

Title 33—Navigation and Navigable Waters

CHAPTER 1—COAST GUARD,
DEPARTMENT OF TRANSPORTATION

[CGD 75-222]

PART 117—DRAWBRIDGE OPERATION
REGULATIONS

Lake Champlain, N.Y.

AGENCY: Coast Guard, DOT.

ACTION: Final rule.

SUMMARY: This amendment changes the regulations governing the operation of the Vermont Department of Highways drawbridge between Sandy Point, Grand Isle (South Hero Island) and Knight Point, North Hero Island to provide periods when the draw need not open for the passage of vessels. The data submitted demonstrated that full-time attendance on a year-round basis and during evenings was not justified. The amendment relieves the state of the obligation of maintaining a full-time draw-tender.

EFFECTIVE DATE: This amendment is effective on September 23, 1977.

FOR FURTHER INFORMATION CONTACT:

Frank L. Teuton, Jr., Chief, Drawbridge Regulations Branch (G-WBR/73), Room 7300, Nassif Building, 400 Seventh Street SW., Washington, D.C. 20590, 202-426-0942.

SUPPLEMENTARY INFORMATION: On December 8, 1975, the Coast Guard published a proposed rule (40 FR 57222) concerning this amendment. The Commander, Third Coast Guard District, also issued a public notice on December 10, 1975. Interested persons were given until January 9, 1976, to submit comments.

DRAFTING INFORMATION

The principal persons involved in drafting this rule are: Frank L. Teuton, Jr., Project Manager, Office of Marine Environment and Systems, and Lieutenant Edward J. Gill, Project Attorney, Office of the Chief Counsel.

DISCUSSION OF COMMENTS

Seven responses were received regarding the highway bridge between Sandy Point, Grand Isle and Knight Point, North Hero Island (§ 117.191(c)). Three had no comment or supported the proposal. Four objected to the proposed change and recommended extending the periods when the draw would open on signal. The applicant was informed of these objections and agreed to extend these periods from June 1 through September 30 to May 15 through October 15. The Coast Guard feels that this change will provide for the reasonable needs of navigation. If navigation increases or decreases, these regulations may be amended to reflect this change.

In consideration of the foregoing, Part 117 of Title 33 of the Code of Federal Regulations is amended as follows:

§ 117.190 [Amended]

1. By deleting § 117.190(f) (3) and (4).
2. By adding a new § 117.191 immediately after § 171.190 to read as follows:

§ 117.191 Navigable waters in the State of Vermont and their tributaries; bridges when constant attendance of draw tenders is not required.

(a) Lake Champlain; Vermont Department of Highways bridge across entrance to Missisquoi Bay, between Alburg Tongue and Hog Island, at East Alburg. The draw shall open on signal if at least 24 hours notice is given.

(b) Lake Champlain; Missisquoi Bay, Central Vermont railroad bridge. The draw shall open on signal from June 1 through September 30 from 7 a.m. to 11 p.m. At all other times the draw shall open on signal if at least 24 hours notice is given to Central Vermont Railway, Inc., St. Albans, Vermont 05478.

(c) Lake Champlain; Vermont Department of Highways bridge between Sandy Point, Grand Isle (South Hero Island) and Knights Point, North Hero Island.

(1) From May 15 through October 15, the draw shall open on signal from 7 a.m. to 9 p.m.

(2) From May 15 through October 15, the draw shall open on signal from 9 p.m. to 7 a.m. if at least four hours notice is given.

(3) From October 16 through May 14, the draw shall open on signal if at least 24 hours notice is given.

(4) During periods of advance notice requirements, the draw shall open as soon as possible for public vessels of the United States.

(d) The owners of or agencies controlling these bridges shall keep a copy of the regulations in this section pertaining to each bridge, and a notice stating how the advance notices required by this section, are to be given. This notice shall be conspicuously posted on both the upstream and downstream sides of the bridge.

(Sec. 5, 28 Stat. 302, as amended, sec. 6(g) (2), 80 Stat. 937; 33 U.S.C. 499, 49 U.S.C. 1655 (g) (2); 49 CFR 1.46(c) (5).)

The Coast Guard has determined that this document does not contain a major proposal requiring preparation of an Economic Impact Statement under Executive Order 11821, as amended and OMB Circular A-107.

Dated: August 15, 1977.

O. W. SILER,
Admiral, U.S. Coast Guard
Commandant.

[FR Doc.77-24295 Filed 8-19-77; 8:45 am]

Title 43—Public Lands: Interior
CHAPTER II—BUREAU OF LAND MANAGEMENT,
DEPARTMENT OF THE INTERIOR

APPENDIX—PUBLIC LAND ORDERS

[Public Land Order 5623]

[Riverside 597]

CALIFORNIA

Revocation of Air Navigation Site
Withdrawal

AGENCY: Bureau of Land Management (Interior).

ACTION: Final rule.

SUMMARY: This order will restore a small parcel of public land to the operation of public land laws, including the mining laws.

DATE EFFECTIVE: August 22, 1977.

FOR FURTHER INFORMATION CONTACT:

Eldon G. Hayes, 202-343-8731.

By virtue of the authority contained in section 204 of the Act of October 21, 1976, 43 U.S.C. 1701, et seq., it is ordered as follows:

1. Air Navigation Site withdrawal of September 26, 1957, which withdrew the following described lands for use of the Corps of Engineers, United States Army, for the Silver Mountain Beacon Site, is hereby revoked as to the following described lands:

SAN BERNARDINO MERIDIAN

T. 6 N., R. 4 W.,

Sec. 10, commencing at the center of said sec. 10, S. 56°58' W., 1,869 feet; S. 10°15' E., 165 feet to the true point of beginning; S. 79°45' W., 40 feet; S. 10°15' E., 50 feet; N. 79°45' E., 40 feet; S. 10°15' E., 90 feet, more or less, to the south line of said SE¼ NW¼ SW¼;

Thence easterly along said south line 10.2 feet; N. 10°15' W., 142 feet, more or less, to a point distant N. 79°45' E., 10 feet from the true point of beginning; S. 79°45' W., 10 feet to the true point of beginning.

Sec. 15, A square parcel of land, measuring 50 feet on each side, said sides bearing due north, east, south and west, the center point of said square parcel being described as follows: Commencing at a point on an existing powerline running approximately east and west from which point the center of sec. 10, said township and range, bears N. 56°58' E., 1,869 feet, thence S. 10°15' E., 3,412.50 feet to a point, said point being the center point of said square parcel of land.

The tracts as described contain approximately 0.114 acre in San Bernardino County.

2. Subject to valid existing rights, the provisions of existing withdrawals, and the requirements of applicable law, at 10 a.m. on September 20, 1977, the lands shall be open to operation of the public land laws generally. All valid applications received at or prior to 10 a.m. on September 20, 1977, shall be considered as simultaneously filed at that time. The lands will be open to location under the United States mining laws and to applications and offers under the mineral leasing laws at 10 a.m. on September 20, 1977.

Inquiries concerning the lands should be addressed to the Bureau of Land Management, Room E-2841, Federal Office Building, 2800 Cottage Way, Sacramento, California 95825.

GUY R. MARTIN,
Assistant Secretary
of the Interior.

AUGUST 15, 1977.

[FR Doc.77-24224 Filed 8-19-77; 8:45 am]

Title 47—Telecommunication

CHAPTER I—FEDERAL COMMUNICATIONS COMMISSION

[Docket No. 20149; FCC 77-518]

LOCAL GOVERNMENT AND MANUFACTURERS RADIO SERVICES

Making Available Four 173 MHz Splinter Frequencies for Telemetry and Remote Control Operations; Second Report and Order, (Proceeding Terminated)

AGENCY: Federal Communications Commission.

ACTION: Final rule.

SUMMARY: This document allocates several 150-174 MHz band "splinter" and "offset" channels for remote control and telemetry operations in the private land mobile services. The action is expected to alleviate the congestion on the presently allocated splinter channels.

EFFECTIVE DATE: September 6, 1977.

ADDRESSES: Federal Communications Commission, Washington, D.C. 20554.

FOR FURTHER INFORMATION CONTACT:

Mr. Herb Zeiler or Mr. Tom Tyc, Industrial and Public Safety Rules Division, Safety and Special Radio Services Bureau, 202-632-6497.

In the matter of amendment of Parts 89 and 91 of the Commission's Rules and Regulations to make available four 173 MHz splinter frequencies to the Local Government and Manufacturers Radio Services for telemetry and remote control operations (Docket No. 20149); Second Report and Order (Proceeding Terminated).

Adopted: July 21, 1977.

Released: August 4, 1977.

I

BACKGROUND STATEMENT

1. We initiated this rule making proposing to make four 173-MHz "splinter" channels available for remote control and telemetry operations in the Local Government and Manufacturers Radio Service.¹ Following, in July 1975, the proposal, essentially as made, was adopted.² In the proceeding, however, a number of parties urged us to explore further the possibilities for allocating additional "narrow-band frequencies" for use in similar "non-voice signalling" operations; and, in response, we issued

¹ Notice of Proposed Rulemaking, Docket No. 20149, Telemetry and Remote Control Operations, 48 FCC 2d 568 (1974). The channels (173.20375 MHz; 173.2100 MHz; 173.3900 MHz; and 173.39625 MHz) were available up to then solely in the Power, Petroleum, Special Industrial, Forest Products, and Business Radio Services. The proposal called for their use in the Local Government and Manufacturers Radio Services where there had developed a need for air, noise, and water quality monitoring systems.

² First "Report and Order," Docket No. 20149, 173 MHz Splinter Frequencies, 54 FCC 2d 612 (1975).

the Further Notice with which we are concerned here.³

2. In the Further Notice, we proposed to make available seven channels in the 150-174 MHz range for use in remote control and telemetry systems.⁴ As in our earlier proceeding, these channels were to be allocated to the Local Government and to the same Industrial Radio Services group. In addition, we asked for suggestions from the parties as to any other narrow band frequencies they thought could be employed similarly. The objective here was to explore all possibilities for using any remaining bandages and "splinter" bandwidths in this very crowded part of the radio spectrum. Further, it had come to our attention that certain telemetry systems might require a wider bandwidth than could be used on the 7.5 kHz splinter frequencies; and comments on this were also requested.⁵

3. The comments and replies of interested parties have been filed.⁶ We have considered them, and our disposition of the various views and recommendations follows.

II

RECOMMENDATION OF THE PARTIES IN GENERAL

4. Our proposal to allocate the seven 152-158 MHz "splinter" frequencies for telemetry and remote control operations in the Local Government and Industrial Services group was supported, on major respects, by API, NABER, NAM, SIRSA,

³ Further Notice of Proposed Rulemaking, Docket No. 20149, 173 MHz Splinter Frequencies, 54 FCC 2d 618 (1975).

⁴ The seven channels referred to are: 152.25875 MHz; 152.85875 MHz; 154.45625 MHz; 154.46375 MHz; 154.47125 MHz; 154.47875 MHz; and 157.75125 MHz. See 173 MHz Splinter Frequencies, cited supra fn. 4, at pages 618-619.

⁵ See op. cit., supra fn. 6. The parties did not address themselves to the possible requirement for wider bandwidth channels (greater than 7.5 kHz) for telemetry operations. Accordingly, we will not explore this subject further at this time. However, recommendations of additional channels for "narrow-band" usages were made; and these proposals will be discussed in our opinion, below.

⁶ American Telephone and Telegraph Company (AT&T); GTE Service Corporation (GTE); Motorola, Inc.; Telecommunications Committee of the National Association of Manufacturers (NAM); Special Industrial Radio Service Association, Inc. (SIRSA); Central Committee on Telecommunications of the American Petroleum Institute (API); National Association of Radiotelephone Systems (NARS); Utilities Telecommunications Council (UTC); Federal Energy Administration (FEA). Reply comments were filed by: Telephone and Data Systems, Inc. (TDS); American Telephone and Telegraph Company; Motorola; Central Committee on Telecommunications of the American Petroleum Institute; Special Industrial Radio Service Association; Utilities Telecommunications Council; National Association of Business and Educational Radio, Inc. (NABER); National Association of Radiotelephone Systems; and GTE Service Corporation.

and UTC.⁷ However, use of three of these channels (those adjacent to allocations in the Part 21, Domestic Public Radio Services)⁸ was opposed to strongly by AT&T, GTE, NARS, and Motorola. FEA expressed the view that there was a need for additional frequencies for "load management" operations by power utilities, but it did not comment specifically on the particular frequencies proposed in the Further Notice. In addition, a number of parties expressed the need for more spectrum for non-voice use at 150 MHz and some urged allocation of frequencies at 450 MHz and 900 MHz for this purpose.⁹ UTC specifically recommended use of six "offset" channels in the 173-174 MHz range;¹⁰ and it also suggested seven additional VHF channels as ones which might possibly be employed in narrow-band telemetry operations.¹¹

III

DISCUSSION AND CONCLUSIONS

THE FREQUENCIES 154.45625, 154.46375, 154.47125 AND 154.47875 MHz

5. The frequency 154.45625 MHz (in the 154.4525-154.4600 MHz band) is presently allocated in the Local Government Radio Service for emergency call box service. See Sections 89.259(f) and (g) (1) and (2). As pointed out in the Further Notice, the channel is in use by a very limited number of licensees. Interest in using it for call boxes has been minimal for several years, and there are other frequencies available for call box operations. Except for UTC, there were no arguments against reallocation of the band for shared use for telemetry and remote control operations. UTC pointed out that this channel (154.45625 MHz) would only be 7.5 kHz removed from 154.46375 MHz, a frequency allocated in the Power Radio Service and used there in relatively high-powered systems for electricity "load shedding." See Sections

⁷ The reference, here, is to 152.25875, 152.85875, 154.45625, 154.46375, 154.47125, 154.47875, and 157.75125 MHz, the proposed allocation as set forth in our Further Notice. UTC did express opposition to "shared use" of 154.46375 MHz which, at the time, was available only to eligibles in the Power Radio Service.

⁸ These channels are: 152.25875, 152.85875, and 157.75125.

⁹ Since this proceeding was intended to deal with VHF bandedges and offset channels, the request concerning frequencies at the 450 and 900 MHz bands will not be disposed of here.

¹⁰ The six "offsets" proposed were 173.2375, 173.2625, 173.2875, 173.3125, 173.3375, and 173.3625. These frequencies are 12.5 kHz offset from 173.225, 173.275, 173.325 MHz, and 173.375 MHz, allocated for base/mobile operation in the Motion Picture and Relay Press Radio Service; and from 173.250, 173.300, and 173.350 MHz, allocated for base/mobile operation in the Power, Petroleum, and Forest Products Radio Services.

¹¹ The suggested channels were: 152.465, 152.495, 157.725, 158.115, 158.475, 158.715, and 161.625 MHz. This recommendation is discussed below.

91.254(b) (17), (18), and (19). In those circumstances, UTC suggested that the channel would be of little use due to the potential for interference from Power Radio Service operations. While we agree that operations on this frequency would not be compatible with operations on 154.46375 MHz in the same area, we feel that the frequency could be used effectively in many parts of the country in view of the narrow-band technical requirements on both frequencies and the requirement for frequency coordination. Accordingly 154.45625 MHz will be reallocated.¹²

6. The frequency 154.47875 MHz is in the band 154.4750-154.4825 MHz. It is presently unassigned; and there were no comments in opposition to its proposed allocation. However, both 154.45625 MHz (just discussed) and this channel, 154.47875 MHz, are only 11.25 kHz removed from regularly assigned base/mobile frequencies.¹³ Using present "off-the-shelf" equipment, from the standpoint of adjacent channel, base/mobile operations, the signals transmitted on the splinter channels must be treated on a par with co-channel interference potentials, and it is important that restrictions be imposed designed to keep potential interference to mobile voice systems to a minimum. To accomplish this, in addition to other antenna limitations now prescribed for these frequencies, we will limit stations operating in a fixed mode on the channels to a maximum ERP of 20 watts with antenna height restricted to 50 feet above ground. Mobile operations on these two frequencies will be limited to 2 watts ERP; and both mobile and fixed stations will be authorized only on a secondary basis to adjacent channel, base/mobile operations. Further, interservice coordination with agencies will be required. With these conditions, then, 154.47875 MHz is being reallocated as planned.

7. The frequency 154.46375 MHz (in the band 154.4600-154.4675 MHz) is presently allocated in the Power Radio Service primarily for assignment to multiple address fixed stations used for electricity "peak load shaving," or "shedding," or electricity load management. In areas 75 miles or more from the urban areas of 200,000 or more population, this frequency may also be assigned in the Power Radio Service for the type of remote control and telemetry we are concerned with here. In the Notice, we proposed to make it available in Local Government and in several Industrial Services for remote control and telemetry in the same remote areas (e.g. 75 miles from some urban centers). UTC opposed the proposal. It argued that load man-

agement operations (i.e. peak load shedding by power utilities are not confined to large urbanized areas so that use of that frequency for other purposes outside the Power Radio Service would not be practical. Further, UTC says, this channel fulfills a "high priority" need; and that our proposal comes at a time when the electric utility industry is making plans for more extensive programs for load management. In these circumstances, UTC concludes, that the availability of this channel should not be expanded as proposed.

8. We are aware of the fact that 154.46375 MHz is employed in the power field for high priority, load management functions and of the importance of such usage. Nevertheless, we believe the channel can be made available in rural areas on a shared but secondary basis in radio services in addition to Power (e.g. Local Government and the Industrial group). Thus, we would limit such assignments to areas outside a 120.7 km (75 miles) from the "centers"¹⁴ of urbanized areas of 200,000 or more population (U.S. Census of population, 1970).¹⁵ With this condition, and with coordination and the use of directional antennas and "tone-coded" transmission techniques, we believe shared use of the channel is feasible; and we are accordingly allocating it essentially as proposed.

9. The final channel in this group, 154.47125 MHz (in the band 154.4675-154.4750 MHz) is presently shared between the Petroleum and Special Industrial Radio Services, API and SIRSA state, generally, that sharing with eligibles in the other five services involved is feasible and, hence, concur in it. They do feel that interservice coordination should be required; but we intend this to be the case and appropriate rules for that purpose are being adopted. With this, the splinter channel 154.47125 MHz will be allocated as proposed.

10. In summary, the frequencies 154.45625, 154.46375, 154.47125, and 154.47875 MHz are allocated for shared use for remote control and telemetry operations, with the restrictions specified in the rules, in the Local Government and in the mentioned Industrial Services (Power, Petroleum, Forest Products, Special Industrial, Manufacturers, and Business for mobile only). We plan to assign the center frequency only and that will be required. Paging systems (including tone paging) or other voice emissions will not be authorized. With the technical standards prescribed in detail in the rules, we believe that these frequencies would be useful in many applications and would be effectively shared.

¹² Also as proposed, the few existing systems on this frequency will be "grandfathered."

¹³ The regularly assigned base/mobile frequencies are: 154.445 MHz, allocated in the Fire Radio Service (See Sections 89.359 (f) and (g)); and 154.490 MHz, allocated in the Special Industrial Radio Service (See Sections 91.504 (a) and (b)).

¹⁴ The "center" of urbanized areas are determined from the Appendix, page 226, of the U.S. Commerce publication, "Air Line Distances Between Cities in the United States."

¹⁵ The urbanized areas involved are listed at Appendix A to this Second Report and Order.

THE FREQUENCIES 152.25875, 152.85875,
AND 157.75175 MHz

11. The other three splinter frequencies proposed in the Notice are located within the 30 kHz bandedges between frequencies allocated in the Domestic Public Land Mobile Radio Service and frequencies allocated in the private land mobile radio services. In all three cases, each proposed frequency is 18.75 kHz removed from the domestic public adjacency, and 11.25 kHz from the private land mobile adjacency. Two of the three domestic public adjacencies, namely 152.240 MHz and 152.840 MHz, are used for one-way paging operations. The third, 157.770 MHz, is not a paging channel, but the other adjacency 157.740 MHz, 11.25 kHz removed, is a paging channel, 157.740 MHz, in the Business Radio Service. We asked for comments specifically on the interference potential of this proposal since the planned remote control and telemetry or load management systems would be interfaced with radio paging systems.

12. Comments filed by AT&T, NARS, GTE, and Motorola, Inc., urged that we not adopt this proposal because, it was argued, operation of control or telemetry stations on the above-mentioned splinter frequencies would cause serious interference to paging operations on the adjacencies. The basic reasons advanced relate to interference, particularly interference to paging operations. Motorola, a leading manufacturer of paging equipment, as well as AT&T stated that the selectivity (that is, the discrimination against adjacent channels signals) of a typical paging receiver is about 60 dB for 30 kHz separation, drops down to about 35 dB for 15 kHz, and to about 25 dB when the separation is only 11.25 kHz, as it would be the case with the Business paging channel 157.740 MHz. Accordingly, it argued that, unless the stations on the adjacent frequencies are co-located, there would be some portion of the paging service area in which the interfering signal would be stronger than the desired signal. Depending on the power used, AT&T suggests that the interference area could be from one to two and a half miles in radius around the interfering transmitter site, or even greater near the fringe area of the paging station's coverage. Even if a station on the splinter frequency were located up to more than one mile outside the service area of the paging station, it is claimed that interference would be caused inside the service area. This interference would be multiplied if more stations were to be authorized on the proposed splinter frequency.

13. Further, it is claimed, the selectivity of paging receivers now in the market is state-of-the-art, and cannot be significantly improved unless new equipment designs are developed and tested. New equipment designs would result in costlier equipment, and would not, they point out, be immediately helpful in view of the vast number of existing equipment now in the hands of the public.

14. We have considered those comments carefully and in light of the equipment in use today it appears that the interference potential of our proposal would be significant and the impact could be felt by a substantial number of radio users. In reaching this conclusion, we have also considered carefully the arguments of those who supported our proposal. But even the supporters of this proposal, namely UTC, API, SIRSA, and NAM, acknowledge its interference potential but argued that it could be overcome by close, interservice coordination. However, even if we were to assume that coordination would avoid most interference problems, we point out that there is no available mechanism for interservice coordination. There is no frequency coordination body, as such, for the Domestic Public Land Mobile Service and the requirement for frequency coordination in the Business Radio Service applies only to frequencies above 450 MHz. Thus, this possible method of avoiding interference problems is not available.¹⁴ We have also considered making these frequencies available on a secondary, non-interference basis. However, this approach also presents similar problems and, in view of the nature of the systems involved, interference, though serious, would be difficult to detect and identify and, when identified, adjustments would be disruptive and difficult to enforce. For all these reasons, we have concluded that the public interest would not be served by the adoption of this proposal at this time.

15. We have also considered the possibility suggested by UTC, that we utilize the frequencies 152.495, 158.115, and 158.475 MHz, which are also within the bandedges between Domestic Public and private land mobile radio allocations; the frequencies 152.465 and 157.725 MHz, situated between Taxicab and Business paging frequencies; and the frequency 161.625 MHz, which is a bandedge between Maritime and Broadcast Remote Pickup allocations. However, we have also concluded that use of these frequencies for the purposes of this proceeding would not be practically feasible. The frequencies 152.465 and 157.725 MHz are the subject of the rule making proceeding in Docket 20685 and their future use, if any, would be decided there. While it might be possible to make some use of the frequency 161.625 MHz, the fact that it is situated between Maritime and Remote Pickup allocations makes its usefulness for industrial telemetry doubtful. The Maritime and Remote Pickup Services are administered differently and are governed by rules and standards that are

¹⁴ In the private land mobile radio services, where the separation between assignable frequencies in the 150-162 MHz band is 15 kHz, the rules require a minimum geographic separation of 10 miles (7 in some cases) and close coordination if stations on adjacent frequencies are to be separated by more than 10 but less than 35 miles. Thus, as AT&T argued, use of these frequencies would place limits on future uses of the regularly assigned adjacent frequencies for domestic public land mobile purposes, a consequence not contemplated in this proceeding.

different from those applicable to the Public Safety and Industrial Radio Services; and this would make it difficult to properly coordinate the use of the channel and to have easy access to records sufficient to eliminate possible conflicts which could arise. We feel that the problem that would be generated would negate the value of the allocation and, accordingly, we have decided not to reallocate that frequency 161.625 MHz.

16. The potential for interference discussed in paragraphs 12-14, above, would exist if the frequencies 152.495, 158.115, and 158.475 MHz were made available. The frequencies 152.495 and 158.475 MHz are 15 KHz removed from the frequencies 152.480 and 158.460 MHz, respectively, which are allocated for paging service in the Business Radio Service and for two-way base/mobile service in the Special Industrial and in the Forest Products Radio Services in rural areas. Also, the frequency 158.100 MHz is primarily a paging frequency in the Domestic Public Land Mobile Service. The selectivity limitations of today's paging receivers and the heavy use of the frequencies for Business paging in urban areas, the extensive use of these same adjacencies in rural areas by Special Industrial and Forest Products licensees, as well as the potential for interference to Domestic Public paging operations on the other adjacencies dictate, in our view, that we not adopt UTC's proposal. However, 15 kHz separation, even where paging receivers are not involved, require geographic separation and close interservice coordination, the mechanism for which is not now available.

17. For all of these reasons, we have concluded that further use of the bandedge frequencies mentioned is not feasible for the purposes of this proceeding at the present time.

THE OFFSET FREQUENCIES IN THE 173 MHz BAND

18. On the other hand, we agree with UTC that some use can be made of the frequency spectrum between the assignable frequencies allocated for private land mobile radio systems in the 173 MHz band. In that band, there are seven assignable frequencies for private systems, four of which are allocated for shared use in the Relay Press and Motion Picture Radio Services and the remaining three are allocated for shared use in the Power, Petroleum, and Forest Products Radio Services. These frequencies are spaced at 25 KHz. UTC proposed that 6 kHz splinters be interspersed, centered at 12.5 kHz from the regularly assigned frequencies, and be made available in the Power Radio Service, principally for multiple address, load management operations with 300 watt output power. While, as we have said, we think that some use of these offset "splinters" can be made, 300-watt omni-directional systems suggested by UTC would not be compatible with land mobile operations

on the regularly assignable frequencies.¹⁷ But with suitable restrictions, comparable to those applicable to the use of "off-sets" in the Business Radio Service allocations in the 450-470 MHz band, these frequencies may be made available. However, the limited use possible also dictates that these should also be made available in Local Government and in the Industrial group of services for environmental monitoring, remote control and for telemetry, in addition to the Power Radio Service.

19. As to the restrictions, use would be limited to fixed nonvoice operation; paging will not be permitted; and all fixed station operation on these channels will be limited to a maximum ERP of 20 watts, with antenna height above ground not to exceed 50 feet. Fixed stations will be required to have directional antennas with a front-to-back ratio of at least 20 dB. However, provisions have been made for authorizing the use of omni-directional antennas with unity gain when a need is shown to transmit to at least three receiving locations separated by a total of 160 degrees in azimuth. Narrow band emission commensurate with the existing 173 MHz splinter operations will be required. In particular, for FM transmitters, the sum of the highest modulating frequency and the amount of frequency deviation may not exceed 2.8 kHz. For AM transmitters, the highest modulating frequency may not exceed 2000 Hz. The carrier frequency must be maintained with 0.0005 percent of the center of the frequency band, and the authorized bandwidth may not exceed 6 KHz. Finally, interservice coordination for co-channel and adjacent channel purposes will be required, and operations on the off-set splinters will be authorized on a secondary basis to adjacent channel users.

SUMMARY

20. In summary, we have decided to allocate four channels in the 154 MHz range for remote control and telemetry operations; and six channels at 173 MHz for use in similar types of systems. All of the frequencies are being made available on a limited and conditioned basis

¹⁷ A 12.5 KHz separation provides adjacent channel attenuation only on the order of 20 dB to land mobile operations. With high power, gain antennas, and substantial antenna height, the area of possible interference to 12.5 KHz adjacent channel mobile operations would be quite large. For instance, a 300 watt (ERP) transmitted signal with unity gain antenna (omnidirectional) and with an antenna height of only 200 feet (AAT) would provide a calculated 20 dBu signal to a 30-foot receiving antenna at a distance of approximately 48 miles from the transmitter based on F (50,50) propagation curves. This same transmitter would provide a 34 dBu signal to a 30-foot receiving antenna at distances up to approximately 38 miles using F (50,10) curves. This 34 dBu signal level would be equivalent to a 14 dBu signal level 12.5 KHz removed which just maintains a desired-to-undesired signal ratio of 6 dB. Since the 173 MHz band in question is primarily a base/mobile band, it is clear that restrictions must be imposed to preserve the basic land mobile priority of the band.

with more stringent requirements applicable to some of the channels in order to avoid possible interference to adjacent channel base/mobile operations. Overall, in this rulemaking, we have carefully examined what we feel are all feasible potentials for the present use of band-edge frequencies and off-sets in the 150-174 VHF band. While there may be some additional bandedge channels or off-sets that might be used in certain remote areas under some conditions, we do not believe that such usage should be permitted on a regular basis and we are satisfied at least for the present, that additional VHF channels are not reasonably available for remote control and telemetry purpose. Accordingly, we feel that this proceeding should be terminated insofar as reallocation of additional bandedge channels in this part of the spectrum are concerned.¹⁸ The further requirements for remote control and telemetry, which the comments reflect exist, will have to be satisfied using the frequencies presently available for these purposes and will be further considered in other pending proceedings.

21. One further matter, UTC in its comments suggested two minor editorial changes. The first, involves deletion of the term "load shedding" and "peak shaving" and using the term "load management" in their place. (See Section 91.254(b) (17).) We agree with the clarification asked. We also agree with UTC to clarify Section 91.254(17) to make clear that multiple address directional as well as omni-directional antennas may be employed. We point out, however, that the possible antenna gain is much greater for a directional antenna than for an omni-directional antenna, and, therefore, licensees should take this gain factor into account when designing a system and power values.

22. Also, as we suggested in the Notice, full and complete cooperation among the various industry frequency advisory committees which must coordinate, on an interservice basis the selection of these frequencies. Thus, it seems to us that responses to coordination requests should be made as promptly as possible, and that the absence of a reply with specific objections within a reasonable period of time, such as three weeks, may be taken to be an affirmative response.

23. Finally, we are taking this opportunity to change our current practice for licensing VHF splinter frequencies. Under our present procedure a separate application must be submitted for each fixed transmitter contemplated. In the past, this has not been a problem because the number of transmitters to be operated by individual entities was small. Hence, an applicant was required

¹⁸Our decision here has been based in large measure on the limitations of radio receivers, particularly paging receivers, now in use in the 150-174 MHz band. However, we expect the new generations of receivers to have significantly improved selectivity and stability characteristics which would allow us to revisit the bandedges and make some use of them at that time.

to prepare a few separate applications. Recently, however, the number of transmitters requested by a single entity has increased dramatically. According to our records, requests now routinely involve more than 10 and sometimes approach 100 or more units. Following the present procedure in licensing these new large systems, in our opinion would be burdensome to both the applicant and the Commission without any apparent value to either. Therefore, we are initiating the following new procedure for licensing fixed operations on the VHF splinter and offset frequencies. Only one application per system would be filed (for transmitters to be considered in a system, they must interact or be related to each other in some way). While more than one splinter frequency is permitted on each license, only one call sign will be assigned. Attached to the license application, on a separate sheet, will be a list of the location by geographical coordinates, power (ERP), and antenna height (above ground) and direction of each transmitter and associated antenna in the system. If after a license is granted, and the licensee wishes to add additional transmitters to the system, the license

§ 2.106 Table of frequency allocations.

Band (Megahertz)	Service	Class of station(s)	Frequency (Megahertz)	Nature of service; nature of stations
7	8	9	10	11
153.7325 to 154.4825	Land mobile.	Base land mobile fixed..	154.2	Industrial, public safety (N G26) (N G57) (Earth telecommand).
154.4825 to 154.6375	do	Base land mobile.		Industrial.

PART 89—PUBLIC SAFETY RADIO SERVICES

II. Part 89 of the Commission's Rules is amended as follows:

1. Section 89.259(f) Table and Paragraph (g) are amended as follows:

§ 89.259 Frequencies available to the local government radio service.

(f)

Frequency or band	Class of station(s)	Limitations
<i>MHz</i>		
154.115	Base and mobile	10
154.45625	Fixed and mobile	15,16,17,19
154.46375	do	13,15,16,17,18
154.47125	do	13,15,16,17
154.47875	do	15,16,17,19
154.965	Base and mobile	
173.210	Fixed and mobile	13,14,16,17
173.2375	do	15,16,17,19
173.2625	do	15,16,17,19
173.2875	do	15,16,17,19
173.3125	do	15,16,17,19
173.3375	do	15,16,17,19
173.3625	do	15,16,17,19
173.3900	do	13,14,16,17

(g)
 (1) reserved
 (2) reserved

could be modified with just a listing similar to that submitted with the original application, of all transmitters, attached to the application for modification.

24. In view of the foregoing the Commission concludes that the public interest will be served by adopting the rule amendments set forth below. Accordingly, it is ordered, That pursuant to authority contained in Section 4(i) and 303 of the Communications Act of 1934, as amended; that Parts 2, 89, and 91 of the Commission's Rules and Regulations are amended effective September 6, 1977, as shown below.

(Secs. 4, 5, 303, 48 Stat., as amended, 1066, 1068, 1082; 47 U.S.C. 154, 155, 303).

FEDERAL COMMUNICATIONS COMMISSION,
 VINCENT J. MULLINS,
 Secretary.

PART 2—FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS; GENERAL RULES AND REGULATIONS

I. Part 2 of Chapter I of Title 47 of the Code of Federal Regulations, § 2.106 is amended as follows:

(13) The maximum power output of the transmitter may not exceed 50 watts for fixed stations and 1 watt for mobile stations. A1, A2, A9, F1, F2, or F9 emission may be authorized.

(16) This frequency is available on a shared basis with the Power, Petroleum, Forest Products, Special Industrial, Business and Manufacturers Radio Services for remote control and telemetry operations. Evidence of interservice coordination is required.

(18) Use of this frequency is limited to stations located at least 120.7 km (75 miles) from the center of any urbanized area of 200,000 or more population (U.S. Census of Population 1970). Operation is on a secondary basis to that in the Power Radio Service.

(19) The maximum effective radiated power (ERP) may not exceed 20 watts for fixed stations and 2 watts for mobile stations. The height of the antenna system may not exceed 15.24 meters (50 feet) above ground. All such operation is on a secondary basis to adjacent channel land mobile operations.

PART 91—INDUSTRIAL RADIO SERVICES

III. Part 91 of the Commission's Rules is amended as follows:

1. Section 91.254(a) Table and Paragraph (b) are amended as follows:

§ 91.254 Frequencies available.

(a) * * *

POWER RADIO SERVICE FREQUENCY TABLE

Frequency or band	Class of station(s)	Limitations
MHz		
153.725	Base or mobile	
154.45625	Fixed or mobile	16,18,22,23
154.46375	do	17,18,19,23
154.47125	do	18,20,22,23
154.47875	do	16,18,22,23
158.130	Base or mobile	
MHz		
173.2100	Fixed or mobile	20,21,22,23
173.2375	do	16,18,22,23
173.250	Base or mobile	12
173.2625	Fixed or mobile	16,18,22,23
173.2875	do	16,18,22,23
173.300	Base or mobile	12
173.3125	Fixed or mobile	16,18,22,23
173.3375	do	16,18,22,23
173.350	Base or mobile	12
173.3625	Fixed or mobile	16,18,22,23
173.3900	do	20,21,22,23

(b) * * *

(16) The maximum effective radiated power (ERP) may not exceed 20 watts for fixed stations and 2 watts for mobile stations. The height of the antenna system may not exceed 15.24 meters (50 feet) above ground. All such operation is on a secondary basis to adjacent channel land mobile operations.

(17) This frequency is available primarily for assignment to multiple address fixed stations employing either omni-directional antennas or multiple address directional antennas used for power utility multiple address load management applications and to mobile stations used for the remote control of objects and devices. The maximum power that may be authorized to fixed stations is 300 watts output and maximum power that may be authorized for mobile stations is 1 watt output. A1, A2, A9, F1, F2, F9 emission may be authorized.

(19) This frequency may also be assigned to operational fixed stations employing directional antenna systems (front-to-back ratio of 20 db) when such stations are located at least 120.7 km (75 miles) from the center of any urbanized area of 200,000 or more population (Census of Population 1960). The maximum power output of the transmitter for such fixed stations may not exceed 50 watts.

(20) The maximum output power of the transmitter may not exceed 50 watts for fixed stations and 1 watt for mobiles.

A1, A2, A9, F1, F2, or F9 emission may be authorized.

(23) This frequency is available on a shared basis with the Local Government, Petroleum, Forest Products, Special Industrial, Business and Manufacturers Radio Services for remote control and telemetry operations. Evidence of interservice coordination is required.

2. Section 91.304(a) Table and Paragraph (b) are amended as follows:

§ 91.304 Frequencies available.

(a) * * *

PETROLEUM RADIO SERVICE FREQUENCY TABLE

Frequency or band	Class of station(s)	Limitations
MHz		
153.680	Base or mobile	9,11
154.45625	Fixed or mobile	20,24,25,26
154.46375	do	21,22,24,25
154.47125	do	25,26
154.47875	do	21,24,25,26
154.48625	do	20,24,25,26
154.49375	do	21,22,24,25
154.50125	do	25,26
154.50875	do	21,24,25,26
154.51625	do	20,24,25,26
154.52375	do	21,22,24,25
154.53125	do	25,26
154.53875	do	21,24,25,26
154.54625	do	20,24,25,26
154.55375	do	21,22,24,25
154.56125	do	25,26
154.56875	do	21,24,25,26
154.57625	do	20,24,25,26
154.58375	do	21,22,24,25
154.59125	do	25,26
154.59875	do	21,24,25,26
154.60625	do	20,24,25,26
154.61375	do	21,22,24,25
154.62125	do	25,26
154.62875	do	21,24,25,26
154.63625	do	20,24,25,26
154.64375	do	21,22,24,25
154.65125	do	25,26
154.65875	do	21,24,25,26
154.66625	do	20,24,25,26
154.67375	do	21,22,24,25
154.68125	do	25,26
154.68875	do	21,24,25,26
154.69625	do	20,24,25,26
154.70375	do	21,22,24,25
154.71125	do	25,26
154.71875	do	21,24,25,26
154.72625	do	20,24,25,26
154.73375	do	21,22,24,25
154.74125	do	25,26
154.74875	do	21,24,25,26
154.75625	do	20,24,25,26
154.76375	do	21,22,24,25
154.77125	do	25,26
154.77875	do	21,24,25,26
154.78625	do	20,24,25,26
154.79375	do	21,22,24,25
154.80125	do	25,26
154.80875	do	21,24,25,26
154.81625	do	20,24,25,26
154.82375	do	21,22,24,25
154.83125	do	25,26
154.83875	do	21,24,25,26
154.84625	do	20,24,25,26
154.85375	do	21,22,24,25
154.86125	do	25,26
154.86875	do	21,24,25,26
154.87625	do	20,24,25,26
154.88375	do	21,22,24,25
154.89125	do	25,26
154.89875	do	21,24,25,26
154.90625	do	20,24,25,26
154.91375	do	21,22,24,25
154.92125	do	25,26
154.92875	do	21,24,25,26
154.93625	do	20,24,25,26
154.94375	do	21,22,24,25
154.95125	do	25,26
154.95875	do	21,24,25,26
154.96625	do	20,24,25,26
154.97375	do	21,22,24,25
154.98125	do	25,26
154.98875	do	21,24,25,26
154.99625	do	20,24,25,26
155.00375	do	21,22,24,25
155.01125	do	25,26
155.01875	do	21,24,25,26
155.02625	do	20,24,25,26
155.03375	do	21,22,24,25
155.04125	do	25,26
155.04875	do	21,24,25,26
155.05625	do	20,24,25,26
155.06375	do	21,22,24,25
155.07125	do	25,26
155.07875	do	21,24,25,26
155.08625	do	20,24,25,26
155.09375	do	21,22,24,25
155.10125	do	25,26
155.10875	do	21,24,25,26
155.11625	do	20,24,25,26
155.12375	do	21,22,24,25
155.13125	do	25,26
155.13875	do	21,24,25,26
155.14625	do	20,24,25,26
155.15375	do	21,22,24,25
155.16125	do	25,26
155.16875	do	21,24,25,26
155.17625	do	20,24,25,26
155.18375	do	21,22,24,25
155.19125	do	25,26
155.19875	do	21,24,25,26
155.20625	do	20,24,25,26
155.21375	do	21,22,24,25
155.22125	do	25,26
155.22875	do	21,24,25,26
155.23625	do	20,24,25,26
155.24375	do	21,22,24,25
155.25125	do	25,26
155.25875	do	21,24,25,26
155.26625	do	20,24,25,26
155.27375	do	21,22,24,25
155.28125	do	25,26
155.28875	do	21,24,25,26
155.29625	do	20,24,25,26
155.30375	do	21,22,24,25
155.31125	do	25,26
155.31875	do	21,24,25,26
155.32625	do	20,24,25,26
155.33375	do	21,22,24,25
155.34125	do	25,26
155.34875	do	21,24,25,26
155.35625	do	20,24,25,26
155.36375	do	21,22,24,25
155.37125	do	25,26
155.37875	do	21,24,25,26
155.38625	do	20,24,25,26
155.39375	do	21,22,24,25
155.40125	do	25,26
155.40875	do	21,24,25,26
155.41625	do	20,24,25,26
155.42375	do	21,22,24,25
155.43125	do	25,26
155.43875	do	21,24,25,26
155.44625	do	20,24,25,26
155.45375	do	21,22,24,25
155.46125	do	25,26
155.46875	do	21,24,25,26
155.47625	do	20,24,25,26
155.48375	do	21,22,24,25
155.49125	do	25,26
155.49875	do	21,24,25,26
155.50625	do	20,24,25,26
155.51375	do	21,22,24,25
155.52125	do	25,26
155.52875	do	21,24,25,26
155.53625	do	20,24,25,26
155.54375	do	21,22,24,25
155.55125	do	25,26
155.55875	do	21,24,25,26
155.56625	do	20,24,25,26
155.57375	do	21,22,24,25
155.58125	do	25,26
155.58875	do	21,24,25,26
155.59625	do	20,24,25,26
155.60375	do	21,22,24,25
155.61125	do	25,26
155.61875	do	21,24,25,26
155.62625	do	20,24,25,26
155.63375	do	21,22,24,25
155.64125	do	25,26
155.64875	do	21,24,25,26
155.65625	do	20,24,25,26
155.66375	do	21,22,24,25
155.67125	do	25,26
155.67875	do	21,24,25,26
155.68625	do	20,24,25,26
155.69375	do	21,22,24,25
155.70125	do	25,26
155.70875	do	21,24,25,26
155.71625	do	20,24,25,26
155.72375	do	21,22,24,25
155.73125	do	25,26
155.73875	do	21,24,25,26
155.74625	do	20,24,25,26
155.75375	do	21,22,24,25
155.76125	do	25,26
155.76875	do	21,24,25,26
155.77625	do	20,24,25,26
155.78375	do	21,22,24,25
155.79125	do	25,26
155.79875	do	21,24,25,26
155.80625	do	20,24,25,26
155.81375	do	21,22,24,25
155.82125	do	25,26
155.82875	do	21,24,25,26
155.83625	do	20,24,25,26
155.84375	do	21,22,24,25
155.85125	do	25,26
155.85875	do	21,24,25,26
155.86625	do	20,24,25,26
155.87375	do	21,22,24,25
155.88125	do	25,26
155.88875	do	21,24,25,26
155.89625	do	20,24,25,26
155.90375	do	21,22,24,25
155.91125	do	25,26
155.91875	do	21,24,25,26
155.92625	do	20,24,25,26
155.93375	do	21,22,24,25
155.94125	do	25,26
155.94875	do	21,24,25,26
155.95625	do	20,24,25,26
155.96375	do	21,22,24,25
155.97125	do	25,26
155.97875	do	21,24,25,26
155.98625	do	20,24,25,26
155.99375	do	21,22,24,25
156.00125	do	25,26
156.00875	do	21,24,25,26
156.01625	do	20,24,25,26
156.02375	do	21,22,24,25
156.03125	do	25,26
156.03875	do	21,24,25,26
156.04625	do	20,24,25,26
156.05375	do	21,22,24,25
156.06125	do	25,26
156.06875	do	21,24,25,26
156.07625	do	20,24,25,26
156.08375	do	21,22,24,25
156.09125	do	25,26
156.09875	do	21,24,25,26
156.10625	do	20,24,25,26
156.11375	do	21,22,24,25
156.12125	do	25,26
156.12875	do	21,24,25,26
156.13625	do	20,24,25,26
156.14375	do	21,22,24,25
156.15125	do	25,26
156.15875	do	21,24,25,26
156.16625	do	20,24,25,26
156.17375	do	21,22,24,25
156.18125	do	25,26
156.18875	do	

SPECIAL INDUSTRIAL RADIO SERVICE FREQUENCY TABLE

Frequency or band	Class of station(s)	General reference	Limitations
<i>MHz</i>			
153.035	Base or mobile	Permanent use	9
154.45625	Fixed or mobile	do	18,21,24,25
154.46375	do	do	20,21,23,24,25
154.47125	do	do	21,23,24,25
154.47875	do	do	18,21,24,25
154.49	Base or mobile	do	11
* * *			
173.210	Fixed or mobile	Permanent use	22,23,24,25
173.2375	do	do	18,21,24,25
173.2625	do	do	18,21,24,25
173.2875	do	do	18,21,24,25
173.3125	do	do	18,21,24,25
173.3375	do	do	18,21,24,25
173.3625	do	do	18,21,24,25
173.3900	do	do	22,23,24,25

(18) The maximum effective radiated power (ERP) may not exceed 20 watts for fixed stations and 2 watts for mobile stations. The height of the antenna system may not exceed 15.24 meters (50 feet) above ground. All such operation is on a secondary basis to adjacent channel land mobile operations.

(20) Use of this frequency is limited to stations located at least 120.7 km (75 miles) from the center of any urbanized area of 200,000 or more population (U.S. Census of Population, 1970). Operation is on a secondary basis to that in the Power Radio Service.

(23) The maximum output power of the transmitter may not exceed 50 watts for fixed stations and 1 watt for mobile stations. A1, A2, A9, F1, F2, or F9 emission may be authorized.

(25) This frequency is available on a shared basis with the Local Government, Power, Petroleum, Forest Products, Business, and Manufacturers Radio Services for remote control and telemetry operations. Evidence of interservice coordination is required.

5. Section 91.554(a) Table and Paragraph (b) are amended as follows:
§ 91.554 Frequencies available.

(a) * * *

BUSINESS RADIO SERVICE FREQUENCY TABLE

Frequency or band	Class of station(s)	General reference	Limitations
<i>MHz</i>			
152.480	Base	1-way paging	25,28
154.45625	Mobile	Permanent use	29,30,52
154.46375	do	do	29,30,51,53
154.47125	do	do	29,30,51
154.47875	do	do	29,30,52
154.515	Base or mobile	do	10,11
173.2100	Mobile	do	29,31
173.2375	do	do	29,30,52
173.2625	do	do	29,30,52
173.2875	do	do	29,30,52
173.3125	do	do	29,30,52
173.3375	do	do	29,30,52
173.3625	do	do	29,30,52
173.3900	do	do	29,31

(29) This frequency is available on a shared basis with the Local Government, Power, Petroleum, Forest Products, Special Industrial, and Manufacturers Radio Services for remote control and telemetry operations.

(51) The maximum output power of the transmitter may not exceed 1 watt. A1, A2, A9, F1, F2 or F9 emission may be authorized.

(52) The maximum effective radiated power (ERP) may not exceed two watts. All operation is on a secondary basis to adjacent channel land mobile operations. All stations will be licensed as a mobile, however, such stations may be used to

provide the operational functions of a base or fixed station. When performing such functions, the height of the antenna system may not exceed 15.24 meters (50 feet) above ground.

(53) Use of this frequency is limited to stations located at least 120.7 km (75 miles) from the center of any urbanized area of 200,000 or more population (U.S. Census of Population 1970). Operation is on a secondary basis to that in the Power Radio Service.

6. Section 91.730(a) Table and Paragraph (b) are amended as follows:
§ 91.730 Frequencies available

(a) * * *

MANUFACTURERS RADIO SERVICE FREQUENCY TABLE

Frequency or band	Class of station(s)	Limitations
<i>MHz</i>		
153.395	Base or mobile	1
154.45625	Fixed or mobile	23,26, 27,28
154.46375	do	23,24,26, 27,29
154.47125	do	23,24, 26,27
154.47875	do	23,26, 27,28
158.280	Base or mobile	1
173.2100	Fixed or mobile	24,25, 26,27
173.2375	do	23,26, 27,29
173.2625	do	23,26, 27,29
173.2875	do	23,26, 27,28
173.3125	do	23,26, 27,29
173.3375	do	23,26, 27,28
173.3625	do	23,26, 27,28
173.3900	do	24,25, 26,27

(24) The maximum output power of the transmitter may not exceed 50 watts for fixed stations and 1 watt for mobile stations. A1, A2, A9, F1, F2, or F9 emission may be authorized.

(26) This frequency is available on a shared basis with the Local Government, Power, Petroleum, Forest Products, Special Industrial and Business Radio Services for remote control and telemetry operations. Evidence of interservice coordination is required.

(28) The maximum effective radiated power (ERP) may not exceed 20 watts for fixed stations and 2 watts for mobile stations and the height of the antenna system may not exceed 15.24 meters (50 feet) above ground. All such operation is on a secondary basis to adjacent channel land mobile operations.

(29) Use of this frequency is limited to stations located at least 120.7 km (75 miles) from the center of any urbanized area of 200,000 or more population (U.S. Census of Population, 1970). Operation is on a secondary basis to that in the Power Radio Service.

APPENDIX A.—Urbanized areas protected

Rank	Urbanized area
1	New York, N.Y.—northeastern New Jersey.
2	Los Angeles-Long Beach, Calif.
3	Chicago, Ill.—northwestern Indiana.
4	Philadelphia, Pa.—New Jersey.
5	Detroit, Mich.
6	San Francisco-Oakland, Calif.
7	Boston, Mass.
8	Washington, D.C.—Maryland, Virginia.
9	Cleveland, Ohio.
10	St. Louis, Mo.—Illinois.
11	Pittsburgh, Pa.
12	Minneapolis-St. Paul, Minn.
13	Houston, Tex.
14	Baltimore, Md.
15	Dallas, Tex.
16	Milwaukee, Wis.

17 Seattle-Everett, Wash.
 18 Miami, Fla.
 19 San Diego, Calif.
 20 Atlanta, Ga.
 21 Cincinnati, Ohio-Kentucky.
 22 Kansas City, Mo.-Kansas.
 23 Buffalo, N.Y.
 24 Denver, Colo.
 25 San Jose, Calif.
 26 New Orleans, La.
 27 Phoenix, Ariz.
 28 Portland, Oreg.-Washington.
 29 Indianapolis, Ind.
 30 Providence-Pawtucket-Warwick, R.I.-
 Massachusetts.
 31 Columbus, Ohio.
 32 San Antonio, Tex.
 33 Louisville, Ky.-Indiana.
 34 Dayton, Ohio.
 35 Fort Worth, Tex.
 36 Norfolk-Portsmouth, Va.
 37 Memphis, Tenn.-Mississippi.
 38 Sacramento, Calif.
 39 Fort Lauderdale-Hollywood, Fla.
 40 Rochester, N.Y.
 41 San Bernardino-Riverside, Calif.
 42 Oklahoma City, Okla.
 43 Birmingham, Ala.
 44 Akron, Ohio.
 45 Jacksonville, Fla.
 46 Springfield-Chicopee-Holyoke, Mass.-
 Connecticut.
 47 St. Petersburg, Fla.
 48 Omaha, Nebr.-Iowa.
 49 Toledo, Ohio-Michigan.
 50 Albany-Schenectady-Troy, N.Y.
 51 Salt Lake City, Utah.
 52 Hartford, Conn.
 53 Nashville-Davidson, Tenn.
 54 Honolulu, Hawaii.
 55 Richmond, Va.
 56 Bridgeport, Conn.
 57 Youngstown-Warren, Ohio.
 58 Syracuse, N.Y.
 59 Tulsa, Okla.
 60 Wilmington, Del.-New Jersey.
 61 Tampa, Fla.
 62 Allentown-Bethlehem-Easton, Pa.-
 New Jersey.
 63 Grand Rapids, Mich.
 64 New Haven, Conn.
 65 El Paso, Tex.
 66 Tacoma, Wash.
 67 Flint, Mich.
 68 Orlando, Fla.
 69 Wichita, Kans.
 70 Albuquerque, N. Mex.
 71 Tucson, Ariz.
 72 South Bend, Ind.-Mich.
 73 West Palm Beach, Fla.
 74 Charlotte, N.C.
 75 Trenton, N.J.-Pa.
 76 Newport News-Hampton, Va.
 77 Davenport-Rock Island-Moline, Iowa-
 Ill.
 78 Austin, Tex.
 79 Fresno, Calif.
 80 Mobile, Ala.
 81 Des Moines, Iowa.
 82 Baton Rouge, La.
 83 Worcester, Mass.
 84 Peoria, Ill.
 85 Oxnard - Ventura - Thousand Oaks,
 Calif.
 86 Canton, Ohio.
 87 Columbia, S.C.
 88 Harrisburg, Pa.
 89 Las Vegas, Nev.
 90 Shreveport, La.
 91 Aurora-Elgin, Ill.
 92 Spokane, Wash.
 93 Lansing, Mich.
 94 Charleston, S.C.
 95 Fort Wayne, Ind.
 96 Chattanooga, Tenn.-Ga.
 97 Wilkes-Barre, Pa.

98 Little Rock-North Little Rock, Ark.
 99 Corpus Christi, Tex.
 100 Columbus, Ga.-Ala.
 101 Rockford, Ill.
 102 Madison, Wis.
 103 Colorado Springs, Colo.
 104 Scranton, Pa.
 105 Lawrence-Haverhill, Mass.-N.H.

[FR Doc. 77-23956 Filed 8-19-77; 8:45 am]

Title 49—Transportation

CHAPTER I—MATERIALS TRANSPORTATION BUREAU, DEPARTMENT OF TRANSPORTATION

[Docket No. HM-139; Amdt. Nos. 173-107, 178-43]

PART 173—SHIPPERS—GENERAL REQUIREMENTS FOR SHIPMENTS AND PACKAGINGS

PART 178—SHIPPING CONTAINER SPECIFICATIONS

Conversion of Individual Exemptions to Regulations of General Applicability

AGENCY: Materials Transportation Bureau, D.O.T.

ACTION: Final rule.

SUMMARY: This action is being taken to incorporate into the Department's Hazardous Materials Regulations a number of changes based on the data and analysis supplied in selected exemption applications, or from existing special permits and exemptions. The need for this action has been created by the public demand to make available new packaging and shipping alternatives that have proven themselves safe under the Department's special permit and exemption programs. The intended effect of these amendments is to provide wider access to the benefits of transportation innovations recognized and shown to be effective and safe.

EFFECTIVE DATE: August 22, 1977.

FOR FURTHER INFORMATION CONTACT:

Alan I. Roberts, Director, Office of Hazardous Materials Operations, 2100 2nd Street, SW., Washington, D.C. 20590 202-426-0656.

SUPPLEMENTARY INFORMATION: On April 7, 1977, the Materials Transportation Bureau (MTB) published a Notice of Proposed Rule Making, Docket HM-139; Notice 77-3 (42 FR 18409) which proposed these amendments. The background and the basis for incorporating these exemptions into the regulations were discussed in that notice. Interested persons were invited to give their views prior to the closing date of May 5, 1977. The primary drafters of this document are Darrell L. Raines and John C. Allen of the Office of Hazardous Materials Operations, Exemptions Branch, and George W. Tenley of the Assistant General Counsel for Materials Transportation Law.

Several changes were made in response to public comments received by the Bureau. Notice 77-3 proposed to add a par-

agraph (b) (11) to § 173.119 to authorize DOT Specification 12P fiberboard boxes with inside 2U polyethylene containers for flammable liquids n.o.s., with flash points above 20° F. Several commenters pointed out that the 12P/2U composite packaging is already authorized under § 173.119(m) (8) for flammable liquids, regardless of flash point, which have a secondary hazard. It is argued that this packaging should also be authorized for flammable liquid n.o.s. commodities which have no secondary hazard classification but have flash points below 20° F. The Bureau agrees and consequently the 12P/2U packaging is added as a new paragraph § 173.119 (a) (27) instead of § 173.119(b) (11).

Several objections were received concerning the addition of the DOT-56 portable tank as an authorized container for magnesium powder in § 173.220(b). One commenter suggests the inclusion of other safety features that are now contained in the exemption. Upon further evaluation, the Bureau has decided to withdraw the proposed amendment to § 173.220(b) until further experience is gained with the portable tanks under exemption.

A new sentence is added at the end of the proposed change to § 173.276(a) (9) which authorizes hydrazine in DOT Specification 12B fiberboard boxes with an inside Specification 2E polyethylene container. The new sentence restricts this packaging to hydrazine solution only. This change is based on a comment received from the holder of DOT-SP 6561, the permit upon which the rule change is based.

The Bureau does not agree with the views of a commenter on the rule change to § 178.33a-2(b) which increases the maximum capacity of the DOT Specification 2Q container from 50 cubic inches to 55 cubic inches. The commenter suggested that the maximum capacity authorized for both the 2P and 2Q containers be increased to 62 cubic inches or approximately one liter to forestall future requests for capacity increases. It was also suggested that the criteria for qualifying containers for limited quantities for compressed gases in § 173.306 (a) (3) (i) and (b) (1) and for ORM-D commodities in § 173.1200(a) (8) (i) (A) be increased to 62 cubic inches. These suggestions go far beyond the proposal in Notice 77-3 and the Bureau has no experience through its exemption and special permit program to warrant making such changes under Docket HM-139 at this time.

The only other change in the proposals contained in Notice 77-3 concerns the redesignation of the rule change to § 173.276 to incorporate the DOT-34 container as an authorized container for hydrazine solution based upon DOT-SP 6561; Notice 77-3 identified the new paragraph to § 173.276 as (a) (9). However, the DOT-34 will be added as paragraph (a) (10) since another rule change to authorize the 12B/2E composite packaging has been added as § 173.276(a) (9).

Analysis of these amendments and comments thereon indicate that the costs of regulatory enforcement will not be significantly affected, nor will additional costs be imposed on the private sector, consumers, or Federal, State, or local governments, since these amendments will authorize the general use of shipping alternatives previously available to only a few users under exemptions. The safety record or analysis of shipments under the exemptions, identified in Notice 77-3, demonstrate that significant environmental impacts will not result from any of these amendments.

Since these amendments are relaxations of existing rules, and place no additional burden on any person, they are being made effective in less than 30 days after publication in the FEDERAL REGISTER.

In consideration of the foregoing, 49 CFR Parts 173 and 178, are amended as follows:

1. In § 173.66 paragraphs (c), (d) and (d) (1) are revised to read as follows:

§ 173.66 **Blasting caps, blasting caps with safety fuse, blasting caps with metal clad mild detonating fuse, and electric blasting caps.**

(c) Blasting caps containing not more than 50 grains of explosive composition each must be placed in strong inside containers, in which they fit snugly. When caps are loaded vertically in inside metal containers, they must be covered by suitable elastic material placed over the caps. Not more than 100 such blasting caps may be packed in a single container. All inside containers, except polyethylene plastic bags not subject to static generation, must then be packed snugly in cartons or wrapping made of paper or pasteboard.

(d) Not more than 5000 blasting caps, containing not more than 50 grains of explosive composition each, packed in inside containers as prescribed in paragraph (c) of this section, must be packed in outside containers complying with the following specifications:

(1) Specification 14, 15A or 16A (§178.165, 178.168, 178.185 of this subchapter) wooden boxes (see § 173.67(a) (1), Note 1) or Specification 12H, 23F, or 23H (§ 178.209, 178.214, 178.219 of this subchapter) fiberboard boxes. Inside containers must be cartons or wrappings with further inside containers as prescribed in paragraph (c) of this section. Polyethylene plastic bags may be used as the only inside containers provided the bags are not subject to static generation and fit snugly in the outside box. Inside containers, except the polyethylene plastic bags, must be separated from the outside box by at least 1-inch of tightly packed sawdust, excelsior, or equivalent cushioning material. Gross weight of the completed package shall not exceed 150 pounds.

2. In § 173.107 paragraph (d) (1) is added to read as follows:

§ 173.107 **Primers, percussion caps, grenades, empty, primed, and cartridge cases, empty, primed.**

(d) ***

(1) Specification 12B (§ 178.205 of this subchapter). Fiberboard box. Caps must be packed in inside metal cans containing not more than 100 caps each. Can must then be packed in a chipboard box with not more than 10 cans per box. Not more than 5 chipboard boxes shall be packed in the 12B fiberboard box. The completed package must be such that the explosion of a part of the caps will not cause the explosion of all the caps.

3. In § 173.119 paragraph (a) (27) is added to read as follows:

§ 173.119 **Flammable liquids not specifically provided for.**

(a) ***

(27) Specification 12P (§ 178.211 of this subchapter). Fiberboard boxes with inside Specification 2U (§ 178.24 of this subchapter) polyethylene containers not over 5-gallon capacity each. Authorized only for material which will not react dangerously with or cause decomposition of polyethylene. Not authorized for transportation by air.

4. In § 173.208 paragraph (b) (4) is added to read as follows:

§ 173.208 **Titanium metal powder, wet or dry.**

(b) ***

(4) Specification 17C (§ 178.115 of this subchapter). Metal drums (single trip) not over 30-gallon capacity.

5. In § 173.239 paragraph (a) (2) is added to read as follows:

§ 173.239 **Barium azide—50 percent or more water wet.**

(a) ***

(2) Specification 21C (§ 178.224 of this subchapter). Fiber drum with inside glass bottle not over 1-pound capacity each. Bottles must have rubber stoppers wire-tied for securement. If shipment is to take place at a time freezing weather is to be anticipated, a suitable antifreeze solution must be used to prevent freezing.

6. In § 173.245b paragraph (a) (6) is revised to read as follows:

§ 173.245b **Corrosive solids not specifically provided for.**

(a) ***

(6) Plastic drum or pail not exceeding 80 pounds net weight and not over 7-gallon capacity.

7. In § 173.247 paragraph (a) (2) is revised to read as follows:

§ 173.247 **Acetyl bromide, acetyl chloride, acetyl iodide, antimony pentachloride, benzoyl chloride, boron trifluoride-acetic acid complex, chromyl chloride, dichloroacetyl chloride, diphenylmethyl bromide solution, pyro sulfuric chloride, silicon chloride, sulfur chloride (mono and di), sulfuric chloride, thionyl chloride, tin tetrachloride (anhydrous), titanium tetrachloride, and trimethyl acetyl chloride.**

(a) ***

(2) Specification 6D (§ 178.102 of this subchapter) Cylindrical steel overpack with inside Specification 2S or 2SL (§§ 178.35, 178.35a of this subchapter) polyethylene packaging. Polyethylene used must be Type III as set forth in Appendix B—Specifications for Plastics to Part 178 of this Title. Authorized for acetyl chloride, dichloroacetyl chloride, sulfuric chloride and trimethyl acetyl chloride only.

8. In § 173.264 paragraph (b) (1) is amended by changing the first sentence to read as follows:

§ 173.264 **Hydrofluoric acid; white acid.**

(b) ***

(1) Specification 3', 3A, 3AA, 3B, 3C, 3E, 4, 4A, 25', or 38' (§§ 178.36, 178.37, 178.38, 178.40, 178.42, 178.48, 178.49 of this subchapter); also specification 4B, 4BA, 4BW or 4C (§§ 178.50, 178.51, 178.61, 178.52, of this subchapter) if not brazed.***

9. In § 173.272 paragraphs (d) and (i) (6) are revised and paragraph (i) (28) is added to read as follows:

§ 173.272 **Sulfuric acid.**

(d) *Sulfuric acid concentration of greater than 51 percent to not over 65.25 percent:* Authorized packaging is described in paragraphs (1) through (16), (27) and (28) of paragraph (i) of this section.

(i) ***

(6) Specification 6D or 37M (nonreusable container) (§§ 178.102, 178.134 of this subchapter). Cylindrical steel overpacks with an inside specification 2S, 2SL, or 2T (§§ 178.35, 178.35a, 178.21 of this subchapter) polyethylene container. Overpack of over 30-gallon capacity must be constructed of at least 16-gauge steel throughout when used for sulfuric acid of 93 percent or greater concentration.

(28) Specification MC 310, MC 311 or MC 312 (§ 178.340, 178.343 of this subchapter). Tank motor vehicles having steel cargo tanks equipped with a phenolic lining impervious to the lading. Not authorized for transportation by water.

10. In § 173.275 paragraph (a) (5) is added to read as follows:

§ 173.275 Difluorophosphoric acid, anhydrous, monofluorophosphoric acid, anhydrous, hexafluorophosphoric acid, and mixtures thereof.

(a) * * *

(5) Specification 6D (§ 178.102 of this subchapter). Cylindrical steel overpack with inside specification 2S or 2SL (§§ 178.35, 178.35a of this subchapter) polyethylene packaging. Net weight may not exceed 550 pounds.

11. In § 173.276 paragraphs (a) (9) and (a) (10) are added to read as follows:

§ 173.276 Anhydrous hydrazine and hydrazine solution.

(a) * * *

(9) Specification 12B (§ 178.205 of this subchapter). Fiberboard box with one

inside Specification 2E (§ 178.24a of this subchapter) polyethylene bottle not over 4½-quart capacity. Polyethylene bottle must be of Type III high density polyethylene having a minimum wall thickness of 30 mils and bottle must be securely closed with a screw cap. Authorized for hydrazine solution only.

(10) Specification 34 (§ 178.19 of this subchapter) polyethylene container without overpack, not over 30-gallon capacity. Authorized for hydrazine solution only.

12. In § 173.304 the Table in paragraph (a) (2) is amended by revising the entry for sulfuryl fluoride to read as follows:

§ 173.304 Charging of cylinders with liquefied compressed gas.

(a) * * *

(2) * * *

Kind of gas	Maximum permitted filling density (see note 1)	Containers marked as shown in this column or of the same type with higher service pressure must be used except as provided in sec. 173.34 (a), (b), sec. 173.301(j) (see notes following table)
(Revise) Sulfuryl fluoride..		106 DOT-3A480; DOT-3AA480; DOT-3E1800; DOT-4B480; DOT-4BA480; DOT-4BW480.

13. In § 173.377 paragraph (b) (6) is revised to read as follows:

§ 173.377 Hexaethyl tetraphosphate mixtures; methyl parathion mixtures; organic phosphorus compound mixtures; organic phosphate compound mixtures; parathion mixtures; tetraethyl dithio pyrophosphate mixtures; and tetraethyl pyrophosphate mixtures, dry.

(b) * * *

(6) Specification 12B (§ 178.205 of this subchapter). Fiberboard box with inside Specification 2D (§ 178.23 of this subchapter) paper bags not over 4-pound capacity each and having an additional foil liner. The mixture may be further packed in water soluble 1½ mil polyvinyl alcohol film pouches of not more than 8-ounce capacity each with not more than 10 pouches per specification bag. Completed package may not exceed 65 pounds gross weight and must meet the test requirements of paragraphs (d) and (e) of this section. Authorized only for mixtures in which the liquid is absorbed in concentrations no greater than 67 percent.

14. In § 178.33a, § 178.33a-2(b) is revised to read as follows:

§ 178.33a Specification 2Q, inside non-refillable metal containers.

§ 178.33a-2 Type and size.

(b) The maximum capacity of containers in this class shall not exceed 55 cubic inches (30.5 fluid ounces). The

maximum inside diameter shall not exceed 3 inches.

EFFECTIVE DATE: This amendment is effective August 22, 1977.

(49 U.S.C. 1803, 1804, 1808; 49 CFR 1.53(e).)

NOTE.—The Materials Transportation Bureau has determined that this document does not contain a major proposal requiring preparation of an Economic Impact Statement under Executive Order 11821 and OMB Circular A-107.

Issued in Washington, D.C. on August 17, 1977.

JOHN J. FEARNSIDES,
Acting Director,

Materials Transportation Bureau.

[FR Doc. 77-24184 Filed 8-19-77; 8:45 am]

CHAPTER V—NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION, DEPARTMENT OF TRANSPORTATION

[Docket No. 75-16; Notice 15]

PART 571—FEDERAL MOTOR VEHICLE SAFETY STANDARDS, AIR BRAKE SYSTEMS

Exclusions From Standard's Applicability

AGENCY: National Highway Traffic Safety Administration (NHTSA).

ACTION: Final rule.

SUMMARY: This amendment adds a small number of vehicles to the category of oversize and specialized vehicles that are permanently excluded from the applicability of Standard No. 121, Air Brake Systems, extends the existing temporary exclusion of heavy hauler trailers and auto transporters until January 1,

1979, and eliminates the "no lockup" requirement in the case of trailers designed exclusively for harvesting lumber or pulpwood, and in the case of inboard wheels on trailers with more than four wheels on an axle system. The amendment responds to manufacturer petitions for exclusion from some or all of the requirements of the standard because of the vehicles' distinctive configurations and functions.

DATE: Effective date August 22, 1977.

ADDRESS: Petitions for reconsiderations should refer to the docket number and be submitted to: Room 5108, Nassif Building, 400 Seventh Street SW., Washington, D.C. 20590.

FOR FURTHER INFORMATION CONTACT:

Duane Perrin, Office of Crash Avoidance, National Highway Traffic Safety Administration, Washington, D.C. 20509, 202-426-2153.

SUPPLEMENTARY INFORMATION: Standard No. 121 (49 CFR 571.121) regulates the braking system performance of air-braked trucks, buses, and trailers, and has been in effect for trailers since January 1, 1975, and for trucks and buses since March 1, 1975. Certain vehicles were excluded from the standard's applicability because their functions or construction dictate oversize or distinctive operational characteristics that result in restricted highway operation (e.g., low speed, permit requirements, daytime operation) which limits hazards and the possibility of accidents. Also their distinctive configurations and low production volumes increase compliance costs.

Because of unavailability of components and other constraints, certain other vehicle categories were excluded from all or some of the standard's requirements for a temporary period. The temporary exclusions that remain in effect are scheduled to end on September 1, 1977.

Several vehicle manufacturers and trade associations petitioned for extension of some of the temporary exclusions, or conversion of them into permanent exclusions. The Truck and Bus Safety Subcommittees of the National Motor Vehicle Safety Advisory Council and National Highway Safety Advisory Committee recommended to the Secretary of Transportation that particular vehicle types be granted full or partial exclusions from the standard.

Based on consideration of the petitions and on the recommendations of the Truck and Bus Safety Subcommittees, the NHTSA proposed several new permanent exclusions from the standard. The 108-inch-width exclusion was proposed for expansion to include vehicles with a width of more than 102 inches. In all States other than Hawaii, vehicles of this width are allowed on the highway only in permit operation. The agency finds that these vehicles are operated with the same level of care as vehicles of 108 inches in overall width. No adverse comment

was received on the proposal and it is accordingly made final.

The agency proposed permanent exclusion of vehicles whose gross vehicle weight rating (GVWR) exceeds 120,000 pounds, under the assumption that such vehicles always operate under restrictions of State motor vehicle administrations. Comments were solicited on whether such vehicles exist that are not already excluded from the standard under another category, and whether such vehicles ever operate in unrestricted highway use. Fruehauf, Rogers Brothers, and Talbert Trailers pointed out that Michigan allows unrestricted highway operation of certain trailers in excess of 120,000 lbs. GVWR. These trailers may be flatbeds, tankers, or dump bodies with 8 or more axles and are currently being built to conform to the standard. Low bed heavy hauler trailers, on the other hand, must have their axles aft of the load, and do not have room for as many as eight axles without exceeding the State length limit requirements, and hence are still subject to restricted operation. It is apparent that the exclusion should be narrowed so that its language reaches only those vehicles originally intended for exclusion. It appears that only low bed "heavy hauler" trailers in this weight range fall under State operating restrictions. As made final, therefore, the exclusion is narrowed to cover only a trailer that has a GVWR of more than 120,000 pounds and a body that conforms to the height limitation for heavy hauler trailers of 40 inches. Fruehauf suggested a 44-inch deck height criterion, but offered no supporting information, and the NHTSA sees no reason to change from the 40 inches presently specified for heavy hauler trailers.

The third proposed permanent exclusion was for "load divider" dollies that are designed exclusively for use with the larger trailers that are already excluded from all the requirements of the standard. This addition was supported, but the Truck Trailer Manufacturers Association (TTMA) and others requested a correction in the description of the vehicle. The agency referred to the "fifth wheel plate" of the dolly which improperly described the connecting or mating devices employed. The proposal is made final, with an appropriately broader statement of vehicle description.

Several commenters argued for additional permanent exclusions from the standard. Schwartz Manufacturing Company asserted that the "heavy hauler" trailers that are currently excluded from the standard for a limited period should all be permanently excluded because of their off highway use and their typical ownership by a small company with limited maintenance resources. The agency has proposed and is making final an extension of the existing temporary exclusion while it develops more data on the difficulty encountered by manufacturers in constructing these vehicles to comply with the standard. Information requests have been issued by the agency and replies have been received which are

presently undergoing analysis. Until analysis is completed, it would be premature to act on the Schwartz request, and it is therefore declined.

Master Truck, the City of San Diego, and the Lake Disposal Corporation supported the Truck and Bus Safety Subcommittees' suggestion to exclude refuse trucks from Standard No. 121 entirely, or at least from the "no lockup" provision. The commenters pointed out that the duty cycle of these vehicles differs from that for highway tractor-trailer combinations and that much of the travel is at low speeds between pick-ups. The City of San Diego pointed out that it must purchase from the low bidder, which can result in having to service several of the commercially available antilock systems, thereby compounding maintenance problems. The agency does not dispute these points, but also does not view them as peculiar to the brake systems of these vehicles. Refuse collection and hauling presumably does put distinctive strains on a vehicle, and the problem of low-bid contracting does occur in municipal fleet maintenance. It is assumed that such problems with braking and other vehicle systems occurred prior to implementation of Standard No. 121 and that adaptive steps were taken to compensate for them. It is conceivable in fact, that some of the adaptations (such as the use of longer wearing but less effective brake linings) may have reduced somewhat the braking capability of some refuse haulers in relation to vehicles of comparable size that serve other functions. It is the agency's considered judgment that the duty cycle of a particular vehicle type should not be fully determinative of its braking capability or general safety characteristics. For this reason, the agency declines to act on requests for exclusion of these vehicles but will continue to give consideration to this and other proposed adjustments in the standard's applicability.

Zieman Manufacturing Company asked that trailers with a GVWR of 10,000 pounds or less with air-over-hydraulic brakes be excluded from the standard's applicability. Such an exclusion was proposed in June 1975 (40 FR 24915, June 11, 1975) in response to the petition of Altec Industries. On the basis of comments received, particularly those of the California Highway Patrol, it was decided not to provide such an exclusion because of the potential for abuse of the category. The Zieman request is therefore not adopted.

No comment was received from any mobile crane manufacturer on the wisdom of continuing the present limits for these vehicles: exclusion of larger categories only, unless top speed is restricted to 45 mph. In the absence of comment, the agency has decided to leave the present exclusions affecting mobile cranes unchanged, except for the over 102-inch width exclusion previously discussed.

It is noted that the existing permanent exclusion of non-cargo-carrying trailers was inadvertently restated in the pro-

posal in exactly the opposite form from that intended. The error is corrected in this amendment.

As a general matter, the continuation of temporary exclusions for heavy hauler trailers and auto transporters was supported. Little information was provided in the comments on the readiness of manufacturers to implement the standard by January 1, 1979. Information requests have been sent to the affected manufacturers to develop additional data. Freightliner Corporation, as the manufacturer of incomplete truck tractors for auto transporter combinations, argued for the indefinite exclusion of these combinations from the standard.

Freightliner's first argument was that the high center-of-gravity characteristics of the towing vehicle (car carried over the cab) and the unique load transfer characteristics of the articulation point on some auto transporters can produce effects which combine to offset the advantages of imposition of the standard on these vehicles. The agency understands that these factors can make compliance for auto transporters more difficult, and has acknowledged this fact by proposing an effective date for auto transporters that is four years after the initial effective date for other highway vehicles. However, the agency is also aware that auto transporters can be (and have been) built to comply fully with the present requirements of the standard. If Freightliner or any other interested party has data to show that the present requirements are insufficient to ensure a safe braking system for auto transporters, the agency solicits their suggestions for improvements.

As a practical matter, the agency has stated (May 5, 1975, NHTSA letter to E. Hammond, Trailmobile Tech. Center) that it will use the chassis manufacturer's load limitations, both weight and center-of-gravity, for purposes of determining compliance. Thus Freightliner's "envelope" of specifications in its incomplete vehicle document would be the outside limit for loading the completed tractor for compliance test purposes. The only limitation on this method would be an "envelope" of specifications so conservative that the braking characteristics of the vehicle as completed would constitute a safety-related defect.

The second point raised by Freightliner is that the testing procedures in the standard may need to be modified before tractors and trailers of the auto transporter combination can be tested separately. During the period of continued delay, the NHTSA intends to call a public meeting to discuss this problem with the affected chassis-cab manufacturers and the auto transporter industry. Freightliner's suggestion for indefinite delay appears unnecessary and, accordingly, is declined.

Freightliner's third argument was that, assuming the incompatibility between the tractor and trailer portions of an auto transporter is great, the agency should not require their compliance with the standard until all incompatibility is removed from all air-braked

vehicle combinations subject to the standard. Actually, the compatibility problems between tractor and trailer are probably less in the case of auto transporters than other combinations because there is more pairing of tractors and trailers in this industry than in the case of dry freight vans. The NHTSA tests mentioned by Freightliner will be completed prior to the January 1, 1979 effective date for auto transporters.

PACCAR, Inc., and Mack Trucks, Inc., both commented favorably on the American Trucking Association's request to continue the exclusion of vehicles equipped with an axle with a gross axle weight rating (GAWR) of 24,000 pounds or more. The agency did not propose continuation because no vehicle or axle manufacturer had petitioned for delay, and because there was strong evidence that the exclusion was being abused by manufacturers who would provide a higher-than-normal rating to avoid the requirements of the standard. PACCAR's expectation that few such vehicles are built because permits are required for loads of more than 24,000 pounds on an axle is not to the point. It is not the gross vehicle weight on the highway that is controlling here, but simply the capacity of the axle installed by the manufacturer. In other words, the vehicle could obtain complete exclusion by the installation of heavy axles, whether or not they are ever used on the highway at full capacity requiring permit operation.

Mack noted the many truck types (e.g., cement mixers, dump trucks) whose permits, if any, do not closely control the actual operation of the vehicle. As a practical matter, these vehicles operate in unrestricted operation with extremely heavy, and often high center-of-gravity loads, that necessitate extremely good braking. The agency continues to believe that an exclusion at this GAWR level is unjustified. The 29,000-pound exclusion reflects the larger vehicles with truly distinctive configuration and more specialized operation that justify special treatment.

Mack, PACCAR, and the ATA also recommended extension of the exclusion for vehicles with two or more front steerable axles with a GAWR of 16,000 pounds or more for each axle. No supporting data was presented and no other comments were received. In the absence of any supporting data the request is denied.

The partial exclusion from the "no lockup" requirement in the case of "wheels other than the outermost on an axle system with more than four wheels" was supported without comment and is therefore made final. Rogers Brothers suggested that use of "axle system" to describe the row of wheels across the vehicle could be misleading. The agency's use of the term as part of its certification requirement to state "axle system" GAWR has not proved troublesome. On the basis of this experience, the terminology is made final as proposed.

The TTMA suggested that the exclusion of certain logging and pulpwood

trailers from the "no lockup" requirement be expanded to permit them the same parking brake option as is provided to agricultural commodity trailers. While not within the scope of this notice, the agency will consider this suggestion in its next parking brake proposal.

While the Truck and Bus Safety Subcommittees did not take a position on the proposal, it is noted that their June 23, 1977, letter to Secretary Adams reaffirmed their earlier recommendations for revision of Standard No. 121.

The economic impact of this rule has been considered and has been determined to be minimal. This is due primarily to the low production volume both collectively and by individual firms and the brief leadtime remaining to make considerable design changes. This could even cause substantial adverse economic and financial impacts if these manufacturers were forced to comply by the September 1, 1977, effective date. However, it has also been determined that the additional leadtime provided by this Final Rule should be sufficient to modify production lines which would incorporate the necessary design changes to accommodate the FMVSS 121 hardware.

§ 571.121 [Amended]

In consideration of the foregoing, Standard No. 121, (49 CFR 571.121) is amended as follows:

1. Section S3 (Application) is amended to read:

S3 Application. This standard applies to trucks, buses, and trailers equipped with air brake systems. However, it does not apply to:

(a) Any vehicle that has an overall vehicle width of more than 102 inches with extendable equipment in the fully retracted position;

(b) Any vehicle equipped with an axle that has a gross axle weight rating (GAWR) of 29,000 pounds or more;

(c) Any truck or bus that has a speed attainable in 2 miles of not more than 33 mph;

(d) Any truck that has a speed attainable in 2 miles of not more than 45 mph, an unloaded vehicle weight that is not less than 95 percent of its GVWR, and no capacity to carry occupants other than the driver and operating crew;

(e) Any trailer that has a gross vehicle weight rating (GVWR) of more than 120,000 pounds and whose body conforms to that described in the definition of "Heavy hauler trailer" set forth in S4;

(f) Any trailer that has an unloaded vehicle weight which is not less than 95 percent of its GVWR; and

(g) Any load divider dolly.

In addition, the standard does not apply to a heavy hauler trailer manufactured before January 1, 1979; any vehicle manufactured before January 1, 1979, that, in combination with another vehicle, constitutes a part of an auto transporter and any vehicle manufactured before September 1, 1977, that has a GAWR for any axle of 24,000 pounds or more, or two or more front steerable axles with a GAWR of 16,000 pounds or more for each axle.

2. Section S4 (Definitions) is amended by the addition of the following definition, between the definitions of "Auto transporter" and "Speed attainable in 2 miles":

"Load divider dolly" means a trailer composed of a trailer chassis and one or more axles, with no solid bed, body, or container attached, and which is designed exclusively to support a portion of the load on a trailer or truck excluded from all the requirements of this standard.

3. The date "September 1, 1977" in the first paragraph of S5.3 is changed to "January 1, 1979."

4. Section S5.3.2 is amended by replacing the period at the end of paragraph (b) with ", or" and by the addition of a new paragraph (c) to read:

S5.3.2 * * *

(c) In the case of an axle system having more than four wheels, lockup of any wheel other than the outermost wheel at each end of the axle system.

5. A new section S5.3.2.2 is added to read:

S5.3.2.2 When stopped in accordance with S5.3.2., any trailer designed exclusively for harvesting logs or pulpwood and constructed with a skeletal frame with no means for attachment of a solid bed, body, or container, and with an arrangement of air control lines and reservoirs designed to minimize damage in off-road operations, need not meet the requirements relating to wheel lockup, but must nevertheless meet the requirements of staying within the 12-foot lane.

Effective date finding. Because these amendments relieve a restriction and do not create additional responsibilities for any person, it is found that an immediate effective date that advises manufacturers of the new requirements as soon as possible is in the public interest.

The program official and lawyer principally responsible for this rulemaking document are Duane Perrin and Tad Herlihy, respectively.

(Sec. 103, 119, Pub. L. 89-563, 80 Stat. 718 (15 U.S.C. 1392, 1407); delegation of authority at 49 CFR 1.50.)

Issued on August 16, 1977.

HOWARD DUGOFF,
Acting Administrator.

[FR Doc. 77-24091 Filed 8-16-77; 3:40 pm]

Title 50—Wildlife and Fisheries

CHAPTER I—UNITED STATES FISH AND WILDLIFE SERVICE, DEPARTMENT OF THE INTERIOR

PART 32—HUNTING

Opening of Browns Park National Wildlife Refuge, Colorado, to Upland Game Hunting
AGENCY: Fish and Wildlife Service, Interior.

ACTION: Special regulation.

SUMMARY: The Director has determined that the opening to upland game hunting of Browns Park National Wildlife Refuge is compatible with the objectives for which the area was established, will utilize a renewable natural