DEPARTMENT OF THE TREASURY

Fiscal Service

31 CFR 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)

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

ACTION: Final rule.

SUMMARY: The Department of the Treasury ("Department" or "Treasury") is publishing in final form an amendment to 31 CFR Part 356 (Uniform Offering Circular for the Sale and Issue of Marketable Book-Entry Treasury Bills, Notes, and Bonds). This amendment makes changes necessary to accommodate the public offering of new Treasury inflation-indexed securities by the Department. In addition, the amendment makes certain technical clarifications and conforming changes. The proposed rule was published for public comment on September 27, 1996.

EFFECTIVE DATE: January 6, 1997. ADDRESS: This rule has been made available for downloading from the Bureau of the Public Debt web site at the following address:

www.publicdebt.treas.gov.

FOR FURTHER INFORMATION CONTACT: Ken Papaj (Director), Lee Grandy, Chuck Andreatta or Kurt Eidemiller (Government Securities Specialists), Bureau of the Public Debt, Government Securities Regulations Staff, (202) 219-3632.

SUPPLEMENTARY INFORMATION:

I. Background

31 CFR Part 356, also referred to as the uniform offering circular, sets out the terms and conditions for the sale and issuance by the Department of the Treasury to the public of marketable Treasury bills, notes, and bonds. The uniform offering circular, in conjunction with offering announcements, represents a comprehensive statement of those terms and conditions.1

The Department has decided to offer a new type of security, referred to as a Treasury inflation-indexed security,²

whose principal value will be adjusted for inflation as measured by the United States Government. The Department believes the issuance of these new inflation-indexed securities will reduce interest costs to the Treasury over the long term and will broaden the types of debt instruments available to investors in U.S. financial markets.

As explained in more detail below, after considering the comments provided, Treasury has determined that the structure of the inflation-indexed securities will remain unchanged from its description in the proposed rule. The securities will be based, with some modifications, on the model of the Real Return Bonds currently issued by the Government of Canada. The principal of the security will be adjusted for changes in the level of inflation. Semiannual interest payments will be made based on a constant rate of interest determined at auction. The index for measuring the inflation rate for these securities will be the non-seasonally adjusted U.S. City Average All Items Consumer Price Index for All Urban Consumers ("CPI" or "CPI-U") published monthly by the Bureau of Labor Statistics of the U.S. Department of Labor.

Further, the Department has announced its intention to begin auctioning inflation-indexed securities in January 1997 and quarterly thereafter. The first auction will be of 10-year inflation-indexed notes. Specific terms and conditions of each issue, including the auction date, issue date, and public offering amount, will be announced prior to each auction. Over time, the Department expects to offer additional maturities of inflation-indexed securities, such as 30-year bonds or shorter-term notes. The Department expects to offer the first additional

maturity later in 1997.

The inflation-adjusted principal value of the securities can be obtained for any date by multiplying the stated value at issuance, or par amount, by the index ratio applicable to that date. The index ratio is the reference CPI applicable to a particular valuation date divided by the reference CPI applicable to the original issue date. The inflation adjustment to the principal will not be payable until maturity, when the securities will be redeemed at the greater of their inflation-adjusted principal amount or par amount. The securities will be issued with a stated rate of interest that remains constant

inflation-indexed bonds in order to give the Department the flexibility to issue both types of securities in the future. However, the Department initially plans to offer only one maturity, a 10-year note. Inflation-indexed securities were referred to as inflation-protection securities in the proposed rule.

until maturity. Interest payments for a particular security will be determined by multiplying the inflation-adjusted principal by one-half of the stated rate of interest on each semiannual interest payment date.

Inflation-indexed notes will be issued with maturities of at least one year but not more than ten years. Inflationindexed bonds, when offered, will be issued with maturities of more than ten years. The inflation-indexed securities will be sold at discount, par, or premium and will pay interest semiannually. The auctions for inflation-indexed securities will be conducted as single-price auctions in which competitive bidders will bid in terms of a desired real yield (yield prior to inflation adjustment), expressed as a percentage with three decimals, e.g., 3.230%. The interest rate established as a result of the auction will generally be set at one-eighth of one percent increments that produce the price closest to, but not above, par when evaluated at the highest real yield at which bids were accepted. The offering announcement issued by the Department for each new inflationindexed security will contain the specific details for that offering.

The inflation-indexed securities will be eligible for the STRIPS program (Separate Trading of Registered Interest and Principal of Securities) immediately upon their issuance by the Treasury.

The securities will also be eligible to serve as collateral for Treasury programs (e.g., Treasury Tax and Loan accounts). Anyone interested in the use of inflation-indexed securities for such collateral purposes should contact the Department's Office of the Fiscal Assistant Secretary for more information. The Department also intends to make components stripped from these securities eligible for collateral at a later date. The Department will notify the public of their eligibility when the valuation of the stripped components for collateral purposes has been determined.

II. Comments Received in Response to the Proposed Rule

The Department published for public comment a proposed amendment to the uniform offering circular on September 27, 1996,³ which laid out the proposed structure, design, terms, and conditions of the new inflation-indexed security. The closing date for comments was October 28, 1996. A few minor typographical and technical errors in the proposed rule text and formulas were subsequently corrected and

¹The uniform offering circular was published as a final rule on January 5, 1993 (58 FR 412). Amendments to the circular were published on June 3, 1994 (59 FR 28773), March 15, 1995 (60 FR 13906), July 16, 1996 (61 FR 37007), August 23, 1996 (61 FR 43626), and October 22, 1996 (61 FR 54908)

²This Part is being revised to accommodate offerings of both inflation-indexed notes and

³ 61 FR 50924 (September 27, 1996).

changed in a correction notice published on October 4, 1996.4

In developing the proposed rule, the Department took into consideration the numerous comments, suggestions, and recommendations that were received in response to two Advance Notices of Proposed Rulemakings; 5 at more than 30 meetings attended by more than 800 investors, dealers and interested parties in nine cities world-wide; and at a public symposium sponsored by the Department. The Department believes that this extensive discussion with, and participation by, market participants in the design of the inflation-indexed security was extremely useful in developing a new investment product that will have wide acceptance and broad market appeal.

The Department received eight letters from seven commenters in response to the proposed rule.⁶ The letters, listed chronologically in order of date received, were submitted by Apex Investment Associates, Inc.; Reed Smith Shaw & McClay; Wrightson Associates; L. Napoleon Cooper (two letters); Robert L. Elgin; HSBC Securities, Inc.; and PSA The Bond Market Trade Association.⁷

Two commenters proposed an entirely different security structure. One of these commenters submitted a proposal that would allow for a new series of federal debt, and would result in a substantially different structure. The other commenter proposed a structure for, and suggested features to be incorporated in, a non-marketable, floating rate, inflation-indexed savings bond. A third commenter expressed support for the process of involving market participants in the design and implementation of these securities, and stated, "as far as the securities themselves are concerned, there is little or nothing we would care to ask be changed." It was this commenter's view, however, that the stripped securities as designed would not provide for a very

liquid market because of the lack of fungibility of the inflation-indexed stripped components. The commenter proposed and described an inflation-indexed "strip that would be entirely fungible with other inflation-protection strips." Under the commenter's proposal, the inflation-indexed securities would be stripped into pieces of equal "real" value. The commenter indicated that its approach to creating fungible STRIPS would require that Treasury relax its requirement that STRIPS be sold in \$1,000 increments.

Two of the remaining commenters confined their comments to taxation issues. One of these commenters expressed its belief that inflationindexed securities would be a great success, but that the inflation adjustment to the principal should be treated as a capital gain or as taxable income at either redemption or sale by the investor. The other commenter recommended that, before inflationindexed securities are offered to the public, Treasury should ask Congress to provide statutory authority to exclude the inflation adjustment from taxation. The commenter said that, without such an exclusion, taxable investors would receive less than full inflation protection.

One commenter specifically addressed the subject of reopenings of the security as stated in the proposed rule. In its letter, the commenter stated its belief that it is extremely important to reopen inflation-indexed securities to consolidate issues, especially since stripped coupons from different inflation-indexed securities will not be interchangeable. The commenter indicated that rules in the tax code restrict reopenings of conventional bonds that might otherwise be desirable, and stated that this may also be true for inflation-indexed securities. The commenter offered two alternatives to resolve this "original-issue-discount" or "OID" problem. One alternative would be to relax the OID restrictions for inflation-indexed securities. A second alternative would be to make an adjustment to the current single-price auction procedures so that the coupon rate would be rounded up instead of down. As a result, the initial price would always be at or above par, causing the new security to be issued further above the OID limit and thus making it easier to reopen.

Another letter, submitted by an industry trade association, had the following comments. While expressing support for particular design details of the security (e.g., modelling the securities on Canada's Real Return Bonds, selecting the CPI–U as the

inflation index, adopting a current auction technique and making the securities eligible for stripping), the commenter stressed its concern and belief "that there are a number of market practice, regulatory, operational and technical issues which must be resolved in order to foster a smooth and orderly auction and efficient secondary market for the new securities in January." To this end, "firms will have to make significant changes to their internal trading, trade processing, settlement, risk management, accounting, regulatory and tax reporting systems, among others, leaving market participants little time to build, test, and implement such internal systems changes before trading in the new securities commences in January." The commenter indicated that it previously advised Treasury that its members would need approximately six months from publication of the final rules to prepare for trading, clearance and settlement of the new securities.

The letter highlighted the commenter's specific concerns, which included: (1) The timing of the planned first issue; (2) a preference to have more time to program systems based on the final rules and more time to study the Boskin Commission's Report (methodology for calculating the CPI which was released on December 4); (3) the lack of fungibility of stripped interest components and its potential affect on liquidity, and the need to devise a viable method to create fungible strips; and (4) the need for a market convention for the appropriate factor or formula, preferably to be provided by Treasury, for valuing stripped interest components.

The letter recommended that Treasury should: (1) Provide a monthly publication of reference CPI numbers for at least the preceding three months as well as a monthly publication of daily index ratios; (2) maintain a permanent and public record of all reference CPI numbers ever used to provide for a single reference source; (3) clarify in the final rules that, in the event of any discrepancies between CPI numbers published by the Bureau of Labor Statistics of the U.S. Department of Labor and the Treasury, those published by Treasury will take precedence; (4) clarify in the final rules the payment of the minimum guarantee; (5) add to the final rules hypothetical examples and sample calculations; and (6) with other regulators, provide formal guidance as to how the securities are required to be valued, recorded and reported under different regulatory regimes.

⁴61 FR 51851 (October 4, 1996).

 $^{^561\} FR\ 25164\ (May\ 20,\ 1996)$ and $61\ FR\ 38127\ (July\ 23,\ 1996)$.

⁶The comment letters are available to the public for inspection and downloading on the Internet, at the address provided earlier in this rule, and for inspection and copying at the Treasury Department Library, Room 5030, Main Treasury Building, 1500 Pennsylvania Avenue NW., Washington, DC. 20220.

⁷ See letters from Alexander A. Lothan, President, Apex Investment Associates, Inc. (September 26, 1996); William Morris, Reed Smith Shaw & McClay (September 27, 1996); Louis Crandall, Wrightson Associates (October 21, 1996); L. Napoleon Cooper (October 23 and November 12, 1996); Robert L. Elgin (October 25, 1996); Robert D. Sbarra, Chief Operating Officer-Fixed Income, HSBC Securities, Inc. (October 25, 1996); Edwin F. Payne, Chairman, PSA Government and Federal Agency Division, PSA The Bond Market Trade Association (November 6, 1996).

III. Changes from the Proposed Rule

A. General

After taking into consideration the comments received, the Department is adopting as a final rule this amendment to the uniform offering circular setting out the terms, conditions and features of Treasury inflation-indexed securities. The final rule adopts the proposed rule without significant changes. A summary of the main features of the final rule that remain unchanged from the proposed rule are: (1) The inflation-indexed securities will be structured similarly to the Real Return Bonds issued by the Government of Canada; (2) the interest rate, which is set at auction, will remain fixed throughout the life of the security while the principal amount of the security will be adjusted for inflation, and interest payments will be based on the inflation-adjusted principal at the time the interest is paid; (3) the nonseasonally adjusted CPI-U will be the inflation index; (4) the auction process will use a single-price auction method that is the same as that currently used for two-year and five-year Treasury notes; and (5) inflation-indexed securities will be eligible immediately for stripping into their principal and interest components.

The proposed changes in §§ 356.2; 356.3; 356.5; 356.10; 356.12; 356.13; 356.20; 356.32; Appendix B, Section I, Paragraphs A and C; Appendix B, Section II; Appendices C and D; and Exhibit A, Section IV are being adopted as originally proposed. Readers should refer to the preamble of the proposed rule § for a description of the above provisions being adopted in this final rule.

B. Section 356.17 Responsibility for Payment

The proposed rule, in paragraphs 356.17 (a) and (b), contained minor conforming clarifications to reflect that bidders submitting payment with their tender may have to include, in addition to announced accrued interest, an inflation-adjustment amount with their payment. The wording in paragraphs (a) and (b) has been modified from the proposed rule to reflect a recent amendment to the offering circular, which added payment by authorized electronic means as a payment option.⁹

C. Section 356.25 Payment for Awarded Securities

In the proposed rule, a conforming change was made to paragraph 356.25(a)(2) to state that additional

amounts due at settlement may include inflation adjustments. The proposed rule also added a new paragraph (c) to provide that the payment amount for awarded securities will be the settlement amount, as that term is defined in § 356.2. The substance of these two provisions remains unchanged in the final rule. However, in the final rule, new paragraph (c) has been redesignated as paragraph (d) to reflect a recent amendment to the uniform offering circular authorizing payment by electronic means, 10 which was effective after publication of the proposed rule.

D. Section 356.30 Payment of Principal and Interest on Notes and Bonds

Proposed paragraph 356.30(b) has been modified in accordance with one commenter's suggestion that the Department make clear in this section its obligation to pay at maturity the greater of the inflation-adjusted principal amount or par amount.

E. Section 356.31 STRIPS

No substantive changes have been made in this section from the proposed rule, which permits inflation-indexed securities to be stripped into separate principal and interest components. Unlike the conventional STRIPS program in which interest components having the same payment/maturity date are fungible (i.e., have the same CUSIP number), interest components stripped from different inflation-indexed securities will not be fungible even if they have the same payment/maturity date.

Some commenters have maintained that the creation of fungible stripped interest components is essential to provide sufficient liquidity in the market for these components. One commenter provided an alternative method that would achieve fungibility for inflation-indexed interest components. This method was supported by a second commenter. The Department understands these concerns and strongly supports the development of an active, liquid market for inflationindexed securities, including their stripped components. Making the securities attractive to a broad investor base and ensuring the development of a liquid market have been two of Treasury's primary objectives throughout the securities' design and development. The Department is evaluating alternative methodologies, including the recommendation mentioned above, for creating fungible

stripped interest components from inflation-indexed securities. However, we are not yet in a position to adopt a methodology that would permit fungibility. We have decided to proceed with the STRIPS program as described in the proposed rule and will continue to work on making interest components fungible in a manner that is operationally feasible. We believe that this approach is preferable to not having the securities strippable at the time they are first offered.

F. Section 356.32 Taxation

No change has been made to this section from the proposed rule. However, readers should note that they are directed in paragraph (b) to the relevant Internal Revenue Service (IRS) regulations for further information about the tax treatment, and reporting, of inflation-indexed securities. The IRS rules are expected to be publicly available and published in the Federal Register at the same time as this final rule is published, or shortly thereafter. The IRS regulations will be issued under §§ 1275(d) and 1286 of the Internal Revenue Code.

In the meantime, prospective investors are advised to refer to IRS Notice 96-51 published in the Internal Revenue Bulletin 1996-42 (October 15, 1996) for information regarding taxation of inflation-indexed securities and the stripped components of such securities. Additionally, in September, Treasury issued a statement providing an explanation of the federal income tax treatment for these securities and their stripped components. Readers interested in receiving a copy of this statement should call the Department's Office of Public Affairs automated facsimile system at 202-622-2040 and request Document No. 1290.

The Department also wishes to respond to the concern expressed by one of the commenters regarding rules in the tax code that could limit Treasury's ability to reopen issues of inflation-indexed securities. We note that the IRS regulations will permit reopenings of inflation-indexed securities without regard to the OID rules, provided that the reopenings occur not more than one year after the original securities were first issued to the public.

G. Appendix B, Section I, Paragraph B

In the proposed rule, Treasury stated that it did not intend to publish the index ratio for use by market participants. However, in the preamble, the Department specifically asked for comments on whether a monthly publication of the daily index ratios or

⁸ See supra note 3.

⁹61 FR 54908 (October 22, 1996).

reference CPIs would be useful to market participants. One of the commenters strongly urged that Treasury publish both the reference CPI numbers for at least the three preceding months and the daily index ratios on a month-to-month basis. Treasury will support this request. Although Appendix B has been revised by deleting the language from the proposed rule and is now silent with respect to publication of the daily index ratios, Treasury intends to provide monthly the daily reference CPI numbers and the daily index ratios on a pilot basis for one year. This information will be available through such means as a monthly press release, the Internet, and automated facsimile systems.

After a year, the Department will determine whether there is still a need for this information to be provided by Treasury. It is our understanding that most market participants will incorporate the formulas for calculating the reference CPIs and index ratios into their trading or other automated systems. Additionally, it is reasonable to expect that the major electronic financial service providers (e.g., Bloomberg, Telerate, Reuters) will provide this information, or substantially similar information, to their subscribers. Further, Treasury will maintain an archival record of the reference CPIs and the daily index ratios throughout the life of each inflationindexed security. This information will be readily available to market participants.

In addition to the publication of reference CPIs and index ratios, the Treasury will provide monthly the non-seasonally adjusted CPI for each of the prior three months.

Changes have been made to the paragraph that addresses index contingencies. Language has been revised to clarify Treasury's course of action if the CPI is: Discontinued, or in the judgment of the Secretary, either fundamentally altered in a manner materially adverse to the interests of an investor in the security or altered by legislation or Executive Order in a manner materially adverse to the interests of an investor in the security.

A change to the CPI would be considered fundamental if it affected the character of the CPI. Technical changes made by the Bureau of Labor Statistics (BLS) to the CPI to improve its accuracy as a measure of the cost of living would not be considered fundamental changes. Technical changes include, but are not limited to, changes in: (1) The specific items (e.g., apples or major appliances) to be priced for the index; (2) the way individual price quotations are

aggregated to construct component price indices for these items (aggregation of item sub-strata); (3) the method for combining these component price indices to obtain the comprehensive, all-items CPI (aggregation of item strata); and (4) the procedures for incorporating new goods into the index and making adjustments for quality changes in existing goods.

Technical changes to the CPI previously made or announced by BLS include introducing probability sampling to select the precise items for which prices are collected and the stores in which collection takes place, and changing the way in which price movements of major components, such as shelter costs for homeowners in the early 1980s and medical care costs beginning in 1997, are measured.

The Advisory Commission to Study the Consumer Price Index (the Boskin Commission) made a number of recommendations to improve the calculation of changes in the cost of living. Some of these recommendations were directed to BLS and were designed to improve the calculation of the monthly CPI. These recommendations, if and to the extent implemented by BLS, would constitute technical changes rather than fundamental changes.

The Boskin Commission also recommended construction of an annual measure of the cost of living as a supplement to the monthly CPI. Development and use of such a supplement, by itself, would not change the monthly CPI itself. While the Boskin Commission did not suggest that such a measure replace the CPI, a decision by BLS to *replace*, rather than *supplement*, the current monthly CPI with an annual measure of consumer prices, would constitute a fundamental change.

In addition, if the Secretary determines that the CPI is altered by legislation or Executive Order in a manner that is materially adverse to the interests of an investor in the security, the Secretary would propose an alternative index.

A minor, technical change has also been made to clarify Treasury's intention in the situation where the CPI for a particular month is not reported by the last day of the following month. In such a situation, the last CPI that has been reported (including any revision of a previously reported CPI number) will be used to calculate CPI numbers for months for which the CPI has not been reported by such day.

H. Appendix B, Section III

Minor, technical changes have been made to certain formulas and examples by adding a definition of one variable, and by elaborating on the definitions of two other variables.

I. Other Issues

One commenter raised a number of issues pertaining to the regulatory treatment of inflation-indexed securities, which are outside the scope of the uniform offering circular regulations. Specifically, the commenter questioned how these securities are to be valued, recorded and reported under various regulatory regimes for purposes such as large position reporting, determining regulatory capital and margin amounts, and broker-dealer reporting. The Treasury has given informal, general guidance on some of these issues as they pertain to the Government Securities Act (GSA) regulations, 17 CFR Chapter IV, (e.g., large position reporting, capital and haircut treatment, recordkeeping and financial reporting), and will respond to additional questions as they arise. The Treasury is also considering issuing an interpretation of the GSA regulations to provide formal clarification and guidance on regulatory issues within the scope of its authority. Additionally, Treasury has been coordinating and consulting with other regulators, such as staff of the Securities and Exchange Commission, the Board of Governors of the Federal Reserve System, and the Federal Reserve Bank of New York, to address the various regulatory issues raised by the commenter and to foster consistent regulatory treatment where possible and appropriate.

The commenter also raised concerns that a number of questions remain unanswered regarding market practice, trading, accounting and operational issues related to the new securities. While these issues are also outside the scope of both the uniform offering circular rules and Treasury's authority under the GSA, Treasury appreciates the need for consistent and widely accepted trading practices and industry conventions for quoting, pricing, and valuing inflation-indexed securities. Treasury strongly supports and encourages industry efforts, including the formation of the PSA Inflation Bond Trading Practices Task Force, to develop trading and market practice conventions. We are confident the industry will be successful in this effort and we will continue to provide guidance as needed.

IV. Procedural Requirements

This final rule does not meet the criteria for a "significant regulatory action" pursuant to Executive Order 12866.

Although this rule was issued in proposed form to secure the benefit of public comment, the notice and public comment procedures requirements of the Administrative Procedure Act are inapplicable, pursuant to 5 U.S.C. 553(a)(2).

As no notice of proposed rulemaking was required, the provisions of the Regulatory Flexibility Act (5 U.S.C. 601,

et seq.) do not apply.

There is no new collection of information contained in this rule, and, therefore, the Paperwork Reduction Act does not apply. The collections of information of 31 CFR Part 356 have been previously approved by the Office of Management and Budget under section 3507(d) of the Paperwork Reduction Act of 1995 (44 U.S.C. Chapter 35) under control number 1535–0112. Under this Act, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB control number.

List of Subjects in 31 CFR Part 356

Bonds, Federal Reserve System, Government securities, Securities.

Dated: December 30, 1996. Donald V. Hammond, Deputy Fiscal Assistant Secretary.

For the reasons set forth in the preamble, 31 CFR Chapter II, Subchapter B, 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 356.2 is amended by revising the definitions of "Accrued interest," "Book-entry security," "Customer," "Interest rate," "Multipleprice auction," "Par amount," 'Settlement amount," "STRIPS," and "Yield;" and adding in alphabetical order the definitions of "Business day," "Consumer Price Index," "Daily interest decimal," "Index," "Index ratio," "Inflation-adjusted principal," "Real yield," and "Reference CPI" to read as follows:

§ 356.2 Definitions.

Accrued interest means an amount payable to the Department for such part of the next semiannual interest payment

that represents interest income attributed to the period prior to the date of issue. (See Appendix B, Section I, Paragraph C.)

Book-entry security means a security the issuance and maintenance of which are represented by an accounting entry or electronic record and not by a certificate. Treasury book-entry securities may generally be held in either TRADĚS or in TREASURY DIRECT. (See § 356.3.)

Business day means any day other than a Saturday, Sunday, or other day on which the Federal Reserve Banks are not open for business.

Consumer Price Index (CPI) means the monthly non-seasonally adjusted U.S. City Average All Items Consumer Price Index for All Urban Consumers, published by the Bureau of Labor Statistics of the Department of Labor. (See Appendix D.)

Customer means a bidder on whose behalf a depository institution or dealer has been directed to submit or forward a competitive or noncompetitive bid for a specified amount of securities in a specific auction. Only depository institutions and dealers may submit or forward bids for customers, whether directly to a Federal Reserve Bank or the Bureau of the Public Debt, or through an intermediary depository institution or

Daily interest decimal means, for a fixed-principal security, the interest factor attributable to one day of an interest payment period per \$1,000 par amount.

Index means the Consumer Price Index, which is used as the basis for making adjustments to principal amounts of inflation-indexed securities. (See Appendix D.)

Index ratio means, for any particular date and any particular inflationindexed security, the Reference CPI applicable to such date divided by the Reference CPI applicable to the original issue date (or dated date, when the dated date is different from the original issue date). (See Appendix B, Section I, Paragraph B.)

Inflation-adjusted principal means, for an inflation-indexed security, the value of the security derived by multiplying the par amount by the applicable index ratio as described in Appendix B, Section I, Paragraph B.

Interest rate means the annual percentage rate of interest paid on the par amount or the inflation-adjusted principal of a specific issue of notes or

bonds. (See Appendix B for methods and examples of interest calculations on notes and bonds.)

Multiple-price auction means an auction in which each successful competitive bidder pays the price equivalent to the yield or rate that it bid.

Par amount means the stated value of a security at original issuance.

Real yield means, for an inflationindexed security, the yield based on the payment stream in constant dollars, i.e., before adjustment by the index ratio.

Reference CPI (Ref CPI) means, for an inflation-indexed security, the index number applicable to a given date. (See Appendix B, Section I, Paragraph B.)

Settlement amount means the par amount of securities awarded less any discount amount and plus any premium amount and/or any accrued interest. For inflation-indexed securities, the settlement amount also includes any inflation adjustment when such securities are reopened or when the dated date is different from the issue date.

STRIPS (Separate Trading of Registered Interest and Principal of Securities) means the Department's program under which eligible securities are authorized to be separated into principal and interest components, and transferred separately. These components are maintained in bookentry accounts, and transferred, in TRADES.

Yield, also referred to as "yield to maturity," means the annualized rate of return to maturity on a fixed-principal security expressed as a percentage. For an inflation-indexed security, yield means the real yield. (See Appendix B.)

3. Section 356.3 is amended by revising the introductory paragraph and the heading of paragraph (a) and removing footnote 1; adding three sentences at the end of paragraph (a); and adding a second sentence at the end of paragraph (b), to read as follows:

§ 356.3 Book-entry securities and systems.

Securities issued subject to this Part shall be held and transferred in either of the two book-entry securities systems-TRADES or TREASURY DIRECTdescribed in this section. Securities are maintained and transferred, to the extent authorized in 31 CFR part 357, in these two book-entry systems at their par amount, e.g., for inflation-indexed

securities, adjustments for inflation will not be included in this amount. Securities may be transferred from one system to the other in accordance with Treasury regulations governing bookentry Treasury bills, notes, and bonds. See Department of the Treasury Circular, Public Debt Series No. 2-86, as amended (31 CFR Part 357).

- (a) Treasury/Reserve Automated Debt Entry System (TRADES). * * * For accounts maintained in TRADES, Treasury discharges its payment obligations when payment is credited to the applicable account maintained at a Federal Reserve Bank or payment is made in accordance with the instructions of the person or entity maintaining such account. Further, neither Treasury nor the Federal Reserve Banks have any obligations to, nor will they recognize any claims of, any person or entity that does not have an account at a Federal Reserve Bank. In addition, neither Treasury nor the Federal Reserve Banks will recognize the claims of any person or entity with respect to any accounts not maintained at a Federal Reserve Bank.
- (b) * * * In TREASURY DIRECT, Treasury discharges its payment obligations when payment is made to a depository institution for credit to the account specified by the owner of the security, or when payment is made in accordance with the instructions of the owner of the security.

4. Section 356.5 is amended by revising the introductory text and paragraphs (b) and (c) to read as follows:

§ 356.5 Description of securities.

Securities offered pursuant to this Part are offered exclusively in bookentry form and are direct obligations of the United States, issued under Chapter 31 of Title 31 of the United States Code. The securities are subject to the terms and conditions set forth in this Part, including the appendices, as well as the regulations governing book-entry Treasury bills, notes, and bonds (31 CFR Part 357), and the offering announcements, all to the extent applicable. When the Department issues additional securities with the same CUSIP number as outstanding securities, all securities with the same CUSIP number are considered the same security.

(b) Treasury notes.

(1) Treasury fixed-principal 1 notes. Treasury fixed-principal notes are

issued with a stated rate of interest to be applied to the par amount, have interest payable semiannually, and are redeemed at their par amount at maturity. They are sold at discount, par, or premium, depending upon the auction results. They have maturities of at least one year, but not more than ten

(2) Treasury inflation-indexed notes. Treasury inflation-indexed notes are issued with a stated rate of interest to be applied to the inflation-adjusted principal on each interest payment date, have interest payable semiannually, and are redeemed at maturity at their inflation-adjusted principal, or at their par amount, whichever is greater. They are sold at discount, par, or premium, depending upon the auction results. They have maturities of at least one year, but not more than ten years. (See Appendix B for price and interest payment calculations and Appendix C for Investment Considerations.)

(c) Treasury bonds.

(1) Treasury fixed-principal bonds. Treasury fixed-principal bonds are issued with a stated rate of interest to be applied to the par amount, have interest payable semiannually, and are redeemed at their par amount at maturity. They are sold at discount, par, or premium, depending upon the auction results. They typically have maturities of more than ten years.

- (2) Treasury inflation-indexed bonds. Treasury inflation-indexed bonds are issued with a stated rate of interest to be applied to the inflation-adjusted principal on each interest payment date, have interest payable semiannually, and are redeemed at maturity at their inflation-adjusted principal, or at their par amount, whichever is greater. They are sold at discount, par, or premium, depending upon the auction results. They typically have maturities of more than ten years. (See Appendix B for price and interest payment calculations and Appendix C for Investment Considerations.)
- 5. Section 356.10 is amended by adding a sentence at the end of the paragraph, before the parenthetical last sentence, to read as follows:

§ 356.10 Offering announcement.

- * * * Accordingly, bidders should read the applicable offering announcement in conjunction with this Part. * * *
- 6. Section 356.12 is amended by revising the first sentence of paragraph (a); revising paragraphs (b)(2), (c)(1)(i)

fixed-principal bonds are referred to as "notes" and "bonds" in official Treasury publications, such as offering announcements and auction results press releases, as well as in auction systems.

and (ii); and adding new paragraph (c)(1)(iii) to read as follows:

§ 356.12 Noncompetitive and competitive bidding.

(a) General. All bids, including bids for reopenings, must state the par amount of securities bid for and must equal or exceed the minimum bid amount stated in the offering announcement. *

(b) *

(2) Additional restrictions. A bidder may not bid noncompetitively for its own account if, in the security being auctioned, it holds or has held a position in when-issued trading or in futures or forward contracts at any time between the date of the offering announcement and the designated closing time for the receipt of competitive tenders. * *

(c) * * * (1) * * *

- (i) Treasury bills. A competitive bid must show the discount rate bid, expressed with two decimals, e.g., 3.10. Fractions may not be used.
- (ii) Treasury fixed-principal securities. A competitive bid must show the yield bid, expressed with three decimals, e.g., 4.170. Fractions may not be used.
- (iii) Treasury inflation-indexed securities. A competitive bid must show the real yield bid, expressed with three decimals, e.g., 3.070. Fractions may not be used.

7. Section 356.13 is amended by revising paragraph (a) to read as follows:

§ 356.13 Net long position.

(a) Reporting net long positions. When bidding competitively, a bidder must report the amount of its net long position when the total of all of its bids in an auction plus the bidder's net long position in the security being auctioned equals or exceeds the net long position reporting threshold amount. The threshold amount for any particular security will be as stated in the offering announcement for that security. (See § 356.10.) That amount will be \$2 billion for bills, notes, and bonds unless otherwise stated in the offering announcement. For example, the net long position reporting threshold amount may be less than \$2 billion for smaller security offerings, e.g., certain inflation-indexed securities or cash management bills. If the bidder either has no position or has a net short position and the total of all of its bids equals or exceeds the threshold amount, e.g., \$2 billion, a net long position of zero must be reported. *

* *

¹ The term "fixed-principal" is used in this Part to distinguish such securities from "inflationindexed" securities. Fixed-principal notes and

8. Section 356.17 is amended by revising the last sentence in the introductory paragraph and the introductory text of paragraphs (a) and (b) to read as follows:

§ 356.17 Responsibility for payment.

- * * * The specific requirements, outlined in this section, depend on whether awarded securities will be delivered in TREASURY DIRECT or TRADES.
- (a) TREASURY DIRECT. For securities to be held in TREASURY DIRECT, payment of the par amount and announced accrued interest and/or inflation adjustment, if any, must be submitted with the tender unless other provisions have been made, such as payment by an authorized electronic means providing for immediately available funds or by charge to the funds account of a depository institution.
- (b) TRADES. For securities to be held in TRADES, payment of the par amount and announced accrued interest and/or inflation adjustment, if any, must be submitted with the tender unless other provisions have been made, such as payment by an authorized electronic means providing for immediately available funds or by charge to the funds account of a depository institution. * *
- 9. Section 356.20 is amended by revising the introductory text of paragraph (c) and adding a sentence to the end of paragraph (c)(2) to read as follows:

§ 356.20 Determination of auction awards.

- (c) Determining purchase prices for awarded securities. Price calculations will be rounded to three decimal places on the basis of price per hundred, e.g., 99.954. (See Appendix B.)
- (2) * * * For inflation-indexed securities, the price of such securities will be the price equivalent to the highest real yield at which bids were accepted.
- 10. Section 356.25 is amended by revising the last sentence in paragraph (a)(2), and adding paragraph (d) to read as follows:

§ 356.25 Payment for awarded securities.

(a) * * *

(2) * * * Such additional amount may be due if the auction calculations result in a premium or if accrued interest and/or inflation adjustment is due.

- (d) Amount of payment for awarded securities. The payment amount for awarded securities will be the settlement amount as defined in § 356.2. (See formulas in Appendix B.)
- 11. Section 356.30 is amended by redesignating the text of the current section as (a), adding a heading of "General" and revising the last sentence in newly redesignated paragraph (a), and adding paragraph (b) to read as follows:

§ 356.30 Payment of principal and interest on notes and bonds.

- (a) General. * * * In the event any principal or interest payment date is not a business day, the amount is payable (without additional interest) on the next business day.
- (b) Treasury inflation-indexed securities. At maturity, the inflationadjusted principal will be paid, unless the inflation-adjusted principal is less than the par amount of the security, in which case an additional amount will be paid at maturity so that the additional amount plus the inflationadjusted principal equals the par amount. If a security has been stripped, any such additional amount will be paid at maturity to holders of principal components only. Regardless of whether or not an additional amount is paid, the final interest payment will be based on the inflation-adjusted principal at maturity.
- 12. Section 356.31 is amended by revising paragraph (a) and the first sentence of paragraph (b), redesignating paragraphs (c) and (d) as paragraphs (g) and (h) respectively, adding new paragraphs (c) through (f), adding a third and fourth sentence to newly redesignated paragraph (g) and revising newly redesignated paragraph (h) to read as follows:

§ 356.31 STRIPS.

(a) General. A note or bond may be designated in the offering announcement as eligible for the STRIPS program. At the option of the holder, and generally at any time from its issue date until its call or maturity, any such security may be "stripped, i.e., divided into separate principal and interest components. A short or long first interest payment and all interest payments within a callable period are not eligible to be stripped from the principal component. The CUSIP numbers and payment dates for the principal and interest components are provided in the offering announcement if not previously announced.

(b) Minimum par amounts required for STRIPS. For a note or bond to be stripped into the components described

above, the par amount of the note or bond must be in an amount that, based on its interest rate, would produce a semiannual interest payment, before adjustment for inflation, in a multiple of \$1,000. * * *

(c) Principal components stripped from fixed-principal securities. Principal components stripped from fixed-principal securities are maintained in accounts, and transferred, in TRADES at their par amount. The principal components have a CUSIP number that is different from the CUSIP number of the fully-constituted

(unstripped) security.

(d) Interest components stripped from fixed-principal securities. Interest components stripped from fixedprincipal securities are maintained in accounts, and transferred, in TRADES at their original payment value, which is derived by applying the semiannual interest rate to the par amount. When an interest component is created, the interest payment date becomes the maturity date for the component. All such components with the same maturity date have the same CUSIP number, regardless of the underlying security from which the interest payments were stripped. All interest components have CUSIP numbers that are different from the CUSIP number of any fully-constituted security and any principal component.

(e) Principal components stripped from inflation-indexed securities. Principal components stripped from inflation-indexed securities are maintained in accounts, and transferred, in TRADES at their par amount. At maturity, the holder will receive the inflation-adjusted principal value or the par amount, whichever is greater. (See § 356.30.) Principal components have a CUSIP number that is different from the CUSIP number of the fully-constituted

security.

(f) Interest components stripped from inflation-indexed securities. Interest components stripped from inflationindexed securities are maintained in accounts, and transferred, in TRADES at their original payment value, which is derived by applying the semiannual interest rate to the par amount. When an interest component is created, the interest payment date becomes the maturity date for the component. Each such component has a unique CUSIP number that is different from the CUSIP number of any interest components stripped from different securities, even if the components have the same maturity date. All interest components have CUSIP numbers that are different from the CUSIP number of any fullyconstituted security and any principal

- component. At maturity, the payment to the holder will be derived by applying the semiannual interest rate to the inflation-adjusted principal of the underlying security.
- (g) Reconstituting a security. * * * Interest components stripped from inflation-indexed securities are different from interest components stripped from fixed-principal securities and, accordingly, are not interchangeable for reconstitution purposes. Interest components stripped from one inflation-indexed security are not interchangeable for reconstitution purposes with interest
- components stripped from another inflation-indexed security.
- (h) Applicable regulations. Unless otherwise provided in this Part, notes and bonds stripped into their STRIPS components are governed by Subparts A, B and D of Part 357 of this title.
- 13. Section 356.32 is revised to read as follows:

§ 356.32 Taxation.

(a) General. Securities issued under this Part are subject to all applicable taxes imposed under the Internal Revenue Code of 1986, or successor.

- Under section 3124 of Title 31, United States Code, the securities are exempt from taxation by a State or political subdivision of a State, except for State estate or inheritance taxes and other exceptions as provided in that section.
- (b) Treasury inflation-indexed securities. Special federal income tax rules for inflation-indexed securities, and principal and interest components stripped from such securities, are set forth in Internal Revenue Service regulations.

BILLING CODE 4810-39-W

14. Appendix B to Part 356 is amended by revising the list of section titles, and adding two new paragraphs following the list to read as follows:

APPENDIX B TO PART 356--FORMULAS AND TABLES

- I. Computation of Interest on Treasury Bonds and Notes.
- II. Formulas for Conversion of Fixed-Principal Security Yields to Equivalent Prices.
- III. Formulas for Conversion of Inflation-Indexed Security Yields to Equivalent Prices.
- IV. Computation of Purchase Price, Discount Rate, and Investment Rate (Coupon-Equivalent Yield) for Treasury Bills.

The numbers in this appendix are examples given for illustrative purposes only and are in no way a prediction of interest rates on any bills, notes, or bonds issued under this Part.

In some of the following examples, intermediate rounding is used to allow the reader to follow the calculations. In actual practice, the Department generally does not round prior to determining the final result.

15. Appendix B, Section I is amended as follows: by redesignating paragraphs A through D and their corresponding Examples as paragraphs A.1. through A.4. respectively, and adding a new title for paragraph A, revising newly redesignated paragraph A.1., revising the first sentence in newly redesignated paragraphs A.2., A.3. and its Example, and A.4. and its Example; by adding a new paragraph B; and by redesignating paragraph E as paragraph C, revising the second paragraph, adding a third paragraph prior to the Examples in newly redesignated paragraph C., redesignating the headings for Examples C.(1) and (2) as C.(1)(i) and C.(1)(ii) respectively, and adding a new heading for Example C.(1).

I. COMPUTATION OF INTEREST ON TREASURY BONDS AND NOTES

A. Treasury Fixed-Principal Securities

1. Regular Half-Year Payment Period

Interest on marketable fixed-principal securities is payable on a semiannual basis. The regular interest payment period is a full half-year of six calendar months. Examples of half-year periods are: (1) February 15 to August 15, (2) May 31 to November 30, and (3) February 29 to August 31 (in a leap year). Calculation of an interest payment for a fixed-principal security with a par amount of \$1,000 and an interest rate of 8% is made in this manner: $(\$1,000 \times .08)/2 = \40 . Specifically, a semiannual interest

payment represents one-half of one year's interest, and is computed on this basis regardless of the actual number of days in the half-year.

2. Daily Interest Decimal

In cases where an interest payment period for a fixedprincipal security is shorter or longer than six months or
where accrued interest is payable by an investor, a daily
interest decimal, based on the actual number of days in the
half-year or half-years involved, must be computed. ***

3. Short First Payment Period

In cases where the first interest payment period for a fixed-principal security covers less than a full half-year period (a "short coupon"), the daily interest decimal is multiplied by the number of days from, but not including, the issue date to, and including, the first interest payment date, resulting in the amount of the interest payable per \$1,000 par amount. ***

EXAMPLE. A 2-year fixed-principal note paying 8-3/8% interest was issued on July 2, 1990, with the first interest payment on December 31, 1990. ***

4. Long First Payment Period

In cases where the first interest payment period for a

fixed-principal security covers more than a full half-year period (a "long coupon"), the daily interest decimal is multiplied by the number of days from, but not including, the issue date to, and including, the last day of the fractional period that ends one full half-year before the interest payment date. ***

EXAMPLE. A 5-year 2-month fixed-principal note paying 7-7/8% interest was issued on December 3, 1990, with the first interest payment due on August 15, 1991. ***

B. Treasury Inflation-Indexed Securities

1. Indexing Process

Interest on marketable Treasury inflation-indexed securities is payable on a semiannual basis. The inflation-indexed securities are issued with a stated rate of interest which remains constant for the term of the particular security. Interest payments are based on the security's inflation-adjusted principal at the time interest is paid. This adjustment is made by multiplying the par amount of the security by the applicable Index Ratio.

2. Index Ratio

The numerator of the Index Ratio, the Ref $\mathrm{CPI}_{\mathrm{Date}}$, is the index number applicable for a specific day, and the denominator of the Index Ratio is the Ref CPI applicable for the original issue date. However, when the dated date is

different from the original issue date, the denominator is the Ref CPI applicable for the dated date. The formula for calculating the Index Ratio is:

$$Index Ratio_{Date} = \frac{Ref CPI_{Date}}{Ref CPI_{Issue Date}}$$

Where Date = valuation date

3. Reference CPI

The Ref CPI for the first day of any calendar month is the CPI for the third preceding calendar month. For example, the Ref CPI applicable to April 1 in any year is the CPI for January, which is reported in February. The Ref CPI for any other day of a month is determined by a linear interpolation between the Ref CPI applicable to the first day of the month in which such day falls (in the example, January) and the Ref CPI applicable to the first day of the next month (in the example, February). For purposes of interpolation, calculations with regard to the Ref CPI and the Index Ratio for a specific date will be truncated to six decimal places and rounded to five decimal places such that the Ref CPI and the Index Ratio for that date will be expressed to five decimal places. The formula for the Ref CPI for a specific date is:

$$Ref CPI_{Date} = Ref CPI_{M} + \frac{t - 1}{D} [Ref CPI_{M+1} - Ref CPI_{M}]$$

Where Date = valuation date

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

t = the calendar day corresponding to Date

 $CPI_{M} = CPI$ reported for the calendar month M by the Bureau of Labor Statistics

 $\label{eq:Ref_CPI_M} \mbox{Ref CPI}_{M} = \mbox{Ref CPI} \mbox{ for the first day of the calendar month}$ $\mbox{in which Date falls, e.g., Ref CPI}_{April\,1} \mbox{ is the}$ $\mbox{CPI}_{January}$

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

For example, the Ref CPI for April 15, 1996 is calculated as follows:

Ref $CPI_{April 15, 1996} = Ref CPI_{April 1, 1996} + \frac{14}{30} [Ref CPI_{May 1, 1996} - Ref CPI_{April 1, 1996}]$

where D = 30, t = 15

Ref $CPI_{April \, 1, \, 1996} = 154.40$, the non-seasonally adjusted CPI-U for January 1996.

Ref $CPI_{May 1, 1996} = 154.90$, the non-seasonally adjusted CPI-U for February 1996.

Putting these values in the equation above:

Ref $CPI_{April_{15, 1996}} = 154.40 + \frac{14}{30} [154.90 - 154.40]$

Ref $CPI_{April\ 15,\ 1996} = 154.6333333333$

This value truncated to six decimals is 154.633333; rounded to five decimals it is 154.63333.

To calculate the Index Ratio for April 16, 1996, for an inflation-indexed security issued on April 15, 1996, the Ref $\text{CPI}_{\text{April 16, 1996}}$ must first be calculated. Using the same values in the equation above except that t=16, the Ref $\text{CPI}_{\text{April 16, 1996}}$ is 154.65000.

The Index Ratio for April 16, 1996 is:

Index Ratio_{April 16, 1996} = 154.65000/154.63333 = 1.000107803.

This value truncated to six decimals is 1.000107; rounded to five decimals it is 1.00011.

4. Index Contingencies

If a previously reported CPI is revised, Treasury will continue to use the previously reported CPI in calculating the principal value and interest payments.

If the CPI is rebased to a different year, Treasury will continue to use the CPI based on the base reference period in effect when the security was first issued, as long as that CPI continues to be published.

If, while an inflation-indexed security is outstanding, the applicable CPI is: (1) discontinued, (2) in the

judgment of the Secretary, fundamentally altered in a manner materially adverse to the interests of an investor in the security, or (3) in the judgment of the Secretary, altered by legislation or Executive Order in a manner materially adverse to the interests of an investor in the security, Treasury, after consulting with the Bureau of Labor Statistics, or any successor agency, will substitute an appropriate alternative index. Treasury will then notify the public of the substitute index and how it will be applied. Determinations of the Secretary in this regard will be final.

If the CPI for a particular month is not reported by the last day of the following month, the Treasury will announce an index number based on the last twelve-month change in the CPI available. Any calculations of the Treasury's payment obligations on the inflation-indexed security that rely on that month's CPI will be based on the index number that the Treasury has announced. For example, if the CPI for month M is not reported timely, the formula for calculating the index number to be used is:

$$\mathtt{CPI}_{M} \ = \ \mathtt{CPI}_{M\text{-}1} \ \mathbf{x} \ \left[\ \frac{\mathtt{CPI}_{M\text{-}1}}{\mathtt{CPI}_{M\text{-}13}} \ \right] \frac{1}{12}$$

Generalizing for the last reported CPI issued N months prior to month M:

$$CPI_{M} = CPI_{M-N} \times \left[\frac{CPI_{M-N}}{CPI_{M-N-12}} \right]^{\frac{N}{12}}$$

If it is necessary to use these formulas to calculate an index number, it will be used for all subsequent calculations that rely on that month's index number and will not be replaced by the actual CPI when it is reported, except for use in the above formulas. When it becomes necessary to use the above formulas to derive an index number, the last CPI that has been reported will be used to calculate CPI numbers for months for which the CPI has not been reported timely.

5. Computation of Interest for a Regular Half-Year Payment Period

Interest on marketable Treasury inflation-indexed securities is payable on a semiannual basis. The regular interest payment period is a full half-year or six calendar months. Examples of half-year periods are January 15 to July 15, and April 15 to October 15. An interest payment will be a fixed percentage of the value of the inflation-adjusted principal, in current dollars, for the date on which it is paid. Interest payments will be calculated by multiplying one-half of the specified annual interest rate for the inflation-indexed securities by the inflation-adjusted principal for the interest payment date.

Specifically, a semiannual interest payment is computed on the basis of one-half of one year's interest regardless of the actual number of days in the half-year.

Example. A 10-year inflation-indexed note paying 3% interest was issued on July 15, 1996, with the first interest payment on January 15, 1997. The Ref CPI on July 15, 1996 (Ref CPI_{Issue Date}) was 120, and the Ref CPI on January 15, 1997 (Ref CPI_{Date}) was 132. For a par amount of \$100,000, the inflation-adjusted principal on January 15, 1997, was (132/120) x \$100,000, or \$110,000. This amount was then multiplied by .03/2, or .015, resulting in a payment of \$1,650.00.

C. <u>Accrued Interest</u>

For a fixed-principal security, if accrued interest covers a fractional portion of a full half-year period, the number of days in the full half-year period and the stated interest rate will determine the daily interest decimal to be used in computing the accrued interest. The decimal is multiplied by the number of days for which interest has accrued. If a reopened fixed-principal security has a long first interest payment period (a "long coupon"), and the dated date for the reopened issue is less than six full months before the first interest payment, the accrued interest will fall into two separate half-year periods, and

a separate daily interest decimal must be multiplied by the respective number of days in each half-year period during which interest has accrued. All accrued interest computations are rounded to five decimal places for a \$1,000 inflation-adjusted principal, using normal rounding procedures. Accrued interest for a par amount of securities greater than \$1,000 is calculated by applying the appropriate multiple to accrued interest payable for \$1,000 par amount, rounded to five decimal places.

For an inflation-indexed security, accrued interest will be calculated as shown in Section III, Paragraphs A and B of this Appendix.

EXAMPLES. (1) Fixed-Principal Securities

- (i) Involving One Half-Year: ***
- (ii) Involving Two Half-Years: ***
- 16. Appendix B, Section II is amended by removing footnote
 1, revising the Section heading, revising the definition of
 "C=", and revising the headings of paragraphs A through G to
 read as follows:

II. FORMULAS FOR CONVERSION OF FIXED-PRINCIPAL SECURITY YIELDS TO EQUIVALENT PRICES

Definitions

c = the regular annual interest per \$100, payable
semiannually, e.g., 10.125 (the dollar equivalent
of a 10-1/8% interest rate)

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

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

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

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

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

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

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

17. Appendix B is amended by redesignating Section III as Section IV and adding a new Section III to read as follows:

III. FORMULAS FOR CONVERSION OF INFLATION-INDEXED SECURITY YIELDS TO EQUIVALENT PRICES

<u>Definitions</u>

- P = unadjusted or real price per 100 (dollars)
- P_{adi} = inflation adjusted price; P x Index Ratio_{Date}
- A = unadjusted accrued interest per \$100 original principal
- A_{adi} = inflation adjusted accrued interest; A x Index Ratio_{Date}
- 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

 $a_n = (1 - v^n)/(i/2) = v + v^2 + v^3 + ... + v^n$

= present value of 1 per period for n periods

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
- $\label{eq:Ref_CPI_M} \mbox{ = reference CPI for the first day of the calendar} \\ \mbox{ month in which Date falls, e.g., Ref CPI}_{\mbox{April 1}} \mbox{ is} \\ \mbox{ the CPI}_{\mbox{January}}$

 $Ref CPI_{M+1} = reference CPI$ for the first day of the calendar

month immediately following Date

$$\begin{split} & \text{Ref CPI}_{Date} = \text{Ref CPI}_{M} \, + \, [\,(\text{t - 1})\,/\text{D}] \, [\text{Ref CPI}_{M+1} \, - \, \text{Ref CPI}_{M}] \\ & \text{Index Ratio}_{Date} = \text{Ref CPI}_{Date}/\text{Ref CPI}_{Issue \, Date} \\ \end{split}$$

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

Formulas:

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

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

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

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

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

Index Ratio_{Date} = Ref $CPI_{Date}/Ref CPI_{Issue Date}$

Example. The Treasury issues a 10-year inflation-indexed note on July 15, 1996. The note is issued at a discount to yield 3.1% (real). The note bears a 3% real coupon, payable on January 15 and July 15 of each year. The base CPI index applicable to this note is 120.1 Calculate the settlement amount.

¹ This number is normally derived using the interpolative process described in Appendix B, Section I, Paragraph B.

Definitions:

C = 3.00

i = 0.0310

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

r = 184 (July 15, 1996 to January 15, 1997)

s = 184 (July 15, 1996 to January 15, 1997)

 $Ref CPI_{Date} = 120$

Ref $CPI_{Issue\ Date} = 120$

Resolution:

Index Ratio_{Date} = Ref CPI_{Date}/Ref CPI_{Issue Date} =
$$120/120 = 1$$

A = [(184 - 184)/184] x 3/2 = 0

A_{adj} = 0 x 1 = 0

 $v^n = 1/(1 + i/2)^n = 1/(1 + .031/2)^{19} = 0.74658863$
 $a_{n7} = (1 - v^n)/(i/2) = (1 - 0.74658863)/(.031/2)$
= 16.34912065

$$P = \frac{(C/2) + (C/2)a_{n7} + 100v^{n}}{1 + (r/s)(i/2)} - [(s - r)/s](C/2)$$

$$P = \frac{(3/2) + (3/2)(16.34912065) + 100(0.74658863)}{1 + (184/184)(0.031/2)} - [(184 - 184)/184](3/2)$$

$$P = \frac{1.5 + 24.52368098 + 74.658863}{1.01550000} - 0$$

$$P = \frac{100.68254398}{1.01550000}$$

P = 99.145784

P = 99.146

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

 $P_{adi} = 99.146 \times 1 = 99.146$

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

SA = 99.146 + 0 = 99.146

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

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 <math>\$10,000\$ x (132/120), or <math>\$11,000\$.

Formulas:

$$P = \frac{(C/2) + (C/2)a_{n7} + 100v^{n}}{1 + (r/s)(i/2)} - [(s - r)/s](C/2)$$

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

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

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

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

Index Ratio_{Date} = Ref CPI_{Date}/Ref CPI_{Issue Date}

Example. A 3% 10-year inflation-indexed note was issued July 15, 1996, due July 15, 2006, with interest payments on January 15 and July 15. For a reopening on April 15, 1997, with inflation compensation accruing from July 15, 1996 to April 15, 1997, and accrued interest accruing from January 15, 1997 to April 15, 1997 (90 days), solve for the price per 100 (P) at a real yield, as determined in the reopening auction, of 3.40%. The base index applicable to the issue date of this note is 120 and the reference CPI applicable to April 15, 1997, is 132.

Definitions:

C = 3.00

i = 0.0340

n = 18

r = 91 (April 15, 1997 to July 15, 1997)

s = 181 (January 15, 1997 to July 15, 1997)

 $Ref CPI_{Date} = 132$

 $Ref CPI_{Issue Date} = 120$

Resolution:

Index Ratio_{Date} = Ref $CPI_{Date}/Ref CPI_{Issue\ Date} = 132/120 = 1.100$

$$v^{n} = 1/(1 + i/2)^{n} = 1/(1 + .0340/2)^{18} = 0.73828296$$

$$a_{n} = (1 - v^{n})/(i/2) = (1 - 0.73828296)/(.0340/2)$$

$$= 15.39512000$$

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

$$P = \frac{(3/2) + (3/2)(15.39512000) + 100(0.73828296)}{1 + (91/181)(0.0340/2)} - [(181 - 91)/181](3/2)$$

$$P = \frac{1.5 + 23.09268 + 73.828296}{1.00854696} - (90/181)(1.5)$$

$$P = \frac{98.420976}{1.00854696} - 0.745856$$

P = 97.586905 - 0.745856

P = 96.841049

P = 96.841

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

 $P_{adi} = 96.841 \times 1.100 = 106.5251$

 $P_{adi} = 106.525$

 $A = [(181 - 91)/181] \times 3/2 = 0.745856$

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

 $A_{adi} = 0.745856 \times 1.100 = 0.820442$

 $SA = P_{adj} + A_{adj} = 106.525 + 0.820442$

SA = 107.345442

BILLING CODE 4810-39-C

18. Part 356 is amended by adding new Appendixes C and D to read as follows:

Appendix C To Part 356—Investment Considerations

I. Inflation-Indexed Securities

A. Principal and Interest Variability

An investment in securities with principal or interest determined by reference to an inflation index involves factors not associated with an investment in a fixedprincipal security. Such factors may include, without limitation, the possibility that the inflation index may be subject to significant changes, that changes in the index may or may not correlate to changes in interest rates generally or with changes in other indices, that the resulting interest may be greater or less than that payable on other securities of similar maturities, and that, in the event of sustained deflation, the amount of the semiannual interest payments, the inflationadjusted principal of the security, and the value of stripped components, will decrease. However, if at maturity the inflation-adjusted principal is less than a security's par amount, an additional amount will be paid at maturity so that the additional amount plus the inflation-adjusted principal equals the par amount. Regardless of whether or not such an additional amount is paid, interest payments will always be based on the inflationadjusted principal as of the interest payment date. If a security has been stripped, any such additional amount will be paid at maturity to holders of principal components only. (See § 356.30.)

B. Trading in the Secondary Market

The Treasury securities market is the largest and most liquid securities market in the world. While Treasury expects that there will be an active secondary market for inflation-indexed securities, that market initially may not be as active or liquid as the secondary market for Treasury fixedprincipal securities. In addition, as a new product, inflation-indexed securities may not be as widely traded or as well understood as Treasury fixed-principal securities. Lesser liquidity and fewer market participants may result in larger spreads between bid and asked prices for inflation-indexed securities than the bid-asked spreads for fixed-principal securities with the same time to maturity. Larger bid-asked spreads normally result in higher transaction costs and/or lower overall returns. The liquidity of an inflation-indexed security may be enhanced over time as Treasury issues additional amounts or more entities participate in the market.

C. Tax Considerations

Treasury inflation-indexed securities and the stripped interest and principal components of these securities are subject to specific tax rules provided by Treasury regulations issued under sections 1275(d) and 1286 of the Internal Revenue Code of 1986, as amended.

D. Indexing Issues

While the CPI measures changes in prices for goods and services, movements in the CPI

that have occurred in the past are not necessarily indicative of changes that may occur in the future.

The calculation of the index ratio incorporates an approximate three-month lag, which may have an impact on the trading price of the securities, particularly during periods of significant, rapid changes in the index.

The CPI is reported by the Bureau of Labor Statistics, a bureau within the Department of Labor. The Bureau of Labor Statistics operates independently of the Treasury and, therefore, Treasury has no control over the determination, calculation, or publication of the index. For a discussion of how the CPI will be applied in various situations, see Appendix B, Section I, Paragraph B. In addition, for a discussion of actions that Treasury would take in the event the CPI is: discontinued; in the judgment of the Secretary, fundamentally altered in a manner materially adverse to the interests of an investor in the security; or, in the judgment of the Secretary, altered by legislation or Executive Order in a manner materially adverse to the interests of an investor in the security, see Appendix B, Section I, Paragraph B.4.

Appendix D to Part 356—Description of the Consumer Price Index

The Consumer Price Index ("CPI") for purposes of inflation-indexed securities is the non-seasonally adjusted *U.S. City*Average All Items Consumer Price Index for All Urban Consumers, published monthly by the Bureau of Labor Statistics of the Department of Labor. The CPI is a measure of the average change in consumer prices over time in a fixed market basket of goods and services, including food, clothing, shelter, fuels, transportation, charges for doctors' and dentists' services, and drugs.

In calculating the index, price changes for the various items are averaged together with weights that represent their importance in the spending of urban households in the United States. The contents of the market basket of goods and services and the weights assigned to the various items are updated periodically to take into account changes in consumer expenditure patterns.

The CPI is expressed in relative terms in relation to a time base reference period for which the level is set at 100. For example, if the CPI for the 1982–84 reference period is 100.0, an increase of 16.5 percent from that period would be shown as 116.5. The CPI for a particular month is released and published during the following month. From time to time, the CPI is rebased to a more recent base reference period. The base reference period for a particular inflation-indexed security will be provided on the offering announcement for that security.

Further details about the CPI may be obtained by contacting the Bureau of Labor Statistics.

19. Exhibit A to Part 356 is amended by adding a new Section IV to the list of section titles and to the text of Exhibit A to read as follows:

Exhibit A to Part 356—Sample Announcements of Treasury Offerings to the Public

IV Tuccum Inflation Ind

IV. Treasury Inflation-Indexed Note Announcement

N TOEACHDY INELATION

IV. TREASURY INFLATION-INDEXED NOTE ANNOUNCEMENT

Embargoed Until 2:30 P.M., October 2, 20XX CONTACT: Office of Financing, 202/219–3350

Treasury to Auction \$5,500 Million of 10-Year Inflation-Indexed Notes

The Treasury will auction \$5,500 million of 10-year inflation-indexed notes to raise cash. In addition, there is \$7,906 million of publicly-held securities maturing October 15, 20XX.

In addition to the public holdings, Federal Reserve Banks hold \$327 million of the maturing securities for their own accounts, which may be exchanged for additional amounts of the new securities.

The maturing securities held by the public include \$584 million held by Federal Reserve Banks as agents for foreign and international monetary authorities. Amounts bid for these accounts by Federal Reserve Banks will be added to the offering.

The auction will be conducted in the single-price auction format. All competitive and noncompetitive awards will be at the highest yield of accepted competitive tenders.

Tenders will be received at Federal Reserve Banks and Branches and at the Bureau of the Public Debt, Washington, D.C. This offering of Treasury securities is governed by the terms and conditions set forth in the Uniform Offering Circular (31 CFR Part 356) for the sale and issue by the Treasury to the public of marketable Treasury bills, notes, and bonds.

Details about the new security are given in the attached offering highlights.

Highlights of Treasury Offering to the Public of 10-Year Inflation-Indexed Notes to be Issued October 15, 20XX

October 2, 20XX Offering Amount: \$5,500 million. Description of Offering:

Term and type of security: 10-year inflation-indexed notes

Series—D-20XX
CUSIP number—912XXX XX X
Auction date—October 9, 20XX
Issue date—October 15, 20XX
Dated date—October 15, 20XX
Maturity date—October 15, 20XX
Interest Rate—Determined based on the highest accepted bid

Real yield—Determined at auction Interest payment dates: April 15 and

October 15.
Minimum bid amount—\$1,000

Multiples—\$1,000 Accrued interest payable by investor:

None.
Premium or discount: Determined at auction.

STRIPS Information:

Minimum amount required—Determined at auction

Corpus CUSIP number—912XXX XX X

STRIPS Information:

Due dates and CUSIP numbers for additional TINTs: 912XXX.

April 15, 20XX—XX X

October 15, 20XX—XX X

April 15, 20XX-XX X

October 15, 20XX—XX X

April 15, 20XX—XX X October 15, 20XX—XX X

April 15, 20XX-XX X

October 15, 20XX—XX X

April 15, 20XX-XX X October 15, 20XX—XX X

April 15, 20XX—XX X

October 15, 20XX-XX X

April 15, 20XX—XX X

October 15, 20XX-XX X

April 15, 20XX—XX X

October 15, 20XX—XX X

April 15, 20XX-XX X

October 15, 20XX-XX X

April 15, 20XX-XX X

October 15, 20XX-XX X

Submission of Bids:

Noncompetitive bids:—Will be accepted in full up to \$5,000,000 at the highest accepted yield.

Competitive bids:

- (1) Must be expressed as a real yield with three decimals, e.g., 3.120%.
- (2) Net long position for each bidder must be reported when the sum of the total bid amount, at all yields, and the net long billion or greater. position is \$
- (3) Net long position must be determined as of one half-hour prior to the closing time for receipt of competitive tenders.

Maximum Recognized Bid at a Single Yield—35% of public offering. Maximum Award—35% of public offering.

Receipt of Tenders:

Noncompetitive tenders: Prior to 12:00 noon Eastern Daylight Saving time on auction

Competitive tenders: Prior to 1:00 p.m. Eastern Daylight Saving time on auction

Payment Terms: Full payment with tender or by charge to a funds account at a Federal Reserve Bank on issue date.

Indexing Information: CPI Base Reference Period:—19XX-XX Ref CPI 10/15/20XX:-XXX.XXXXX [FR Doc. 96-33396 Filed 12-31-96; 10:08 am]

BILLING CODE 4810-39-W