

3. Subarea C.
Boundaries.
Beginning at Lat. 36°15'00"N., Long. 87°36'00"W.; to Lat. 36°00'00"N., Long. 87°58'00"W.; to Lat. 36°00'00"N., Long. 88°17'00"W.; to Lat. 36°15'00"N., Long. 88°15'00"W.; to point of beginning.
Designated altitudes. From 10,000 feet MSL to and including FL 180.

Time of designation. December 6-11, 1973, inclusive, from 0600 C.S.T. to 1900 C.S.T.

Controlling agency. Federal Aviation Administration, Memphis ARTC Center.

Using agency. U.S. Air Force Readiness Command, Langley AFB, Va.

(Sec. 307(a), Federal Aviation Act of 1958 (49 U.S.C. 1348(a)); sec. 6(c), Department of Transportation Act (49 U.S.C. 1655(c)).)

Issued in Washington, D.C., on October 4, 1973.

CHARLES H. NEWPOL,
Acting Chief, Airspace and Air
Traffic Rules Division.

[FR Doc. 73-21854 Filed 10-12-73; 8:45 am]

[Docket No. 13231; Amdt. 885]

PART 97—STANDARD INSTRUMENT APPROACH PROCEDURES

Miscellaneous Amendments

This amendment to Part 97 of the Federal Aviation Regulations incorporates by reference therein changes and additions to the Standard Instrument Approach Procedures (SIAPs) that were recently adopted by the Administrator to promote safety at the airports concerned.

The complete SIAPs for the changes and additions covered by this amendment are described in FAA Forms 3139, 8260-3, 8260-4, or 8260-5 and made a part of the public rulemaking dockets of the FAA in accordance with the procedures set forth in Amendment No. 97-696 (35 FR 5609).

SIAPs are available for examination at the Rules Docket and at the National Flight Data Center, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, D.C. 20591. Copies of SIAPs adopted in a particular region are also available for examination at the headquarters of that region. Individual copies of SIAPs may be purchased from the FAA Public Document Inspection Facility, HQ-405, 800 Independence Avenue, SW., Washington, D.C. 20591, or from the applicable FAA regional office in accordance with the fee schedule prescribed in 49 CFR 7.85. This fee is payable in advance and may be paid by check, draft or postal money order payable to the Treasurer of the United States. A weekly transmittal of all SIAP changes and additions may be obtained by subscription at an annual rate of \$150.00 per annum from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Additional copies mailed to the same address may be ordered for \$30.00 each.

Since a situation exists that requires immediate adoption of this amendment, I find that further notice and public

procedure hereon is impracticable and good cause exists for making it effective in less than 30 days.

In consideration of the foregoing, Part 97 of the Federal Aviation Regulations is amended as follows, effective on the dates specified:

1. Section 97.23 is amended by originating, amending, or canceling the following VOR-VOR/DME SIAP's, effective November 22, 1973.

Hagerstown, Md.—Hagerstown Municipal Airport, VOR Runway 9, Amdt. 4.
Hattiesburg, Miss.—Hattiesburg Municipal Airport, VOR Runway 13, Amdt. 5.
Houston, Tex.—William P. Hobby Airport, VORTAC Runway 3, Amdt. 10.
Houston, Tex.—William P. Hobby Airport, VOR Runway 12 (TAC), Amdt. 8.
Houston, Tex.—William P. Hobby Airport, VORTAC Runway 21, Amdt. 15.
Houston, Tex.—William P. Hobby Airport, VORTAC Runway 30, Amdt. 5.
Huntsville, Tex.—Huntsville Municipal Airport, VORTAC-A, Amdt. 2.
Kenedy, Tex.—Karnes County Airport, VORTAC-A, Amdt. 1.
Liberty, Tex.—Liberty Municipal Airport, VOR-A, Amdt. 1.
Modesto, Calif.—Modesto City-County Airport, VOR Runway 10L, Amdt. 2.

Nashville, Tenn.—Nashville Metropolitan Airport, VOR/DME Runway 2L, Amdt. 1.
Nashville, Tenn.—Nashville Metropolitan Airport, VOR/DME Runway 13, Amdt. 3.
Nashville, Tenn.—Nashville Metropolitan Airport, VOR/DME Runway 20R, Amdt. 1.
Nashville, Tenn.—Nashville Metropolitan Airport, VOR Runway 31, Amdt. 21.
Port Lavaca, Tex.—Calhoun County Airport, VORTAC Runway 23, Amdt. 1.
St. Petersburg, Fla.—Albert Whitted Airport, VOR Runway 18, Amdt. 2.
Vero Beach, Fla.—Vero Beach Municipal Airport, VOR Runway 11, Amdt. 8.

* * * effective October 2, 1973

Destin, Fla.—Destin-Ft. Walton Beach Airport, VOR-A, Amdt. 1.

* * * effective October 1, 1973

North Myrtle Beach, S.C.—Myrtle Beach Airport, VOR Runway 5, Amdt. 8.

* * * effective September 28, 1973

Owensboro, Ky.—Owensboro-Daviess County Airport, VOR Runway 35, Amdt. 9.

2. Section 97.25 is amended by originating, amending, or canceling the following SDF-LOC-LDA SIAP's, effective November 22, 1973.

Nashville, Tenn.—Nashville Metropolitan Airport, LOC (BC) Runway 20R, Amdt. 11.

* * * effective October 18, 1973

Bethel, Alaska—Bethel Airport, LOC/DME Runway 18, Original, canceled.

3. Section 97.27 is amended by originating, amending, or canceling the following NDB/ADF SIAP's, effective November 22, 1973.

Cleveland, Ohio—Cleveland Hopkins International Airport, NDB Runway 5R/L, Amdt. 7.

Cleveland, Ohio—Cleveland Hopkins International Airport, NDB Runway 23R, Original, Canceled.

Cleveland, Ohio—Cleveland Hopkins International Airport, NDB Runway 23L, Original, Canceled.

Cleveland, Ohio—Cleveland Hopkins International Airport, NDB Runway 23L/R, Original.

Hattiesburg, Miss.—Hattiesburg Municipal Airport, NDB Runway 13, Amdt. 4.

Houghton Lake, Mich.—Roscommon County Airport, NDB Runway 27, Amdt. 2.

Houston, Tex.—Andrau Airpark, NDB Runway 16, Amdt. 11.

Houston, Tex.—Hull Field, NDB Runway 17, Amdt. 1.

Houston, Tex.—David Wayne Hooks Memorial Airport, NDB Runway 17R, Amdt. 3.

Lexington, Ky.—Blue Grass Airport, NDB Runway 4, Amdt. 9.

Nashville, Tenn.—Nashville Metropolitan Airport, NDB Runway 2L, Amdt. 21.

Nashville, Tenn.—Nashville Metropolitan Airport, NDB Runway 20R, Amdt. 1.

* * * effective November 1, 1973

Worcester, Mass.—Worcester Municipal Airport, NDB Runway 11, Amdt. 6.

* * * effective September 28, 1973

Owensboro, Ky.—Owensboro-Daviess County Airport, NDB Runway 35, Amdt. 1.

4. Section 97.29 is amended by originating, amending, or canceling the following ILS SIAP's, effective November 22, 1973.

Cleveland, Ohio—Cleveland Hopkins International Airport, ILS Runway 5R/L, Amdt. 10.

Cleveland, Ohio—Cleveland Hopkins International Airport, ILS Runway 28R, Amdt. 10.

Lexington, Ky.—Blue Grass Airport, ILS Runway 4, Amdt. 3.

Nashville, Tenn.—Nashville Metropolitan Airport, ILS Runway 2L, Amdt. 23.

* * * effective November 15, 1973

Houston, Tex.—Houston Intercontinental Airport, ILS Runway 8, Amdt. 3.

* * * effective November 1, 1973

Worcester, Mass.—Worcester Municipal Airport, ILS Runway 11, Amdt. 6.

* * * effective October 25, 1973

Sterling Rockfalls, Ill.—Whiteside County Airport, ILS Runway 25, Original.

* * * effective October 18, 1973

Bethel, Alaska—Bethel Airport, ILS/DME Runway 18, Original.

* * * effective September 28, 1973

Owensboro, Ky.—Owensboro-Daviess County Airport, ILS Runway 35, Amdt. 3.

5. Section 97.31 is amended by originating, amending, or canceling the following Radar SIAP's, effective November 22, 1973.

Baytown, Tex.—Humphrey Airport, RADAR-A, Amdt. 1.

Houston, Tex.—Collier Airport, RADAR-B, Original.

La Porte, Tex.—La Porte Municipal Airport, RADAR-B, Amdt. 4.

Nashville, Tenn.—Nashville Metropolitan Airport, RADAR-1, Amdt. 13.

Pearland, Tex.—Pearland Airport, RADAR-A, Amdt. 1.

* * * effective October 2, 1973

Destin, Fla.—Destin-Ft. Walton Beach Airport, RADAR-1, Amdt. 3.

Corrections. In Docket No. 13229, Amendment No. 884 to Part 97 of the Federal Aviation Regulations, published in the FEDERAL REGISTER under §§ 97.25 and 97.29 effective October 25, 1973, disregard New York, N.Y.—La Guardia Air-

port, LOC Runway 22, Orig.; New York, N.Y.—La Guardia Airport, ILS Runway 22, Amdt. 9, effective September 13, 1973 remains in effect.

In Docket No. 13145, Amendment No. 880 to Part 97 of the Federal Aviation Regulations published in the FEDERAL REGISTER dated Friday, September 7, 1973, on page 24351, under § 97.29 effective October 18, 1973; change effective date of San Antonio, Tex.—San Antonio International Airport, ILS Runway 12R, Amdt. 3 to November 15, 1973.

In Docket No. 13210, Amendment No. 883 to Part 97 of the Federal Aviation Regulations published in the FEDERAL REGISTER under § 97.29, effective November 8, 1973, disregard Kailua-Kona, Hawaii—Ke-ahole Airport, ILS/DME Runway 17, Amdt. 1; Original remains in effect.

(Secs. 307, 313, 601, 1110, Federal Aviation Act of 1948 (49 U.S.C. 1438, 1354, 1421, 1510); sec. 6(e) Department of Transportation Act, (49 U.S.C. 1655(c), 5 U.S.C. 552(a)(1)).)

Issued in Washington, D.C., on October 4, 1973.

JAMES M. VINES,
Chief, Aircraft Programs Division.

NOTE.—Incorporation by reference provisions in §§ 97.10 and 97.20 (35 FR 5610) approved by the Director of the Federal Register on May 12, 1969.

[FR Doc. 73-21857 Filed 10-12-73; 8:45 am]

[Docket No. 12649; Amdt. No. 171-9]

PART 171—NON-FEDERAL NAVIGATION FACILITIES

Performance Requirements for VOR, ILS, and SDF Facilities

The purpose of these amendments to Part 171 of the Federal Aviation Regulations is to revise certain performance requirements for non-Federal very high frequency omnidirectional radio (VOR), instrument landing systems (ILS), and simplified directional facilities (SDF).

This amendment is based on a notice of proposed rulemaking (Notice No. 73-9) issued March 14, 1973, and published in the FEDERAL REGISTER on March 21, 1973 (38 FR 7401). Interested persons have been afforded an opportunity to participate in the making of these amendments, and due consideration has been given to all comments received in response to that Notice.

Notice 73-9 stated that the FAA had determined that future requirements for air navigation aids in the National Airspace System could not be met with the number of frequencies now available for assignment, and that examination of alternative solutions to this problem indicated that reduction of radio channel spacing from the present 100 kHz spacing to 50 kHz spacing was the most economical and practicable method of increasing the number of assignable frequencies.

The Federal Communications Commission, at the request of the FAA, has amended Parts 2 and 87 of the FCC regulations (47 CFR 2, 87; 38 FR 14106,

May 29, 1973) to provide for 50 kHz channel spacing in the frequency band 108-117.95 MHz. This amendment doubles the availability of assignable channels for VOR and ILS facilities.

As indicated in Notice No. 73-9, implementation of 50 kHz channel spacing will require an increase of frequency stability for the ILS glide slope and localizer, SDF, and VOR ground transmitters. In order to provide for satisfactory adjacent-channel operations, the frequency tolerance of these transmitters must necessarily be reduced from the previous performance requirement of 0.005 percent to 0.002 percent. The FCC rules change cited above requires 0.002 percent frequency tolerance effective July 1, 1973. The FAA and Department of Defense (DOD) have accomplished frequency stabilization for federally operated facilities.

The Notice proposed that operators of non-Federal VOR facilities be required to suppress subcarrier harmonics (to perform in accordance with paragraph 3.3.5.7 of Annex 10 to the Convention on International Civil Aviation) within 180 days after notification by the Administrator that 50 kHz channel spacing was to be implemented in the area and that a requirement existed for suppression of 9960 Hz subcarrier harmonics. While it was proposed that this requirement be made effective July 1, 1973, it was also anticipated that with the additional frequencies available for assignment, adjacent-channel interference could be avoided for some period of time and suppression of harmonics at non-Federal facilities could be avoided until 1975.

Objection was expressed in comments received to the early effective date for this requirement as imposing an unnecessary requirement. It was recommended that the requirement not be imposed until 1975.

Another comment recommended that harmonic suppression be required to be accomplished as soon as possible, and no later than January 1, 1974, to eliminate the problem of adjacent-channel interference or reception, without a warning flag, when a 50 kHz receiver is inadvertently tuned to an unoccupied channel adjacent to a VOR ground station.

Data available to the FAA indicates that suppression of harmonics to the ICAO standard proposed, or even 3dB and 5dB below that standard does not eliminate the undesirable flag action under the inadvertent mistuning condition. Additionally, FAA believes that the problem of mistuning an airborne receiver is most appropriately resolved by crew training and indoctrination, or by modification of airborne equipment. In this connection, FAA issued Advisory Circular 90-58, February 16, 1972, advising of the potential hazards of inadvertent mistuning of 50 kHz receivers.

With respect to the effective date for requiring harmonic suppression, the FAA believes that with the additional flexibility in frequency assignment afforded by 50 kHz channel spacing adjacent-channel interference from non-

Federal facilities can be avoided for the immediate future. Accordingly, § 171.7(e) has been changed to provide for suppression of harmonics on non-Federal VOR facilities after January 1, 1975. VOR facilities operated by the United States (FAA and DOD) will have harmonics suppressed as necessary to avoid adjacent-channel interference.

These amendments are made under the authority of sections 305, 307, 313(a), 601, and 606 of the Federal Aviation Act of 1958 (49 U.S.C. 1346, 1348, 1354(a), 1421, and 1426), and section 6(c) of the Department of Transportation Act (49 U.S.C. 1655(c)).

In consideration of the foregoing, Part 171 of the Federal Aviation Regulations is amended effective November 19, 1973, as follows:

1. By amending paragraph (a) of § 171.7 and by adding a new paragraph (e) to § 171.7 to read as follows:

§ 171.7 Performance requirements.

(a) The VOR must perform in accordance with the "International Standards and Recommended Practices, Aeronautical Telecommunications," Part I, paragraph 3.3 (Annex 10 to the Convention on International Civil Aviation), except that part of paragraph 3.3.2.1 specifying a radio frequency tolerance of 0.005 percent, and that part of paragraph 3.3.7 requiring removal of only the bearing information. In place thereof, the frequency tolerance of the radio frequency carrier must not exceed plus or minus 0.002 percent, and all radiation must be removed during the specified deviations from established conditions and during periods of monitor failure.

(e) After January 1, 1975, the owner of the VOR shall modify the facility to perform in accordance with paragraph 3.3.5.7 of Annex 10 to the Convention on International Civil Aviation within 180 days after receipt of notice from the Administrator that 50 kHz channel spacing is to be implemented in the area and that a requirement exists for suppression of 9960 Hz subcarrier harmonics.

2. By adding a new paragraph (a) (4) to 171.47 to read as follows:

§ 171.47 Performance requirements.

(a) * * *

(4) The frequency tolerance of the radio frequency carrier must not exceed plus or minus 0.002 percent.

3. By amending paragraph (a) (4) of § 171.109 to read as follows:

§ 171.109 Performance requirements.

(a) * * *

(4) The SDF must operate on odd tenths or odd tenths plus a twentieth MHz within the frequency band 108.1 MHz to 111.95 MHz. The frequency tolerance of the radio frequency carrier must not exceed plus or minus 0.002 percent.

4. By amending paragraph (a) (1) of § 171.111 to read as follows:

§ 171.111 Ground standards and tolerances.

(a) * * *

(1) The SDF must operate on odd tenths or odd tenths plus a twentieth MHz within the frequency band 108.1 MHz to 111.95 MHz. The frequency tolerance of the radio frequency carrier must not exceed plus or minus 0.002 percent.

Issued in Washington, D.C., on October 3, 1973.

ALEXANDER P. BUTTERFIELD,
Administrator.

[FR Doc.73-21855 Filed 10-12-73;8:45 am]

Title 21—Food and Drugs

CHAPTER 1—FOOD AND DRUG ADMINISTRATION, DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

PART 2—ADMINISTRATIVE FUNCTIONS, PRACTICES, AND PROCEDURES

Delegations of Authority

The Commissioner of Food and Drugs, for the purpose of establishing an orderly development of informative regulations for the Food and Drug Administration, furnishing ample room for expansion of such regulations in years ahead, and providing the public and affected industries with regulations that are easy to find, read, and understand, has initiated a recodification program for Chapter I of Title 21 of the Code of Federal Regulations.

The first document in a series of recodification documents that will eventually include all regulations administered by the Food and Drug Administration appears elsewhere in this issue of the FEDERAL REGISTER. The regulations formerly under Part 278—Regulations for the Administration and Enforcement of the Radiation Control for Health and Safety Act of 1968, have been reorganized into eight parts as a new Subchapter J—Radiological Health, in an effort to provide greater clarity and adequate space for the development of future regulations.

Regulations that were formerly listed under 21 CFR Part 278 are referenced in § 2.121(z), (cc) and (dd). To provide uniformity and continuity during the recodification the Commissioner concludes that the references under § 2.121(z), (cc) and (dd) should be made at this time. Therefore, § 2.121(z), (cc) and (dd) are revised to read as follows:

§ 2.121 Redelegations of authority from the Commissioner to other officers of the Administration.

(2) *Delegations relating to granting and withdrawing variances from performance standards for electronic products*—The Director and Deputy Director of the Bureau of Radiological Health are authorized to grant and withdraw variances from the provisions of performance standards for electronic products established in Subchapter J of this chapter.

(cc) *Delegations relating to notification of defects in, and repair or replacement of, electronic products*—The Director and Deputy Director of the Bureau of Radiological Health are authorized to perform all the functions of the Commissioner of Food and Drugs relating to notification of defects in, and repair or replacement of, electronic products under section 359 of the Public Health Service Act and under §§ 1003.11, 1003.22, 1003.31, 1004.2, 1004.3, 1004.4, and 1004.6 of this chapter. The Director of the Division of Compliance of the Bureau of Radiological Health is authorized to notify manufacturers of defects in, and noncompliance of, electronic products under section 359(e) of the Public Health Service Act.

(dd) *Delegations relating to manufacturer's resident import agents*—The Director and Deputy Director of the Bureau of Radiological Health are authorized to reject manufacturers' designations of resident import agents pursuant to § 1005.25(b) of this chapter.

The changes being made are nonsubstantive in nature and for this reason notice and public procedure are not prerequisites to this promulgation.

Dated October 9, 1973.

SAM D. FINE,
Associate Commissioner
for Compliance.

[FR Doc.73-21645 Filed 10-12-73;8:45 am]

SUBCHAPTER B—FOOD AND FOOD PRODUCTS

PART 15—CEREAL FLOURS AND RELATED PRODUCTS

PART 17—BAKERY PRODUCTS

Improvement of Nutrient Levels of Enriched Flour, Enriched Self-rising Flour, and Enriched Breads, Rolls or Buns

In the matter of amending the standards of identity for enriched flour, enriched self-rising flour, enriched farina and enriched bread, rolls or buns to improve the nutrient levels:

A notice of proposed rulemaking was published in the FEDERAL REGISTER of April 1, 1970 (35 FR 5412), based on a petition filed jointly by the American Bakers Association, 1700 Pennsylvania Ave., NW., Washington, D.C. 20006, and the Millers' National Federation, National Press Bldg., 529 14th St., N.W., Washington, D.C. 20004, proposing that (1) iron be required at a level of not less than 50 milligrams and not more than 60 milligrams per pound of enriched flour (21 CFR 15.10) and enriched self-rising flour (21 CFR 15.60) and (2) that iron be required at a level of not less than 32 milligrams and not more than 38 milligrams per pound of enriched bread, rolls or buns (21 CFR 17.2).

In the same proposal the Commissioner of Food and Drugs, on his own initiative,

proposed that the standard for enriched bread, rolls or buns also be amended by inserting a statement that iron and calcium may be added only in forms which are harmless and assimilable. The standards for enriched flour and enriched self-rising flour already bear such a statement.

Thirty-five comments representing the medical and allied professions, State and county officials, the baking and milling industry, ingredient suppliers, and consumers were received in response to the proposal. Thirty-two of the respondents favored the proposal, some recommending certain changes such as delayed effective dates or different amounts of iron.

Three respondents, all physicians, opposed the proposal on the grounds that increased iron in the diet, especially in the case of males, could lead to excessive iron storage in such diseases as cirrhosis of the liver and hemochromatosis or to an increased prevalence of iron storage disorders. As the 1969 White House Conference on Food, Nutrition, and Health, the Food and Nutrition Board, National Academy of Sciences-National Research Council, and the Council on Foods and Nutrition, American Medical Association had all recommended increasing the iron content in the diet, the Commissioner deemed it advisable to pursue the matter further.

The Food and Drug Administration asked the Council of Foods and Nutrition of the American Medical Association for an opinion on the opposing comments. In a letter dated July 13, 1970, the Council expressed the opinion that it would be in the public interest to adopt the higher levels of iron as proposed for enriched flour and bread.

On further consideration, the Commissioner concluded that an alternate proposal should be published. Accordingly, a notice of proposed rulemaking was published in the FEDERAL REGISTER of December 3, 1971 (36 FR 23074), in which the Commissioner, on his own initiative, made an alternate proposal that the standards of identity for enriched flour, enriched self-rising flour, enriched farina, and enriched bread, rolls or buns be amended to revise the requirements, not only for iron, but also for calcium and vitamins.

In most instances, the present standards provide ranges for the quantities of added nutrients with both maximum and minimum levels specified. In order to insure uniformity and maximum benefit to the consumer, the Commissioner proposed that the present ranges for nutrients enriched flour, enriched self-rising flour, enriched farina and enriched bread, rolls or buns be deleted and that single level requirements, with provisions for reasonable overages within the limits of good manufacturing practice, be substituted. The reason for applying the new requirements to enriched self-rising flour and enriched farina was to ensure an improved nutritional quality of the diet when home-prepared foods made from these cereal products are consumed in place of enriched bread.

The proposed level of iron for enriched flour and enriched self-rising flour (21 CFR 15.10, and 15.60) was 40 milligrams per pound. Due to a cross reference, amendment of 21 CFR 15.10 would have the effect of similarly amending the standard for enriched bromated flour (21 CFR 15.30). This level is 23.5 milligrams more than the maximum level now permitted. With respect to iron in enriched bread, rolls or buns (21 CFR 17.2), the proposed level of 25 milligrams per pound was 12.5 milligrams more than the maximum level now permitted. Based on average consumption data, these higher amounts would provide modest increases of 2 to 4 milligrams in daily iron intakes, varying on the basis of different age and sex groups. In order to insure uniformity, the amount of iron proposed for enriched farina (21 CFR 15.140) was also 40 milligrams per pound of finished food, as compared with a minimum of 13 milligrams and no maximum in the present standard. In accord with the general philosophy of moderation in enrichment practices, the proposed increases in iron levels were selected to achieve significant increments in average iron intakes of population segments known to have high prevalences of iron deficits, but without exceeding acceptable intakes for persons who may be heavy consumers of these enriched foods.

The proposed level for calcium in enriched flours and in enriched farina was 960 milligrams per pound of finished food, except that when more calcium is needed for technical purposes in enriched self-rising flour the quantity could exceed 960 milligrams per pound but the excess could be no greater than that necessary to accomplish the intended effect. The ranges provided for in the existing standards are 500-625 milligrams for enriched flour, 500-1,500 milligrams for enriched self-rising flour, and a 500 milligram minimum with no maximum for enriched farina. The proposed level for calcium in enriched bread, rolls or buns was 600 milligrams per pound of finished food, as compared with a range of 300-800 milligrams in the present standard.

With respect to vitamins, the proposed levels for thiamine, riboflavin, and niacin were either within the range specified in an existing standard (in the case of enriched bread, rolls or buns) or in excess of but close to the maxima of the ranges specified in the present standards. It was also proposed to eliminate existing provisions for the optional addition of vitamin D.

In response to the proposal of December 3, 1971 (36 FR 23074), 520 comments were received. Seventeen of the comments carried more than one signature, bringing the total number of respondents to 575. Three hundred and eighteen, or 55 percent, of the respondents were professional scientists in the health and allied fields. Most of these commented as individuals but 16 spoke for medical or nutrition-oriented organizations. Two-thirds of this group were physicians. Twenty-six widely recognized authorities on iron nutrition, iron metabolism and/or

iron storage diseases commented, 17 of whom were physicians. There were seven comments from Federal, State, and local government agencies. There were 26 comments from industrial firms and trade associations, their officers, or legal firms representing them. More than half of these were from the baking and milling sector. Two hundred and twenty-four, or 39 percent, of the respondents were consumers. Three consumer organizations responded.

More than 95 percent of all respondents commented on the iron enrichment aspect of the proposal, either directly or as part of a position on the entire proposal.

All three national medical organizations which commented (Council on Foods and Nutrition of the American Medical Association (AMA), American Society for Clinical Nutrition; American College of Nutrition) supported the iron proposal. All national organizations representing combined medical and/or allied sciences which commented also supported the proposal (American Dietetic Association; Food and Nutrition Section of the American Public Health Association; Food and Nutrition Section of the American Home Economics Association). No official comments were received from national or international hematological societies. The Food and Nutrition Board of the National Academy of Sciences-National Research Council (NAS-NRC) called attention without further comment to its original statement of November 1969 in support of increased iron enrichment. Of State organizations representing nutrition, public health or dietetics, comments in support of the proposal were received from the following States: Michigan, Minnesota, Oregon, Washington, and Kentucky. The New York State Nutrition Council Executive Board endorsed the proposal in principle, but requested hearings and possible additional research before implementation. Comments from other scientific organizations at the state level were not submitted. The only county organization which commented supported the proposal (Nutrition Committee of Rochester and Monroe County, New York). The only other professional organization which commented opposed the proposal as well as other enrichment practices (Washington, D.C., Chapter of the Allergy Foundation of America). Comments from Federal, State, and local government agencies and from industrial firms and trade associations supported the increased iron proposal.

Among the 26 widely recognized authorities on iron who individually commented, 21 supported the proposal and 5 opposed it, the latter primarily indicating the need for additional research on efficacy, bioavailability and/or toxicity before implementation. An additional 24 individuals who identified themselves as hematologists opposed the proposal on similar grounds. However, a strong appeal to the hematological community calling for further comments to the Hearing Clerk in opposition to the proposal resulted in no further comments

making reference to this appeal (Letter to the Editor of "Blood" 39:298, February 1972, by Dr. W. H. Crosby), even though the Commissioner extended the period for comment at the request of the Editor of the journal, "Blood", from February 1 to May 1, 1972. All but 9 of the comments received from hematologists were received prior to February 1972. There were an additional 164 general practitioners, osteopaths or medical specialists in fields other than nutrition and hematology who commented on the iron aspects of the proposal, 17 favoring it and 147 opposing it. Individual professionals in the allied sciences, including 93 nutritionists, dietitians, educators, and nurses, favored the iron proposal by approximately two to one.

Consumers, commenting both as individuals and as represented by various organizations, opposed by more than six to one the proposal to increase the iron content. A very large proportion of these comments were stimulated by numerous articles in the lay press (as evidenced by the enclosure of, or reference to, such articles), suggesting that the increased iron levels would not be beneficial and would lead to an increase in the number and severity of cases of iron storage disorders.

During the two months following the end of the comment period on May 1, 1972, an additional 35 comments were received and reviewed. The views expressed were similar to, and as diverse as, the comments received during the official comment period.

The only major opposition to the proposal concerned the increase in iron enrichment. The principal reasons for concern expressed by those opposing the increase in iron enrichment and the Commissioner's conclusions are as follows:

(1) *It was asserted that higher iron intakes might result in chronic iron toxicity in males, manifested by an increase in the prevalence and/or severity of iron storage disorders, particularly hemochromatosis.* This concern was stated in 73 percent of the unfavorable letters, and was prominently expressed by opposing physicians, allied science professionals, and consumers. Consumers also frequently referred to gastrointestinal intolerance to iron. The Commissioner felt that this possibility required further detailed study, even though authoritative scientific bodies had reviewed the subject in recent years, had concluded that the possibility of toxic problems was extremely unlikely, and had recommended the increased iron enrichment as proposed in the interest of the public health. Therefore, the Food and Drug Administration contracted with the Federation of American Societies for Experimental Biology (FASEB) to conduct a thorough review of existing knowledge of iron storage disorders in the human. This review was conducted with the assistance of 18 of the most eminent international authorities in the field, including authorities who had voiced objections to the iron proposal, and the detailed final report was published and submitted to the Food

and Drug Administration in November 1972, entitled "A Review of the Significance of Dietary Iron on Iron Storage Phenomena". (Copies are available under the Accession No. PB218836 at a cost of \$3.00 each from: National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22151.) In addition, the Council on Foods and Nutrition of the American Medical Association (AMA) reexamined its position on the matter, and published its detailed review in the *Journal of the American Medical Association* of May 8, 1972 (JAMA, 220: 855-859, 1972). On the basis of the comments received, the comprehensive report from FASEB, the AMA review statement and other information, the Commissioner concludes that the proposed increase in the iron content of enriched flours and enriched bread, rolls or buns will not jeopardize the health of normal males (or females), and that the additional iron will not increase the incidence of hemochromatosis or other hereditary iron storage disorders. Regarding the hypothesis that additional dietary iron may accelerate the accumulation of iron in the latent or undiagnosed hemochromatosis, the Commissioner concludes that there is no substantial evidence to prove or disprove the hypothesis. In addition, the Commissioner notes that dietary iron restriction is not a prominent part of the therapy of iron storage disorders, and most frequently is not prescribed at all, that regularly scheduled phlebotomy is the principal therapy for hemochromatosis, and that the effectiveness of phlebotomy greatly exceeds the effectiveness of efforts to control the dietary intake of iron. The Commissioner fully appreciates the desirability of further research on the iron storage disorders, even though they are relatively rare, and will take steps to stimulate the support of such research by appropriate Federal agencies.

A substantial number of respondents expressed an opposite concern that flour and bakery products not enriched with iron would be available in the future. It is not mandatory that flour and bread or other bakery products be enriched. The Food and Drug Administration does not intend to alter the existing standards of identity for enriched cereal flours and related products (21 CFR Part 15) and unenriched bakery products (21 CFR Part 17) in the immediate future with regard to nutrient properties. Approximately two-thirds of the flour currently consumed in the United States is enriched. Some States have passed mandatory enrichment laws for white flour and/or bread sold in the retail market. In the States not having mandatory enrichment laws, millers and bakers can produce and market the foods without any addition of nutrients. Certain specialty breads such as whole wheat bread, and raisin bread are not enriched customarily. If breads are enriched, their labels must clearly so state.)

(2) Doubts were expressed as to the need for or efficacy of the iron enrichment as proposed. These doubts were expressed in 21 percent of the letters op-

posing the increased iron levels. Specific questions were raised as to: (a) The validity and volume of data indicating a prevalent iron deficiency problem; (b) whether a mild-to-moderate iron deficiency anemia is deleterious to health; (c) the bioavailability of various forms of iron used for enrichment in prevention or treatment of iron deficiency anemia; (d) the sufficiency of the proposed increases in iron, and (e) whether cereal products generally are the most suitable vehicles for iron enrichment. The Commissioner initiated reexaminations of each of these questions within the Food and Drug Administration to determine if the stated conclusions of such groups as the AMA Council on Foods and Nutrition, the NAS-NRC Food and Nutrition Board, and the White House Conference on Food, Nutrition, and Health remained valid. The Commissioner's conclusions are discussed below:

(a) There has been a steadily increasing number of studies on specific population groups indicating substantial prevalences of iron deficiency anemia in various sex, age, and physiologic groups. There have been no studies to the contrary. These studies emphasize that the observation of a given prevalence and degree of anemia in any particular population group indicates deficits in body iron stores of a much higher degree. Although these studies have involved many specific groups such as infants, preschool children, adolescents, adult men and women, and elderly people, and have examined differences on the basis of race and socio-economic status, it is not possible to generalize about the national population, nor is it particularly useful to do so, because of the basic heterogeneity of the population. Examples of recent study results include: (1) in rural Tennessee, 26 percent to 39 percent of black children and 20 percent to 27 percent of white children under the age of 2 years had hematocrit levels below 31 percent; (2) in the Ten State Nutrition Survey, anemia rates for black children were more than twice the rates seen for white children; (3) numerous surveys have shown higher rates in lower income families; (4) using the criteria of 11.5 grams of hemoglobin per 100 milliliters of blood to define anemia in adolescent girls, prevalence rates of from 2.6 percent in white girls from relatively high income states to 26.6 percent in black girls from relatively low income states were documented in the Ten State Nutrition Survey; using the criteria of 13.0 grams per 100 milliliters to define anemia in adolescent boys, the comparable prevalence figures were 12.8 percent and 49.6 percent; (5) in pregnant women, using the criteria of 11 grams and below to define anemia, reported prevalence rates ranged between 8 percent and 58 percent and varied widely from one population group to another; (6) in a series of 460 preschool black children from low income families in Washington, DC, 29 percent were found to have hemo-

globin levels below 10 grams per 100 milliliters, and almost half were below 10.5 grams of hemoglobin; (7) regardless of age or sex, recent studies permitting appropriate comparisons have consistently shown higher anemia prevalence rates in blacks compared to whites, in low income states compared to higher income states, and in low socio-economic groups compared with groups higher in this regard. The Commissioner concludes from these and related observations that there is a strikingly high incidence of iron deficiency anemia in many large segments of the U.S. population and that these deficits are not limited to infants, women during their menstrual life, and pregnant women.

(b) There is general agreement that severe iron deficiency anemia is debilitating and, in rare cases, that it can be extremely serious and even fatal; that sufficient dietary iron leads to a maximum hemoglobin level generally thought of as being optimal for good health; and that marked iron deficiency is harmful to both pregnant women and the newborn. One is dealing with a continuum between severe anemia on the one hand and maximal hemoglobin levels and normal iron stores on the other, with much variation of response from individual to individual between these two extremes. There remains a considerable lack of precise knowledge in the area of the clinical significance of mild to moderate anemia. This is an extremely difficult area in which to perform definitive studies because of the many variables involved, the need to document differences or changes with imprecise methods (particularly when measuring behavioral, psychological or sociological parameters), and the likelihood that differences in many parameters will be small if the anemia itself is mild. Nevertheless, most (but not all) efforts to explore this area have indicated adverse effects of mild to moderate anemia. Fatigue and listlessness are frequently observed, but difficult to quantitate. One study of 89 children of 4 to 5 years of age indicated that iron deficiency was associated with measurably lower alertness and attentiveness in a learning situation, but that measured IQ was not affected. Another study of adolescents indicated that students with iron deficiency tended to score lower on Iowa Achievement Tests. From a study involving a broad sampling of preschool children across the country, results indicated that the children whose heights were below the 25th percentile had lower levels of transferrin saturation and hemoglobin than did those children whose heights were above the 25th percentile. Other studies have also indicated poor growth in iron deficient infants. There is some evidence to suggest that iron deficiency is associated with reduced resistance to infections. The Commissioner concludes from these and related observations that moderate to severe iron deficiency anemia is clearly detrimental to health and that the preponderance of available evidence

indicates that mild to moderate anemia is also deleterious to good health and normal function. The Commissioner recognizes the need for further precise research in the area and notes that definitive results from such research may not be available for some years because of the inherent complexity of the research.

(c) The Commissioner contracted with FASEB for an in-depth review of the current knowledge of the bioavailability of the various forms of iron used for enrichment purposes, and the resultant definitive report entitled "The Bioavailability of Iron Sources and Their Utilization in Food Enrichment" is available from the National Technical Information Service, U.S. Department of Commerce, 14th St. & Constitution Ave. NW., Washington, D.C. 20230. Extensive work is now underway in Food and Drug Administration laboratories and in collaboration with independent investigators to refine and standardize the biological method most suitable for measuring bioavailability for future research, quality control and regulatory use. The Commissioner realizes that a fixed degree of bioavailability for any specific source of iron does not exist because of individual variability from person to person and extensive variations due to the effect of the composition of the total diet on bioavailability. The Commissioner also recognizes that there are certain forms of iron currently used for enrichment or fortification purposes which probably have unacceptable bioavailability characteristics, although their use has been decreasing in recent years in favor of the use of such readily bioavailable sources as ferrous sulfate. The Commissioner concludes that there is a need to define sources of iron with reasonable bioavailability characteristics, but does not feel that it is in the public interest to delay publication of these regulations to await the outcome of evaluation of the single matter of acceptable sources of iron. This matter will be handled as a separate action upon completion of the evaluation.

(d) The Commissioner notes some misunderstanding of the purpose of iron enrichment of cereal-based products. Enrichment is aimed at reducing the development of iron deficiency anemia, and is therefore preventive in nature. When demonstrable anemia is already present, indicating a marked depletion of total body iron stores, it is unlikely that iron intakes of the order of the U.S. Recommended Daily Allowance (U.S. RDA) (10 milligrams to 18 milligrams per day, depending on age and sex) will have a therapeutic effect on the anemia except over very long periods of time, if then. Much larger amounts are required for therapy. As a generalization, treatment of moderate to severe iron deficiency anemia usually consists of the oral administration of 300 milligrams of hydrated ferrous sulfate three times a day for a number of months (approximately six months for severe anemia) in addition to the intake of a well-balanced diet. On the basis of average consumption

data, the proposed increase in enrichment provides additional daily intakes of 2 milligrams to 4 milligrams of iron, i.e., approximately 10 percent to 20 percent of the U.S. RDA, depending on age and sex. Such increases are therefore modest in magnitude. Because of the high prevalences of anemia, the decrease in total caloric intakes in the U.S. population in recent decades (and the probability of associated decreases in iron intakes), and the fact that the current U.S. diet provides only an average of 6 milligrams or less of iron per 1000 calories, it is reasonable to speculate that the new enrichment levels may be insufficient to markedly influence the prevalence of iron deficiency and associated anemia. However, the Commissioner feels that, in matters such as increases in nutrient enrichment levels in foods which are major contributors to the total diet, it is prudent to take modest steps based on available scientific knowledge, followed by observations of the results obtained over a reasonable period of time, before giving consideration to further changes in enrichment levels. The Commissioner will take steps to stimulate the support of additional research in this area by appropriate Federal Agencies.

(e) Concerning the matter as to whether cereal products generally are the most suitable vehicles for iron enrichment, the Commissioner notes that cereal-based foods, particularly bread and other products made from wheat flour, continue to be the most uniformly consumed major foods in the American diet (except for meat, poultry and fish which are not amenable to enrichment). As noted by the AMA Council on Foods and Nutrition (Journal of the American Medical Association, 220: 855, 1972):

It has been accepted for decades that, if there exists a need to increase the national supply of dietary iron, enrichment of the most commonly consumed cereal-based foods is the most useful, practical and cheapest approach. In most Western countries, including the United States, wheat based products are more widely consumed than any other class of foods in the entire diet. Current Department of Agriculture food consumption data indicate that approximately one quarter of total calories consumed in the United States is derived from grain products, about two-thirds of which is enriched in accord with existing standards. In addition, grain products contribute a significantly higher proportion of total calories in low income households than in high income ones. The latter point is of particular importance because of the higher prevalence of iron deficiency anemia among low income families.

A corollary to the appropriate enrichment with iron of commonly consumed cereal-based products is the use of restraint in enrichment of other foods. Among the restraining approaches of recent origin are the nutritional guidelines for various classes of processed foods now appearing in the Federal Register, the new regulation on infant formulas, and new regulations in preparation by the FDA for defining the composition of dietary supplements of vitamins and minerals.

The Commissioner concurs with these views expressed by the AMA. The Commissioner also notes that specific target

population groups such as adult women during their menstrual life continue to consume significant quantities of bread, rolls and biscuits. There also are no other classes of foods the consumption of which is characteristically high in specific target groups except for milk and milk-based products in infancy and childhood.

The levels for iron and other nutrients in the proposed flour standards were set so that bakers, relying on the enrichment provided in enriched flour, would be able in most instances to produce enriched bread meeting the requirements of the enriched bread standard. Enriched bread can also be made from unenriched flour by the separate addition of the required nutrients at the bakery.

(3) It was asserted that additional research on efficacy, bioavailability and toxicity of iron should be undertaken and completed before adoption of the proposal to increase the iron enrichment of flour and bread. This view was expressed by 26 percent of those commenting adversely on the proposal. On the basis of the analyses and conclusions described in paragraphs (1) and (2) above, the Commissioner further concludes that there is adequate current knowledge to establish beyond reasonable doubt that the proposed increase is safe, efficacious, and in the interest of the public health. The matter of defining specific sources of iron suitable for enrichment should be satisfactorily resolved in the near future. The Commissioner notes that the AMA Council on Foods and Nutrition recently reexamined its position on the matter for the third time during the past three years (JAMA, 223: 322, 1973), stating, "The AMA Council on Foods and Nutrition has followed with great interest the arguments for and against additional fortification of flour and bread with iron. It is the considered judgment of the Council that increased fortification is a logical step at the present time to improve iron balance." The AMA Council and all other expert bodies and individuals with whom the FDA has been in contact, whether in favor of or opposed to the proposal, agree that there are gaps in current knowledge concerning efficacy, bioavailability, and toxicity, requiring additional research. The Commissioner fully concurs in the desirability of such future research, and, as noted in paragraphs (1) and (2) above, will take steps to stimulate such research by appropriate agencies as well as to continue application of FDA resources to the remaining questions. The Commissioner initiated review by the Food and Drug Administration of current clinical research on iron efficacy, bioavailability and toxicity supported by Federal agencies. Conclusions from this review are: (a) There are at least seven Federal agencies supporting such research; (b) Although it cannot be measured, much additional support is derived from sources other than the Federal Government; (c) Federal support for clinical research on the specific problem areas exceeds \$1 million annually, and supportive biological research on iron is in excess of \$1.5 million

annually; (d) Although this does not represent optimal support, it does constitute a significant level of effort, somewhat larger in magnitude and scope than was thought to be the case before the review was undertaken; (e) Assuming continuation of current levels of support, there will be a steady inflow of new clinical information over the next 5 to 10 years concerning iron efficacy, anemia prevalence, and the deleterious effects of anemia on health; (f) There is a modest level of research effort by at least 5 different research groups in the field of iron storage disorders in man, particularly hemochromatosis, which constitutes a substantive effort to improve understanding of the underlying mechanisms involved in abnormal iron absorption, transport and storage; (g) of the three specific problem areas, the subject of iron bioavailability is receiving the least attention, most of the work being performed by one "consortium" of investigators in several medical centers and by the FDA; (h) A number of excellent research approaches to filling major gaps in existing knowledge have come to the attention of the FDA from multiple sources. The Commissioner further notes that much of the future research is costly and will require some years for definitive results, primarily because of the complexity of the research and, in many cases, the need to study large numbers of individuals over prolonged periods.

(4) *It was asserted that the iron enrichment proposal would constitute medication through the grocery store.* This concept was expressed by 15 percent of those expressing opposition to the proposal. The Commissioner feels that this concept generally arose from the misunderstanding of the magnitude of the proposed increases, as discussed in paragraph (2)(d) above. The Commissioner also notes that the prevalence of actual iron deficiency anemia in the United States indicates that many individuals who need medicinal quantities of iron are not receiving a sufficient dietary input of iron. In addition, several physicians were concerned that the increases might mask the anemia resulting from blood loss from gastrointestinal lesions, particularly carcinoma of the bowel, thus delaying diagnosis. It is the opinion of the Commissioner that the small increments in iron intake resulting from the increased enrichment levels would not be sufficient to significantly alter the development of blood loss anemia from such gastrointestinal lesions (see paragraph (2)(d) for further discussion). One physician warned of the contraindications to the use of iron in patients on allopurinol for gout or other chronic hyperuricemias. The Commissioner concludes that this warning applies to the consumption of medicinal quantities of iron over prolonged periods and not to quantities of dietary iron derived from enriched food or foods which are naturally good sources of iron.

(5) *There was concern regarding the whole concept of processed foods and the use of food additives, whether the addi-*

tives be nutrients or for other purposes. Seventeen percent of those commenting unfavorably stated these anxieties and their desire to see a return to consumption of "natural" foods. Approximately one-third of the consumers indicated these views. These respondents believed that the food industry removes too much of the nutritional value during processing, including iron, and that replacement of such nutrients is not an acceptable alternative to leaving in more "natural goodness". Some consumers believed enrichment iron to be a contaminant. The Commissioner does not share these views because they are contrary to modern nutrition knowledge and to the realistic abilities of the agricultural and food industry sectors to provide nutritionally adequate food supplies for the nation. The Commissioner notes that foods which have been enriched must be so labeled, permitting them to be readily distinguished from foods which have not been enriched. The availability of many unenriched cereal-based products such as whole wheat flour and bread, rye bread, and raisin bread, will not be affected by the order ruling on the proposal. Several respondents indicated that they "did not need iron". The Commissioner sees a failure on the part of these latter individuals to understand the absolute essentiality of iron and other nutrients in the diet.

(6) *It was asserted that there is a need to regulate the addition of iron to other foods.* This subject is addressed in paragraph (2)(e) above in connection with the discussion of cereal-based products as the most suitable vehicle for iron enrichment of the national food supply. The Commissioner concurs with this comment, and feels that, in order to avoid unnecessary or excessive intakes of iron from innumerable sources, the enrichment of commonly consumed cereal-based products must be balanced by restraint in the enrichment of other foods. This is the current policy of the FDA which will continue in the future. Current approaches include: (a) The new regulation for nutrition labeling, published as a final order in the FEDERAL REGISTER of March 14, 1973 (38 FR 6951) which will greatly improve the ability of the consumer to identify the iron content of foods (all foods with added iron or other added nutrients will be required to comply with this regulation); (b) the new regulation creating a procedure for the establishment of nutritional quality guidelines for foods, published in the FEDERAL REGISTER of March 14, 1973 (38 FR 6969), which will limit the amount of added iron (and other added nutrients) in various classes of processed foods to the amounts specified in a guideline regulation, whenever the manufacturer wishes to take advantage of the label declaration that his product provides nutrients in amounts appropriate for that class of foods as determined by the U.S. Government; (c) the new standard of identity for dietary supplements of vitamins and minerals, (21 CFR 80.1) published as a final order in the FEDERAL REGISTER of August 2, 1973 (38 FR 20730),

which places upper limits on the amount of iron (and other nutrients) which may be contained in such supplements.

(7) *It was asserted that enrichment of farina should reflect the primary use of the food as a breakfast cereal, and that this food product should not be regulated in the same manner as flour or bread.* The Commissioner concurs with this concept. Accordingly, this final order does not include action pertaining to enriched farina. In a forthcoming issue of the FEDERAL REGISTER, the Commissioner will publish a revised proposal regarding the standard of identity for enriched farina (21 CFR 15.140), together with proposed nutritional quality guidelines for breakfast cereals.

There were a number of matters other than those relating to iron which were raised by those commenting on the proposal. These are described and the Commissioner's conclusions presented below:

(1) *The merit of enrichment with other nutrients (thiamine, riboflavin, niacin and calcium) was questioned.* Approximately 25 percent of those commenting referred to nutrients other than iron, favoring their continued use in enrichment by more than two to one. Consumers were the only group registering significant opposition, usually by being opposed to enrichment in any form and in favor of less processed food in the market place generally. Support, and no major objections, relative to these other nutrients were expressed by professional scientists and physicians, government agencies and industrial groups. As in the case of enrichment with iron, the Commissioner does not share the views of those opposed to all enrichment because such views are contrary to modern nutrition knowledge. The Commissioner further notes that, as knowledge of nutrient requirements and deficits in the national diet increases, there may arise in the future a need to further improve enrichment of flour, bread and other cereal products by the addition of other nutrients in short supply in the diet.

(2) *Several comments were received concerning niacin, requesting more specific designation in the standards of the allowable chemical forms, and authorization to use niacin equivalents of tryptophan.* The Commissioner notes that any vitamin or mineral added to a food for enrichment purposes may be supplied by any suitable chemically synthesized or naturally produced substance which is either not a food additive as defined in section 201(s) of the act, or which is a food additive as so defined and used in conformity with regulations established pursuant to section 409 of the act. The Commissioner further notes that the actual amount of the active component of a vitamin depends on the chemical form in which the nutrient is supplied, and that, as a result, there is a need to establish chemically identifiable reference forms for determining and declaring the quantities of the vitamin present in the food. Therefore, the final regulations include reference forms to be used in calculating the quantitative content of thiamine, riboflavin, and niacin.

With regard to niacin equivalents, as derived from tryptophan, the Commissioner concludes that the quantitative contribution of tryptophan to total niacin activity in these enriched foods is variable and that the quantitative determination of niacin equivalents in these foods is subject to serious practical limitations regarding as an analytical methodology for quality control and compliance purposes. The Commissioner notes that, although the conversion of a portion of tryptophan intake to niacin is a well-established nutrition principle, there is currently inadequate knowledge of the magnitude of such conversion resulting from the consumption of specific individual foods. For the sake of a consistent approach to such nutritional matters, if calculation of niacin equivalents derived from tryptophan were permitted in this regulation, it would be necessary to permit the use of niacin equivalents derived from tryptophan in other regulations necessitating niacin calculations. Therefore, for the present, the use of niacin equivalents is rejected for declaring total niacin activity. As further knowledge accumulates and improved analytical procedures become available, the Commissioner will welcome reexamination of the matter.

(3) Several correspondents commented on an inconsistency in the proposed regulations concerning calcium. In the proposal published in the *FEDERAL REGISTER* on December 3, 1971 (36 FR 23074), as well as in the currently effective standards, added calcium is designated as optional in enriched flour and enriched bread, rolls or buns but as mandatory in enriched self-rising flour. After considering the comments, the Commissioner is deleting the mandatory requirement for added calcium in enriched self-rising flour, thus making added calcium optional in the three standards covered by this order.

(4) The proposal to delete the provisions in these standards for the addition of vitamin D was in general acceptable or desirable to the several individuals and groups commenting on the subject. Historically, few flour and bread products have been enriched with vitamin D. The need for vitamin D in human nutrition and the importance of maintaining a daily intake sufficient to protect infants, growing children and pregnant and lactating women from developing deficiency states are well established. However, the addition of vitamin D to flour and bread products is unnecessary in light of the availability and use of vitamin D fortified dairy products, infant formulas and dietary supplements. To continue to permit addition of vitamin D to flour and bread products could result in excessive consumption of vitamin D. Accordingly, the Commissioner concludes that flour and bread products are not appropriate carriers of vitamin D.

An alternate suggestion was received from one respondent to continue the provisions permitting vitamin D addition, but to substitute metabolites of the vitamin showing less toxicity compared with the chemical forms of vitamin D pres-

ently used. Although the Commissioner feels that the concept of using such metabolites in the future in those foods suitable for vitamin D enrichment warrants further study as to efficacy, safety and practical feasibility, he reiterates his conclusion that flour and bread products are not appropriate carriers of vitamin D in the national diet.

(5) Several suggestions were made that the regulations should define the precise meaning of "reasonable overages of the vitamins and minerals within the limits of good manufacturing practice". The Commissioner reiterates his desire for uniformity of enrichment among these enriched food products. Designation of allowable overage amounts automatically provides for a range of nutrient levels, thus reducing the possibility of attaining the desired uniformity. The Commissioner advises that matters of good manufacturing practices will continue to be judged on the basis of the multiple factors involved, including technology, nutrient deterioration, and the appreciation of these factors by the manufacturer in his food processing and quality control procedures.

(6) Comments were received from industry suggesting that the effective date should be six months or more after the date of publication of the orders to allow for utilization of existing labeling inventory and changeover in manufacturing processes. The Commissioner concurs.

(7) Other suggestions regarding future action. As a legal matter, these were not within the scope of the proposed rule-making but are worthy of further consideration for possible action in the future, including: (a) extension of such enrichment to other food products, particularly the other basic staples which substitute for flour and bread in the national and regional or ethnic diets; (b) extension of such enrichment to other nutrients which may be deficient in the diets of major segments of the total population; (c) the need for nutrition education programs in conjunction with enrichment programs.

Accordingly, having considered the comments received and other relevant information, the Commissioner concludes that it will promote honesty and fair dealing in the interests of consumers to rule jointly on the proposals published in the *FEDERAL REGISTER* of April 1, 1970 (35 FR 5412), and December 3, 1971 (36 FR 23074), by adopting the proposed amendments as modified and set forth below.

Therefore, pursuant to provisions of the Federal Food, Drug, and Cosmetic Act (secs. 401, 701, 52 Stat. 1046, 1055-1056, as amended by 70 Stat. 919 and 72 Stat. 948; 21 U.S.C. 341, 371) and under authority delegated to the Commissioner (21 CFR 2.120): It is ordered, That Parts 15 and 17 be amended as follows:

1. In Part 15:

a. By revising § 15.10 to read as follows:

§ 15.10 Enriched flour; identity; label statement of optional ingredients.

Enriched flour conforms to the definition and standard of identity, and is sub-

ject to the requirements for label statement of optional ingredients, prescribed for flour by § 15.1 of this chapter, except that:

(a) It contains in each pound 2.9 milligrams of thiamine, 1.8 milligrams of riboflavin, 24 milligrams of niacin, and 40 milligrams of iron;

(b) It may contain added calcium in such quantity that the total calcium content is 960 milligrams per pound. Enriched flour may be acidified with monocalcium phosphate within the limits prescribed by § 15.70 for phosphated flour, but, if insufficient additional calcium is present to meet the 960 milligram level, no claim may be made on the label for calcium as a nutrient;

(c) The requirement of paragraphs (a) and (b) of this section will be deemed to have been met if reasonable overages of the vitamins and minerals, within the limits of good manufacturing practice, are present to insure that the required levels of the vitamins and minerals are maintained throughout the expected shelf life of the food under customary conditions of distribution and storage. The quantitative content of the following vitamins shall be calculated in terms of the following chemically identifiable reference forms:

Vitamin	Reference form		
	Name	Empirical formula	Molecular weight
Thiamine	Thiamine chloride hydrochloride	$C_{12}H_{17}ClN_4OS \cdot HCl$	337.28
Riboflavin	Riboflavin	$C_{17}H_{21}N_4O_6$	376.37
Niacin	Niacin	$C_6H_5NO_2$	123.11

(d) It may contain not more than 5 percent by weight of wheat germ or partly defatted wheat germ;

(e) In determining whether the ash content complies with the requirements of this section, ash resulting from any added iron or salts of iron or calcium is included in calculating ash content.

(f) All ingredients from which the food is fabricated shall be safe and suitable. The vitamins and minerals added to the food for enrichment purposes may be supplied by any safe and suitable substance. Niacin equivalents as derived from tryptophan content shall not be used in determining total niacin content.

b. By revising § 15.60 to read as follows:

§ 15.60 Enriched self-rising flour; identity; label statement of optional ingredients.

Enriched self-rising flour conforms to the definition and standard of identity, and is subject to the requirements for label statement of optional ingredients, prescribed for self-rising flour by § 15.50, except that:

(a) It contains in each pound 2.9 milligrams of thiamine, 1.8 milligrams of riboflavin, 24 milligrams of niacin, and 40 milligrams of iron;

(b) It may contain added calcium in such quantity that the total calcium con-

tent is 960 milligrams per pound. If a calcium compound is added for technical purposes to give self-rising characteristics to the flour, the amount of calcium per pound of flour may exceed 960 milligrams provided that the excess is no greater than necessary to accomplish the intended effect. However, if such calcium is insufficient to meet the 960 milligram level, no claim may be made on the label for calcium as a nutrient;

(c) The requirements of paragraphs (a) and (b) of this section will be deemed to have been met if reasonable overages of the vitamins and minerals, within the limits of good manufacturing practice, are present to insure that the required levels of the vitamins and minerals are maintained throughout the expected shelf life of the food under customary conditions of distribution and storage. The quantitative content of the following vitamins shall be calculated in terms of the following chemically identifiable reference forms:

Reference form			
Vitamin	Name	Empirical formula	Molecular weight
Thiamine	Thiamine chloride hydrochloride	$C_{12}H_{17}ClN_4OS \cdot HCl$	337.28
Riboflavin	Riboflavin	$C_{17}H_{20}N_4O_6$	376.37
Niacin	Niacin	$C_6H_5NO_2$	123.11

(d) It may contain not more than 5 percent by weight of wheat germ or partly defatted wheat germ;

(e) When calcium is added as dicalcium phosphate, such dicalcium phosphate is also considered to be an acid-reacting substance;

(f) When calcium is added as carbonate, the method set forth in § 15.50 (c) does not apply as a test for carbon dioxide evolved; but in such case the quantity of carbon dioxide evolved under ordinary conditions of use of the enriched self-rising flour is not less than 0.5 percent of the weight thereof;

(g) All ingredients from which the food is fabricated shall be safe and suitable. The vitamins and minerals added to the food for enrichment purposes may be supplied by any safe and suitable substances. Niacin equivalents as derived from tryptophan content shall not be used in determining total niacin content.

2. In Part 17 by revising § 17.2 to read as follows:

§ 17.2 Enriched bread and enriched rolls or enriched buns; identity; label statements of optional ingredients.

(a) Each of the foods enriched bread, enriched rolls, and enriched buns conforms to the definition and standard of identity, and is subject to the requirements for label statement of optional ingredients, prescribed for bread by § 17.1 (a) and (c) of this chapter, except that:

(1) Each such food contains in each pound 1.8 milligrams of thiamine, 1.1 milligrams of riboflavin, 15 milligrams of niacin, and 25 milligrams of iron;

(2) Each such food may contain added calcium in such quantity that the total calcium content is 600 milligrams per pound of the finished food. If insufficient calcium is added to meet the 600 milligram level per pound of the finished food, no claim may be made on the label for calcium as a nutrient;

(3) The requirements of paragraphs (a) (1) and (2) of this section will be deemed to have been met if reasonable overages of the vitamins and minerals, within the limits of good manufacturing practice, are present to insure that the required levels of the vitamins and minerals are maintained throughout the expected shelf life of the food under customary conditions of distribution and storage. The quantitative content of the following vitamins shall be calculated in terms of the following chemically identifiable reference forms:

Reference form			
Vitamin	Name	Empirical formula	Molecular weight
Thiamine	Thiamine chloride hydrochloride	$C_{12}H_{17}ClN_4OS \cdot HCl$	337.28
Riboflavin	Riboflavin	$C_{17}H_{20}N_4O_6$	376.37
Niacin	Niacin	$C_6H_5NO_2$	123.11

(4) Each such food may also contain wheat germ or partly defatted wheat germ, but the total quantity thereof, including any wheat germ or partly defatted wheat germ in any enriched flour used, shall not be more than 5 percent of the flour ingredient;

(5) Enriched flour may be used, in whole or in part, instead of flour. As used in this section, the unqualified term "flour" includes bromated flour and phosphated flour; the term "enriched flour" includes enriched bromated flour;

(6) The limitation prescribed by § 17.1(a) (2) of this chapter on the quantity and composition of milk and dairy ingredients does not apply;

(7) All ingredients, from which the food is fabricated shall be safe and suitable. The vitamins and minerals added to the food for enrichment purposes may be supplied by any safe and suitable substances. Niacin equivalents as derived from tryptophan content shall not be used in determining total niacin content.

(b) (1) Enriched bread is baked in units each of which weighs one-half pound or more after cooling. Enriched rolls or enriched buns are baked in units each of which weighs less than one-half pound after cooling.

(2) The optional gluten ingredient described in § 17.1(b) (2) of this chapter may be added in such quantity that for each 100 parts by weight of flour used, the added gluten does not exceed 2 parts for dough used to make loaves and does not exceed 4 parts for dough used to make rolls or buns.

Any person who will be adversely affected by the foregoing order may at any time on or before November 14, 1973

file with the Hearing Clerk, Food and Drug Administration, Room 6-86, 5600 Fishers Lane, Rockville, Md. 20852, written objections thereto. Objections shall show wherein the person filing will be adversely affected by the order, specify with particularity the provisions of the order deemed objectionable, and state the grounds for the objections. If a hearing is requested, the objections shall state the issues for the hearing, shall be supported by grounds factually and legally sufficient to justify the relief sought, and shall include a detailed description and analysis of the factual information intended to be presented in support of the objections in the event that a hearing is held. Objections may be accompanied by a memorandum or brief in support thereof. Six copies of all documents shall be filed. Received objections may be seen in the above office during working hours, Monday through Friday.

Effective date. Compliance with this order, which shall include any labeling changes required, may begin immediately and shall begin on April 15, 1973, except as to any provisions that may be stayed by the filing of proper objections. Notice of the filing of objections or lack thereof will be published in the FEDERAL REGISTER.

(Secs. 401, 701, 52 Stat. 1046, 1055-1056, as amended by 70 Stat. 919 and 72 Stat. 948; 21 U.S.C. 241, 371)

Dated October 9, 1973.

A. M. SCHMIDT,
Commissioner of Food and Drugs.

[FR Doc. 73-21918 Filed 10-12-73; 8:45 am]

Title 26—Internal Revenue

CHAPTER I—INTERNAL REVENUE SERVICE, DEPARTMENT OF THE TREASURY

SUBCHAPTER A—INCOME TAX

[T.D. 7285]

PART 1—INCOME TAX; TAXABLE YEARS BEGINNING AFTER DECEMBER 31, 1953

Use of the Full Absorption Method of Inventory Costing

Correction

In FR Doc. 73-19930 appearing at page 26184 in the issue of Wednesday, September 19, 1973, where the words "[the date of adoption of these regulations as a Treasury decision]" appear in § 1.471-11(e) (i) (ii), substitute the date "September 19, 1973."

Title 40—Protection of Environment

CHAPTER I—ENVIRONMENTAL PROTECTION AGENCY

SUBCHAPTER C—AIR PROGRAMS

PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

Emissions During Startup, Shutdown, and Malfunction

The Environmental Protection Agency promulgated Standards of Performance for New Stationary Sources pursuant to section 111 of the Clean Air Act Amend-

ments of 1970, 40 U.S.C. 1857c-6, on December 23, 1971, for fossil fuel-fired steam generators, incinerators, Portland cement plants, and nitric and sulfuric acid plants (36 F.R. 24876), and proposed Standards of Performance on June 11, 1973, for asphalt concrete plants, petroleum refineries, storage vessels for petroleum liquids, secondary lead smelters, secondary brass and bronze ingot production plants, iron and steel plants, and sewage treatment plants (38 FR 15406). New or modified sources in these categories are required to meet standards for emissions of air pollutants which reflect the degree of emissions limitation achievable through the application of the best system of emission reduction which (taking into account the cost of achieving such reduction) the Administrator determines has been adequately demonstrated.

Sources which ordinarily comply with the standards may during periods of startup, shutdown, or malfunction unavoidably release pollutants in excess of the standards. These regulations make it clear that compliance with emission standards, other than opacity standards, is determined through performance tests conducted under representative conditions. It is anticipated that the initial performance test and subsequent performance tests will ensure that equipment is installed which will permit the standards to be attained and that such equipment is not allowed to deteriorate to the point where the standards are no longer maintained. In addition, these regulations require that the plant operator use maintenance and operating procedures designed to minimize emissions. This requirement will ensure that plant operators properly maintain and operate the affected facility and control equipment between performance tests and during periods of startup, shutdown, and unavoidable malfunction.

The Environmental Protection Agency on August 25, 1972, proposed procedures pursuant to which new sources could be deemed not to be in violation of the new source performance standards if emissions during startup, shutdown, and malfunction unavoidably exceed the standards (37 FR 17214). Comments received were strongly critical of the reporting requirements and the lack of criteria for determining when a malfunction occurs.

In response to these comments, the Environmental Protection Agency rescinded the August 25, 1972, proposal and published a new proposal on May 2, 1973 (38 FR 17214). The purpose and reasoning in support of the May 2, 1973, proposal are set forth in the preamble to the proposal. As these regulations being promulgated are in substance the same as those of the May 2, 1973, proposal, this preamble will discuss only the comments received in response to the proposal and changes made to the proposal.

A total of 28 responses were received concerning the proposal (38 FR 10820). Twenty-one responses were received from the industrial sector, three from

State and local air pollution control agencies, and four from EPA representatives.

Some air pollution control agencies expressed a preference for more detailed reporting and for requiring reporting immediately following malfunctions and preceding startups and shutdowns in order to facilitate handling citizens' complaints and emergency situations. Since States already have authority to require such reporting and since promulgation of these reporting requirements does not preclude any State from requiring more detailed or more frequent reporting, no changes were deemed necessary.

Some comments indicated that changes were needed to more specifically define those periods of emissions that must be reported on a quarterly basis. The regulations have been revised to respond to this comment. Those periods which must be reported are defined in applicable subparts. Continuous monitoring measurements will be used for determining those emissions which must be reported. Periods of excess emissions will be averaged over specified time periods in accordance with appropriate subparts. Automatic recorders are currently available that produce records on magnetic tapes that can be processed by a central computing system for the purpose of arriving at the necessary averages. By this method and by deletion of requirements for making emission estimates, only minimal time will be required by plant operators in preparing quarterly reports. The time period for making quarterly reports has been extended to 30 days beyond the end of the quarter to allow sufficient time for preparing necessary reports.

The May 2, 1973, proposal required that affected facilities be operated and maintained "in a manner consistent with operations during the most recent performance test indicating compliance." Comments were received questioning whether it would be possible or wise to require that all of the operating conditions that happened to exist during the most recent performance test be continually maintained. In response to these comments, EPA revised this requirement to provide that affected facilities shall be operated and maintained "in a manner consistent with good air pollution control practice for minimizing emissions" (§ 60.11(d)).

Comments were received indicating concern that the proposed regulations would grant license to sources to continue operating after malfunctions are detected. The provision of § 60.11(d) requires that good operating and maintenance practices be followed and thereby precludes continued operation in a malfunctioning condition.

This regulation is promulgated pursuant to sections 111 and 114 of the Clean Air Act as amended (42 U.S.C. 1857c-b, 1857c-9).

This amendment is effective November 14, 1973.

Dated October 10, 1973.

JOHN QUARLES,
Acting Administrator.

Part 60 of Title 40, Code of Federal Regulations is amended as follows:

1. Section 60.2 is amended by adding paragraphs (p), (q), and (r) as follows:

§ 60.2 Definitions.

(p) "Shutdown" means the cessation of operation of an affected facility for any purpose.

(q) "Malfunction" means any sudden and unavoidable failure of air pollution control equipment or process equipment or of a process to operate in a normal or usual manner. Failures that are caused entirely or in part by poor maintenance, careless operation, or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.

(r) "Hourly period" means any 60 minute period commencing on the hour.

2. Section 60.7 is amended by adding paragraph (c) as follows:

§ 60.7 Notification and recordkeeping.

(c) A written report of excess emissions as defined in applicable subparts shall be submitted to the Administrator by each owner or operator for each calendar quarter. The report shall include the magnitude of excess emissions as measured by the required monitoring equipment reduced to the units of the applicable standard, the date, and time of commencement and completion of each period of excess emissions. Periods of excess emissions due to startup, shutdown, and malfunction shall be specifically identified. The nature and cause of any malfunction (if known), the corrective action taken, or preventive measures adopted shall be reported. Each quarterly report is due by the 30th day following the end of the calendar quarter. Reports are not required for any quarter unless there have been periods of excess emissions.

3. Section 60.8 is amended by revising paragraph (c) to read as follows:

§ 60.8 Performance tests.

(c) Performance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions of performance tests unless otherwise specified in the applicable standard.

4. A new § 60.11 is added as follows:

§ 60.11 Compliance with standards and maintenance requirements.

(a) Compliance with standards in this part, other than opacity standards, shall be determined only by performance tests established by § 60.8.

(b) Compliance with opacity standards in this part shall be determined by use of Test Method 9 of the appendix.

(c) The opacity standards set forth in this part shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.

(d) At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

5. A new paragraph is added to § 60.45 as follows:

§ 60.45 Emission and fuel monitoring.

(g) For the purpose of reports required pursuant to § 60.7(c), periods of excess emissions that shall be reported are defined as follows:

(1) Opacity. All hourly periods during which there are three or more one-minute periods when the average opacity exceeds 20 percent.

(2) Sulfur dioxide. Any two consecutive hourly periods during which average sulfur dioxide emissions exceed 0.80 pound per million B.t.u. heat input for liquid fossil fuel burning equipment or exceed 1.2 pound per million B.t.u. heat input for solid fossil fuel burning equipment; or for sources which elect to conduct representative analyses of fuels in accordance with paragraph (c) or (d) of this section in lieu of installing and operating a monitoring device pursuant to paragraph (a)(2) of this section, any calendar day during which fuel analysis shows that the limits of § 60.43 are exceeded.

(3) Nitrogen oxides. Any two consecutive hourly periods during which the average nitrogen oxides emissions exceed 0.20 pound per million B.t.u. heat input for gaseous fossil fuel burning equipment, or exceed 0.30 pound per million B.t.u. for liquid fossil fuel burning equipment, or exceed 0.70 pound per million B.t.u. heat input for solid fossil fuel burning equipment.

6. A new paragraph is added to § 60.73 as follows:

§ 60.73 Emission monitoring.

(e) For the purpose of making written reports pursuant to § 60.7(c), periods of excess emissions that shall be reported are defined as any two consecutive hourly periods during which average nitrogen oxides emissions exceed 3 pounds per ton of acid produced.

7. A new paragraph is added to § 60.84 as follows:

§ 60.84 Emission monitoring.

(e) For the purpose of making written reports pursuant to § 60.7(c), periods of excess emissions that shall be reported are defined as any two consecutive hourly periods during which average sulfur dioxide emissions exceed 4 pounds per ton of acid produced.

[FR Doc. 73-21896 Filed 10-12-73; 8:45 am]

Title 41—Public Contracts and Property Management

CHAPTER 101—FEDERAL PROPERTY MANAGEMENT REGULATIONS

SUBCHAPTER E—SUPPLY AND PROCUREMENT

[FPMR Amdt. E-134]

GSA SUPPLY CATALOG

Miscellaneous Amendments

This amendment deletes references to the GSA Stock Catalog and Guide to Sources of Supply and Service which have been consolidated into a single publication titled "GSA Supply Catalog," and the Management Data List, which has been discontinued. Other minor editorial corrections are included.

The table of contents for Parts 101-26, 101-27, and 101-30 is amended as follows:

Sec.

101-26.402-4	Schedule Identification.
101-27.304-2	[Reserved]
101-30.603-1	[Reserved]
101-30.603-2	GSA Supply Catalog.
101-30.603-3	[Reserved]
101-30.603-6	Special Notices.

PART 101-25—GENERAL

Subpart 101-25.4—Replacement Standards

Section 101-25.404 is revised to read as follows:

§ 101-25.404 Furniture.

Furniture (office, household and quarters, and institutional) shall not be replaced unless the estimated cost of repair or rehabilitation (based on GSA term contracts), including any transportation expense, exceeds at least 75 percent of the cost of a new item of the same type and class (based on prices as shown in the current edition of the GSA Supply Catalog, applicable Federal Supply Schedules, or the lowest available market price). An exception is authorized in those unusual situations in which rehabilitation of the furniture at 75 percent or less of the cost of a new item would not extend its useful life for a period compatible with the cost of rehabilitation as determined by the agency head or his designee.

PART 101-26—PROCUREMENT SOURCES AND PROGRAMS

Subpart 101-26.2—Federal Requisitioning System

Section 101-26.201(e) is revised and 101-26.203-1 is amended to read as follows:

§ 101-26.201 General.

(c) Incorporation of codes in the multicopy shipping document which are significant to the agencies on GSA supply distribution facilities shipments; and

§ 101-26.203-1 Forms prepared by ordering offices.

The forms set forth in this § 101-26.203-1 are prescribed for use in the FEDSTRIP system and may be obtained in accordance with the instructions provided in the GSA Supply Catalog.

Subpart 101-26.3—Procurement of GSA Stock Items

Section 101-26.301 is amended and §§ 101-26.301-1(a), 101-26.301-2, 101-26.302(c), 101-26.307-3, and 101-26.310 (a) (1) and (3) are revised to read as follows:

§ 101-26.301 Applicability.

All executive agencies within the United States (including Hawaii and Alaska) shall requisition from GSA their requirements of stock items available from GSA supply distribution facilities, including requirements for items which originate outside the United States but which are required, by agency instruction or otherwise, to be requisitioned in the United States except as provided in this § 101-26.301 and as may be otherwise specifically authorized. (Items available from GSA stock, including GSA self-service stores, are listed or described in the GSA Supply Catalog which is issued in accordance with Subpart 101-30.6.) Federal agencies not required to requisition stock items from GSA are encouraged to do so.

§ 101-26.301-1 Similar items.

(a) Agencies required to requisition, exclusively, items listed in the GSA Supply Catalog shall utilize such items in lieu of procuring similar items from other sources when the GSA items will adequately serve the required functional end-use purpose.

§ 101-26.301-2 Issue of used, repaired, and rehabilitated items in serviceable condition.

Stock items returned to GSA under the provisions of Subpart 101-27.5 will be reissued to all requisitioning activities without distinction between new, used, repaired, or rehabilitated items in serviceable condition. Requisitioning agencies will be billed for these items at the current GSA selling price.

§ 101-26.302 Standard and optional forms.

(c) Forms or form assemblies which deviate in any manner from those listed in the GSA Supply Catalog are not stocked or distributed by GSA. Agencies requiring such nonstock forms shall pre-