

FCC AND ELECTRICAL INTERFERENCE

INTRODUCTION

The Federal Communications Commission has been controlling the generation of electrical interference which interfered with communications, for many years. As communications equipment became more complex and utilized larger segments of the spectrum, and the spectrum became more crowded with radiation from electronic, industrial, commercial and consumer equipment, the FCC has increased the scope and effectiveness of its regulations. On October 1, 1970, the rules requiring manufacturers, vendors, and shippers of electronic devices to meet FCC electromagnetic interference regulations have become effective.

The new rules implemented a 1968 law empowering the FCC to make reasonable regulations governing the interference potential of certain devices. The purpose of the new rules is to require compliance with equipment standards by manufacturers, importers and distributors of RF devices, as well as by users.

RF devices subject to FCC authority and included under the amended rules range from the many kinds of radio transmitters used in the broadcasting, common carrier, marine, aviation and land mobile services to restricted radiation devices such as radio receivers, CATV systems, and low power communication devices such as wireless microphones, phonograph oscillators, radio controlled garage door openers, radio controlled models and toys. Also included are industrial, scientific and medical equipment such as ultrasonic industrial heating, medical diathermy, radio frequency stabilized arc welders and miscellaneous equipment.

Exempted from the 1968 law are carriers transporting radio frequency devices but not trading in them, devices manufactured solely for export, and devices to be used by the U.S. Government.

At the time of this publication, a number of rule makings are pending, but it cannot be anticipated when the final rules will be adopted. Thus, attention is called to the following rule-making proceedings:

DOCKET NO. 20074: Amendment of Parts 2, 15, 81 and 83 of Commission's Rules to establish minimum performance for receivers employed at coast stations or used aboard ships and operating on frequencies in the band 156-162 MHz in the maritime service. Adopted: June 5, 1974.

DOCKET NO. 20118: Amendment of Parts 2 and 95 of the Commission's Rules to prohibit external radio frequency power amplifiers at Class D Citizens Radio Service stations and to prohibit marketing of external radio frequency power amplifiers capable of operation in the band 26.96 - 27.26 MHz. Adopted: July 23, 1974.

DOCKET NO. 20119: Amendment of Rules Part 15, Subpart E-Low Power Communication Devices - to delete the frequency band 26.97 - 27.27 MHz, to add the frequency band 49.9 - 50.0 MHz, and to promulgate technical specifications. Adopted: July 23, 1974.

DOCKET NO. 20120: Revision of operating rules for Class D stations in the Citizens Radio Service. Adopted: July 23, 1974.

DOCKET NO. 19356: Amendment of Part 0 and 2 of the Rules relating to equipment authorization of RF devices. Adopted: July 23, 1974.

DOCKET NO. 20154: Amendment of Part 2 of the Commission's Rules to add a new footnote to the Table of Frequency Allocations to reflect the need for Special Considerations in Planning the Use of Certain Bands so as to Minimize Potential Interference to Radio Astronomy Operations in Adjacent Bands. Adopted: August 28, 1974.

VHF MARINE RECEIVERS DOCKET NO. 20074 - June 13, 1974

In this Notice of Proposed Rule Making, the Commission is proposing to amend Parts 2, 15, 81 and 83 of the rules to require receivers manufactured after July 1, 1975, which are intended for use in the VHF maritime service, to meet or exceed certain minimum technical characteristics. Further, they are proposing that marine coast and ship stations operating at frequencies of 156 to 162 MHz maintain at least one receiver after July 1, 1980 which meets these requirements.

While it is the general procedure in the International Telecommunications Union (ITU) to direct regulation to transmitters rather than to receivers, this procedure was not followed at the World Administrative Radio Conference (WARC) with regard to receivers used in the maritime mobile service in the band 156-174 MHz. The reasons which were advanced during the debates at the WARC in favor of inclusion in Appendix 19 of technical characteristics for receivers were supported with near unanimity by the participating administrations. Briefly, these reasons are: this is a world-wide system providing safety and other communications; vessels fitted with VHF must be able to provide and to obtain two-way communications with other ship stations and with coast stations serving ports throughout the world; in a two-way communication system the technical characteristics of the receiver and transmitter must be such that inter-communication is assured; under these conditions the receiver is an integral and inseparable part of the communication system and, therefore, it is as necessary to specify technical characteristics for the receiver as for the transmitter.

While a substantial number of currently available receivers are believed to conform in major part to the technical characteristics set forth in the attached Appendix, there are some receivers which they believe do not meet these standards. The proposed receiver characteristics should result in the production of a superior type of receiver, give encouragement to manufacturers to continue to effect refinements and improvements in the design of receivers for use in the maritime mobile service; and discourage the production of inferior receivers by setting a minimally acceptable level of performance. Further, such characteristics are intended to discourage competition in one undesirable area, that is, reduction in product quality or performance as a means of reducing unit cost.

The statistics on ship station licensing clearly show that use of VHF by the maritime mobile service is expanding at a rapid rate. It is reasonable to expect that the density of users of VHF within a given area will continue to increase, with a consequent increase in the potentiality of interference, particularly with inferior receivers, from one or more of several sources. It is appropriate and timely, therefore, that technical characteristics applicable to receivers set forth levels of performance which will reduce or eliminate the common sources of interference. These technical characteristics, when designed into a receiver, will substantially reduce the susceptibility of a receiver to undesired signals which arise from poor selectivity, poor spurious response attenuation and poor frequency stability. These technical characteristics, which are usually designed into the superior receiver, are in the areas of adjacent channel rejection, spurious response attenuation and frequency stability.

The technical characteristics set forth in this Notice of Proposed Rule Making are applicable generally to receivers used in the maritime mobile service. They will be supplemented where there is a requirement peculiar to one or more categories of vessels, or to fulfill a specific operational requirement. The technical characteristics set forth will be applicable to receivers used for bridge-to-bridge communications.

**AMENDMENT OF RULES AND
REGULATIONS REGARDING INTERFERENCE
TO
SPACE RADIOCOMMUNICATION SERVICES
September 27, 1974**

A Partial Revision of the Radio Regulations (Geneva, 1959) relating to space telecommunications was signed at Geneva on July 17, 1971, by the respective plenipotentiaries of the United States and certain other countries. The said Partial revision and Final Protocol were duly ratified by the President of the United States on July 14, 1972, and the instrument of ratification was deposited with the Secretary-General of the International Telecommunication Union on July 28, 1972, and Proclaimed by the President on September 4, 1972, that every article and clause thereof may be observed and fulfilled on and after January 1, 1973, by the United States. 23 U.S.T. 1527, T.I.A.S. No. 7435.

Chapter II, Article 7, Section VII, 18.(2), 19.(1), 19.(2A), and 19.(4) of the Radio Regulations, as amended, set forth certain special rules which affect the Cable Television Relay Service between 12.70 and 12.75 GHz. These special rules are intended to prevent interference to Space Radiocommunication Service (earth-to-space) and are incorporated into Sections 78.18, 78.101, and 78.105 of the Commission's Rules as set forth below.

Accordingly, it was ordered, that, effective October 9, 1974, the modification in Part 78 of the Commission's Rules and Regulations that are set out below are adopted.

Part 78 of Chapter I of Title 47, C.F.R. is amended in the following manner:

1. Section 78.18, Paragraph (a) is amended to read as follows:
78.18 Frequency assignments.

(a) The Cable Television Relay Service is assigned the band of frequencies from 12.70 to 12.95 GHz. This band is shared with the Fixed-Satellite Service (earth-to-space) from 12.70 to 12.75 GHz, and the Television Inter-City Relay, Television Pickup, and Television STL Services from 12.70 to 12.95 GHz. The following channels may be assigned to cable television relay stations for the propagation of radio waves with the indicated polarization:

2. Section 78.101 is amended to add a new Paragraph (c) to read as follows:

78.101 Power limitations.

(c) Notwithstanding provisions elsewhere in this Part, the power delivered by a transmitter to the antenna system in the frequency band between 12.70 and 12.75 GHz shall not exceed +10 dBW. Additionally, the maximum equivalent isotropically radiated power of a station shall not exceed +55 dBW.

3. Section 78.105 is amended to add a new Paragraph (c) to read as follows:

78.105 Antennas

(c) The transmitting antenna system of stations employing maximum equivalent isotropically radiated power exceeding +45 dBW in the frequency band between 12.70 and 12.75 GHz shall be orientated so that the direction of maximum radiation of any antenna shall be at least 1.5° away from the geostationary satellite orbit, taking into account the effect of atmospheric refraction.

1/ See Chapter I, Article 1, Section III of the [International] Radio Regulations (Geneva, 1959), as amended, for Technical Characteristics Terms and Definitions. Additional information and methods for calculating azimuths to be avoided may be found in the following: Report 393, International Radio Consultative Committee (C.C.I.R.); "Geostationary Orbit Avoidance Computer Program," Report CC-7202, Federal Communications Commission, available from the National Technical Information Service, Springfield VA 22151, in printed form (PB-211 500) or source card deck (PB-211 501).

**BROADCAST ACTION
Report No. 12552 - August 28, 1974**

A petition by Taft Broadcasting Co. to deny the application of The Library Board of Huntsville, Alabama Public Library for a construction permit for a new noncommercial educational FM station on Channel 207(89.3 MHz) in Huntsville, has been denied by the Commission.

Taft, licensee of television station WBRC-TV, channel 6, Birmingham, Ala., alleged that the operation proposed by the Library Board would cause objectionable interference to the reception of its channel 6 television signal within its predicted Grade B contour. The alleged area of interference is located south of Huntsville and encompasses 348 square miles with a population of 23,840.

The Commission said whenever an FM station causes interference to the reception of a television signal because of radiation and spurious emissions from its FM transmitter, it has consistently maintained that it is the responsibility of the FM licensee to add filters or take other corrective measures at its transmitter to eliminate the problem.

"Whatever the cause of the interference, however, FM licensees are expected to cooperate in the solution of any such problems which might arise," the Commission said. In this regard, the Commission added, The Library Board would be required to comply with the specific procedures outlined in a September 1, 1967 Public Notice entitled *FM Interference to TV Reception*. The procedures are designed to determine and to alleviate interference to television reception.

EXTRACTS FROM PART 2 MARKETING RULES

**SUBPART I—MARKETING OF RADIOFREQUENCY
DEVICES**

2.801 Radiofrequency device defined.

As used in this part, a radiofrequency device is any device which in its operation is capable of emitting radiofrequency energy by radiation, conduction or other means. Radiofrequency devices include, but are not limited to

(a) The various types of radio communication transmitting devices described throughout this chapter.

(b) The incidental and restricted radiation devices described in Part 15 of this chapter.

(c) The industrial, scientific, and medical equipment described in Part 18 of this chapter.

(d) Any part or component thereof which in use emits radiofrequency energy by radiation, conduction or other means.

2.803 Equipment requiring Commission approval.

In the case of a radiofrequency device, which, in accordance with the rules in this chapter must be type approved, type accepted, or certificated prior to use, no person shall sell or lease, or offer for sale or lease (including advertising for sale or lease) or import, ship or distribute for the purposes of selling or leasing or offering for sale or lease, any such radiofrequency devices, unless, prior thereto, such device shall have been type approved, type accepted or certificated as the case may be.

2.805 Equipment that does not require Commission approval.

In the case of a radiofrequency device which, in accordance with the rules in this chapter must comply with specific technical standards prior to use, no person shall sell or lease, or offer for sale or lease (including advertising for sale or lease) or import, ship or distribute for the purposes of selling or leasing or offering for sale or lease, any such radiofrequency device, unless prior thereto such device complies with the applicable technical standards specified in the Commission's rules.

**EXTRACTS FROM PART 18
I S M EQUIPMENT**

2.807 Statutory exceptions.

As provided by section 302(c) of the Communications Act of 1934, as amended, 2.803 and 2.805 shall not be applicable to:

- (a) Carriers transporting radiofrequency devices without trading in them.
- (b) Radiofrequency devices manufactured solely for export.
- (c) The manufacture, assembly, or installation of radiofrequency devices for its own use by a public utility engaged in providing electric service: *Provided, however,* That no such device shall be operated if it causes harmful interference to radio communications.
- (d) Radiofrequency devices for use by the Government of the United States or any agency thereof: *Provided, however,* That this exception shall not be applicable to any device after it has been disposed of by such Government or agency.

2.809 Exception for ISM equipment.

(a) Sections 2.803 and 2.805 shall not apply to the following ISM equipments:

- (1) Ultrasonic equipment as defined in 18.3(e) of this chapter which generates 2 kW or more of radiofrequency energy.
- (2) Particle accelerators, e.g., cyclotrons, and other similar scientific equipment.
- (3) Electro-crosion equipment.
- (4) Sputtering equipment using RF energy.
- (5) RF stabilized arc welders.
- (6) Industrial heating equipment as defined in 18.3(c), of this chapter which generates 10 kW or more of RF energy.

(b) Sections 2.803 and 2.805 shall not apply to industrial heating equipment as defined in 18.3(c) of this chapter which generates less than 10 kW of RF energy: *Provided, However:*

- (1) The vendor of such equipment has notified the purchaser/lessee in writing whether the equipment as delivered will meet the technical standards in Part 18 of this chapter, or whether the equipment must be installed in a screened enclosure before it may be operated.
- (2) A copy of the notification shall be furnished to the Federal Communications Commission, Washington, D.C. 20554. Attention: Field Engineering Bureau.
- (3) The copy of the notification furnished to the Commission shall include:

- Name and address of purchaser/lessee,
- Name of manufacturer,
- Type or model of the equipment delivered, and
- Nominal operating frequency and power.

(c) The equipment listed in paragraphs (a) and (b) of this section must meet the applicable certification or type approval requirement of Part 18 of this chapter before such equipment is operated.

2.811 Transmitters operated under Part 73.

Sections 2.803 and 2.805 shall not be applicable to a transmitter operated in any of the Radio Broadcast Services regulated under Part 73 of this chapter, provided the conditions set out in Part 73 of this chapter for the acceptability of such transmitter for use under licensing are met.

2.813 Transmitters operated in the Instructional Television Fixed Service.

Sections 2.803 and 2.805 shall not be applicable to a transmitter operated in the Instructional Television Fixed Service regulated under Part 74 of this chapter provided the conditions in 74.952 of this chapter for the acceptability of such transmitter for licensing are met.

18.3 Definitions.

For purposes of the provisions of this part the following definitions in the industrial, scientific, and medical service shall be applicable:

- a.
- b. "Medical diathermy equipment" shall include any apparatus (other than surgical diathermy apparatus designed for intermittent operation with low power) which utilizes a radio frequency oscillator or any other type of radio frequency generator and transmits radio frequency energy used for therapeutic purposes.
- c. "Industrial heating equipment" shall include any apparatus which utilizes a radio frequency oscillator or any other type of radio frequency generator and transmits radio frequency energy used for or in connection with industrial heating operations utilized in a manufacturing or production process.
- d. Miscellaneous equipment shall include apparatus other than that defined in or excepted by paragraphs (b) and (c) of this section in which radio frequency energy is applied to materials to produce physical, biological, or chemical effects such as heating, ionization of gases, mechanical vibrations, hair removal and acceleration of charged particles, which do not involve communications or the use of radio receiving equipment.
- e. Ultrasonic equipment shall include any apparatus which generates radio frequency energy and utilizes that energy to excite or drive an electromechanical transducer for the production of sonic or ultrasonic mechanical energy for industrial, scientific, medical or other noncommunication purposes.
- f. "Industrial, scientific and medical equipment" (ISM equipment). Devices which use radio waves for industrial, scientific, medical or any other purposes including the transfer of energy by radio and which are neither used nor intended to be used for radio-communication.
- g. & h.

18.13 ISM frequencies and frequency tolerances.

The following frequencies are allocated for use by ISM equipment with the tolerance limits specified:

ISM frequency :	Frequency tolerance
13,560 kHz-----	± 0.78 kHz.
27,120 kHz-----	± 160.0 kHz.
40,680 kHz-----	± 20.0 kHz.
915 MHz-----	± 13 MHz.
2,450 MHz-----	± 50.0 MHz.
5,800 MHz-----	± 75.0 MHz.
22,125 MHz-----	± 125.0 MHz.

18.14 Operation on microwave frequencies.

Except for industrial heating equipment which is regulated by 18.101 through 18.122, inclusive, ISM equipment may be operated on the microwave ISM frequencies (915 MHz, 2450 MHz, 5800 MHz and 22,125 MHz) subject to the following conditions:

- a. The emission of radio frequency energy resulting from such operation shall be on the particular frequency and must not exceed tolerance limits associated with each such frequency as set forth in 18.13.
- b. The energy radiated and the bandwidth of emissions shall be reduced to the greatest extent practicable.

c. No harmful interference shall be caused to authorized communication services from spurious or harmonic radiation. In the event of such harmful interference, operation of the ISM equipment causing such harmful interference shall cease and shall not be resumed until steps necessary to eliminate such interference have been taken.

SUBPART C—ULTRASONIC EQUIPMENT

18.71 Operation without a license

Ultrasonic equipment may be operated without a license: *Provided*, the design and operation complies with the technical limitations for such equipment: *And provided further*, That the equipment has been type approved by the Commission or has been certified pursuant to the requirements of 18.71 to 18.84 and the certificate is attached to the equipment or is prominently posted in the room in which the equipment is being operated; except that ultrasonic equipment operating on frequencies below 90 kHz and generating less than 500 watts of radio frequency power may be operated without license, type approval or certification, if such equipment complies with all other applicable provisions of 18.71 to 18.84.

18.72 Technical limitations.

- Ultrasonic equipment shall be designed and constructed in accordance with good engineering practice with sufficient shielding and filtering to provide adequate suppression of emissions on frequencies outside the ISM frequency bands.
- Except for ultrasonic measurement equipment that operates over a continuous band of frequencies, the fundamental frequency of operation shall fall outside the frequency bands 490-510 kHz, 2170-2194 kHz, and 8354-8374 kHz.
- The varying conditions under which Ultrasonic equipment is operated shall not result in radiation exceeding the following limits:

Frequency	Distance <i>Feet</i>	Field $\mu\text{V}/\text{m}$
Up to and including 490 kHz.....	1,000	$\frac{2400}{\text{Frequency in kHz}}$
Over 490 kHz up to and including 1600 kHz.	100	$\frac{24000}{\text{Frequency in kHz}}$
Over 1600 kHz exclusive of frequencies in the ISM frequency bands.	100	15.

d. The operation of ultrasonic equipment on frequencies below 490 kHz using radio frequency power in excess of 500 watts shall be in compliance with the requirements of this section except that the maximum radiated field permitted may be increased as the square root of the ratio of the generated radio frequency power to 500 watts: *Provided*, that the radiated field shall in no case exceed the field permitted industrial heating equipment: *And providing further*, That equipment used in predominantly residential areas shall not be permitted the increase in field with power as indicated in this paragraph.

e. On any frequency above 490 kHz, the radio frequency voltage appearing on each power line shall not exceed 200 microvolts. On any frequency below 490 kHz, the radio frequency voltage appearing on each power line shall not exceed 1000 microvolts. Measurement shall be made from each power line to ground with the equipment itself both grounded and ungrounded.

18.73 Type approval.

a. Manufacturers of ultrasonic equipment desiring to obtain type approval for their equipment may request permission to submit such equipment to the Commission for testing by following the procedure set out in Part 2 of this chapter. The request shall include a statement that at least five units of the model to be submitted are scheduled for manufacture.

SUBPART D—INDUSTRIAL HEATING EQUIPMENT

18.101 Operation without a license.

Industrial heating equipment may be operated without a license: *Provided*, The design and operation of the equipment complies with the technical limitations in this part for such equipment: *And provided further*, That the equipment has been certificated pursuant to the requirements of this part.

18.102 Technical limitations

- Industrial heating equipment shall be designed and constructed in accordance with good engineering practice with sufficient shielding and filtering to meet the requirements of this part.
- Industrial heating equipment may be operated on any frequency except frequencies in the bands 490-510 kHz, 2170-2194 kHz, and 8354-8374 kHz. Equipment operating on an ISM frequency may be operated with unlimited radiation on that frequency. Equipment operated on other frequencies must suppress radiation on the fundamental carrier frequency as well as other frequencies as required by this part.
- Industrial heating equipment designed for operation on an ISM frequency shall be adjusted to operate as close to that ISM frequency as practicable.

FCC REORGANIZED

The Office of Chief Engineer has been reorganized by the Commission, and comprises of the following units: Immediate Office of the Chief; International and Operations Division; Research and Technical Division; Laboratory Division; and Spectrum Management Task Force. The Commission said the reorganization would "promote greater efficiency and effectiveness in Commission operations." The Immediate Office will assist the Chief in planning, directing, coordinating, and executing his functions, and will be composed of the Chief Engineer, the Deputy Chief, a Planning and Coordinating Staff, a Spectrum Allocations Staff, and an Administrative Section.

The International and Operations Division consists of the Frequency Registration and Notification Branch, Treaty Branch and RF-Devices-Experimental Services Branch. Its functions include regulating the Experimental Radio Services; reviewing patents as they are issued by the Patent Office to determine which patents may dominate radio services regulated by the FCC; providing FCC representation on, and coordination with the Interdepartmental Radio Advisory Committee (IRAC); coordinating frequency allocation policy matters involving government uses of radio with the Office of Telecommunications Policy; and making notification of the U.S. frequency assignments to the International Frequency Registration Board of the International Telecommunications Union.

The Research and Technical Division is comprised of the Applied Propagation, Space Systems, Special Projects and Technical Standards Branches. The Division is responsible for reviewing and analyzing technical and scientific data relating to terrestrial and space communications; conducting scientific studies in wave propagation, satellite and space communications; studying technical aspects of potential new uses of radio; and providing FCC representation at national and international conferences.

The functions of the Laboratory Division is expanded to include all type acceptance activities currently carried on in Washington, D.C.

The Spectrum Allocations Staff's functions is to assist the Chief Engineer and assume the duties presently assigned to the Frequency Allocations and Analysis Branch of the Frequency Allocation and Treaty Division--conduct of engineering, economic, social, etc. studies and surveys of the use being made of the spectrum to achieve a more efficient or optimum future use of the spectrum.

The reorganization, which amends Part O of the rules, became effective August 1, 1974.

Volumes of FCC Rules and Regulations by Categories—
Available on subscription basis from Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Subscription price is for an indefinite period and includes basic volume plus all amendments to be mailed to subscribers by the Superintendent of Documents when issued. Parts will not be sold *separately*, nor can they be supplied by the Commission. Domestic subscription includes U.S. Territories, Canada and Mexico. Do not send orders to the Federal Communications Commission.

Volume II (Aug. 1969) \$3.50 Foreign \$4.25	Part 2: Frequency Allocations and Radio Treaty Matters: General Rules and Regulations Part 5: Experimental Radio Services (other than Broadcast) Part 15: Radio Frequency Devices Part 18: Industrial, Scientific, and Medical Equipment
Volume III (Mar. 1968) \$10.00 Foreign \$12.50	Part 73: Radio Broadcast Services Part 74: Experimental, Auxiliary and Special Broadcast Services, and other program distribution services.
Volume IV (Oct. 1971) \$5.50 Foreign \$7.00	Part 81: Stations on Land in Maritime Services and Alaska-Public Fixed Stations Part 83: Stations on Shipboard in Maritime Services Part 14: Public Fixed Stations & Stations of the Maritime Services in Alaska
Volume V (Jan. 1970) \$7.00 Foreign \$8.75	Part 87: Aviation Services Part 89: Public Safety Radio Services Part 91: Industrial Radio Services Part 93: Land Transportation Radio Services
Volume VI (Jan. 1972) \$2.00 Foreign \$2.50	Part 95: Citizens Radio Service Part 97: Amateur Radio Service Part 99: Disaster Communications Service
Volume VII (Sept. 1970) \$3.50 Foreign \$4.50	Part 23: International Fixed Public Radio Communication Services Part 21: Domestic Public Radio Services (Other than than Maritime Mobile) Part 25: Satellite Communications

NEED AN ENGINEER?

Send your requirements to the Interference Technology Employment Service, Division of R & B Enterprises, P.O. Box 328, Plymouth Meeting, Pa. 19462.

LOCATION OF FIELD OFFICES

District Offices and their suboffices are located at the following addresses:

Radio district	Address of the Engineer in Charge
1	1600 Customhouse, Boston, Mass. 02109.
2	748 Federal Bldg., 641 Washington St., New York, N.Y. 10014.
3	1005 New U.S. Customhouse, Philadelphia, Pa. 19106.
4	Room 819, Federal Building, Baltimore, Md. 21201.
5	Room 400, Federal Building, Norfolk, Va. 23510.
6	1602 Gas Light Tower, 235 Peachtree Street NE., Atlanta, Ga. 30303. Suboffice: Post Office Box 8004, Room 238, Post Office Building, Savannah, Ga. 31402.
7	Room 919, 51 Southwest First Ave., Miami, Fla. 33130.
8	829 Federal Office Bldg., 600 South St., New Orleans, La. 70130. Suboffice: 439 U.S. Courthouse and Customhouse, Mobile, Ala. 36602.
9	New Federal Office Bldg., 515 Rusk Ave., Room 5636, Houston, Tex. 77002. Suboffice: 239 Federal Bldg., 300 Willow St., Beaumont, Tex. 77701.
10	1314 Wood St., Room 707, Dallas, Tex. 75202.
11	Room 1758, U.S. Courthouse, 312 North Spring Street, Los Angeles, Calif. 90012. Suboffice: Fox Theatre Bldg., 1245 Seventh Ave., San Diego, Calif. 92101.
12	323-A Customhouse, 555 Battery St., San Francisco, Calif. 94111.
13	314 Multnomah Building, 319 Southwest Pine Street, Portland, Oreg. 97204.
14	8012 Federal Office Bldg., First Ave. and Marion, Seattle, Wash. 98104.
15	504 New Customhouse, Denver, Colo. 80202.
16	691 Federal Building and U.S. Courthouse, Fourth and Robert Streets, St. Paul, Minn. 55101.
17	1703 Federal Bldg., 601 East 12th St., Kansas City, Mo. 64106.
18	1872 New U.S. Courthouse and Federal Office Bldg., 219 South Dearborn St., Chicago, Ill. 60604.
19	1029 New Federal Bldg., Detroit, Mich. 48226.
20	328 Federal Bldg., Buffalo, N.Y. 14203.
21	502 Federal Bldg., Post Office Box 1021, Honolulu, Hawaii 96808.
22	Post Office Box 2987, 322-323 Federal Bldg., San Juan, P.R. 00903.
23	Post Office Box 644, Room 53, U.S. Post Office and Courthouse Bldg., Anchorage, Alaska 99501.
24	Room 216, M St. NW., Washington, D.C. 20554.

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