateur service shall not cause harmful interference to the government radiopositioning service.
- (15) 21000 to 22000 MCS, and any frequency or frequencies above 30,000 MCS, using A \emptyset , Al, A2, A3, A4, A5, F \emptyset , F1, F2, F3, F4, F5, and pulse emission.
- 2.02 <u>Individual Frequency Not Specified</u>. Transmissions by an amateur station may be on any frequency within any authorized amateur band. Sideband frequencies resulting from keying or modulating a carrier wave shall be confined within the authorized amateur band.

2.03 Types of Emission

- a. Type A \emptyset emission, where not specifically designated in the bands listed in Article 2.01 of these Instructions, may be used for short periods of time when required for authorized remote control purposes or for experimental purposes. However, these limitations do not apply where type A \emptyset emission is specifically designated.
- b. The use of narrow-band frequency or phase modulation is subject to the conditions that the bandwidth of the modulated carrier shall not exceed the bandwidth occupied by an amplitude-modulated carrier of the same audio characteristics, and that the purity and stability of such emissions shall be maintained in accordance with the requirements of Article 2.13 of these Instructions:
- c. Whenever code practice, in accordance with Article 1.96d, is conducted in the bands authorized for A3 emission, tone modulation of the radiotelephone transmitter may be utilized when interspersed with appropriate voice instructions.

2.10 EQUIPMENT AND OPERATION

- 2.11 Maximum Authorized Power. Except for novice stations, as outlined in Article 1.34, each amateur transmitter may be operated with power input not exceeding one kilowatt to the plate circuit of the final amplifier stage of an amplifier-oscillator transmitter or to the plate circuit of an oscillator transmitter. An amateur transmitter operating with a power input exceeding 900 watts to the plate circuit shall provide means for measuring accurately the plate power input to the vacuum tube or tubes supplying power to the antenna.
- 2.12 Power Supply to Transmitter. The licensee of an amateur station using frequencies below 144 megacycles shall use adequately filtered direct-current plate power supply for the transmitting equipment to minimize modulation from this source.
- 2.13 Purity and Stability of Emission. Spurious radiation from an amateur station being operated with a carrier frequency below 144 megacycles shall be reduced or eliminated in accordance with good engineering practice. This spurious radiation shall not be of sufficient intensity to cause interference in receiving equipment of good engineering design, including adequate selectivity characteristics, which is tuned to a frequency or frequencies outside the frequency band of emission normally required for the type of emission being employed by the amateur station. In the case of A3 emission, the amateur transmitter shall not be modulated to the extent that interfering spurious radiation occurs,

and in no case shall the emitted carrier wave be amplitude modulated in excess of 100 percent. Means shall be employed to insure that the transmitter is not modulated in excess of its modulation capability for proper technical operation. For the purposes of this paragraph, a spurious radiation is any radiation from a transmitter which is outside the frequency band of emission normal for the type of emission employed, including any component whose frequency is an integral multiple or submultiple of the carrier frequency (harmonics and subharmonics), spurious modulation products, key clicks, and other transient effects, and parasitic oscillations. When using amplitude modulation on frequencies below 144 megacycles, simultaneous frequency modulation is not permitted; and when using frequency modulation on frequencies below 144 megacycles, simultaneous amplitude modulation is not permitted. The frequency of the emitted carrier wave shall be as constant as the state of the art permits.

- 2.14 Modulation of Carrier Wave. Except for brief tests or adjustments, an amateur radiotelephone station shall not emit a carrier wave on frequencies below 51 megacycles unless modulated for the purpose of communication.
- 2.15 Frequency Measurement and Regular Check. The licensee of an amateur station shall provide for measurement of the emitted carrier frequency or frequencies and shall establish procedure for making such measurement regularly. The measurement of the emitted carrier frequency or frequencies shall be made by means independent of the means used to control the radio frequency or frequencies generated by the transmitting apparatus and shall be of sufficient accuracy to assure operation within the amateur frequency band used.
- 2.16 Logs. Each licensee of an amateur station shall keep an accurate log of station operation, including the following:
- a. The date and time of each transmission. (The date need be entered only once for each day's operation.) The expression "time of each transmission" means the time of making a call and need not be repeated during the sequence of communications which immediately follows; however, an entry shall be made in the log when signing off, so as to show the period during which communications were carried on.
- b. The signature of each licensed operator who manipulates the key of a radiotelegraph transmitter, the signature of each licensed operator who operates a transmitter of any other type, and the name of any person not holding an amateur operator license who either directly or by recording transmits by voice over a radiotelephone transmitter or operates a teleprinter

keying a radiotelegraph transmitter. Full names of persons employing telephone patches are to be included. (The signature of the operator need be entered only once in the log in those cases where all transmissions are made by or under the supervision of the signatory operator, provided a statement to that effect is also entered. The signature of any other operator who operated the station shall be entered in the proper space for that operator's transmission.)

- c. Call of the station called. (This entry need not be repeated for calls made to the same station during any sequence of communication, provided the time of signing off is entered.)
- d. The input power to the oscillator, or to the final amplifier stage where an oscillator-amplifier transmitter is employed. (This need be entered only once, provided the input power is not changed.
- e. The frequency band used. (This information need be entered only once in the log for all transmissions until there is a change in frequency to another amateur band.)
- f. The type of emission used. (This need be entered only once until there is a change in the type of emission.)
- g. The location of the station (or the approximate geographical location of a mobile station) at the time of each transmission. (This need be entered only once provided the location of the station is not changed. However, suitable entry shall be made upon changing the location. Where operating at other than a fixed location, the type and identity of the vehicle or other mobile unit in which the station is operated shall be shown.)
- h. The message traffic handled. (If record communications are handled in regular message form, a copy of each message sent and received shall be entered in the log or retained on file at the station for at least one year.
- 2.17 Retention of Logs. The logs shall be preserved for a period of at least one year following the last date of entry. The copies of record communications and station log required by Article 2.16 above shall be available for inspection by authorized United States Government officials.

2.20 SPECIAL CONDITIONS

2.21 Additional Conditions to Be Observed by Licensees. In all respects not specifically covered by these Instructions, each amateur station shall be operated in accordance with good engineering and good amateur practices.

2.22 Restricted Operation

- interference to the reception of transmissions from stations operating in the domestic broadcast service when receivers of good engineering design, including adequate selectivity characteristics, are installed to receive such transmissions and this fact is made known to the amateur station licensee, the amateur station shall not be operated during the hours from 2000 to 2230 local time, and on Sunday for the additional period from 1030 until 1300 local time, upon the frequency or frequencies where the interference is created.
- b. In general, such steps as may be necessary to minimize interference to stations operating in other services may be required after investigation by this command.
- 2.23 Second Notice of Same Violation. In every case where an amateur station licensee is cited within a period of twelve consecutive months for the second violation of the provisions of Articles 2.01, 2.12, 2.13, 2.14 or 2.15 above, the station licensee, if directed by this command, will not operate the station and will not permit it to be operated from 1800 to 2230 local time until written notice has been received authorizing the resumption of full time operation. This notice will not be issued until the licensee has reported on the results of tests which he has conducted with at least two other amateur stations at hours other than 1800 to 2230 local time. Such tests are to be made for the specific purpose of aiding the licensee in determining whether the emissions of the station are in accordance with the Instructions of this command. The licensee shall report to this command the observations made by the cooperating amateur licensees in relation to the reported violations. This report shall include a statement as to the corrective measures taken to insure compliance with these Instructions.
- 2.24 Third Notice of Same Violation. In every case where an amateur station licensee is cited within a period of twelve consecutive months for the third violation of Articles 2.01, 2.12, 2.13, 2.14 or 2.15 above, the station licensee, if directed by this command, shall not operate the station and shall not permit it to be operated from 0800 to 2400 local time, except for the purpose of transmitting a pre-arranged test to be observed by a monitoring station of this command to be designated in each particular case. The station shall not be permitted to resume operation during these hours until the licensee is authorized by this command, following the test, to resume full time operation. The results of the test and the licensee record shall be considered in determining the advisability of suspending the operator license or revoking the station license, or both.

2.25 Answers to Notices of Violations. Any licensee receiving notice from this command of a violation of these Instructions, any legislative act or executive order, or treaty to which the United States is a party, or a notice from the Federal Communications Commission for any violation of their regulations, shall within three days from such receipt send a written answer direct to this command. The answer to each notice shall be complete in itself and shall not be abbreviated by reference to other communications or answers to other notices. If the notice relates to some violation that may be due to the physical or electrical characteristics of transmitting apparatus, the answer shall state fully what steps, if any, are taken to prevent future violations, and if any new apparatus is to be installed, the date such apparatus was ordered, the name of the manufacturer, and promised date of delivery, except that an answer from a licensee-trustee need state only the date and number of the requisition if the apparatus used at the station is military owned. If the notice of violation relates to lack of attention or improper operation of the transmitter, the name of the operator in charge shall be given.

2.26 Prohibited Transmissions

- a. No licensed radio operator or other person shall transmit by radio any information or any statement which is, or may be, prejudicial to the security and defense of the Panama Canal, the United States of America, or the sovereignty of the Republic of Panama.
- b. No licensed radio operator shall transmit, or permit any other person to transmit, any communication in cryptographic form.
- c. No licensed radio operator or other person shall transmit any international communication except when such communication is destined for a country which does not object to such transmissions by amateur stations. Countries with whom two way amateur communication is not authorized are those which are on the Federal Communications Commission banned list. Exceptions for specific stations are identical to FCC exceptions.
- d. No licensed amateur radio operator or other person shall transmit communications containing obscene, indecent, or profane words, language, music or meaning.
- e. No licensed amateur operator or other person shall transmit any communication or signal of any kind, or activate an amateur radio transmitter for any purpose whatsoever during

any period when the suspension of amateur radio operations is ordered by this command or other competent authority of the United States Government.

f. No licensed amateur operator or other person shall transmit any message or communication of a commercial nature on any amateur frequency except in bonafide emergencies.

g. Communications on Behalf of Third Parties

- (1) Bilateral agreements concluded between the United States and certain countries allow amateur radio stations to exchange messages or other communications internationally from or to third parties. These countries are: Argentina, Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Greenland (XP calls only), Haiti, Honduras, Israel, Liberia, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay, and Venezuela. These agreements involve United States amateurs and include properly licensed amateurs in the Canal Zone,
- (2) When communicating with amateurs in countries other than those listed, amateurs licensed by this command are expressly forbidden to use their amateur stations for the transmission of international communications on behalf of third parties.
- h. False Signals. No licensed amateur operator shall transmit false or deceptive signals or communications by radio, or any call letter or call sign which has not been assigned by proper authority to the station he is operating.
- i. <u>Unidentified Communications</u>. No licensed amateur operator shall transmit unidentified radio communications or signals.
- j. <u>Interference</u>. No licensed amateur operator will willfully or maliciously interfere with or cause interference to any radio communication or signal.
- 2.27 <u>Damage to Apparatus</u>. No licensed amateur operator shall willfully damage, or cause or permit to be damaged, any radio apparatus or installation of any licensed radio station.
- 2.28 <u>Fraudulent Licenses</u>. No licensed amateur operator or other person shall obtain or attempt to obtain, or assist another person to obtain or attempt to obtain, an operator license by fraudulent means.

2.30 RADIO AMATEUR CIVIL EMERGENCY SERVICE (RACES)

- 2.31 Purpose. The purpose of radio amateur civil emergency service is to supplement or extend other means of communications available to civil defense and disaster control organizations, or to provide necessary communications for which no other means exist.
- 2.32 <u>Eligibility</u>. No person shall operate an amateur radio station in a civil defense or disaster control organization unless:
- That person holds a valid extra, advanced, or general class amateur license.
- b. That person has been licensed to operate an amateur radio station in a communications network supporting a civil defense or disaster control organization.
- 2.33 <u>Public Action Signals</u>. There are two civil defense/disaster control public action signals: the ALERT SIGNAL and the TAKE COVER SIGNAL. These signals may be sounded in any order; consequently, the listing below does not signify a time sequence. The signals may be repeated to assure the public is fully alerted.
- a. ALERT SIGNAL. A steady blast of three to five minutes duration. The signal will indicate to the public (military and civilian) to act according to the operations plans promulgated by the civil defense and disaster control authorities.
- b. TAKE COVER SIGNAL. A wailing tone or a series of short blasts of three minutes duration. This signal will indicate that attack is imminent, and that the public must take the best available shelter immediately.

2.34 <u>Civil Defense - Disaster Control Instructions</u>

a. Radio broadcasts on 790 and 1420 KCS will supplement the ALERT and TAKE COVER signals referenced in article 2.33 by

APPENDIX I

EXTRACTS FROM GENERAL RADIO REGULATIONS (Cairo Revision)

Article 5 Classification of Emissions

1. Emissions shall be classified below according to the purpose for which they are used, assuming their modulation or their possible keying to be only in amplitude.

a. Continuous waves:

- (1) Type AØ. Waves of successive oscillations which are identical under fixed conditions.
- (2) Type Al. Telegraphy on pure continuous waves. A continuous wave which is keyed according to a telegraph code.
- (3) Type A2. Modulated telegraphy. A carrier wave modulated at one or more audible frequencies, the audible frequency or frequencies or their combination with the carrier wave being keyed according to a telegraph code.
- (4) <u>Type A3</u>. Telephony. Waves resulting from the modulations of a carrier wave by frequencies corresponding to the voice, to music, or to other sounds.
- (5) Type A4. Facsimile. Waves resulting from the modulation of a carrier wave by frequencies produced at the time of the scanning of a fixed image with a view to its reproduction in a permanent form.
- (6) <u>Type A5</u>. Television. Waves resulting from the modulation of a carrier wave by frequencies produced at the time of the scanning of fixed or moving objects.
- b. Damped Waves: <u>Type B</u>. Waves composed of successive series of oscillations the amplitude of which, after attaining maximum, decreases gradually, the wave trains being keyed according to a telegraph code.
- 2. In the above classification, the presence of a carrier wave is assumed in all cases. However, such carrier wave may or may not be transmitted. This classification does not contemplate exclusion of the use, by the administrations concerned, under specified conditions, types of waves no included in the foregoing definitions.

instructing the public on specific and continuing actions to be taken in connection with civil defense/disaster control operations.

- b. In addition to radio broadcasts, other means of communications, such as public address systems, person to person contact by wardens, police, and other officials may be used to supplement public action signals.
- 2.35 Plan for Controlled Operation. Upon receipt of PUBLIC ACTION SIGNAL:
- a. All amateur radio stations not licensed to operate in a radio communications net supporting a civil defense or disaster control organization will leave the air and maintain radio silence until authorized by the Commander in Chief, United States Southern Command to resume normal operations.
- b. Amateur radio stations that are licensed to operate in a radio communications net supporting a civil defense or disaster control organization will operate in accordance with instructions contained in the communications plan of the organization with which they are affiliated.
- 2.36 <u>Definition</u>. The term "controlled operation" includes both operation in a prescribed manner and cessation of operations producing radio silence.
- 2.37 Licensees of amateur radio stations in the Canal Zone who are interested in affiliating their stations with radio networks organized to provide communications service to civil defense or disaster control organizations should contact the following listed officials:
 - a. Chief, Civil Defense Canal Zone Government Box 504 Balboa Heights, Canal Zone
 - b. Assistant Chief of Staff, Communications-Electronics United States Army Forces Southern Command ATTN: MARS Director Corozal, Canal Zone
 - C. Commanding Officer
 U.S. Naval Communication Station Balboa
 Fort Amador, Canal Zone
 - d. Director of Communications United States Air Forces Southern Command ATTN: MARS Director Albrook AFB, Canal Zone

(A)-4-4 APPENDIX II

THE INTERNATIONAL TELECOMMUNICATION CONVENTION

(Atlantic City, 1947)

Article 42 Amateur Stations

- 1. Radio communications between amateur stations of different countries shall be forbidden if the administration of one of the countries concerned has notified that it objects to such radio communications.
- 2. a. When transmissions between amateur stations of different countries are permitted, they must be made in plain language and must be limited to messages of a technical nature, relating to tests and to remarks of a personal character for which, by reason of their unimportance, recourse to the public telecommunications service is not justified. It is absolutely forbidden for amateur stations to be used for transmitting international communications on behalf of third parties.
- b. The preceding provisions may be modified by special arrangements between the countries concerned.
- 3. a. Any person operating the apparatus in an amateur station must have proved that he is able to transmit, and to receive by ear, texts in morse code signals. Administrations concerned may, however, waive this requirement in the case of stations making use exclusively of frequencies above 1000 (one thousand) Mcs.
- b. Administrations shall take such measures as they judge necessary to verify the qualifications, from a technical point of view, of any person operating the apparatus of an amateur station.
- 4. The maximum power of amateur stations shall be fixed by the administrations concerned, having regard to the technical qualifications of the operators and to the conditions under which these stations must work.
- 5. a. All the general rules of the convention and of the present regulations shall apply to amateur stations. In particular, the transmitting frequency must be as constant and as free from harmonics as the state of technical development for stations of this nature permits.
- b. During the course of their transmissions, amateur stations must transmit their call signs at short intervals.

INSTRUCTIONS FOR COMPLETING FORM A-J6-(63)

Prepare one copy of the application Form A-J6-(63). Type or print in ink all entries, except signatures. Following numbered items refer to like numbered items on application form.

- 1. List full name with middle initial, military grade and serial number, if applicable.
- 2. List your Canal Zone mailing address.
- 3. List your Canal Zone residence address.
- 4. List your telephone number, if any, of office, residence, amateur radio station.
- 5. Answer the questions "Yes" or "No".
- 6. Indicate by an "X" what you are applying for.
- 7. List Canal Zone or FCC amateur licenses now held or formerly held, by number and class, call signs, and expiration date.
 Attache license to application.
- 8. List Canal Zone call sign desired: KZ5----.
- 9. List the address of your amateur radio transmitting station.
- 10. The signature of the official designated to act upon applications for the installation of radio antenna apparatus on public quarters and building, must be entered on line 10.
- 11. Applicant's signature to this certificate of application is required pursuant to the provisions of Section 35(a), U.S. Criminal Code, which concerns false statements to any Department or Agency of the United States.
- 12. Submit your application properly accomplished and signed to:

Coordinator of Amateur Radio Activities (J-6)
United States Southern Command
Quarry Heights, Canal Zone