regulations as may be necessary to improve the efficiency of spectrum use.

IV. Description, Potential Impact and Number of Small Entities Affected

The proposed action would lessen paperwork burdens on all users of Specialized Mobile Radio services as well as entrepreneurs providing the services.

V. Reporting, Recordkeeping and other Compliance Requirements

No new requirements will be imposed upon Private Land Mobile Radio Service licensees.

VI. Federal Rules which Overlap, Duplicate or Conflict with this Rule

None.

VII. Significant Alternatives

There are no significant alternatives which would accomplish our stated objective of simplifying the paperwork burden on Private Radio Service licensees. Additionally, retaining the *status quo* represents a continuing burden on those licensees.

13. For purposes of this non-restricted notice and comment rule making proceeding, members of the public are advised that *ex parte* contacts are permitted from the time the Commission adopts a notice of proposed rule making until the time a public notice is issued stating that a substantive disposition of the matter is to be considered at a forthcoming meeting or until a final order disposing of the matter is adopted by the Commission, whichever is earlier. In general, an *ex parte* presentation is any written or oral communication (other than formal written comments/pleadings and formal oral arguments) between a person outside the Commission and a Commissioner or a member of the Commission's staff which addresses the merits of the proceeding. Any person who submits a written *ex parte* presentation must serve a copy of that presentation on the Commission's Secretary for inclusion in the public file. Any person who makes an oral *ex parte* presentation addressing matters not fully covered in any previously filed written comments for the proceeding, must prepare a written summary of that presentation. On the day of that oral presentation, a written summary must be served on the Commission's Secretary for inclusion in the public file, with a copy to the Commission official receiving the oral presentation. Each *ex parte* presentation described above must state on its face that the Secretary has been served, and must also state by docket number the proceeding to which it relates. See generally, § 1.1231 of the Commission's Rules, 47 CFR § 1.1231.

14. This action is taken pursuant to section 4(i), 303(c), 303(f), 303(g), 303(r), and 331 of the Communications Act of 1934, as amended, 47 U.S.C. § 154(i), 303(f), 303(g), 303(r) and 332. Interested persons may file comments on this proposal on or before November 25, 1985, and reply comments on or before December 10, 1985. All relevant and timely comments filed in accordance with Rules 1.415 and 1.419 (47 CFR 1.415 and 1.419) will be considered by the Commission before final action is taken in this proceeding. In reaching its decision, the Commission may take into consideration information and ideas not contained in the comments, provided that such information is placed in the public file, and provided that the Commission's reliance on such information is noted in its final decision.

15. In accordance with the provisions of Rule 1.419 (47 CFR 1.419), formal participants shall file an original and five copies of their comments and other materials. Participants wishing each Commissioner to have a personal copy of their comments should file an original and 11 copies. Members of the general public who wish to express their interest by participating informally may do so by submitting one copy of their comments without regard to form (as long as the docket number is clearly stated in the heading). All documents will be available for public inspection during regular business hours in the Commission's Public Reference Room at its headquarters in Washington, D.C.

16. For further information concerning this rule making contact W. Riley Hollingsworth, Chief of the Compliance Branch, Land Mobile and Microwave Division, Private Radio Bureau, Federal Communications Commission, Washington, D.C. 20554, (202) 632-7125.

Federal Communications Commission.

William J. Tricarico,

Secretary.

Appendix

Part 90 of Chapter I of Title 47 of the Code of Federal Regulations is proposed to be amended as follows:

PART 90—PRIVATE LAND MOBILE RADIO SERVICES

1. The authority citation for 47 CFR Part 90 continues to read:

Authority: Secs. 4, 303,48 stat., as amended, 1066, 1082; 47 U.S.C. 154, 303.

2. Section 90.135 is amended as set forth below by adding a new paragraph (c) (1). Existing paragraphs (c)(1) and (c)(2) are redesignated paragraphs (c)(2) and (c)(3) respectively.

§ 90.135 Modification of license.

* * * * *

(c)(1) Where the change noted in paragraph (a)(1), (a)(6) or (a)(7) is due to assignment of SMR base station, increase or reduction in frequencies assigned to SMR base station, or the users' acquiring service from additional SMR base stations, notification by letter to the Private Radio Bureau Licensing Division rather than an application for modification of license is required for end-user licensees.

* * * * *

[FR Doc. 85-25105 Filed 10-21-85; 8:45 am]

BILLING CODE 6712-01-M

[PR Docket No. 83-426]

47 CFR Part 94

Amendment of the Commission's Rules To Authorize Private Carrier Systems in the Private Operational Fixed Microwave Radio Service

AGENCY: Federal Communications Commission.

ACTION: Order Extending Time to File Comments and Reply Comments.

SUMMARY: The Commission has received a joint motion from the Central Committee on Telecommunications of the American Petroleum Institute and the Utilities Telecommunications Council seeking an extension of the time to comment on the Further Notice of Proposed Rule Making in this proceeding. By this action the Commission has granted the joint motion by extending the deadline for comments and reply comments to November 21, 1985 and December 23, 1985 respectively.

DATES: Comments are now due on November 21, 1985; Reply comments are now due on December 23, 1985.

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

FOR FURTHER INFORMATION CONTACT: Mary Beth Hess, Private Radio Bureau, Land Mobile and Microwave Division (202) 634-2443.

SUPPLEMENTARY INFORMATION:

List of Subjects in 47 CFR Part 94

Private operational-fixed microwave radio service, Radio.

Order

In the matter of amendment of Part 94 of the Commission's Rules and Regulations to Authorize Private Carrier Systems in the Private Operational-Fixed Microwave Radio Service, PR Docket No. 83-426.

Adopted: October 11, 1985;
Released: October 16, 1985.

By the Chief, Private Radio Bureau:

1. On September 12, 1985, the Commission released a *Further Notice of Proposed Rule Making* [1] to permit licensees in the Private Operational-Fixed Microwave Radio Service (OFS) to lease capacity on their private microwave systems for the transmission of common carrier communications by non-dominant common carriers. Comments are due October 21, 1985 and reply comments November 5, 1985. The Central Committee on Telecommunications of the American Petroleum Institute (Central Committee) and the Utilities Telecommunications Council (UTC) have filed a joint motion for an extension of time in which to file comments in this proceeding. They request the comment period be extended until November 21, 1985 and the reply comment period until December 23, 1985.

2. In support of their joint motion, Central Committee and UTC state that the additional time is necessary to develop and submit meaningful comments and reply comments. They note that both entities are scheduled to conduct meetings within the next month and wish to discuss with thier members the issues addressed in the *Further Notice*. The extension will allow them to prepare comments based on the discussions and responses from their meetings.

3. We recognize the complexity of the issues involved in this proceeding. Therefore, an extension of time will be granted. Accordingly, IT IS ORDERED, pursuant to the authority set forth in Section 0.331 of the Commission's Rules, that interested parties are to file comments by November 21, 1985 and reply comments by December 23, 1985.

4. The point of contact in this matter is Mary Beth Hess of the Rules Branch, Land Mobile and Microwave Division, (202) 634-2443.

Federal Communications Commission.

Robert S. Foosaner,

Chief, Private Radio Bureau.

[FR Doc. 85-25103 Filed 10-21-85; 8:45 am]

BILLING CODE 6712-01-M

[1] 50 FR 37878, September 18, 1985.

DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

49 CFR Part 571

[Docket No. 85-15; Notice 1]

Federal Motor Vehicle Safety Standards; Lamps, Reflective Devices and Associated Equipment

AGENCY: National Highway Traffic Safety Administration (NHTSA), DOT.

ACTION: Notice of request for comments.

SUMMARY: NHTSA is conducting a comprehensive review of the headlighting requirements of Federal Motor Vehicle Safety Standard No. 108 *Lamps, Reflective Devices, and Associated Equipment*. The purpose of the review is to identify regulatory requirements that may be simplified or eliminated, while being consistent with motor vehicle safety. The agency has concentrated its efforts into five principal areas. The first is the feasibility of a standard directed toward on-board original equipment headlighting performance rather than toward performance of individual after-market headlamps in a laboratory environment. The second is the desirability of specifications for headlamp life. The third concerns the necessity of dimensional specifications for headlamp equipment. The fourth is the issue of headlamp aim. The fifth is the elimination of obsolete photometric requirements. The notice discusses each issue in detail, and solicits information in response to specific questions related to each area.

DATE: Comments are due January 21, 1986.

ADDRESS: Comments should refer to the docket and notice numbers set forth above and be submitted (preferably in 10 copies) to National Highway Traffic Safety Administration, 400 Seventh Street SW., Washington, D.C. 20590.

FOR FURTHER INFORMATION CONTACT: Deborah L. Parker, Office of Rulemaking, National Highway Traffic Safety Administration, 400 Seventh Street SW., Washington, D.C. 20590 (202-426-2264).

SUPPLEMENTARY INFORMATION: On September 9, 1966, the National Traffic and Motor Vehicle Safety Act was enacted. It required the issuance of initial Federal motor vehicle safety standards based upon then-existing safety standards by the end of January 1967. Pursuant to this mandate, Federal requirements for motor vehicle lighting were promulgated: Federal Motor Vehicle Safety Standard No. 108 *Lamps, Reflective Devices, and Associated Equipment*. This standard, *inter alia*, established headlighting requirements applicable to multipurpose passenger vehicles, trucks, and buses, whose overall width was 80 inches or more and which were manufactured on and after January 1, 1968. The standard became applicable to all other motor vehicles (except, of course, trailers) manufactured on and after January 1, 1969. Coverage was extended to replacement headlighting equipment manufactured on and after January 1, 1972.

Initially the requirements were solely those of the Society of Automotive Engineers, SAE Standard J579a *Sealed Beam Headlamp Units for Motor Vehicles*, August 1965, and SAE J580a *Sealed Beam Headlamp*, June 1966. The two SAE Standards defined performance characteristics for two types of sealed beam headlighting systems; these characteristics included upper and lower beam photometric maxima and minima as measured at discrete test points, capability for mechanical aim as represented by three pads on the face of the lens preaimed during manufacture to form an aiming plane, aiming adjustment tests, and retaining ring requirements. The SAE Standards, which were incorporated by reference, themselves referenced additional SAE requirements which have been considered to be incorporated into Standard No. 108 by subreference. These included vibration and corrosion tests specified by SAE Standard J575 *Tests for Motor Vehicle Lighting Devices and Components*, June 1966, SAE J571b *Dimensional Specifications for Sealed Beam Headlamp Units* April 1965, including the mounting ring and retaining ring, and electrical and life specifications of SAE Standard J573a *Lamp Bulbs and Sealed Units*, November 1964. These requirements and/or some subsequent SAE updates remain the basic regulatory requirements for all motor vehicle headlamps today.

In an effort to move toward a less design restrictive standard, NHTSA amended Standard No. 108 in 1983 to allow an alternative to sealed beam systems (the originally allowed two types of sealed beam systems have been expanded by Standard No. 108 over the years to the presently allowed six systems). Design restrictions previously imposed on the size and shape of headlamps were eliminated, provided that the headlamp incorporated a standardized replaceable light source whose mechanical design was

established by a comprehensive Figure 3 in Standard No. 108. The photometric performance and capability of mechanical aim remained unchanged.

The alternative headlamp incorporated a replaceable light source with an O-ring seal in its base that is intended to provide a barrier to moisture and contaminants, which is somewhat equivalent to the permanent seal of the sealed beam lamp. In exchange for providing a light source meeting the comprehensive design requirements of Figure 3 of the standard, manufacturers were afforded complete design freedom as to size and shape of the lamp incorporating the light source. This move to allow an alternative headlighting system was a first step toward eliminating some of the unnecessary design restrictions in the standard, but it has been criticized as being itself too design restrictive, since it specifies dimensions and performance characteristics of the light source. Thus, the agency has received an unprecedented number of petitions seeking amendments of headlighting requirements. Petitions have been received to modify dimensions orginally adopted for the light source, to allow multiple standardized replaceable light sources in headlighting systems, to allow alternative replaceable light sources other than that currently specified, to permit different photometrics, and to allow coordinated aiming of pairs of headlamps. In addition, a petition has been received to allow a new type of headlighting system consisting of eight miniature headlamps. Lighting systems are being developed in Europe with a beam aperture (lens) the size of an ordinary business card. In short, the 1980s have become a decade of new headlighting concepts and experiments. Their evaluation is to some extent restricted by headlighting regulations in effect in the industrialized countries of the world; their adoption most certainly is affected by these regulations.

Recognizing the technological validity of many of these concepts and the fact that they cannot be realized in an unduly burdensome regulatory climate, NHTSA has embarked upon a review of the headlighting requirements of Standard No. 108 with the goal of eliminating those that are determined to be no longer necessary for the safety of the motoring public. NHTSA has identified five principal areas of possible regulatory reform, and wishes to present these candidates for discussion, comments, and recommendations by interested persons. After the agency has more clearly defined and determined the implications for safety, it plans to issue a notice with specific proposals for a more performance-oriented headlighting standard.

I. Coverage of the Standard: The Systems Approach and/or the Equipment Approach

There are two basic types of Federal motor vehicle safety standards; those that establish minimum performance levels for motor vehicles, and those that establish levels for individual items of motor vehicle equipment used for both original and replacement equipment purposes. Illustrative of the former is Standard No. 105 *Hydraulic brake systems*. The vehicle is required to meet certain stopping distance requirements, but the design of the components of the system such as brake shoes or brake linings is left to the vehicle manufacturer. On the other hand, Standard No. 106 *Brake hoses* covers an equipment item; it requires all brake hoses to be manufactured to conform to its requirements, whether used as original or replacement equipment, and for new vehicles to be equipped with conforming brake hoses. Because of its extensive coverage of individual equipment items and specifications for tests conducted in laboratory environments, Standard No. 108 is more like an equipment standard than a vehicle standard. This basic approach to headlamp regulation is also in effect in other areas where headlamp manufacturers are located such as Japan, Canada, and Western Europe.

Standard No. 108 today meets the need for motor vehicle safety in a two-step process. First, headlamps must perform to a specified photometric level. Second, they must be placed within designated bounds on a motor vehicle, so that the vehicle can perform to a specified photometric level. Under a vehicle standard, the first step would be eliminated; by specifying an acceptable photometric level for the vehicle itself, there would be no further need, as NHTSA see it, to specify location, size, and number of headlamps.

There are some considerations to this approach. The first is the point at which light should be measured: Should it be at the seeing eye point of the driver, or at the points on the road where the light falls? NHTSA is not well versed in the overall quality and sensitivity of light-measuring equipment and its capability to be positioned and to function at the average driver's seeing eye point. Other factors such as reflectivity, field-of-view, and windshield light transmittance must also be considered. NHTSA would welcome comments on the feasibility of this approach. In the case of measuring light on the road, current photometric test points on the test screen could be translated into points on the road. Were this approach adopted, it presumably would require a test chamber long enough to measure light at the seeing distance point—now 220 feet—and wide enough to measure glare light as projected along the sight line of the oncoming driver. Construction of such chambers would entail an expense by industry that is not presently imposed. Another option possibly would be to use an existing section of road or a test track with limits on grade, ambient light and reflectivity. NHTSA seeks comments on whether this could be done in a way that would assure consistency of tests and test results.

A further alternative would be to translate the road test points into test points on the screen. The screen could be located perpendicular to the vehicle's foward direction of travel. The "V" (vertical) axis would be formed either by a plane that is extended from the left edge of the vehicle or by a simulated road centerline. The "H" (horizontal) axis would either be at, or some specified distance below, the sight line of an oncoming driver in a standard-sized automobile. The H axis could be located below the sight line to account for the lower eye position of drivers who are approaching on a grade or who are at a further distance than the position of the test screen can indicate. The distance from the screen to the vehicle would also be specified and would of course affect the final position of the sight line/H axis.

The approach of a vehicle standard also raises issues with respect to replacement lamps. Simply testing an aftermarket headlamp by current Standard No. 108 requirements may not be adequate. A lamp that performs properly as, for example, a right headlamp in a set of five may be inadequate for use as one in a set of three. This suggests that with an on-vehicle performance standard the photometric unit is the headlamp system rather than any individual lamp. Replacement headlamps would have to be tested within the context of the headlighting system in which they were intended to function. For sealed beam headlamps, the test system would consist of a setup with all headlamps in the same configuration as on the original vehicle. For replaceable bulb headlamps, the original equipment lens/reflector units would have to be part of the test system as well in order to test the bulb. The vehicle manufacturer

would have to specify the test configuration for each vehicle and the bulb manufacturer would have to indicate which vehicles and which headlamp positions each bulb was meant to fit. This approach appears feasible. But it would seen to require an alternative form of regulation: Such as a requirement that manufacturers label on the vehicle or lamp and on each bulb, as to which headlamp components fit with which others, and into which vehicle headlight systems and positions they fit.

There is some precedent for this in the interrelationship between the passenger car tire and rim standards, Standards Nos. 109 and 110. The vehicle is labeled to indicate the proper tire size. Each tire manufacturer has to insure that the tire and rim matching information (i.e., the design load at various inflation pressures) is available through one of several designated standards organizations or else make the information available itself. This standardizes the load limits for each tire size. When the tire is replaced, the placard indicates that any tire with that size disignation will handle the load requirements of the vehicle.

A similar system could be instituted for replacement headlamps and components in a system-oriented standard. Each vehicle and headlamp component could be cross-referenced by vehicle placards, labels embossed on the lamp, and listing of performance data, issued either by standards organizations or by NHTSA. In this way, replacements could be matched properly with original equipment systems, and be assured of complying with new-vehicle photometric requirements.

A vehicle-only standard would cover only slightly more than one-third of the headlighting market. It is estimated that slightly more than one-third of the headlamps sold yearly in the United States are for use as original equipment. It therefore would not seen consistent with motor vehicle safety to repeal all safety standards for the remaining two-thirds of the market. This percentage could be reduced by requiring that the new headlamps be designed to perform for the lifetime of the vehicle, since the two-thirds of the U.S. sales which comprise the aftermarket is composed of approximately 45% due to burnout and nearly 20% due to accident and stone damage. Under this concept, the aftermarket would decline to some lower percentage (i.e., close to 20 percent) than presently exists—those needed to replace damaged units and those to replace units which prematurely burned out. (The source for these data is Current Industrial Reports, Electric Lamps, Summary for the Years 1978–1982, Bureau of the Census, U.S. Department of Commerce.)

In summary, the options are, as NHTSA sees them: (a) Retain the present equipment-oriented standard with on-board location parameters, which covers 100% of the market; (b) substitute a vehicle-oriented systems standard, and regulate the vehicle for performance with original equipment, which would cover approximately one-third of the market; (c) regulate the vehicle for performance but require that headlamps be designed for the life of the vehicle, which would cover about 80% of the market (issues regarding headlamp life expectancy are discussed in section II below), and (d) regulate the vehicle for performance while requiring that manufacturers label the vehicle and lamp components to indicate how they fit with each other, which would cover 100% of the market. In consideration of the foregoing, NHTSA seeks comments on the following issues, with respect to each option. It would be helpful if responses indicated the section and question number in the sequence given in this notice, i.e., the first question below I–1.

I–1. The ramifications for safety of each alternative.

I–2. The costs and benefits of each alternative.

I–3. If the vehicle rather than equipment (or in addition to equipment, as in option (d) above) is regulated, the manner in which photometric testing should be conducted.

I–4. The effects upon the aftermarket.

I–5. The effects upon consumers' ability to replace headlamps/bulbs.

II. Life Expectancy of Headlamps

There are three principal components of equipment durability: its integrity (for example, there shall be no leakage of fluid after the brake tests conducted in accordance with Standard No. 105), environmental resistance (such as the ability of a replaceable bulb headlamp to pass the photometric test of Standard No. 108 after a corrosion test), and longevity (under Standard No. 104 the windshield washer must function for 800 cycles).

Currently, Standard No. 108 specifies longevity requirements for certain headlighting equipment but not for others. The large rectangular headlamp—Type 2B1 (paragraph S4.1.1), the new Type F, and the standardized replaceable light source (paragraph S4.1.1.38(b)(1)) require that at 14 volts the *average* life of the bulb shall be 320 hours for the lower beam and 150 hours for the upper. There are no requirements for Type A, C, D, or E sealed beam headlamps which comply with SAE J579c (Types A, C, and D can also comply with SAE J579a which does have a longevity requirement. However, SAE J579a is obsolete since no major manufacturer has built bulbs to these specifications for several years). NHTSA knows of no apparent safety basis for maintaining a lifetime requirement for some lamps but not others. The options, therefore, as NHTSA sees them are: (a) To delete all longevity requirements from Standard No. 108; (b) to delete all longevity requirements but require manufacturers to rate life expectancy on the lamp/bulb package (i.e., provide consumer information similar to that provided for household light bulbs); (c) to extend current longevity requirements to other types of headlighting systems; (d) to require that the headlamp last for the life of the vehicle; and (e) to retain the existing requirements.

The issues to be considered with each option, and for which NHTSA seeks specific comments are:

II–1. The ramifications for safety.

II–2. The costs and benefits to both consumers and manufacturers. The issues with regard to option (e), that the headlamp last for the life of the vehicle, are:

II–3. A definition of "lifetime" for passenger cars, trucks, buses, multipurpose passenger vehicles.

II–4. The technical feasibility of a lifetime headlamp meeting the photometrics of Standard No. 108.

II–5. Whether photometric requirements of a lifetime headlamp would need to differ from current Standard No. 108 test point values.

II–6. The effect of environmental factors (e.g. vibration, corrosion) upon the lifetime capability of the lamp on the road.

II–7. Whether a lifetime headlamp would affect the safety performance of the vehicle, either adversely or favorably.

II–8. The appropriate specifications to assure lifetime performance (i.e., hours of service, vibration, corrosion).

II–9. The cost for a lifetime headlamp with respect to:

a. The lamp or its components.

b. The secondary effects such as demand on electrical systems, and reduction of fuel economy.

II–10. The specific tradeoffs among photometrics, wattage, costs (primary and secondary) and other areas were a lifetime headlamp to be required.

II–11. Whether and how replacement equipment should be regulated.

NHTSA asks that responses indicate their applicability to sealed beam

headlamps, and the individual components of replaceable bulb headlamps such as reflector/lens assemblies and bulbs.

III. Elimination of Dimensional Specifications

The primary purpose for which Standard No. 108 specifies dimensions for sealed beam headlamps, light sources for replaceable bulb headlamps, and other headlighting components is to assure interchangeability, so that proper replacement equipment shall be readily available, shall fit only in the proper receptacle to assure a photometrically correct system, and shall perform with the equivalence of the original lighting equipment. The safety argument in favor of design restrictions was perhaps best expressed by Chief Judge Phillips of the Sixth Circuit Court of Appeals in his 1973 decision upholding NHTSA's specification for a rectangular headlamp of a single size: ". . . the overall safety and reliability of a headlamp system depends to a certain extent upon the wide availability of replacement lamps, which in turn depends upon standardization. Therefore, uniformity of headlamp size is an element of headlamp performance. Design freedom would inhibit safety . . . ." (*Chrysler Corp.* v. *DOT*, 515 F.2d 1053, at 1058).

With respect to sealed beam headlamps, dimensions relating to fit of the lamp into the housing are prescribed for the size and shape of the lamp, and for its retaining flange, seating plane lugs, electrical prongs, and headlamp mounting ring notches. With regard to photometrics, the number of headlamps and their location relative to each other are prescribed, as are mounting height and maximum wattage. Headlamp covers are prohibited.

For replaceable bulb headlamps, dimensions are prescribed for the bulb capsule, bulb black cap, base, reflector socket, O-ring seal, and for the location of the filaments relative to the lens/reflector assembly. With regard to photometrics, the number of headlamps and their location relative to each other are prescribed, as are mounting height and maximum wattage. Headlamps covers are permitted.

There are arguments to be made for either continuing or relieving these design restrictions. They were orginally imposed through a consensus of State motor vehicle administrators in the late 1930's that the situation then existing with complete design freedom was so chaotic that order had to be imposed. Accordingly, beginning with 1940 model cars, a standardized headlamp was introduced, a sealed beam unit of 7 inches diameter. Over the years, five additional types of sealed beam headlamps have been introduced gradually without a return to the problems that gave rise to standardization. An argument can be made that this is because the distribution and inventory systems are for more extensive and sophisticated today then they were 50 years ago.

Those who support dimensional specifications relating to the fit of the lamp into the housing might argue that without them, manufacturers of headlamps, headlamp components, and vehicles will no longer have a common understanding of dimensional requirements to assure proper fitting of manufactured parts. Those who oppose these dimensional requirements might reply that the market place will ensure an acceptable amount of commonality, and that dimensional specifications are properly the function of a standard setting organization (such as the SAE from whence the sealed beam specifications originated) rather than the Federal government.

Finally, without these dimensions, it could be argued, the consumer may choose parts that can be assembled into a photometrically incorrect headlamp, such as fitting the wrong bulb into a lens/reflector unit. Such a possibility, NHTSA believes, can be reduced through advisory labels and other related materials.

The agency stated previously that recently it has received an unprecedented number of petitions seeking amendments of headlighting requirements. The majority of these are concerned with dimensional requirements—from the size and shape of sealed beam headlamps to the location of filaments in replaceable bulb headlamps. Thus, significant agency resources are engaged in this area, an area in which uncertain, if any, safety benefits are involved and an area whose requirements clearly inhibit design innovation.

With regard to dimensions relating to photometrics (e.g. filament location) consideration of options relates back to consideration of a vehicle standard as discussed in section I.

Therefore, NHTSA seeks comments on the following issues:

III–1. The costs and benefits of eliminating dimensional specifications for fitting the headlamp into the housing:

a. Under current circumstances, where nearly two-thirds of headlamps are sold for replacement purposes.

b. Under the assumption that headlamps were regulated as original vehicle equipment and designed for vehicle life so that less than 20% of headlamps would be sold for replacement purposes.

III–2. Under the assumption that some dimensions are to be retained, discuss the dimensions that are critical to motor vehicle safety.

III–3. These same issues as applied to elimination of dimensional specifications for photometrics.

IV. Headlamp Aim

Intuitively, proper aiming of headlamps would appear necessary to asure that they provide the light required for the tasks of driving at night and under other considerations of reduced visibility, and that they not cause glare to oncoming drivers. However, it is difficult to come by research data or statistics indicating a direct or indirect causation of accidents attibutable to improper aim.

The general aiming specifications of Standard No. 108 are that headlamp aiming screws perform in a defined manner, that aim be capable of being held through 20 adjustments, that there be capability of aim of 4 degrees in both the horizontal and vertical directions, that there be an adjustable light beam axis, and that headlamps be capable of aiming with ordinary tools. The capability of mechanical aim is provided by the specification that the lamp have three pads on its lens which form an aiming plane.

There are three methods of headlamp aim in general use today: visual aim, optical aim, and mechanical aim. In visual aiming, an individual views the light beam on a vertical surface such as a wall or a screen 25 feet from the headlamp in relation to the H-V lines (horizontal-vertical) and aims the lamp so that its point of maximum intensity ("hot spot") falls in the appropriate location on the vertical surface. In optical aiming, a machine is placed in front of the headlamp, and its condensing lens collects light and measures certain beam points to judge the accuracy of the aim. In mechanical aiming, a machine is attached directly, to the headlamp by being fitted over the three pads on the lamp.

Visual aiming is better suited to lamps employing a beam pattern with a sharp cut-off, such as is found in the typical European lamp. When used with the softer, less defined U.S. beam pattern, an unavoidble element of subjectivity arises increasing the likelihood of improper aim. Optical aim also is more time consuming than mechanical aim and requires a subjective determination by the operator of the optical aiming device.

In accordance with SAE practice since the adoption of sealed beam headlamps, Standard No. 108 requires that all headlamps be capable of mechanical aim. To NHTSA, mechanical aiming has been the most objective, simplest way to determine accuracy of aim. It is the method most frequently used in those State motor vehicle inspections which check aim at all. (NHTSA estimates the number of States which inspect for headlamp aim to be 21 and of those, 13 use mechanical aiming devices). However, the requirements of having an aiming plane and aiming pads are somewhat of an inhibition to styling freedom, as only certain configurations of aiming pads are permitted, to insure fit with the aimer. As the number of types of headlamps has grown, mechanical headlamp aiming has become somewhat more cumbersome because of the necessity of providing adapters for the aimers so that they may be used with the new designs.

Headlamp aiming comprises two components, aim in the horizontal plane (left-right) and in a vertical plane (up-down). Horizontal aim presents a lesser potential for glare than vertical aim, and is therefore a less critical component. It may be practicable, therefore, to design headlamps which do not require horizontal aim and permit vertical aim by use of a level-type indicator mounted on the vehicle itself.

With respect to the general issue of headlamp aimability NHTSA seeks comments on the following issues:

IV–1. Whether an aiming requirement in the Federal standard is necessary for motor vehicle safety.

IV–2. Whether there is a relationship between aim and photometrics, i.e., whether a brighter headlamp could be used if aim adjustment were reduced.

IV–3. Whether there is a set of photometric specifications that is more amenable to simplified aiming procedures than the current requirements.

IV–4. The cost and desirability of determining proper vertical aim through use of a level-type indicator mounted on the vehicle itself.

IV–5. The dimensions, if any, that should be retained. With respect to mechanical aim:

IV–6. The effects of mechanical aim upon motor vehicle safety.

IV–7. The costs and benefits of eliminating mechanical aiming capability.

IV–8. Alternatives to the existing specifications for capability of mechanical aim.

V. Photometric Performance of Sealed Headlamps

There are three different photometric specifications allowed in Standard No. 108, each applicable to some but not all headlamps. These are specified in SAE J579a, SAE J579c, and Figure 15.

Until 1976, only SAE J579a photometric performance was permitted. The lower beam seeing distance point was located at ½ D–2R and had a range of from 6000 cd to 15,000 cd. The upper beam was aimed at ½ D–V and had a range of 20,000 cd to 37,500 cd.

With the amending of Standard No. 108 in 1976 to permit the Type B large rectangular lamp, and later in 1978 to permit "halogen technology" for all lamps, the standard was also amended to permit SAE J579c photometry. The lower beam was aimed more to the left and had a higher intensity. The lower beam seeing point distance was now located at ½ D–1½ R with a range of 8,000 to 20,000 cd. The upper beam was now aimed higher, at H–V, with a higher performance range of 25,000 cd to 75,000 cd.

The Type F photometry of Figure 15 of Standard No. 108, was adopted with the 92 x 150 mm, small rectangular four headlamp system in 1984. Intended to give more seeing light down the road on lower beam, the lamps use the same test points as SAE J579c but have higher minimum values at some of them and a higher maximum value at one lower beam test point.

Although headlamp Types A, C, and D (small rectangular, large round and small round, respectively) are still allowed to comply with SAE J579a to the best of NHTSA's knowledge, very few manufacturers appear to be currently producing SAE J579a headlamps.

The existence of three photometric requirements, one of which is for all practical purposes nearly obsolete, promotes unnecessary confusion and serves no apparent safety purposes.

Therefore, NHTSA seeks comments on the following issues:

V–1. The ramifications for safety of eliminating SAE J579a as an alternative headlamp performance level for Types A, C, and D headlamps.

V–2. The costs and benefits to manufacturers and consumers of eliminating SAE J579a.

V–3. The desirability of developing a single set of photometric requirements for all headlamps.

The program official and attorney primarily responsible for this notice are Deborah L. Parker and Z. Taylor Vinson respectively.

(Secs. 103, 119, Pub. L. 89–563, 80 Stat. 718 (15 U.S.C. 1392, 1407); delegations of authority at 49 CFR 1.50 and 49 CFR 501.8)

Issued on October 16, 1985.

Barry Felrice,

Associate Administrator for Rulemaking.

[FR Doc. 85–25089 Filed 10–17–85; 1:41 pm]

BILLING CODE 4910–59–M