

under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 71

Airspace, Incorporation by Reference, Navigation (air).

The Proposed Amendment

Accordingly, pursuant to the authority delegated to me, the Federal Aviation Administration proposes to amend 14 CFR part 71 as follows:

PART 71—DESIGNATION OF CLASS A, CLASS B, CLASS C, CLASS D, AND CLASS E AIRSPACE AREAS; AIRWAYS; ROUTES; AND REPORTING POINTS

1. The authority citation for part 71 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40103, 40113, 40120; E.O. 10854, 24 FR 9565, 3 CFR 1959–1963 Comp., p. 389.

§ 71.1 [Amended]

2. The incorporation by reference in 14 CFR 71.1 of Federal Aviation Administration Order 7400.9F, Airspace Designations and Reporting Points, dated September 10, 1998, and effective September 16, 1998, is amended as follows:

Paragraph 5000 Class D airspace

* * * * *

ACE MO D St. Joseph, MO [Revised]

Rosecrans Memorial Airport, MO
(Lat. 39°46'19" N., long. 94°54'35" W.)

That airspace extending upward from the surface to and including 3,300 feet MSL within a 4.2-mile radius of the Rosecrans Memorial Airport. This Class D airspace area is effective during the specific dates and times established in advance by a Notice to Airmen. The effective date and time will thereafter be continuously published in the Airport/Facility Directory.

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Paragraph 6004 Class E airspace areas designated as an extension to a Class D or Class E surface area

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ACE MO E4 St. Joseph, MO [Revised]

Rosecrans Memorial Airport, MO
(Lat. 39°46'19" N., long. 94°54'35" W.)

St. Joseph VORTAC
(Lat. 39°57'38" N., long. 94°55'31" W.)

TARIO LOM
(Lat. 39°40'33" N., long. 94°54'25" W.)

St. Joseph ILS
(Lat. 39°47'16" N., long. 94°54'25" W.)

That airspace extending upward from the surface within 1.8 miles each side of the St. Joseph ILS localizer south course extending from the 4.2-mile radius of Rosecrans Memorial Airport to the TARIO LOM and within 1.8 miles each side of the St. Joseph VORTAC 175° radial extending from the 4.2-mile radius of the airport to 5.8 miles north

of the airport. This Class E airspace area is effective during the specific dates and times established in advance by a Notice to Airmen. The effective date and time will thereafter be continuously published in the Airport/Facility Directory.

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Paragraph 6005 Class E airspace area extending upward from 700 feet or more above the surface of the earth

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ACE MO E5 St. Joseph, MO [Revised]

Rosecrans Memorial Airport, MO
(Lat. 39°46'19" N., long. 94°54'35" W.)

St. Joseph VORTAC
(Lat. 39°57'38" N., long. 94°55'31" W.)

TARIO LOM
(Lat. 39°40'33" N., long. 94°54'25" W.)

St. Joseph ILS
(Lat. 39°47'16" N., long. 94°54'25" W.)

That airspace extending upward from 700 feet above the surface within a 6.8-mile radius of Rosecrans Memorial Airport and within 2.0 miles each side of the 175° radial of the St. Joseph VORTAC extending from the 6.8-mile radius to the VORTAC and within 4 miles east and 6 miles west of the St. Joseph ILS localizer south course, extending from the 6.8-mile radius to 10.5 miles south of the TARIO LOM.

* * * * *

Issued in Kansas City, MO, on November 3, 1998.

Christopher R. Blum,

Acting Manager, Air Traffic Division, Central Region.

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DEPARTMENT OF THE TREASURY

Internal Revenue Service

26 CFR Part 1

[REG–105170–97]

RIN 1545–AV14

Credit for Increasing Research Activities

AGENCY: Internal Revenue Service (IRS), Treasury.

ACTION: Notice of proposed rulemaking.

SUMMARY: This document contains proposed regulations relating to the computation of the credit under section 41(c) and the definition of *qualified research* under section 41(d). The proposed regulations reflect changes to section 41 made by the Tax Reform Act of 1986, the Revenue Reconciliation Act of 1989, the Small Business Job Protection Act of 1996, and the Taxpayer Relief Act of 1997. The proposed regulations also provide certain technical amendments to the regulations.

DATES: Written comments must be received no later than March 2, 1999.

ADDRESSES: Send submissions to: CC:DOM:CORP:R (REG–105170–97), room 5228, Internal Revenue Service, POB 7604, Ben Franklin Station, Washington, DC 20044. Submissions may be hand delivered Monday through Friday between the hours of 8 a.m. and 5 p.m. to: CC:DOM:CORP:R (REG–105170–97), Courier's Desk, Internal Revenue Service, 1111 Constitution Avenue NW., Washington, DC. Alternatively, taxpayers may submit comments electronically via the Internet by selecting the "Tax Regs" option of the IRS Home Page, or by submitting comments directly to the IRS Internet site at: <http://www.irs.ustreas.gov/prod/tax—regs/comments.html>.

FOR FURTHER INFORMATION CONTACT: Concerning the proposed regulations, Lisa J. Shuman or Leslie H. Finlow at (202)622–3120 (not a toll-free number); concerning submission of comments, the hearing, and/or to be placed on the building access list to attend the hearing, La Nita Van Dyke at (202)622–7190 (not a toll-free number).

SUPPLEMENTARY INFORMATION:

Paperwork Reduction Act

The collection of information contained in this notice of proposed rulemaking has been submitted to the Office of Management and Budget for review in accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. 3507(d)). Comments on the collection of information should be sent to the Office of Management and Budget, Attn: Desk Officer for the Department of the Treasury, Office of Information and Regulatory Affairs, Washington, DC 20503, with copies to the Internal Revenue Service, Attn: IRS Reports Clearance Officer, OP:FS:FP, Washington, DC 20224. Comments on the collection of information should be received by March 2, 1999. Comments are specifically requested concerning:

Whether the proposed collection of information is necessary for the proper performance of the functions of the IRS, including whether the information will have practical utility;

The accuracy of the estimated burden associated with the proposed collection of information (see below);

How the quality, utility, and clarity of the information to be collected may be enhanced;

How the burden of complying with the proposed collection of information may be minimized, including through the application of automated collection techniques or other forms of information technology; and

Estimates of capital or start-up costs and costs of operation, maintenance, and purchase of services to provide information.

The collection of information in this proposed regulation is in §§ 1.41-4(a) and 1.41-8(b). The information is required by the IRS to ensure that taxpayers have engaged in qualified research and to ensure the proper computation of the credit for increasing research activities under section 41. Section 1.41-4(a) defines a process of experimentation, as required for credit eligibility, to include the recording of the results of the experiments. This requirement imposes no additional recordkeeping burden, because taxpayers engaging in a bona fide process of experimentation already record the results in any event (see discussion under Explanation of Provisions, 3. *Documentation*, in this preamble). The information required by § 1.41-8 will be used to determine if the taxpayer has elected or revoked the election to use the alternative incremental credit allowed under section 41(c)(4). The collection of information is mandatory. The likely respondents are businesses or other for-profit institutions and organizations. Responses to this collection of information are required to elect to use and to revoke the election to use the alternative incremental credit computation allowed under section 41(c)(4).

The reporting burden contained in § 1.41-8(b)(2) (relating to the election of the alternative incremental credit) is reflected in the burden of Form 6765.

Estimated total annual reporting burden under § 1.41-8(b)(3) (relating to the revocation of the election to use the alternative incremental credit): 250 hours.

Estimated average annual burden hours per respondent: 50 hours.

Estimated number of respondents: 5.

Estimated frequency of responses: On occasion.

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 control number assigned by the Office of Management and Budget.

Books or records relating to a collection of information must be retained as long as their contents may become material in the administration of any internal revenue law. Generally, tax returns and tax return information are confidential, as required by 26 U.S.C. 6103.

Background

The research credit provisions originally appeared in section 44F of the Internal Revenue Code of 1954 (the 1954 Code), as added to the 1954 Code by section 221 of the Economic Recovery Tax Act of 1981. Section 471(c) of the Tax Reform Act of 1984 redesignated section 44F as section 30. Section 231 of the Tax Reform Act of 1986 (the 1986 Act) redesignated section 30 as section 41 and substantially modified the research credit provisions. The amendments made to section 41 by the 1986 Act primarily relate to the definition of *qualified research* in section 41(d) and the computation of *basic research* payments under section 41(e). The Revenue Reconciliation Act of 1989 (the 1989 Act), the Revenue Reconciliation Act of 1993 (the 1993 Act), the Small Business Job Protection Act of 1996 (the 1996 Act), and the Taxpayer Relief Act of 1997 (the 1997 Act) also amended the research credit provisions. These amendments primarily relate to the trade or business requirement in section 41(b) and the computation of the credit under sections 41(c) and 41(f).

On May 17, 1989, the IRS published in the **Federal Register** (54 FR 21203) final regulations under section 41. The 1989 final regulations generally do not reflect the amendments to section 41 made by the 1986 Act, the 1989 Act, the 1993 Act, the 1996 Act, and the 1997 Act. The amendments proposed by this document contain rules relating primarily to the amendments to section 41(d) made by the 1986 Act. The amendments proposed by this document also contain some rules relating to amendments to section 41 made by the 1989 Act, the 1996 Act, and the 1997 Act.

On January 2, 1997, the IRS published in the **Federal Register** (62 FR 81) proposed regulations (the 1997 proposed regulations) under section 41 describing when computer software that is developed by (or for the benefit of) a taxpayer primarily for the taxpayer's internal use can qualify for the credit for increasing research activities. The 1997 proposed regulations reflect a change to section 41 made by the 1986 Act. The proposed regulations set forth in this notice of proposed rulemaking complement but otherwise do not affect the 1997 proposed regulations.

The Tax and Trade Relief Extension Act of 1998 extended the research credit from June 30, 1998 through June 30, 1999. In the Conference Report, H.R. Rep. No. 105-825, at 1547-49 (1998), the conferees address the scope of the term *qualified research*, comment on an

aspect of the process of experimentation requirement, and note a lack of clarity in the interpretation of the distinction between internal-use software and other software. These proposed regulations reflect the views expressed by the conferees, as well as prior legislative history, regarding the term *qualified research* and the process of experimentation. The IRS and Treasury request comments on the distinction between internal-use software and other software.

Explanation of Provisions

1. Qualified Research

Congress enacted the research credit to encourage business firms to perform the research necessary to increase the innovative qualities and efficiency of the U.S. economy. H.R. Rep. No. 99-426, at 177 (1985); S. Rep. No. 99-313, at 694 (1986). In extending the research credit in the 1986 Act, Congress expressed concern that, in practice, taxpayers had applied the existing definition of *qualified research* too broadly and some taxpayers had claimed the credit for virtually any expense relating to product development. H.R. Rep. No. 99-426, at 178; S. Rep. No. 99-313, at 694-95. Many taxpayers claiming the credit were not in industries that involved high technology or its application in developing technologically new and improved products or methods of production. H.R. Rep. No. 99-426, at 178; S. Rep. No. 99-313, at 695.

To address these concerns, Congress narrowed the scope of the research credit by providing in the Internal Revenue Code (Code) an express definition of the term *qualified research*. In determining eligibility for the research credit, section 41(d) requires that qualified research activities satisfy a multi-part test. First, the taxpayer's expenditures must be eligible to be treated as expenses under section 174. See § 1.174-2(a)(1) (defining *research and experimental expenditures*).

Second, the expenditures must relate to research undertaken for the purpose of discovering information that is both technological in nature and the application of which is intended to be useful in developing a new or improved business component of the taxpayer. The proposed regulations provide that research is undertaken for the purpose of discovering information that is technological in nature only if the research activities are undertaken to obtain knowledge that exceeds, expands, or refines the common knowledge of skilled professionals in the particular field of technology or

science and the process of experimentation utilized fundamentally relies on principles of physical or biological sciences, engineering, or computer science. Consistent with the requirement that the research activities be undertaken to obtain knowledge that exceeds, expands, or refines the common knowledge of skilled professionals in the particular field of technology or science, the credit may be available where the technological advance sought by the taxpayer is evolutionary, and, in certain circumstances, where the taxpayer is not the first to achieve the same advance. Moreover, the credit is available regardless of whether the taxpayer succeeds or fails in achieving the desired advance.

Third, section 41(d) requires that substantially all of the activities of the research constitute elements of a *process of experimentation* that relates to a new or improved function, performance, reliability or quality. As noted in the previous paragraph, the process of experimentation utilized must fundamentally rely on principles of physical or biological sciences, engineering, or computer science.

In developing a process of experimentation rule applicable to all scientific disciplines, IRS personnel met with personnel from the National Science Foundation and the National Institute of Standards and Technology. The proposed regulation explains that a process of experimentation is a process involving the evaluation of more than one alternative designed to achieve a result where the means of achieving that result are uncertain at the outset. This requires that the taxpayer (i) develop one or more hypotheses designed to achieve the intended result; (ii) design a scientific experiment (that, where appropriate to the particular field of research, is intended to be replicable with an established experimental control) to test and analyze those hypotheses (through, for example, modeling, simulation, or a systematic trial and error methodology); (iii) conduct the experiment and record the results; and (iv) refine or discard the hypotheses as part of a sequential design process to develop or improve the business component.

The proposed regulation does not require that the results of the experiments be recorded in any specific manner. The results of the experiments should be recorded in a manner that is appropriate for the particular field of science in which the experiment is conducted and for the type of experimentation involved. In some fields, for example, experiments are

recorded in lab books. When developing computer software, by contrast, the experiments might be recorded in comment lines contained in the source code.

In the 1986 Act, Congress also specified that expenditures incurred in certain research, research-related, or non-research activities are not eligible for the credit. The excluded activities are: post-production activities, adaptation, duplication, surveys and studies, research outside the United States, research in the social sciences, funded research, and research related to certain internal-use computer software.

Section 1.41-4 of this proposed regulation contains rules that clarify the definition of the term qualified research and other terms used in section 41(d). The proposed regulation also provides rules relating to activities for which the research credit is not allowed.

2. Application of Tests

In the legislative history to the 1986 Act, Congress stated that if the requirements of section 41(d) are not met for an entire product, the term *business component* means the most significant set of elements of that product for which all the requirements of section 41(d) are met. The legislative history provides that this "shrinking back" is to continue until either a subset of elements of the product that satisfies the requirements is reached, or the most basic element of the product is reached and such element fails to satisfy the test.

Consistent with the legislative history, § 1.41-4(b) of the proposed regulation explains that the "shrinking-back" concept is the method for applying the tests in section 41(d) to a business component.

3. Documentation

Taxpayers must (a) record the results of their scientific experiments (in a manner that is appropriate for the particular field of science in which the experiment is conducted and for the type of experiment involved) and (b) comply with the recordkeeping requirements of section 6001 and the regulations thereunder. The requirement that taxpayers record the results of their scientific experiments is not intended to cause taxpayers to create records that otherwise would not be created. Rather, the recording of results is inherent in a process of experimentation to discover information that is technological in nature. Limiting the availability of the credit to taxpayers who record the results of their scientific experiments is not intended to change taxpayer behavior, but to identify taxpayers who engage in a bona fide process of

experimentation and thus may be eligible for the credit.

4. Election of the Alternative Incremental Credit

The notice of proposed rulemaking provides rules for electing the alternative incremental credit, which may be elected under section 41(c)(4). Section 1.41-8 of the proposed regulation provides that the election is made on Form 6765, "Credit for Increasing Research Activities," and that the completed form must be attached to the taxpayer's timely filed original return (including extensions) for the taxable year to which the election applies.

Proposed Effective Date

In general, the regulations are proposed to be effective for expenditures paid or incurred on or after the date final regulations are published in the **Federal Register**. The regulations addressing the base amount are proposed to be effective for taxable years beginning on or after the date final regulations are published in the **Federal Register**. The regulations providing for the election and revocation of the alternative incremental credit are proposed to be effective for taxable years ending on or after the date final regulations are published in the **Federal Register**. No inference should be drawn from the proposed effective date concerning the application of section 41 to expenditures paid or incurred or the computation of the base amount before the proposed effective date.

Special Analyses

It has been determined that this notice of proposed rulemaking is not a significant regulatory action as defined in EO 12866. Therefore, a regulatory assessment is not required. It also has been determined that section 553(b) of the Administrative Procedure Act (5 U.S.C. chapter 5) does not apply to these regulations. It is hereby certified that the collection of information contained in these regulations will not have a significant economic impact on a substantial number of small entities. Accordingly, a Regulatory Flexibility Analysis under the Regulatory Flexibility Act (5 U.S.C. chapter 6) is not required. This certification is based on the information that follows. The economic impact of the collection of information contained in these regulations on any small entity would result from the entity being required: to (1) Record the results of experiments related to its qualified research activities, (2) elect on Form 6765 to use the alternative incremental credit if the

entity desires to use that method, and (3) obtain permission to revoke the alternative incremental credit election, if so desired. Because taxpayers record results in conducting their research activities in any event (see discussion under Explanation of Provisions, 3. *Documentation*, in this preamble), the economic impact of the recordkeeping requirement in the regulation would not be significant. The economic impact of electing the alternative incremental credit on Form 6765 also would not be significant because the election is made on the same form and is based on the same information that is used to claim the research credit. Pursuant to section 7805(f), this notice of proposed rulemaking will be submitted to the Chief Counsel for Advocacy of the Small Business Administration for comment on its impact on small business.

Comments and Public Hearing

Before these proposed regulations are adopted as final regulations, consideration will be given to any written comments (preferably a signed original and eight (8) copies) that are submitted timely (in the manner described in the ADDRESSES portion of this preamble) to the IRS. Submissions might include comments on the definition of gross receipts, comments regarding the exclusion for post-production activities, comments on whether and how the definition of a process of experimentation should be refined to ensure that it is appropriate for all scientific fields, and comments on the interaction of the discovery requirement and the duplication exclusion and the effect of such interaction on specific industries. Also, submissions might include comments on clarifying the distinction between internal-use software (i.e., software described in section 41(d)(4)(E)) and other software. All comments will be available for public inspection and copying.

A public hearing will be scheduled in the Internal Revenue Building, 1111 Constitution Avenue, NW., Washington, DC. The IRS recognizes that persons outside the Washington, DC area also may wish to testify at the public hearing through teleconferencing. Requests to include teleconferencing sites must be received by January 16, 1999. If the IRS receives sufficient indications of interest to warrant teleconferencing to a particular city, and if the IRS has teleconferencing facilities available in that city on the date the public hearing is to be scheduled, the IRS will try to accommodate the requests.

The IRS will publish the time and date of the public hearing and the

locations of any teleconferencing sites in an announcement in the **Federal Register**. The announcement will include the date by which persons that wish to present oral comments at the hearing must submit requests to speak, outlines of the topics to be discussed, and the time to be devoted to each topic.

An agenda showing the scheduling of the speakers will be prepared after the deadline for receiving outlines has passed. Copies of the agenda will be available free of charge at the hearing.

Drafting Information. The principal authors of these proposed regulations are Lisa J. Shuman and Leslie H. Finlow of the Office of the Assistant Chief Counsel (Passthroughs and Special Industries). However, personnel from other offices of the IRS and the Treasury Department participated in their development.

List of Subjects in 26 CFR Part 1

Income taxes, Reporting and recordkeeping requirements.

Proposed Amendments to the Regulations

Accordingly, 26 CFR part 1 is proposed to be amended as follows.

(Note: These proposed amendments complement the proposed amendments published at 62 FR 83, January 2, 1997.)

PART 1—INCOME TAXES

Paragraph 1. The authority citation for part 1 continues to read in part as follows:

Authority: 26 U.S.C. 7805 * * *

Par. 2. Revise the undesignated centerheading immediately before § 1.30–1 to read as follows:

Credits Allowable Under Section 30 through 44B

Par. 3. Remove the undesignated centerheading immediately before § 1.41–0.

Par. 4. Section 1.41–0 is revised to read as follows:

§ 1.41–0 Table of contents.

This section lists the paragraphs contained in §§ 1.41–0 through 1.41–8.

§ 1.41–0 Table of contents.

§ 1.41–1 Credit for increasing research activities.

- (a) Basic principles.
- (b) Amount of credit.
- (c) Introduction to regulations under section 41.

§ 1.41–2 Qualified research expenses.

- (a) Trade or business requirements.
- (1) In general.
- (2) New business.
- (3) Research performed for others.

- (i) Taxpayer not entitled to results.
- (ii) Taxpayer entitled to results.
- (4) Partnerships.
 - (i) In general.
 - (ii) Special rule for certain partnerships and joint ventures.
- (b) Supplies and personal property used in the conduct of qualified research.
 - (1) In general.
 - (2) Certain utility charges.
- (i) In general.
- (ii) Extraordinary expenditures.
- (3) Right to use personal property.
- (4) Use of personal property in taxable years beginning after December 31, 1985.
- (c) Qualified services.
 - (1) Engaging in qualified research.
 - (2) Direct supervision.
 - (3) Direct support.
 - (d) Wages paid for qualified services.
 - (1) In general.
 - (2) "Substantially all."
 - (e) Contract research expenses.
 - (1) In general.
 - (2) Performance of qualified research.
 - (3) "On behalf of."
 - (4) Prepaid amounts.
 - (5) Examples.

§ 1.41–3 Base amount for taxable years beginning on or after the date final regulations are published in the Federal Register.

- (a) and (b) [Reserved]
- (c) Definition of gross receipts.
 - (1) In general.
 - (2) Amounts excluded.
 - (3) Foreign corporations.
 - (d) Consistency requirement.
 - (1) In general.
 - (2) Illustrations.

§ 1.41–4 Qualified research for expenditures paid or incurred on or after the date final regulations are published in the Federal Register.

- (a) Qualified research.
 - (1) General rule.
 - (2) Requirements of section 41(d)(1).
 - (3) Discovering information.
 - (4) Technological in nature.
 - (5) Process of experimentation.
 - (6) Substantially all requirement.
 - (7) Use of computers and information technology.
 - (8) Illustrations.
 - (b) Application of requirements for qualified research.
 - (1) In general.
 - (2) Shrinking-back rule.
 - (3) Illustration.
 - (c) Excluded activities.
 - (1) In general.
 - (2) Research after commercial production.
 - (i) In general.
 - (ii) Certain additional activities related to the business component.
 - (iii) Activities related to production process or technique.
 - (3) Adaptation of existing business components.
 - (4) Duplication of existing business component.
 - (5) Surveys, studies, research relating to management functions, etc.

- (6) Internal-use computer software.
- (7) Activities outside the United States.
- (i) In general.
- (ii) Apportionment of in-house research expenses.
- (iii) Apportionment of contract research expenses.
- (8) Research in the social sciences, etc.
- (9) Research funded by any grant, contract, or otherwise.
- (10) Illustrations.
- (d) Documentation.

§ 1.41-5 Basic research for taxable years beginning after December 31, 1986.
[Reserved]

§ 1.41-6 Aggregation of expenditures.

- (a) Controlled group of corporations; trades or businesses under common control.
 - (1) In general.
 - (2) Definition of trade or business.
 - (3) Determination of common control.
 - (4) Examples.
- (b) Minimum base period research expenses.
 - (c) Tax accounting periods used.
 - (1) In general.
 - (2) Special rule where timing of research is manipulated.
 - (d) Membership during taxable year in more than one group.
 - (e) Intra-group transactions.
 - (1) In general.
 - (2) In-house research expenses.
 - (3) Contract research expenses.
 - (4) Lease payments.
 - (5) Payment for supplies.

§ 1.41-7 Special rules.

- (a) Allocations.
 - (1) Corporation making an election under subchapter S.
 - (i) Pass-through for taxable years beginning after December 31, 1982, in the case of an S corporation.
 - (ii) Pass-through, for taxable years beginning before January 1, 1983, in the case of a subchapter S corporation.
 - (2) Pass-through in the case of an estate or trust.
 - (3) Pass-through in the case of a partnership.
 - (i) In general.
 - (ii) Certain expenditures by joint ventures.
 - (4) Year in which taken into account.
 - (5) Credit allowed subject to limitation.
- (b) Adjustments for certain acquisitions and dispositions—Meaning of terms.
- (c) Special rule for pass-through of credit.
- (d) Carryback and carryover of unused credits.

§ 1.41-8 Special rules for taxable years ending on or after the date final regulations are published in the Federal Register.

- (a) Alternative incremental credit.
- (b) Election.
 - (1) In general.
 - (2) Time and manner.
 - (3) Revocation.

Par. 5. Section 1.41-1 is revised to read as follows:

§ 1.41-1 Credit for increasing research activities.

(a) *Basic principles.* Section 41 provides a credit for increasing research activities. The credit is intended to encourage business firms to perform the technological research necessary to increase the innovative qualities and efficiency of the U.S. economy. The credit provides an incentive for business firms to increase their expenditures for research to obtain new knowledge through a scientific process of experimentation. Consequently, the credit is not to be applied too broadly or in a manner such that virtually any expense relating to the development of a product is eligible for the credit, even if some portion of the expense of developing the product does qualify for the credit. Similarly, the credit is not available for an expenditure merely because the expenditure may be treated as an expense under section 174. On the other hand, the credit may be available even though the technological advance sought by the taxpayer is evolutionary, and, in certain circumstances, even if another taxpayer has previously achieved the same advance. Moreover, the credit is available regardless of whether the taxpayer succeeds or fails in achieving the desired advance. The credit is limited to eligible expenditures paid or incurred for qualified research, as defined in section 41(d) and § 1.41-4.

(b) *Amount of credit.* The amount of a taxpayer's credit is determined under section 41(a). For taxable years beginning after June 30, 1996, and at the election of the taxpayer, the portion of the credit determined under section 41(a)(1) may be calculated using the alternative incremental credit set forth in section 41(c)(4).

(c) *Introduction to regulations under section 41.* (1) Sections 1.41-2 through 1.41-8 and 1.41-3A through 1.41-5A address only certain provisions of section 41. The following table identifies the provisions of section 41 that are addressed, and lists each provision with the section of the regulations in which it is covered.

Section of the regulation	Section of the Internal Revenue Code
§ 1.41-2	41(b)
§ 1.41-3	41(c)
§ 1.41-4	41(d)
§ 1.41-5	41(e)
§ 1.41-6	41(f)
§ 1.41-7	41(g)
§ 1.41-8	41(c)
§ 1.41-3A	41(c) (taxable years beginning before January 1, 1990)

Section of the regulation	Section of the Internal Revenue Code
§ 1.41-4A	41(d) (taxable years beginning before January 1, 1986)
§ 1.41-5A	41(e) (taxable years beginning before January 1, 1987)

(2) Section 1.41-3A also addresses the special rule in section 221(d)(2) of the Economic Recovery Tax Act of 1981 relating to taxable years overlapping the effective dates of section 41. Section 41 was formerly designated sections 30 and 44F. Sections 1.41-0 through 1.41-8 and 1.41-0A through 1.41-5A refer to these sections as section 41 for conformity purposes. Whether section 41, former section 30, or former section 44F applies to a particular expenditure depends upon when the expenditure was paid or incurred.

§ 1.41-2 [Amended]

Par. 6. Section 1.41-2 is amended as follows:

1. The last sentence of paragraph (a)(3)(i) is amended by removing the language “§ 1.41-5(d)(2)” and adding “§ 1.41-4A(d)(2)” in its place.
2. The last sentence of paragraph (a)(3)(ii) is amended by removing the language “§ 1.41-5(d)(3)” and adding “§ 1.41-4A(d)(3)” in its place.
3. The last sentence of paragraph (a)(4)(ii)(F) is amended by removing the language “§ 1.41-9(a)(3)(ii)” and adding “§ 1.41-7(a)(3)(ii)” in its place.
4. Paragraph (e)(1)(i) is amended by removing the language “§ 1.41-5” and adding “§ 1.41-4 or 1.41-4A, whichever is applicable” in its place.

Par. 7. An undesignated centerheading is added immediately following § 1.44B-1 to read as follows:

Research Credit—For Taxable Years Beginning Before January 1, 1990

§ 1.41-3 [Redesignated as § 1.41-3A]

Par. 8. Section 1.41-3 is redesignated as § 1.41-3A and added under the new undesignated centerheading “Research Credit—For Taxable Years Beginning Before January 1, 1990.”

Par. 9. New § 1.41-3 is added to read as follows:

§ 1.41-3 Base amount for taxable years beginning on or after the date final regulations are published in the Federal Register.

- (a) and (b) [Reserved]
- (c) *Definition of gross receipts*—(1) *In general.* For purposes of section 41, gross receipts means the total amount, as determined under the taxpayer's method of accounting, derived by the taxpayer from all its activities and from all sources (e.g., revenues derived from

the sale of inventory before reduction for cost of goods sold).

(2) *Amounts excluded.* For purposes of this paragraph (c), gross receipts do not include amounts representing—

(i) Returns or allowances;

(ii) Receipts from the sale or exchange of capital assets, as defined in section 1221;

(iii) Repayments of loans or similar instruments (e.g., a repayment of the principal amount of a loan held by a commercial lender);

(iv) Receipts from a sale or exchange not in the ordinary course of business, such as the sale of an entire trade or business or the sale of property used in a trade or business as defined under section 1221(2); and

(v) Amounts received with respect to sales tax or other similar state and local taxes if, under the applicable state or local law, the tax is legally imposed on the purchaser of the good or service, and the taxpayer merely collects and remits the tax to the taxing authority.

(3) *Foreign corporations.* For purposes of section 41, in the case of a foreign corporation, gross receipts include only gross receipts that are effectively connected with the conduct of a trade or business within the United States. See section 864(c) and applicable regulations thereunder for the definition of *effectively connected income*.

(d) *Consistency requirement*—(1) *In general.* In computing the credit for increasing research activities for taxable years beginning after December 31, 1989, qualified research expenses and gross receipts taken into account in computing a taxpayer's fixed-base percentage and a taxpayer's base amount must be determined on a basis consistent with the definition of qualified research expenses and gross receipts for the credit year, without regard to the law in effect for the taxable years taken into account in computing the fixed-base percentage or the base amount. This consistency requirement applies even if the period for filing a claim for credit or refund has expired for any taxable year taken into account in computing the fixed-base percentage or the base amount.

(2) *Illustrations.* The following examples illustrate the application of the consistency rule of paragraph (d)(1) of this section:

Example 1. (i) X, an accrual method taxpayer using the calendar year as its taxable year, incurs qualified research expenses in 1990. X wants to compute its research credit under section 41 for the tax year ending December 31, 1990. As part of the computation, X must determine its fixed-base percentage, which depends in part on X's qualified research expenses incurred

during the fixed-base period, the taxable years beginning after December 31, 1983, and before January 1, 1989.

(ii) During the fixed-base period, X reported the following amounts as qualified research expenses on its Form 6765:

1984	\$100x
1985	120x
1986	150x
1987	180x
1988	170x
Total	\$720x

(iii) For the taxable years ending December 31, 1984, and December 31, 1985, X based the amounts reported as qualified research expenses on the definition of qualified research in effect for those taxable years. The definition of qualified research changed for taxable years beginning after December 31, 1985. If X used the definition of qualified research applicable to its taxable year ending December 31, 1990, the credit year, its qualified research expenses for the taxable years ending December 31, 1984, and December 31, 1985, would be reduced to \$80x and \$100x, respectively. Under the consistency rule in section 41(c)(5) and paragraph (d)(1) of this section, to compute the research credit for the tax year ending December 31, 1990, X must reduce its qualified research expenses for 1984 and 1985 to reflect the change in the definition of qualified research for taxable years beginning after December 31, 1985. Thus, X's total qualified research expenses for the fixed-base period (1984–1988) to be used in computing the fixed-base percentage is $\$80 + 100 + 150 + 180 + 170 = \$680x$.

Example 2. The facts are the same as in *Example 1*, except that, in computing its qualified research expenses for the taxable year ending December 31, 1999, X claimed that a certain type of expenditure incurred in 1999 was a qualified research expense. X's claim reflected a change in X's position, because X had not previously claimed that similar expenditures were qualified research expenses. The consistency rule requires X to adjust its qualified research expenses in computing the fixed-base percentage to include any similar expenditures not treated as qualified research expenses during the fixed-base period, regardless of whether the period for filing a claim for credit or refund has expired for any year taken into account in computing the fixed-base percentage.

Par. 10. Section 1.41–4 is revised to read as follows:

§ 1.41–4 Qualified research for expenditures paid or incurred on or after the date final regulations are published in the Federal Register.

(a) *Qualified research*—(1) *General rule.* Research activities related to the development or improvement of a business component constitute qualified research only if the research activities meet all of the requirements of section 41(d)(1) and this section, and are not otherwise excluded under section 41(d)(3)(B) or (4), or this section.

(2) *Requirements of section 41(d)(1).* Research constitutes qualified research only if it is research—

(i) With respect to which expenditures may be treated as expenses under section 174, see § 1.174–2;

(ii) That is undertaken for the purpose of discovering information that is technological in nature, and the application of which is intended to be useful in the development of a new or improved business component of the taxpayer; and

(iii) Substantially all of the activities of which constitute elements of a process of experimentation that relates to a new or improved function, performance, reliability or quality.

(3) *Discovering information.* For purposes of section 41(d) and this section, the term *discovering information* means obtaining knowledge that exceeds, expands, or refines the common knowledge of skilled professionals in a particular field of technology or science.

(4) *Technological in nature.* For purposes of section 41(d) and this section, information is technological in nature if the process of experimentation used to discover such information fundamentally relies on principles of physical or biological sciences, engineering, or computer science.

(5) *Process of experimentation.* For purposes of section 41(d) and this section, a process of experimentation is a process to evaluate more than one alternative designed to achieve a result where the means of achieving that result are uncertain at the outset. A process of experimentation in the physical or biological sciences, engineering, or computer science requires that the taxpayer—

(i) Develop one or more hypotheses designed to achieve the intended result;

(ii) Design a scientific experiment (that, where appropriate to the particular field of research, is intended to be replicable with an established experimental control) to test and analyze those hypotheses (through, for example, modeling, simulation, or a systematic trial and error methodology);

(iii) Conduct the experiment and record the results; and

(iv) Refine or discard the hypotheses as part of a sequential design process to develop or improve the business component.

(6) *Substantially all requirement.* The substantially all requirement of section 41(d)(1)(C) and paragraph (a)(2)(iii) of this section is satisfied only if 80 percent or more of the research activities, measured on a cost or other

consistently applied reasonable basis, constitute elements of a process of experimentation for a purpose described in section 41(d)(3). The substantially all requirement is applied separately to each business component.

(7) *Use of computers and information technology.* The employment of computers or information technology, or the reliance on principles of computer science or information technology to store, collect, manipulate, translate, disseminate, produce, distribute, or process data or information, and similar uses of computers and information technology does not itself establish that qualified research has been undertaken.

(8) *Illustrations.* The following examples illustrate the application of paragraph (a) of this section:

Example 1. (i) Facts. X undertakes to develop for sale a tool that would improve its suite of application development products. The desired tool would handle connectivity problems for software application developers by providing data access via a layer of software that is more effective than existing software at finding data in various locations and forms within a network, translating it if need be, and then delivering the result to whatever application or user requested it. The means of developing such versatile database access middleware are not in the common knowledge of skilled professionals in the relevant technological fields. In order to determine whether it can successfully develop the desired tool, X develops, tests, and discards or refines various algorithms and protocols.

(ii) *Conclusion.* X's activities to develop the technology to build the new software development tool may be qualified research within the meaning of section 41(d)(1) and paragraph (a) of this section. In developing the technology, X undertook to obtain knowledge that exceeds, expands, or refines the common knowledge of skilled professionals in the relevant technological fields.

Example 2. (i) Facts. X acquired a new software environment, including a new operating system and a new database management system with related tools. X undertook a project to redeploy its data processing systems to the new software environment. X anticipated that, relative to the old system, the new system would significantly increase the time-sharing capabilities of its computer system. The project activities included redesign of databases and user interfaces, and translation of code from one programming language to another. In migrating to the new software environment, X relied on techniques and approaches that were within the common knowledge of skilled professionals in the relevant technological fields.

(ii) *Conclusion.* X's activities to redeploy its data processing systems to the new software environment are not qualified research within the meaning of section 41(d)(1) and paragraph (a) of this section. X did not undertake to obtain knowledge that exceeds, expands, or refines the common

knowledge of skilled professionals in the relevant technological fields.

Example 3. (i) Facts. X operates a computer system that does not recognize dates beginning in the year 2000. In order to ensure that its computer system will not malfunction in the year 2000, X incurs substantial costs having its employees manually search its computer programs to find all date fields used in the programs and replace all of the date fields with year 2000 compliant date fields.

(ii) *Conclusion.* Because the activities of X's employees were not undertaken to obtain knowledge that exceeds, expands, or refines the common knowledge of skilled professionals in the relevant technological fields and do not involve a process of experimentation, the activities are not qualified research within the meaning of section 41(d)(1) and paragraph (a) of this section.

Example 4. (i) Facts. X is engaged in the business of developing and manufacturing widgets. X wants to manufacture an improved widget made out of a material that X has not previously used. Although X is uncertain how to use the material to manufacture an improved widget, the viability and means of using the material to manufacture such widgets are within the common knowledge of skilled professionals in the relevant technological fields.

(ii) *Conclusion.* Even though X's expenditures for the activities to resolve the uncertainty in manufacturing the improved widget may be treated as expenses for research activities under section 174 and § 1.174-2, X's activities to resolve the uncertainty in manufacturing the improved widget are not qualified research within the meaning of section 41(d) and paragraph (a) of this section. Although X's activities were intended to eliminate uncertainty, the activities were not undertaken to obtain knowledge that exceeds, expands, or refines the common knowledge of skilled professionals in the relevant technological fields.

Example 5. (i) Facts. X desires to build a bridge that can sustain greater traffic flow without deterioration than can existing bridges. The technology used to build such a bridge is not in the common knowledge of skilled professionals in the relevant technological fields. X eventually abandons the project after attempts to develop the technology prove unsuccessful.

(ii) *Conclusion.* X's activities to develop the technology to build the bridge may be qualified research within the meaning of section 41(d)(1) and paragraph (a) of this section, regardless of the fact that X did not actually succeed in developing that technology. In seeking to develop the technology, X undertook to obtain knowledge that exceeds, expands, or refines the common knowledge of skilled professionals in the relevant technological fields.

Example 6. (i) Facts. The facts are the same as in *Example 5*, except that Y successfully builds a bridge that can sustain the greater traffic flow. Thereafter, Z seeks to build a bridge that can also sustain such greater traffic flow. The technology used by Y to build its bridge is a closely guarded secret

that is not known to Z and remains beyond the common knowledge of skilled professionals in the relevant technological fields.

(ii) *Conclusion.* Z's activities to develop the technology to build the bridge may be qualified research within the meaning of section 41(d)(1) and paragraph (a) of this section, even if it so happens that the technology used by Z to build its bridge is similar or identical to the technology used by Y. In developing the technology, Z undertook to obtain knowledge that exceeds, expands, or refines the common knowledge of skilled professionals in the relevant technological fields.

Example 7. (i) Facts. X and other manufacturing companies have previously designed and manufactured a particular kind of machine using Material S. Material T is less expensive than Material S. X wishes to design a new machine that appears and functions exactly the same as its existing machines, but that is made of Material T instead of Material S. The technology necessary to achieve this objective is not within the common knowledge of skilled professionals in the relevant technological fields.

(ii) *Conclusion.* X's activities to design the new machine using Material T may be qualified research within the meaning of section 41(d)(1) and paragraph (a) of this section. In seeking to design the machine, X undertook to obtain knowledge that exceeds, expands, or refines the common knowledge of skilled professionals in the relevant technological fields.

Example 8. (i) Facts. X, a tire manufacturer, seeks to build a tire that will not deteriorate as rapidly under certain conditions of high speed and temperature as do existing tires. The design of such a tire is not within the common knowledge of skilled professionals in the relevant technological fields. X commences laboratory research on January 1. On April 1, X determines in the laboratory that a certain combination of materials and additives can withstand higher rotational speeds and temperatures than the combination of materials and additives used in existing tires. On the basis of this determination, X undertakes further research activities to determine how to design a tire using those materials and additives, and to determine whether such a tire functions outside the laboratory as intended under various actual road conditions. By September 1, but not prior to September 1, X's research has progressed to the point where, applying X's knowledge to date, both the viability and means of producing the desired tire would be within the common knowledge of skilled professionals in the relevant technological fields. However, X continues to engage in certain research activities related to the tire after September 1, and until the first tire rolls off the assembly line on December 1.

(ii) *Conclusion.* Some or all of X's research activities until September 1 may be qualified research within the meaning of section 41(d)(1) and paragraph (a) of this section. In seeking to design the tire, X undertook to obtain knowledge that exceeds, expands, or refines the common knowledge of skilled professionals in the relevant technological

fields. The activities conducted after September 1 are not qualified research within the meaning of section 41(d)(1) and paragraph (a) of this section, because those activities were not undertaken to obtain knowledge that exceeds, expands, or refines the common knowledge of skilled professionals in the relevant technological fields.

(b) *Application of requirements for qualified research—(1) In general.* The requirements for qualified research in section 41(d)(1) and paragraph (a) of this section, must be applied separately to each business component, as defined in section 41(d)(2)(B). In cases involving development of both a product and a manufacturing or other commercial production process for the product, research activities relating to development of the process are not qualified research unless the requirements of section 41(d) and this section are met for the research activities relating to the process without taking into account the research activities relating to development of the product. Similarly, research activities relating to development of the product are not qualified research unless the requirements of section 41(d) and this section are met for the research activities relating to the product without taking into account the research activities relating to development of the manufacturing or other commercial production process.

(2) *Shrinking-back rule.* The requirements of section 41(d) and paragraph (a) of this section are to be applied first at the level of the discrete business component to be held for sale, lease or license, or used by the taxpayer in a trade or business of the taxpayer. If all aspects of the requirements are not met at the first level, the requirements are to be applied at the next most significant subset of elements of the business component. The shrinking-back of the applicable business component continues until a subset of elements of the business component satisfies the requirements of section 41(d) and paragraph (a) of this section (treating that subset of elements as a business component) or the most basic element fails to satisfy the requirements.

(3) *Illustration.* The following example illustrates the application of this paragraph (b):

Example. X, a motorcycle engine builder, develops a new carburetor for use in a motorcycle engine. X also modifies an existing engine design for use with the new carburetor. Under the shrinking-back rule, the requirements of section 41(d)(1) and paragraph (a) of this section are applied first to the engine. If the modifications to the engine when viewed as a whole, including the development of the new carburetor, do

not satisfy the requirements of section 41(d)(1) and paragraph (a) of this section, those requirements are applied to the next most significant subset of elements of the business component. For purposes of this example, it is assumed that the new carburetor is the next most significant subset of elements of the business component. The research activities in developing the new carburetor may constitute qualified research within the meaning of section 41(d)(1) and paragraph (a) of this section.

(c) *Excluded activities—(1) In general.* Qualified research does not include any activity described in sections 41(d)(3)(B) and (4), this paragraph (c), and paragraph (e) of this section.

(2) *Research after commercial production—(i) In general.* Activities conducted after the beginning of commercial production of a business component are not qualified research. Activities are conducted after the beginning of commercial production of a business component if such activities are conducted after the component is developed to the point where it is ready for commercial sale or use, or meets the basic functional and economic requirements of the taxpayer for the component's sale or use.

(ii) *Certain additional activities related to the business component.* The following activities are deemed to occur after the beginning of commercial production of a business component—

- (A) Preproduction planning for a finished business component;
- (B) Tooling-up for production;
- (C) Trial production runs;
- (D) Trouble shooting involving detecting faults in production equipment or processes;
- (E) Accumulating data relating to production processes; and
- (F) Debugging or correcting flaws in a business component.

(iii) *Activities related to production process or technique.* In cases involving development of both a product and a manufacturing or other commercial production process for the product, the exclusion described in section 41(d)(4)(A) and paragraphs (c)(2)(i) and (ii) of this section applies separately for the activities relating to the development of the product and the activities relating to the development of the process. For example, even after a product meets the taxpayer's basic functional and economic requirements, activities relating to the development of the manufacturing process still may constitute qualified research, provided that the development of the process itself separately satisfies the requirements of section 41(d) and this section, and the activities are conducted before the process meets the taxpayer's

basic functional and economic requirements or is ready for commercial use.

(3) *Adaptation of existing business components.* Activities relating to adapting an existing business component to a particular customer's requirement or need are not qualified research. This exclusion does not apply merely because a business component is intended for a specific customer.

(4) *Duplication of existing business component.* Activities relating to reproducing an existing business component (in whole or in part) from a physical examination of the business component itself or from plans, blueprints, detailed specifications, or publicly available information about the business component are not qualified research. This exclusion does not apply merely because the taxpayer inspects an existing business component in the course of developing its own business component.

(5) *Surveys, studies, research relating to management functions, etc.* Qualified research does not include activities relating to—

- (i) Efficiency surveys;
- (ii) Management functions (except for the direct supervision of qualified research as defined in § 1.41-2(c)(2)) or techniques, including such items as preparation of financial data and analysis, development of employee training programs and management organization plans, and management-based changes in production processes (such as rearranging work stations on an assembly line);
- (iii) Market research, testing, or development (including advertising or promotions);
- (iv) Routine data collections; or
- (v) Routine or ordinary testing or inspections for quality control.

(6) *Internal-use computer software.* [Reserved]¹

(7) *Activities outside the United States—(i) In general.* Research conducted outside the United States, as defined in section 7701(a)(9), does not constitute qualified research.

(ii) *Apportionment of in-house research expenses.* In-house research expenses paid or incurred for qualified services performed both in the United States and outside the United States must be apportioned between the services performed in the United States and the services performed outside the United States. Only those in-house research expenses apportioned to the

¹ Section 1.41-4(e), proposed on January 2, 1997 (62 FR 83), including any revisions to that proposed rule will be incorporated as this paragraph (c)(6) in the final rule.

services performed within the United States are eligible to be treated as qualified research expenses, unless the in-house research expenses are wages and the 80 percent rule of § 1.41-2(d)(2) applies.

(iii) *Apportionment of contract research expenses.* If contract research is performed partly in the United States and partly outside the United States, only 65 percent (or 75 percent in the case of amounts paid to qualified research consortia) of the portion of the contract amount that is attributable to the research activity performed in the United States may qualify as a contract research expense (even if 80 percent or more of the contract amount is for research performed in the United States).

(8) *Research in the social sciences, etc.* Qualified research does not include research in the social sciences (including economics, business management, and behavioral sciences), arts, or humanities.

(9) *Research funded by any grant, contract, or otherwise.* Qualified research does not include any research to the extent funded by any grant, contract, or otherwise by another person (or governmental entity). To determine the extent to which research is so funded, § 1.41-4A(d) applies.

(10) *Illustrations.* The following examples illustrate provisions contained in paragraphs (c)(1) through (9) of this section. No inference should be drawn from these examples concerning the application of section 41(d)(1) and paragraph (a) of this section to these facts:

Example 1. (i) *Facts.* X, a pharmaceutical company, performs additional clinical tests on one of its products after that product has been approved for a specific therapeutic use by the FDA and is ready for commercial production and sale. The clinical tests study the drug's long-term morbidity and mortality profile, and are undertaken to develop information to use in the marketing materials for the drug.

(ii) *Conclusion.* Because the additional tests are performed after the drug is ready for commercial sale, X's activities in connection with the tests are excluded from the definition of qualified research under section 41(d)(4)(A) and paragraph (c)(2) of this section.

Example 2. (i) *Facts.* The facts are the same as in *Example 1*, except that, while studying the long-term morbidity and mortality profile of the drug product, X discovers that the product may be useful in treating a different medical condition. X begins new clinical studies to establish the compound's new potential therapeutic use.

(ii) *Conclusion.* Because the new clinical studies are performed to establish a new therapeutic use of the drug product, the additional clinical studies performed to

establish the new therapeutic use are not excluded from the definition of qualified research under section 41(d)(4)(A) and paragraph (c)(2) of this section.

Example 3. (i) *Facts.* X, a domestic corporation that manufactures paper, develops and markets a new type of paper containing a different chemical composition than the paper generally available for commercial sale. Prior to manufacturing the paper, X conducts preproduction planning for the finished paper product, tools up for production, conducts trial production runs, engages in trouble shooting involving detecting problems in production equipment, accumulates production process data, and debugs the product.

(ii) *Conclusion.* X's activities of preproduction planning, tooling up for production, trial production runs, trouble shooting, accumulation of production process data, and product debugging do not constitute qualified research with respect to development of the paper product because the activities are deemed to occur after the beginning of commercial production of the product. Whether any activities engaged in by X to develop a process for manufacturing the paper constitute qualified research depends on whether the development of the process itself separately satisfies the requirements of section 41(d) and this section, and whether the process meets the taxpayer's basic functional and economic requirements or is ready for commercial use.

Example 4. (i) *Facts.* X, a computer software development firm, owns all substantial rights in a general ledger accounting software core program that X markets and licenses to customers. After entering into a contractual agreement with a customer, X incurs expenditures in modifying the core software program to adapt the program to the customer's requirement or need.

(ii) *Conclusion.* Because X's activities represent activities to modify an existing software program to adapt the program to a particular customer's requirement, X's activities are excluded from the definition of qualified research under section 41(d)(4)(B) and paragraph (c)(3) of this section.

Example 5. (i) *Facts.* An existing gasoline additive is manufactured by Y using three ingredients, A, B, and C. X seeks to develop and manufacture its own gasoline additive that appears and functions in a manner similar to Y's additive. To develop its own additive, X first inspects the composition of Y's additive, and uses knowledge gained from the inspection to reproduce A and B in the laboratory. Any differences between ingredients A and B that are used in Y's additive and those reproduced by X are insignificant and are not material to the viability, effectiveness, or cost of A and B. X desires to use with A and B an ingredient that has a materially lower cost than ingredient C. Accordingly, X engages in a process of experimentation to discover potential alternative formulations of the additive (i.e., the development and use of various ingredients other than C to use with A and B).

(ii) *Conclusion.* X's activities in analyzing and reproducing ingredients A and B involve

duplication of existing business components and are excluded from qualified research under section 41(d)(4)(C) and paragraph (c)(4) of this section. X's experimentation activities to discover potential alternative formulations of the additive do not involve duplication of an existing business component and are not excluded from qualified research under section 41(d)(4)(C) and paragraph (c)(4) of this section.

Example 6. (i) *Facts.* X, an appliance manufacturer, rearranges employee work stations in its manufacturing assembly line and develops a new employee training program to train employees for the rearranged work stations.

(ii) *Conclusion.* X's activities associated with rearranging the work stations and developing a new employee training program represent activities related to management functions or techniques and are excluded from qualified research under section 41(d)(4)(D) and paragraph (c)(5) of this section.

Example 7. (i) *Facts.* X, an insurance company, develops a new life insurance product. In the course of developing the product, X engages in research with respect to the effect of pricing and tax consequences on demand for the product, the expected volatility of interest rates, and the expected mortality rates (based on published data and prior insurance claims).

(ii) *Conclusion.* X's activities related to the new product represent research in the social sciences, and are thus excluded from qualified research under section 41(d)(4)(G) and paragraph (c)(7) of this section.

(d) *Documentation.* See section 6001 and the regulations thereunder for the recordkeeping requirements that must be satisfied.

§ 1.41-5 [Redesignated as § 1.41-4A, and Amended]

Par. 11. Section 1.41-5 is redesignated as § 1.41-4A, and the last sentence of paragraph (d)(1) is amended by removing the language "§ 1.41-8(e)" and adding "§ 1.41-6(e)" in its place.

§ 1.41-6 [Redesignated as § 1.41-5 and Amended]

Par. 12. Section 1.41-6 is redesignated as § 1.41-5 and the section heading is amended by removing the language "December 31, 1985" and adding "December 31, 1986" in its place.

§ 1.41-7 [Redesignated as § 1.41-5A, and Amended]

Par. 13. Section 1.41-7 is redesignated as § 1.41-5A, and amended as follows:

1. The section heading is amended by removing the language "January 1, 1986" and adding "January 1, 1987" in its place.

2. Paragraph (e)(2) is amended by removing the language "§ 1.41-5(c)" and adding "1.41-4A(c)" in its place.

§ 1.41-8 [Redesignated as § 1.41-6, and Amended]

Par. 14. Section 1.41-8 is redesignated as § 1.41-6, and the last sentence of paragraph (c) is amended by removing the language “§ 1.41-3, except that § 1.41-3(c)(2)” and adding “§ 1.41-3A, except that § 1.41-3A(c)(2)” in its place.

§ 1.41-9 [Redesignated as § 1.41-7]

Par. 15. Section 1.41-9 is redesignated as § 1.41-7.

Par. 16. New § 1.41-8 is added to read as follows:

§ 1.41-8 Special rules for taxable years ending on or after the date final regulations are published in the Federal Register.

(a) *Alternative incremental credit.* At the election of the taxpayer, the credit determined under section 41(a)(1) equals the amount determined under section 41(c)(4).

(b) *Election—(1) In general.* A taxpayer may elect to apply the provisions of the alternative incremental credit in section 41(c)(4) for any taxable year of the taxpayer beginning after June 30, 1996. If a taxpayer makes an election under section 41(c)(4), the election applies to the taxable year for which made and all subsequent taxable years.

(2) *Time and manner of election.* An election under section 41(c)(4) is made by completing the portion of Form 6765, “Credit for Increasing Research Activities,” relating to the election of the alternative incremental credit, and attaching the completed form to the taxpayer’s timely filed original return (including extensions) for the taxable year to which the election applies.

(3) *Revocation.* An election under this section may not be revoked except with the consent of the Commissioner. A taxpayer must attach the Commissioner’s consent to revoke an election under section 41(c)(4) to the taxpayer’s timely filed original return (including extensions) for the taxable year of the revocation.

Par. 17. Section 1.41-0A is added under the new undesignated centerheading “Research Credit—For Taxable Years Beginning Before January 1, 1990” to read as follows:

§ 1.41-0A Table of contents.

This section lists the paragraphs contained in §§ 1.41-0A, 1.41-3A, 1.41-4A and 1.41-5A.

§ 1.41-0A Table of contents.**§ 1.41-3A Base period research expenses.**

- (a) Number of years in base period.
- (b) New taxpayers.
- (c) Definition of base period research expenses.
- (d) Special rules for short taxable years.

- (1) Short determination year.
- (2) Short base period year.
- (3) Years overlapping the effective dates of section 41 (section 44F).
 - (i) Determination years.
 - (ii) Base period years.
- (4) Number of months in a short taxable year.
- (e) Examples.

§ 1.41-4A Qualified research for taxable years beginning before January 1, 1986.

- (a) General rule.
- (b) Activities outside the United States.
 - (1) In-house research.
 - (2) Contract research.
 - (c) Social sciences or humanities.
 - (d) Research funded by any grant, contract, or otherwise.

- (1) In general.
- (2) Research in which taxpayer retains no rights.
- (3) Research in which the taxpayer retains substantial rights.

- (i) In general.
- (ii) Pro rata allocation.
- (iii) Project-by-project determination.
- (4) Independent research and development under the Federal Acquisition Regulations System and similar provisions.
- (5) Funding determinable only in subsequent taxable year.
- (6) Examples.

§ 1.41-5A Basic research for taxable years beginning before January 1, 1987.

- (a) In general.
- (b) Trade or business requirement.
- (c) Prepaid amounts.
 - (1) In general.
 - (2) Transfers of property.
 - (d) Written research agreement.
 - (1) In general.
 - (2) Agreement between a corporation and a qualified organization after June 30, 1983.
 - (i) In general.
 - (ii) Transfers of property.
 - (3) Agreement between a qualified fund and a qualified educational organization after June 30, 1983.
 - (e) Exclusions.
 - (1) Research conducted outside the United States.
 - (2) Research in the social sciences or humanities.
 - (f) Procedure for making an election to be treated as a qualified fund.

§ 1.218-0 [Removed]

Par. 18. Section 1.218-0 is removed.

§ 1.482-7 [Amended]

Par. 19. In § 1.482-7, the sixth sentence of paragraph (h)(1) is amended by removing the language “§ 1.41-8(e)” and adding “§ 1.41-6(e)” in its place.

Michael P. Dolan,

Deputy Commissioner of Internal Revenue.

[FR Doc. 98-31528 Filed 12-01-98; 8:45 am]

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FEDERAL MARITIME COMMISSION**46 CFR Parts 502, 545 and 571**

[Docket No. 98-21]

Miscellaneous Amendments to Rules of Practice and Procedure

AGENCY: Federal Maritime Commission.

ACTION: Notice of Proposed Rulemaking.

SUMMARY: The Federal Maritime Commission intends to make corrections and changes to existing regulations to update and improve them, and to conform them to and implement the Ocean Shipping Reform Act of 1998. At the same time, the Commission is restructuring all of its rules and regulations. (See Tables herein.) This proposed rule would modify part 502 (Rules of Practice and Procedure) and part 571 (to be redesignated as part 545) (Interpretations and Statements of Policy).

DATES: Submit comments on or before January 4, 1999.

ADDRESSES: Address all comments concerning this proposed rule to: Joseph C. Polking, Secretary, Federal Maritime Commission, 800 North Capitol St., N.W., Room 1046, Washington, D.C., 20573-0001.

FOR FURTHER INFORMATION CONTACT: Joseph C. Polking, Secretary, Federal Maritime Commission, 800 North Capitol St., N.W., Room 1046, Washington, D.C. 20573-0001 (202) 523-5725, E-mail: secretary@fmc.gov.

SUPPLEMENTARY INFORMATION:

The Ocean Shipping Reform Act of 1998 (“OSRA”), Pub. L. 105-258, 112 Stat. 1902, which made numerous changes to the Shipping Act of 1984 (“1984 Act”), Pub. L. 98-237, 98 Stat. 67 (46 U.S.C. app. secs. 1701 through 1720), was enacted on October 14, 1998, and becomes effective on May 1, 1999. Among other things, OSRA authorizes the Commission to prescribe implementing rules and regulations. Accordingly, the Federal Maritime Commission (hereinafter referred to as the Commission) must conform all of its rules and regulations to this new statute.

In addition to changes required by OSRA, other changes will be made to improve various rules and to bring them in line with current practices, guidelines and organization. This approach will provide the Commission and the industry with the opportunity to review the Commission’s rules and regulations related to ocean shipping. This review process should ultimately result in a more useful realignment of Chapter IV of Title 46 of the CFR.