

## CONSUMER PRODUCT SAFETY COMMISSION

16 CFR Parts 1307, 1410, 1500 and 1515

### Standards for All Terrain Vehicles and Ban of Three-Wheeled All Terrain Vehicles; Notice of Proposed Rulemaking

**AGENCY:** Consumer Product Safety Commission.

**ACTION:** Notice of proposed rulemaking.

**SUMMARY:** To address the unreasonable risks of injury and death associated with all terrain vehicles ("ATVs"), the Commission is proposing rules for adult and youth ATVs. The proposed rules include requirements concerning the mechanical operation of ATVs, requirements for providing safety information about operating ATVs (such as through labeling and training), and requirements for certification, testing and recordkeeping. The proposed standards would apply to adult single-rider and tandem ATVs and to youth ATVs. The Commission is also proposing a rule to ban three-wheeled ATVs. The proposed rules are issued under the authority of both the Consumer Product Safety Act ("CPSA") and the Federal Hazardous Substances Act ("FHSA").

**DATES:** Written comments in response to this document must be received by the Commission no later than October 24, 2006. Comments on elements of the proposed rule that, if issued in final form would constitute collection of information requirements under the Paperwork Reduction Act, may be filed with the Office of Management and Budget ("OMB") and with the Commission. Comments will be received by OMB until October 10, 2006.

**ADDRESSES:** Comments should be filed by email to [cpsc-os.gov](mailto:cpsc-os.gov). Comments also may be filed by telefacsimile to (301) 504-0127 or they may be mailed or delivered, preferably in five copies, to the Office of the Secretary, U.S. Consumer Product Safety Commission, 4330 East West Highway, Bethesda, Maryland 20814-4408; telephone (301) 504-7923. Comments should be captioned "ATV NPR."

Comments to OMB should be directed to the Desk Officer for the Consumer Product Safety Commission, Office of Information and Regulatory Affairs, OMB, Washington, DC 20503. The Commission asks commenters to provide copies of such comments to the Commission's Office of the Secretary, with a caption or cover letter identifying

the materials as copies of comments submitted to OMB on the proposed collection of information requirements for the proposed ATV standard.

#### FOR FURTHER INFORMATION CONTACT:

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#### SUPPLEMENTARY INFORMATION:

##### A. Background

The Commission is proposing rules that will cover single-rider ATVs, tandem ATVs (intended for two people) and ATVs intended for children under 16 years of age.<sup>1</sup> These proposed rules include proposed standards that specify mechanical requirements for ATVs and informational requirements so that ATV purchasers and operators will have safety information about ATVs. The Commission is also proposing to ban three-wheeled ATVs. The Commission believes that these proposed rules are necessary to address an unreasonable risk of injury and death associated with ATVs.

ATVs were first available in this country in the early 1970's, and became increasingly popular in the early 1980's. With their rise in popularity, the number of ATV-related incidents also rose. On May 31, 1985, the Commission published an advance notice of proposed rulemaking ("ANPR") stating the Commission's safety concerns and outlining options the Commission was considering to address ATV-related hazards. 50 FR 23139. In 1987, the Commission filed a lawsuit under section 12 of the CPSA against the five companies that were major ATV distributors at that time to declare ATVs an imminently hazardous consumer product, see 15 U.S.C. 2061(b)(1).<sup>2</sup> The

<sup>1</sup> The Commission voted unanimously to issue the notice of proposed rulemaking with changes to address youth and adult ATV training (subsection (g)). Commissioner Nancy A. Nord and Commissioner Thomas H. Moore voted for additional changes not included in Chairman Stratton's vote, including additional instructions to staff and request for comments, a new subsection and modifying language in the preamble. Commissioners Nord and Moore issued statements which are available from the Commission's Office of the Secretary or from the Commission's Web site, <http://www.cpsc.gov>.

<sup>2</sup> The five distributors were American Honda Motor Co., Inc., American Suzuki Motor Corp., Polaris Industries, L.P., Yamaha Motor Corp., USA, and Kawasaki Motors Corp., USA. In 1996, Arctic Cat, Inc. began manufacturing ATVs and entered into an Agreement and Action Plan with the Commission in which the company agreed to take substantially the same actions as required under the Consent Decrees.

lawsuit was settled by Consent Decrees filed on April 28, 1988 that were effective for ten years.

##### 1. The Consent Decrees

In the Consent Decrees, the distributors agreed to: (1) Halt the distribution of three-wheel ATVs, (2) attempt "in good faith" to devise a voluntary performance standard satisfactory to the Commission; (3) label ATVs with four types of warnings, the language and format of which were specified in the Consent Decrees; (4) supplement existing owners manuals with safety text and illustrations specified in the Consent Decrees and to prepare new owners manuals with specified safety information; (5) provide point of purchase safety materials meeting guidelines specified by the Consent Decrees, including hangtags, a safety video, and other safety information; (6) and offer a rider training course to ATV purchasers and members of their immediate families at no cost. In addition, the Consent Decrees contained several media and marketing provisions.

The distributors also agreed in the Consent Decrees that they would "represent affirmatively" that ATVs with engine sizes between 70 and 90 cc should be used only by those age 12 and older, and that ATVs with engine sizes larger than 90 cc should be used only by those 16 and older. Because distributors did not sell their products directly to consumers but through dealerships (which were not parties to the Consent Decrees), distributors agreed to "use their best efforts to reasonably assure" that ATVs would "not be purchased by or for the use of" anyone who did not meet the age restrictions. While the Consent Decrees were in effect, the distributors entered into agreements with the Commission and the Department of Justice agreeing to monitor their dealers to determine whether they were complying with the age recommendations and to terminate the franchises of dealers who repeatedly failed to provide the appropriate age recommendations.

##### 2. Development of the Voluntary Standard for Single-Rider ATVs

Industry had begun work on a voluntary standard before the Consent Decrees were in place. Distributors that were parties to the Decrees agreed to work in good faith to develop a voluntary standard that was satisfactory to the Commission within four months of the signing of the Consent Decrees. The five companies, working through the Specialty Vehicle Institute of America ("SVIA"), submitted a standard

for approval as an American National Standards Institute ("ANSI") standard in December 1988. On January 13, 1989, the Commission published a notice in the **Federal Register** concluding that the voluntary standard was "satisfactory" to the Commission.<sup>3</sup> 54 FR 1407. The standard, known as ANSI/SVIA 1–2001, *The American National Standard for Four Wheel All-Terrain Vehicles—Equipment, Configuration, and Performance Requirements*, was first published in 1990, and was revised in 2001. The ANSI standard has requirements for the mechanical operation of ATVs, but does not contain any provisions concerning labeling, owners manuals or other information to be provided to the purchaser because such requirements were stated in the Consent Decrees that were in effect when the ANSI standard was developed. As discussed in section G.3, ANSI now has a draft voluntary standard for tandem ATVs.

### 3. ATV Action Plans/Letters of Undertaking

The Consent Decrees expired in April 1998. The Commission entered into voluntary "Action Plans," also known as "Letters of Undertaking" or "LOUs," with eight major ATV distributors (the five who had been parties to the Consent Decrees, plus Arctic Cat, Inc., Bombardier, Inc. and Cannondale Corporation, which no longer makes ATVs) See 63 FR 48199 (summarizing Action Plans).<sup>4</sup> Except for Bombardier's, all of the Action Plans took effect in April 1998 at the expiration of the Consent Decrees. (Bombardier's took effect in 1999 when the company began selling ATVs.) The companies agreed to continue many of the actions the Consent Decrees had required concerning the age recommendations, point of sale information (i.e., warning labels, owners manuals, hang tags, safety alerts, and safety video), advertising and promotional materials, training, and stopping distribution of three-wheeled ATVs.

### 4. Termination of Previous Rulemaking

As mentioned above, the Commission issued an ANPR concerning ATVs in

1985, but chose to pursue legal action under section 12 of the CPSA instead of taking regulatory action. In 1991, the Commission terminated the rulemaking proceeding it had started with the 1985 ANPR. 56 FR 47166. The Commission observed in its termination notice that, at the time of the termination, the Consent Decrees were in effect, the five ATV distributors had agreed to conduct monitoring of dealers' compliance with the Consent Decrees' provisions, and ATV-related injuries and deaths were declining. The ATV-related injury rate for the general population (per ATV) had dropped by about 50 percent between 1985 and 1989, and ATV-related fatalities had declined from an estimated 347 in 1986 to about 258 in 1989. Id. At 47170.

The Commission's termination of its rulemaking proceeding was challenged by the Consumer Federation of America ("CFA") and U.S. Public Interest Research Group ("PIRG") arguing that withdrawing the ANPR rather than pursuing a ban on the sale of new adult-size ATVs for use by children under 16 was arbitrary and capricious. The court upheld the Commission's decision. *Consumer Federation of America v. Consumer Product Safety Commission*, 990 F.2d 1298 (D.C. Cir. 1993). The court noted that it was reasonable for the Commission to determine the effectiveness of the Consent Decrees and monitoring activities before considering whether additional action would be necessary. Id. at 1306.

### 5. CFA's Petition and the Chairman's Memo

In August 2002, CFA and eight other groups requested that the Commission take several actions regarding ATVs. CPSC docketed the portion of the request that met the Commission's docketing requirements in 16 CFR § 1051.5(a). That request asked for a rule banning the sale of adult-size four wheel ATVs for the use of children under 16 years old. The Commission solicited public comments on the petition. 67 FR 64353 (2002). In 2003, the Commission held a public hearing in West Virginia, and the Chairman held hearings in Alaska and New Mexico to hear oral presentations from the public about ATVs. The staff prepared a briefing package analyzing the petition and recommending that the Commission deny the petition (available on the Commission's Web site at [www.cpsc.gov/library/foia/foia05/brief/briefing.html](http://www.cpsc.gov/library/foia/foia05/brief/briefing.html)). (After an initial vote on October 6, 2005 to defer a decision on the petition, the Commission voted 2–1 to deny the petition when it voted on July 12, 2006 to issue this NPR. The

statements issued by Commissioner Nord and Commissioner Moore, referenced in footnote 1, also discuss their votes on the petition.)

On June 8, 2005, Chairman Hal Stratton delivered a memorandum to the staff asking the staff to review all ATV safety actions and make recommendations on a number of issues. The memo directed the staff to consider whether: (1) The current ATV voluntary standards are adequate in light of trends in ATV-related deaths and injuries; (2) the current ATV voluntary standards or other standards pertaining to ATVs should be adopted as mandatory standards by the Commission; and (3) other actions, including rulemaking, should be taken to enhance ATV safety. The memo also identified several specific issues for the staff to review, namely: (1) Pre-sale training/certification requirements; (2) enhanced warning labels; (3) formal notification of safety rules by dealers to buyers; (4) the addition of a youth ATV model appropriate for 14-year olds; (5) written notification of child injury data at the time of sale; (6) separate standards for vehicles designed for two riders; and (7) performance safety standards. The memo directed the staff to give particular attention to improving the safety of young riders.

### 6. 2005 ANPR

On October 14, 2005, the Commission published an ANPR that began this proceeding. 70 FR 60031. The ANPR reviewed the history of the Commission's involvement with ATVs, summarized the ANSI/SVIA–1–2001 standard, described regulatory and non-regulatory options to address ATV-related injuries and deaths, and requested comments from the public. Comments on the ANPR and the Commission's responses are discussed at section H.

### B. Statutory Authority

This proceeding is conducted pursuant to the Consumer Product Safety Act ("CPSA") and the Federal Hazardous Substances Act ("FHSA"). All Terrain Vehicles are "consumer products" which can be regulated by the Commission under the authority of the CPSA. See 15 U.S.C. 2052(a). However, the FHSA provides the Commission with regulatory authority over articles intended for use by children. See 15 U.S.C. 1261(f)(1)(D). See also 15 U.S.C. 2079(d) (requiring, that the Commission regulate under the FHSA if the risk of injury at issue can be eliminated or sufficiently reduced by action under the FHSA unless the Commission finds by rule that it is in the public interest to

<sup>3</sup> In the FR notice, the Commission noted that it "specifically reserved its rights under the consent decrees to institute certain enforcement or rulemaking proceedings in the future." 54 FR 1407.

<sup>4</sup> These documents are available on CPSC's Web site at [www.cpsc.gov/library/foia/foia98/fedreg/honda.pdf](http://www.cpsc.gov/library/foia/foia98/fedreg/honda.pdf); [www.cpsc.gov/library/foia/foia98/fedreg/suzuki.pdf](http://www.cpsc.gov/library/foia/foia98/fedreg/suzuki.pdf); [www.cpsc.gov/library/foia/foia98/fedreg/kawasaki.pdf](http://www.cpsc.gov/library/foia/foia98/fedreg/kawasaki.pdf); [www.cpsc.gov/library/foia/foia98/fedreg/polaris.pdf](http://www.cpsc.gov/library/foia/foia98/fedreg/polaris.pdf); [www.cpsc.gov/library/foia/foia98/fedreg/yamaha.pdf](http://www.cpsc.gov/library/foia/foia98/fedreg/yamaha.pdf); [www.cpsc.gov/library/foia/foia98/fedreg/arctic.pdf](http://www.cpsc.gov/library/foia/foia98/fedreg/arctic.pdf); and [www.cpsc.gov/library/foia/foia99/pubcom/bobard.pdf](http://www.cpsc.gov/library/foia/foia99/pubcom/bobard.pdf).

regulate under the CPSA). Thus, the Commission is proposing standards for adult 4-wheel ATVs and a ban of adult three-wheeled ATVs under the CPSA, and is proposing a standard for youth ATVs, which includes a ban of three-wheeled ATVs, under the FHSA.

### 1. The CPSA

Section 7 of the CPSA authorizes the Commission to issue consumer product safety standards that consist of performance requirements and/or requirements for warnings or instructions. Id. 2056(a). The requirements of the standard must be “reasonably necessary to prevent or reduce an unreasonable risk of injury associated with such product.” Id.

Section 8 of the CPSA authorizes the Commission to issue a rule declaring a consumer product a “banned hazardous product” when the Commission finds that: The product is being, or will be, distributed in commerce; the product presents an unreasonable risk of injury; and no feasible consumer product safety standard would adequately protect the public from the risk of injury. Id. 2057.

Section 9 of the CPSA specifies the procedure the Commission must follow to issue a consumer product safety standard or a ban under section 8. In accordance with section 9, the Commission commenced this rulemaking by issuing an ANPR identifying the product and the risk of injury, summarizing regulatory alternatives, and inviting comments or suggested standards from the public. Id. 2058(a). 70 FR 60031 (2005). The Commission considered the comments submitted in response to the ANPR, and has decided to issue these proposed rules and a preliminary regulatory analysis in accordance with section 9(c) of the CPSA. Next, the Commission will consider the comments received in response to the proposed rules and decide whether to issue final rules and a final regulatory analysis. 15 U.S.C. 2058(c)–(f).

According to section 9(f)(1) of the CPSA, before promulgating a consumer product safety rule, the Commission must consider, and make appropriate findings to be included in the rule, concerning the following issues: (1) The degree and nature of the risk of injury that the rule is designed to eliminate or reduce; (2) the approximate number of consumer products subject to the rule; (3) the need of the public for the products subject to the rule and the probable effect the rule will have on utility, cost or availability of such products; and (4) means to achieve the objective of the rule while minimizing adverse effects on competition,

manufacturing and commercial practices. Id. 2058(f)(1).

According to section 9(f)(3) of the CPSA, to issue a final rule, the Commission must find that the rule is “reasonably necessary to eliminate or reduce an unreasonable risk of injury associated with such product” and that issuing the rule is in the public interest. Id. 2058(f)(3)(A) & (B). In addition, if a voluntary standard addressing the risk of injury has been adopted and implemented, the Commission must find that (1) the voluntary standard is not likely to eliminate or adequately reduce the risk of injury, or that (2) substantial compliance with the voluntary standard is unlikely. Id. 2058(f)(3)(D). The Commission also must find that expected benefits of the rule bear a reasonable relationship to its costs and that the rule imposes the least burdensome requirements that would adequately reduce the risk of injury. Id. 2058(f)(3)(E) & (F).

Other provisions of the CPSA also authorize this rulemaking. Section 27(e) provides the Commission with authority to issue a rule requiring consumer product manufacturers to provide the Commission with such performance and technical data related to performance and safety as may be required to carry out the CPSA, and to give such performance and technical data to prospective and first purchasers. Id. 2076(e). This provision bolsters the Commission’s authority under section 7 to require provision of safety-related information such as hangtags, instructional/owners manuals, safety videos, and training.

Section 14 of the CPSA authorizes the Commission to issue a rule requiring certification that a product meets a consumer product safety standard. Id. 2063(c). Section 14 also authorizes the Commission to prescribe, by rule, reasonable testing programs for consumer products subject to a consumer product safety rule. Id. 2063(b).

Finally, section 16 of the CPSA authorizes the Commission to issue rules requiring establishment and maintenance of records needed to implement the CPSA or to determine compliance with rules or orders issued under the CPSA. Id. 2065(b).

### 2. The FHSA

The FHSA requires proceedings and findings similar to those required by the CPSA. Section 2(f)(1)(D) of the FHSA defines “hazardous substance” to include any toy or other article intended for use by children that the Commission determines, by regulation, presents an electrical, mechanical, or thermal

hazard. 15 U.S.C. 1261(f)(1)(D). An article may present a mechanical hazard if its design or manufacture presents an unreasonable risk of personal injury or illness during normal use or when subjected to reasonably foreseeable damage or abuse. 15 U.S.C. 1261(s).

Under section 2(q)(1)(A) of the FHSA, an article intended for use by children, which is a hazardous substance (as defined in the FHSA) accessible by a child, is banned. 15 U.S.C. 1261(q)(1)(A). Under this authority, the Commission can issue a rule stating that if a particular article intended for use by children does not meet requirements that the Commission specifies by rule, the item is banned. *See Forester v. Consumer Product Safety Commission*, 559 F.2d 774, 782 (D.C. Cir. 1977).

Section 3(f) through 3(i) of the FHSA, 15 U.S.C. 1262(f)–(i), describes the procedures to promulgate a regulation determining that an article intended for children presents an electrical, mechanical, or thermal hazard. The procedures are the same as those required for a CPSA rule discussed above. 15 U.S.C. 1262(f) through (i).

Before the Commission can issue this type of final rule under the FHSA, it must make many of the same findings necessary for a final CPSA rule: (1) if an applicable voluntary standard has been adopted and implemented, that compliance with the voluntary standard is not likely to adequately reduce the risk of injury, or compliance with the voluntary standard is not likely to be substantial; (2) that benefits expected from the regulation bear a reasonable relationship to its costs; and (3) that the regulation imposes the least burdensome alternative that would adequately reduce the risk of injury. Id. 1261(i)(2).

Section 10 of the FHSA authorizes the Commission to issue regulations “for the efficient enforcement of” the FHSA. Id. 1269(a). This provision gives the Commission authority to issue the requirements for certification, testing and recordkeeping in the youth ATV standard.

## C. The Product

### 1. What’s Covered by the Proposed Rules

An ATV is a motorized vehicle with three or four broad, low pressure tires (less than 10 pounds per square inch) a seat designed to be straddled by the operator, handlebars for steering, and it is designed for off-road use. Most ATVs are designed for use by only one person. However, some companies have developed ATVs intended for use by the operator and one passenger. These

ATVs are referred to in this notice as tandem ATVs. The proposed rules the Commission is issuing cover three-wheeled ATVs, four-wheeled adult ATVs intended for single riders, four-wheeled adult tandem ATVs, and ATVs intended for children under 16 years of age (referred to here as youth ATVs).

## 2. Market and Sales Information

The market for ATVs has increased greatly since they were first introduced over thirty years ago. The SVIA, an ATV trade association, estimated that in 2005, there were 6.9 million ATVs in use. The market is made of seven major distributors of ATVs (the companies that have entered into voluntary LOUs with the Commission and are represented by SVIA) and new entrants that import ATVs to the U.S. Sales by both groups have increased over the past decade. U.S. retail sales of ATVs by the seven major distributors have increased from an estimated 293,000 ATVs sold in the U.S. in 1995 to an estimated 921,000 ATVs sold in the U.S. in 2005. [4]<sup>5</sup>

## 3. Imports

Imports for the new entrants have increased markedly in recent years. In the late 1990's, imports comprised a small portion of the ATV market, near zero. In 2001, imports were estimated to account for about 5 percent of total U.S. sales. By 2004, imports had increased to 10 percent of the total U.S. market. [4]

In 2006, Commission staff has identified over 80 importers of ATVs. Most of these firms import other products in addition to ATVs, such as powered scooters, dirt bikes, go-carts and snow mobiles. A recent trade report estimated that 100 to 150 Chinese manufacturers and an estimated 22 Taiwanese firms exported ATVs worldwide in 2005. The trade report does not indicate what share of these firms' output is exported to the U.S., but based on another trade analysis, Commission staff estimates that approximately 80,000 ATVs were exported from China to the U.S. in 2004 and approximately 14,000 ATVs were exported from Taiwan in that year. There also appear to be imports from other countries in Europe and Southeast Asia (notably South Korea and Vietnam), but the staff does not have information on the extent of such imports. [4]

Staff has observed that imported ATVs may lack some or all of the labeling specified in the LOUs. On such ATVs, labels may be unclear, translated incorrectly, or in a language other than English. Staff has also found that owner's manuals for imported ATVs may not provide information that could be understood by U.S. consumers (e.g., information that conflicts with labeling, measurements in unfamiliar measuring systems). [8]

## 4. Marketing

The major distributors have traditionally marketed ATVs through franchises, either as free-standing locations or in conjunction with other related retail operations (such as motorcycle retailers). [4]

Imported ATVs are sold in a variety of ways. They may be sold through distributors, including some of the major distributors. Foreign firms also market through U.S. importer/wholesalers who, in turn, may market the products to retailers (including such mass marketers as Pep Boys, Fleet and Farm, Wal-Mart, Sam's Club, and BJ's). Some importer/suppliers also have dealer networks. [4]

Imported ATVs also are offered for sale directly to consumers through import brokers who transship imported units to retailers (or consumers), often without taking physical control of the products. Web sites offering ATVs for sale are ubiquitous. A recent CPSC surveillance effort reported that there were literally hundreds of Web sites offering ATVs for sale, but the staff does not know the extent of actual purchases through the Internet. [4]

## 5. Consumer Prices

The staff's 2004 market study observed that the major distributors' suggested retail price for ATVs ranged from about \$2,000 to \$8,000; the median suggested retail price was \$5,150. As a subgroup, the price ranges for youth ATVs from these manufacturers was \$1,800 to \$2,500. The median suggested retail price for youth ATVs was about \$2,300. [4]

A recent staff Internet search of new ATVs with brand names other than those of the North American distributors, offered for sale by business entities, found youth ATV models ranging from about \$320 to \$950 each, with an average price of about \$630. Larger ATVs ranged from about \$600 to \$2,400, with an average of \$1,340. The cited prices included the cost of shipping to points within the lower 48 states from the dealers' U.S. warehouses. Thus, it appears that ATVs from importers/new entrants may have

a significant price advantage over the major distributors' products. [4]

## D. Risk of Injury

As noted in the 2005 ANPR, the most recent annual report of ATV deaths and injuries that the Commission has issued is the 2004 Annual Report (which was issued in September 2005). According to that report, the Commission had reports of 6,494 ATV-related deaths that have occurred since 1982. Of these, 2,019 (31 percent of the total) were to children under 16 years of age and 845 (13 percent of the total) were to children under 12 years of age. According to the 2004 Annual Report, 569 ATV-related deaths were reported to the Commission for 2003. Deaths reported to the Commission represent a minimum count of ATV-related deaths. To account for ATV-related deaths that are not reported to the Commission, the staff calculates an estimated number of ATV deaths. The most recent estimate of ATV-related deaths for 2003 is 740. [3]

CPSC collects information on hospital emergency room treated injuries. The estimated number of ATV-related injuries treated in hospital emergency rooms in 2004 was 136,100. This is an increase of about eight percent over the 2003 estimate. The estimated number of injuries to children under 16 in 2004 was 44,700 (about 33 percent of the total estimated injuries for 2004). [3]

The staff also estimates the risk of injury and the risk of death per 10,000 ATVs in use. According to the 2004 Annual Report, the estimated risk of injury for four-wheel ATVs for 2004 was 187.9 injuries per 10,000 four-wheel ATVs in use. A recent high in the estimated risk of injury occurred at 200.9 in 2001. The estimated risk of death for four-wheel ATVs in 2003 was 1.1 deaths per 10,000 four-wheel ATVs in use. In 1999, the earliest comparable year due to changes in data collection, the estimated risk of death was 1.4 deaths per 10,000 four-wheel ATVs in use. [3]

Based on injury and exposure studies conducted in 1997 and, most recently, in 2001, the estimated number of ATV-related injuries treated in hospital emergency rooms rose from 52,800 to 110,100 (a 109 percent increase). Injuries to children under 16 rose 60 percent. During these years, the estimated number of ATV drivers rose from 12 to 16.3 million (a 36 percent increase); the estimated number of driving hours rose from 1,580 to 2,360 million (a 50 percent increase); and the estimated number of ATVs rose from 4 to 5.6 million (a 40 percent increase). The chief finding of the 2001 Report was that increases in the estimated

<sup>5</sup>Numbers in brackets refer to documents listed at the end of this notice. They are available from the Commission's Office of the Secretary (see "Addresses" section above) or from the Commission's web site (<http://www.cpsc.gov/library/foia/foia.html>)



numbers of drivers, driving hours and vehicles did not account for all of the increase in the estimated number of ATV injuries. [3]

#### E. Children and ATVs

During its involvement with ATVs, the Commission has been particularly concerned with reducing the ATV-related deaths and injuries suffered by children. The Consent Decrees established age guidelines, which the major distributors continue through their Letters of Undertaking. In the Consent Decrees, the major distributors agreed to represent and to make their best efforts to see that their dealers also abided by age recommendations in their dealings with purchasers. These age recommendations were based on the ATV's engine size (measured as cubic centimeter ("cc") displacement). They established that an ATV with an engine that is larger than 90 cc should be used only by those 16 years of age and older, and that an ATV with an engine size between 70 and 90 cc should be used only by those 12 years of age and older. Thus, ATVs with engine sizes larger than 90 cc have been considered adult ATVs.

Yet, in spite of these efforts through the Consent Decrees and LOUs, recent Commission staff studies have shown that many children ride adult ATVs, and that injury rates are climbing. The Commission's injury and exposure studies indicate that injuries to children under age 16 rose 60 percent from 1997 to 2001. Although the number of children riding ATVs also rose during this period, that increase does not fully account for the rise in incidents.

The age delineations in the Consent Decrees made no mention of speed limits. However, the ANSI/SVIA-1-2001 voluntary standard does categorize youth ATVs by reference to speed limits. The voluntary standard requires that Y-6 ATVs (intended for ages 6-11) have devices to limit their speed to not more than 10 mph and allow upward adjustment to a maximum unrestricted speed of 15 mph. Y-12 ATVs (intended for ages 12-16) have similar requirements to limit speed to not more than 15 mph and allow upward adjustment to a maximum unrestricted speed of 30 mph.

The Commission is proposing to change the categorization of ATVs based on engine size that the Consent Decrees established. Instead the Commission proposes three categories of youth ATVs based on maximum speed of the ATV. The 90cc policy is design restrictive; engine size does not necessarily restrict ATV size, nor does it necessarily regulate maximum unrestricted speed;

staff cannot make assumptions (e.g., speed, power, weight, or size) about all ATVs of a certain engine size based solely on the engine displacement values; and the current voluntary standard for ATVs categorizes youth ATVs by speed limiting characteristics, not engine size.

The Commission's ESHF staff considered several sources to determine appropriate categories of ATVs. Based on developmental characteristics, children are typically grouped as: age 5 through 7 or 8; age 8 or 9 through 11 or 12; age 12 through 15; and age 16 and up. Children, of course, do not all develop at the same rate, but these groupings are appropriate for most.

The CPSC staff's Age Determination Guidelines, state that children age 6 through 8 years can operate slow-moving motorized vehicles, and that children age 9 through 12 years can operate motorized vehicles with gear shifting up to 10 miles per hour. The guidelines state a clear demarcation with the teenage years: "faster [than 10 mph] moving motorized [vehicles] are generally not appropriate even for 12-year-olds because of the difficulty associated with both balancing and steering the vehicle while moving."

Since ATVs require significant balance and control, it seems most appropriate to have an age division around the late pre-teen/early teenage years. Based on youth attributes described in the Age Determination Guidelines, reasonable youth ATV categories would be Y-6 ("slow-moving," no gear shifting), Y-9 (speeds 5-15 mph, gear shifting acceptable) and Y-13 (since the Age Determination Guidelines stop at age 12, no specifications can be made based on them). Additionally, the Age Determination Guidelines mention that 9-to 12-year-olds are generally "aware of traffic laws, but they are very likely to engage in high-risk behaviors like riding in traffic and stunt riding."

In addition to cognitive development, appropriate age groupings should account for children's physical size. Analysis of children's physical growth suggests groupings with breaks roughly at around ages 8 to 9 and 11 to 13, acknowledging that growth will be rapid between ages 11 and 16 for both males and females.

Groupings set out in the Age Determination Guidelines can be used to delineate three categories for youth ATVs based on maximum speed of the ATV. For the youngest category, the Age Determination Guidelines indicate that the ATV should be "slow-moving." One method of defining "slow moving" could be slow enough to allow parents to walk or jog with the ATV to facilitate

supervision. Under this premise, it would be reasonable to set the maximum speed for the slowest youth ATV between the jogging speed and running speed. Research indicates that is about 9 to 10 mph. Based on the Age Determination Guidelines, the next category should be roughly 10 to 15 mph. The Age Determination Guidelines do not extend past 12 years of age, but it is reasonable to assume that the third category could be faster than 10 mph and that older, more experienced teens may be able to handle speeds higher than 10 to 15 mph. The Commission's ESHF staff has found no scientific research to support either raising or lowering the current 30 mph speed limit for teens. Thus, 30 mph is a reasonable top speed for the third category of youth ATVs.

#### PROPOSED ATV MODELS AND INTENDED AGES

ATV Model age (years)	Speed range
Junior 6 + .....	10 mph or less.
Pre-teen 9 + .....	10* - 15 mph.
Teen 12 + .....	15* - 30 mph.
Adult 16 + .....	Not restricted.

\*With speed limiter.

Although the weight of the ATV can play a role in the suitability of an ATV for a youth, the Commission does not have sufficient information to set an appropriate weight for youth ATVs.

Frame size also plays a role in the appropriateness of an ATV for a child. Several commenters have expressed frustration with the current ATVs available for children because the smaller frames of these ATVs will not fit some 13 to 15 year olds. Establishing categories based on speed limit rather than engine size may encourage manufacturers to offer ATVs with larger frames (and larger engines), but with limited maximum speeds that would be appropriate for children.

The availability of such youth ATVs may shift a number of young riders to youth ATVs rather than larger adult models. This would increase safety. Commission analysis indicates that the injury rate for ATV riders under the age of 16 who are driving adult ATVs is about twice the expected injury rate of those who are driving age-appropriate ATVs. Moreover, these categories may enable more children to receive formal ATV training. The largest and best established formal training programs will not train children under age 16 unless they are riding an appropriate youth model. [8]

The proposed rule also requires that youth ATVs must have automatic

transmissions. Based on the Age Determination Guidelines, ESHF staff believes that manual transmission ATVs are inappropriate for children under 9 years of age. Due to the high cognitive load required to operate complex motorized vehicles, HF staff believes it best to allow all children below 16 years of age to master driving skills before learning to coordinate gear shifting with the many other skills involved when riding.

## F. Training

In the 1980s, Commission staff worked with the major ATV distributors to develop the predecessor to the current ATV training course that is offered through the ATV Safety Institute ("ASI"), the non-profit training division of the SVIA. Training is important because operating an ATV seems deceptively easy; steering controls are similar to a bicycle, and the throttle is generally simply lever-operated with the thumb. ATVs are, however, high-speed motorized vehicles that require repeated practice to drive proficiently. Operating an ATV is somewhat comparable to operating other complex motorized vehicles. ATVs have top speeds approaching that of automobiles on highways, yet have as little protection from oncoming objects as a motorcycle. Even at relatively low speeds (20–30 mph) they can take as much skill to operate as an automobile because the operator requires: (1) Situational awareness to negotiate unpaved terrain with both eye-level hazards (trees, other ATVs) and trail-level hazards (ditches, rocks, hidden holes); and (2) quick judgments including not only steering, speed, and braking, but also terrain suitability, weight shifting and other active riding behaviors. [12]

Formal, hands-on training teaches drivers how the ATV responds in situations that are typically encountered. ATV training may act as a surrogate for experience because it exposes new ATV drivers to situations they will encounter when riding off-road and teaches them the proper driving behavior to navigate those situations. [12]

All of the major distributors offer training through the ASI. In spite of the offers of free training and other incentives, relatively few ATV riders take formal safety training. According to a 2004 study by SVIA, only about 7 percent of new purchasers actually took training. The newer entrants to the market do not offer any training with their ATVs. These manufacturers account for about 10 percent of domestic ATV sales, but their share of the market has been increasing. [4 & 12]

The Commission is proposing to require that manufacturers provide purchasers with a certificate for free training for the purchaser and any member of his/her immediate family who meets the age recommendations for the ATV. The benefits of training to new ATV purchasers could be substantial. As stated above, training may act as a surrogate for experience. The greatest risk of injury occurs with inexperienced riders. Staff's analysis of ATV incident data has found a strong inverse relationship between driving experience and the risk of hospital emergency department-treated injury. The analysis indicates that risk in the first year of riding was about 65 percent higher than the risk in the second year, and about twice the risk of the third year. [8]

The proposed rules outline the basic content that a free training course must have. This curriculum is based on CPSC safety messages and the "ATV Rider's Course Outline" from the Consent Decrees. In addition to instruction about the basic maneuvers that are necessary to operate an ATV safely, the course must include instruction about the risks of ATV-related deaths and injuries, the importance of safety equipment, and the importance of avoiding the warned against behaviors that are stated in the general warning label (such as children not riding ATVs, not driving on paved roads, etc.). [12]

In many ways, training is essentially an extension of the warning labels and owners instruction manuals. The training course provides the rider with a fuller understanding of the risks involved in riding an ATV and of the actions he/she can take to avoid or reduce these risks.

## G. Description of Proposed Standards

### 1. General

The proposed standards draw from the ANSI/SVIA 1–2001 standard for four-wheel ATVs (for single rider ATVs), the draft voluntary standard for tandem ATVs, the Consent Decrees, and the LOUs. The Commission has pulled together elements from all of these sources to construct proposed standards with the goal of reducing ATV-related deaths and injuries. Both the adult and youth standards require that ATVs meet requirements for the mechanical operation of the ATV, informational/point of sale requirements, and certification and recordkeeping requirements.

The Commission believes that the reduction of deaths and injuries from both adult and youth ATVs will require the active participation and cooperation of the ATV industry and we encourage

their recommendations for additional safety provisions to the proposed mandatory standards. The creation of viable, safer youth ATVs will be an important component of any final rule.

### 2. Requirements for Adult Single Rider ATVs

#### a. Definitions

All terrain vehicle or ATV is defined as "a three- or four-wheeled motorized vehicle that travels on low pressure tires, has a seat designed to be straddled by the operator (and a passenger if provision is made for carrying a passenger), has handlebars for steering, and is intended for off-road use on non-paved surfaces." The definition of ATV states that for purposes of this part, an ATV is one that is intended for an operator 16 years of age or older. The term "manufacturer" is defined to include an importer for purposes of the ATV standards. Many of the definitions in the proposed standard are derived from the ANSI/SVIA–1–2001 standard.

#### b. Equipment and Configuration Requirements

*General.* Section 1410.5 proposes requirements for various aspects of the mechanical operation of adult single-rider ATVs. Many of these requirements are substantially the same as requirements of the ANSI/SVIA–1–2001 voluntary standard. However, the CPSC requires that consumer product safety standards be stated as performance rather than design standards. Thus, some requirements that were stated in the ANSI standard in terms of design have been modified to establish performance requirements.

The provisions of this section ensure that there will be uniformity in the basic operation of ATVs from one make or model to another. Proposed configuration requirements for vehicle controls, indicators, and gearing ensure the standardized instrumentation and safety features of current ATVs. It is important that the location and method of operation of safety related controls, such as brake controls and engine stop switch, be standardized to reduce operator confusion. The specified requirements are consistent with current ATV practice which is based on the National Highway Traffic Safety Administration requirements for motorcycle control location and operation requirements (49 CFR 571.123). [5]

*Operator Foot Environment.* Proposed performance requirements for operator foot environment ensure adequate vehicle configuration that reduces inadvertent contact between the

operator's feet and the ground or the ATV's rear wheels. Operator foot contact with the ground or the ATV's rear wheels has been identified as a hazard pattern among ATV-related injuries. Differing zones are defined for ATVs equipped with footpegs (designed to support the operator's foot with a relatively narrow bar), and footboards (designed to support the operator's foot with a platform-type structure). [5]

**Lighting.** Proposed lighting requirements mandate headlamps, tail lamps, and stop lamps on all adult ATVs. The lighting equipment must conform to applicable referenced standards. This provision was adopted from the ANSI/SVIA-1-2001 standard. Nighttime riding can be expected with adult ATVs and requirements for industry standard headlamps will ensure minimum illumination for nighttime or safer operation of the vehicle. [5 & 7]

**VIN or PIN.** The proposed standard requires that each ATV have assigned a unique vehicle identification number ("VIN") in accordance with 49 CFR Part 565 or a product identification number ("PIN") in accordance with Recreation Off-Road Vehicle Product Identification Numbering System, SAE International Consortium Standard, ICS-1000, issued 2004-9. If the ATV has a VIN number, the characters in location 4 and 5 of the number must be "A" and "T", respectively to identify the vehicle as an ATV and an off road vehicle. Having a VIN or PIN on every ATV can be helpful if an ATV is the subject of a corrective action. The VIN or PIN should also permit tracing the ATV back to its retailer to determine compliance with applicable requirements.

**Maximum speed capability and brake requirements.** Procedures are outlined for the measurement of a loaded vehicle's maximum speed. The maximum speed is used to determine the brake test speed and conformance to the youth ATV speed restriction requirements. [5]

The proposed standard establishes performance tests for service brakes and parking brakes. Reliable brake performance is critical to the safety of an ATV operator. The requirements specify a braking deceleration of  $5.88\text{m/s}^2$  (0.6g) or greater for service brakes and brake holding power up to a 30 percent grade for parking brakes. [5]

These proposed requirements establish minimum brake performance to ensure that brake systems are adequate for stopping the vehicle and holding the vehicle on an incline. The specified requirements are consistent with current ANSI/SVIA-1-2001 voluntary standard requirements which

are patterned after those in the Federal Motor Vehicle Safety Standard No. 122 Motorcycle Brake Systems (49 CFR 571.122).

The proposed requirements deviate from the current ANSI/SVIA-1-2001 requirements in terms of the vehicle test weight used to perform service brake tests. The current voluntary standard specifies the test weight as the unloaded vehicle weight plus 91 kg (200 lb) if the vehicle load capacity is specified as 91 kg (200 lb) or more. The proposed requirements specify the test weight as the unloaded vehicle weight plus the vehicle load capacity. This will ensure that larger vehicles with larger load capacities do not have a less stringent brake requirement (by using a comparatively lower test weight during brake tests).

**Stability requirements.** The standard proposes the same pitch stability requirements as the ANSI/SVIA-1-2001 voluntary standard. The pitch stability for single-rider ATVs is based on the longitudinal tilt angle of a vehicle without an operator. A vehicle's longitudinal tilt angle can be calculated by measuring the vehicle's front and rear weights and balancing angle (angle at which vehicle is balanced on its rear wheels) or it can be measured on a tilt table. The ANSI/SVIA-1-2001 voluntary standard requires calculation of a vehicle's longitudinal pitch angle which must be 45 degrees or higher to meet the pitch stability requirement. The proposed requirements adopt this test procedure and minimum tilt angle for single-rider ATVs, and add a tilt table option to address larger ATVs whose weights could make it unsafe to follow the voluntary standard procedures for measuring and calculating the pitch stability.

The proposed pitch stability requirements deviate from ANSI/SVIA-1-2001 in terms of the test conditions of the vehicle. The current voluntary standard specifies that the vehicle tires be inflated to the ATV manufacturer's lowest recommended pressure. The proposed requirements specify that the tires be inflated to the ATV manufacturer's highest recommended pressure. This will ensure that the vehicle configuration with the highest expected center of gravity will be tested.

Over the years, the Commission has analyzed the issue of ATV stability. Because ATVs are rider-active vehicles (that is, their performance is affected by the rider's movements), it is difficult to evaluate an ATV's actual stability. A satisfactory static test has been developed to measure an ATV's pitch stability (movement from front to back). At this point in time, the industry has

not been able to develop a satisfactory test of lateral stability (movement from side to side). Thus, the ANSI/SVIA-1-2001 standard has a requirement for pitch stability, but not for lateral stability. The Commission's proposed standard likewise contains requirements only for pitch stability. However, the Commission encourages the industry to continue to pursue an accurate and reliable test for lateral stability.

#### c. Information/Point of Sale Requirements

The proposed standard mandates by rule many similar information/point of sale requirements as were specified in the Consent Decrees and subsequently continued in the LOUs. This subpart of the proposed standard contains requirements for labeling, hangtags, age acknowledgment forms, instructional/owner's manuals, a safety video, and instructional training.

**Warning labels.** The Consent Decrees specified four labels to appear on all ATVs: (1) a general warning label, (2) an age recommendation label, (3) a passenger warning label, and (4) a tire pressure and overloading warning label. Most ATVs include these or substantially equivalent labels as well as other discretionary warning labels. However, imported ATVs may not have all of these warning labels, the labels may be unclear or they may not be in English.

The proposed rule requires labels that are similar to those required by the Consent Decrees, but allows more flexibility. The warning labels have evolved since the Consent Decrees, and the major distributors currently use their own copyrighted labels that present substantially the same warnings. In the case of the general warning label and the passenger label, the distributors sought Commission approval for new labels that included pictograms and somewhat different wording than had been specified in the Consent Decrees.

Like the Consent Decrees, the proposed rule requires a general warning label, an age recommendation warning label, a passenger warning label and a tire pressure/overloading label (or labels). All of the warning labels must display the safety alert symbol in accordance with section 4.1 of ANSI Z535.4-2002, American National Standard for Product Safety Signs and Labels, and the word "WARNING" in capital letters. The format for all of the labels must be consistent with the ANSI Z535.4-2002 standard. The proposed rule requires the same location for the single-rider ATVs as was required by the Consent Decrees. The proposed rule

requires the warning labels to be in English.

The proposed rule specifies statements for these warning labels and requires that the warning labels provide these, or substantially equivalent, statements. This should enable provision of the vital safety information but allow some flexibility to manufacturers who are using labels that are consistent with, but not identical to, the Consent Decree labels.

*General warning label.* The proposed rule requires a general warning label that contains the same statements, or substantially equivalent ones, as the general warning label required by the Consent Decrees. This label warns that ATVs can be hazardous to operate and that severe injury or death can result if the operator does not follow instructions to: Read the owners manual and all labels; never operate the ATV without proper instruction; never carry a passenger; never operate the ATV on paved surfaces or on public roads; always wear a helmet and protective clothing; never consume alcohol or drugs before or while operating ATVs; never operate the ATV at excessive speeds; and never attempt wheelies, jumps or other stunts. The proposed rule states that the warning statements may be arranged on the label to group the prohibited actions together and the required actions together. This is how many of the current general warning labels are arranged. The location is to be the same as specified in the Consent Decrees.

*Age recommendation warning labels.* The content of the age recommendation warning labels differs from the Consent Decree labels. The Commission's Human Factors staff concluded that the Consent Decree age labels for adult ATVs are vague about the nature of the hazard they are warning against and may not be as persuasive as they could be. The primary reasons for the age recommendations are children's lack of experience and, particularly, their immature judgment. If the reasons for the age recommendations are not explicitly described in the label, parents may rationalize why their children are exceptions to the recommendations. Thus, the proposed rule requires the following, or substantially similar statement: "Even youth with ATV experience have immature judgment and should never drive an adult ATV." The proposed age recommendation label also differs from the Consent Decree label by directing the message to the supervising parents rather than to the child, who is likely to ignore it. Thus, the proposed rule requires the following, or substantially equivalent,

statement: "Letting children under the age of 16 operate this ATV increases their risk of severe injury or death. NEVER let children under age 16 operate this ATV." [10]

*Passenger warning label.* The proposed rule specifies different wording for the passenger warning label than the Consent Decrees required. The major distributors are currently using a passenger label that differs from the Consent Decrees. As with the general warning label, they asked for and received approval from the Commission for a different passenger label. Both the current label and the Consent Decree label identify that the hazard caused by a passenger is that the ATV may go out of control, but the labels do not state how the presence of a passenger can lead to loss of control. To address this, the proposed standard requires the following, or substantially similar, statement: "Passengers can affect ATV balance and steering. The resulting loss of control can cause SEVERE INJURY or DEATH." The proposed standard also requires the statement (or a substantially similar one): "NEVER ride on this ATV as a passenger." The proposed language inserts the phrase "on this ATV" because, with the development of tandem ATVs, some ATVs are intended to carry passengers. [10]

*Tire pressure and overloading label(s).* Like the Consent Decrees, the proposed standard allows the option of having the tire pressure warning and the overloading warning in separate warning labels or combined into one label. The proposed content of the label(s) is the same as specified in the Consent Decrees.

*Label durability.* The proposed rule requires that all of the warning labels must meet the durability requirements of Underwriters Laboratories Standard UL 969, fourth edition, October 3, 1995. This should ensure that the labels will remain on the ATVs and legible for operators to see.

*Discretionary warning labels.* The proposed standard allows manufacturers to display additional warning labels on ATVs so long as they are consistent with ANSI Z535.4–2002, American National Standard for Product Safety Signs and Labels ANSI Z535.4 (2002) and are affixed to the ATV in an appropriate location that does not detract from the required warning labels. [10]

*Hangtags.* Like the Consent Decrees, the proposed standard requires that certain hangtags be present on the ATV at the point of sale. The hangtags must provide the contents of the general warning label, a statement that the hangtag is not to be removed before sale,

and a statement directing the purchaser to check with the ATV dealer about state or local laws concerning ATVs. The hangtags must be conspicuous and must be at least 4 by 6 inches.

*Age acknowledgement form.* The proposed rule requires that before the sales transaction, the ATV retailer must provide the purchaser with an age acknowledgement form, the content of which is specified in the proposed rule. The form tells the purchaser that the ATV he/she is considering is for adults and that children have immature judgment and should never drive an adult ATV. The form states the number of children who have died and who have been injured on adult ATVs in each year since 2001 and informs the purchaser that youth ATVs are available. The retailer must require the purchaser to sign the acknowledgement form before the sales transaction; must provide the purchaser and manufacturer with a copy of the form; and must maintain the original for at least five years. The signed forms must be available for Commission inspection upon request.

The purpose of the age acknowledgment form is to ensure that everyone who purchases an adult ATV is aware that it is not intended to be ridden by anyone under 16 and that children can be severely injured or die when riding an adult ATV. The Commission has received comments from parents indicating that they were unaware of the hazard adult ATVs pose for children until their child became injured or killed while riding one. Even with the current warning labels on ATVs stating this hazard and with the LOU provisions that voluntarily continue the major distributors' agreement to follow the age guidelines of the Consent Decrees, apparently some consumers purchase adult ATVs without knowing that a child should not ride them. Requiring purchasers to sign a form which states the age recommendations will inform the purchaser of the risks to children riding adult ATVs and could influence them to prohibit children under 16 from riding one. [8 & 11]

*Instructional/owners manuals.* Like the Consent Decrees, the proposed rule requires that ATVs be provided with an instructional/owners manual. The proposed rule continues many of the Consent Decrees' requirements for the manuals. They must be written to convey information about the safe operation and maintenance of the ATV, be written plainly in language that is comprehensible to a 7th grader, and be consistent with other required safety messages. The basic content of the

manual is specified much as it was in the Consent Decrees. The proposed rule adds a requirement that the manuals be in English.

An introductory safety section must contain certain specified safety messages. This section concludes with CPSC's website and phone number, and the manufacturer must provide a contact number for the purchaser to obtain further ATV safety information. The manufacturer also must provide a phone number or email address for the owner to report any safety issues (this could be the same phone number). The section of the manual that describes proper operating procedures must include narrative text identifying potential hazards, possible consequences, and describing how to avoid or reduce the risk of those hazards. This text must also include relevant warning statements required by the standard. The manufacturer must retain a copy of the manual for each model for 5 years and make it available for CPSC inspection upon request.

**Safety Video.** The proposed rule requires the retailer to provide the purchaser with a safety video before the sales transaction is completed. The requirements for the safety video are substantially the same as those set out in the Consent Decrees. The video is to include the contents of the hang tag, the concept of knowing one's limitations when operating an ATV, the importance of gradually progressing from basic to more complex maneuvers, and the importance of remaining alert while operating the ATV. The video also must include ATV-related death and injury statistics, both for all riders and for children under the age of 16, which can be stated in rolling five-year averages. These must be updated when there is a statistically significant change in the statistics. The video must be made available to the purchaser in at least one commonly used format, such as VHS or DVD. The manufacturer must retain a copy of the video for 5 years and make it available for CPSC inspection upon request.

The Commission believes that providing the safety video is an extension of the safety messages specified in the warning labels and the instructional/owners manual. The video provides safety information through a readily accessible medium. It can impart more detailed safety information than a warning label can. A purchaser might be more inclined to watch a safety video shortly after purchasing an ATV than he/she would be to read the entire owner's manual with all of its safety information.

**Instructional Training.** The proposed rule requires ATV manufacturers to provide to purchasers a training course (at no cost) for the purchaser and each member of the purchaser's immediate family who meets the minimum age recommendation for the ATV that is being purchased. At the time of sale, the retailer must deliver to the purchaser a certificate which is valid for attendance at a training course that meets the requirements in the proposed rule. The retailer also must have the purchaser sign a form indicating that ATVs are complex vehicles to drive and that he/she is aware that free training is available. The retailer must retain the original of the training disclosure form and provide the purchaser and the manufacturer each with a copy.

As discussed above, the Commission believes that training can play an important role in reducing ATV-related deaths and injuries. The curriculum specified in the proposed rule is similar to training that is currently offered by SVIA. It includes instruction on the maneuvers necessary for operation of the ATV and information about behaviors to avoid in order to reduce the rider's risk of injury. The course must include classroom, field and trail activities. The course content must include information on ATV-related deaths and injuries; the role of safety equipment; rider responsibilities and safety messages; identifying displays and controls on the ATV itself; recognizing one's limitations while driving; evaluating a variety of situations to predict a proper course of action, including terrain obstacles and behavior of other riders; demonstrating successful learning of riding skills, including starting, stopping, and negotiating turns of all types; stopping in a turn; emergency braking; negotiating full-track and partial-track obstacles; driving up hills; and combining skills together in a non-predictable manner. No course duration is specified, but it must be sufficient to cover all of the topics outlined in the proposed rule and to allow for students to individually master the riding skills covered in the course and to allow for written and riding skills tests.[12]

Although no specific time or location is stated, the course must be provided within a reasonable time from the date of purchase of the ATV and a reasonable distance from the place the ATV is purchased.

**Recordkeeping, testing and certification.** The proposed rule requires manufacturers to provide near the VIN or PIN number a statement certifying that the ATV meets the requirements of the standard. The manufacturer must

perform, or cause to be performed, tests sufficient to demonstrate on an objectively reasonable basis that each ATV produced by the manufacturer meets the mechanical operation requirements of the proposed rule (sections 1410.5 through 1410.9). (This requirement is not intended to mandate testing of every ATV of a particular model.)

The proposed rule requires ATV manufacturers (including importers) to keep records sufficient to show that each ATV the manufacturer produces meets the requirements of the proposed standard. The records must be in English and must be kept at a U.S. location for five years after the manufacturer ceases production of that model. Retailers must keep records of the age recommendations acknowledgment form and the training acknowledgment form for five years after the purchase.

### 3. Requirements for Tandem ATVs

#### a. Background

Tandem ATVs are a relatively recent development. The Consent Decrees did not contemplate ATVs designed for more than one rider. The ANSI/SVIA-1-2001 standard does not cover tandem ATVs. However, in 2002 the International 2-Up ATV Manufacturers Association (I2AMA) began working on a voluntary standard for tandems, which subsequently became a draft ANSI voluntary standard, ANSI/I2AMA-1-XXXX, Draft American National Standard for Four Wheel, Two Person, All-Terrain Vehicles Equipment, Configuration, Performance, Safety Information and Training Requirements. Recently, I2AMA agreed to suspend its development of a tandem standard and will instead work with SVIA to include tandem ATVs in the existing ANSI/SVIA standard. [5]

The Commission covers tandem ATVs in its proposed standard for adult ATVs. Most of the requirements for single rider ATVs also apply to tandems. A few provisions in the equipment and configuration requirements and the information requirements are different in order to make them appropriate for tandems. The certification, testing and recordkeeping requirements specified above also apply to tandem ATVs.

#### b. Equipment and Configuration Requirements

Most of the proposed equipment and configuration requirements for single rider ATVs also apply to tandem ATVs. The proposed standard for tandems states requirements for the passenger environment, and modifies the single

rider requirements for the operator and passenger foot environment to suit tandem ATVs. The proposed tandem standard also adds requirements for passenger handholds. Two headlights and two tail lights are required for tandem ATVs that are wider than 1500 mm. These proposed requirements are based on the draft voluntary standard for tandem ATVs and additional information provided by letter from the SVIA of May 19, 2006. [5]

The proposed pitch stability requirements are different for tandem ATVs than for single rider ATVs. The pitch stability for single rider ATVs is based on the longitudinal tilt angle of a vehicle without an operator. However, the pitch stability for tandem ATVs is based on the tilt angle of a vehicle with an operator and passenger (simulated loads). The proposed requirements for tandem ATVs adopt the tilt table method and minimum tilt angle specified in the ANSI draft standard for tandem ATVs. A tandem ATV with simulated operator and passenger weights must reach a minimum of 36 degrees in the longitudinal direction on a tilt table before lift-off of both uppermost tires occur. Lift-off of a tire occurs when a strip of 20-gauge steel can be pulled from underneath the tire with a force of 9 N (2 lbf) or less. [5]

#### c. Information Requirements

Most of the information requirements discussed above for single rider ATVs also apply to tandem ATVs. However, there are a few differences. The general warning label proposed for tandem ATVs omits the warning about carrying a passenger. The passenger warning label is completely different from the passenger warning label of single rider ATVs. It states "Never carry more than 1 passenger," and states the following recommended hazard avoidance behaviors: "Never carry a passenger too small to firmly plant his/her feet on the footrests and to securely grab the handles; never allow a passenger to sit in a location other than the passenger seat; and never carry a passenger who is not securely grasping the grip handles at all times." [10]

The location required for the passenger warning label for tandem ATVs is also different from the location required for the single rider ATV. Because the general warning label required by the proposed standard no longer has any warnings about passengers, the passenger warning label should have greater visibility. Therefore, the proposed rule requires it to be affixed to the front fender of the tandem adjacent to the general warning label, so that it can be easily read by the operator

when seated on the ATV in the proper operating position. [10]

The hangtag must provide the contents of the general warning label required for tandems rather than the one required for single rider ATVs. The instructional/owners manual also must have a different statement about passengers. It must state the following (or substantially equivalent): "NEVER CARRY MORE THAN ONE PASSENGER. This ATV has been designed specifically to carry one passenger." [10]

#### 4. Requirements for Youth ATVs

##### a. General

As discussed in section E above, the Commission is proposing three categories of youth ATVs based on maximum speed. Many of the proposed requirements for youth ATVs are similar to those for adult ATVs and the ANSI/SVIA-1-2001 voluntary standard. Because the FHSA, which provides authority for the proposed youth standard, allows design standards, some of the provisions of the proposed youth standard are phrased more closely to the ANSI/SVIA-1-2001 standard than the comparable adult standard provisions.

A youth ATV is defined as an ATV that is intended for use by an operator less than 16 years of age. A Junior ATV is a youth ATV intended for use by an operator at least 6 years old. A Pre-teen ATV is a youth ATV intended for use by an operator at least 9 years old. And a Teen ATV is a youth ATV intended for use by an operator at least 12 years old.

##### b. Equipment and Configuration Requirements

With the exception of lighting, maximum speed capability, and the requirement for automatic transmission, the proposed equipment and configuration requirements for youth ATVs are essentially the same as those for adult single rider ATVs, which are expressed as performance requirements.

**Lighting.** The proposed youth standard requires all youth ATVs to have at least one stop lamp, and it prohibits any headlamp or forward-facing day-time running lights. The ANSI/SVIA-1-2001 standard prohibits both headlamps and tail lamps and is silent about running lights. [7]

The Commission believes that youth ATVs should have stop lamps to alert a follower to the deceleration of a lead vehicle. The Commission believes it is also appropriate to allow (but not require) tail lamps for youth ATVs. Both of these types of lights could increase the ability of other ATVs to see a youth ATV, but they would not improve the

ability of the youth ATV rider to operate the ATV at night. It is the concern that children may be encouraged to ride ATVs at night that is the basis for the proposed rule's prohibition of headlamps and forward-facing daytime running lights. Although the purpose of daytime running lights is to make the vehicle more conspicuous to other drivers rather than to illuminate the driver's path, the Commission is concerned that parents and children may have difficulty distinguishing between a daytime running light and a headlamp. This may encourage a child to ride at night. Thus, the proposed standard for youth ATVs allows daytime running lights only if they are not forward facing. This should increase the conspicuity of the ATV without providing forward illumination that could encourage night riding. [7]

**Maximum speed capability.** As discussed above, the proposed rule establishes maximum speeds for three categories of youth ATVs. Junior ATVs, which are intended for children age 6 and older, must have a maximum speed capability of 10 mph. Pre-teen ATVs, which are intended for children age 9 and older, must have a maximum speed capability of 15 mph. And Teen ATVs, intended for children age 12 and older, must have a maximum speed of 30 mph. In addition to placing limits on the maximum speed capability of the ATV, the proposed youth standard also requires speed limiting devices for Pre-teen and Teen ATVs. The maximum speed allowed for a Pre-teen ATV with a speed limiting device is 10 mph and the maximum restricted speed allowed for a Teen ATV is 15 mph. The youth ATVs requiring speed limiting devices must be delivered to the purchaser with the speed limiting device adjusted to limit the maximum speed to the lowest setting specified for each category of youth ATV. The proposed rule requires the simultaneous use of two different tools for the speed limiting devices to be adjusted or removed. This requirement is to make the devices more difficult to remove and thus discourage children from removing them without the participation of an adult. [5&6]

Although the proposed rule creates three categories of youth ATVs instead of the current two categories, the proposal retains the current maximum unrestricted speed of 30 mph for youth ATVs. The combination of defining youth ATVs only by their maximum speed capability (rather than engine size) while retaining the maximum speed currently in place should allow manufacturers to develop ATVs with larger frames and somewhat more powerful engines while still

maintaining the safety of the current speed limitations. Consequently, provided a manufacturer is committed to the speed limitations of this proposed youth ATV standard, the Commission would not oppose a modification to a LOU to delete the engine size limitation.

*Automatic transmission.* As discussed above, the proposed rule requires that all youth ATVs have automatic transmissions. The operation of an ATV is complex for a child even without the added activity of changing gears.

#### c. Information Requirements

The requirements for labels, hangtags, instructional/owners manuals, safety video, and training in the proposed youth ATV standard are essentially the same as those in the proposed adult standard. However, there are some differences in wording where appropriate.

*Labels.* As with the warning labels for adult ATVs, the format for all required warning labels for youth ATVs must be consistent with the ANSI Z535.4–2002 standard. The required location for all of the youth warning labels is the same as required for adult single rider ATVs. The contents of the general warning label, the passenger warning label, and the tire pressure and overloading label(s) are the same as required for adult single rider ATVs. The contents of the age recommendation labels differ slightly for each category of youth ATV. The age recommendation label for the Junior ATV must display the safety alert symbol and the word “WARNING” in capital letters. It must also contain a circle with a slash through it and within the circle the words “UNDER 6.” The proposed rule requires that below the circle must be the following, or substantially equivalent, statements: “Operation of this ATV by children under the age of 6 increases the risk of severe injury or death. Adult supervision required for children under 16. Never let children under 6 operate this ATV.” The age recommendation labels for the Pre-teen and Teen ATVs are similar, but the ages 9 and 12, respectively, are inserted instead of the age 6. [10]

*Hangtags.* The proposed rule requirements for hangtags are similar to those in the proposed adult single rider standard. However, in addition to the statements required there, the youth ATV hangtag must also state: “Even though a child is of the recommended age to operate a particular size ATV, not all children have the strength, skills, or judgment needed to operate an ATV safely, and parents should, therefore, supervise their child’s operation of the ATV at all times.” [10]

*Age acknowledgment.* The proposed youth ATV standard also requires the retailer to get the purchaser’s signature on an age acknowledgment form before the sales transaction. However, the required acknowledgment form is different from the adult standard. The form states the age categories and corresponding speed range. It advises the purchaser to buy an ATV that fits his/her child or teen, to use the speed limiter while the child is developing skills on the ATV, and to always supervise his/her child or teen. [6]

*Instructional/owners manuals.* The proposed youth standard’s requirements for owners manuals are essentially the same as the requirements for adult single rider ATVs. However, statements concerning children’s use of ATVs have been modified or added. The manual must contain an introductory notice to parents emphasizing that ATVs are not toys and that it is important for children to understand the manual’s instructions and warnings. The introductory section must contain the following statement: “Children differ in skills, physical abilities, and judgment. Some children may not be able to operate an ATV safely. Parents should supervise their children’s use of the ATV at all times.” [10]

*Safety video and training.* Requirements concerning the safety video and training are the same in the proposed youth standard as in the proposed adult ATV standard.

#### 5. Ban of Three-Wheeled ATVs

The Consent Decrees prohibited the ATV distributors who signed the Consent Decrees from distributing or selling three-wheeled ATVs. In the LOUs, the major distributors agreed to continue to refrain from selling three-wheeled ATVs. None of them currently sell them (although three-wheeled ATVs that pre-date the Consent Decrees are still in use and could continue to be used if a ban is finally adopted). However, newer entrants to the ATV market have not made such agreements with the Commission.

The Commission’s Office of Compliance has found that three-wheeled vehicles are being advertised and marketed as ATVs for sale in the United States. Compliance staff has identified three importers who have sold a recreational vehicle that is essentially a cross between a traditional ATV and a dirt bike, and would meet the proposed rule’s definition of an ATV. All three importers use the Internet as the retail location for this product. They refer to it as a three-wheeled ATV. The price ranges from \$350.00 to \$380.00, plus shipping. All

three importers are selling this product with a 49cc engine displacement. [14]

In addition, two styles of an all terrain three-wheeled golf scooter are being sold on the Internet and at golf supply stores. Both of these styles would meet the proposed rule’s definition of an ATV.

The presence of these three-wheeled vehicles on the market indicates that the current LOU provisions, which continue the stop sale provision in the Consent Decrees, are not sufficient to keep new three-wheeled ATVs from entering the market. As discussed earlier, the newer entrant importers have been increasing their proportion of the market for ATVs sold in the U.S. This could mean increasing availability of these types of three-wheeled ATVs. [4]

Analysis of Commission data indicates that the risk of injury associated with three-wheeled ATVs is substantially higher than with four-wheeled ATVs. A recent risk analysis, based on injuries reported through the CPSC’s National Electronic Injury Surveillance System (“NEISS”) and a parallel survey of the general population of ATV drivers, found that the risk of a hospital emergency department treated injury on a three-wheeled ATV was about 3.1 (95% confidence interval, 1.5 times to 6.4 times) times the risk on a similar four-wheeled ATV. As explained in the Preliminary Regulatory Analysis, the staff estimates the expected difference in non-fatal injury costs between three- and four-wheeled ATVs to be about \$3,045 per ATV annually. This means that over the expected 9 year life of an ATV, the present value of the injury cost difference would be about \$23,700. Even a lower bound estimate for the injury cost differential comes to a difference of \$6,839 over the life of the product. The injury cost difference would be offset somewhat by the lower retail costs of a three-wheeled ATV compared to a four-wheeled ATV. Accounting for this, the total costs associated with three-wheeled ATVs (including both the injury costs and the costs of purchasing the ATV) might amount to about \$23,400 (\$23,700 in injury costs less \$300 in retail costs) more than the costs of a similar four-wheeled ATV (over its useful product life). At the lower bound level, the difference would amount to about \$6,530. [8]

Although the Commission cannot quantitatively estimate the utility of a three-wheeled ATV, available evidence suggests that the utility differential between a three-wheeled ATV and a four-wheeled ATV, for most people, is minimal. In the 1980s, before the Consent Decrees, four-wheeled ATVs



were steadily increasing their market share, so that by 1986, 80% of ATVs sold were four-wheeled models. Moreover, after the manufacturers agreed to stop selling three-wheeled ATVs pursuant to the Consent Decrees, the market price of used three-wheeled ATVs declined relative to four-wheeled models. This indicates that most consumers did not value three-wheeled ATVs significantly more than four-wheeled ATVs. [8]

At this point, it seems unlikely that any feasible standard could be developed for three-wheeled ATVs. As the Engineering staff notes, three-wheeled ATVs are less stable than four-wheeled ATVs and require far more active rider input to steer properly. Although many technical factors make a four-wheeled ATV more dynamically stable than a three-wheeled ATV, one of the largest factors is the fourth wheel. Given the inherent difference in vehicle configuration, the Commission does not believe that it is feasible to develop a performance standard for three-wheeled ATVs that would improve their stability performance to the level of a four-wheeled ATV. [5]

#### H. Response to Comments on the ANPR

As discussed above, the Commission published an ANPR in the **Federal Register** on October 14, 2005, 70 FR 60031. The Commission received 165 comments; one of those comments was a form letter, copies of which were submitted by about 1,500 consumers. Among those who sent comments to the Commission were ATV Safety Institute instructors; a state senator; ATV riders; parents and relatives of riders; parents, relatives, and friends of fatality and injury victims; consumers; medical professionals; consumer organizations; ATV industry associations; employees of the ATV industry; the Centers for Disease Control and Prevention; and students at a U.S. university.

The issues that were raised most frequently concerned the importance of training and safety education; state and local laws and enforcement; the use of protective gear; age/size guidelines, the proper fit of a child on an ATV and a transitional vehicle; the need to provide ATV purchasers with ATV-related death and injury statistics; ATV design; and parental rights and responsibilities. Other comments provided ATV-related injury and fatality statistics for specific states, regions, and hospitals. Some comments stated a position on the petition that was submitted in 2002 by the CFA and eight other groups. Another issue raised in a handful of comments was the non-recreational use

of ATVs and the marketing of ATVs for that purpose.

Each of these issues, with the Commission's response, is summarized below. Many of the issues raised in the comments are discussed in more detail in the staff's input memoranda listed at the end of this notice.

#### Training

*Comment.* Many comments expressed the importance of training for safe ATV driving. Some comments spoke about training in general being important, while a few others suggested that training should be mandated, that training should be required before purchase of an ATV, or that training should be free of charge to all ATV riders.

*Response.* CPSC agrees that formal hands-on training teaches drivers how the ATV responds in situations that are typically encountered. CPSC believes that ATV training is important because, as mentioned in the memo "ATV Training" from the Division of Human Factors, operating an ATV seems deceptively easy; steering controls are similar to a bicycle's, and the throttle is generally lever-operated with the thumb. ATVs, however, are high-speed motorized vehicles that require repeated practice to drive proficiently. In addition, riding an ATV is "rider-active," that is, the rider must actively shift his or her body to maintain proper control of the vehicle. It takes repeated practice to become a proficient driver. Formal training may act as a surrogate for experience because it exposes new ATV drivers to situations they will encounter while riding off-road and teaches them the proper driving behavior to navigate those situations.

As discussed above, to address the issue of training, CPSC is proposing that retailers of ATVs provide to every purchaser of an ATV a training certificate that would offer free hands-on training to members of the purchaser's immediate family. The course would include classroom, field, and trail activities, and a means for the student to demonstrate skills.

#### State and Local Laws and Enforcement

*Comment.* Many comments reflected on the role of states and localities in addressing the risks associated with ATVs. Some commenters expressed the need to enact state legislation, while others expressed the need for the states to clarify and enforce the laws that already are in place. Some commenters called for ATV licensing, just as automobile drivers have driver's licenses. Others suggested fines for riding on public roads, as well as sales

taxes or city taxes on ATVs. Some commenters felt that more laws are not the answer because they still will not cause irresponsible drivers to drive safely. One commenter suggested that state laws should set minimum age limits for ATV riders and require licensing, registration, training, safety equipment, and prohibit passengers, while another commenter suggested that Congressional action should be taken to provide financial incentives for states to adopt safer ATV laws. Other commenters asked that CPSC join the ATV companies and other interested parties in actively supporting enactment of comprehensive ATV safety legislation in states where it is under consideration. A state senator from Minnesota expressed opposition to any federal regulation that "removes the state as the primary regulatory mechanism" for ATVs. Other commenters wrote about having graduated licensing of ATV drivers as some states have for automobiles.

*Response.* CPSC believes that states and localities have a critical role to play in any strategy to address the risk of injury and death associated with ATVs. Legislative activity, or interest in such activity, has been on the increase in the states. As noted in the staff's briefing memorandum, the staff suggests that the Commission establish an online state data resource bank for use by those who might want to pursue legislation or other ATV safety-related actions.

#### Helmets and the Use of Protective Gear

*Comment.* Some commenters noted that the use of helmets and protective gear is important in reducing deaths and injuries. One commenter cited CPSC staff research that suggests that between 42 and 64 percent of fatalities and hospitalized injuries involving the head "could have been averted by helmet use in cases where a helmet was not being worn." Others mentioned that ATV riders and parents of riders need to know the importance of helmet use, while another commenter suggested that the helmet should be "required to be thrown in as part of the package."

*Response.* CPSC has always emphasized the importance of using helmets and other protective safety gear. As noted in the briefing package, CPSC staff encourages retailers to co-market ATV safety gear, particularly helmets, alongside ATVs. The importance of wearing helmets and safety gear is one of the messages in the proposed rule; the message would be required on the general warning label and in the owner's manual. Wearing suitable equipment also is included as

an element in the required training course.

*Age/Size Guidelines, Proper Fit, and Transitional Vehicle*

*Comment.* Many commenters addressed the current age/size guidelines and the importance of finding a "right fit" for a child who rides an ATV; they also supported or opposed a transitional vehicle. Commenters noted the difficulty of children being able to get training when they were on an adult ATV; others said that the current CPSC guidelines matching engine size to age are too narrow in focus. One commenter suggested focusing less on the age of the rider and more on size, weight, and experience. Another commenter pointed out that the market now has some mid-sized ATVs and that they are safer for a child to ride than the smaller 90cc ATVs, while another suggested that children ages 12 to 15 years old should be able to ride up to a 250cc 4-stroke ATV. Other commenters pointed out that the age restriction actually leads to a safety problem because riding an undersized ATV is as much a safety concern as riding an oversized ATV. A few commenters mentioned that being able to adjust the throttle limits was a particularly useful feature as children grow physically and learn to ride.

With respect to a transitional vehicle, many commenters expressed opposition and stated that any proposal to put a child on an ATV larger than 90cc should be rejected, that this would be a step backward, and it would put children at an even greater risk of death and injury. Commenters who were in opposition to a transitional vehicle seemed to equate a transitional vehicle as one that was heavier, larger and faster.

*Response.* As discussed in section E of this notice and in the briefing memo, CPSC believes that speed, not engine size, is a more appropriate criterion for determining which ATVs should be recommended for children and youth under the age of 16. The proposed rule eliminates engine size as a category marker for distinguishing youth ATVs. In addition, all youth model ATVs will be required to have an automatic transmission, so that children can focus on mastering driving skills before learning to coordinate gear shifting with the many other skills involved in operating an ATV.

CPSC believes that limiting maximum speed is the most critical safety factor for youth ATV models. By eliminating the engine size restriction, manufacturers will be able to produce a variety of ATV models that meet speed

restrictions but are more appropriately sized to account for the wide variation in physical dimensions of young people. By having the option of riding better-fitting ATVs that are not performance limited by undersized engines, CPSC believes that more youth will ride age-appropriate and speed-restricted ATVs rather than gravitating toward adult ATV models.

*Disclosure of Death and Injury Data*

*Comment.* Several comments expressed the belief that information about the risk of injury and death associated with riding ATVs, especially with regard to children riding adult ATVs, has not been available to prospective purchasers and that such information should be provided at the point of sale. One of these comments includes the 1,500 individuals who submitted the letters that are entered as comment 57.

*Response.* The proposed rule would require that ATV dealers provide purchasers of adult ATVs with a written statement that (1) clearly states that adult ATVs are not intended for use by children under the age of 16, and (2) gives consumers specific information about the possible injury consequences of allowing children to ride adult ATVs. The disclosure statement would be provided to purchasers prior to completion of the sale. Consumers would be required to sign the statement to acknowledge that they had been informed about the CPSC age guidelines for youth models and the risks associated with children riding adult ATVs. Similar disclosure forms would be provided to purchasers of youth ATVs; those forms would indicate the age of the child for which the youth model was designed.

*ATV Design*

*Comment.* Comments on ATV design ranged from the belief that deaths and injuries are operator error and not the result of the machine's design to some specific suggested design changes. One commenter said that manufacturers should not be required to significantly modify their designs for the sake of adding safety equipment, while a few others stated that ATVs should have a roll bar and safety belt. Other suggested design changes included: tags (license plates) on machines so they can be identified; make the ATVs two inches wider; provide a seat actuator which would turn the engine off if a passenger was on a single-person ATV; provide daytime running lights and headlights on ATVs. One commenter suggested that CPSC should determine the appropriate testing that needs to be

done in order to assess dynamic stability, rollover propensity, and braking, suspension, and handling systems.

*Response.* CPSC staff notes in Tab G of the briefing package from the Directorate for Engineering Sciences that there are technical issues that would benefit from further testing and study. This work, however, will require time and the coordinated application of CPSC and private sector resources. CPSC believes that the most effective way to carry this out is through close, ongoing interaction with voluntary standards committees that are addressing ATVs in that regard.

With respect to lighting equipment, the proposed rule for adult ATVs would require at least one headlamp projecting a white light to the front of the ATV, at least one tail lamp projecting a red light to the rear and at least one stop lamp or combination tail/stop lamp. Daytime running lights would be allowed on adult ATVs.

All youth ATVs would be required to have at least one stop light. As discussed in section G.4.b above and in the briefing package, CPSC believes that riding ATVs at night is a significant risk factor for children and should be discouraged. Because headlamps or any forward-facing light on youth ATVs may encourage nighttime and unsupervised riding in challenging conditions, CPSC believes that these lights should not be allowed. Under the proposed rule, forward-facing daytime running lights for conspicuity would be prohibited on a youth ATV; but daytime running lights would be allowed on other parts of youth ATVs. A brake light would be required on youth ATVs.

*Parental Rights and Responsibilities*

*Comment.* Many comments focused on parental rights and responsibilities. For the most part, these comments expressed the belief that parents have the right and the responsibility to make decisions for their children and are the best judges of their children's abilities and skill levels. Other comments stated that some parents have neglected supervising their children and that the rights of many should not be taken away because of the actions of a few.

*Response.* CPSC agrees that parents must play a critical role in supervising their children's use of ATVs. This includes decisions about the size of ATV their child/children should use and their child's riding behavior. As mentioned above, the proposed rule requires that information be provided to help parents in their decision-making. The mandatory labels for youth ATVs provide a notice to parents that children

should ride only age-appropriate ATVs, while the hangtags and the owner's manual are required to include messages about the importance of supervision.

#### *Injury and Fatality Statistics*

*Comment.* Some comments included death and/or injury statistics for specific regions of the country, specific hospital emergency rooms, and specific states; some of the information was contained in articles that had been published in professional journals. A few commenters talked about the comparative risk of ATV riding and the risk associated with other activities. One commenter stated that overall ATV injury risk, as measured per vehicle in use (for all ages or for children) has been stable since the expiration of the Consent Decrees in 1998 and that ATV-related fatality risk (for all ages or for children) has declined or remained stable since 1999.

*Response.* With respect to the comment that overall ATV injury risk has been stable since the expiration of the Consent Decrees, the Directorate for Epidemiology notes that the 2004 Annual Report of ATV Deaths and Injuries compared the 2004 injury risk to the 2001 injury risk and concluded that there was no statistically significant trend in injury risk, positive or negative, from 2001 to 2004. However, the report noted that the statistical testing of differences in injury risk prior to 2001 is not possible due to the unavailability of measures of variation for risk estimates during those years.

With respect to fatality risk, CPSC staff notes that, because data collection was incomplete for the years 2002–2004 at the time of the most recent report, no conclusions could be made about fatality risk for those years. The commenter's assertion that fatality risk has declined or remained stable does not appear to be the result of a statistical test, since no measures of variation are provided in the commenter's report. CPSC staff has not performed statistical testing on risk of death for similar reasons.

As noted in section D of this notice and in the briefing memo, there were an estimated 136,100 emergency room-treated injuries for all ages in 2004. This was an increase of 10,600 from 2003. In 2003, there were an estimated 740 deaths associated with ATVs. Twenty-six percent of the reported deaths in 2001 were of children under 16 years old.

#### *Ban the Sale of Adult-Size ATVs for the Use of Children Under 16 Years Old*

*Comment.* Several comments were submitted that specifically expressed a position on the CFA petition to ban the sale of adult sized vehicles for use by children under 16 years old. This included the 1,500 form letters submitted as comment 57, which expressed the opinion (without mentioning the petition) that the sale or rental of adult-sized ATVs to anyone under 16 should be prohibited. A few letters expressed opposition to the petition.

*Response.* The petition to ban the sale of adult ATVs for the use of children under 16 years old was the focus of the staff's 2005 briefing package. The staff comments on the petition are contained in that document.

#### *Non-Recreational Use of ATVs, ATV Marketing*

*Comment.* A few commenters mentioned the non-recreational aspect of ATVs, the perceived need to limit their marketing to farm or utility use alone, and that the advertised recreational use of ATVs is not a practical or safe form of activity. Some of these commenters expressed concern about the injuries and deaths associated with the use of ATVs in farm or utility work.

*Response.* CPSC believes the issue of how ATVs are marketed as recreational or utility vehicles is better addressed by the Federal Trade Commission.

### **I. Preliminary Regulatory Analysis**

The Commission is issuing a proposed rule under sections 7, 8 and 9 of the CPSA and section 2(q)(1)(A) of the FHSA. Both the CPSA and FHSA require that the Commission prepare a preliminary regulatory analysis for these proposed rules and that it be published with the final rule. 15 U.S.C. 2058(c) and id. 1262(h). The following discussion is extracted from the staff's memo, "All Terrain Vehicle Mandatory Standard: Preliminary Regulatory Analysis."

#### *1. Introduction*

The main provisions of the ATV proposed rules include (1) Mechanical requirements for ATVs, (2) a ban on the sale of new three-wheel ATVs, (3) speed limitations on ATVs intended for children under 16 years of age, (4) requirements for warnings and recommendations to be provided to purchasers of new ATVs through hang tags, labels, videos, and owner's manuals, (5) requirements for a disclosure statement to be provided to purchasers warning against the use of

adult ATVs by children, (6) a requirement that all purchasers of new ATVs be offered free safety training, and (7) requirements that purchasers of new ATVs be provided with a means for reporting safety related complaints to the manufacturer and the CPSC.

Many of the provisions of the proposed rules are based on an existing voluntary standard (ANSI-SVIA-1–2001), provisions of the 1988 Consent Decrees, and the current LOUs with a number of manufacturers that may account for as much as 90 percent of the U.S. market for ATVs. Consequently, the Commission believes that most ATVs are already in substantial conformance with most of the provisions of the proposed rule. Some of the smaller manufacturers, and some of the recent entrants into the market may also be in conformance with some (or most) of the provisions of the proposed rule. Promulgating a mandatory rule will ensure that manufacturers that are already conforming continue to do so, and that any manufacturer that does not now conform can be brought into conformance.

Below is a preliminary regulatory analysis of the proposed rule, including a description of the potential costs and potential benefits. Each element of the proposed rule is discussed separately. For some elements, the benefits and costs cannot be quantified in monetary terms. Where this is the case, the potential costs and benefits are described and discussed conceptually.

#### *2. Products Covered*

An ATV is a motorized vehicle with 3 or 4 low-pressure tires (less than 10 pounds per square inch) that is intended for off-road use. The seat is designed to be straddled by the operator. Handlebars are used for steering control. Most ATVs are intended to carry only one person: the operator. More recently, some tandem ATVs have been introduced that are designed to carry a passenger in addition to the operator. ATVs can be used for purposes of recreation, sport or utility.

If promulgated in final, the proposed rule will apply to all ATVs sold in the United States on or after the effective date of the rule (180 days after publication of a final rule). It will not apply to ATVs that were sold prior to the effective date.

#### *3. ATV Manufacturers, Numbers in Use, and Sales*

The ATV market has grown substantially since Honda introduced the first ATV in 1969. The Specialty Vehicle Institute of America (SVIA) estimated that in 2005, there were 6.9

million ATVs in use. While most ATVs are used for recreational activities, ATVs can also be used for non-recreational activities, such as farm or ranch work or for transportation to remote work sites that are not accessible on paved roads.

The number of new ATVs sold annually has increased substantially in the last decade. In 1995, an estimated 293,000 ATVs were sold in the US, almost all by 7 North American distributors (Honda, Kawasaki, Yamaha, Suzuki, Polaris, Bombardier, and Arctic Cat). In 2005, an estimated 921,000 ATVs were sold in the US. An estimated 10 percent (or 92,000) were imported. The share of imports is expected to continue to increase in the future.

With the substantial increase in ATV sales has come a substantial increase in the number of manufacturers supplying ATVs to the U.S. market. In 1995, virtually all the ATVs were supplied by 7 domestic distributors; by 2006, the staff had identified at least 87 firms supplying ATVs to the U.S. market.

Generally, the largest manufacturers sell their ATVs through franchised dealers. Importers will typically import ATVs from a foreign manufacturer and then market them to various retailers. Some importers may sell directly to consumers. Some imported ATVs are sold directly to consumers through import brokers who never actually have physical possession of the ATV. ATVs are also offered for sale through the internet.

Most ATV retailers sell products in addition to ATVs. For example, many ATV dealers also sell motorcycles, scooters, personal water craft, and sometimes farm equipment. Some ATVs are sold by other types of retailers, such as aftermarket automotive parts and accessories dealers.

The median retail price of an ATV from the domestic manufacturers is about \$5,150 (range \$2,000 to \$8,000). The median price for youth ATVs is about \$2,300 (range \$1,800 to \$2,500). The retail prices of imports can be substantially lower.

#### *4. Benefits and Costs of the Proposed Rule*

**Mechanical Requirements.** The proposed rule incorporates a number of mechanical requirements from the current voluntary standard for ATVs (ANSI/SVIA-1-2001). The specific requirements and rationales are described and discussed in more detail above. They include, among other things, requirements for service and parking brakes, mechanical suspension, pitch stability, handlebars, and the operator foot environment. There are

also some additional design requirements for youth models covering items such as the location of brake and throttle controls.

The proposed rule differs from ANSI/SVIA-1-2001 with regard to some lighting requirements. The proposed standard would require stop lamps on all ATVs, including youth models (i.e., those intended for children under the age of 16). ANSI/SVIA-1-2001 allows, but does not require stop lamps on adult and youth ATVs. Stop lamps can reduce the risk of a collision by visibly signaling to a following ATV that an ATV ahead of it is decelerating. CPSC believes that while most adult ATVs are already equipped with stop lamps, most youth ATVs do not currently have stop lamps.

The proposed rule would require that youth ATVs be equipped with automatic transmissions so that the operator does not have to either engage a clutch or select the proper gear in order for the engine to maintain its optimum speed. This is a change from the voluntary standard, which does not specify the type of transmission on youth ATVs.

Each provision of the mechanical requirements should reduce injury risks associated with ATVs. For example, the pitch stability requirement is intended to reduce the propensity of ATVs to tip rearward, which could injure the rider if he or she was thrown from the vehicle or the vehicle flipped and landed on the rider. The service and parking brake performance requirements are intended to ensure that brakes are at least adequate for stopping the vehicle and preventing the vehicle from rolling when it is left unattended. The requirement for automatic transmissions on youth ATVs could reduce injury risk by reducing the number of tasks that inexperienced drivers must perform while driving an ATV.

Mandating these mechanical requirements would help ensure compliance with these minimum mechanical safety requirements and enhance the CPSC's ability to enforce the mechanical safety requirements at a time when many new manufacturers are entering the market. Conformance to ANSI/SVIA-1-2001 is voluntary.

Mandating these mechanical requirements would have a small initial impact on injury risk. The ATV manufacturers that have negotiated LOUs with the CPSC are already in conformance with the requirements of the voluntary mechanical standard, from which the requirements in the proposed rule were adapted. Some of the smaller manufacturers are also believed to be in conformance with the

voluntary standard. In total, the firms that are already in substantial conformance probably account for more than 90 percent of ATVs now sold. However, mandating these requirements would ensure that those firms that do not now meet these minimum safety requirements will begin to do so. Moreover, as new firms enter the market, the presence of a mandatory standard that can be more easily enforced would make it more likely that new entrants comply with the mechanical safety requirements. Mandating these requirements should also help ensure that the risk of ATV-related injury due to ATVs that do not meet the mechanical safety standards does not increase in the future.

Since many manufacturers already conform with the voluntary standard, the additional cost that will be incurred by manufacturers to meet the mechanical requirements of the proposal will be low. The cost to some may be limited to the cost of adding stop lamps to their youth ATVs. The cost of adding stop lamps to ATVs could amount to several dollars or more, especially on youth ATVs. Most adult ATVs are thought to already have stop lamps.

Additionally, some manufacturers will have to modify the transmissions on some youth ATV models so that they are fully automatic. Based on staff observations, most current youth ATV models are already equipped with automatic transmissions, especially those intended for children under the age of 12 years. The staff has identified some ATVs intended for children between 12 and 15 years of age that are equipped with automatic clutches, but not automatic transmissions. These ATVs would not meet the requirements of the proposed rule.

The fact that many youth ATVs are already equipped with automatic transmissions indicates that many consumers are willing to pay the additional cost of automatic transmissions for the additional safety, convenience, or driving ease that is provided by automatic transmissions. However, the Commission has not been able to quantify the difference in cost between automatic transmissions and manual transmissions or between automatic transmissions and automatic clutches/manual transmissions.

The mechanical requirements are not expected to cause a substantial loss of utility for the rider. In fact, to the extent that the requirements prevent accidents, reduce downtime, make the ride more comfortable (e.g., the suspension requirements), and increase the functionality of the vehicles, most of the

requirements could have a positive impact on rider utility.

The proposed rule would require manufacturers (including importers) to perform, or cause to be performed, testing sufficient to ensure, on an objectively reasonable basis, that each ATV conforms to the requirements in the proposed rule. The specified tests will require some time and equipment. If the tests are conducted at a facility where the required equipment is available and set up time for each test is kept to a minimum, it is possible that all of the tests could be conducted in one day (8 hours) or less. It is reasonable to assume that the person supervising the tests will be a senior mechanical engineer and that at least one other mechanical engineer will be involved in conducting the tests. If the total labor costs were \$90 per hour, then the cost of conducting the tests would be about \$720 per model (8 hours  $\times$  \$90).<sup>6</sup>

In addition to the labor cost, some accounting for the cost of equipment required for testing should also be made. Assuming that ATV manufacturers have the equipment easily available, it is probably reasonable to assume that the cost of the equipment used in the testing is perhaps about \$500. This could be thought of as the rental value of the equipment for a day of testing.

The testing must be documented and maintained for 5 years after the production of that model ceases. The information required for this documentation would be collected during the performance of the tests. However, this information might be reformatted and assembled into the final record after the testing is completed. Moreover, in the case of foreign manufacturers, this documentation will have to be provided to the U.S. based importer and it is the importer that will be required to maintain the records. This could add perhaps another \$100 to the cost of the testing and record keeping.

These estimates suggest that the full testing and recordkeeping costs of the proposed rule could be about \$1,320 per model. Previously, CPSC staff had identified 131 different ATV models for the model year 2001 and 235 different ATV models for the year 2003. Given the significant increase in sales of ATVs in recent years, it is not unreasonable to believe that there might be 500 different ATV models today. Therefore, the full

testing and recordkeeping costs could be \$660,000 per year, assuming models are changed annually.

Several ATV manufacturers conform to ANSI/SVIA-1-2001 and, therefore, should already be performing the testing called for in the proposed rule. The proposed rule will not impose additional testing burdens on these manufacturers. The staff estimates that these manufacturers account for at least 150 ATV models. Therefore, the testing and recordkeeping costs that could be attributed to the proposed rule that would not be incurred in the absence of the proposed rule, could be less than \$462,000 annually (\$660,000 - 150  $\times$  \$1,320).

*Ban on the Sale of New 3-Wheel ATVs.* As part of the 1988 Consent Decrees, ATV manufacturers agreed not to sell any new 3-wheel ATVs, which had been shown to be less stable and more risky than their 4-wheel counterparts. As a result, until recently, no new 3-wheel ATVs have been marketed in the United States since the late 1980s. However, the CPSC Office of Compliance has found evidence on the Internet that 3-wheel vehicles that could be considered to be ATVs have recently been offered for sale to the public. Therefore, the proposed rule would formalize a ban on the sale of new 3-wheel ATVs. While formalizing the ban will not reduce ATV-related injuries significantly from their present levels, it will ensure that 3-wheel ATVs are not reintroduced into the U.S. market.

The justification for a ban on the sale of 3-wheel ATVs is based on the substantially higher expected injury costs associated with the ownership and use of 3-wheelers, relative to 4-wheelers, and the likelihood that these higher costs outweigh any additional utility that they may provide to their owners. We begin with a discussion of the costs associated with the ownership and use of 3-wheel and 4-wheel ATVs.

The real costs of ATVs include the expected injury costs associated with their use as well as their purchase price. A recent risk analysis, based on injuries reported through the CPSC National Electronic Injury Surveillance System (NEISS) and a parallel survey of the general population of ATV drivers, found that the risk of a hospital emergency department-treated injury on a 3-wheel ATV was about 3.1 (95% confidence interval (CI), 1.5, 6.4) times the risk on a similar 4-wheel ATV.<sup>7</sup>

These relative risk estimates can be used to estimate the expected difference in annual injury costs between 3-wheel and 4-wheel ATVs. In 2001, the societal cost of non-fatal ATV-related injuries was about \$1,876 per ATV in use. In 2001, 3-wheel ATVs made up about 14 percent of the ATVs in use. If we let  $Cost_3$  and  $Cost_4$  represent the expected annual non-fatal injury cost per 3-wheel and 4-wheel ATVs in use respectively, then the expected annual injury cost per ATV can be expressed as  $0.14(Cost_3) + 0.86(Cost_4) = \$1,876$ .

Since the risk of a non-fatal injury on 3-wheel ATVs is approximately 3.1 times that of a 4-wheel ATV,  $Cost_3$  can be expressed in terms of  $Cost_4$  (i.e.,  $Cost_3 = 3.1 * Cost_4$ ). Solving these equations yields  $Cost_3 = \$4,494$  and  $Cost_4 = \$1,450$ . Therefore the expected difference in non-fatal injury costs between 3-wheel and 4-wheel ATVs is about \$3,045 per vehicle annually.<sup>8</sup> If the expected life of an ATV is 9 years, the present value of this injury cost difference (at a 3 percent discount rate) over the expected life of the product will come to about \$23,700.<sup>9</sup>

A lower bound estimate for the injury cost differential might be based on the lower 95 percent confidence bounds of the relative risk factors for 3-wheel ATVs described above, or 1.5 instead of 3.1. Based on these relative risk estimates, the non-fatal injury cost differential on a 3-wheel ATV would be about \$877 per year. Assuming a 9-year useful life and a 3 percent discount rate, this comes to a difference of \$6,830 over the life of an ATV.<sup>10</sup>

The injury cost differential would be offset somewhat by the lower retail costs of 3-wheel ATVs. Based on information from the late-1980s, when 3-wheel ATVs were still being produced, 3-wheeled ATVs cost about \$190 less than a similar 4-wheel model. This cost

<sup>8</sup> An analysis of fatal injury risks also suggested a higher relative risk on 3-wheel ATVs. However, because information regarding a key driver characteristic was missing, the difference in fatal injury risks was less amenable to quantification and, therefore, not included in the above analysis. It suggests however, that the cost differential between 3-wheel and 4-wheel ATVs estimated above could be low (see Gregory B. Rodgers, "Revisiting All-Terrain Vehicle Risks: Response to Critique," *Journal of Regulatory Economics*, Vol. 10 (September 1996)).

<sup>9</sup> This is a low estimate of the average life of an ATV. One analysis suggests that the expected life of an ATV could be 19 years (Statement of Ed Heiden of Heiden Associates at the Consumer Product Safety Commission West Virginia Public Field Hearing, Morgantown, West Virginia, 5 June 2003).

<sup>10</sup> Even if a higher discount rate were used, the cost differences would be substantial. For example, if a 7 percent discount were used with the lower estimates of the relative risks, the expected cost difference over the life of an ATV would be \$5,713.

<sup>6</sup> According to the U.S. Department of Labor, Bureau of Labor Statistics, the average wage for a Level 13 Mechanical Engineer was \$52.45 in July 2003. In this discussion \$90 is used to allow for the assistance of a less experienced engineer and inflation.

<sup>7</sup> Gregory B. Rodgers and Prowpit Adler, "Risk Factors for All-Terrain Vehicle Injuries: A National Case-Control Study," *American Journal of Epidemiology*, Vol. 153, No. 11 (2001). Hereafter Cited "Rodgers and Adler (2001)."

differential would probably amount to about \$300 in 2004 dollars.

Thus, the total costs associated with 3-wheeled ATVs (including both the injury costs and the costs of purchasing the ATV) might amount to about \$23,400 (\$23,700 in injury costs less \$300 in retail costs) more than the costs of a similar 4-wheel ATV (over its useful product life). At the lower bound level, the difference would amount to about \$6,530.

A ban of 3-wheel ATVs would therefore be beneficial (on average) if the average extra valuation (i.e., use value or utility) that individuals put on a 3-wheel ATV over a 4-wheel ATV is less than \$23,700 (or about \$6,530 at the lower bound) over the useful life of the product. Consequently, if the utility from a 4-wheel ATV is not substantially different from the utility from a 3-wheel ATV, the ban would be justified.

We cannot estimate the utility that individuals get from ATVs, and so we cannot say that the ban would be justified for all individuals. However, available evidence suggests that for most individuals, the utility differential is minimal. First, 4-wheel ATVs were growing in market share throughout the 1980s, even though their retail prices were marginally higher than similar 3-wheel ATVs. By 1986, for example, two years before the consent decrees became effective, about 80 percent of ATVs sold in the U.S. had four wheels. Second, after the ATV manufacturers agreed to stop selling 3-wheel ATVs as part of the consent decrees, the market price of used 3-wheel ATVs actually declined relative to the price of 4-wheel models.<sup>11</sup> There was no evidence of a strong market reaction to the 3-wheel ATV stop-sale, such as bidding up the price of the increasingly scarce 3-wheelers that would suggest many consumers valued 3-wheel ATVs significantly more than they valued 4-wheel models.

*Speed Limitations on ATVs Intended for Youths.* The proposed rule would limit the maximum speeds of ATVs intended for children under the age of 16 years. Teen ATVs (i.e., those intended for riders between 12 and 15 years of age) would have a maximum unrestricted speed of 30 mph and a speed limiting device that can limit the maximum restricted speed to 15 mph. Pre-Teen ATVs (i.e., those intended for children between 9 and 11 years of age) would have a maximum unrestricted speed of 15 mph and a speed limiting device that can limit the maximum

restricted speed to 10 mph. Junior ATVs (i.e., those intended for children between 6 and 8 years of age) would have a maximum speed of 10 mph. No ATVs would be recommended for children under the age of 6 years. All references to engine size, such as those in the LOUs, would be eliminated.

Based on an analysis by the CPSC Division of Human Factors (ESHF), speed—not engine size—is a more appropriate control variable for determining which ATVs should be recommended for children under age 16 years. In fact, limiting engine size could be counterproductive. There is some evidence that limiting the power of youth models by controlling engine size can, in some circumstances, make ATV riding less safe. As one example, underpowered children's models have a greater potential for stalling when going uphill.

It is also likely that engine size restrictions discourage some people from purchasing appropriate ATVs for young riders. If the ATV engine lacks sufficient power for things such as acceleration or hill climbing, some young riders may resist riding these ATVs and instead ride adult ATVs. Additionally, the frame size of the current ATVs with less than 90cc engines might not comfortably fit "large" children. Some adolescents between the ages of 12 and 14 are larger than some adults; these adolescents may resist using an ATV with a frame designed to fit a much smaller person. According to ESHF, "fitting the [ATV] frame anthropometrically to the user is one of the most important factors for youth ATVs. If the frame is too small, the youth will be discouraged from riding the ATV both physically and socially." This may explain, at least in part, the fact that relatively few children actually ride the youth models. Based on the 2001 exposure survey, only about 20 percent of children under 16 years of age who drove ATVs drove youth models.

Based on these considerations, eliminating the engine size limitations from youth models may enhance safety. It might lead to some ATV manufacturers introducing a wider variety of youth models, including models with larger frames and more powerful engines. With larger frames and more power, it is possible that more young riders will be willing to accept ATVs with the recommended speed restrictions. It is also likely that more parents would be willing to purchase youth models with larger frames that could be used by children for a longer period of time without replacement. Moreover, increased acceptance of

ATVs with the age-recommended speed restrictions could reduce the number of ATV-related injuries.<sup>12</sup>

Increasing the number of youth ATVs with larger frames could also increase safety by increasing the proportion of young ATV drivers that receive formal ATV safety training. Most formal ATV safety training programs, such as that run by the ATV Safety Institute, will not train children under the age of 16 unless they are riding an appropriate youth model. Therefore, children who do not have ATVs with less than 90cc engines cannot receive formal training. If simplifying the age recommendations for ATVs leads manufacturers to introduce more ATVs with the recommended speed restrictions for young riders and, as a result, more children begin riding youth ATVs, it will be possible for more young riders to receive formal safety training. As discussed more fully below, formal training can act as a surrogate for experience and thereby reduce the risk of injury.

The speed limitations for ATVs intended for youths should not impose substantial additional costs on manufacturers because they are similar to those already in the voluntary standard (ANSI/SVIA-1-2001). Moreover, the speed limitations in the proposed standard are less restrictive than the requirements for youth ATVs specified in the LOUs, since they do not include the engine size limitations. Consequently, the Commission believes that this provision of the proposed standard increases the potential for safety in the form of reduced injuries and deaths, without imposing additional costs and burdens on manufacturers.<sup>13</sup>

*Warnings and Safety Information to be Provided to Consumers.* According to ESHF, hazard communications "are crucial for products with hazards that cannot be eliminated through design." The proposed rule requires ATV manufacturers, distributors, or dealers to provide several safety warnings to consumers. These will consist of labels or hang tags that, among other things, advise consumers of the age recommendations for ATVs, warn that it is unsafe to allow children to operate

<sup>12</sup> It should be noted that manufacturers are not now prohibited from producing youth ATVs on larger frames. However, increasing the options available to manufacturers in designing youth ATVs should increase the probability that manufacturers might manufacture youth ATVs in a wider range of sizes.

<sup>13</sup> ANSI/SVIA-1-2001 does not have an age category that corresponds to "Junior ATV" in the proposed rules. CPSC staff believe that the "Junior ATV" market will be a very small segment of the ATV market.

<sup>11</sup> Gregory B. Rodgers, "All-Terrain Vehicles: Market Reaction to Risk Information," *Economic Inquiry*, Vol. 31, No. 1 (January 1993).

ATVs intended for adults or older children, and warn that it is unsafe to carry passengers on an ATV (with the exception of specially designed tandem ATVs). This information will also be required to be contained in the owner's manuals and in a video to be provided to each consumer.

The ATV manufacturers with the greatest share of the market are already conforming to this requirement, which is included in the LOUs negotiated with the major ATV manufacturers. Therefore, this provision will not impose any new costs on these manufacturers. For the manufacturers that are not now in conformance, the cost to bring themselves into conformance will be low on a per unit basis. The cost of designing, printing, and attaching a label or hang tag or adding pages in an owner's manual is low. Even for manufacturers with a very low sales volume, the cost of adding the required warnings will be probably no more than a few dollars per vehicle.

The major manufacturers are already providing the safety video and so the proposed standard will have no impact on their costs. For manufacturers that are not currently providing a safety video to their consumers the costs could be higher. The cost of duplicating a video or DVD is no more than a few dollars. However, the cost of producing the safety video could be several thousand dollars. For a manufacturer or distributor with a low sales volume, this could be a more significant cost. The cost or impact could be lower if a third party video could be licensed or shared by many small manufacturers or distributors.

Manufacturers would also be required to keep a copy of the owner's manuals and the safety video for each model on file for at least 5 years. It is likely that many manufacturers would do this even in the absence of a mandatory rule. The storage costs of these items probably would not exceed \$10 per model. The cost could be lower since the same safety video would likely be used for all ATV models produced or imported by a manufacturer and could be used for several years. Owner's manuals also might cover more than one model.

The benefit of this provision is that it will ensure that all consumers receive some basic safety and hazard information regarding such things as the risk of children riding ATVs not appropriate for their age and carrying passengers on ATVs not designed for carrying passengers. Although this benefit cannot be quantified, the following example sheds some light on the potential impact. The risk of injury for riders under the age of 16 driving

adult ATVs is about twice the risk of injury of those who are driving age-appropriate ATVs.<sup>14</sup> In 2001, the societal cost of ATV related injuries and fatalities involving children under the age of 16 was about \$3.6 billion. Therefore, although it is not known how effective these warnings are at reducing children from riding adult ATVs, if they reduced the number of children riding adult ATVs enough to reduce the number of ATV-related injuries to children (either by parents not allowing a child to drive an adult ATV or by purchasing an appropriate ATV for young riders) by even a small amount, the benefits of these warnings could exceed the costs. For example, if they reduced the injuries by only one-half of one percent, this would still amount to a benefit of \$25 over the life of an ATV.<sup>15</sup>

*Disclosure Statement to Consumers About the Risks to Children Riding Adult ATVs.* The proposed rule would require that ATV retailers provide purchasers of adult ATVs a written statement that (1) clearly states adult ATVs are not intended for the use of children under the age of 16 and (2) provides the consumer with specific information on the possible injury consequences of allowing children to ride adult ATVs. A similar disclosure statement would be provided purchasers of youth ATVs advising them to monitor their child's ATV driving to ensure that the child is capable of and does drive the ATV safely. This requirement is a direct response to the high risk of injury to children riding adult ATVs, and the comments of many parents (including some whose children died on adult ATVs) that they had never been warned of the risks. This disclosure would be provided to the purchaser and signed before the purchaser completes or signs other documents related to the sale, such as sales contracts or financing agreements. Consumers will be required to sign the statement to acknowledge that they were warned. Dealers would be required to keep the signed disclosure statement on file for at least 5 years after the purchase so that

compliance with the requirement for the disclosure statement can be monitored. Dealers would also be required to send a copy of the signed disclosure statement to the manufacturer, who would also be required to keep the statement on file for at least 5 years after the purchase.

The benefits of the disclosure statement are twofold. First, it will help consumers make a more informed choice when they purchase a new ATV. Second, as suggested by the ESHF analysis, signing the document may discourage some purchasers from allowing children to ride their adult ATVs. As shown in the above discussion of "Warnings," the injury costs associated with children riding adult ATVs are significantly higher than the injury costs associated with children riding age-appropriate ATVs. Even if the disclosure statement could reduce the number of injuries by one-half of one percent, it could still produce a benefit of \$25 over the life of an ATV.

The cost of this disclosure statement is estimated to be approximately \$0.95 per ATV sold.<sup>16</sup> Generally, when ATVs are sold there is already some amount of paperwork generated, including purchase contracts and financing agreements. Therefore, the marginal cost of an additional form is minimal. Moreover, under the LOUs manufacturers already require their dealers to inform consumers of the age recommendations for ATVs and to monitor dealer compliance with these recommendations. It is possible that the enforcement mechanism provided by this disclosure statement would be no more costly than the current methods of monitoring compliance with the LOUs.

*Provision of Training for ATV Purchasers.* The training requirement of the proposed rule would require manufacturers or distributors of ATVs to provide a training certificate to each purchaser of a new ATV that entitles the purchaser and any qualified member of his or her immediate family to attend an authorized training course, "free" of charge. Of course, the training will not be free in terms of the trainee's time. The trainee would have to devote a day to the training process, and may have to transport an ATV to the training site. In the case of children, parents would likely need to become involved by

<sup>14</sup> According to information provided by the CPSC Directorate for Epidemiology and included in the 2005 CPSC Briefing Package on ATVs (regarding Petition No. CP-02-4/HP-02-1, Request to Ban All-Terrain Vehicles Sold for Use by Children Under 16 Years Old), risk of injury to children under 16 driving adult ATVs was 18.6 per thousand drivers compared to 9.6 per thousand drivers for children driving youth ATVs.

<sup>15</sup> One-half of one percent of \$3.6 billion divided by the 5.6 million ATVs of all types in use in 2001 is \$3.21. Over the expected 9-year life of an ATV this comes to about \$25 discounted at 3 percent per year.

<sup>16</sup> This estimate is based on it taking approximately 2 minutes to complete the form and distribute the copies to the purchaser, the manufacturer, and the retailer's files and that the time is valued at \$21.32/hour, which is the average wage of motor vehicle sales workers in July 2004, as reported by the U.S. Department of Labor, Bureau of Labor Statistics, adjusted for inflation. Other costs, such as the cost of the blank forms and postage, may add another \$0.24 to the cost.



providing transportation to the training site. Hence, the provision of the "free" certificate entitling the holder to training can be thought of as a subsidy to encourage new purchasers to take the training.

The cost of the training to be provided will depend upon a number of factors, such as the length of the course, the number of trainers, the number of enrollees, and others. However, if the training is similar to that currently provided by the ATV Safety Institute (ASI), the value of the training certificate entitling the holder to a training course might be \$75 to \$125. This is what ASI currently charges children and adults respectively for the course, as indicated at their Web site ([www.atvsafety.org](http://www.atvsafety.org)). Thus, the value of the training subsidy, under this requirement of the proposed standard, might be \$75 to \$125 per trainee.

The requirement that manufacturers offer free training is essentially a requirement that they subsidize ATV safety training. The purpose of a subsidy is to lower the cost of a product to a person to induce them to purchase more of the product. It can be an appropriate policy when it is believed that consumers will not purchase the socially optimal quantity of the good without some intervention. A consumer might not purchase the optimum quantity of a good for a variety of reasons, such as some of the societal benefit of purchasing the good (or undertaking an activity) might go to people other than the direct consumer or if the consumer underestimates the value of the good to himself or herself.

In the case of ATV safety training, it is likely that many consumers underestimate the benefits of training. According to ESHF, ATVs can appear "deceptively easy" to operate but in fact require "repeated practice to drive safely." Even at low speeds ATV drivers need to have "situational awareness necessary to negotiate hazards on unpaved terrain" and make "quick judgments" with regard to steering, speed, braking, weight shifting and terrain suitability. Consumers who underestimate the difficulty of riding ATVs may conclude that the cost of the training, including the costs in terms of time and travel, will exceed the benefits. It is likely that more consumers will be induced to take training if the manufacturers emphasize the importance of training to consumers and offer them free training.

The benefits of training to new ATV drivers could be substantial. ESHF indicates that training may act as a surrogate for experience because it exposes new ATV drivers to situations

they will encounter riding off-road and teaches them the proper driving behavior to navigate those situations. The Directorate for Epidemiology estimates, based on the results of the 2001 ATV injury and exposure surveys, that formal training may reduce the risk of injury by about half. The application of this result, in combination with the HF finding that training may function as a surrogate for driving experience, allows us to quantify the possible benefits of training.

A recent ATV risk analysis found a strong inverse relationship between driving experience and the risk of hospital emergency department (ED) treated injury. Based on this analysis, risk in the first year of riding was about 65 percent higher than the risk in the second year, and about twice the risk of the third year. Assuming that formal training reduces risk by half in the first year of ATV use (i.e., acts as a surrogate for experience), the risk of ED injury for a male driver under the age of 36 on a 325 cc four-wheel ATV, would decline by about 0.0083. According to the CPSC's Injury Cost Model, the average societal cost of an ATV-related ED injury amounted to about \$60,250 in 2004 dollars. Consequently, the expected benefits of training would amount to about \$500 ( $0.0083 * \$60,250$ ) per new rider taking the training. The risks for female drivers are less than for males. Using the same approach, the ED risk reduction for new female riders (under age 36, and on a 325 cc, four-wheel ATV) in the first year would be about 0.0029. The expected benefit of training an inexperienced female driver would therefore be about \$175 ( $0.0029 * \$60,250$ ). Given that about 63 percent of drivers were male in 2001, the average risk reduction for male and female drivers would amount to about 0.0063; the expected benefits would average about \$380 (i.e.,  $0.63(\$500) + 0.37(\$175)$ ).

In addition to preventing non-fatal ED injuries, training would also likely reduce ATV-related injuries initially treated outside of hospital EDs and ATV-related deaths (see the appendix). While the risk model formally applies to ED injuries, it does not seem unreasonable to assume that the impact of training on non-ED injuries and deaths would be similar. Consequently, if the relationships in the risk model apply proportionally to non-ED injuries and deaths, the expected non-fatal injury reduction benefits for a typical new driver (weighted by the proportion of male and female drivers) would amount to about \$220 and the expected benefits associated with the reduction in

deaths would amount to about \$170 per trainee.<sup>17</sup>

Based on this analysis, the expected benefits of training new riders could therefore amount to about \$770 ( $\$380 + \$220 + \$170$ ) per rider. Factoring in reasonable estimates of the costs of the training to the consumers, the benefit of training for new riders should exceed the costs. For example, if the course fee is \$125 and a trainee must give up 10 hours to take the course (including transportation to and from the training site) then the cost of training to a consumer who valued his or her time at \$17 per hour would be about \$295.<sup>18</sup> Consequently, the net benefits of training to this consumer would be about \$475.

A major assumption in this cost-benefit comparison is that riders taking advantage of the training program would be inexperienced drivers who would take the training early in the first year of ATV riding. The expected benefits would be lower if the training were taken later. For example, if the analysis just completed had assumed the training were taken in the second year of ownership (rather than the first), the estimated gross benefits would have been about \$470. Note, however, that while net benefits would have been lower (about \$175), they are still positive. Hence even if some riders take the training after the first year of riding, the benefits of the training are still likely to exceed the costs. This suggests that the results of the cost-benefit comparison may not be very sensitive to the timing of the training.

ATV manufacturers that account for about 90 percent of all U.S. ATV sales already offer free training to their

<sup>17</sup> These calculations were based on information provided in the appendix to the preliminary regulatory analysis. According to the appendix, there were about 1.49 non-ED injuries for every ED injury in 2001. If the reduction in risk associated with preventing non-ED injuries were proportional to the reduction in the ED injury risk, the reduction would amount to  $0.0093 (0.0063 * 1.49)$ . And, since the costs of the non-ED injuries averaged about \$23,700, the expected benefits from preventing these injuries would be about \$220 ( $0.0093 * \$23,700$ ) per trainee. Similarly, there were about 0.0054 deaths for every ED-injury. Consequently, if the reduction in the fatality risk were proportional to the reduction in the ED injury risk, the reduction would amount to about 0.000034 ( $0.0063 * 0.0054$ ). Assuming a value of statistical life of \$5 million, the expected benefits of reductions in the fatality risk would amount to about \$170 per trainee.

<sup>18</sup> The SVIA sponsored training for new riders is approximately one-half day in length. Assuming that a trainee must give up 10 hours to take the training allows for travel to and from the site. The "value of time" estimate is based on the average net compensation for 2004 as reported by the Social Security Administration (\$34,197.63 for the year, which is about \$17 per hour).

consumers.<sup>19</sup> Therefore, the primary impact of this requirement will be to extend the free training offer to people who purchase ATVs from manufacturers or importers that do not now offer free training. These manufacturers account for about 10 percent of total domestic ATV sales.

In spite of the offers of free training and other incentives, few ATV riders take formal safety training. Based on the 2004 Rider Training Summary provided by the SVIA, about 35 percent of first-time ATV purchasers who were offered this training by member firms took advantage of it. Since first-time purchasers accounted for about 20 percent of new ATV purchases, this suggests that only about 7 percent of all purchasers of new ATVs actually took the training. Assuming that this pattern will hold for the manufacturers or importers that are not now offering free training, one can expect that perhaps 7 percent of their consumers will take the training. Approximately 950,000 ATVs are sold annually. Because manufacturers that do not already offer free training account for about 10 percent of the market, this provision would likely increase the number of riders trained annually by 6,000 to 7,000 ( $.07 \times 92,000$ ). If the benefits of the training are \$770 per trainee and the cost of the training is \$295, this could result in a net benefit of about \$3.3 million annually ( $(\$770 - \$295) \times 7,000$ ).

There would be some recordkeeping costs imposed on retailers and manufacturers by the proposed rule. The retailers would be required to prepare a training certificate that entitles each qualified member of the purchaser's immediate family and obtain the purchaser's signature on a form that acknowledges the receipt of the free training certificate. The signed original of this form must be kept by the retailer and copies provided to both the purchaser and the manufacturer.

The cost of preparing and filing the training certificates and acknowledgement forms is estimated to be about \$1.38 per ATV sold. This is based on it taking approximately 1 minute to complete the training certificate and the acknowledgement form. An additional minute might be required to distribute the copies of the forms to the purchaser, the manufacturer, and the retailer's files.

Time is valued at \$21.32.<sup>20</sup> The cost of the blank forms, postage, and other supplies, accounts for the remaining \$0.31.

*Means for Reporting Safety Complaints and Concerns.* The proposed rule will require that each manufacturer provide consumers with a means of relaying safety or hazard related information concerning an ATV to the manufacturer or importer. Manufacturers must make available for this purpose a domestic telephone number and mailing address, and a Web site or email address. This contact information must be contained in the owners' manuals which will also be required to provide consumers with the instructions for reporting safety or hazard information to the CPSC.

This provision could provide manufacturers with an early alert if there is a potential hazard or defect with one of their products. This could allow manufacturers to take preemptive actions to minimize the risk of injury due to the problem. However, this benefit cannot be quantified because we cannot predict how frequently such a problem will occur or how reliably it will be reported to the manufacturer by consumers.

However, the cost of providing a means to report safety related problems is low. Virtually all manufacturers or distributors that sell ATVs in the U.S. already have domestic telephone numbers, addresses, and Internet sites. The additional cost of inserting this information in an owner's manual is very low. In fact, many manufacturers and distributors already do this.

*Discussion.* CPSC has been monitoring ATV-related injuries and promoting ATV safety since the early 1980s. Over that time, it has negotiated several voluntary agreements with major ATV manufacturers that have improved the safety of ATVs, encouraged formal safety training for ATV riders, and promoted safe ATV riding practices. However, as the ATV market has grown, new manufacturers and importers have entered the market that are not party to any voluntary agreements with the CPSC with regard to ATV safety. As the number of new participants increases, it becomes increasingly difficult to maintain voluntary agreements with all manufacturers and importers. In the absence of either mandatory requirements or voluntary agreements, CPSC has no effective mechanism for enforcing safety standards and practices.

Moreover, if the market share of manufacturers and importers that are not party to any agreement with the CPSC increases, manufacturers that are parties to agreements may resist renewing the voluntary agreements.

The proposed rule would ensure that key elements of the voluntary agreements are extended to all ATV manufacturers and distributors. Because manufacturers and distributors that account for about 90 percent of the market already conform to these requirements (and much of the remaining 10 percent conform to at least some of the requirements) the proposed standard may not significantly lower the number of injuries from their current levels. However, it will establish some minimum enforceable standards that all firms that sell ATVs in the U.S. will be expected to meet.

Where the benefits and costs of the individual provisions can be quantified, this analysis has shown that the benefits are expected to exceed the costs (i.e., a ban on 3-wheel ATVs and training inexperienced ATV riders). For other provisions, the costs of complying with the standard will be low on a per unit basis (i.e., providing warning labels and safety information at the point of sale, a safety video, and means for reporting safety hazards or concerns to the manufacturer). Although the benefits of these cannot be quantified, they provide consumers with information that may help them choose an appropriate ATV for the rider and may reduce some unsafe riding behaviors. The costs of complying with each element of the requirements of the mechanical standard have not been quantified. However, each of the requirements would provide some safety benefits. Moreover, the vast majority of ATVs sold are already thought to be in compliance.

##### 5. Alternatives to the Proposed Rule

The Commission could consider alternatives to the proposed rule including continuing to pursue voluntary actions rather than a mandatory rule. Other alternatives include adopting some parts of the proposed rule, but not others. Additionally, the staff considered other requirements for headlamps and training.

*Not Adopting a Mandatory Rule and Continuing to Pursue Voluntary Actions.* CPSC has been successful in gaining the cooperation of the largest ATV manufacturers and some of the smaller ones in working voluntarily to reduce the number of ATV-related injuries. However, entry into the ATV market is relatively easy. The number of

<sup>19</sup> In addition to offering free training, some ATV manufacturers offer additional incentives to encourage first-time buyers to take ATV safety training. For example, in addition to providing free training, some manufacturers give first-time purchasers an additional \$100 if they complete the training. Some manufacturers also offer the free training to other members of the purchaser's family.

<sup>20</sup> This is the average hourly wage of motor vehicle sales workers reported by the Bureau of Labor Statistics in July 2004 (inflated to 2006 dollars).

manufacturers and importers has increased substantially in even the last few years: from about 7 manufacturers and importers in 1995, to more than 87 today. As the number of manufacturers increases it will be increasingly difficult to negotiate voluntary agreements with every one. To the extent that some new entrants do not conform to the agreements, there could be some economic pressure on others to limit their cooperation in the future.

It should also be noted that promulgating a mandatory rule does not rule out future CPSC efforts, either voluntary or mandatory, to further improve ATV safety.

*Promulgating Portions of the Proposed Rule.* Each of the major provisions of the proposed rule (e.g., mechanical requirements, ban of 3-wheel ATVs, and so on) could be considered independently. If the Commission believes that the benefits of any of the individual provisions do not bear a reasonable relationship to the costs, or for some other reason should not be mandated, it could exclude those provisions from a proposed rule.

*Allowing Headlamps on Youth ATVs.* The justification for the prohibition of headlamps on youth ATVs is to discourage children from riding after dark. Riding after dark is believed to be a significant risk factor for children. Also it can be difficult to supervise children riding ATVs in low light conditions. The Commission believes that allowing headlamps on youth ATVs would encourage children riding after dark.

There is a counter argument that if some children ride after dark or in low light conditions anyway (or if they do not return from a trip begun during daylight before dark) then allowing headlamps on youth ATVs could reduce the risk of injury by better illuminating the rider's path. It is also possible that the prohibition could cause some young teens to ride adult ATVs if they were involved in some ATV-related activities with parents or older siblings after dark. This could increase the injury risk since, as described earlier, the risk of injury for a child riding an adult ATV is twice that of riding a youth ATV.

The Commission does not have the data to provide statistical support to either argument. However, in the judgment of ESHF, the decrease in injuries resulting from discouraging after-dark riding by children by prohibiting headlamps on youth ATVs probably outweighs the increase in risk to those children who might still occasionally ride after dark.

*Not Mandating Stop Lamps.* As an alternative to mandating stop lamps, the

CPSC considered following ANSI/SVIA-1-2001 by allowing, but not requiring, stop lamps on all ATVs. Currently, CPSC staff believes that most adult ATVs have stop lamps, but most youth ATVs do not. If stop lamps were not mandated, the practice of installing stop lamps on adult ATVs, but not youth models, is likely to continue. This is probably due in part to the lower added cost of installing stop lamps on adult ATVs, where some of the steps can be combined with the installation of tail lamps that are already required.

The benefit of stop lamps is that they can alert a driver when the driver of a leading vehicle has applied his or her brakes, which can increase the chance of the trailing driver reacting appropriately, either by applying his or her own brakes or taking evasive maneuvers and avoiding a rear-end collision. It can be anticipated that there are situations where ATVs would be traveling in a row on a trail and a driver may stop unexpectedly. While the staff has not been able to quantify the benefits, in some cases, the activation of a stop lamp may help to avoid a collision.

The cost of including stop lamps on ATVs is the cost of the materials (e.g., bulbs, switches, wiring, and lenses) and labor to install the stop lamps during the manufacturing process, and the cost of redesigning the body of the ATV to accommodate the stop light housing. This cost has not been quantified. Although the cost is not expected to be very expensive in absolute terms, the cost could amount to several dollars or more per ATV, especially in the case of youth ATVs that are not currently equipped with any wiring for lighting.

*More Stringent Training Requirements.* The CPSC considered including more stringent training requirements in the proposal, including requiring that at least 8 hours of training, along with specific requirements for written and riding tests, be provided, and that the student-teacher ratio not exceed 4:1. The minimum time requirements would be intended to ensure that there would be sufficient time to cover all topics that should be covered in a safety course and to give each student enough time to practice each skill until they had reached a satisfactory level of proficiency. The written and riding tests would provide a mechanism for the instructor to give the student specific feedback concerning his or her performance. A student-teacher ratio of 4:1 would ensure that each student gets individual attention.

However, there are drawbacks to mandating the more stringent

requirements outlined above. The training program of the ATV Safety Institute, which is the leading ATV safety training provider, is approximately one-half day in length, there are no written or driving tests, and a 4:1 student-teacher ratio is encouraged but not required. Therefore, mandating the more stringent requirements could increase the cost of the training from its present level. Mandating a minimum length for the training and mandating a lower student-teacher ratio could possibly reduce the availability of training. Moreover, some new ATV purchasers who are willing to set aside the time to participate in a one-half day training program might not be willing to set aside a full day for the program, which for some trainees could include an overnight stay if the training site was a substantial distance from their home.

## J. Paperwork Reduction Act

The proposed standards will require manufacturers (including importers) to perform testing and require manufacturers and retailers to keep records. For this reason, the rules proposed below contain "collection of information requirements" as that term is used in the Paperwork Reduction Act, 44 U.S.C. 3501-3520. Therefore, the proposed rule is being submitted to the Office of Management and Budget ("OMB") in accordance with 44 U.S.C. 3507(d) and implementing regulations codified at 5 CFR 1320.11. The estimated costs of these requirements are discussed below.

### 1. Testing and Recordkeeping Costs

*Manufacturers.* The proposed rule would require manufacturers (including importers) to perform, or cause to be performed, testing sufficient to ensure that each ATV conforms to the requirements in the proposed rule. The requirements in the proposed rule are based on ANSI/SVIA-1-2001.

As discussed in section I above, the specified tests will require some time and equipment. They are estimated to take one day (8 hours) or less and would be conducted by at least one other mechanical engineer. If the total labor costs were \$90 per hour, then the cost of conducting the tests would be about \$720 per model (8 hours × \$90). As discussed in the Preliminary Regulatory Analysis above, staff estimates the cost of the equipment used in the testing to be about \$500. Documentation of the tests could add perhaps another \$100 to the cost of the testing and record keeping.

These estimates suggest that the full testing and recordkeeping costs of the proposed rule could be about \$1,320 per

model. Based on staff's identification of 131 different ATV models for the 2001 and 235 different ATV models for the year 2003 and the significant increase in sales of ATVs in recent years, there might be 500 different ATV models today. Therefore, the full testing and recordkeeping costs could be \$660,000 per year, assuming models are changed annually.

Because several ATV manufacturers conform to ANSI/SVIA-1-2001 and should already be performing the testing called for in the proposed rule, the proposed rule will not impose additional testing burdens on these manufacturers. The staff estimates that these manufacturers account for at least 150 ATV models. Therefore, the testing and recordkeeping cost that could be attributed to the proposed rule that would not be incurred in the absence of the rules, could be less than \$462,000 annually (\$660,000 – 150 × \$1,320).

**Retailers.** Retailers would be required to provide certificates for free training as discussed above. Additionally, each retailer would be required to maintain a record of the age acknowledgment statement and the training acknowledgment statement. The retailer will be required to write in the vehicle identification number on the training certificates that will be provided to the purchaser. The purchaser will be required to sign the original of each form and the retailer will have to maintain the originals in his or her files for 5 years after the date of the purchase. A copy of the age disclosure statement and training availability statement must also be sent to the manufacturer (or importer). The forms must be made available to CPSC representatives upon request.

These records are not complex and simply provide some basic information to the consumer (i.e., the minimum age one should be to ride the particular ATV and contact information for free ATV safety training). No information needs to be collected by the retailer, other than the consumer's signature. No particular skill will be required to generate or maintain these records. However, retailers that sell ATVs over the internet, or in other settings where a representative of the retailer does not meet personally with the consumer, may have to develop new procedures for obtaining the consumers' signatures. These might include not shipping the ATV until the consumer has returned the signed originals to the retailer.

The cost of preparing and filing these records is estimated to come to about \$2.33 per ATV sold. This estimate assumes that an average of 3 forms and training certificates will be required for

each ATV: The age acknowledgement form, the availability of training acknowledgement form; and an average of 1 training certificate. It is further assumed that each form takes an average of one minute to complete. An additional minute will be required for the retailer to send copies of the forms to the manufacturer and the manufacturer will require an additional minute to properly file the copies. The time is valued at \$21.32 per hour.<sup>21</sup> The cost of the blank forms themselves, postage, envelopes, and other supplies might add another \$0.55 to the cost.

If 950,000 ATVs are sold annually, the total recordkeeping cost on retailers will be about \$2.2 million annually. The number of ATV retailers is estimated to be about 5,000. Therefore, the recordkeeping costs will average about \$440 per retailer annually. Training certificates are already provided with about 90 percent of the ATVs sold. Therefore, about \$0.3 million of this cost is already being incurred.

## K. Initial Regulatory Flexibility Analysis

### 1. Introduction

The Regulatory Flexibility Act ("RFA") generally requires that agencies review proposed rules for their potential economic impact on small entities, including small businesses. Section 603 of the RFA calls for agencies to prepare and make available for public comment an initial regulatory flexibility analysis describing the impact of the proposed rule on small entities and identifying impact-reducing alternatives. Accordingly, the staff prepared an initial regulatory flexibility analysis which is summarized below.

### 2. Reporting, Recordkeeping and Other Compliance Requirements

It is difficult to estimate accurately the number of small entities that could be impacted for two reasons. One reason is that as noted below, the number of firms participating in the market has increased significantly over the last 10 years. Secondly, it is relatively easy for a firm to enter and exit the market. It is certain, however, that the ATV market has grown significantly in recent years.

**Manufacturers (and Importers).** The proposed rule imposes some requirements on manufacturers (which includes importers) of ATVs. The number of firms that manufacture or import ATVs is increasing. From the time ATVs were first introduced in the

early 1970s until about 2000, virtually all ATVs were manufactured and distributed by a few large firms. Since 2000, the number of smaller importers has increased significantly. The staff now believes that there are at least 87 manufacturers or importers that supply ATVs to the U.S. market. However, seven large manufacturers still account for about 90 percent of the U.S. ATV market. Thus, small manufacturers or importers have a combined market share of perhaps 10 percent of the market.<sup>22</sup>

Many of the new entrants are small importers that import ATVs from manufacturers based in Korea, Taiwan, and China. Virtually all manufacturers and importers of ATVs, including the small ones, are believed to manufacture and import products other than ATVs. These other products often include other motorized vehicles, such as motorcycles, motor scooters, go-carts, and mini bikes. In fact, of the ATV import operations that CPSC staff inspected in 2005, none sold ATVs exclusively and most received a majority of their revenue from other products.

Conducting the tests to ensure that ATVs comply with the proposed mechanical standards will require professional engineering services. ATV manufacturers probably have qualified engineers on staff or can obtain the services of qualified engineers to conduct the tests. The documentation of the tests would likely be completed by the engineer conducting the tests.

As discussed in sections I and J above, estimates suggest that the full testing and recordkeeping costs of the proposed rule could be about \$1,320 per model. Staff estimates that there might be 500 different ATV models today. Therefore, the full testing and recordkeeping costs could be \$660,000 per year, assuming models are changed annually.

As discussed above, the proposed rule will not impose additional testing burdens on the manufacturers who already conform to ANSI/SVIA-1-2001. The staff estimates that these manufacturers account for at least 150 ATV models. Therefore, the testing and recordkeeping cost that could be attributed to the proposed rule that would not be incurred in the absence of the rule, could be less than \$462,000 annually (\$660,000 – 150 × \$1,320). The annual cost of the testing per small manufacturer could be \$5,000 to \$6,000

<sup>21</sup> This is the average hourly wage of motor vehicle sales workers reported by the Bureau of Labor Statistics in July 2004 (inflated to 2006 dollars).

<sup>22</sup> According to the U.S. Small Business Administration size standards, an ATV manufacturer (NAICS code 336999) with fewer than 500 employees would be considered small and an ATV wholesaler (NAICS code 423110) with fewer than 100 employees would be considered small.

assuming an average of 4 to 5 models require testing each year.

Importers that do not manufacture ATVs can probably work with the foreign manufacturers to ensure that the ATVs meet the mechanical requirements and the documentation is prepared and transferred to the importer. Where the compliance testing is conducted by persons not fluent in English, an importer may have to employ the services of a qualified translator who can translate the records accurately into English.

The requirement that all ATVs be equipped with a stop lamp would impose some cost burden on ATV manufacturers. Although many adult ATVs are already equipped with stop lights, most youth ATVs are not. Many small manufacturers and importers supply youth ATVs to the U.S. market. The cost of including stop lamps on ATVs includes the cost of the materials (e.g., bulbs, wiring, switches, lenses, and housing), the cost of the labor to install the materials, and the cost of modifying the bodies of ATVs to accommodate stop lamps. Stop lamps are standard on many different vehicles and, as noted, are included on most adult ATVs. However, CPSC has not developed firm estimates of the added cost to equip youth ATVs with stop lamps.

The requirement that youth ATVs be equipped with automatic transmissions could impose some cost on manufacturers whose youth models are not already so equipped. However, most youth ATV models, including those from small importers, already appear to be equipped with automatic transmissions. The models identified by the staff that did not have automatic transmissions were some ATVs intended for children 12 years of age or older that were equipped with automatic clutches. An automatic clutch, which still requires the driver to manually select the appropriate gear, would not meet this requirement for youth ATVs.<sup>23</sup>

The cost of providing the required warning labels, hangtags, and additional pages in owner's manuals is low. Many, if not most, manufacturers already comply, at least to some degree, with this requirement. However, some foreign manufacturers may require the services of a qualified translator to ensure that the labels and manuals are written in clear and understandable English. Other special skills probably will not be required since the required

safety content of the warning labels, hangtags, and manuals is specified in the rule.

The proposed rule requires that manufacturers provide purchasers with a video that provides safety information concerning ATVs. The major manufacturers already provide the safety videos that conform to this requirement. The cost of duplicating a video or DVD is no more than a few dollars. However, the cost of producing the safety video could be several thousand dollars. The impact on small importers could be reduced if a third party video could be licensed or shared by many small manufacturers or importers.

Manufacturers would also be required to keep a copy of the owner's manuals and the safety video for each model on file for at least 5 years. It is likely that many manufacturers would do this even in the absence of a mandatory rule. The storage costs of these items probably would not exceed \$10 per model. The cost could be lower since the same safety video would likely be used for all ATV models produced or imported by a manufacturer and could be used for several years. Owner's manuals also might cover more than one model.

The proposed rule requires manufacturers to offer "free" ATV safety training to each purchaser of a new ATV and to each member of the purchaser's family who meets the age qualification to drive the ATV. The manufacturer or importer must make arrangements with a training provider to provide this training. The training providers must offer their services reasonably close to where the purchaser lives and within a reasonable time of the purchase. There are groups, such as the ATV Safety Institute (sponsored by the Specialty Vehicles Institute of America (or "SVIA")) that offer ATV safety training that should comply with this requirement. Based on the listed prices for the SVIA training, the cost is between \$75 and \$125 per person. Based on the experience with the manufacturers that have signed LOUs with the CPSC, it is expected that about 30 to 40 percent of ATV purchasers with little riding experience will take advantage of the offer of free safety training. However, since most ATV purchasers are already experienced drivers, it is expected that less than 10 percent of all purchasers of new ATVs will take advantage of the free training offer.

The proposed rule would formalize a ban on the sale of new 3-wheel ATVs. CPSC reached voluntary agreements with ATV manufacturers to stop supplying 3-wheel ATVs to the U.S.

market in 1988. The staff is not aware of any major manufacturers that are currently supplying 3-wheel ATVs to the U.S. market. However, the Office of Compliance has found evidence that some 3-wheeled vehicles that meet the definition of an ATV are being offered for sale to U.S. consumers on the internet. The formal ban in the proposed rule is intended to ensure no manufacturer or importer introduces a new 3-wheel ATV in the future. The ban should not impact the current operations of any manufacturer or importer.

*Retailers.* ATV retailers would have some responsibilities under the proposed rule, but none that would be expected to have a substantial impact. The CPSC staff have not determined the total number of ATV retail operations, but they certainly number in the thousands, a substantial number of which could be small businesses. Many ATV retailers are franchise operations of the larger ATV manufacturers or distributors. Other ATV retailers purchase their inventory from ATV importers and wholesalers. ATV retailers usually sell products in addition to ATVs, including motorcycles, scooters, and farm equipment. Some ATVs are offered for sale over the internet.

Each retailer will be required to prepare a "training certificate" that entitles each qualified member of the purchaser's immediate family to free ATV safety training. Additionally, the retailer will be required to prepare and maintain records of disclosure statements concerning age recommendations and availability of training. The retailer will provide copies of both forms to the purchaser and the manufacturers. The retailer and manufacturers would have to maintain the originals in their files for 5 years after the date of the purchase. The forms must be made available to CPSC representatives upon request.

As discussed in sections I and J above, the cost of preparing and filing these records is estimated to come to about \$2.33 per ATV sold. The cost of the blank forms themselves, postage, envelopes, and other supplies might add another \$0.55 to the cost. If 950,000 ATVs are sold annually, the total recordkeeping cost on retailers will be about \$2.2 million annually. The number of ATV retailers is estimated to be about 5,000. Therefore, the recordkeeping costs will average about \$440 per retailer annually.

The retailer will also be responsible for ensuring the warning labels and hang tags specified in the proposed rule remain on the vehicle at least until the

<sup>23</sup> The three youth ATV models equipped with automatic clutches were produced by three of the large ATV manufacturers.

purchaser has possession of it. In addition, the retailer would be responsible for ensuring that the safety video and owner's manual provided by the manufacturer or importer are transferred to the purchaser.

### 3. Other Federal Rules

The CPSC has not identified any Federal rule that either overlaps or conflicts with the proposed rule. Some states require training of ATV operators under some circumstances or require riders to wear certain protective gear. At least one state (North Carolina) has specified maximum engine sizes for ATVs intended for children under the age of 16 years.

### 4. Alternatives to the Proposed Rule

The proposed rule would essentially mandate provisions of a voluntary mechanical standard and certain provisions of agreements that CPSC has negotiated with the major ATV distributors. Manufacturers and distributors with an estimated combined market share of about 90 percent of the ATVs sold already comply with most of the provisions of the proposed rule. Because the rules are intended to ensure that all ATVs, distributors, and retailers meet these minimum requirements, CPSC has not identified any alternatives that would reduce the burden on small businesses and accomplish the goals of the proposed rule.

The option of continuing to rely on voluntary activity was considered by the staff. However, the rapid increase in the number of firms supplying ATVs to the market and the relative ease of entry and exit into the market make it impractical to negotiate individual agreements with each manufacturer and importer.

### 5. Summary and Conclusions

Many of the 87 or more companies that manufacture or import ATVs into the U.S. and an unknown number of the retailers are small entities. The proposed rule would impose some requirements on these firms. However, the requirements are needed to ensure that all ATVs meet some minimum safety requirements, that all ATV consumers receive some important safety information, and that all buyers be offered the training that is needed to safely operate ATVs. Some small entities are already meeting many of the provisions of the proposed rule.

### L. Environmental Considerations

Usually, CPSC rules establishing performance requirements are considered to "have little or no potential for affecting the human environment," and environmental

assessments are not usually prepared for these rules (see 16 CFR 1021.5 (c)(1)). Moreover, most of the ATV industry is already thought to be in conformance with most of the provisions of the proposed standard. Therefore, it is unlikely that substantial changes will be made in production practices nor will a substantial number of products require modification or disposal.

### M. Executive Order 12988 (Preemption)

As required by Executive Order 12988 (February 5, 1996), the CPSC states the preemptive effect of the ATV regulations proposed today as follows:

The regulations for youth ATVs are proposed under authority of the Federal Hazardous Substances Act (FHSA). 15 U.S.C. 1261–1278. Section 18 of the FHSA provides that, generally, if the Commission issues a rule under, or for the enforcement of, section 2(q) of the FHSA to protect against a risk of injury associated with, among other things, any toy or other article intended for use by children, "no State or political subdivision of a State may establish or continue in effect a requirement applicable to such [article] and designed to protect against the same risk of illness or injury unless such requirement is identical to the requirement established under such regulations." 15 U.S.C. 1261n(b)(1)(B). Upon application to the Commission, a State or local standard may be excepted from this preemptive effect if the State or local standard (1) provides a higher degree of protection from the risk of injury or illness than the FHSA standard and (2) does not unduly burden interstate commerce. In addition, the Federal government, or a State or local government, may establish and continue in effect a non-identical requirement that provides a higher degree of protection than the FHSA requirement for the hazardous substance for the Federal, State or local government's own use. 15 U.S.C. 1261n(b)(2).

The proposed rule for adult ATVs is issued under authority of the Consumer Product Safety Act (CPSA). 15 U.S.C. 2051–2084. Section 26 of the CPSA sets out a preemption provision similar to that of the FHSA, specifically "whenever a consumer product safety standard under the Act [CPSA] is in effect and applies to a risk of injury associated with a consumer product, no State or political subdivision of a State shall have any authority either to establish or continue in effect any provision of a safety standard or regulation which prescribes any requirements as to the performance, composition, contents, design, finish, construction, packaging, or labeling of

such product which are designed to deal with the same risk of injury associated with such consumer product, unless such requirements are identical to the requirements of the Federal standard." 15 U.S.C. 2075(a). As with the FHSA preemption provisions, an exception for products for the state or political subdivision's own use and a petitioning procedure for an exemption from the otherwise applicable federal standard are provided.

Thus, with the exceptions noted above, the ATV requirements proposed in today's **Federal Register** would preempt non-identical state or local requirements for ATVs designed to protect against the same risk of injury.

### N. Effective Date

The Commission proposes that these rules would become effective 180 days from publication of a final rule in the **Federal Register** and would apply to all terrain vehicles manufactured or imported on or after that date. The CPSA requires that consumer product safety rules take effect not later than 180 days from their promulgation unless the Commission finds there is good cause for a later date. 15 U.S.C. 2058(g)(1). Many of the requirements proposed in these rules are substantially the same as provisions of the ANSI/SVIA voluntary standard, which the major ATV manufacturers currently comply with, or of the LOU agreements, which the major ATV manufacturers have with the Commission. Therefore, the Commission believes that a 180-day effective date is appropriate.

### O. Proposed Findings

The CPSA and FHSA require the Commission to make certain findings when issuing a consumer product safety standard or a rule under the FHSA. The CPSA requires that the Commission consider and make findings about the degree and nature of the risk of injury; the number of consumer products subject to the rule; the need of the public for the rule and the probable effect on utility, cost and availability of the product; and other means to achieve the objective of the rule while minimizing the impact on competition, manufacturing and commercial practices. The CPSA also requires that the rule must be reasonably necessary to eliminate or reduce an unreasonable risk of injury associated with the product and issuing the rule must be in the public interest. For a rule declaring a product a banned hazardous product, the CPSA requires that the Commission must find that no feasible consumer product safety standard would

adequately protect the public from the unreasonable risk. 15 U.S.C. 2058(f)(3).

In addition, the Commission must find that: (1) If an applicable voluntary standard has been adopted and implemented, that compliance with the voluntary standard is not likely to adequately reduce the risk of injury, or compliance with the voluntary standard is not likely to be substantial; (2) that benefits expected from the regulation bear a reasonable relationship to its costs; and (3) that the regulation imposes the least burdensome requirement that would prevent or adequately reduce the risk of injury. *Id.*

The FHSA requires essentially similar findings concerning unreasonable risk, voluntary standards and potential costs and benefits. Under the FHSA, the Commission must find that some aspect of the design or manufacture of the article it seeks to regulate presents an unreasonable risk of injury or illness. *Id.* 1261(s). The Commission must also make the findings concerning voluntary standards, relationship of costs to benefits, and least burdensome alternative as required by the CPSA. The findings must also be stated in the rules. These findings are discussed below.

*Degree and nature of the risk of injury.* According to the Commission's 2004 Annual Report on ATVs, the Commission has reports of 6,494 ATV-related deaths that have occurred since 1982. For 2003 alone, an estimated 740 ATV-related deaths were reported to the Commission. The estimated number of ATV-related injuries treated in hospital emergency rooms in 2004 was 136,100, which is an increase of about 8 percent over the 2003 estimate. These incidents occur when the operator of an ATV loses control of the vehicle, collides with another object, or otherwise becomes injured or dies while riding an ATV. Many incidents are related to behavior of the operator (such as riding on paved roads, carrying a passenger, driving at excessive speeds).

*Number of consumer products subject to the rule.* The market has increased substantially since ATVs were first introduced over thirty years ago. In 2005, an estimated 6.9 million ATVs were in use.

*The need of the public for ATVs and the effects of the rule on their utility, cost and availability.* The need of the public for ATVs is both for recreation and for work, particularly on farms and ranches in rural areas. The proposed rule will have minimal effect on the utility, cost and availability of ATVs. The mechanical provisions of the proposed rule are substantially similar to requirements of the voluntary standard with which the major ATV

manufacturers comply. Costs should be small because the information provisions of the proposed rule are also currently being followed by the major ATV manufacturers. With the exception of the ban of three-wheeled ATVs, the proposed rule should not affect the availability of ATVs. In fact, a greater variety of youth ATVs may become more available.

*Other means to achieve the objective of the rule while minimizing the impact on competition and manufacturing.* Because most ATV manufacturers are currently complying with the ANSI/SVIA voluntary standard and are providing the information materials the proposed rule requires, the Commission does not believe that the proposed rule will have much effect on competition and manufacturing. It is likely, however, that newer entrants may need to take action to bring their ATVs into compliance with the proposed rule. This could have the effect of increasing the price for the newer entrants' imported ATVs. In the future, this could reduce the number of new entrants coming into the ATV market.

*Unreasonable risk.* As discussed above, the Commission has reports of 6,494 ATV-related deaths that have occurred since 1982 and for 2003 alone, an estimated 740 ATV-related deaths were reported to the Commission. The estimated number of ATV-related injuries treated in hospital emergency rooms in 2004 was 136,100. The proposed rules will establish mechanical standards for ATVs and requirements for the provision of safety information about operating ATVs. Included in this will be a requirement for manufacturers to provide free training. Many ATV manufacturers are currently in compliance with many of the proposed requirements. However, some of the additional requirements (such as requiring the age acknowledgment form and training acknowledgment form) or requirements that are somewhat different from current practice (such as clearer warning statements) may better inform consumers of ATV-related risks who may then be better able to reduce or avoid these risks. Moreover, the mandatory requirements will cover the increasing number of new entrants into the ATV market who are not following current voluntary standards or other safety practices that the major manufacturers are voluntarily following. This will reduce the risk of injury in the future as more such new entrants may enter the market.

*Public interest.* These rules are in the public interest because they may reduce ATV-related deaths and injuries in the

future. Their mandatory nature will mean that all ATV manufacturers will have to comply with the mechanical and information requirements of the rules. The increasing number of new entrants will make it difficult to maintain voluntary agreements with manufacturers. By issuing mandatory requirements, the Commission will have the authority to enforce these requirements rather than relying on voluntary compliance.

*Ban of three-wheeled ATVs.* Three-wheeled ATVs are less stable and more difficult to steer than four-wheeled ATVs. The risk of sustaining a hospital emergency room-treated injury while operating a three-wheeled ATV is about 3 times the risk on a similar four-wheeled ATV. While there are many technical factors that make a four-wheeled ATV more dynamically stable than a three-wheeled ATV, one of the largest factors is the fourth wheel. Given the inherent difference in vehicle configuration, the Commission does not believe it is feasible to develop a performance standard for three-wheeled ATVs that would improve that vehicle's stability performance to that of a four-wheeled vehicle.

*Voluntary standards.* The current voluntary standard, ANSI/SVIA-1-2001, specifies requirements for the mechanical operation of single rider ATVs (both for adult and youth ATVs). Manufacturers are working to incorporate requirements for tandem ATVs into the voluntary standard. The major manufacturers appear to comply with most provisions of the voluntary standard. However, the voluntary standard does not contain information requirements for such things as warning labels, owners manuals and training. Thus, compliance with the voluntary standard alone would not be sufficient to adequately reduce or eliminate the risk of injury. Many ATV incidents occur because of the way the ATV is used. The Commission cannot issue requirements for how a product should be used (e.g., requiring helmets, prohibiting children from riding adult ATVs). To affect these behaviors the Commission must act through requirements directing manufacturers and retailers to take actions that inform consumers of the risks associated with ATVs and advise consumers how they could reduce these risks.

The major manufacturers have agreed to take many of the informational actions proposed in the rules through the LOUs they have entered into with the Commission. The LOUs are completely voluntary. A company could decide to change any of the actions it has agreed to at any time.



Although the major manufacturers appear to be complying with the voluntary standard and abiding by their LOUs, a growing portion of the ATV market may not be following the voluntary standard (and is not bound by the LOUs). These new entrants now comprise approximately 10 percent of the market. Given recent trends and the lower price of the new entrants' products, their share of the market is likely to increase.

Thus, the Commission finds that compliance with the ANSI/SVIA-1-2001 voluntary standard is not likely to eliminate or adequately reduce the risk of injury associated with ATVs, and it is unlikely that there will be substantial compliance with the voluntary standard.

#### *Relationship of benefits to costs.*

Because most manufacturers are currently taking most of the actions that the proposed rules would require, costs from the proposed rules are likely to be small. The initial potential reduction of ATV-related deaths and injuries may also be small. However, mandating the mechanical and information requirements will mean that new entrants to the market, a group that has recently been increasing, will have to comply with the requirements as well. The proposed rule would impose some testing and recordkeeping costs. The staff estimates these to be about \$462,000 annually. For many of the provisions, it is difficult to quantify benefits. However, for the training requirement alone, the Commission estimates the proposed provision could result in a net benefit of about \$3.3 million annually. Given that in 2004 an estimated 136,000 ATV-related injuries were treated in hospital emergency rooms, and that an estimated 6,494 ATV-related deaths have occurred since 1982, if the proposed rule affects even a small number of potential deaths and injuries, the benefits would bear a reasonable relationship to the costs.

As for youth ATVs, the Commission proposes to establish categories of youth ATVs based on maximum speed rather than engine size. This should not impose additional costs on manufacturers because these delineations are similar to those already in the ANSI/SVIA-1-2001 voluntary standard. However, this change could lead to a greater variety of youth ATVs which could result in more children riding youth ATVs rather than larger, riskier adult models. Such a movement of children to youth ATVs could reduce ATV-related deaths and injuries because the risk of injury for riders under the age of 16 driving adult ATVs is about twice the risk of injury of those who are

driving age-appropriate ATVs. Additionally, the proposed change could result in more children receiving formal training, and this too could reduce deaths and injuries.

*Least burdensome requirement.* As discussed above, the proposed rule is likely to impose only a small burden on most current ATV manufacturers and retailers. The Commission is essentially mandating the current practice that many manufacturers are following. Nevertheless, the proposed rule is likely to reduce the risk of injury associated with ATVs because it will enable the Commission to directly enforce the provisions of the rule and will bring new entrants under federal regulation.

#### **P. Additional Instructions to the Staff and Request for Comments**

The Commission instructs the staff to take the following actions and invites public comment on any of the issues raised.

With regard to youth ATVs:

1. Analyze all in-depth investigation reports and any other detailed reports of injuries we may have to children on ATVs to determine what factors contributed to the incidents and to determine whether additional changes could be made to the operational/handling characteristics of youth ATVs that would reduce or eliminate injuries and deaths due to those factors.

2. Test current youth models against one another to determine if there are characteristics of some models that make them more stable or otherwise less incident prone than other models.

3. Determine whether making the junior and/or pre-teen youth models less rider interactive (lateral stability, braking systems, etc.) could reduce or eliminate deaths and injuries on youth models.

4. Explore the feasibility of providing guidance to purchasers on the appropriate weight of the youth model ATV in relation to the weight of the rider and of providing guidance to manufacturers on an upper limit on the weight of the junior and pre-teen ATVs.

5. Do research to determine if the top speed of thirty miles per hour for the teen youth model is excessive and whether reducing the speed would reduce or eliminate deaths and injuries on those vehicles.

6. Determine how ATV training for children in the three age groups should be structured to maximize their ability to learn the safety information and riding skills (for example, should we require that a separate ATV training course for children be developed?).

7. Determine whether tandem youth ATVs are appropriate.

8. Analyze CPSC data to determine the desirability of illumination on youth ATVs (in both daytime and nighttime situations) to reduce deaths and injuries to riders.

With regard to ATVs in general:

1. As part of the on-going information and education campaign, Human Factors and other staff shall work with the Office of Information and Public Affairs to ensure that the core message that is developed with regard to children under 16 driving ATVs is as effective as possible. Explore whether two campaigns should be developed: One directed to children and one directed to the parents/adult drivers.

2. Review and revise, where necessary, the incident reporting form on the ATV Web site to solicit as much information about ATV incidents as possible to assist staff in current and future ATV incident evaluations.

3. Create a new tab on the ATV Web site that would contain everything parents ought to know about ATV safety for their children.

4. Detail the plan for enforcement and monitoring of the ATV age guidelines under the new proposal and explain how it would differ from current practice and what additional enforcement tools it would provide the Commission.

#### **Q. Conclusion**

For the reasons stated in this preamble, the Commission preliminarily concludes that all terrain vehicles intended for adults present an unreasonable risk of injury which can be reduced through the requirements of this proposed rule. With regard to ATVs intended for children under the age of 16, the Commission preliminarily concludes that ATVs that do not meet the requirements specified for youth ATVs are hazardous substances under section 2(f)(1)(D) of the FHSA. The Commission also preliminarily concludes that three-wheeled ATVs present an unreasonable risk of injury and there is no feasible consumer product safety standard that would adequately protect the public from the risk of injury.

#### **List of Subjects**

##### *16 CFR Part 1307*

Consumer protection, Imports, Law enforcement, Recreation and recreation areas, Safety.

##### *16 CFR Part 1410*

Consumer protection, Imports, Information, Labeling, Law enforcement, Recreation and recreation areas, Reporting and recordkeeping requirements, Safety.

### 16 CFR Part 1500

Consumer protection, Hazardous materials, Hazardous substances, Imports, Infants and children, Labeling, Law enforcement, Toys.

### 16 CFR Part 1515

Consumer protection, Imports, Infants and children, Information, Labeling, Law enforcement, Recreation and recreation areas, Reporting and recordkeeping requirements, Safety, Youth.

For the reasons stated in the preamble, the Commission proposes to amend Chapter II of title 16 of the Code of Federal Regulations as follows:

1. Add part 1307 to read as follows:

### PART 1307—BAN OF THREE-WHEELED ALL TERRAIN VEHICLES

#### Sec.

- 1307.1 Scope and application.
- 1307.2 Purpose.
- 1307.3 Definitions.
- 1307.4 Banned hazardous products.
- 1307.5 Findings.
- 1307.6 Effective date.

**Authority:** 15 U.S.C. 2057 and 2058.

#### § 1307.1 Scope and application.

In this part 1307 the Consumer Product Safety Commission declares that three-wheeled all terrain vehicles, as defined in § 1307.3, are banned hazardous products under sections 8 and 9 of the Consumer Product Safety Act (15 U.S.C. 2057 and 2058).

#### § 1307.2 Purpose.

The purpose of the rule in this part is to prohibit the sale of three-wheeled all terrain vehicles. These products present an unreasonable risk of injury as a three-wheeled ATV is inherently less stable than an ATV with four wheels resulting in 3 times the risk of injury compared to a four-wheeled ATV.

#### § 1307.3 Definitions.

(a) The definitions in section 3 of the Consumer Product Safety Act (15 U.S.C. 2052) apply to this part 1307.

(b) *Three-wheeled all terrain vehicle*, or *three-wheeled ATV*, means a motorized vehicle that travels on three low pressure tires, has a seat designed to be straddled by the operator, has handlebars for steering, and is intended for off-road use on non-paved surfaces.

#### § 1307.4 Banned hazardous products.

Any three-wheeled ATV, as defined in § 1307.3(b), that is manufactured or imported on or after [180 days from issuance of final rule] is a banned hazardous product.

#### § 1307.5 Findings.

(a) *The degree and nature of the risk of injury.* The Commission finds that the risk of injury which the regulation in this part is designed to eliminate or reduce is that of severe injury or death occurring when the operator of a three-wheeled ATV loses control of the vehicle, collides with another object, or otherwise becomes injured or dies while riding a three-wheeled ATV. Three-wheeled ATVs are less stable and more risky than four-wheeled ATVs. The risk of sustaining a hospital emergency room treated injury while operating a three-wheeled ATV is about 3 times the risk on a similar four-wheeled ATV.

(b) *Products subject to the ban.* Three-wheeled ATVs are motorized vehicles that travel on three low pressure tires, have a seat designed to be straddled by the operator, have handlebars for steering, and are intended for off-road use on non-paved surfaces.

(c) *The need of the public for three-wheeled ATVs and the effects of the rule on their utility, cost and availability.* The Commission finds that the public's need for three-wheeled ATVs (given the continued availability of four-wheeled ATVs) is small and that the effect of this rule on the cost, utility, and availability of three-wheeled ATVs will also be small. The major manufacturers of ATVs have not sold three-wheeled ATVs in the United States since 1988. Although a few new entrants to the market have started to offer three-wheeled ATVs, and some models that were manufactured before 1988 are still in use, three-wheeled ATVs are not widely available at this time. Even before 1988, the market for three-wheeled ATVs compared to four-wheeled ATVs was declining. In 1986, about 80 percent of ATVs sold in the United States had four wheels. For most individuals, the utility difference between a three-wheeled ATV and a four-wheeled ATV is minimal. Four-wheeled ATVs will continue to be available. Except for the fact that three-wheeled ATVs are considerably less stable than four-wheeled ATVs, they are functionally equivalent. One can use a four-wheeled ATV in essentially the same manner as a three-wheeled ATV.

(d) *Alternatives.* The Commission has considered other means of obtaining the objective of this ban, but has found none that would adequately reduce the risk of injury. While there are many technical factors that make a four-wheeled ATV more dynamically stable than a three-wheeled ATV, one of the largest factors is the fourth wheel. Given the inherent difference in vehicle configuration, the Commission does not believe it is feasible to develop a performance

standard for three-wheeled ATVs that would improve that vehicle's stability performance to that of a four-wheeled vehicle.

#### § 1307.6 Effective date.

The rule in this part becomes effective [180 days from issuance of final rule] and applies to all three-wheeled ATVs manufactured or imported on or after that date.

2. Add part 1410 to Subchapter B to read as follows:

### PART 1410—REQUIREMENTS FOR ADULT ALL TERRAIN VEHICLES

#### Subpart A—General Requirements

##### Sec.

- 1410.1 Purpose, scope, effective date.
- 1410.2 Definitions.
- 1410.3 Requirements in general.
- 1410.4 Findings.

#### Subpart B—Requirements for Equipment, Configuration and Performance for Single Rider ATVs

- 1410.5 Equipment and configuration requirements.
- 1410.6 Maximum speed capability test.
- 1410.7 Service brake performance test.
- 1410.8 Parking brake performance test.
- 1410.9 Pitch stability requirements.

#### Subpart C—Requirements for Labeling, Point of Sale Information and Instruction

- 1410.10 Labeling requirements.
- 1410.11 Hangtag requirements.
- 1410.12 Age acknowledgment.
- 1410.13 Instructional/Owner's manual.
- 1410.14 Safety video.
- 1410.15 Instructional training.

#### Subpart D—Requirements for Tandem ATVs

- 1410.16 Requirements in general for tandem ATVs.
- 1410.17 Equipment and configuration requirements for tandem ATVs.
- 1410.18 Pitch stability requirements for tandem ATVs.
- 1410.19 Information requirements for tandem ATVs.

#### Subpart E—Certification/Testing/Recordkeeping

- 1410.20 Certification.
- 1410.21 Testing.
- 1410.22 Recordkeeping.

#### Figures

- Figure 1 to Part 1410—Operator Foot Environment—Plan View
- Figure 2 to Part 1410—Operator Foot Environment—Front View
- Figure 3 to Part 1410—Age Acknowledgment Form
- Figure 4 to Part 1410—Training Acknowledgment Form
- Figure 5 to Part 1410—Operator and Passenger Foot Environment—Plan View
- Figure 6 to Part 1410—Operator and Passenger Foot Environment—Front View

**Authority:** 15 U.S.C. 2056–2058, 2063, 2065 and 2076(e).

**§ 1410.1 Purpose, scope, effective date.**

(a) *Purpose.* The purpose of the standard of this part is to reduce deaths and injuries associated with adult all terrain vehicles (ATVs) by ensuring that such ATVs meet certain technical requirements and that consumers have sufficient safety information about operating such ATVs.

(b) *Scope and effective date.* All terrain vehicles, as defined in § 1410.2(a) manufactured or imported on or after [180 days after final rule is issued] are subject to the requirements of the standard in this part and 16 CFR Part 1307. ATVs intended for use by an operator less than sixteen (16) years of age are subject to the requirements in 16 CFR 1500.18(a)(20) and 16 CFR part 1515.

**§ 1410.2 Definitions.**

In addition to the definitions in section 3 of the Consumer Product Safety Act (15 U.S.C. 2052), the following definitions apply for purposes of this part 1410.

(a) *All terrain vehicle, or ATV,* means a three- or four-wheeled motorized vehicle that travels on low pressure tires, has a seat designed to be straddled by the operator (and a passenger if provision is made for carrying a passenger), has handlebars for steering, and is intended for off-road use on non-paved surfaces. For purposes of this part, all terrain vehicle, or ATV, means an ATV that is intended for use by an operator 16 years of age or older.

(b) *Footrest* means a structural support for the operator's feet, which can include footpegs and footboards.

(c) *Gearshift control* means a control for selecting among a number of sets of transmission gears.

(d) *Handlebar* means a device used for steering and rider support and as a place to mount hand-operated controls.

(e) *Low pressure tire* means a tire designed for off-road use on ATVs, and having a recommended tire pressure of no more than 69 kPa (10 psi).

(f) *Manual clutch* means a device activated by the operator to disengage the engine from the transmission.

(g) *Manual fuel shutoff control* means a device designed to turn the fuel flow from the fuel tank on and off.

(h) *Manufacturer* means any entity that produces ATVs. For purposes of this part 1410, an importer is a manufacturer.

(i) *Mechanical suspension* means a system which permits vertical motion of an ATV wheel relative to the chassis and provides spring and damping forces.

(j) *Parking brake* means a brake system which, after actuation, holds one

or more brakes continuously in an applied position without further action.

(k) *Passenger handhold* means a device on a tandem ATV to be grasped by the passenger to provide support and help maintain balance while riding as a passenger.

(l) *PIN* means a Product Identification Number assigned in accordance with *Recreation Off-Road Vehicle Product Identification Numbering System*, SAE International Consortium Standard, ICS-1000, issued 2004-9.

(m) *Retailer* means, for purposes of this part 1410, a person to whom an ATV is delivered or sold for purposes of sale or distribution by such person to a consumer.

(n) *Safety alert symbol* means the symbol which indicates a potential personal injury hazard as defined in section 4.10 of ANSI Z535.4-2002, *American National Standard for Product Safety Signs and Labels*.

(o) *Service brake* means the primary brake system used for slowing and stopping a vehicle.

(p) *Spark arrester* means an exhaust system component which limits the size of carbon particles expelled from a tailpipe.

(q) *Tandem all terrain vehicle* means a motorized off-highway vehicle designed to travel on four tires, having a seat designed to be straddled by the operator and handlebar for steering control, and a seating position behind the operator seat designed to be straddled by no more than one passenger.

(r) *Three-wheeled all terrain vehicle* means an all terrain vehicle as defined in paragraph (a) of this section that has three wheels.

(s) *Throttle control* means a control which is located on the handlebar and is used to control engine power.

(t) *VIN* means a Vehicle Identification Number assigned as specified in 49 CFR part 565.

(u) *Wheelbase (L)* means the longitudinal distance from the center of the front axle to the center of the rear axle.

(v) *Wheel travel* means the displacement of a reference point on the suspension (such as the wheel axle) from when the suspension is fully extended (no force applied) to when it is fully compressed.

**§ 1410.3 Requirements in general.**

(a) Each ATV designed for use only by a single rider, shall meet the equipment, configuration and performance requirements specified in subpart B of this part. Each ATV designed for two riders shall meet the equipment, configuration and performance

requirements specified in subpart D of this part. All ATVs shall meet the requirements for labeling, point of sale information, instruction manuals, and instructional training specified in subpart C of this part and the recordkeeping and certification requirements specified in subpart E of this part.

(b) Each ATV manufacturer shall comply with the requirements of this part applicable to manufacturers. For purposes of this part, an ATV importer is an ATV manufacturer.

(c) Each ATV retailer shall comply with the requirements of this part applicable to retailers.

(d) In accordance with 16 CFR part 1307, any three-wheeled all terrain vehicle as defined in § 1410.2(r) which is manufactured or imported on or after [180 days after final rule is issued] is a banned hazardous product.

**§ 1410.4 Findings.**

(a) *General.* In order to issue a consumer product safety standard under the Consumer Product Safety Act, the Commission must make certain findings and include them in the rule. 15 U.S.C. 2058(f)(3). These findings are discussed in this section.

(b) *Degree and nature of the risk of injury.* According to the Commission's 2004 Annual Report on ATVs, the Commission has reports of 6,494 ATV-related deaths that have occurred since 1982. For 2003 alone, an estimated 740 ATV-related deaths were reported to the Commission. The estimated number of ATV-related injuries treated in hospital emergency rooms in 2004 was 136,100, which is an increase of about 8 percent over the 2003 estimate. These incidents occur when the operator of an ATV loses control of the vehicle, collides with another object, or otherwise becomes injured or dies while riding an ATV. Many incidents are related to behavior of the operator (such as riding on paved roads, carrying a passenger, driving at excessive speeds).

(c) *Number of consumer products subject to the rule.* The market has increased substantially since ATVs were first introduced over thirty years ago. In 2005, an estimated 6.9 million ATVs were in use.

(d) *The need of the public for ATVs and the effects of the rule on their utility, cost and availability.* The need of the public for ATVs is both for recreation and for work, particularly on farms and ranches in rural areas. The proposed rule will have minimal effect on the utility, cost and availability of ATVs. The mechanical provisions of the proposed rule are substantially similar to requirements of the voluntary

standard with which the major ATV manufacturers comply. Costs should be small because the information provisions of the proposed rule are also currently being followed by the major ATV manufacturers. With the exception of the ban of three-wheeled ATVs, the proposed rule should not affect the availability of ATVs. In fact, a greater variety of youth ATVs may become more available.

(e) *Other means to achieve the objective of the rule while minimizing the impact on competition and manufacturing.* Because most ATV manufacturers are currently complying with the ANSI/SVIA-1-2001 voluntary standard and are providing the information materials the proposed rule requires, the Commission does not believe that the proposed rule will have much effect on competition and manufacturing. It is likely, however, that newer entrants may need to take action to bring their ATVs into compliance with the proposed rule. This could have the effect of increasing the price for the newer entrants' imported ATVs. In the future, this could reduce the number of new entrants coming into the ATV market.

(f) *Unreasonable risk.* As noted in paragraph (b) of this section, the Commission has reports of 6,494 ATV-related deaths that have occurred since 1982, and an estimated 740 ATV-related deaths were reported to the Commission for 2003 alone. The proposed rules will establish mechanical standards for ATVs and requirements for the provision of safety information about operating ATVs. Included in this will be a requirement for manufacturers to provide free training. Many ATV manufacturers are currently in compliance with many of the proposed requirements. However, some of the additional requirements (such as requiring the age acknowledgment form and training acknowledgment form) or requirements that are somewhat different from current practice (such as clearer warning statements) may better inform consumers of ATV-related risks who may then be better able to reduce or avoid these risks. Moreover, the mandatory requirements will cover the increasing number of new entrants into the ATV market who are not following current voluntary standards or other safety practices that the major manufacturers are voluntarily following. This will reduce the risk of injury in the future as more such new entrants may enter the market.

(g) *Public interest.* These rules are in the public interest because they may reduce ATV-related deaths and injuries in the future. Their mandatory nature

will mean that all ATV manufacturers will have to comply with the mechanical and information requirements of the rules. The increasing number of new entrants will make it difficult to maintain voluntary agreements with manufacturers. By issuing mandatory requirements, the Commission will have the authority to enforce these requirements rather than relying on voluntary compliance.

(h) *Voluntary standards.* The current voluntary standard, ANSI/SVIA-1-2001, specifies requirements for the mechanical operation of single rider ATVs (both for adult and youth ATVs). Manufacturers will be working to incorporate requirements for tandem ATVs into the voluntary standard. The major manufacturers appear to comply with most provisions of the voluntary standard. The voluntary standard does not contain information requirements for such things as warning labels, owners manuals and training. Thus, compliance with the voluntary standard alone would not be adequate to eliminate the risk of injury. Many ATV incidents occur because of the way the ATV is used. The Commission cannot issue requirements for how a product should be used (e.g., requiring helmets, prohibiting children from riding adult ATVs). To affect these behaviors the Commission must act through requirements directing manufacturers and retailers to take actions that inform consumers of the risks associated with ATVs and advise consumers how they could reduce these risks. Although the major manufacturers have agreed to take many of the informational actions proposed in the rules through the Letters of Undertaking ("LOUs") that they have entered into with the Commission, the LOUs are completely voluntary, and a company could decide to change any of the actions it has agreed to at any time. Although the major manufacturers appear to be complying with the voluntary standard and abiding by their LOUs, a growing portion of the ATV market may not be following the voluntary standard (and is not bound by the LOUs). These new entrants now comprise approximately 10 percent of the market. Given recent trends and the lower price of the new entrants' products, their share of the market is likely to increase. Thus, the Commission finds that compliance with the ANSI/SVIA-1-2001 voluntary standard is not likely to eliminate or adequately reduce the risk of injury associated with ATVs, and it is unlikely that there will be substantial compliance with the voluntary standard.

(i) *Relationship of benefits to costs.* Because most manufacturers are currently taking most of the actions that the proposed rules would require, costs from the proposed rules are likely to be small. The initial potential reduction of ATV-related deaths and injuries may also be small. However, mandating the mechanical and information requirements will mean that new entrants to the market, a group that has recently been increasing, will have to comply with the requirements as well. The proposed rule would impose some testing and recordkeeping costs. The staff estimates these to be about \$462,000 annually. For many of the provisions, it is difficult to quantify benefits. However, for the training requirement alone, the Commission estimates the proposed provision could result in a net benefit of about \$3.3 million annually. Given that in 2004 an estimated 136,000 ATV-related injuries were treated in hospital emergency rooms, and that an estimated 6,494 ATV-related deaths have occurred since 1982, if the proposed rule affects even a small number of potential deaths and injuries, the benefits would bear a reasonable relationship to the costs.

(j) *Least burdensome requirement.* The proposed rule is likely to impose only a small burden on ATV manufacturers and retailers. The Commission is essentially mandating the current practice that many manufacturers are following. Nevertheless, the proposed rule is likely to reduce the risk of injury associated with ATVs because it will enable the Commission to directly enforce the provisions of the rule and will bring new entrants under federal regulation.

## **Subpart B—Requirements for Equipment, Configuration and Performance for Single Rider ATVs**

### **§ 1410.5 Equipment and configuration requirements.**

(a) *Service brakes.* All ATVs shall have either independently-operated front and rear brakes, or front and rear brakes that are operated by a single control, or both. These brakes shall meet the requirements of § 1410.7.

(b) *Parking brake.* All ATVs shall have a parking brake capable of holding the ATV stationary under prescribed conditions. The parking brake shall meet the performance requirements of § 1410.8.

(c) *Mechanical suspension.* All ATVs shall have mechanical suspension for all wheels. Each wheel shall have a minimum wheel travel of 50 mm (2 inches). Springing and damping

properties shall be provided by components other than the tire.

(d) *Engine stop switch.* All ATVs shall have an engine stop switch which is operable by the thumb without removing the hand from the handlebar. The engine stop switch shall not require the operator to hold it in the off position to stop the engine.

(e) *Manual clutch control.* All ATVs equipped with a manual clutch shall have a clutch lever which is operable without removing the hand from the handlebar.

(f) *Throttle control.* All ATVs shall be equipped with a means of controlling engine power through a throttle control. The throttle control shall be operable without removing the hand from the handlebar. The throttle control shall be self-closing to an idle position upon release of the operator's hand from the control.

(g) *Drivetrain controls.* (1) Manual transmission gearshift control. All ATVs equipped with a manual transmission gearshift control shall have the control located so that it is operable by the operator's left foot or left hand.

(i) *Operation of a foot gearshift control.* If equipped with a foot gearshift control, an upward motion of the operator's toe shall shift the transmission toward higher (lower numerical gear ratio) gears, and a downward motion toward lower gears. If equipped with a heel-toe (rocker) shifter, an upward motion of the toe or a downward motion of the heel shall shift the transmission toward higher gears and a downward motion of the toe toward lower gears.

(ii) *Operation of a hand gearshift control.* If equipped with a hand gearshift control, moving a control upward or depressing the upper portion of the control shall shift the transmission toward higher (lower numerical gear ratio) gears, and moving the control downward or depressing the lower portion of the control shall shift the transmission toward lower gears.

(iii) *Gear selection.* If three or more gears are provided, it shall not be possible to shift from the highest gear directly to the lowest gear, or vice versa.

(2) *Directional/Range controls.* Controls for selecting forward, neutral, or reverse or for selecting overall transmission ranges, or for selecting the differential drive (2-wheel or 4-wheel) shall have a defined shift pattern viewable by the operator.

(3) *Neutral indicator.* All ATVs with a neutral position shall have either a neutral indicator readily visible to the operator when seated on the ATV or a means to prevent starting of the ATV unless the transmission is in the neutral

position. The indicator, if provided, shall be activated whenever the ignition system is on and the transmission is in neutral.

(4) *Reverse indicator.* All ATVs with a reverse position shall have a reverse indicator readily visible to the operator when the operator is seated on the ATV. The indicator shall be activated whenever the engine is running and the transmission is in reverse.

(5) *Electric start interlock.* An interlock shall be provided to prevent the ATV engine from being started by electric cranking unless the transmission is in neutral or park, or the brake is applied.

(h) All ATVs shall have a means for allowing the presence of the ATV to be visible during daylight hours over an obstacle with a height of six (6) feet located directly adjacent to the ATV.

(i) *Manual fuel shutoff control.* If an ATV is equipped with a manual fuel shutoff control, the device shall be operable as prescribed in 49 CFR 571.123, Table 1.

(j) *Handlebars.* The handlebar and its mounting shall present no rigid materials with an edge radius of less than 3.2 mm (0.125 inch) that may be contacted by a probe in the form of a 165 mm (6.5 inch) diameter sphere. The probe shall be introduced to the handlebar mounting area. It shall not be possible to touch any part of any edge that has a radius of less than 3.2 mm (0.125 inch) with any part of the probe. A handlebar crossbar, if provided, shall be equipped to minimize contact injuries.

(k) *Operator foot environment.* All ATVs shall have a structure or other design feature which meets the requirements of paragraphs (k)(1) through (4) of this section.

(1) *Test procedure.* Compliance shall be determined by introduction of a probe, whose end is a rigid flat plane surface 75 mm (3 inches) in diameter, in the prescribed direction to the zones as described in paragraphs (k)(2) and (3) of this section and as shown in Figures 1 and 2 of this part, or in the case of a tandem ATV, Figures 5 and 6 of this part.

(i) *Inserting probe vertically and downward.* The probe shall be introduced end-first in a vertical and downward direction to the zone described in paragraph (k)(2) of this section and shown by the shaded portion of Figure 1 of this part, or in the case of a tandem ATV, the shaded portion of Figure 5. The end of the probe in its entirety shall remain within the limits of the zone. It shall not penetrate the zone sufficiently to touch

the ground when applied with a force of 445 N (100 lbf).

(ii) *Inserting probe horizontally and rearward.* The probe shall be introduced end-first in a horizontal and rearward direction to the zone described in paragraph (k)(3) of this section and shown by the shaded portion of Figure 2 of this part, or in the case of a tandem ATV, the shaded portion of Figure 6 of this part. The end of the probe in its entirety shall remain within the limits of the zone. It shall not penetrate the zone sufficiently to touch the rear tire when applied with a force of 90 N (20 lbf).

(2) *Boundaries of zone in Figure 1 of this part.* The zone shown in Figure 1 of this part, or in the case of a tandem ATV, Figure 5 of this part, is defined as bounded by:

(i) The vertical projection of the rear edge of the footrest.

(ii) The vertical plane (line AA) parallel to the ATV's longitudinal plane of symmetry that passes through the inside edge of the footrest.

(iii) The vertical projection of the intersection of a horizontal plane passing through the top surface of the footrest and the rear fender or other structure.

(iv) The vertical plane passing through point D and tangent to the outer front surface of the rear tire.

(A) For footpegs point D is defined as the intersection of the lateral projection of the rearmost point of the footpeg and the longitudinal projection of the outermost point of the footpeg.

(B) For footboards point D is defined as the intersection of 2 lines. The first is a line perpendicular to the vehicle longitudinal plane of symmetry and one-third of the distance from the front edge of the rear tire to the rear edge of the front tire. The second is a line parallel to the ATV's longitudinal plane of symmetry and one-half the distance between the inside edge of the footboard and the outside surface of the rear tire.

(3) *Boundaries of zone in Figure 2 of this part.* The zone shown in Figure 2 of this part is defined as bounded by:

(i) The horizontal plane passing through the lowest surface of the footrest on which the operator's foot (boot) rests (plane F), or in the case of a tandem ATV, the passenger's foot (boot) rests (Plane G, Figure 6 of this part).

(ii) The vertical plane (line AA) parallel to the ATV's longitudinal plane of symmetry that passes through the inside edge of the footrest.

(iii) The horizontal plane 100 mm (4 inches) above plane F, or in the case of a tandem ATV, plane G, Figure 6 of this part.

(iv) The vertical plane (line BB) parallel to the ATV's longitudinal plane of symmetry and 50 mm (2 inches) inboard of the outer surface of the rear tire.

(4) *Requirements for ATVs with non-fixed structure.* All ATVs equipped with a non-fixed type (for example, foldable, removable or retractable) structure intended to meet the requirements of this paragraph (k) shall be equipped with one or more of the following:

(i) A warning device (for example, a buzzer or indicator) to indicate that the structure is not in the position needed to comply with the requirements of this paragraph (k).

(ii) A device to prevent the ATV from being operated under its own power if the structure is not in the position needed to comply with the requirements of this paragraph (k).

(iii) A structure that can be folded, retracted, or removed, such that when the structure is folded, retracted, or removed, the ATV cannot be operated using the footrest in the normal manner.

**(l) Lighting equipment—(1)**

*Requirement.* All ATVs shall have at least one headlamp projecting a white light to the front of the ATV, at least one tail lamp projecting a red light to the rear, and at least one stop lamp or combination tail/stop lamp. The stop lamp shall be illuminated by the actuation of any service brake control.

(2) *Specifications.* Headlamps shall conform to Surface Vehicle Recommended Practice, *All Terrain Vehicle Headlamps*, SAE J1623 FEB94; and tail lamps shall conform to Surface Vehicle Standard, *Tail Lamps (Rear Position Lamps) for Use on Motor Vehicles Less than 2032 mm in Overall Width*, SAE J585 MAR00. Stop lamps shall conform to Surface Vehicle Standard, *Stop Lamps for Use on Motor Vehicles Less than 2032 mm in Overall Width*, SAE J586 MAR00 or Surface Vehicle Recommended Practice, *Snowmobile Stop Lamp*, SAE J278 MAY95.

(m) *Spark arrester.* All ATVs shall have a spark arrester of a type that is qualified according to the United States Department of Agriculture Forest Service Standard for Spark Arresters for Internal Combustion Engines, 5100–1 c, September 1997 or, Surface Vehicle Recommended Practice, *Spark Arrester Test Procedure for Medium Size Engines*, SAE J350 JAN91.

(n) *Tire marking.* All ATV tires shall carry the following markings:

(1) *Inflation pressure.* Both tire sidewalls shall be marked with the operating pressure or the following statement, or an equivalent message: "SEE VEHICLE LABEL OR OWNER'S

MANUAL FOR OPERATING PRESSURE." The messages required by this paragraph shall be in capital letters not less than 4 mm (0.156 inch) in height.

(2) *Bead seating pressure.* Both tire sidewalls shall be marked with the following statement, or an equivalent message: "Do Not Inflate Beyond \*\*psi (\*\*kPa) When Seating Bead."

(3) *Other Markings.* Both tire sidewalls shall have the following information:

(i) The manufacturer's name or brand name.

(ii) On one tire sidewall, the three-digit week and year of manufacture in the form prescribed at 49 CFR 574.5(d), fourth grouping.

(iii) The size nomenclature of the tire (for example, AT 22 × 10 – 9\*) as standardized by the Tire and Rim Association, Inc. or the Japan Automobile Tire Manufacturers Association, Inc.

(iv) The word "tubeless" for a tubeless tire.

(v) The phrase "Not For Highway Use" or "Not For Highway Service."

(4) *Letter sizes.* The information required by paragraphs (n)(2) and (3) of this section shall be in letters or numerals no less than 2 mm (.078 inch) in height.

(o) *Tire pressure.* All ATVs shall be provided with a means to verify that the pressures within each tire are within the recommended range(s).

(p) *Security.* All ATVs shall have a means to deter unauthorized use of the ATV.

(q) *Vehicle Identification Number (VIN) or Product Identification Number (PIN).* Each ATV shall have prominently displayed on the ATV a unique VIN assigned by its manufacturer in accordance with 49 CFR Part 565 or a unique PIN in accordance with *Recreation Off-Road Vehicle Product Identification Numbering System*, SAE International Consortium Standard, ICS–1000, issued 2004–9. If the ATV has a VIN number, the characters in location 4 and 5 of the number shall be "A" and "T", respectively. The VIN or PIN label shall meet the durability requirements, including exposure conditions for outdoor use, of UL Standard for Safety for Marking and Labeling Systems, Underwriters Laboratories Standard UL 969, fourth edition, October 3, 1995.

**§ 1410.6 Maximum speed capability test.**

(a) *Test conditions.* Test conditions shall be as follows:

(1) ATV test weight shall be the unloaded ATV weight plus the vehicle load capacity (including test operator

and instrumentation), with any added weight secured to the seat or cargo area(s) if so equipped.

(2) Tires shall be inflated to the pressures recommended by the ATV manufacturer for the vehicle's test weight.

(3) The test surface shall be clean, dry, smooth and level concrete, or equivalent.

(b) *Test procedure.* Measure the maximum speed capability of the ATV using a radar gun or equivalent method. The test operator shall accelerate the ATV until maximum speed is reached, and shall maintain maximum speed for at least 30.5 m (100 ft). Speed measurement shall be made when the ATV has reached a stabilized maximum speed. A maximum speed test shall consist of a minimum of two measurement test runs conducted over the same track, one each in opposite directions. If more than two measurement runs are made there shall be an equal number of runs in each direction. The maximum speed capability of the ATV shall be the arithmetic average of the measurements made. A reasonable number of preliminary runs may be made prior to conducting a recorded test.

**§ 1410.7 Service brake performance test.**

(a) *Test conditions.* Test conditions shall be as follows.

(1) The ATV shall be tested at the appropriate test weight prescribed in this paragraph (a)(1). The ATV test weight shall be the unloaded vehicle weight plus the vehicle load capacity (including test operator and instrumentation) with any added weight secured to the seat or cargo area(s) (if equipped).

(2) Tires shall be inflated to the pressures recommended by the ATV manufacturer for the vehicle test weight.

(3) Engine idle speed and ignition timing shall be set according to the manufacturer's recommendations.

(4) Ambient temperature shall be between 0°C (32°F) and 38°C (100°F).

(5) The test surface shall be clean, dry, smooth and level concrete, or equivalent.

(6) Any removable speed limiting devices shall be removed and any adjustable speed limiting devices shall be adjusted to provide the ATV's maximum speed capability.

(b) *Test procedure.* The test procedure shall be as follows:

(1) Measure the maximum speed capability of the ATV in accordance with § 1410.6. Determine the braking test speed (V). The braking test speed is the speed that is the multiple of 8 km/h (5 mph), which is 6 km/h (4 mph) to

13 km/h (8 mph) less than the maximum speed capability of the ATV.

(2) Burnish the front and rear brakes by making 200 stops from the braking test speed. Stops shall be made by applying front and rear service brakes simultaneously, and braking decelerations shall be from 1.96 m/s<sup>2</sup> to 4.90 m/s<sup>2</sup> (0.2 g to 0.5 g).

(3) After burnishing, adjust the brakes according to the manufacturer's recommendation.

(4) Make six stops from the braking test speed. Stops shall be made by applying the front and rear service brakes simultaneously, and braking decelerations shall be from 1.96 m/s<sup>2</sup> to 4.90 m/s<sup>2</sup> (0.2 g to 0.5 g).

(5) Make four stops from the braking test speed, applying the front and rear service brakes. Measure the speed immediately before the service brakes are applied. Appropriate markers or instrumentation shall be used which will accurately indicate the point of brake application. Measure the stopping distance (S).

(i) Hand lever brake actuation force shall be not less than 22 N (5 lbf) and not more than 133 N (30 lbf) and foot pedal brake actuation force shall be not less than 44 N (10 lbf) and not more than 222 N (50 lbf).

(ii) The point of initial application of lever force shall be 25 mm (1.0 in.) from the end of the brake lever. The direction of lever force application shall be perpendicular to the handle grip in the plane in which the brake lever rotates. The point of application of pedal force shall be the center of the foot contact pad of the brake pedal, and the direction of force application shall be perpendicular to the foot contact pad and in the plane in which the brake pedal rotates.

(c) *Performance requirements.* (1) For ATVs with maximum speed capability of 29 km/h (18 mph) or less, at least one of the four stops required by paragraph (b)(5) of this section shall comply with the relationship:

$$S \leq V/5.28$$

Where:

S = brake stopping distance (m)

V = braking test speed (km/hr)

$$S \leq V$$

Where:

S = brake stopping distance (ft)

V = braking test speed (mph)

(2) For ATVs with maximum speed capability of greater than 29 km/h (18 mph), at least one of the four stops required by paragraph (b)(5) of this section shall have an average braking deceleration of 5.88 m/s<sup>2</sup> (0.6 g) or greater. Average braking deceleration

can be determined according to the following formulae:<sup>1</sup>

$$a = V^2/25.92S$$

Where:

a = average deceleration (m/s<sup>2</sup>)

S = brake stopping distance (m)

V = braking test speed (km/h)

$$a = [(0.033) \times V^2]/S$$

Where:

a = average deceleration (g)

S = brake stopping distance (ft)

V = braking test speed (mph)

#### **§ 1410.8 Parking brake performance test.**

(a) *Test conditions.* Test conditions shall be as follows:

(1) ATV test weight shall be the unloaded ATV weight plus weight secured to the seat or cargo area(s) (if equipped), which is equal to the manufacturer's stated vehicle load capacity.

(2) Tires shall be inflated to the pressures recommended by the ATV manufacturer for the vehicle test weight.

(3) The test surface shall be clean, dry, smooth concrete or equivalent, having a 30 percent grade.

(b) *Test procedure.* The test procedure shall be as follows:

(1) Burnish the service brakes according to the procedure specified in § 1410.7(b)(2) if service brakes are used as part of the parking brake.

(2) Adjust the parking brake according to the procedure recommended by the ATV manufacturer.

(3) Position the ATV facing downhill on the test surface, with the longitudinal axis of the ATV in the direction of the grade. Apply the parking brake and place the transmission in neutral and leave the ATV undisturbed for 5 minutes. Repeat the test with the ATV positioned facing uphill on the test surface.

(c) *Performance requirements.* When tested according to the procedure specified in paragraph (b) of this section, the parking brake shall be capable of holding the ATV stationary on the test surface, to the limit of traction of the tires on the braked wheels, for 5 minutes in both uphill and downhill directions.

#### **§ 1410.9 Pitch stability requirements.**

(a) *Test conditions.* Test conditions shall be as follows:

(1) The ATV shall be in standard condition, without accessories. The ATV and components shall be assembled and adjusted according to the manufacturer's instructions and specifications.

(2) Tires shall be inflated to the ATV manufacturer's recommended settings

for normal operation. If more than one pressure is specified, the highest value shall be used.

(3) All fluids shall be full (oil, coolant, and the like), except that fuel shall be not less than three-fourths full. ATV shall be unladen, with no rider, cargo, or accessories.

(4) Steerable wheels shall be held in the straight ahead position.

(5) Adjustable suspension components shall be set to the values specified at the point of delivery to the dealer.

(6) Suspension components shall be fixed by means of a locking procedure such that they remain in the same position and displacement as when the unladen ATV is on level ground, and in the conditions specified in paragraphs (a)(1) through (5) of this section.

(b) *Test procedure.* The test procedure shall be as follows:

(1) Calculations based on vehicle metrics:

(i) Measure and record the wheelbase (L). The measurement of this length shall be done with an accuracy of  $\pm 5$  mm ( $\pm 0.2$  inch) or  $\pm 0.5\%$ , whichever is greater.

(ii) Measure and record the front and rear weights, ( $W_f$  and  $W_r$ , respectively).  $W_f$  is the sum of the front tire loads; and  $W_r$  is the sum of the rear tire loads with the ATV level and in the condition specified in subsection (a) of this section. The measurements of these weights shall be done with an accuracy of  $\pm 0.5$  kg ( $\pm 1.1$  lb) or  $\pm 0.5\%$ , whichever is greater.

(iii) Using the values obtained in paragraphs (b)(1)(i) and (ii) of this section, compute and record the quantity as follows:  $L_1 = (W_f / (W_f + W_r)) \times L$ .

(iv) Measure and record the vertical height between the rear axle center and the ground ( $R_v$ ). This measurement shall be done on level ground, with the ATV in the conditions specified in subsection (a) of this section, with an accuracy of  $\pm 3$  mm ( $\pm 0.1$  inch) or  $\pm 1.5\%$ , whichever is greater.

(v) Measure and record the balancing angle alpha. The procedure for obtaining this value is as follows: with the ATV on a level surface, the front of the vehicle shall be rotated upward about the rear axle without setting the rear parking brake or using stops of any kind, until the ATV is balanced on the rear tires. The balancing angle alpha through which the ATV is rotated shall be measured and recorded with an accuracy of  $\pm 0.5$  degrees. If an assembly protruding from the rear of the ATV, such as a carry bar or trailer hitch or hook, interferes with the ground surface, so as to not allow a balance to be

<sup>1</sup> Direct on-board instrumentation may be used to acquire any measurement data.



reached, the vehicle shall be placed on blocks of sufficient height to eliminate the interference.

(vi) Repeat the measurement in paragraph (b)(1)(v) of this section and determine if the two individual measurements are within 1.0 degree of each other. If they are not, repeat the measurements two more times and compute the average of the four individual measurements, and use that as the value.

(2) *Tilt table procedure.* The ATV shall be placed on a variable slope single-plane tilt table. The steerable wheels shall be straight forward. The ATV shall be positioned on the tilt table with its longitudinal center line perpendicular to the tilt axis of the table and its rear positioned downhill. The table shall be tilted until lift-off of the upper tire(s) occurs. Measure the angle at which lift-off of the upper wheel(s) occurs. Lift-off shall have occurred when a strip of 20-gauge steel [approximately 1 mm (.039 inch) thick], 76 mm (3 inch) minimum width, can be pulled from or moved under the second uphill tire to lift with a force of 9 N (2 lb) or less.

(c) *Performance requirements—(1) Computation from vehicle metrics.* Using the values obtained in paragraphs (b)(1)(iii), (b)(1)(iv), and (b)(1)(vi) of this section, compute the pitch stability coefficient as follows:  $K_p = (L_1 \tan \alpha) / (L_1 + R_r \tan \alpha)$ .

(2) *Computation from tilt table.* The pitch stability coefficient  $K_p$  is the tangent of the tilt table angle.

(3) *Requirement.* The pitch stability coefficient  $K_p$  calculated according to paragraph (c)(2) of this section shall be at least 1.0.

### Subpart C—Requirements for Labeling, Point of Sale Information and Instruction

#### § 1410.10 Labeling requirements.

(a) *General warning label.* (1) Each ATV shall have affixed to it a general warning label in English that meets the requirements of this section.

(2) *Content.* The general warning label shall display the safety alert symbol and the word “WARNING” in capital letters.

The label shall contain the following, or substantially equivalent, statements. They may be arranged on the label to place the prohibited actions together and the required actions together.

“THIS VEHICLE CAN BE HAZARDOUS TO OPERATE. A collision or rollover can occur quickly, even during routine maneuvers such as turning and driving on hills or over obstacles, if you fail to take proper precautions.”

“SEVERE INJURY OR DEATH can result if you do not follow these instructions:”

“BEFORE YOU OPERATE THIS ATV, READ THE OWNER’S MANUAL AND ALL LABELS.”

“NEVER OPERATE THIS ATV WITHOUT PROPER INSTRUCTION. Beginners should complete a training course.”

“NEVER CARRY A PASSENGER ON THIS ATV. You increase your risk of losing control if you carry a passenger.”

“NEVER OPERATE THIS ATV ON PAVED SURFACES. You increase your risk of losing control if you operate this ATV on pavement.”

“NEVER OPERATE THIS ATV ON PUBLIC ROADS. You can collide with another vehicle if you operate this ATV on a public road.”

“ALWAYS WEAR AN APPROVED MOTORCYCLE HELMET, eye protection, and protective clothing.”

“NEVER CONSUME ALCOHOL OR DRUGS before or while operating this ATV.”

“NEVER OPERATE THIS ATV AT EXCESSIVE SPEEDS. You increase your risk of losing control if you operate this ATV at speeds too fast for the terrain, visibility conditions, or your experience.”

“NEVER ATTEMPT WHEELIES, JUMPS, OR OTHER STUNTS.”

(3) *Format.* The color scheme, typeface and formatting of the label shall be consistent with ANSI Z535.4 (American National Standard for Product Safety Signs and Labels (2002).

(4) *Location.* This label shall be affixed to the left front fender so it is easily visible in its entirety to the operator when seated on the vehicle in the proper operating position. If this location is not available for a particular ATV, the label shall be affixed to the right front fender so as to be easily read by the operator when seated in the ATV in the proper operating position.

(b) *Age recommendation warning label.* (1) Each ATV shall have affixed an age recommendation warning label in English that meets the requirements of this section.

(2) *Content.* The age recommendation warning label shall display the safety alert symbol and the word “WARNING” in capital letters. The label shall have a circle with a slash through it with the words “under 16” inside the circle. Below the circle, the label shall contain the following, or substantially equivalent, statements:

“Even youth with ATV experience have immature judgment and should never drive an adult ATV.

Letting children under the age of 16 operate this ATV increases their risk of severe injury or death.

NEVER let children under age 16 operate this ATV.”

(3) *Format.* The color scheme, typeface and formatting of the label shall be consistent with ANSI Z535.4 (2002).

(4) *Location.* This label shall be affixed to the fuel tank so it is visible

in its entirety to the operator when seated on the vehicle in the proper operating position. If this location is not available for a particular ATV, or, if affixed at this location the label will not meet the durability requirement of paragraph (e) of this section, the label shall be placed on the front fender above the label required by paragraph (a) of this section so that it is visible in its entirety to the operator. If this location is not available for a particular ATV, the label shall be placed on the vehicle body immediately forward of the seat so it is visible in its entirety to the operator when seated on the vehicle in the proper operating position.

(c) *Passenger warning label.* (1) Each ATV shall have affixed a passenger warning label in English that meets the requirements of this section.

(2) *Content.* The passenger warning label shall display the safety alert symbol and the word “WARNING” in capital letters. The label shall contain the following, or substantially equivalent, statements:

“Passengers can affect ATV balance and steering. The resulting loss of control can cause SEVERE INJURY or DEATH.

NEVER ride on this ATV as a passenger.”

(3) *Format.* The color scheme, typeface and formatting of the label shall be consistent with ANSI Z535.4 (2002).

(4) *Location.* This label shall be affixed either to a flat surface of the vehicle body located to the rear of the seat and toward the center of the vehicle, or to the rear portion of the vehicle seat itself. If neither of these locations is available for a particular vehicle, the label shall be affixed to the left rear fender or the left side of the body so as to be easily seen by a potential passenger.

(d) *Tire pressure and overload warning label(s).* (1) Each ATV shall have affixed a label or labels in English that meet the requirements of this section warning against improper air pressure in the ATV’s tires and against overloading. Manufacturers may affix one warning label addressing both hazards.

(2) *Content.* The label(s) shall contain the safety alert symbol and the signal word “WARNING” in capital letters. Every label warning about improper tire pressure shall contain a statement indicating the recommended tire pressure, either on the label or by reference to the owner’s manual and/or the tires. Every label warning against overloading shall contain a statement indicating the maximum weight capacity for the ATV model.

(i) If a manufacturer uses separate tire pressure and overloading labels, the

label to warn of tire pressure shall contain the following, or substantially equivalent, statements:

—“Improper tire pressure can cause loss of control. Loss of control can result in severe injury or death.”

(ii) If a manufacturer uses separate tire pressure and overloading labels, the label to warn of overloading hazards shall contain the following, or substantially equivalent, statements:

—“Overloading can cause loss of control. Loss of control can result in severe injury or death.”

(iii) If a manufacturer uses one label for both tire pressure and overloading warnings, the label shall contain the following, or substantially equivalent, statements:

“Improper tire pressure or overloading can cause loss of control.

Loss of control can result in severe injury or death.”

(3) *Format.* The color scheme, typeface and formatting of the label shall be consistent with ANSI Z535.4 (2002).

(4) *Location.* The label(s) shall be affixed to the left rear fender above the axle, facing outward in such a position that it (they) can be read by the operator when mounting the vehicle.

(e) *Label durability requirements.* Each label required or permitted by this section shall meet the standards for durability in UL Standard for Safety for Marking and Labeling Systems, Underwriters Laboratories Standard UL 969, fourth edition, October 3, 1995.

(f) *Discretionary labels.* Hazard labels in addition to those specified in paragraphs (a) through (d) of this section may be affixed to the vehicle provided that:

(1) The discretionary labels are consistent with ANSI Z535.4 (2002); and

(2) Discretionary labels shall be affixed to ATVs in an appropriate location that does not detract from the mandatory labels required in paragraphs (a) through (d) of this section.

#### **§ 1410.11 Hangtag requirements.**

(a) Each ATV shall be equipped at the point of sale with a hang tag in English that, at a minimum, contains:

(1) The contents of the general warning label described in § 1410.10(a);

(2) The statement—“This hang tag is not to be removed before sale”—; and

(3) The statement—“Check with your dealer to find out about state or local laws regarding ATV operation.”

(b) Each hang tag shall be attached to the ATV in such a manner as to be conspicuous and removable only with deliberate effort.

(c) Each hang tag shall be at least 4 by 6 inches.

#### **1410.12 Age acknowledgment.**

(a) *General.* Prior to the sales transaction, the retailer shall provide the purchaser of each ATV with an age acknowledgment in the form shown in figure 3 of this part.

(b) *Signature.* Prior to the sales transaction, the retailer shall require that the purchaser of the ATV sign the age acknowledgment representing that the purchaser has read and understood the age acknowledgment.

(c) *Copies/retention.* The retailer shall provide the purchaser of the ATV and the manufacturer of the ATV with a copy of the signed age acknowledgment. The retailer shall retain the signed original of the age acknowledgment for a minimum of five (5) years after the date of the purchase of the ATV to which it pertains. The manufacturer shall retain the copy of the age acknowledgment for a minimum of five (5) years after the date of the purchase of the ATV to which it pertains.

#### **§ 1410.13 Instructional/Owner's manual.**

(a) *General.* (1) Each ATV shall be provided at the point of sale with an instructional/owner's manual that meets the requirements of this section. All ATVs shall be equipped with a means of carrying the manual that protects it from destructive elements while allowing reasonable access.

(2) Each manual shall be written in English and shall be written and designed in a manner reasonably calculated to convey information regarding safe operation and maintenance of the vehicle to persons who read such manual.

(3) Each manual shall be written in plain, simple language so as to be readily comprehended by the average seventh grader, as measured by a standard technique for assessing the readability of written materials.

(4) Information in each manual shall be presented in a meaningful sequence designed to permit readers to understand the information presented and appreciate its significance.

(5) Each manual shall be consistent with other safety messages required by this part, including those contained in warning labels, hang tags, and the safety video.

(6) Each manufacturer shall retain a copy of the manual for each model until five years after the model has ceased to be in production. The manufacturer shall make the manual available to CPSC upon request.

(b) *Contents.* Each manual shall contain—

(1) A statement on the outside front cover that, at a minimum, alerts the reader that the manual contains important safety information which should be read carefully.

(2) A statement on the outside front cover stating that the ATV is intended for operators 16 years of age or older.

(3) Definitions for “warning” and “caution” that are consistent with, or in any event not weaker than, the definitions for those terms contained in American National Standards Institute (ANSI) standard Z535–2002, along with an introductory statement alerting the reader to the significance of the safety alert symbol and the signal words.

(4) A reminder that the safety alert symbol with the word “WARNING” indicates a potential hazard that could result in serious injury or death. This reminder shall be repeated immediately preceding the table of contents, at the beginning and end of the section describing proper operating procedures, on the last page before the outside back cover (or on the inside back cover), and a total of at least five (5) more times, appropriately spaced, within sections containing warnings.

(5) An introductory safety message emphasizing the importance of reading and understanding the manual prior to operation of the ATV, the importance of and availability of the instructional training required by § 1410.15 of this part, and the importance of the age recommendation for the particular model. This introductory message shall contain, at a minimum, the following statement:

“Failure to follow the warnings contained in this manual can result in SERIOUS INJURY or DEATH”

(6) An introductory notice stating, at a minimum:

“This ATV is not intended for children. Children should only ride youth ATVs that are specifically intended for children under 16 years of age.”

(7) An introductory safety section which, at a minimum, contains the following safety messages in the form shown:

“AN ATV IS NOT A TOY AND CAN BE HAZARDOUS TO OPERATE. An ATV handles differently from other vehicles including motorcycles and cars. A collision or rollover can occur quickly, even during routine maneuvers such as turning and driving on hills or over obstacles, if you fail to take proper precautions.

SEVERE INJURY OR DEATH can result if you do not follow these instructions:

1. Read this manual and all labels carefully and follow the operating procedures described.

2. Never operate an ATV without proper instruction. *Take a training course.* Contact

an authorized ATV dealer to find out about the training courses near you.

3. Never allow a child under 16 to operate this ATV, which is not intended for operators under 16 years of age.

4. Never carry a passenger on this ATV.

5. Never operate an ATV on any paved surfaces, including sidewalks, driveways, parking lots and streets.

6. Never operate an ATV on any public street, road or highway, even a dirt or gravel one.

7. Never operate an ATV without wearing an approved helmet that fits properly. You should also wear eye protection (goggles or face shield), gloves, boots, long-sleeved shirt or jacket, and long pants.

8. Never consume alcohol or drugs before or while operating an ATV.

9. Never operate at excessive speeds. Always go at a speed that is proper for the terrain, visibility and operating conditions, and your experience.

10. Never attempt wheelies, jumps, or other stunts.

11. Always inspect your ATV each time you use it to make sure it is in safe operating condition. Always follow the inspection and maintenance procedures and schedules described in this manual.

12. Always keep both hands on the handlebars and both feet on the footpegs of the ATV during operation.

13. Always go slowly and be extra careful when operating on unfamiliar terrain. Always be alert to changing terrain conditions when operating the ATV.

14. Never operate on excessively rough, slippery or loose terrain until you have learned and practiced the skills necessary to control the ATV on such terrain. Always be especially cautious on these kinds of terrain.

15. Always follow proper procedures for turning as described in this manual. Practice turning at low speeds before attempting to turn at faster speeds. Do not turn at excessive speed.

16. Never operate the ATV on hills too steep for the ATV or for your abilities. Practice on smaller hills before attempting larger hills.

17. Always follow proper procedures for climbing hills as described in this manual. Check the terrain carefully before you start up any hill. Never climb hills with excessively slippery or loose surfaces. Shift your weight forward. Never open the throttle suddenly or make sudden gear changes. Never go over the top of any hill at high speed.

18. Always follow proper procedures for going down hills and for braking on hills as described in this manual. Check the terrain carefully before you start down any hill. Shift your weight backward. Never go down a hill at high speed. Avoid going down a hill at an angle that would cause the vehicle to lean sharply to one side. Go straight down the hill where possible.

19. Always follow proper procedures for crossing the side of a hill as described in this manual. Avoid hills with excessively slippery or loose surfaces. Shift your weight to the uphill side of the ATV. Never attempt to turn the ATV around on any hill until you have mastered the turning technique

described in this manual on level ground. Avoid crossing the side of a steep hill if possible.

20. Always use proper procedures if you stall or roll backwards when climbing a hill. To avoid stalling, use proper gear and maintain a steady speed when climbing a hill. If you stall or roll backwards, follow the special procedure for braking described in this manual. Dismount on the uphill side or to a side if pointed straight uphill. Turn the ATV around and remount, following the procedure described in this manual.

21. Always check for obstacles before operating in a new area. Never attempt to operate over large obstacles, such as large rocks or fallen trees. Always follow proper procedures when operating over obstacles as described in this manual.

22. Always be careful when skidding or sliding. Learn to safely control skidding or sliding by practicing at low speeds and on level, smooth terrain. On extremely slippery surfaces, such as ice, go slowly and be very cautious in order to reduce the chance of skidding or sliding out of control.

23. Never operate an ATV in fast flowing water or in water deeper than that specified in this manual. Remember that wet brakes may have reduced stopping ability. Test your brakes after leaving water. If necessary, apply them several times to let friction dry the linings.

24. Always be sure there are no obstacles or people behind you when you operate in reverse. When it is safe to proceed in reverse, go slowly.

25. Always use the size and type tires specified in this manual. Always maintain proper tire pressure as described in this manual.

26. Never modify an ATV through improper installation or use of accessories.

27. Never exceed the stated load capacity for an ATV. Cargo should be properly distributed and securely attached. Reduce speed and follow instructions in the manual for carrying cargo or pulling a trailer. Allow greater distance for braking.

FOR MORE INFORMATION ABOUT ATV SAFETY, visit the CPSC website at [www.cpsc.gov](http://www.cpsc.gov) or call the Consumer Product Safety Commission at 1-800-638-2772, or [Insert contact number for manufacturer].

(8) An appropriate table of contents identifying the major portions of the manual.

(9) Descriptions of the location of warning labels on the ATV and an introductory statement emphasizing the importance of understanding and following the labels and the importance of keeping the labels on the ATV. The introductory statement shall also contain instructions on how to obtain a replacement label in the event any label becomes difficult to read. These instructions shall include a toll-free telephone number that can be called to obtain a replacement label.

(10) A telephone number or email address for the owner of the ATV to contact the manufacturer to report safety

issues and/or seek information on the proper, safe operation of the ATV.

(11) A description of pre-operating inspection procedures and a statement emphasizing the importance of these procedures.

(12) A description of proper operating procedures and of potential hazards associated with improper operation of the ATV. The section of each manual devoted to describing proper operating procedures shall include material addressing in narrative text form and in appropriate detail all of the topics addressed in paragraph (b)(7) of this section. Such narrative text shall identify particular potential hazards associated with the types of operation or behavior in question, the possible consequences of such operation or behavior, and shall describe the manner in which the vehicle should be properly operated to avoid or reduce the risk associated with such hazards. Such narrative text shall include warning statements and corresponding illustrations in conformance with the requirements of this section and § 1410.10 of this part. The language of the narrative sections accompanying each warning shall not contradict any information contained in the warning section and shall be written to draw attention to the warning.

(13) Descriptions of proper maintenance, storage, and transportation procedures.

(14) On the outside back cover, the contents of the general warning label required by § 1410.10(a).

(c) Where a manual describes a potential hazard that is not addressed in this section, but which nevertheless meets the definition of a potential hazard for which a "warning" or "caution," as these terms are defined in ANSI Standard Z535.4-2002, is appropriate, the discussion of that potential hazard shall be accompanied by a "warning" or "caution" statement which conforms to the requirements of ANSI Standard Z535.4-2002 and this section.

#### **§ 1410.14 Safety video.**

(a) *General.* The retailer shall provide the purchaser with a safety video at or before the completion of the purchase transaction. The safety video shall be designed to communicate to an audience consisting of prospective purchasers and users, including children between the ages of 9 and 16, and their parents.

(b) *Title.* The title of the safety video shall indicate that the video provides safety information concerning ATV operation.

(c) *Content.* The safety video shall communicate the following:

(1) The contents of the hang tag described in § 1410.11;

(2) The concept that a person operating an ATV should know his or her limitations and not attempt to perform any maneuver or traverse any terrain if performing the maneuver or operating on the terrain is beyond that person's capabilities and experience;

(3) The importance of practicing and gradually progressing from basic to more complex maneuvers; and

(4) The importance of keeping alert at all times and the concept that even a brief distraction can lead to loss of control resulting in a severe or fatal accident.

(5) ATV-related death and injury statistics both for all riders and for children under the age of 16. The video may use rolling five-year averages, and the statistics only need to be updated if there is a statistically significant change in either the death or injury statistics. Such change shall be noted in the subsequent video.

(d) *Dramatization.* All dramatizations designed to communicate any of the concepts set forth in the preceding subsection shall be unambiguous. To avoid ambiguity and ensure clarity, dramatizations shall:

(1) In the case of dramatizations that show an accident occurring, averted, or about to occur, the video shall contain no intervening events that detract from communication of the hazard (for example, the presence of an obstacle on a paved surface when communicating the hazard of operating on a paved surface, or a person running in front of an ATV when communicating the hazard of carrying passengers); and

(2) In the case of dramatizations that show either the conduct, terrain, or maneuvers that a person should avoid, or the conduct that a person should observe, the video shall also unequivocally state the relevant safety message, either verbally by means of lines spoken by a screen character or narrator, in written form, or both.

(e) *Format.* The safety video shall be made available in at least one commonly used format, e.g., VHS or DVD, and the purchaser shall be given the option at no cost of procuring the safety video in at least one format other than the one originally supplied with the ATV at the time of purchase.

(f) *Retention.* The manufacturer shall retain a copy of the safety video until five years after the model to which the video applies ceases to be in production. The manufacturer shall make the video available to CPSC upon request.

#### 1410.15 Instructional training.

(a) *General.* The manufacturer shall provide to the purchaser at no charge a training course for the purchaser and each member of the purchaser's immediate family who meets or exceeds the minimum age recommendation for the ATV in question. The training course shall be provided in the form of one certificate valid for the purchaser and each qualifying member of the purchaser's immediate family redeemable at no cost for attendance at a training course meeting the requirements of this section.

(b) *Form of certificate.* Each certificate shall identify the VIN or PIN number for the ATV to which it pertains and shall have no expiration date. In addition the certificate shall include a toll-free telephone number or other readily useable means for the purchaser to contact the training organization to arrange for training.

(c) *Retailer responsibility.* The retailer shall provide the certificate(s) to the purchaser at the time of purchase and shall obtain the purchaser's signature on the training acknowledgment form shown in Figure 4 of this part. The retailer shall retain the signed original of the training availability form and shall provide the purchaser and the manufacturer of the ATV with a copy.

(d) *Course content.* The training curriculum shall, at a minimum, address the following:

(1) The risks of ATV-related deaths and injuries (risk awareness).

(2) The role of safety equipment, including identifying suitable equipment, properly using equipment, and understanding why it is used.

(3) Rider responsibilities, including:

(i) Why children/youths should not ride adult ATVs;

(ii) Why all ATV users should take a hands-on safety training course;

(iii) Why one should never ride a youth ATV or non-tandem adult ATV with a passenger or as a passenger;

(iv) Why one should never drive an ATV on paved roads;

(v) Why one should always wear a helmet and other protective gear while on an ATV; and

(vi) Why one should never drive an ATV while under the influence of alcohol or drugs.

(4) Identifying displays and controls;

(5) Recognizing limitations, including inclines and rider abilities;

(6) Evaluating a variety of situations to predict proper course of action, including terrain obstacles and behavior of other riders;

(7) Demonstrating successful learning of riding skills, including:

(i) Starting and stopping;

(ii) Negotiating turns, including gradual, sharp, and quick turns, weaving, and evasive maneuvers;

(iii) Stopping in a turn;

(iv) Emergency braking while straight and while turning.

(v) Negotiating full track and partial track obstacles.

(vi) Negotiating hills, including ascending, descending, traversing, and emergency situations; and

(vii) Combining skills together in a non-predictable manner (i.e. trail ride or free riding period with instructor supervision and critique).

(e) *Course structure.* The course shall include classroom, field, and trail activities.

(f) *Course duration.* The course duration shall be sufficient to cover the topics noted in this section, allow for each student to individually master the riding skills addressed in the course at the level commensurate with the terrain at the location of the course, and allow for written and riding skills tests.

(g) *Course accessibility.* The course shall be provided within a reasonable time from the date of purchase of the ATV and a reasonable distance from the place of purchase of the ATV.

#### Subpart D—Requirements for Tandem ATVs

##### § 1410.16 Requirements in general for tandem ATVs.

All tandem ATVs shall meet the requirements stated in Subpart B and Subpart C of this part except as specified differently in this subpart D.

##### § 1410.17 Equipment and configuration requirements for tandem ATVs.

(a) *Passenger environment.* All tandem ATVs shall have a passenger backrest and handhold which meet the following requirements:

(1) *Passenger location and restraint.* The passenger seating area behind the operator area shall be equipped with a generally vertical cushioned passenger backrest at the back of the seating area that shall be capable of withstanding a 900 N (202 lb.) loading force applied horizontally toward the rear at a height above the seating area of at least 162 cm (8 inches), without failure or permanent deformation.

(2) *Passenger handholds.* Two handholds shall be provided and be located on each side of the passenger seating area in a symmetrical manner. These handholds must be able to withstand, without failure or permanent deformation, a vertical force of 1000 N (224 lb.) applied statically to the center of the surface of the handhold. Handholds shall allow the passenger to

dismount without interference from the handholds.

(b) *Operator and Passenger foot environment.* All two-person ATVs shall have a foot support structure covered by footboards and distinct foot pegs for the operator and the passenger respectively. The minimum projected horizontal distance between the foot pegs shall be 230mm (9 inches) as measured on a line parallel to the longitudinal axis of the vehicle. When normally positioned on the foot pegs, the operator and passenger foot print must not overlap as projected on a horizontal plane and the passenger footprint must be contained in the projected footboard area. The operator and passenger foot environment shall meet the requirements in § 1410.5(k)(1) through (3). See Figures 5 and 6 of this part.

(c) *Mechanical suspension.* All tandem ATVs shall have mechanical suspension for all wheels in addition to what is provided by the tires. Each wheel shall have a minimum travel of 102 mm (4 inches).

(d) *Lighting equipment.* Tandem ATVs that are wider than 1500 mm shall have at least two headlights and two tail lamps.

#### **§ 1410.18 Pitch stability requirements for tandem ATVs.**

(a) *Test conditions.* Test conditions shall be as follows:

(1) The ATV shall be in standard condition, without accessories. The ATV and components shall be assembled and adjusted according to the manufacturer's instructions and specifications.

(2) Tires shall be inflated to the tandem ATV manufacturer's highest recommended pressure.

(3) All fluids shall be full (oil, coolant, and the like), except that fuel shall be not less than three-fourths full. ATV shall be unladen, with no rider, passenger, cargo, or accessories except as noted per the following conditions.

(4) Steerable wheels shall be held in the straight ahead position.

(5) Adjustable suspension components shall be set to the highest values recommended by the manufacturer.

(6) A weight of 91 kg  $\pm$  3 (200 lb  $\pm$  7) shall be securely fastened to the passenger seat to simulate a passenger. The center of gravity of the weight shall be 15 cm  $\pm$  2 (6 inches  $\pm$  1) above the passenger supporting surface and 25 cm  $\pm$  2 (10 inches  $\pm$  1) forward of the front surface of the back rest. The back rest shall be adjusted to its most rearward position.

(7) A weight of 91 kg  $\pm$  3 (200 lb  $\pm$  7) shall be securely fastened to the

operation seat to simulate an operator. The center of gravity of the weight shall be 15 cm  $\pm$  2 (6 inches  $\pm$  1) above the operator supporting surface and either 30 cm  $\pm$  2 (12 inches  $\pm$  1) ahead of the passenger center of gravity.

(8) The area under the tires on the table may be covered with  $\frac{3}{4}$ " No. 1 diamond shaped steel expanded metal grid (or plate) or similar material to engage tire tread and prevent tire sliding.

(b) *Test procedure.* The tandem ATV shall be placed on a variable slope single-plane tilt table. The steerable wheels shall be straight forward. The ATV shall be positioned on the tilt table with its longitudinal center line perpendicular to the tilt axis of the table and its rear positioned downhill. The table shall be tilted until lift-off of the upper wheel(s) occurs. Measure the angle at which lift-off of the upper wheel(s) occurs. Lift-off shall have occurred when a strip of 20-gauge steel [approximately 1 mm (.039 inch) thick], 76 mm (3 inch) minimum width, can be pulled from or moved under the second uphill tire to lift with a force of 9 N (2 lb) or less.

(c) *Performance requirements.* The angle of the tilt table with the tandem ATV positioned as described in 9.2.2 shall reach a minimum of 36 degrees (73% slope) before lift-off occurs.

#### **§ 1410.19 Information requirements for tandem ATVs.**

Each tandem ATV shall meet the requirements of subpart C of this part, with the following exceptions.

(a) *Labeling*—(1) *General warning label.* The general warning label required by § 1410.10(a) shall omit the statement "NEVER CARRY A PASSENGER. You increase your risk of losing control if you carry a passenger."

(2) *Passenger warning label.* (i) *Content.* Instead of the warning statement specified in § 1410.10(c), the passenger warning label shall state "NEVER CARRY MORE THAN 1 PASSENGER" in capital letters and shall recommend the following hazard-avoidance behaviors:

1. Never carry a passenger less than twelve (12) years old or twelve years old or older who is too small to firmly plant his/her feet on the footrests and to securely grab the handles;

2. Never allow a passenger to sit in a location other than the passenger seat;

3. Never carry a passenger who is not securely grasping the grip handles at all times.

(ii) *Location.* The passenger warning label shall be affixed to the front fender of each tandem ATV so it is adjacent to the general warning label and can be

easily read by the operator when seated on the ATV in the proper operating position.

(b) *Hangtags.* The hangtag stating the contents of the general warning label shall meet the requirements of § 1410.11.

(c) *Instructional/owner's manuals.* Instead of instructing that operators should never carry passengers on ATVs, instructional/owner's manuals shall contain the following, or substantially equivalent statement:

"NEVER CARRY MORE THAN ONE PASSENGER. This ATV has been designed specifically to carry one passenger."

### **Subpart E—Certification/Testing/Recordkeeping**

#### **§ 1410.20 Certification.**

(a) At the location of the VIN or PIN number, the following statement shall be made: "The manufacturer certifies that this ATV complies with all applicable requirements of 16 C.F.R. Part 1410."

(b) The VIN number or PIN number and the compliance statement shall meet the durability requirements of UL Standard for Safety for Marking and Labeling Systems, Underwriters Laboratories Standard UL 969, fourth edition, October 3, 1995.

#### **§ 1410.21 Testing.**

Each manufacturer of ATVs subject to this part shall perform or cause to be performed testing sufficient to demonstrate on an objectively reasonable basis that each ATV produced by that manufacturer meets the performance requirements of §§ 1410.5 through 1410.9 of this part for single rider ATVs and §§ 1410.16 through 1410.18 of this part for tandem ATVs.

#### **§ 1410.22 Recordkeeping.**

(a) *Manufacturer requirements.* Each manufacturer (the importer is considered a manufacturer for purposes of this part) of ATVs subject to this part shall:

(1) Maintain records in English sufficient to demonstrate on an objectively reasonable basis that each ATV produced by that manufacturer complies with the requirements of this part;

(2) Retain records required by this part for a period of at least five (5) years after production of the model of ATV to which the records pertain ceases;

(3) Maintain records required by this part at a location in the United States; and

(4) Make records required by this part available for inspection at the request of

a duly authorized representative of the U.S. Consumer Product Safety Commission.

(b) *Retailer requirements.* Each retailer of ATVs subject to this part shall:

(1) Maintain the original of each age acknowledgment required by § 1410.12 of this part and each acknowledgment of

training availability required by § 1410.15 of this part for a period of at least five (5) years after the date of purchase of the ATV to which the acknowledgments pertain;

(2) Maintain records required by this section at a location in the United States; and

(3) Make records required by this section available for inspection at the request of a properly authorized representative of the U.S. Consumer Product Safety Commission.

**BILLING CODE 6355-01-P**

Figure 1 to Part 1410

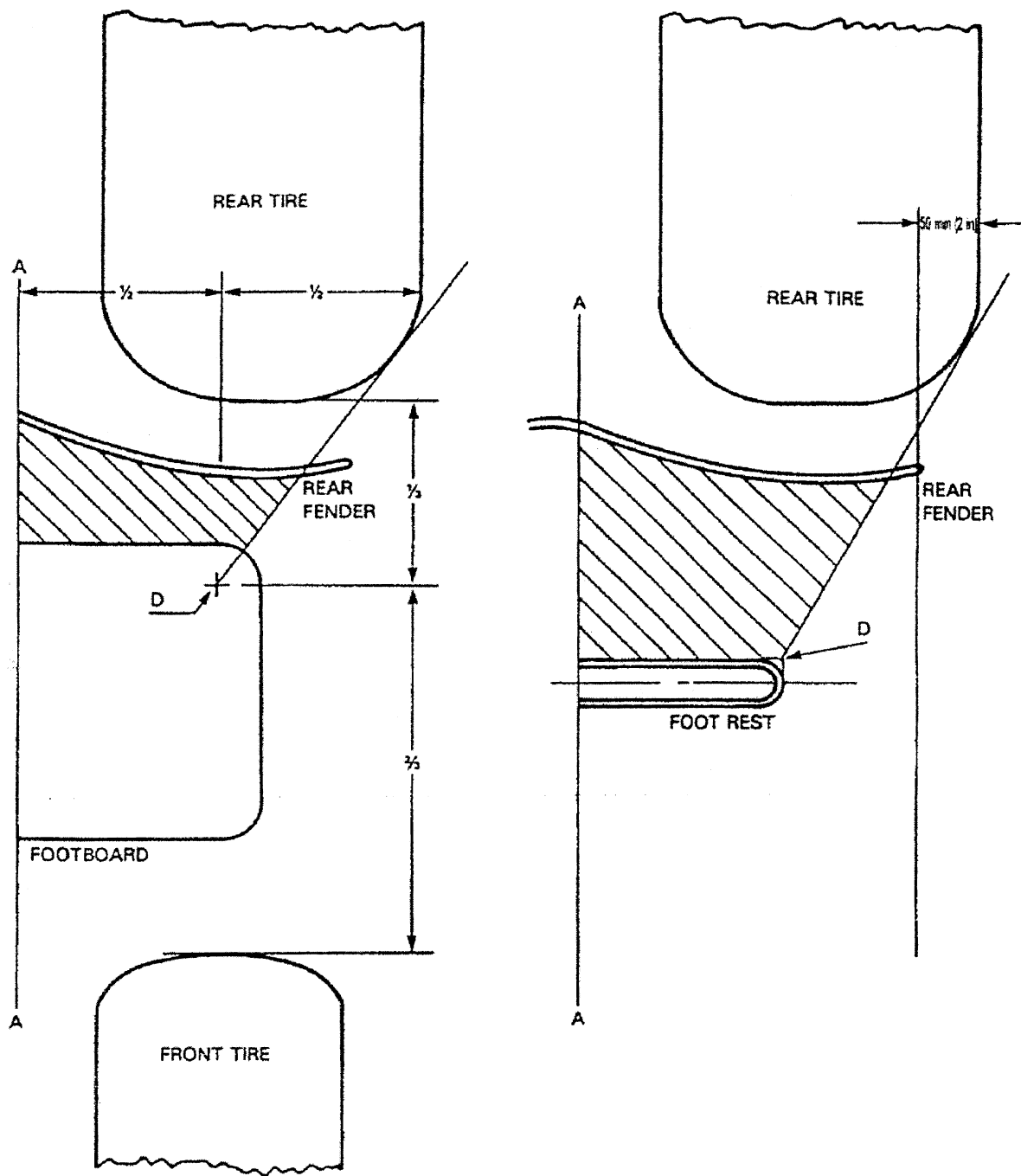


Figure 1  
Operator Foot Environment - Plan View



Figure 2 to Part 1410

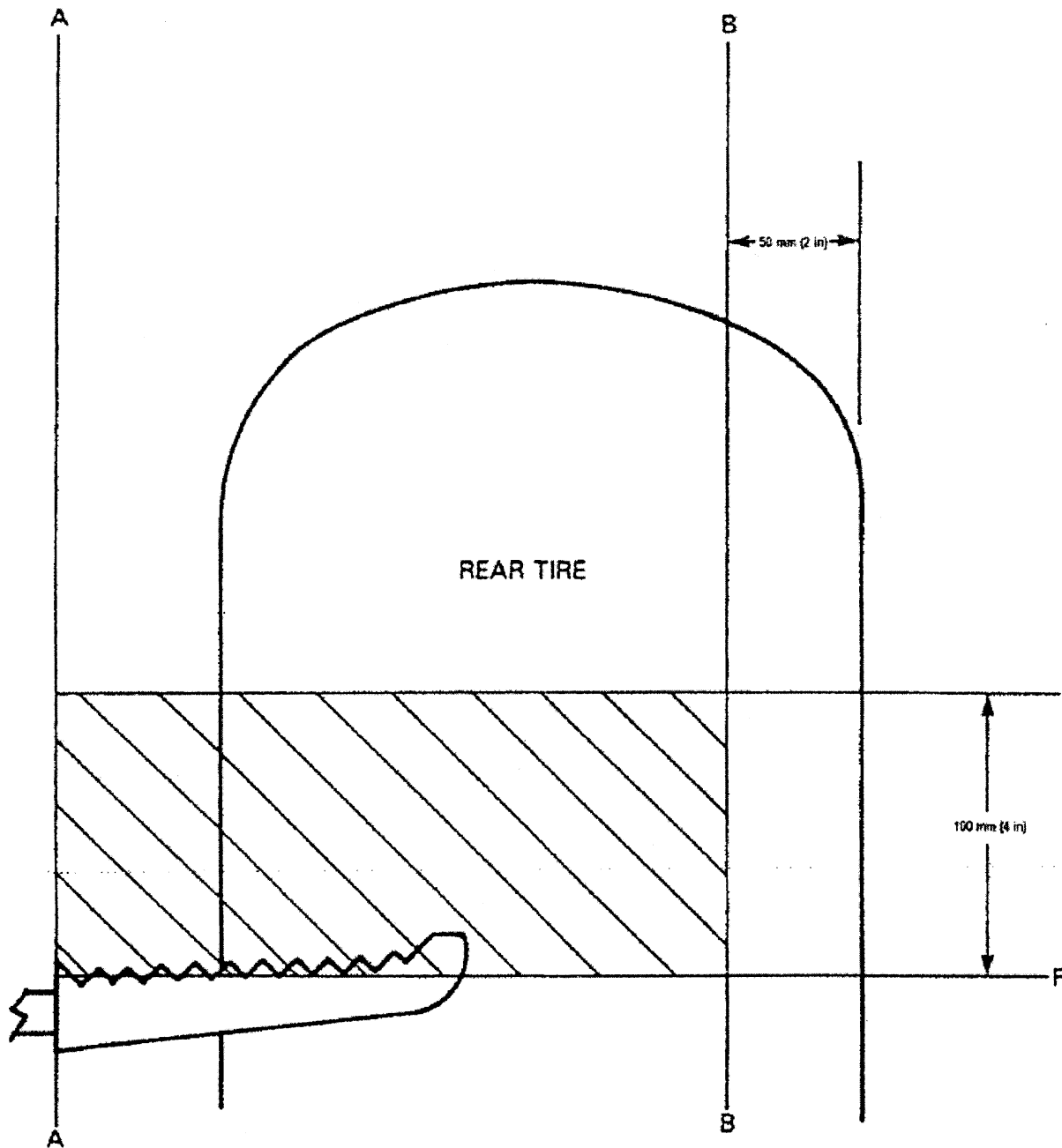


Figure 2  
Operator Foot Environment - Front View

Figure 3 to Part 1410

**The ATV you are considering is for adult drivers ONLY.**

Adult ATVs can reach highway speeds and are inappropriate for anyone under 16. Even children with ATV-driving experience have immature judgment and should never drive an adult ATV.

Compared to an adult, a child younger than 16 who drives an adult ATV is more than [to be added] times as likely to die or to be injured.

In **each** year since 2001:

- More than [to be added] children younger than 16 died while riding an ATV.
- More than [to be added] children younger than 16 were treated in emergency rooms for ATV-related injuries.

Most of these deaths and injuries involved a child riding an adult ATV. Youth ATVs are available and are designed specifically for drivers under 16.

I have read the information above and understand that the ATV I am about to buy is for adults only. I also understand that youth ATVs are available for children under 16.

---

Purchaser Signature

---

Date (mm/dd/yyyy)

---

Full name (please print)

**TO BE COMPLETED BY DEALER**

This form must be kept on file for 5 years and may be periodically reviewed by officials of the U.S. Consumer Product Safety Commission to ensure that ATV purchasers have been given this information.

---

Vehicle VIN/PIN

Figure 3  
Age Acknowledgment Form

Figure 4 to Part 1410

**ATV Training**

ATVs are complex motor vehicles requiring skill to drive, and new ATV drivers<sup>1</sup> have the highest risk of injury. ATVs don't handle as you might expect - they don't behave like a dirt bike, motorcycle, or car.

The best way to become familiar with your ATV and learn about its special handling is to take an ATV training class.

**FREE** ATV training is available for you and your household when you purchase an ATV.

You wouldn't drive a car without having someone show you how to handle it. Come to a training class and learn how to drive your ATV!

I have read the information above and have been given a certificate that is good for one free training course for me and each member of my immediate household whom the ATV is age-appropriate.

---

Purchaser Signature

---

Date (mm/dd/yyyy)

---

Full name (please print)**TO BE COMPLETED BY DEALER**

This form must be kept on file for 5 years and may be periodically reviewed by officials of the U.S. Consumer Product Safety Commission to ensure that ATV purchasers have been given this information.

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Vehicle VIN/PIN

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<sup>1</sup> Those with less than one year of experience compared to those with multiple years of experience.

**Figure 4 Training Acknowledgment Form**

Figure 5 Part 1410

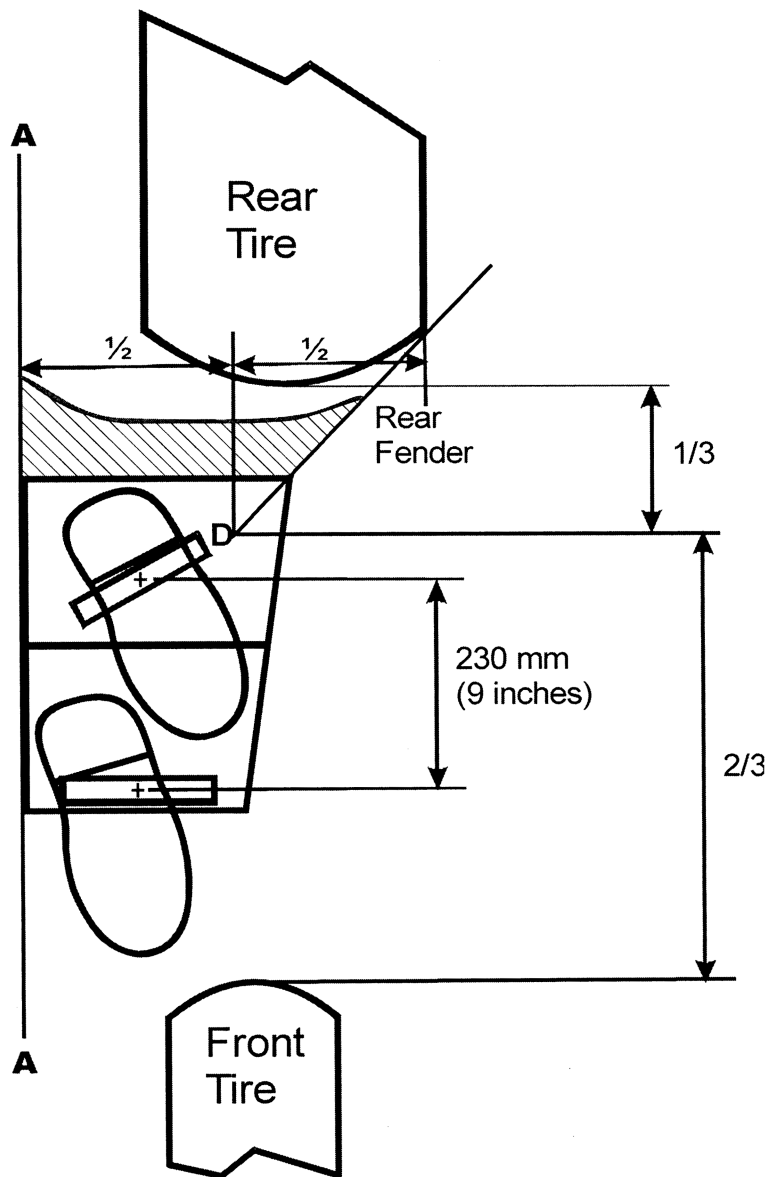


Figure 5  
Operator and Passenger Foot Environment  
Plan View

Figure 6 Part 1410

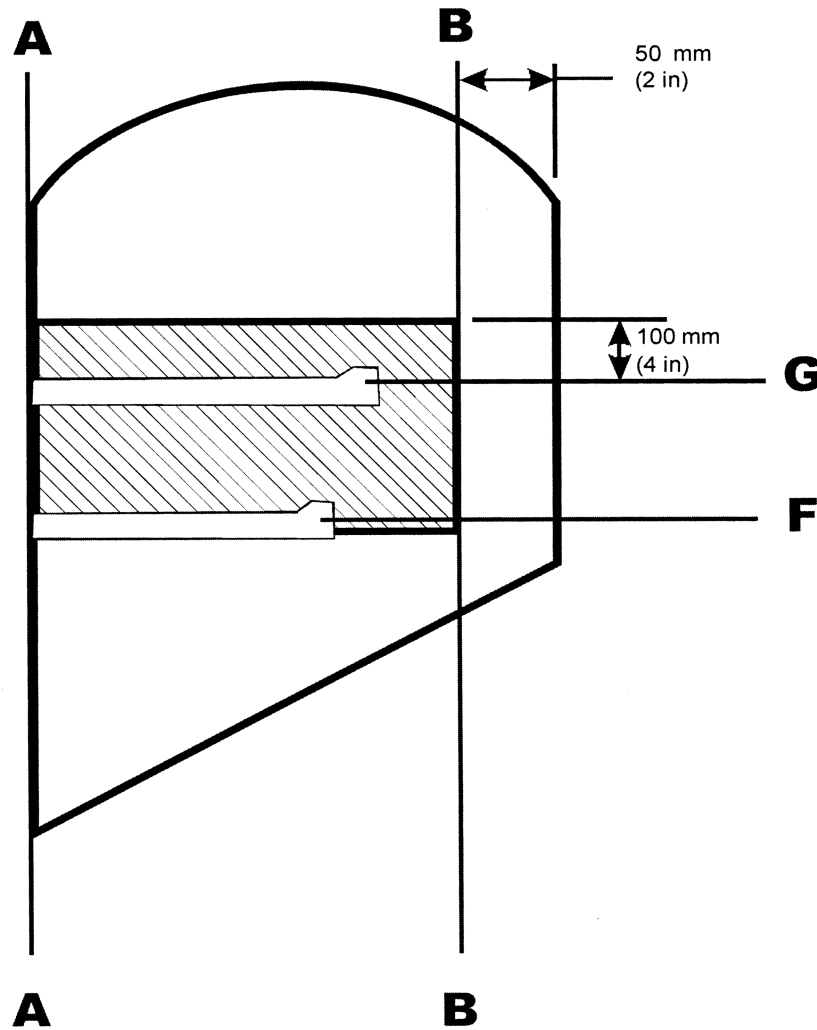


Figure 6  
Operator and Passenger Foot Environment  
Front View

## PART 1500—HAZARDOUS SUBSTANCES AND ARTICLES; ADMINISTRATION AND ENFORCEMENT REGULATIONS

3. The authority for part 1500 continues to read as follows:

**Authority:** 15 U.S.C. 1261–1278.

4. Section 1500.18 is amended to add a new paragraph (a)(20) to read as follows:

### § 1500.18 Banned toys and other banned articles intended for use by children.

(a) \* \* \*

(20)(i) Any three-wheeled youth all terrain vehicle, as defined in § 1515.2(a) that is manufactured or imported on or after [180 days after issuance of final rule] and

(ii) Any youth all terrain vehicle, as defined in § 1515.2(a), that is manufactured or imported on or after [180 days after issuance of final rule] and that does not meet the requirements of Part 1515.

(iii) (A) *Findings.* In order for the Commission to issue a rule under section 2(q)(1) of the FHSA classifying a substance or article as a banned hazardous substance, the Commission must make certain findings and include these findings in the regulation. 15 U.S.C. 1262(i)(2). These findings are discussed in paragraphs (a)(20)(iii)(B) through (D) of this section.

(B) *Voluntary standards.* The current voluntary standard, ANSI/SVIA–1–2001, specifies requirements for the mechanical operation of single rider ATVs (both for adult and youth ATVs). The major manufacturers appear to comply with most provisions of the voluntary standard. However, the voluntary standard does not contain information requirements for such things as warning labels, owners manuals and training. Thus, compliance with the voluntary standard alone would not be adequate to eliminate the risk of injury. Many ATV incidents occur because of the way the ATV is used, and the Commission cannot issue requirements for how a product should be used (e.g., requiring helmets, prohibiting children from riding adult ATVs). To affect these behaviors the Commission must act through requirements directing manufacturers and retailers to take actions that inform consumers of the risks associated with ATVs and advise consumers how they could reduce these risks. Although the major manufacturers have agreed to take many of the informational actions proposed in the rules through agreements with the Commission, these are completely voluntary. A company could decide to change any of the

actions it has agreed to at any time. Moreover, new market entrants, a growing portion of the ATV market, may not be following the voluntary standard (and they do not have individual agreements with the Commission). These new entrants now comprise approximately 10 percent of the market and their share of the market is likely to increase. Thus, the Commission finds that compliance with the ANSI/SVIA–1–2001 voluntary standard is not likely to eliminate or adequately reduce the risk of injury associated with youth ATVs, and it is unlikely that there will be substantial compliance with the voluntary standard.

(C) *Relationship of benefits to costs.* Because most manufacturers are currently taking most of the actions that the proposed rules would require, costs from the proposed rules are likely to be small. The initial potential reduction of ATV-related deaths and injuries may also be small. However, mandating the mechanical and information requirements will mean that new entrants to the market will have to comply with the requirements as well. The proposed rule would impose some testing and recordkeeping costs. The staff estimates these to be about \$462,000 annually. The Commission proposes to establish categories of youth ATVs based on maximum speed rather than engine size. This should not impose additional costs on manufacturers because these delineations are similar to those already in the ANSI/SVIA–1–2001 voluntary standard. However, this change could lead to a greater variety of youth ATVs which could result in more children riding youth ATVs rather than larger, riskier adult models. Such a shift of children to youth ATVs could reduce ATV-related deaths and injuries because the risk of injury for riders under the age of 16 driving adult ATVs is about twice the risk of injury of those who are driving age-appropriate ATVs. Additionally, the proposed change could result in more children receiving formal training, and this too could reduce deaths and injuries.

(D) *Least burdensome requirement.* The proposed rule is likely to impose only a small burden on ATV manufacturers and retailers. The Commission is essentially mandating the current practice that many manufacturers are following. Nevertheless, the proposed rule is likely to reduce the risk of injury associated with ATVs because it will enable the Commission to directly enforce the

provisions of the rule and will bring new entrants under federal regulation.

\* \* \* \* \*

5. Add part 1515 to Subchapter C to read as follows:

## PART 1515—REQUIREMENTS FOR YOUTH ALL TERRAIN VEHICLES

### Subpart A—General Requirements

Sec.

1515.1 Purpose, scope, effective date.

1515.2 Definitions.

1515.3 Requirements in general.

### Subpart B—Requirements for Equipment, Configuration and Performance

1515.4 Equipment and configuration requirements.

1515.5 Maximum speed capability test.

1515.6 Maximum speed capability requirements.

1515.7 Service brake performance test.

1515.8 Parking brake performance test.

1515.9 Pitch stability requirements.

### Subpart C—Requirements for Labeling, Point of Sale Information and Instruction

1515.10 Labeling requirements.

1515.11 Hangtag requirements.

1515.12 Age acknowledgment.

1515.13 Instructional/owner's manual.

1515.14 Safety video.

1515.15 Instructional training.

### Subpart D—Certification/Testing/Recordkeeping

1515.16 Certification.

1515.17 Testing.

1515.18 Recordkeeping.

### Figures

Figure 1 to Part 1515—Operator Foot Environment—Plan View

Figure 2 to Part 1515—Operator Foot Environment—Front View

Figure 3 to Part 1515—Age Acknowledgment Form

Figure 4 to Part 1515—Training Acknowledgment Form

**Authority:** 15 U.S.C. 1261, 1262, and 1269.

### Subpart A—General Requirements

#### § 1515.1 Purpose, scope, effective date.

(a) *Purpose.* The purpose of the standard in this part is to reduce deaths and injuries associated with youth all terrain vehicles (ATVs) by ensuring that all youth ATVs meet certain technical requirements and that consumers have sufficient safety information about operating youth ATVs.

(b) *Scope and effective date.* Youth all terrain vehicles, as defined in § 1515.2(a), manufactured or imported on or after [date 180 days from issuance of final rule] are subject to the requirements of this part and 16 CFR 1500.18(a)(20).

#### § 1515.2 Definitions.

In addition to the definitions in section 2 of the Federal Hazardous

Substances Act (15 U.S.C. 1261), the following definitions apply for purposes of this part 1515.

(a) *Youth all terrain vehicle*, or *youth ATV*, means a three- or four-wheeled motorized vehicle intended for use by an operator less than sixteen (16) years of age, that travels on low pressure tires, has a seat designed to be straddled by the operator, has handlebars for steering, and is intended for off-road use on non-paved surfaces.

(b) *Junior ATV* means a youth ATV intended for use by an operator of at least 6 years of age.

(c) *Pre-teen ATV* means a youth ATV intended for use by an operator of at least 9 years of age.

(d) *Teen ATV* means a youth ATV intended for use by an operator of at least 12 years of age.

(e) *Footrest* means a structural support for the operator's foot, can include footpegs and footboards.

(f) *Handlebar* means a device used for steering and rider support and as a place to mount hand-operated controls.

(g) *Low pressure tire* means a tire designed for off-road use on ATVs, and having a recommended tire pressure of no more than 69 kPa (10 psi).

(h) *Manual fuel shutoff control* means a device designed to turn the fuel flow from the fuel tank on and off.

(i) *Manufacturer* means any entity that produces youth ATVs. For purposes of this part 1515, an importer is a manufacturer.

(j) *Mechanical suspension* means a system which permits vertical motion of an ATV wheel relative to the chassis and provides spring and damping forces.

(k) *Parking brake* means a brake system which, after actuation, holds one or more brakes continuously in an applied position without further action.

(l) *PIN* means the Product Identification Number assigned in accordance with *Recreation Off-Road Vehicle Product Identification* Numbering System, SAE International Consortium Standard, ICS-1000, issued 2004-9.

(m) *Retailer* means, for purposes of this part, a person to whom an ATV is delivered or sold for purposes of sale or distribution by such person to a consumer.

(n) *Safety alert symbol* means the symbol which indicates a potential personal injury hazard as defined in section 4.10 of ANSI Z535.4-2002, *American National Standard for Product Safety Signs and Labels*.

(o) *Service brake* means the primary brake system used for slowing and stopping a vehicle.

(p) *Spark arrester* means an exhaust system component which limits the size

of carbon particles expelled from a tailpipe.

(q) *Speed limiting device* means a device intended to limit the maximum speed of a vehicle.

(r) *Three-wheeled youth all terrain vehicle* means a youth all terrain vehicle as defined in paragraph (a) of this section that has three wheels.

(s) *Throttle control* means a control which is located on the handlebar and is used to control engine power.

(t) *VIN* means a Vehicle Identification Number assigned as specified in 49 CFR Part 565.

(u) *Wheelbase (L)* means the longitudinal distance between the center of the front axle and the center of the rear axle.

(v) *Wheel travel* means the displacement of a reference point on the suspension (such as the wheel axle) from when the suspension is fully extended (no force applied) to when it is fully compressed.

#### **§ 1515.3 Requirements in general.**

(a) Each youth ATV shall be designed for use only by a single rider, shall meet the equipment, configuration and performance requirements specified in subpart B of this part, and shall meet the requirements for labeling, point of sale information, instruction manuals, and instructional training specified in subpart C of this part.

(b) Each youth ATV manufacturer shall comply with the requirements of this part applicable to manufacturers. For purposes of this part, an ATV importer is an ATV manufacturer.

(c) Each youth ATV retailer shall comply with the requirements of this part applicable to such retailers.

#### **Subpart B—Requirements for Equipment, Configuration and Performance**

##### **§ 1515.4 Equipment and configuration requirements.**

(a) *Service brakes*. All youth ATVs shall have either independently-operated front and rear brakes, or front and rear brakes that are operated by a single control, or both. These brakes shall meet the requirements of § 1515.7.

(1) *Independently-operated front brakes*. Independently-operated front brakes shall be operated by a lever located on the right side of the handlebar and shall be operable without removing the hand from the handlebar.

(2) *Independently-operated rear brakes*. Independently-operated rear brakes shall be operated by either a pedal which is located near the right footrest and operable by the right foot or by a lever located on the left side of the

handlebar and operable without removing the hand from the handlebar or by both.

(3) *Simultaneously operated front and rear brakes*. Simultaneously operated front and rear brakes shall be operated by either a pedal which is located near the right footrest and operable by the right foot or by a lever located on the left side of the handlebar and operable without removing the hand from the handlebar or by both.

(b) *Parking brake*. All youth ATVs shall have a parking brake capable of holding the youth ATV stationary under prescribed conditions. The parking brake or parking mechanism shall meet the performance requirements of § 1515.8.

(c) *Mechanical suspension*. All youth ATVs shall have mechanical suspension for all wheels. Each wheel shall have a minimum wheel travel of 50 mm (2 inches). Springing and damping properties shall be provided by components other than the tire.

(d) *Engine stop switch*. All youth ATVs shall have an engine stop switch which is mounted on the left handlebar and is operable by the thumb without removing the hand from the handlebar.

(1) *Operation*. The engine stop switch shall not require the operator to hold it in the off position to stop the engine.

(2) *Color of device*. The switch-operating device shall be orange.

(e) *Throttle control*. All youth ATVs shall be equipped with a means of controlling engine power through a throttle control. The throttle control shall be located on the right side of the handlebar and shall be operable without removing the hand from the handlebar. The throttle control shall be self-closing to an idle position upon release of the operator's hand from the control.

(f) *Automatic transmission*. All youth ATVs shall be equipped with a transmission that effects graduated gear ratios, in proper relation to speed and torque, without the active participation of the operator. It shall not be necessary for the operator to engage a clutch or choose a gear in order for the vehicle's engine to maintain its optimum speed.

(g) *Drivetrain controls*—(1) *Directional/range controls*. Controls for selecting forward, neutral, or reverse or for selecting overall transmission ranges, or for selecting the differential drive (2-wheel or 4-wheel) shall have a defined shift pattern marked for the operator.

(2) *Neutral indicator*. All youth ATVs with a neutral position shall have either a neutral indicator readily visible to the operator when seated on the ATV or a means to prevent starting of the ATV unless the transmission is in the neutral



position. The indicator, if provided, shall be activated whenever the ignition system is on and the transmission is in neutral.

(3) *Reverse indicator.* All youth ATVs with a reverse position shall have a reverse indicator readily visible to the operator when the operator is seated on the ATV. The indicator shall be activated whenever the engine is running and the transmission is in reverse.

(4) *Electric start interlock.* An interlock shall be provided to prevent the youth ATV engine from being started by electric cranking unless the transmission is disengaged or the brake is applied.

(h) *Flag pole bracket.* All youth ATVs shall have a flag pole bracket at the rear of the ATV that provides a rigid mounting location for a flag pole having a 13 mm (0.5 inch) diameter mounting shaft.

(i) *Manual fuel shutoff control.* If a youth ATV is equipped with a manual fuel shutoff control, the device shall be operable as prescribed in 49 CFR 571.123, Table 1.

(j) *Handlebars.* The handlebar and its mounting shall present no rigid materials with an edge radius of less than 3.2 mm (0.125 inch) that may be contacted by a probe in the form of a 165 mm (6.5 inch) diameter sphere. The probe shall be introduced to the handlebar mounting area. It shall not be possible to touch any part of any edge that has a radius of less than 3.2 mm (0.125 inch) with any part of the probe. A handlebar crossbar, if provided, shall be padded.

(k) *Operator foot environment.* All youth ATVs shall have a structure or other design feature which meets the requirements of paragraphs (k)(1) through (4) of this section.

(1) *Test procedure.* Compliance shall be determined by introduction of a probe, whose end is a rigid flat plane surface 75 mm (3 inches) in diameter, in the prescribed direction to the zones as described in paragraphs (k)(2) and (3) of this section and as shown in Figures 1 and 2 of this part.

(i) *Inserting probe vertically and downward.* The probe shall be introduced end-first in a vertical and downward direction to the zone described in paragraph (k)(2) of this section and shown by the shaded portion of Figure 1. The end of the probe in its entirety shall remain within the limits of the zone. It shall not penetrate the zone sufficiently to touch the ground when applied with a force of 445 N (100 lbf).

(ii) *Inserting probe horizontally and rearward.* The probe shall be introduced

end-first in a horizontal and rearward direction to the zone described in paragraph (k)(3) of this section and shown by the shaded portion of Figure 2. The end of the probe in its entirety shall remain within the limits of the zone. It shall not penetrate the zone sufficiently to touch the rear tire when applied with a force of 90 N (20 lbf).

(2) *Boundaries of zone in Figure 1 of this Part.* The zone shown in Figure 1 of this part is defined as bounded by:

(i) The vertical projection of the rear edge of the footrest.

(ii) The vertical plane (line AA) parallel to the youth ATV's longitudinal plane of symmetry that passes through the inside edge of the footrest.

(iii) The vertical projection of the intersection of a horizontal plane passing through the top surface of the footrest and the rear fender or other structure.

(iv) The vertical plane passing through point D and tangent to the outer front surface of the rear tire.

(A) For footpegs point D is defined as the intersection of the lateral projection of the rearmost point of the footpeg and the longitudinal projection of the outermost point of the footpeg.

(B) For footboards point D is defined as the intersection of 2 lines. The first is a line perpendicular to the vehicle longitudinal plane of symmetry and one-third of the distance from the front edge of the rear tire to the rear edge of the front tire. The second is a line parallel to the youth ATV's longitudinal plane of symmetry and one-half the distance between the inside edge of the footboard and the outside surface of the rear tire.

(3) *Boundaries of zone in Figure 2 of this Part.* The zone shown in Figure 2 of this part is defined as bounded by:

(i) The horizontal plane passing through the lowest surface of the footrest on which the operator's foot (boot) rests (plane F).

(ii) The vertical plane (line AA) parallel to the ATV's longitudinal plane of symmetry that passes through the inside edge of the footrest.

(iii) The horizontal plane 100 mm (4 inches) above plane F.

(iv) The vertical plane (line BB) parallel to the ATV's longitudinal plane of symmetry and 50 mm (2 inches) inboard of the outer surface of the rear tire.

(4) *Requirements for ATVs with non-fixed structure.* All youth ATVs equipped with a non-fixed type (for example, foldable, removable or retractable) structure intended to meet the requirements of this paragraph (k) shall be equipped with one or more of the following:

(i) A warning device (for example, a buzzer or indicator) to indicate that the structure is not in the position needed to comply with the requirements of this paragraph (k).

(ii) A device to prevent the ATV from being operated under its own power if the structure is not in the position needed to comply with the requirements of this paragraph (k).

(iii) A structure that can be folded, retracted, or removed, such that when the structure is folded, retracted, or removed, the ATV cannot be operated using the footrest in the normal manner.

(l) *Lighting equipment—(1) Required equipment.* All youth ATVs shall have at least one stop lamp. The stop lamp shall be illuminated by the actuation of any service brake control. Stop lamps shall conform to Surface Vehicle Standard, Stop Lamps for Use on Motor Vehicles Less than 2032 mm in Overall Width, SAE J586 MAR00 or Surface Vehicle Recommended Practice, Snowmobile Stop Lamp, SAE J278 MAY95.

(2) *Prohibitions on certain lighting.* No youth ATV may be equipped with a projecting headlamp or forward-facing day-time running lights.

(m) *Spark arrester.* All youth ATVs shall have a spark arrester of a type that is qualified according to the United States Department of Agriculture Forest Service Standard for Spark Arresters for Internal Combustion Engines, 5100-l c, September 1997 or Surface Vehicle Recommended Practice, *Spark Arrester Test Procedure for Medium Size Engines*, SAE J350 JAN91.

(n) *Tire marking.* All youth ATV tires shall carry the following markings:

(1) *Inflation pressure.* Both tire sidewalls shall be marked with the operating pressure or the following statement, or an equivalent message: "SEE VEHICLE LABEL OR OWNER'S MANUAL FOR OPERATING PRESSURE." The messages required by this paragraph shall be in capital letters not less than 4 mm (0.156 inch) in height.

(2) *Bead seating pressure.* Both tire sidewalls shall be marked with the following statement, or an equivalent message: "Do Not Inflate Beyond \*\*psi (\*\*kPa) When Seating Bead."

(3) *Other markings.* Both tire sidewalls shall have the following information:

(i) The manufacturer's name or brand name.

(ii) On one tire sidewall, the three-digit week and year of manufacture in the form prescribed at 49 CFR 574.5(d), fourth grouping.

(iii) The size nomenclature of the tire (for example, AT 22x10-9\*) as

standardized by the Tire and Rim Association, Inc. or the Japan Automobile Tire Manufacturers Association, Inc.

(iv) The word “tubeless” for a tubeless tire.

(v) The phrase “Not For Highway Use” or “Not For Highway Service.”

(4) *Letter sizes.* The information required by paragraphs (n)(2) and (3) of this section shall be in letters or numerals no less than 2 mm (.078 inch) in height.

(o) *Tire pressure gauge.* All youth ATVs shall be provided with a tire pressure gauge appropriate for the recommended operating tire pressure. All youth ATVs shall have a means of carrying the tire pressure gauge.

(p) *Security.* All youth ATVs shall have a means to deter unauthorized use.

(q) *Vehicle Identification Number (VIN) or Product Identification Number (PIN).* Each youth ATV shall have prominently displayed on the ATV a unique VIN assigned by its manufacturer in accordance with 49 CFR part 565 or a unique PIN in accordance with *Recreation Off-Road Vehicle Product Identification Numbering System*, SAE International Consortium Standard, ICS-1000, issued 2004–9. If the ATV has a VIN number, the characters in location 4 and 5 of the number shall be “A” and “T”, respectively. The VIN or PIN label shall meet the durability requirements of Underwriters Laboratories Standard UL 969, fourth edition, October 3, 1995.

(r) *Speed limiting devices.* All Pre-teen and Teen ATVs shall be equipped with a means of limiting throttle travel or other means of limiting the maximum speed attainable by the ATV to less than the ATV’s maximum speed capability as determined using the test procedure of § 1515.5. The speed limiting device may be adjustable or removable or both, but shall have a means to prevent adjustment or removal without the simultaneous use of at least two different tools.

#### **§ 1515.5 Maximum speed capability test.**

(a) *Test conditions.* Test conditions shall be as follows:

(1) ATV test weight shall be the unloaded ATV weight plus the vehicle load capacity (including test operator and instrumentation), with any added weight secured to the seat or cargo area(s) if so equipped.

(2) Tires shall be inflated to the pressures recommended by the ATV manufacturer for the vehicle’s test weight.

(3) The test surface shall be clean, dry, smooth and level concrete, or equivalent.

(b) *Test procedure.* Measure the maximum speed capability of the ATV using a radar gun or equivalent method. The test operator shall accelerate the ATV until maximum speed is reached, and shall maintain maximum speed for at least 30.5 m (100 ft). Speed measurement shall be made when the ATV has reached a stabilized maximum speed. A maximum speed test shall consist of a minimum of two measurement test runs conducted over the same track, one each in opposite directions. If more than two measurement runs are made there shall be an equal number of runs in each direction. The maximum speed capability of the ATV shall be the arithmetic average of the measurements made. A reasonable number of preliminary runs may be made prior to conducting a recorded test.

#### **§ 1515.6 Maximum speed capability requirements.**

(a) *Performance requirement for Junior ATV.* When tested in accordance with the procedures of § 1515.5 with any removable speed limiting device removed and with any adjustable speed limiting device adjusted to provide the ATV’s maximum speed capability, the maximum speed capability of a Junior ATV shall not exceed 10 mph.

(b) *Performance requirements for Pre-teen youth ATV.* (1) When tested in accordance with the procedures of § 1515.5 with any removable speed limiting device removed and with any adjustable speed limiting device adjusted to provide the ATV’s maximum speed capability, the maximum speed capability of a Pre-teen youth ATV shall not exceed 15 mph.

(2) When tested in accordance with the procedures of § 1515.5 with the speed limiting device required by § 1515.4(r) adjusted accordingly, the Pre-teen youth ATV shall accelerate to a maximum speed that does not exceed 10 mph.

(c) *Performance requirements for Teen ATV.* (1) When tested in accordance with the procedures of § 1515.5 with any removable speed limiting device removed and with any adjustable speed limiting device adjusted to provide the ATV’s maximum speed capability, the maximum speed capability of a Teen ATV shall not exceed 30 mph.

(2) When tested in accordance with the procedures of § 1515.5 with the speed limiting device required by § 1515.4(r) adjusted accordingly, Teen ATV shall accelerate to a maximum speed that does not exceed 15 mph.

(d) *Maximum speed requirements on delivery to consumer.* (1) Each Pre-teen

ATV shall be delivered to the purchaser with the speed limiting device required by § 1515.4(r) adjusted so that the maximum speed of the ATV does not exceed 10 mph when tested in accordance with § 1515.5.

(2) Each Teen ATV shall be delivered to the purchaser with the speed limiting device required by § 1515.4(r) adjusted so that the maximum speed of the ATV does not exceed 15 mph when tested in accordance with § 1515.5.

#### **§ 1515.7 Service brake performance test.**

(a) *Test conditions.* Test conditions shall be as follows.

(1) The ATV test weight shall be the unloaded vehicle weight plus the vehicle load capacity (including test operator and instrumentation) with any added weight secured to the seat or cargo area(s), if equipped.

(2) Tires shall be inflated to the pressures recommended by the ATV manufacturer for the vehicle test weight.

(3) Engine idle speed and ignition timing shall be set according to the manufacturer’s recommendations.

(4) Ambient temperature shall be between 0 °C (32 °F) and 38 °C (100 °F).

(5) The test surface shall be clean, dry, smooth and level concrete, or equivalent.

(6) Any removable speed limiting devices shall be removed and any adjustable speed limiting devices shall be adjusted to provide the ATV’s maximum speed capability.

(b) *Test procedure.* The test procedure shall be as follows:

(1) Measure the maximum speed capability of the ATV in accordance with § 1515.5. Determine the braking test speed (V). The braking test speed is the speed that is the multiple of 8 km/h (5 mph), which is 6 km/h (4 mph) to 13 km/h (8 mph) less than the maximum speed capability of the ATV.

(2) Burnish the front and rear brakes by making 200 stops from the braking test speed. Stops shall be made by applying front and rear service brakes simultaneously, and braking decelerations shall be from 1.96 m/s<sup>2</sup> to 4.90 m/s<sup>2</sup> (0.2 g to 0.5 g).

(3) After burnishing, adjust the brakes according to the manufacturer’s recommendation.

(4) Make six stops from the braking test speed. Stops shall be made by applying the front and rear service brakes simultaneously, and braking decelerations shall be from 1.96 m/s<sup>2</sup> to 4.90 m/s<sup>2</sup> (0.2 g to 0.5 g).

(5) Make four stops from the braking test speed, applying the front and rear service brakes. Measure the speed immediately before the service brakes are applied. Appropriate markers or

instrumentation shall be used which will accurately indicate the point of brake application. Measure the stopping distance (S).

(i) Hand lever brake actuation force shall be not less than 22 N (5 lbf) and not more than 133 N (30 lbf) and foot pedal brake actuation force shall be not less than 44 N (10 lbf) and not more than 222 N (50 lbf).

(ii) The point of initial application of lever force shall be 25 mm (1.0 in.) from the end of the brake lever. The direction of lever force application shall be perpendicular to the handle grip in the plane in which the brake lever rotates. The point of application of pedal force shall be the center of the foot contact pad of the brake pedal, and the direction of force application shall be perpendicular to the foot contact pad and in the plane in which the brake pedal rotates.

(c) *Performance requirements*—(1) *Junior and Pre-teen ATVs*. For each Junior and each Pre-teen ATV, at least one of the four stops required by paragraph (b)(5) of this section shall comply with the relationship:

$$S \leq V/5.28$$

Where:

S = brake stopping distance (m)

V = braking test speed (km/h)

$$S \leq V$$

Where:

S = brake stopping distance (ft)

V = braking test speed (mph)

(2) *Teen ATVs*. For each Teen ATV, at least one of the four stops required by paragraph (b)(5) of this section shall have an average braking deceleration of 5.88 m/s<sup>2</sup> (0.6 g) or greater. Average braking deceleration can be determined according to the following formulae<sup>1</sup>:

$$a = V^2/25.92S$$

Where:

a = average deceleration (m/s<sup>2</sup>)

S = brake stopping distance (m)

V = braking test speed (km/h)

$$a = [(.033) \times V^2]/S$$

Where:

a = average deceleration (g)

S = brake stopping distance (ft)

V = braking test speed (mph)

#### **§ 1515.8 Parking brake performance test.**

(a) *Test conditions*. Test conditions shall be as follows:

(1) ATV test weight shall be the unloaded ATV weight plus weight secured to the seat or cargo area(s) (if equipped), which is equal to the manufacturer's stated vehicle load capacity.

(2) Tires shall be inflated to the pressures recommended by the ATV manufacturer for the vehicle test weight.

(3) The test surface shall be clean, dry, smooth concrete or equivalent, having a 30 percent grade.

(b) *Test procedure*. The test procedure shall be as follows:

(1) Burnish the service brakes according to the procedure specified in § 1515.7(b)(2) if service brakes are used as part of the parking brake.

(2) Adjust the parking brake according to the procedure recommended by the ATV manufacturer.

(3) Position the ATV facing downhill on the test surface, with the longitudinal axis of the ATV in the direction of the grade. Apply the parking brake and place the transmission in neutral. Leave the ATV undisturbed for 5 minutes. Repeat the test with the ATV positioned facing uphill on the test surface.

(c) *Performance requirements*. When tested according to the procedure specified in paragraph (b) of this section, the parking brake shall be capable of holding the ATV stationary on the test surface, to the limit of traction of the tires on the braked wheels, for 5 minutes in both uphill and downhill directions.

#### **§ 1515.9 Pitch stability requirements.**

(a) *Test conditions*. Test conditions shall be as follows:

(1) The ATV shall be in standard condition, without accessories. The ATV and components shall be assembled and adjusted according to the manufacturer's instructions and specifications.

(2) Tires shall be inflated to the ATV manufacturer's recommended settings for normal operation. If more than one pressure is specified, the highest value shall be used.

(3) All fluids shall be full (oil, coolant, and the like), except that fuel shall be not less than three-fourths full. ATV shall be unladen, with no rider, cargo, or accessories.

(4) Steerable wheels shall be held in the straight ahead position.

(5) Adjustable suspension components shall be set to the values specified at the point of delivery to the dealer.

(6) Suspension components shall be fixed by means of a locking procedure such that they remain in the same position and displacement as when the unladen ATV is on level ground, and in the conditions specified in paragraphs (a)(1) through (5) of this section.

(b) *Test procedure*. The test procedure shall be as follows:

(1) Calculations based on vehicle metrics:

(i) Measure and record the wheelbase (L). The measurement of this length shall be done with an accuracy of ±5 mm (±0.2 inch) or ±0.5%, whichever is greater.

(ii) Measure and record the front and rear weights, ( $W_f$  and  $W_r$ , respectively).  $W_f$  is the sum of the front tire loads; and  $W_r$  is the sum of the rear tire loads with the ATV level and in the condition specified in paragraph (a) of this section. The measurements of these weights shall be done with an accuracy of ±0.5 kg (±1.1 lb) or ±0.5%, whichever is greater.

(iii) Using the values obtained in paragraphs (b)(1)(i) and (ii) of this section, compute and record the quantity as follows:  $L_1 = ((W_f/(W_f + W_r)) \times L$ .

(iv) Measure and record the vertical height between the rear axle center and the ground ( $R_v$ ). This measurement shall be done on level ground, with the ATV in the conditions specified in subsection (a) of this section, with an accuracy of ±3 mm (±0.1 inch) or ±1.5%, whichever is greater.

(v) Measure and record the balancing angle alpha. The procedure for obtaining this value is as follows: with the ATV on a level surface, the front of the vehicle shall be rotated upward about the rear axle without setting the rear parking brake or using stops of any kind, until the ATV is balanced on the rear tires. The balancing angle alpha through which the ATV is rotated shall be measured and recorded with an accuracy of ±0.5 degrees. If an assembly protruding from the rear of the ATV, such as a carry bar or trailer hitch or hook, interferes with the ground surface, so as to not allow a balance to be reached, the vehicle shall be placed on blocks of sufficient height to eliminate the interference.

(vi) Repeat the measurement in paragraph (b)(1)(v) of this section and determine if the two individual measurements are within 1.0 degree of each other. If they are not, repeat the measurements two more times and compute the average of the four individual measurements, and use that as the value.

(2) *Tilt table procedure*. The ATV shall be placed on a variable slope single-plane tilt table. The steerable wheels shall be straight forward. The ATV shall be positioned on the tilt table with its longitudinal center line perpendicular to the tilt axis of the table and its rear positioned downhill. The table shall be tilted until lift-off of the upper wheel(s) occurs. Measure the angle at which lift-off of the upper wheel(s) occurs. Lift-off shall have occurred when a strip of 20-gauge steel

<sup>1</sup> Direct on-board instrumentation may be used to acquire any measurement data.

[approximately 1 mm (.039 inch) thick], 76 mm (3 inch) minimum width, can be pulled from or moved under the second uphill tire to lift with a force of 9 N (2 lb) or less.

(c) *Performance requirements.* (1) *Computation from vehicle metrics.* Using the values obtained in paragraphs (b)(1)(iii), (b)(1)(iv), and (b)(1)(vi) of this section, compute the pitch stability coefficient as follows:  $K_p = (L_1 \tan \alpha) / (L_1 + R_r \tan \alpha)$ .

(2) *Computation from tilt table.* The pitch stability coefficient  $K_p$  is the tangent of the tilt table angle.

(3) *Requirement.* The pitch stability coefficient  $K_p$  calculated according to paragraph (c)(1) or (c)(2) of this section shall be at least 1.0.

### Subpart C—Requirements for Labeling, Point of Sale Information and Instruction

#### § 1515.10 Labeling requirements.

(a) *General warning label.* (1) Each youth ATV shall have affixed to it a general warning label in English that meets the requirements of this section.

(2) *Content.* The general warning label shall display the safety alert symbol and the word “WARNING” in capital letters. The label shall contain the following, or substantially equivalent, statements. They may be arranged on the label to place the prohibited actions together and the required actions together.

“THIS VEHICLE CAN BE HAZARDOUS TO OPERATE. A collision or rollover can occur quickly, even during routine maneuvers such as turning and driving on hills or over obstacles, if you fail to take proper precautions.”

“SEVERE INJURY OR DEATH can result if you do not follow these instructions:”

“BEFORE YOU OPERATE THIS ATV, READ THE OWNER'S MANUAL AND ALL LABELS.”

“NEVER OPERATE THIS ATV WITHOUT PROPER INSTRUCTION. Beginners should complete a training course.”

“NEVER CARRY A PASSENGER. You increase your risk of losing control if you carry a passenger.”

“NEVER OPERATE THIS ATV ON PAVED SURFACES. You increase your risk of losing control if you operate this ATV on pavement.”

“NEVER OPERATE THIS ATV ON PUBLIC ROADS. You can collide with another vehicle if you operate this ATV on a public road.”

“ALWAYS WEAR AN APPROVED MOTORCYCLE HELMET, eye protection, and protective clothing.”

“NEVER CONSUME ALCOHOL OR DRUGS before or while operating this ATV.”

“NEVER OPERATE THIS ATV AT EXCESSIVE SPEEDS. You increase your risk of losing control if you operate this ATV at speeds too fast for the terrain, visibility conditions, or your experience.”

“NEVER ATTEMPT WHEELIES, JUMPS, OR OTHER STUNTS.”

(3) *Format.* The color scheme, typeface and formatting of the label shall be consistent with ANSI Z535.4 (American National Standard for Product Safety Signs and Labels) (2002).

(4) *Location.* This label shall be affixed to the left front fender so it is easily visible in its entirety to the operator when seated on the vehicle in the proper operating position. If this location is not available for a particular ATV, the label shall be affixed to the right front fender so as to be easily read by the operator when seated on the ATV in the proper operating position.

(b) *Age recommendation warning label.* (1) Each youth ATV shall have affixed an age recommendation warning label in English that meets the requirements of this section.

(2) *Content.* (i) *Label for Junior ATV.* The age recommendation warning label for a Junior ATV shall display the safety alert symbol and the word “WARNING” in capital letters. The label shall contain a circle with a slash through it and the wording “UNDER 6” inside the circle. Below the circle, the label shall contain the following, or substantially equivalent, statements:

“Operation of this ATV by children under the age of 6 increases the risk of severe injury or death.

Adult supervision required for children under age 16.

NEVER let children under age 6 operate this ATV.”

(ii) *Label for Pre-teen ATV.* The age recommendation warning label for a Pre-teen ATV shall display the safety alert symbol and the word “WARNING” in capital letters. The label shall contain a circle with a slash through it and the wording “UNDER 9” inside the circle. Below the circle, the label shall contain the following, or substantially equivalent, statements:

“Operation of this ATV by children under the age of 9 increases the risk of severe injury or death.

Adult supervision required for children under age 16.

NEVER let children under age 9 operate this ATV.”

(iii) *Label for Teen ATV.* The label age recommendation warning label for a Teen ATV shall display the safety alert symbol and the word “WARNING” in capital letters. The label shall contain a circle with a slash through it and the wording “UNDER 12” inside the circle. Below the circle, the label shall contain the following, or substantially equivalent, statements:

“Operation of this ATV by children under the age of 12 increases the risk of severe injury or death.

Adult supervision required for children under age 16.

NEVER let children under age 12 operate this ATV.”

(3) *Format.* The color scheme, typeface and formatting of the age recommendation label shall be consistent with ANSI Z535.4 (2002).

(4) *Location.* This label shall be affixed to the fuel tank so it is visible in its entirety to the operator when seated on the vehicle in the proper operating position. If this location is not available for a particular ATV, or, if affixed at this location the label will not meet the durability requirement of paragraph (f) of this section, the label shall be placed on the front fender above the label required by paragraph (a) of this section so that it is visible in its entirety to the operator. If this location is not available for a particular ATV, the label shall be placed on the vehicle body immediately forward of the seat so it is visible in its entirety to the operator when seated on the vehicle in the proper operating position.

(c) *Passenger warning label.* (1) Each youth ATV shall have affixed a passenger warning label in English that meets the requirements of this section.

(2) *Content.* The passenger warning label shall display the safety alert symbol and the word “WARNING” in capital letters. The label shall contain the following, or substantially equivalent, statements:

“Passengers can affect ATV balance and steering. The resulting loss of control can cause SEVERE INJURY or DEATH.

NEVER ride as a passenger.”

(3) *Format.* The color scheme, typeface and formatting of the label shall be consistent with ANSI Z535.4 (2002).

(4) *Location.* This label shall be affixed either to a flat surface of the vehicle body located to the rear of the seat and toward the center of the vehicle, or to the rear portion of the vehicle seat itself. If neither of these locations is available for a particular vehicle, the label shall be affixed to the left rear fender or the left side of the body so as to be easily seen by a potential passenger.

(d) *Tire pressure and overload warning label(s).* (1) Each youth ATV shall have affixed a label or labels in English that meet the requirements of this section warning against improper air pressure in the ATV's tires and against overloading. Manufacturers may affix one warning label addressing both hazards.

(2) *Content.* The label(s) shall contain the safety alert symbol and the signal word “WARNING” in capital letters. Every label warning about improper tire pressure shall contain a statement indicating the recommended tire pressure, either on the label or by

reference to the owner's manual and/or the tires. Every label warning against overloading shall contain a statement indicating the maximum weight capacity for the ATV model.

(i) If a manufacturer uses separate tire pressure and overloading labels, the label to warn of tire pressure shall contain the following, or substantially equivalent, statements:

—“Improper tire pressure can cause loss of control. Loss of control can result in severe injury or death.”

(ii) If a manufacturer uses separate tire pressure and overloading labels, the label to warn of overloading hazards shall contain the following, or substantially equivalent, statements:

—“Overloading can cause loss of control. Loss of control can result in severe injury or death.”

(iii) If a manufacturer uses one label for both tire pressure and overloading warnings, the label shall contain the following, or substantially equivalent, statements:

“Improper tire pressure or overloading can cause loss of control. Loss of control can result in severe injury or death.”

(3) *Format.* The color scheme, typeface and formatting of the label shall be consistent with ANSI Z535.4 (2002).

(4) *Location.* The label(s) shall be affixed to the left rear fender above the axle, facing outward in such a position that it (they) can be read by the operator when mounting the vehicle.

(e) *Label durability requirements.* Each label required or permitted by this section shall meet the standards for durability of Underwriters Laboratories Standard UL 969, fourth edition, October 3, 1995.

(f) *Discretionary labels.* Labels in addition to those specified in paragraphs (a) through (d) of this section may be affixed to the vehicle provided that:

(1) The discretionary labels are consistent with ANSI Z535.4 (2002); and

(2) Discretionary labels shall be affixed to ATVs in an appropriate location that does not detract from the mandatory labels required in paragraphs (a) through (d) of this section.

#### **§ 1515.11 Hangtag requirements.**

(a) Each youth ATV shall be equipped at the point of sale with a hang tag that, at a minimum, contains in English:

(1) The contents of the general warning label described in § 1515.10(a);

(2) The statement—“Even though a child is of the recommended age to operate a particular size ATV, not all

children have the strength, skills, or judgment needed to operate an ATV safely, and parents should, therefore, supervise their child's operation of the ATV at all times”—;

(3) The statement—“This hang tag is not to be removed before sale”—; and

(4) The statement—“Check with your dealer to find out about state or local laws regarding ATV operation.”

(b) Each hang tag shall be attached to the ATV in such a manner as to be conspicuous and removable only with deliberate effort.

(c) Each hang tag shall be at least 4 by 6 inches.

#### **1515.12 Age acknowledgment.**

(a) *General.* The retailer shall provide the purchaser of each youth ATV with an age acknowledgment in the form shown in figure 3.

(b) *Signature.* Prior to the sales transaction, the retailer shall require that the purchaser of the ATV sign the age acknowledgment representing that the purchaser has read and understood the age acknowledgment.

(c) *Copies/retention.* The retailer shall provide the purchaser of the ATV and the manufacturer of the ATV with a copy of the signed age acknowledgment. The retailer shall retain the signed original of the age acknowledgment for a minimum of five (5) years after the date of the purchase of the ATV to which it pertains. The manufacturer shall retain the copy of the age acknowledgment for a minimum of five (5) years after the date of the purchase of the ATV to which it pertains.

#### **1515.13 Instructional/owner's manual.**

(a) *General.* (1) All youth ATVs shall be delivered to the purchaser with an instructional/owner's manual that meets the requirements of this section. All youth ATVs shall be equipped with a means of carrying the manual that protects it from destructive elements while allowing reasonable access.

(2) Each manual shall be in English and shall be written and designed in a manner reasonably calculated to convey information regarding safe operation and maintenance of the vehicle by persons who read such manual.

(3) Each manual shall be written in plain, simple language so as to be readily comprehended by the average seventh grader, as measured by a standard technique for assessing the readability of written materials.

(4) Information in each manual shall be presented in a meaningful sequence designed to permit readers to understand the information presented and appreciate its significance.

(5) Each manual shall be consistent with other safety messages required by

this part, including those contained in warning labels, hang tags, and the safety video.

(6) Each manufacturer shall retain a copy of the manual for each model until five years after the model has ceased to be in production. The manufacturer shall make the manual available to CPSC upon request.

(b) Contents. Each manual shall contain—

(1) A statement on the outside front cover that, at a minimum, alerts the reader that the manual contains important safety information which should be read carefully.

(2) A statement on the outside front cover stating the age recommendation for the particular ATV model in question.

(3) Definitions for “warning” and “caution” that are consistent with, or in any event not weaker than, the definitions for those terms contained in American National Standards Institute (ANSI) standard Z535–2002 along with an introductory statement alerting the reader to the significance of the safety alert symbol and the signal words.

(4) A reminder that the safety alert symbol with the word “WARNING” indicates a potential hazard that could result in serious injury or death. This reminder shall be repeated immediately preceding the table of contents, at the beginning and end of the section describing proper operating procedures, on the last page before the outside back cover (or on the inside back cover), and a total of at least five (5) more times, appropriately spaced, within sections containing warnings.

(5) An introductory safety message emphasizing the importance of reading and understanding the manual prior to operation of the ATV, the importance of and availability of the instructional training required by § 1515.15, and the importance of the age recommendation for the particular model. This introductory message shall contain, at a minimum, the following statement:

Failure to follow the warnings contained in this manual can result in SERIOUS INJURY or DEATH

(6) An introductory notice to parents emphasizing that an ATV is not a “toy,” the importance of children completing the instructional training required by § 1515.15 of this part, and the importance of children understanding and following the instructions and warnings contained in the manual. This introductory statement shall also contain, at a minimum, the following statement:

Children differ in skills, physical abilities, and judgment. Some children may not be

able to operate an ATV safely. Parents should supervise their children's use of the ATV at all times.

(7) An introductory safety section which, at a minimum, contains the following safety messages in the form shown:

**AN ATV IS NOT A TOY AND CAN BE HAZARDOUS TO OPERATE.** An ATV handles differently from other vehicles including motorcycles and cars. A collision or rollover can occur quickly, even during routine maneuvers such as turning and driving on hills or over obstacles, if you fail to take proper precautions.

SEVERE INJURY OR DEATH can result if you do not follow these instructions:

1. Read this manual and all labels carefully and follow the operating procedures described.

2. Never operate an ATV without proper instruction. *Take a training course.* Contact an authorized ATV dealer to find out about the training courses near you.

3. Always follow the age recommendations for this ATV.

4. Never allow a child under 16 to operate an ATV without adult supervision, and never allow continued use of an ATV by a child if he or she does not have the abilities to operate it safely.

5. Never carry a passenger on an ATV, unless it is a two-person ATV.

6. Never operate an ATV on any paved surfaces, including sidewalks, driveways, parking lots and streets.

7. Never operate an ATV on any public street, road or highway, even a dirt or gravel one.

8. Never operate an ATV without wearing an approved helmet that fits properly. You should also wear eye protection (goggles or face shield), gloves, boots, long-sleeved shirt or jacket, and long pants.

9. Never consume alcohol or drugs before or while operating an ATV.

10. Never operate at excessive speeds. Always go at a speed that is proper for the terrain, visibility and operating conditions, and your experience.

11. Never attempt wheelies, jumps, or other stunts.

12. Always inspect your ATV each time you use it to make sure it is in safe operating condition. Always follow the inspection and maintenance procedures and schedules described in this manual.

13. Always keep both hands on the handlebars and both feet on the footpegs of the ATV during operation.

14. Always go slowly and be extra careful when operating on unfamiliar terrain. Always be alert to changing terrain conditions when operating the ATV.

15. Never operate on excessively rough, slippery or loose terrain until you have learned and practiced the skills necessary to control the ATV on such terrain. Always be especially cautious on these kinds of terrain.

16. Always follow proper procedures for turning as described in this manual. Practice turning at low speeds before attempting to turn at faster speeds. Do not turn at excessive speed.

17. Never operate the ATV on hills too steep for the ATV or for your abilities.

Practice on smaller hills before attempting larger hills.

18. Always follow proper procedures for climbing hills as described in this manual. Check the terrain carefully before you start up any hill. Never climb hills with excessively slippery or loose surfaces. Shift your weight forward. Never open the throttle suddenly or make sudden gear changes. Never go over the top of any hill at high speed.

19. Always follow proper procedures for going down hills and for braking on hills as described in this manual. Check the terrain carefully before you start down any hill. Shift your weight backward. Never go down a hill at high speed. Avoid going down a hill at an angle that would cause the vehicle to lean sharply to one side. Go straight down the hill where possible.

20. Always follow proper procedures for crossing the side of a hill as described in this manual. Avoid hills with excessively slippery or loose surfaces. Shift your weight to the uphill side of the ATV. Never attempt to turn the ATV around on any hill until you have mastered the turning technique described in this manual on level ground. Avoid crossing the side of a steep hill if possible.

21. Always use proper procedures if you stall or roll backwards when climbing a hill. To avoid stalling, use proper gear and maintain a steady speed when climbing a hill. If you stall or roll backwards, follow the special procedure for braking described in this manual. Dismount on the uphill side or to a side if pointed straight uphill. Turn the ATV around and remount, following the procedure described in this manual.

22. Always check for obstacles before operating in a new area. Never attempt to operate over large obstacles, such as large rocks or fallen trees. Always follow proper procedures when operating over obstacles as described in this manual.

23. Always be careful when skidding or sliding. Learn to safely control skidding or sliding by practicing at low speeds and on level, smooth terrain. On extremely slippery surfaces, such as ice, go slowly and be very cautious in order to reduce the chance of skidding or sliding out of control.

24. Never operate an ATV in fast flowing water or in water deeper than that specified in this manual. Remember that wet brakes may have reduced stopping ability. Test your brakes after leaving water. If necessary, apply them several times to let friction dry the linings.

25. Always be sure there are no obstacles or people behind you when you operate in reverse. When it is safe to proceed in reverse, go slowly.

26. Always use the size and type tires specified in this manual. Always maintain proper tire pressure as described in this manual.

27. Never modify an ATV through improper installation or use of accessories.

28. Never exceed the stated load capacity for an ATV. Cargo should be properly distributed and securely attached. Reduce speed and follow instructions in the manual for carrying cargo or pulling a trailer. Allow greater distance for braking.

FOR MORE INFORMATION ABOUT ATV SAFETY, visit the CPSC website at [www.cpsc.gov](http://www.cpsc.gov) or call the Consumer Product Safety Commission at 1-800-638-2772, or [insert contact number for manufacturer]."

(8) An appropriate table of contents identifying the major portions of the manual.

(9) Descriptions of the location of warning labels on the ATV and an introductory statement emphasizing the importance of understanding and following the labels and the importance of keeping the labels on the ATV. The introductory statement shall also contain instructions on how to obtain a replacement label in the event any label becomes difficult to read. These instructions shall include a toll-free telephone number that can be called to obtain a replacement label.

(10) A toll-free telephone number, or other no cost means, for the owner of the ATV to contact the manufacturer to report safety issues and/or seek information on the proper, safe operation of the ATV.

(11) A description of pre-operating inspection procedures and a statement emphasizing the importance of these procedures.

(12) A description of proper operating procedures and of potential hazards associated with improper operation of the ATV. The section of each manual devoted to describing proper operating procedures shall include material addressing in narrative text form and in appropriate detail all of the topics addressed in paragraph (b)(7) of this section. Such narrative text shall identify particular potential hazards associated with the types of operation or behavior in question, the possible consequences of such operation or behavior, and shall describe the manner in which the vehicle should be properly operated to avoid or reduce the risk associated with such hazards. Such narrative text shall include warning statements and corresponding illustrations in conformance with the requirements of this section. The language of the narrative sections accompanying each warning shall not contradict any information contained in the warning section and shall be written to draw attention to the warning.

(13) Descriptions of proper maintenance, storage, and transportation procedures.

(14) On the outside back cover, the contents of the general warning label required by § 1515.10(a).

#### § 1515.14 Safety video.

(a) *General.* The retailer shall provide the purchaser with a safety video at or before the completion of the purchase

transaction. The safety video shall be designed to communicate to an audience consisting of prospective purchasers and users, including children between the ages of 9 and 16, and their parents.

(b) *Title*. The title of the safety video shall indicate that the video provides safety information concerning ATV operation.

(c) *Content*. The safety video shall communicate the following:

(1) The contents of the hang tag described in § 1515.11;

(2) The concept that a person operating an ATV should know his or her limitations and not attempt to perform any maneuver or traverse any terrain if performing the maneuver or operating on the terrain is beyond that person's capabilities and experience;

(3) The importance of practicing and gradually progressing from basic to more complex maneuvers; and

(4) The importance of keeping alert at all times and the concept that even a brief distraction can lead to loss of control resulting in a severe or fatal accident.

(5) ATV-related death and injury statistics both for all riders and for children under the age of 16. The video may use rolling five-year averages, and the statistics only need to be up-dated if there is a statistically significant change in either the death or injury statistics. Such change shall be noted in the subsequent video.

(d) *Dramatization*. All dramatizations designed to communicate any of the concepts set forth in the preceding subsection shall be unambiguous. To avoid ambiguity and ensure clarity, dramatizations shall:

(1) In the case of dramatizations that show an accident occurring, averted, or about to occur, the video shall contain no intervening events that detract from communication of the hazard (for example, the presence of an obstacle on a paved surface when communicating the hazard of operating on a paved surface, or a person running in front of an ATV when communicating the hazard of carrying passengers on a youth ATV or a single rider adult ATV); and

(2) in the case of dramatizations that show either the conduct, terrain, or maneuvers that a person should avoid, or the conduct that a person should observe, the video shall also unequivocally state the relevant safety message, either verbally by means of lines spoken by a screen character or narrator, in written form, or both.

(e) *Format*. The safety video shall be made available in at least one commonly used format, e.g., VHS or

DVD, and the purchaser shall be given the option at no cost of procuring the safety video in at least one format other than the one originally supplied with the ATV at the time of purchase.

(f) *Retention*. The manufacturer shall retain a copy of the safety video until five years after the model to which applies ceases to be in production. The manufacturer shall make the video available to CPSC upon request.

#### **1515.15 Instructional training.**

(a) *General*. The manufacturer shall provide to the purchaser at no charge a training course for the purchaser and each member of the purchaser's immediate family who meets or exceeds the minimum age recommendation for the ATV in question. The training course shall be provided in the form of one certificate valid for the purchaser and each qualifying member of the purchaser's immediate family redeemable at no cost for attendance at a training course meeting the requirements of this section.

(b) *Form of certificate*. Each certificate shall identify the VIN or PIN number and category of ATV (i.e. Junior, Pre-teen, or Teen) to which it pertains and shall have no expiration date. In addition the certificate shall include a toll-free telephone number or other readily useable means for the purchaser to contact the training organization to arrange for training.

(c) *Retailer responsibility*. The retailer shall provide the certificate to the purchaser at the time of purchase and shall obtain the purchaser's signature on the training availability form shown in Figure 4 of this part. The retailer shall retain the signed original of the training availability form and shall provide the purchaser and the manufacturer of the ATV with a copy.

(d) *Course content*. The training curriculum shall, at a minimum, address the following:

(1) The risks of ATV-related deaths and injuries (risk awareness).

(2) The role of safety equipment, including identifying suitable equipment, properly using equipment, and understanding why it is used.

(3) Rider responsibilities, including:

(i) Why children/youths should not ride adult ATVs;

(ii) Why all ATV users should take a hands-on safety training course;

(iii) Why one should never ride a youth ATV or non-tandem adult ATV with a passenger or as a passenger;

(iv) Why one should never drive an ATV on paved roads;

(v) Why one should always wear a helmet and other protective gear while on an ATV; and

(vi) Why one should never drive an ATV while under the influence of alcohol or drugs.

(4) Identifying displays and controls;

(5) Recognizing limitations, including inclines and rider abilities;

(6) Evaluating a variety of situations to predict proper course of action, including terrain obstacles and behavior of other riders;

(7) Demonstrating successful learning of riding skills, including:

(i) Starting and stopping;

(ii) negotiating turns, including gradual, sharp, and quick turns, weaving, and evasive maneuvers;

(iii) Stopping in a turn;

(iv) Emergency braking while straight and while turning.

(v) Negotiating full track and partial track obstacles.

(vi) Negotiating hills, including ascending, descending, traversing, and emergency situations; and

(vii) Combining skills together in a non-predictable manner (i.e. trail ride or free riding period with instructor supervision and critique).

(e) *Course structure*. The course shall include classroom, field, and trail activities.

(f) *Course duration*. The course duration shall be sufficient to cover the topics noted in this section and allow for each student to individually master the riding skills addressed in the course at the level commensurate with the terrain at the location of the course, and allow for written and riding skills tests.

(g) *Course accessibility*. The course shall be provided within a reasonable time from the date of purchase of the ATV and a reasonable distance from the place of purchase of the ATV.

#### **Subpart D—Certification/Testing/Recordkeeping**

##### **§ 1515.16 Certification.**

(a) At the location of the VIN or PIN number, the following statement shall be made: "The manufacturer certifies that this ATV complies with all applicable requirements of 16 CFR part 1515."

(b) The VIN or PIN number and compliance statement shall meet the durability requirements of Underwriters Laboratories Standard UL 969, fourth edition, October 3, 1995.

##### **§ 1515.17 Testing.**

Each manufacturer of ATVs subject to this part shall perform or cause to be performed testing sufficient to demonstrate on an objectively reasonable basis that each ATV produced by that manufacturer meets the performance requirements of §§ 1515.4 through 1515.9.



**§ 1515.18 Recordkeeping.**

(a) *Manufacturer requirements.* Each manufacturer (the importer is considered a manufacturer for purposes of this part) of ATVs subject to this part shall:

(1) Maintain records in English sufficient to demonstrate that each ATV produced by that manufacturer complies with the requirements of this part;

(2) Unless otherwise specified, retain records required by this part for a period of at least five (5) years after production

of the model of ATV to which the records pertain ceases;

(3) Maintain records required by this part at a location in the United States; and

(4) Make records required by this part available for inspection at the request of a duly authorized representative of the U.S. Consumer Product Safety Commission.

(b) *Retailer requirements.* Each retailer of ATVs subject to this part shall:

(1) Maintain the original of each age acknowledgment required by § 1515.12

and each acknowledgment of training availability required by § 1515.15 for a period of at least five (5) years after the date of purchase of the ATV to which the acknowledgments pertain;

(2) Maintain records required by this section at a location in the United States; and

(3) Make records required by this section available for inspection at the request of a properly authorized representative of the U.S. Consumer Product Safety Commission.

**BILLING CODE 6355-01-P**

Figure 1 to Part 1515

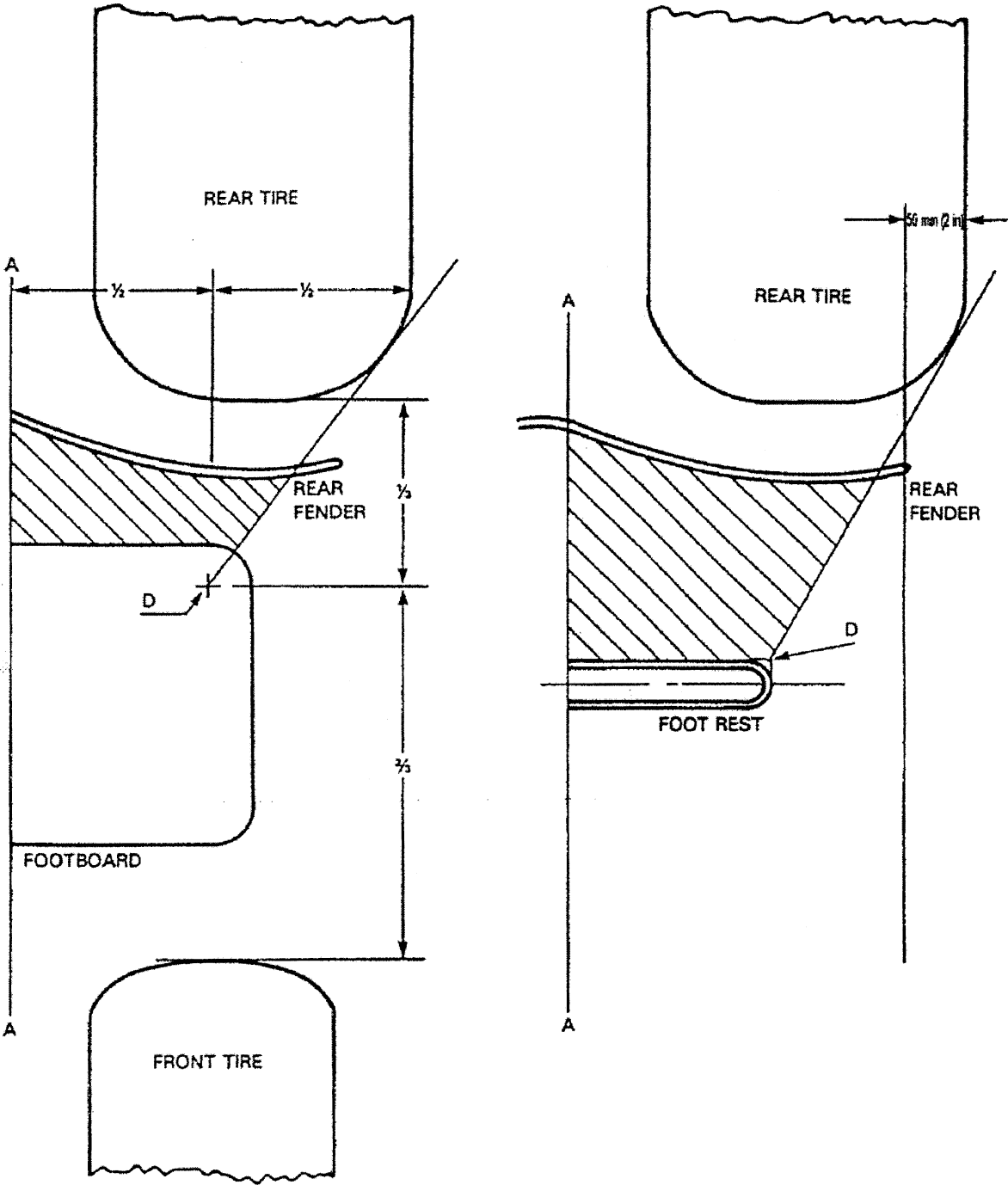


Figure 1  
Operator Foot Environment - Plan View

Figure 2 to Part 1515

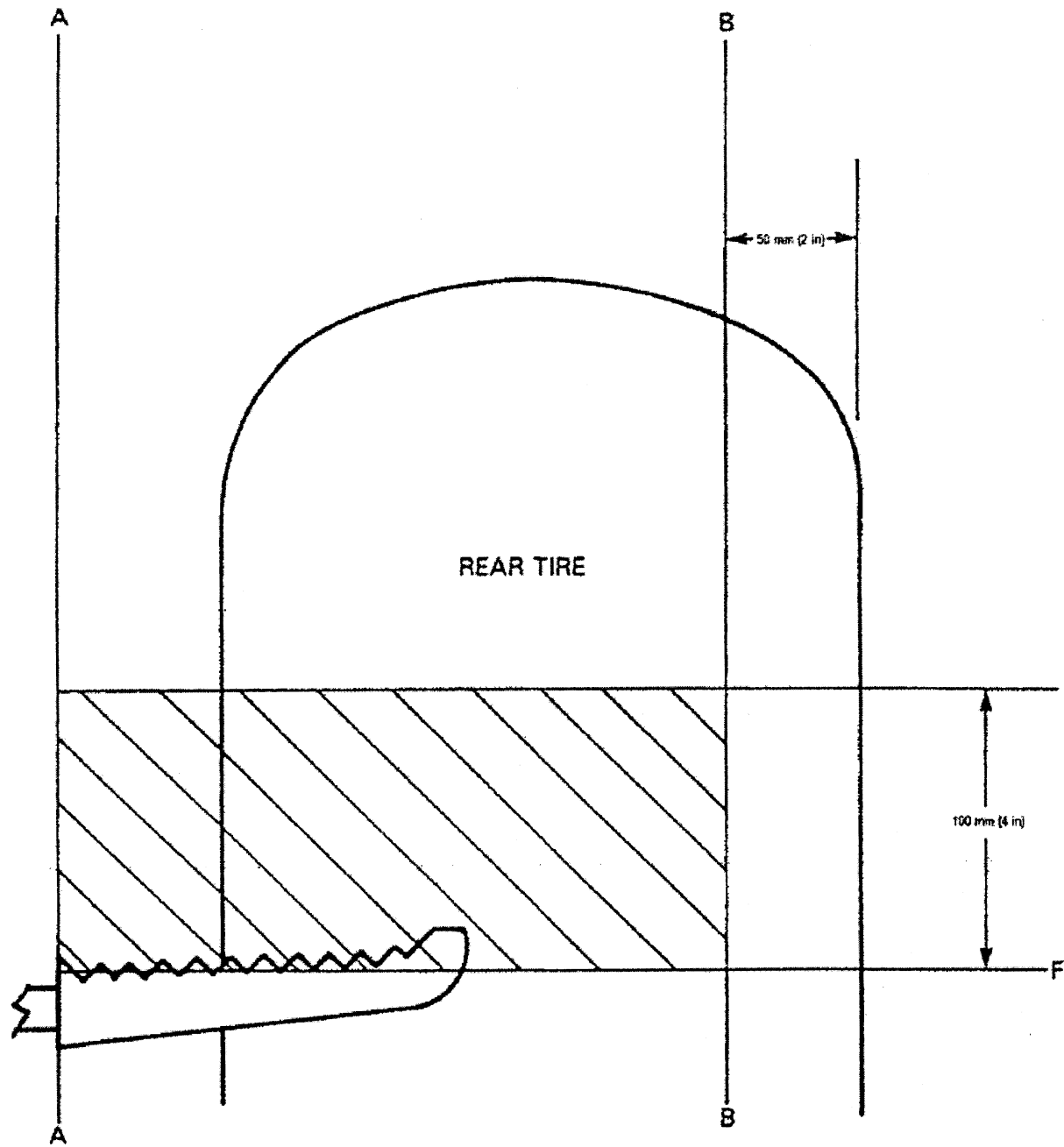


Figure 2  
Operator Foot Environment - Front View

Figure 3 to Part 1515

**The ATV you are considering is for youth drivers**

Not all children develop at the same rate. Kids and teens have immature judgment, tend to take risks, disregard consequences, and bow to peer pressure – even if they have been riding ATVs for a long time.

1. Select an ATV for your child or teen that fits him or her both physically and mentally.
2. Use the speed limiter to allow the child or teen to develop skills at a controlled pace.
3. **ALWAYS** supervise your child or teen.

**ATV models and their intended ages**

<b>ATV Model</b>	<b>Age (years)</b>	<b>Speed Range</b>
Junior	6+	10 mph or less
Pre-teen	9+	10-15 mph
Teen	12+	15-30 mph
Adult	16+	Not restricted

I have read the information above and understand that the ATV I am about to buy is a

junior / pre-teen / teen model  
(circle one)

intended for children ages \_\_\_\_\_ and older.

I also understand that other ATVs are available for children of different ages.

Purchaser Signature

Date (mm/dd/yyyy)

Full name (please print)

**TO BE COMPLETED BY DEALER**

This form must be kept on file for 5 years and may be periodically reviewed by officials of the U.S. Consumer Product Safety Commission to ensure that ATV purchasers have been given this information.

Vehicle VIN/PIN

**FIGURE 3 Age Acknowledgment form**

Figure 4 to Part 1515

**ATV Training**

ATVs are complex motor vehicles requiring skill to drive, and new ATV drivers<sup>1</sup> have the highest risk of injury. ATVs don't handle as you might expect - they don't behave like a dirt bike, motorcycle, or car.

The best way to become familiar with your ATV and learn about its special handling is to take an ATV training class.

**FREE** ATV training is available for you and your household when you purchase an ATV.

You wouldn't drive a car without having someone show you how to handle it. Come to a training class and learn how to drive your ATV!

I have read the information above and have been given a certificate that is good for one free training course for me and each member of my immediate household whom the ATV is age-appropriate.

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Purchaser Signature

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Date (mm/dd/yyyy)

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Full name (please print)**TO BE COMPLETED BY DEALER**

This form must be kept on file for 5 years and may be periodically reviewed by officials of the U.S. Consumer Product Safety Commission to ensure that ATV purchasers have been given this information.

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Vehicle VIN/PIN

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<sup>1</sup> Those with less than one year of experience compared to those with multiple years of experience.

**Figure 4 Training Acknowledgment Form**

Dated: August 1, 2006.

**Todd Stevenson,**

*Secretary, Consumer Product Safety Commission.*

[NOTE: The following appendix will not appear in the Code of Federal Regulations]

**List of Relevant Documents**

1. Briefing memorandum from Elizabeth Leland, Project Manager, Directorate for Economic Analysis, to the Commission, "All-Terrain Vehicles: CPSC Staff Proposals for Consideration" May 31, 2006.

2. Memorandum from Elizabeth W. Leland, Economic Analysis, CPSC, to Jacqueline Elder, Assistant Executive Director for Hazard Identification and Reduction, "October 14, 2005, All-Terrain Vehicle (ATV) Advance Notice of Proposed Rulemaking (ANPR): CPSC Staff Response to Comments," May 23, 2006.

3. Report from Robin L. Ingle, Directorate for Epidemiology, Division of Hazard Analysis, CPSC, "2004 Annual Report of ATV Deaths and Injuries," September 2005.

4. Memorandum from Terrance R. Karels, Directorate for Economic Analysis, CPSC, to Elizabeth W. Leland, EC, Project Manager,

ATVs, "Current Market Conditions—ATVs", May 23, 2006.

5. Memorandum from Caroleene Paul, Division of Mechanical Engineering, Directorate for Engineering Sciences, CPSC, to Elizabeth Leland, Project Manager, ATV Safety Review Team, "Draft Proposed Requirements for All-Terrain Vehicles (ATVs)," May 23, 2006.

6. Memorandum from Hope E. Johnson, Engineering Psychologist, Division of Human Factors, Directorate for Engineering Sciences, CPSC, to Elizabeth Leland, Project Manager ATV Team, "ATV Age Guidelines," May 23, 2006.

7. Memorandum from Sarah B. Brown, Engineering Psychologist, Division of Human Factors, Directorate for Engineering Sciences, CPSC, to Elizabeth Leland, Project Manager, ATV Project, "ATV Lighting," May 22, 2006.

8. Report from Robert Franklin, Directorate for Economic Analysis, CPSC, "All Terrain Vehicle Mandatory Standard: Preliminary Regulatory Analysis", May 2006.

9. Report from Robert Franklin, Directorate for Economic Analysis, CPSC, "All Terrain Vehicles: Initial Regulatory Flexibility Analysis," May 2006.

10. Memorandum from Timothy P. Smith, Engineering Psychologist, Division of Human Factors, Directorate for Engineering Sciences, CPSC, "Minimum requirements for ATV hang tags, product labels, and manual warnings," May 23, 2006.

11. Memorandum from Timothy P. Smith, Engineering Psychologist, Division of Human Factors, Directorate for Engineering Sciences, CPSC, "Recommended disclosure statement for adult-ATV purchasers," May 23, 2006.

12. Memorandum from Hope E. Johnson, Engineering Psychologist, Division of Human Factors, Directorate for Engineering Sciences, "ATV Training," May 17, 2006.

13. Memorandum from Robin L. Ingle, Health Statistician, Hazard Analysis Division, Directorate for Epidemiology, CPSC, "Explanation of Trained ATV Rider Risk Statement," April 11, 2006.

14. Memorandum from Tanya Topka, Compliance Officer, Recalls and Compliance Division, CPSC Office of Compliance, "Three-Wheeled All-Terrain Vehicles," May 22, 2006.

[FR Doc. 06-6703 Filed 8-9-06; 8:45 am]

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