

The new exemption from the nonimmigrant visa application processing (MRV) fee will provide a waiver of the fee for an applicant who is an immediate family member of a U.S. Government employee killed in the line of duty and who is traveling to attend the employee's funeral and/or burial. The new exemption will also be applicable to a family member visiting a U.S. Government employee who has been critically injured in the line of duty during the period of emergency treatment and convalescence. The exemption will extend to a surviving parent, sibling, spouse, son, or daughter of the deceased or injured U.S. Government employee. This exemption appropriately shifts the cost of visa processing in such cases to the general public because it is in the national interest to assist close non-U.S. citizen relatives of U.S. Government employees killed or critically injured in the line of duty traveling to the United States for funeral and/or burial events or for visitation during emergency treatment and convalescence.

**Regulatory Findings**

*Administrative Procedure Act*

The Department is publishing this rule as an interim rule effective upon publication under the good cause authorities of 5 U.S.C. 553(b)(B) and (d)(3) and the exemption provision of 5 U.S.C. 553 (d)(1).

*Regulatory Flexibility Act*

The Department of State, in accordance with the Regulatory Flexibility Act (5 U.S.C. 605(b)), has reviewed this regulation and, by approving it, certifies that this rule will not have a significant economic impact on a substantial number of small entities as defined in 5 U.S.C. 601(6). Adding the exemption will have no economic impact on such entities.

*Unfunded Mandates Reform Act of 1995*

This rule will not result in the expenditure by State, local, and tribal governments, in the aggregate, or by the private sector, of \$100 million or more in any year and it will not significantly or uniquely affect small governments. Therefore, no actions were deemed necessary under the provisions of the Unfunded Mandates Reform Act of 1995, 2 U.S.C. 1501 *et seq.*

*Small Business Regulatory Enforcement Fairness Act of 1996*

This rule is not a major rule as defined by 5 U.S.C. 801–808, which constitute the Congressional Review portion (Subtitle E) of the Small Business Regulatory Enforcement Act of

1996. This rule will not result in an annual effect on the economy of \$100 million or more; a major increase in costs or prices; or significant adverse effects on competition, employment, investment, productivity, innovation, or on the ability of the United States-based companies to compete with foreign-based companies in domestic and export markets.

*Executive Order 12866*

The Department of State does not consider this rule to be a “significant regulatory action” under Executive Order 12866, section 3(f), Regulatory Planning and Review. In addition, the Department is exempt from Executive Order 12866 except to the extent that it is promulgating regulations in conjunction with a domestic agency that are significant regulatory actions. The Department has nevertheless reviewed the regulation to ensure its consistency with the regulatory philosophy and principles set forth in that Executive Order.

*Executive Order 12988: Civil Justice Reform*

The Department has reviewed this regulation in light of sections 3(a) and 3(b)(2) of Executive Order 12988 to eliminate ambiguity, minimize litigation, establish clear legal standards, and reduce burden.

*Executive Order 13132*

This regulation will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with section 6 of Executive Order 13132, it is determined that this rule does not have sufficient federalism implications to warrant the preparation of a federalism summary impact statement.

*Paperwork Reduction Act*

This rule does not impose any new reporting or record-keeping requirements subject to the Paperwork Reduction Act, 44 U.S.C. Chapter 35.

**List of Subjects in 22 CFR Part 22**

Consular services, Fees, Schedule of fees for Consular Services, Passports, Visas.

■ For the reasons set forth in the preamble, part 22 of title 22 of the Code of Federal Regulations is amended as follows:

**PART 22—SCHEDULE OF FEES FOR CONSULAR SERVICES— DEPARTMENT OF STATE AND FOREIGN SERVICE**

■ 1. The authority citation for part 22 continues to read as follows:

**Authority:** 8 U.S.C. 1153 note, 1351, 1351 note; 10 U.S.C. 2602(c); 22 U.S.C. 214, 2504(a), 4201, 4206, 4215, 4219; 31 U.S.C. 9701; Pub. L. 105–277, 112 Stat. 2681 *et seq.*; E.O. 10718, 22 FR 4632, 3 CFR, 1954–1958 Comp., p. 382; E.O. 11295, 31 FR 10603, 3 CFR, 1966–1970 Comp., p. 570.

■ 2. Section 22.1 is amended in item 22 of the table by adding paragraph (g) to read as follows:

**§ 22.1 Schedule of fees.**

\* \* \* \* \*

*Schedule of Fees for Consular Services*

Item No.	Fee
* * * * *	* * * * *

■ 22. \* \* \*

(g) A parent, sibling, spouse, or child of a U.S. Government employee killed in the line of duty who is traveling to attend the employee's funeral and/or burial; or a parent, sibling, spouse, son, or daughter of a U.S. Government employee critically injured in the line of duty for visitation during emergency treatment and convalescence. [24–MRV EXEMPT] \* \* \* NO FEE

\* \* \* \* \*

August 23, 2004.  
**Grant Green, Jr.,**  
*Under Secretary of State for Management, Department of State.*  
 [FR Doc. 04–20043 Filed 9–1–04; 8:45 am]  
**BILLING CODE 4710–06–P**

**DEPARTMENT OF THE TREASURY**

**Fiscal Service**

**31 CFR Part 356**

[Department of the Treasury Circular, Public Debt Series No. 1–93]

**Sale and Issue of Marketable Treasury Bills, Notes, and Bonds: Six-Decimal Pricing, Negative-Yield Bidding, Zero-Filling, and Noncompetitive Bidding and Award Limit Increase**

**AGENCY:** Bureau of the Public Debt, Fiscal Service, Department of the Treasury.

**ACTION:** Final rule.

**SUMMARY:** The Department of the Treasury (“Treasury,” “We,” or “Us”) is issuing in final form an amendment to its regulations (Uniform Offering Circular for the Sale and Issue of

Marketable Book-Entry Treasury Bills, Notes, and Bonds). This amendment implements four policy changes and makes conforming changes to the formulas. First, this amendment changes the pricing convention for all marketable Treasury securities auctions from three decimal places to six decimal places. Second, this amendment allows for negative-yield bidding in Treasury inflation-protected securities (TIPS) auctions to accommodate circumstances in which the desired real yield is a negative number. Third, this amendment provides for “zero-filling” of competitive auction bids that are not expressed out to the required three decimals by modifying the bids to a three-decimal rate or yield that is mathematically equivalent to the rate or yield submitted. Finally, this amendment raises the noncompetitive bidding and award limit for all Treasury bill auctions from \$1 million to \$5 million, which is the current noncompetitive limit for all Treasury note and bond auctions.

**EFFECTIVE DATE:** September 20, 2004.

**ADDRESSES:** You may download this final rule from the Bureau of the Public Debt’s Web site at <https://treasurydirect.gov/laws-and-regulations/auction-regulations-uoc/> or from the Electronic Code of Federal Regulations (e-CFR) Web site at <https://www.ecfr.gov/current/title-22>. It is also available for public inspection and copying at the Treasury Department Library, Room 1428, Main Treasury Building, 1500 Pennsylvania Avenue, NW., Washington, DC 20220. To visit the library, call (202) 622-0990 for an appointment.

**FOR FURTHER INFORMATION CONTACT:** Lori Santamarena (Executive Director), Chuck Andreatta or Lee Grandy (Associate Directors), Bureau of the Public Debt, Government Securities Regulations Staff, (202) 504-3632, or e-mail us at [govsecreg@bpd.treas.gov](mailto:govsecreg@bpd.treas.gov).

**SUPPLEMENTARY INFORMATION:** The Uniform Offering Circular, in conjunction with the offering announcement for each auction, provides the terms and conditions for the sale and issuance in an auction to the public of marketable Treasury bills, notes and bonds.<sup>1</sup> In this notice, we describe the current rules and why we are changing them. Then we describe the final amendment to the Uniform Offering Circular.

<sup>1</sup> The Uniform Offering Circular was published as a final rule on January 5, 1993 (58 FR 412). The circular, as amended, is codified at 31 CFR part 356.

## Background and Analysis

### A. Six-Decimal Pricing

It is a longstanding convention in marketable Treasury securities auctions that the prices at which we award securities to successful bidders are expressed in terms of price per 100 of par value to three decimal places, for example, 99.170. One result is that auctions of Treasury bills of less than 72 days currently do not result in price uniqueness for each discount rate bid.<sup>2</sup> In other words, for these short-term Treasury bills, there may be multiple discount rates bid that result in the same three-decimal price. Furthermore, for extremely short-term Treasury bills, rounding the price to three decimals can result in the investment rate (the equivalent coupon-issue yield) being inaccurate. Treasury provides both the discount rate and the investment rate on its Treasury bill auction results announcements. Because the discount rate is based on a par value of \$100, and the investment rate is based on the actual price paid per \$100 of par, the discount rate should always be less than the investment rate. (The formula for calculating a purchase price from a discount rate is  $P = 100(1 - dr/360)$ , where  $d$  = the discount rate, in decimals,  $r$  = the number of days to maturity, and  $P$  = price per hundred (dollars). The formula for calculating an investment rate from a purchase price is

$$i = \left[ \frac{100 - P}{P} \times \frac{y}{r} \right]$$

where  $i$  = the investment rate, in decimals;  $P$  = price per hundred (dollars);  $r$  = number of days to maturity; and  $y$  = number of days in the year following the issue date (normally 365). See Section V of Appendix B.) However, this relationship does not always hold under our current three-decimal conventions.

An example of the anomalies that can occur in very short-term Treasury bills occurred in Treasury’s auction of four-day cash management bills on September 10, 2003. This bill was awarded at a discount rate of 0.940 percent and a three-decimal price of 99.990. Under the current bidding convention, 18 different discount rates could have been bid in the auction (from 0.860 percent to 0.945 percent), all having a corresponding rounded price of 99.990. In addition, the

<sup>2</sup> Price uniqueness occurs when each separate discount rate produces a different (unique) price, *i.e.*, no two discount rates result in the same price. Price uniqueness is a function of the minimum bid increment allowed in auctions, price rounding conventions, and the number of days to maturity.

investment rate for the auction was 0.915 percent, which is less than the awarded discount rate of 0.940 percent.

In the February 2004 Quarterly Refunding Statement, Treasury announced its intention to compute the price of awards in auctions to six decimal places per hundred.<sup>3-4</sup> In an effort to make the transition as smooth as possible, the six-decimal pricing calculation formulas were made available at the Bureau of the Public Debt Website on March 4, 2004.<sup>5</sup> In the May 2004 Quarterly Refunding Statement, Treasury reiterated its intention to change to the six-decimal pricing convention in the second half of the year.<sup>6</sup>

Accordingly, to ensure price uniqueness for all discount rates or yields bid in all marketable Treasury securities auctions, we are amending the Uniform Offering Circular to calculate prices for awarded securities to six decimals per \$100 of par value. Specifically, § 356.20(c) is being changed to state that price calculations for awarded securities will be rounded to six decimal places per hundred (rather than the current three decimals), for example, 99.954321. Calculating prices to six decimals will also make Treasury’s pricing practice consistent with secondary market practices. As of the effective date of this amendment, this change will apply to all Treasury bill, note, and bond auctions.

### B. Negative-Yield Bidding

Treasury’s current auction regulations do not expressly permit bidders in TIPS auctions to submit negative-yield bids. Since it is possible that under certain market conditions the yield desired by a competitive bidder in a TIPS auction would be a negative number, this amendment modifies the regulations to allow Treasury to accept negative-yield bids in TIPS auctions.

The introduction of 5-year TIPS<sup>7</sup> has increased the possibility that a Treasury TIPS auction could result in a negative-yield TIPS. However, a negative TIPS interest (coupon) rate is neither practical nor desirable. Therefore, if a TIPS auction produces a negative or zero yield, this amendment clarifies that

<sup>3-4</sup> Treasury February Quarterly Refunding Statement, February 4, 2004. Treasury stated its intention to implement six-decimal pricing later in the year.

<sup>5</sup> See Public Debt News Release on March 4, 2004. The formulas are available at <https://www.treasurydirect.gov/instit/annceresult/press/preanre/2004/ofcalc6decbill.pdf>.

<sup>6</sup> Treasury May Quarterly Refunding Statement, May 5, 2004.

<sup>7</sup> Treasury May 2004 Quarterly Refunding Statement, May 5, 2004. Treasury stated it would begin offering 5-year TIPS, with the first such offering to be conducted in October 2004.

we will set the interest rate at zero and calculate the award price accordingly. Investors will receive the inflation-adjusted par amount at maturity. Therefore, § 356.12(c)(1)(iii) is being modified to state that the real-yield bid submitted for a TIPS auction may be a positive number, a negative number, or zero. Also, § 356.20(b) is being modified to state that if a TIPS auction produces a negative or zero yield, the interest rate will be set at zero, with successful bidders' award prices calculated accordingly.

### C. Zero-Filling

When evaluating bids submitted in Treasury auctions, we currently reject any bid that does not adhere to the established three-decimal bidding format. Rejecting such bids reduces the number of competitive bids in Treasury auctions, which is counter to our objective of ensuring broad participation in Treasury auctions. Therefore, we have decided to accept competitive bids that are not expressed out to three decimals at a three-decimal rate or yield that is mathematically equivalent to the rate or yield that was submitted. For example, a bid of 5.32 will be treated as a bid of 5.320, a bid of 4.1 will be treated as a bid of 4.100, and a bid of 3 will be treated as a bid of 3.000. Accordingly, §§ 356.12(c)(1)(i),(ii), and (iii) are being modified to state that any missing decimals in a competitive bid will be treated as zero.

### D. Noncompetitive Bidding and Award Limit Increase for Treasury Bill Auctions

In an October 25, 1991 Treasury News press release, Treasury announced it was increasing the maximum noncompetitive award in note and bond auctions from \$1 million to \$5 million, effective November 5, 1991.<sup>8</sup> The change was made to broaden participation in Treasury auctions, particularly to encourage bidding by smaller investors. The noncompetitive bid and award limit for Treasury bills remained at \$1 million. In an effort to make the maximum noncompetitive bid and award limit consistent for all marketable Treasury securities auctions, and to increase participation in Treasury auctions, Treasury is raising the noncompetitive bidding and award limit for Treasury bill auctions from \$1 million to \$5 million.

Accordingly, § 356.12(b)(1) is being modified to provide generally that the maximum amount that can be bid noncompetitively in any Treasury

securities auction is \$5 million.<sup>9</sup> Also, § 356.22(a) is being modified to state that the maximum noncompetitive award to any bidder will be \$5 million, which will apply to all Treasury auctions.

### E. Formulas and Effective Date

Technical changes are being made to the formulas in Appendix B, Sections II, III, and V to conform with the changes we are making in the pricing conventions. To provide market participants and Treasury sufficient time to modify their settlement systems and to make any other operational changes that may be needed, we are providing a delayed effective date of September 20, 2004.

### Procedural Requirements

It has been determined that this final rule is not a significant regulatory action for purposes of Executive Order 12866. The notice and public procedures requirements of the Administrative Procedure Act do not apply.

Since no notice of proposed rulemaking is required, the provisions of the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*) do not apply.

The Office of Management and Budget has approved the collections of information in this final rule amendment in accordance with the Paperwork Reduction Act of 1995. This final rule is technical in nature and imposes no additional burdens on auction bidders.

### List of Subjects in 31 CFR Part 356

Bonds, Federal Reserve System, Government Securities, Securities.

■ For the reasons stated in the preamble, 31 CFR part 356 is amended as follows:

#### **PART 356—SALE AND ISSUE OF MARKETABLE BOOK-ENTRY TREASURY BILLS, NOTES AND BONDS (DEPARTMENT OF THE TREASURY CIRCULAR, PUBLIC DEBT SERIES NO. 1-93)**

■ 1. The authority citation for part 356 continues to read as follows:

**Authority:** 5 U.S.C. 301; 31 U.S.C. 3102 *et seq.*; 12 U.S.C. 391.

■ 2. Section 356.12 is amended by revising paragraphs (b)(1) and (c)(1)(i),(ii), and (iii) to read as follows:

#### **§ 356.12 What are the different types of bids and do they have specific requirements or restrictions?**

\* \* \* \* \*

<sup>9</sup> Paragraph 356.12(b)(1) also states that the maximum bid limitation does not apply if a bidder is bidding solely through a TreasuryDirect reinvestment request.

(b) *Noncompetitive bids.* (1) *Maximum bid.* You may not bid noncompetitively for more than \$5 million. The maximum bid limitation does not apply if you are bidding solely through a TreasuryDirect reinvestment request. A request for reinvestment of securities maturing in TreasuryDirect is a noncompetitive bid.

\* \* \* \* \*

(c) *Competitive bids.*—(1) *Bid format* (i) *Treasury bills.* A competitive bid must show the discount rate bid, expressed with three decimals in .005 increments. The third decimal must be either a zero or a five, for example, 5.320 or 5.325. We will treat any missing decimals as zero, for example, a bid of 5.32 will be treated as 5.320.

(ii) *Treasury fixed-principal securities.* A competitive bid must show the yield bid, expressed with three decimals, for example, 4.170. We will treat any missing decimals as zero, for example, a bid of 4.1 will be treated as 4.100.

(iii) *Treasury inflation-protected securities.* A competitive bid must show the real yield bid, expressed with three decimals, for example, 3.070. We will treat any missing decimals as zero, for example, a bid of 3 will be treated as 3.000. The real yield may be a positive number, a negative number, or zero.

\* \* \* \* \*

■ 3. Section 356.20 is amended by revising paragraphs (b) and (c) to read as follows:

#### **§ 356.20 How does the Treasury determine auction awards?**

\* \* \* \* \*

(b) *Determining the interest rate for new note and bond issues.* We set the interest rate at a 1/8 of one percent increment. If a Treasury inflation-protected securities auction results in a negative or zero yield, the interest rate will be set at zero, and successful bidders' award prices will be calculated accordingly (See Appendix B to this part for formulas).

(1) *Single-price auctions.* The interest rate we establish produces the price closest to, but not above, par when evaluated at the yield of awards to successful competitive bidders.

(2) *Multiple-price auctions.* The interest rate we establish produces the price closest to, but not above, par when evaluated at the weighted-average yield of awards to successful competitive bidders.

(c) *Determining purchase prices for awarded securities.* We round price calculations to six decimal places on the basis of price per hundred, for example, 99.954321 (See Appendix B to this part).

<sup>8</sup> Treasury News press release dated October 21, 1991.

(1) *Single-price auctions.* We award securities to both noncompetitive and competitive bidders at the price equivalent to the highest accepted discount rate or yield at which bids were accepted. For inflation-protected securities, the price for awarded securities is the price equivalent to the highest accepted real yield.

(2) *Multiple-price auctions—(i) Competitive bids.* We award securities to competitive bidders at the price equivalent to each yield or discount rate at which their bids were accepted.

(ii) *Noncompetitive bids.* We award securities to noncompetitive bidders at the price equivalent to the weighted average yield or discount rate of accepted competitive bids.

■ 4. Section 356.22 is amended by revising paragraph (a) to read as follows:

**§ 356.22 Does the Treasury have any limitations on auction awards?**

(a) *Awards to noncompetitive bidders.* The maximum award to any bidder is \$5 million. This limit does not apply to bidders bidding solely through TreasuryDirect reinvestment requests.

\* \* \* \* \*

■ 5. Appendix B to part 356, sections II and III are revised to read as follows:

**Appendix B to Part 356—Formulas and Tables**

\* \* \* \* \*

**II. Formulas for Conversion of Fixed-Principal Security Yields to Equivalent Prices**

*Definitions*

P = price per 100 (dollars), rounded to six places, using normal rounding procedures.

C = the regular annual interest per \$100, payable semiannually, e.g., 6.125 (the decimal equivalent of a 6 1/8 interest rate).

i = nominal annual rate of return or yield to maturity, based on semiannual interest payments and expressed in decimals, e.g., .0719.

n = number of full semiannual periods from the issue date to maturity, except that, if the issue date is a coupon frequency date, n will be one less than the number of full semiannual periods remaining to maturity. Coupon frequency dates are the two semiannual dates based on the maturity date of each note or bond issue. For example, a security maturing on November 15, 2015, would have coupon frequency dates of May 15 and November 15.

r = (1) number of days from the issue date to the first interest payment (regular or short first payment period), or (2) number of days in fractional portion (or "initial short period") of long first payment period.

s = (1) number of days in the full semiannual period ending on the first interest payment date (regular or short first

payment period), or (2) number of days in the full semiannual period in which the fractional portion of a long first payment period falls, ending at the onset of the regular portion of the first interest payment.

$v^n = 1 / [1 + (i/2)]^n$  = present value of 1 due at the end of n periods.

$a_n = (1 - v^n) / (i/2) = v + v^2 + v^3 + \dots + v^n$  = present value of 1 per period for n periods.

*Special Case:* If  $i = 0$ , then  $a_n = n$ . Furthermore, when  $i = 0$ ,  $a_n$  cannot be calculated using the formula:  $(1 - v^n)/(i/2)$ . In the special case where  $i = 0$ ,  $a_n$  must be calculated as the summation of the individual present values (i.e.,  $v + v^2 + v^3 + \dots + v^n$ ). Using the summation method will always confirm that  $a_n = n$  when  $i = 0$ .

A = accrued interest.

*A. For fixed-principal securities with a regular first interest payment period:*

Formula:

$$P[1 + (r/s)(i/2)] = (C/2)(r/s) + (C/2)a_n + 100v^n.$$

Example:

For an 8 3/4% 30-year bond issued May 15, 1990, due May 15, 2020, with interest payments on November 15 and May 15, solve for the price per 100 (P) at a yield of 8.84%.

Definitions:

C = 8.75.

i = .0884.

r = 184 (May 15 to November 15, 1990).

s = 184 (May 15 to November 15, 1990).

n = 59 (There are 60 full semiannual periods, but n is reduced by 1 because the issue date is a coupon frequency date.)

$v^n = 1 / [(1 + .0884 / 2)]^{59}$ , or .0779403508.

$a_n = (1 - .0779403508) / .0442$ , or 20.8610780353.

Resolution:

$$P[1 + (r/s)(i/2)] = (C/2)(r/s) + (C/2)a_n + 100v^n$$

or

$$P[1 + (184/184)(.0884/2)] = (8.75/2)(184/184) + (8.75/2)(20.8610780353) + 100(.0779403508).$$

$$(1) P[1 + .0442] = 4.375 + 91.2672164044 + 7.7940350840.$$

$$(2) P[1.0442] = 103.4362514884.$$

$$(3) P = 103.4362514884 / 1.0442.$$

$$(4) P = 99.057893.$$

*B. For fixed-principal securities with a short first interest payment period:*

Formula:

$$P[1 + (r/s)(i/2)] = (C/2)(r/s) + (C/2)a_n + 100v^n.$$

Example:

For an 8 1/2% 2-year note issued April 2, 1990, due March 31, 1992, with interest payments on September 30 and March 31, solve for the price per 100 (P) at a yield of 8.59%.

Definitions:

C = 8.50.

i = .0859.

n = 3.

r = 181 (April 2 to September 30, 1990).

s = 183 (March 31 to September 30, 1990).

$v^n = 1 / [(1 + .0859 / 2)]^3$ , or .8814740565.

$a_n = (1 - .8814740565) / .04295$ , or 2.7596261590.

Resolution:

$$P[1 + (r/s)(i/2)] = (C/2)(r/s) + (C/2)a_n + 100v^n$$

or

$$P[1 + (181/183)(.0859/2)] = (8.50/2)(181/183) + (8.50/2)(2.7596261590) + 100(.8814740565).$$

$$(1) P[1 + .042480601] = 4.2035519126 + 11.7284111757 + 88.14740565.$$

$$(2) P[1.042480601] = 104.0793687354.$$

$$(3) P = 104.0793687354 / 1.042480601.$$

$$(4) P = 99.838183.$$

*C. For fixed-principal securities with a long first interest payment period:*

Formula:

$$P[1 + (r/s)(i/2)] = [(C/2)(r/s)]v + (C/2)a_n + 100v^n.$$

Example:

For an 8 1/2% 5-year 2-month note issued March 1, 1990, due May 15, 1995, with interest payments on November 15 and May 15 (first payment on November 15, 1990), solve for the price per 100 (P) at a yield of 8.53%.

Definitions:

C = 8.50.

i = .0853.

n = 10.

r = 75 (March 1 to May 15, 1990, which is the fractional portion of the first interest payment).

s = 181 (November 15, 1989, to May 15, 1990).

$v = 1 / (1 + .0853/2)$ , or .9590946147.

$v^n = 1 / (1 + .0853/2)^{10}$ , or .6585890783.

$a_n = (1 - .658589) / .04265$ , or 8.0049454082.

Resolution:

$$P[1 + (r/s)(i/2)] = [(C/2)(r/s)]v + (C/2)a_n + 100v^n$$

or

$$P[1 + (75/181)(.0853/2)] = [(8.50/2)(75/181)].9590946147 + (8.50/2)(8.0049454082) + 100(.6585890783).$$

$$(1) P[1 + .017672652] = 1.6890133062 + 34.0210179850 + 65.8589078339.$$

$$(2) P[1.017672652] = 101.5689391251.$$

$$(3) P = 101.5689391251 / 1.017672652.$$

$$(4) P = 99.805118.$$

*D. (1) For fixed-principal securities reopened during a regular interest period where the purchase price includes predetermined accrued interest.*

*(2) For new fixed-principal securities accruing interest from the coupon frequency date immediately preceding the issue date, with the interest rate established in the auction being used to determine the accrued interest payable on the issue date.*

Formula:

$$(P + A)[1 + (r/s)(i/2)] = C/2 + (C/2)a_n + 100v^n.$$

Where:

$$A = [(s - r)/s](C/2).$$

Example:

For a 9 1/2% 10-year note with interest accruing from November 15, 1985, issued November 29, 1985, due November 15, 1995, and interest payments on May 15 and November 15, solve for the price per 100 (P) at a yield of 9.54%. Accrued interest is from November 15 to November 29 (14 days).

Definitions:

C = 9.50.

i = .0954.

n = 19.

$r = 167$  (November 29, 1985, to May 15, 1986).

$s = 181$  (November 15, 1985, to May 15, 1986).

$v^n = 1 / [(1 + .0954/2)]^{19}$ , or .4125703996.

$a_n = (1 - .4125703996) / .0477$ , or 12.3150859630.

$A = [(181 - 167) / 181](9.50/2)$ , or .367403.

Resolution:

$(P+A)[1 + (r/s)(i/2)] = C/2 + (C/2)a_n + 100v^n$   
or

$(P + .367403)[1 + (167/181)(.0954/2)] = (9.50/2) + (9.50/2)(12.3150859630) + 100(.4125703996)$ .

(1)  $(P + .367403)[1 + .044010497] = 4.75 + 58.4966583243 + 41.25703996$ .

(2)  $(P + .367403)[1.044010497] = 104.5036982843$ .

(3)  $(P + .367403) = 104.5036982843 / 1.044010497$ .

(4)  $(P + .367403) = 100.098321$ .

(5)  $P = 100.098321 - .367403$ .

(6)  $P = 99.730918$ .

*E. For fixed-principal securities reopened during the regular portion of a long first payment period:*

Formula:

$(P + A)[1 + (r/s)(i/2)] = (r's'')(C/2) + C/2 + (C/2)a_n + 100v^n$ .

Where:

$A = AI' + AI$ ,

$AI' = (r's'')(C/2)$ ,

$AI = [(s - r) / s](C/2)$ , and

$r =$  number of days from the reopening date to the first interest payment date,

$s =$  number of days in the semiannual period for the regular portion of the first interest payment period,

$r' =$  number of days in the fractional portion (or "initial short period") of the first interest payment period,

$s'' =$  number of days in the semiannual period ending with the commencement date of the regular portion of the first interest payment period.

Example:

A 10 $\frac{3}{4}$ % 19-year 9-month bond due August 15, 2005, is issued on July 2, 1985, and reopened on November 4, 1985, with interest payments on February 15 and August 15 (first payment on February 15, 1986), solve for the price per 100 (P) at a yield of 10.47%. Accrued interest is calculated from July 2 to November 4.

Definitions:

$C = 10.75$ .

$i = .1047$ .

$n = 39$ .

$r = 103$  (November 4, 1985, to February 15, 1986).

$s = 184$  (August 15, 1985, to February 15, 1986).

$r' = 44$  (July 2 to August 15, 1985).

$s'' = 181$  (February 15 to August 15, 1985).

$v^n = 1 / [(1 + .1047/2)]^{39}$ , or .1366947986.

$a_n = (1 - .1366947986) / .05235$ , or 16.4910258142.

$AI' = (44 / 181)(10.75 / 2)$ , or 1.306630.

$AI = [(184 - 103) / 184](10.75 / 2)$ , or 2.366168.

$A = AI' + AI$ , or 3.672798.

Resolution:

$(P + A)[1 + (r/s)(i/2)] = (r's'')(C/2) + C/2 + (C/2)a_n + 100v^n$  or

$(P + 3.672798)[1 + (103/184)(.1047/2)] = (44/181)(10.75/2) + 10.75/2 + (10.75/2)(16.4910258142) + 100(.1366947986)$ .

(1)  $(P + 3.672798)[1 + .02930462] = 1.3066298343 + 5.375 + 88.6392637512 + 13.6694798628$ .

(2)  $(P + 3.672798)[1.02930462] = 108.9903734482$ .

(3)  $(P + 3.672798) = 108.9903734482 / 1.02930462$ .

(4)  $(P + 3.672798) = 105.887384$ .

(5)  $P = 105.887384 - 3.672798$ .

(6)  $P = 102.214586$ .

*F. For fixed-principal securities reopened during a short first payment period:*

Formula:

$(P + A)[1 + (r/s)(i/2)] = (r's)(C/2) + (C/2)a_n + 100v^n$ .

Where:

$A = [(r' - r)/s](C/2)$  and

$r' =$  number of days from the original issue date to the first interest payment date.

Example:

For a 10 $\frac{1}{2}$ % 8-year note due May 15, 1991, originally issued on May 16, 1983, and reopened on August 15, 1983, with interest payments on November 15 and May 15 (first payment on November 15, 1983), solve for the price per 100 (P) at a yield of 10.53%. Accrued interest is calculated from May 16 to August 15.

Definitions:

$C = 10.50$ .

$i = .1053$ .

$n = 15$ .

$r = 92$  (August 15, 1983, to November 15, 1983).

$s = 184$  (May 15, 1983, to November 15, 1983).

$r' = 183$  (May 16, 1983, to November 15, 1983).

$v^n = 1 / [(1 + .1053/2)]^{15}$ , or .4631696332.

$a_n = (1 - .4631696332) / .05265$ , or 10.1962082956.

$A = [(183 - 92) / 184](10.50 / 2)$ , or 2.596467.

Resolution:

$(P + A)[1 + (r/s)(i/2)] = (r's)(C/2) + (C/2)a_n + 100v^n$  or

$(P + 2.596467)[1 + (92/184)(.1053/2)] = (183/184)(10.50/2) + (10.50/2)(10.1962082956) + 100(.4631696332)$ .

(1)  $(P + 2.596467)[1 + .026325] = 5.2214673913 + 53.5300935520 + 46.31696332$ .

(2)  $(P + 2.596467)[1.026325] = 105.0685242633$ .

(3)  $(P + 2.596467) = 105.0685242633 / 1.026325$ .

(4)  $(P + 2.596467) = 102.373541$ .

(5)  $P = 102.373541 - 2.596467$ .

(6)  $P = 99.777074$ .

*G. For fixed-principal securities reopened during the fractional portion (initial short period) of a long first payment period:*

Formula:

$(P + A)[1 + (r/s)(i/2)] = [(r'/s)(C/2)]v + (C/2)a_n + 100v^n$ .

Where:

$A = [(r' - r)/s](C/2)$ , and

$r =$  number of days from the reopening date to the end of the short period.

$r' =$  number of days in the short period.

$s =$  number of days in the semiannual period ending with the end of the short period.

Example:

For a 9 $\frac{3}{4}$ % 6-year 2-month note due December 15, 1994, originally issued on October 15, 1988, and reopened on November 15, 1988, with interest payments on June 15 and December 15 (first payment on June 15, 1989), solve for the price per 100 (P) at a yield of 9.79%. Accrued interest is calculated from October 15 to November 15.

Definitions:

$C = 9.75$ .

$i = .0979$ .

$n = 12$ .

$r = 30$  (November 15, 1988, to December 15, 1988).

$s = 183$  (June 15, 1988, to December 15, 1988).

$r' = 61$  (October 15, 1988, to December 15, 1988).

$v = 1 / (1 + .0979/2)$ , or .9533342867.

$v^n = [1 / (1 + .0979/2)]^{12}$ , or .5635631040.

$a_n = (1 - .5635631040) / .04895$ , or 8.9159733613.

$A = [(61 - 30) / 183](9.75/2)$ , or .825820.

Resolution:

$(P + A)[1 + (r/s)(i/2)] = [(r'/s)(C/2)]v + (C/2)a_n + 100v^n$  or

$(P + .825820)[1 + (30/183)(.0979/2)] = [(61/183)(9.75/2)](.9533342867) + (9.75/2)(8.9159733613) + 100(.5635631040)$ .

(1)  $(P + .825820)[1 + .00802459] = 1.549168216 + 43.4653701362 + 56.35631040$ .

(2)  $(P + .825820)[1.00802459] = 101.3708487520$ .

(3)  $(P + .825820) = 101.3708487520 / 1.00802459$ .

(4)  $(P + .825820) = 100.563865$ .

(5)  $P = 100.563865 - .825820$ .

(6)  $P = 99.738045$ .

### III. Formulas for Conversion of Inflation-Indexed Security Yields to Equivalent Prices

Definitions

$P =$  unadjusted or real price per 100 (dollars).  
 $P_{adj} =$  inflation adjusted price;  $P \times$  Index Ratio<sub>Date</sub>.

$A =$  unadjusted accrued interest per \$100 original principal.

$A_{adj} =$  inflation adjusted accrued interest;  $A \times$  Index Ratio<sub>Date</sub>.

$SA =$  settlement amount including accrued interest in current dollars per \$100 original principal;  $P_{adj} + A_{adj}$ .  
 $r =$  days from settlement date to next coupon date.

$s =$  days in current semiannual period.

$i =$  real yield, expressed in decimals (e.g., 0.0325).

$C =$  real annual coupon, payable semiannually, in terms of real dollars paid on \$100 initial, or real, principal of the security.

$n =$  number of full semiannual periods from issue date to maturity date, except that, if the issue date is a coupon frequency date,  $n$  will be one less than the number of full semiannual periods remaining until maturity. Coupon frequency dates are the two semiannual dates based on the maturity date of each note or bond

issue. For example, a security maturing on July 15, 2026 would have coupon frequency dates of January 15 and July 15.

$v^n = 1/(1 + i/2)^n$  = present value of 1 due at the end of  $n$  periods.

$a_n \bar{\phantom{a}} = (1 - v^n)/(i/2) = v + v^2 + v^3 + \dots + v^n$  = present value of 1 per period for  $n$  periods.

Special Case: If  $i = 0$ , then  $a_n \bar{\phantom{a}} = n$ .

Furthermore, when  $i = 0$ ,  $a_n \bar{\phantom{a}}$  cannot be calculated using the formula:  $(1 - v^n)/(i/2)$ . In the special case where  $i = 0$ ,  $a_n \bar{\phantom{a}}$  must be calculated as the summation of the individual present values (*i.e.*,  $v + v^2 + v^3 + \dots + v^n$ ). Using the summation method will always confirm that  $a_n \bar{\phantom{a}} = n$  when  $i = 0$ .

Date = valuation date.

$D$  = the number of days in the month in which Date falls.

$t$  = calendar day corresponding to Date.

CPI = Consumer Price Index number.

$CPI_M$  = CPI reported for the calendar month  $M$  by the Bureau of Labor Statistics.

Ref  $CPI_M$  = reference CPI for the first day of the calendar month in which Date falls (also equal to the CPI for the third

preceding calendar month), *e.g.*, Ref  $CPI_{April\ 1}$  is the  $CPI_{January}$ .

Ref  $CPI_{M+1}$  = reference CPI for the first day of the calendar month immediately following Date.

Ref  $CPI_{Date} = Ref\ CPI_M - [(t - 1)/D][Ref\ CPI_{M+1} - Ref\ CPI_M]$ .

Index  $Ratio_{Date} = Ref\ CPI_{Date} / Ref\ CPI_{IssueDate}$ .  
**Note:** When the Issue Date is different from the Dated Date, the denominator is the Ref  $CPI_{DatedDate}$ .

*A. For inflation-indexed securities with a regular first interest payment period:*  
 Formulas:

$$P = \frac{(C/2) + (C/2)a_n \bar{\phantom{a}} + 100v^n}{1 + (r/s)(i/2)} - [(s - r)/s](C/2)$$

$$P_{adj} = P \times Index\ Ratio_{Date}$$

$$A = [(s - r)/s] \times (C/2)$$

$$A_{adj} = A \times Index\ Ratio_{Date}$$

$$SA = P_{adj} + A_{adj}$$

$$Index\ Ratio_{Date} = Ref\ CPI_{Date} / Ref\ CPI_{IssueDate}$$

Example:

We issued a 10-year inflation-indexed note on January 15, 1999. The note was issued at a discount to yield of 3.898% (real). The note

bears a 37/8% real coupon, payable on July 15 and January 15 of each year. The base CPI index applicable to this note is 164. (We normally derive this number using the interpolative process described in Appendix B, section I, paragraph B.)

Definitions:

$C = 3.875$ .

$i = 0.03898$ .

$n = 19$  (There are 20 full semiannual periods but  $n$  is reduced by 1 because the issue date is a coupon frequency date.)

$r = 181$  (January 15, 1999 to July 15, 1999).

$s = 181$  (January 15, 1999 to July 15, 1999).

Ref  $CPI_{Date} = 164$ .

Ref  $CPI_{IssueDate} = 164$ .

Resolution:

$$Index\ Ratio_{Date} = Ref\ CPI_{Date} / Ref\ CPI_{IssueDate} = 164/164 = 1.$$

$$A = [(181 - 181)/181] \times 3.875/2 = 0.$$

$$A_{adj} = 0 \times 1 = 0.$$

$$v^n = 1/(1 + i/2)^n = 1/(1 + .03898/2)^{19} = 0.692984572.$$

$$a_n \bar{\phantom{a}} = (1 - v^n)/(i/2) = (1 - 0.692984572) / (.03898/2) = 15.752459107.$$

Formula:

$$P = \frac{(C/2) + (C/2)a_n \bar{\phantom{a}} + 100v^n}{1 + (r/s)(i/2)} - [(s - r)/s](C/2)$$

$$P = \frac{(3.875/2) + (3.875/2)(15.752459107) + 100(0.692984572)}{1 + (181/181)(0.03898/2)} - [(181 - 181)/181](3.875/2)$$

$$P = \frac{1.9375 + 30.52038952 + 69.29845720}{1.01949000} - 0$$

$$P = \frac{101.75634672}{1.01949000}$$

$P = 99.811030$ .

$$P_{adj} = P \times Index\ Ratio_{Date}$$

$$P_{adj} = 99.811030 \times 1 = 99.811030.$$

$$SA = P_{adj} \times A_{adj}$$

$$SA = 99.811030 + 0 = 99.811030.$$

**NOTE:** For the real price ( $P$ ), we have rounded to six places. These amounts are based on 100 par value.

B. (1) *For inflation-indexed securities reopened during a regular interest period where the purchase price includes predetermined accrued interest.*

(2) *For new inflation-indexed securities accruing interest from the coupon frequency date immediately preceding the issue date, with the interest rate established in the auction being used to determine the accrued interest payable on the issue date.*

**Bidding:** The dollar amount of each bid is in terms of the par amount. For example, if the Ref CPI applicable to the issue date of the note is 120, and the reference CPI applicable to the reopening issue date is 132, a bid of

\$10,000 will in effect be a bid of \$10,000  $\times$  (132/120), or \$11,000.

Formulas:

$$P = \frac{(C/2) + (C/2)a_n \bar{\phantom{a}} + 100v^n}{1 + (r/s)(i/2)} - [(s - r)/s](C/2)$$

$$P_{adj} = P \times Index\ Ratio_{Date}$$

$$A = [(s - r)/s] \times (C/2)$$

$$A_{adj} = A \times Index\ Ratio_{Date}$$

$$SA = P_{adj} + A_{adj}$$

$$Index\ Ratio_{Date} = Ref\ CPI_{Date} / Ref\ CPI_{IssueDate}$$

Example:

We issued a 35/8% 10-year inflation-indexed note on January 15, 1998, with interest payments on July 15 and January 15. For a reopening on October 15, 1998, with inflation compensation accruing from January 15, 1998 to October 15, 1998, and accrued interest accruing from July 15, 1998 to October 15, 1998 (92 days), solve for the price per 100 ( $P$ ) at a real yield, as determined in the reopening auction, of

3.65%. The base index applicable to the issue date of this note is 161.55484 and the reference CPI applicable to October 15, 1998, is 163.29032.

Definitions:

$C = 3.625$ .

$i = 0.0365$ .

$n = 18$ .

$r = 92$  (October 15, 1998 to January 15, 1999).

$s = 184$  (July 15, 1998 to January 15, 1999).

Ref  $CPI_{Date} = 163.29032$ .

Ref  $CPI_{IssueDate} = 161.55484$ .

Resolution:

$$Index\ Ratio_{Date} = Ref\ CPI_{Date} / Ref\ CPI_{IssueDate} = 163.29032/161.55484 = 1.01074.$$

$$v^n = 1/(1 + i/2)^n = 1/(1 + .0365/2)^{18} = 0.722138438.$$

$$a_n \bar{\phantom{a}} = (1 - v^n)/(i/2) = (1 - 0.722138438) / (.0365/2) = 15.225291068.$$

Formula:

$$P = \frac{(C/2) + (C/2)a_n + 100v^n}{1 + (r/s)(i/2)} - [(s-r)/s](C/2)$$

$$P = \frac{(3.625/2) + (3.625/2)(15.225291068) + 100(0.722138438)}{1 + (92/184)(0.0365/2)} - [(184 - 92)/184](3.625/2)$$

$$P = \frac{1.8125 + 27.59584006 + 72.21384380}{1.009125} - (92/184)(1.8125)$$

$$P = \frac{101.62218386}{1.009125} - 0.906250$$

P = 100.703267 - 0.906250.  
 P = 99.797017.  
 $P_{adj} = P \times \text{Index Ratio}_{Date}$   
 $P_{adj} = 99.797017 \times 1.01074 = 100.86883696$ .  
 $P_{adj} = 100.868837$ .  
 $A = [(184 - 92)/184] \times 3.625/2 = 0.906250$ .  
 $A_{adj} = A \times \text{Index Ratio}_{Date}$   
 $A_{adj} = 0.906250 \times 1.01074 = 0.91598313$ .  
 $A_{adj} = 0.915983$ .  
 $SA = P_{adj} + A_{adj} = 100.868837 + 0.915983$ .  
 $SA = 101.784820$ .

**Note:** For the real price (P), and the inflation-adjusted price ( $P_{adj}$ ), we have rounded to six places. For accrued interest (A) and the adjusted accrued interest ( $A_{adj}$ ), we have rounded to six places. These amounts are based on 100 par value.

■ 6. Appendix B to Part 356, Section V, is revised to read as follows:

**V. Computation of Purchase Price, Discount Rate, and Investment Rate (Coupon-Equivalent Yield) for Treasury Bills**

A. Conversion of the discount rate to a purchase price for Treasury bills of all maturities:

Formula:  
 $P = 100 (1 - dr / 360)$ .

Where:  
 d = discount rate, in decimals.  
 r = number of days remaining to maturity.  
 P = price per 100 (dollars).

Example:  
 For a bill issued November 24, 1989, due February 22, 1990, at a discount rate of 7.610%, solve for price per 100 (P).

Definitions:  
 d = .07610.  
 r = 90 (November 24, 1989 to February 22, 1990).

Resolution:  
 $P = 100 (1 - dr / 360)$ .  
 (1)  $P = 100 [1 - (.07610)(90) / 360]$ .  
 (2)  $P = 100 (1 - .019025)$ .  
 (3)  $P = 100 (.980975)$ .  
 (4)  $P = 98.097500$ .

**Note:** Purchase prices per \$100 are rounded to six decimal places, using normal rounding procedures.

B. Computation of purchase prices and discount amounts based on price per \$100, for Treasury bills of all maturities:

1. To determine the purchase price of any bill, divide the par amount by 100 and multiply the resulting quotient by the price per \$100.  
 Example:

To compute the purchase price of a \$10,000 13-week bill sold at a price of \$98.098000 per \$100, divide the par amount (\$10,000) by 100 to obtain the multiple (100). That multiple times 98.098000 results in a purchase price of \$9,809.80.

2. To determine the discount amount for any bill, subtract the purchase price from the par amount of the bill.

Example:  
 For a \$10,000 bill with a purchase price of \$9,809.80, the discount amount would be \$190.20, or \$10,000 - \$9,809.80.

C. Conversion of prices to discount rates for Treasury bills of all maturities:

Formula:  
 $d = \left[ \frac{100 - P}{100} \times \frac{360}{r} \right]$

Where:  
 P = price per 100 (dollars).  
 d = discount rate.  
 r = number of days remaining to maturity.

Example:  
 For a 26-week bill issued December 30, 1982, due June 30, 1983, with a price of \$95.934567, solve for the discount rate (d).

Definitions:  
 $P = 95.934567$ .  
 $r = 182$  (December 30, 1982, to June 30, 1983).

Resolution:  
 $d = \left[ \frac{100 - P}{100} \times \frac{360}{r} \right]$

$d = \left[ \frac{100 - 95.934567}{100} \times \frac{360}{182} \right]$   
 (2)  $d = [.04065433 \times 1.978021978]$ .  
 (3)  $d = .080415158$ .  
 (4)  $d = 8.042\%$ .

**Note:** Prior to April 18, 1983, we sold all bills in price-basis auctions, in which discount rates calculated from prices were rounded to three places, using normal rounding procedures. Since that time, we have sold bills only on a discount rate basis.

D. Calculation of investment rate (coupon-equivalent yield) for Treasury bills:

1. For bills of not more than one half-year to maturity:

Formula:  
 $i = \left[ \frac{100 - P}{P} \times \frac{y}{r} \right]$

Where:  
 i = investment rate, in decimals.  
 P = price per 100 (dollars).  
 r = number of days remaining to maturity.

y = number of days in year following the issue date; normally 365 but, if the year following the issue date includes February 29, then y is 366.

Example:  
 For a cash management bill issued June 1, 1990, due June 21, 1990, with a price of \$99.559444 (computed from a discount rate of 7.930%), solve for the investment rate (i).

Definitions:  
 $P = 99.559444$ .  
 $r = 20$  (June 1, 1990, to June 21, 1990).  
 $y = 365$ .

Resolution:  
 $i = \left[ \frac{100 - P}{P} \times \frac{y}{r} \right]$   
 (1)  $i = \left[ \frac{100 - 99.559444}{99.559444} \times \frac{365}{20} \right]$   
 (2)  $i = [.004425 \times 18.25]$ .  
 (3)  $i = .080756$ .  
 (4)  $i = 8.076\%$ .

2. For bills of more than one half-year to maturity:

Formula:  
 $P [1 + (r - y/2)(i/y)] (1 + i/2) = 100$ .

This formula must be solved by using the quadratic equation, which is:  
 $ax^2 + bx + c = 0$ .

Therefore, rewriting the bill formula in the quadratic equation form gives:

$$\left[ \frac{r}{2y} - .25 \right] i^2 + \left( \frac{r}{y} \right) i + \left( \frac{P - 100}{P} \right) = 0$$

and solving for "i" produces:

$$i = \frac{-b + \sqrt{b^2 - 4ac}}{2a}$$

Where:  
 i = investment rate in decimals.  
 $b = r/y$ .  
 $a = (r/2y) - .25$ .  
 $c = (P - 100)/P$ .  
 P = price per 100 (dollars).  
 r = number of days remaining to maturity.  
 y = number of days in year following the issue date; normally 365, but if the year following the issue date includes February 29, then y is 366.

Example:  
 For a 52-week bill issued June 7, 1990, due June 6, 1991, with a price of \$92.265000 (computed from a discount rate of 7.65%), solve for the investment rate (i).

Definitions:  
 $r = 364$  (June 7, 1990, to June 6, 1991).  
 $y = 365$ .  
 $P = 92.265000$ .

b = 364 / 365, or .997260274.  
 a = (364 / 730) - .25, or .248630137.  
 c = (92.265 - 100) / 92.265, or -.083834607.

Resolution:

$$i = \frac{-b + \sqrt{b^2 - 4ac}}{2a}$$

$$(1) i = \frac{-997260274 + \sqrt{(.997260274)^2 - 4[(.248630137)(-.083834607)]}}{2(.248630137)}$$

$$(2) i = \frac{-997260274 + \sqrt{.994528054 + .083375239}}{.497260274}$$

$$(3) i = (-.997260274 + 1.038221216) / .497260274.$$

$$(4) i = .040960942 / .497260274.$$

$$(5) i = .082373244 \text{ or}$$

$$(6) i = 8.237\%.$$

\* \* \* \* \*

**Donald V. Hammond,**

*Fiscal Assistant Secretary.*

[FR Doc. 04-19999 Filed 9-1-04; 8:45 am]

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## DEPARTMENT OF THE INTERIOR

### National Park Service

#### 36 CFR Part 7

RIN 1024-AD15

#### Rocky Mountain National Park Snowmobile Routes

**AGENCY:** National Park Service, Interior.

**ACTION:** Final rule.

**SUMMARY:** The National Park Service (NPS) is amending regulations specific to Rocky Mountain National Park that designate snowmobile routes inside the park. The routes currently designated are inconsistent with the protection of the resources and values of this park, management objectives, the requirements of two Executive orders, and NPS general regulations that govern snowmobile use in the National Park System. This amendment would eliminate three of the four routes currently designated for snowmobile use and for the remaining route ensure compliance with the general regulations.

**DATES:** This rule becomes effective October 4, 2004.

**FOR FURTHER INFORMATION CONTACT:**

*Technical information:* Larry Gamble, Chief, Branch of Planning and Compliance, Rocky Mountain National Park, 1000 Highway 36, Estes Park, CO 80517. Telephone: (970) 586-1320. E-mail: [Larry\\_Gamble@nps.gov](mailto:Larry_Gamble@nps.gov).

*Other information:* Bernard C. Fagan, Acting Regulations Program Manager, National Park Service, 1849 C Street,

NW., Mail Stop 7252, Washington, DC 20240. Telephone: (202) 208-7456. E-mail: [Chick\\_Fagan@nps.gov](mailto:Chick_Fagan@nps.gov).

**SUPPLEMENTARY INFORMATION** The NPS published a Proposed Rule in the **Federal Register** on January 5, 2001 (66 FR 1069). Background information on the Proposed Rule can be found in that **Federal Register** notice. The Proposed Rule was available for public review through March 6, 2001.

In addition to the **Federal Register** notice, the NPS released an Environmental Assessment (EA) for the Management of Snowmobiles in Rocky Mountain National Park for public review and comment. The EA was released December 15, 2000, and was available for public review and comment for a period of eighty-four days, which ended March 6, 2001. Four alternatives were included in the EA:

(1) *Preferred Alternative*—Trail Ridge Road, the Summerland Park Snowmobile Trail, and Bowen Gulch Access Trail would be permanently closed to snowmobiles. The North Supply Access Trail would remain open.

(2) *No Action Alternative*—The North Supply Access Trail and Trail Ridge Road would remain open to snowmobile use.

(3) *Less Restrictive Alternative*—The North Supply Access Trail and Trail Ridge Road would remain open to snowmobiles. The Summerland Park Snowmobile Trail and Bowen Gulch Access Trail would be reopened to snowmobile use.

(4) *Most Restrictive Alternative*—The park would be closed to all snowmobiles.

The NPS received 3,363 responses to the EA in the form of letters, a petition, facsimiles and e-mail. After a careful review of public comments and resource, economic and visitor impacts, the Preferred Alternative (Alternative 1) was selected for implementation and a Finding of No Significant Impact (FONSI) was signed February 20, 2003, by the Director of the Intermountain Region of the National Park Service.

#### Final Rule

The Proposed Rule called for the repeal of the designation of all snowmobile routes in Rocky Mountain National Park except the North Supply Access Trail. The Preferred Alternative in the EA is identical to the Proposed Rule and is therefore consistent with the signed FONSI. After a careful review of public comments and resource, economic and visitor impacts, the Final Rule remains unchanged from the Proposed Rule. The park will close three routes to snowmobile use:

- Trail Ridge Road
- Summerland Park Snowmobile Trail

- Bowen Gulch Access Trail

The North Supply Access Trail will remain open for snowmobile use.

#### Analysis of Public Comments

A period of sixty days was provided for public comments on the rule change, from January 5, 2000, through March 6, 2001. We received 3,453 responses in the form of letters, a petition, facsimiles, and via e-mail. Many of the responses to the Proposed Rule identified the same issues that were raised during the public comment period for the EA. A few responses raised new issues. Following is a summary of the comments we received and our responses to them.

1. We support the NPS phase-out of snowmobiles in Rocky Mountain National Park. The park should work with adjacent landowners and Forest Service officials to provide alternative access to lands west of the park that does not include a route within the boundaries of the park.

*NPS Response:*

We are aware that there has been an effort to find an alternative route, but to date nothing has been resolved. The NPS will continue to support and provide input for any future discussions. If we were to close the park now to snowmobiles, there is no guarantee that an alternative trail would be quickly established. In the interim, there would be significant economic impacts to Grand Lake. The Arapaho