U.S. Department
of Transportation
**Federal Railroad
Administration**

Railroad Research and Development

Office of Research and
Development
Washington, DC 20590

Supplemental Standards for Technical Reports and Machine-Readable Products

DOT/FRA/ORD-81/71

DECEMBER 1981

Document is available from the Office of Research and Development, Federal Railroad Administration, Washington, D.C. 20590

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1. PURPOSE. This document establishes standards and procedures to be followed in the handling of technical reports and machine-readable products prepared by or for the Office of Research and Development (OR&D). It supplements other Department of Transportation (DOT) or Federal Railroad Administration (FRA) directives pertaining to this subject. It will be included as an exhibit in all OR&D procurement contracts along with similar DOT/FRA standards, as applicable.

2. EXCLUDED DOCUMENTS. These standards do not apply to material excluded by DOT or FRA documents on this subject.

3. REFERENCES.

   a. DOT Order 5300.1, Standards for the Preparation, Publication, and Dissemination of DOT Technical Reports (to be published).

   b. DOT Order 1360.6, Department of Transportation Graphic Standards, 3/18/81 (with errata sheet).

   c. DOT Order 1700.25 w/Change 1, Distribution User's Manual, 6/23/78, Change 4/1/80.

   d. FRA Order 1710.1B, Printing, Photographic and Graphics Services, 9/8/81.

   e. FIPS PUB 38, Federal Information Processing Standards Publication, Guidelines for Documentation of Computer Programs and Automated Data Systems, February 1976.

   f. How to Submit Your Information Items to NTIS: A Manual for Source Clients, U.S. Department of Commerce, National Technical Information Service, Summer 1980.

4. DEFINITIONS.

   a. See DOT Standard (Reference 3.a.).

   b. Machine-Readable Product. Any form of technical information intended for use with computers or EDP equipment, e.g., magnetic tapes, punched tapes or punched cards of programs or data.

5. REQUIREMENTS. OR&D sponsored technical reports and machine-readable products shall conform to the requirements of DOT/FRA standards as further amended by this document. Processing shall be as delineated herein.

6. LEGAL CONSIDERATIONS.

   a. See DOT Standard (Reference 3.a.).

   b. Use and availability of International Union of Railways (UIC)/Office for Research and Experiments (ORE) material. See Appendix G.

7. FORMAT. (See also 8. PRODUCTION)

a. See DOT Standard (Reference 3.a.).

b. Executive Summary.

(1) When a report is lengthy, or complex, consideration may be given to the use of an Executive Summary. This practice will normally be employed only when the limitation on the abstract (Block 16, Form DOT F 1700.7) precludes an adequate brief of the research and its findings.

(2) When an Executive Summary is employed, it shall be the first item in the "body" of the report, preceding the "introduction." The Executive Summary shall be no more than 3-4 pages in length and easily read in 5-10 minutes. It shall summarize the objectives, procedures and conclusions of the research being reported.

c. Report Cover and Machine-Readable Product Identification.

(1) See DOT Standard (Reference 3.a.).

(2) OR&D Report Covers will be prepared as shown in examples; Figure 1A illustrates a typical standard cover containing the required items of information. A sample of a dual-sponsored cover is shown in Figure 1B. All OR&D report covers shall be in this format.

(3) Report/Product Numbers.

(a) General. Identification of a specific technical report or machine-readable product by a short number facilitates reference and ordering since the user does not have to distinguish between one or more reports with similar titles. If the issuing organization includes an acronym or abbreviated form of its name as part of the report number, then indexing services will be able to provide lists of technical reports and machine-readable products by number without confusion or apparent duplication. Similarly, libraries, information centers, and other technical report users will be able to identify, locate, and easily organize the literature according to a consistent and accepted pattern, and users will be able to cite reports and machine-readable products efficiently and accurately.

(b) OR&D Numbering Practice.

1 Reports. This office has adopted the American National Standards Institute (ANSI), Standard Technical Report Number (STRN) practice. Thus, the alphanumeric designation assigned by this office will always begin with DOT/FRA/ORD followed by a hyphen, and in Arabic numbers the calendar year, a slash, and finally the chronological (within the year) report number assigned by the Office of the Associate Administrator for R&D. For example: DOT/FRA/ORD-81/01 would be the first report issued during calendar

(Signature)

U.S. Department of Transportation

Federal Railroad Administration

Truck Design Optimization Project Phase II

(Title)

Office of Research and Development
Washington, DC 20590

Performance Characterization of Type I Freight Car Trucks

(Subtitle)

P. V. RamaChandran
M. M. ElMadany

(Author(s))

Wyle Laboratories
Scientific Services and Systems Group
Colorado Springs Division
4620 Edison Avenue
Colorado Springs, Colorado 80915

(Performing Organization)

(Report Number)	(Month/Year Published) (Type of Report)	(Availability Statement)
DOT/FRA/ORD-81/10	January 1981 Final Report	This document is available to the U.S. public through the National Technical Information Service, Springfield, Virginia 22161.

Figure 1A. Standard Report Cover Format

(Signature)

U.S. Department of Transportation

Federal Railroad Administration

Alternate Fuels in Medium-Speed Diesel Engines (Title)

Office of Research and Development
Washington, DC 20590

Off-Specification Diesel Fuels, Simulated Coal-Derived Fuel and Methanol (Subtitle)

Q. A. Baker
J. O. Storment (Author(s))

Southwest Research Institute
6220 Culebra Road
San Antonio, Texas 78284 (Performing Organization)

Prepared in cooperation with
U.S. Department of Energy
Office of Transportation Programs
Washington, DC 20585 (Cosponsor)

(Report Number)	(Month/Year Published) (Type of Report)	(Availability Statement)
DOT/FRA/ORD–80/40.I	January 1981 Final Report	This document is available to the U.S. public through the National Technical Information Service, Springfield, Virginia 22161.

Figure 1B. Dual-Sponsored Report Cover Format year 1981. Report/Product numbers are assigned by RRD-1.

2 Machine-Readable Products. In assigning numbers to machine-readable products the alpha prefix will have added after "ORD"; a "/DF" for a data file, or a "/MT" for a computer program tape, or the like. For example: DOT/FRA/ORD/DF-81/01, or DOT/FRA/ORD/MT-81/01.

3 Multiple Volumes or Products. When a report or machine-readable product consists of two or more volumes/tapes each volume or tape will have the same basic number with a decimal and a Roman number added. For example, DOT/FRA/ORD-81/01.I and DOT/FRA/ORD-81/01.II (report) or DOT/FRA/ORD/DF-81/01.I and DOT/FRA/ORD/DF-81/01.II (data file example).

(c) Report/Product Date. The date on the cover of a report or label of a machine-readable product should bear the month and year of release to the public, i.e., input to NTIS. Note: Block 5 of Form DOT F 1700.7, Technical Report Documentation Page; Block 8 of Form NTIS-231; and Block 01 of Standard Forms 185 and 277 shall also contain the same date as appears on a report cover or magnetic tape label, as applicable.

(d) Technical Report Documentation Page (Form DOT F 1700.7). An example of a completed page is shown in Figure 2A with OR&D instructions for completing the page in Figure 2B. This form is available to OR&D operating elements from RRD-1. An example of a completed page for work performed under contract to an organization other than OR&D but sponsored by OR&D shall be indicated as shown in model, Figure 2C (only affected blocks are shown). Note: See also Appendix A for Machine-Readable Products.

8. PRODUCTION.

a. Camera Ready Copy.

(1) See DOT Standard (Reference 3.a.).

(2) Type Size and Pitch for Typewritten Materials shall be of 10 pitch (characters per inch) in pica, delegate, or equivalent type (see also: U.S.D.O.T. Graphics Standard).

(3) Page Numbering shall be as specified in Reference 3.a. When a blank page will occur following a typed, numbered page, as before the body or first appendix, which must start on a right-hand (odd) page; then, the typed, numbered page will contain two page numbers, e.g., iii/iv or 29/30. The number following the slash indicates a blank page follows.

Technical Report Documentation Page

1. Report No. DOT/FRA/ORD-81/10	2. Government Accession No. (blank)	3. Recipient's Catalog No. (blank)
4. Title and Subtitle TRUCK DESIGN OPTIMIZATION PROJECT, PHASE II Performance Characterization of Type I Freight Car Trucks		5. Report Date January 1981 6. Performing Organization Code
7. Author(s) P. V. Rama Chandran, M. M. El Madany		8. Performing Organization Report No. (per organization's policy)
9. Performing Organization Name and Address Wyle Laboratories, Scientific Services & Systems Group Colorado Springs Division 4620 Edison Avenue Colorado Springs, Colorado 80915		10. Work Unit No. (TRAIS) (Blank) 11. Contract or Grant No. DOT-FR-XXXXXX
12. Sponsoring Agency Name and Address U.S. Department of Transportation Federal Railroad Administration Office of Research and Development Washington, D.C. 20590		13. Type of Report and Period Covered Final Report October 1979 - November 1980 14. Sponsoring Agency Code RRD-11

15. Supplementary Notes
See also report DOT/FRA/ORD-81/11, Same Title, Subtitle: Performance Specification of Type II Freight Car Trucks.

16. Abstract
TDOP/Phase II is part of a series of studies being conducted by the FRA to define the engineering options available to the railroad industry to improve the efficiency and productivity of rail freight operations. As part of this effort, experimental and analytic studies have been conducted to define the performance capabilities of the current freight car truck configurations. The results of these studies are used in arriving at quantitative characterization of performance of the standard, three-piece freight car truck under revenue service conditions. Field test data generated during TDOP/Phase I were supplemented with additional data gathered from field tests conducted during Phase II. These test data were reduced, analyzed, and interpreted in the light of physical reasoning as well as analytic simulations. Overall truck performance has been classified into four distinct and non-overlapping regimes, namely lateral stability, trackability, steady state curve negotiation, and ride qualtiy. Performance indices, or measureable quantities typical of each performance regime, have been defined and quantified through the use of field test data and analytic simulations. Correlating the quantified performance indices within each regime with representative operating conditions such as speed, lading, and track quality, ranges of quantified performance levels have been arrived at as being characteristic of truck performance under the corresponding conditions of operation.

17. Key Words Standard trucks, performance regimes, performance characteristics, lateral stability, trackability, ride quality, steady state curve negotiation, TDOP Phase II, freight car truck performance.	18. Distribution Statement Document is available to the U.S. public through the National Technical Information Service, Springfield, Virginia 22161

19. Security Classif. (of this report)	20. Security Classif. (of this page)	21. No. of Pages	22. Price
Unclassified	Unclassified	226	(blank)

Form DOT F 1700.7 (8-72)

FIGURE 2A. Technical Report Documentation Page

Make items 1, 4, 5, 7, 9, 12, 13, and 18 agree with the corresponding information on the report cover. Use all capital letters for main title (item 4). Leave items 2, 6, and 22 blank. Complete the remaining items as follows:

3. Recipient's Catalog No. Reserve for use by report recipient.

8. Performing Organization Report No. Insert if performing organization wishes to assign this number.

10. Work Unit No. (TRAIS). Use the number code from the applicable research and technology resume which uniquely identifies the work unit in the Transporation Research Activity Information Service.

11. Contract or Grant No. Insert the number of the contract or grant under which the report was prepared.

15. Supplementary Notes. Enter information not included elsewhere but useful, such as: Prepared in cooperation with . . . , Translation of (or by) . . . , Presented at conference of . . . , To be published in . . . , Other related reports.

16. Abstract. Include a brief (not to exceed 2000 characters and spaces) factual summary of the most significant information contained in the report. An abstract should state the purpose, methods, results, and conclusions of the work effort. For the purpose, include a statement of goals (objectives, aims). For methods, include experimental techniques or the means by which the results were obtained. Results (findings) are the most important part of the abstract and selection should be based on one, or several of the following: new and verified events, findings of permanent value, significant findings which contradict previous theories, or findings which the author knows are relevant to a practical problem. Conclusions should deal with the implications of the findings and how they tie in with studies in related fields. Do not repeat title or other items provided on this page. When a report consists of a number of volumes, include the volume number and title of each of the other volumes in each abstract.

    Reports presenting the results of computerized model development will use the following structure for the preparation of abstracts:

    a. Technical Model description (Nature of the model or simulator)

    b. Areas of model application

    c. Special model requirements

        (1) Areas of model application

        (2) Other special considerations

17. Key Words. Select specific and precise terms or short phrases that identify the principal subjects covered in the report. The sponsoring organization may specify that key words shall conform to standard terminology, such as that given in the Department of Defense/Engineers Joint Council Thesaurus of Engineering and Scientific Terms or the Railroad Research Information Service, Subject Terms Frequency Count Index (available at RRD-5).

18. Distribution Statement. Enter one of the authorized statements used to denote releasability to the public or a limitation on dissemination for reasons other than security of defense information. Refer questions on the statements to the sponsoring organization.

19. Security Classification (of report). Note: Reports carrying a security classification will require additional markings giving security and downgrading information as specified by the sponsoring element.

20. Security Classification (of this page). Note: Because this page may be used in preparing announcements, bibliographies, and data banks, it should be unclassified, if possible. If a classification is required, identify the classified, items on the page by an appropriate symbol.

21. No. of Pages. Insert the number of pages having printed material, including front and inside covers.

FIGURE 2B. Instructions for Completing Technical Report Documentation Page

Technical Report Documentation Page

1. Report No.	2. Government Accession No.	3. Recipient's Catalog No.
4. Title and Subtitle		5. Report Date
		6. Performing Organization Code
7. Author(s)		8. Performing Organization Report No.
9. Performing Organization Name and Address SRI International* 333 Ravenswood Avenue Menlo Park, California 94205		10. Work Unit No. (TRAIS)
		11. Contract or Grant No.
12. Sponsoring Agency Name and Address		13. Type of Report and Period Covered
		14. Sponsoring Agency Code
15. Supplementary Notes *under contract to: U. S. Department of Transportation Transportation Systems Center Kendall Square Cambridge, Massachusetts 02142		
16. Abstract		
17. Key Words	18. Distribution Statement	
19. Security Classif. (of this report)	20. Security Classif. (of this page)	21. No. of Pages / 22. Price

Form DOT F 1700.7 (8-72)

FIGURE 2C. Work done under contract to others but for OR&D

GUIDE FOR TYPING CAMERA COPY

This guide is for typing oversize copy with provision for a 25% reduction. For 2-column format type within the guidelines of the narrow measures. For 1-column format type across the page, staying within the outer guidelines. Be sure to place the page number inside the bottom line.

<u>NOTE</u>: Actual Guides for typing are printed in "non-photo blue". This guide is for illustration only.

Index guide for page number which is placed immediately below (as shown)

X

Guides for Folios

(4) Final Camera-Ready Copy shall be on oversize paper ($10\frac{1}{2}$" x 14"), preferably in two-column format conforming to the guide shown at Figure 3. Note: When using two-column format, photographs, tables, illustrations, etc., may use single column spacing in order to maintain clarity and minimum size lettering (6-point) following 25% reduction. Form guide paper for 25% reduction is available from RRD-1 for internally prepared documents; otherwise, from commercial sources. Following 25% reduction in printing the finished product should result in a report which conforms to Grid D-$8\frac{1}{2}$" x 11" Technical Publication Format found in section 9 of the publication "Graphic Standards for the U.S. Department of Transportation" (DOT Order 1360.6, 3-18-81).

b. Workmanship. Photo copies of automatic data processing (ADP) printouts are generally of poor quality for further reproduction. Original printouts using new or disposable tape and increased type pressure, or photographic reproductions using high contrast film processing techniques, will generally produce an acceptable camera-ready copy.

9. REVIEW, ACCEPTANCE, AND DISTRIBUTION

a. Review.

(1) See DOT Standard (Reference 3.a.).

(2) See Appendix B for Transportation Systems Center (or other agency) administered reports.

(3) The Contracting Officer's Technical Representative (COTR) will have the primary responsibility for ensuring compliance with the DOT Standards and the requirements of this supplement. If a review period of less then 30 days is desired by the performing organization, the letter transmitting the draft report shall state the desired review period and the reasons for the expedited review and approval. In the event the COTR cannot meet the normal 30 day review schedule, the performing organization shall be notified within 10 days of the receipt of the draft report. Prior to returning the reviewed draft report to the performing organization the COTR shall obtain a report number (see 7.C.(3)) and verify the correct title/subtitle to be used on the report and advise the performing organization accordingly at the time of returning the draft. At this same time a request for the preparation of cover graphics shall be submitted to the Administrative Officer, RRD-5 (see 7.c.(2)) in order that the camera ready cover will be available upon receipt of the camera-ready report. NOTE: The report month and year requested must allow time for preparation of the camera-ready copy and printing; hence, project ahead at least two months, or preferably 3 months, for report issue month and year. If a "perfect binding" (See Appendix D-3.(b)(4)) is contemplated, be sure to request spine graphics and specify the expected thickness of the report in number of sheets (2 pages per sheet) of paper or thickness dimension. At the time of review, the COTR must also take into consideration the size of the report and the limitation imposed on printing and distribution (see 9.c.(2) below).

b. Acceptance. Final acceptance of a camera-ready document is the responsibility of the COTR of the sponsoring organization. A complete package, including the Technical Report Documentation Page (Form DOT F 1700.7), but excluding the cover and inside cover, shall be furnished by the performing organization to the sponsoring organization along with such additional copies as may be required in the contract/agreement.

c. Distribution.

(1) General. Publication and distribution of reports shall be selective and restricted to a minimum number of copies. Reports considered worthy of publication shall be expeditiously made available to the public. To the maximum extent feasible, these publications shall be made available on a sales basis through the National Technical Information Service (NTIS). Reports may also be furnished to certain groups as required by law and as deemed essential for achieving the goals of technical programs.

(2) Receipt of Camera-Ready Report. Upon receipt of an acceptable camera-ready report the COTR shall determine the number of copies required to be printed. This will be accomplished through a careful review of Appendix C containing distribution requirements. In addition to copies required for mailing list needs, 25 additional copies will be needed to satisfy sponsoring organization distribution indicated in 9.c.(4). Yet another 5 copies will be required if TSC is involved. At this time, the COTR will execute in duplicate the "Review, Approval, Publication, and Distribution of FRA/ORD Scientific and Technical Reports Form (Form RRD 100.1) a specimen of which appears at Figure 4. Original will accompany printing request to RRD-5; copy is retained by sponsoring organization. NOTE: Item 14, Form RRD 100.1, "Production Units", indicates the combination of the number of copies of a report to be printed, multiplied by the number of pages in it. A production unit is defined as one $8\frac{1}{2}$" X 11" page of one report copy. A foldout page in a report is considered as four (4) production units. In order to reduce the high cost associated with printing and distribution of reports OR&D has adopted a policy of limiting printing of reports to not more than 25,000 production units. Accordingly, the COTR should ensure concise and effective reporting. Extraneous material should be avoided. Pages-and-pages of data rarely contribute to the substance of a report. If deemed appropriate to be made available to the public data can be included in a second volume available only from NTIS or in microfiche form (see 9.c(5) below and Appendix D-3.b.(5)).

(3) Printing and Distribution. Following the completion of Form RRD 100.1 the COTR will provide the office secretary all materials for further processing. Use the reverse side of the "Instructions" sheet on Form DOT F 1700.3 to indicate what is desired. Secretaries will prepare the cover graphics and camera-ready report for printing and distribution by:

REVIEW, APPROVAL, PUBLICATION, AND DISTRIBUTION OF

FRA/OR&D SCIENTIFIC AND TECHNICAL REPORTS

1. Report Title: ______________________________

2. Report Author(s): ______________________________

3. Performing Organization: ______________________________

4. Sponsoring OR&D Office & Program Manager: ______________________________

5. Purpose of Report (Include whether this is a project in itself or is a part of a larger program): ______________________________

____

____

____

6. Intended Users: ______________________________

____

7. Benefits to Users (Describe benefits to rail transportation from this report): ______________________________

____

____

8. Status of this Research (on-going or completed): ______________________________

9. Validity

Is the report soundly based in its research method reasoning [ ]Yes [ ]NO

Are its conclusions properly supported [ ]Yes [ ]NO

10. Originality

Is the content new, novel or original in substance? [ ]Yes [ ]NO

11. Sensitivity

Describe if the report has any sensitive issues affecting the industry competition, proprietary data, policy, regulation, legislation, etc.

____

____

FORM RRD 100.1 (Rev. 10/81)

FIGURE 4. Internal Approval Form

12. Publication

Is the report publishable in its present form [ ]Yes [ ]NO

Is there a need for urgency in its publication [ ]Yes [ ]NO

If yes, explain why ______________________________

Does the abstract convey the report's meaning? [ ]Yes [ ]NO

13. Recommendations for Publication: [ ]Should be Published

[ ]Should Not Be Published

14. Total report production units ______________________________

15. Number of copies to be Published ______________________________

16. Distribution Recommendations: [ ]Limited [ ]Unlimited

Standard Mailing Lists: ______________________________

Internal Distribution: ______________________________

17. Report disposition & Final Action: ______________________________

____

18. Justification for not using oversize paper and double-column format:

____

____

____

______________ Date	______________ Program Manager/COTR
______________ Date	______________ Cognizant Division Chief
______________ Date	______________ Office Director

FIGURE 4. Internal Approval Form (Continued)

(a) Circle folioing each page of the cover (always consisting of four pages) and the report separately. Marking the circle folio shall be done lightly with a "non-photo blue" pencil. The cover pages shall be designated as such, i.e., "cover① " (for the top), "cover ② " for the disclaimer or inside cover. Blank rear cover pages may be indicated on the "Cover② " page by placing a comma after the ② and adding 3X, 4X which indicates the rear cover is blank both inside and out. For example, the inside front cover would be annotated, "Cover②, 3X, 4X". Commencing with the Technical Report Documentation Page a new series of circle folio numbers will start with this page annotated simply "①, 2X". NOTE: The actual report page number should appear as i/ii since the reverse is blank. The Preface, if used, will appear starting as page iii and be circle folioed as ③; otherwise, the Table of Contents will commence on page iii. In any event, the Table of Contents must start on a right-hand or odd numbered page (in the case where the Preface is only one page in length or ends on an odd numbered page the circle folio would indicate the blank page following, e.g., "③, 4X" and have an actual report page as iii/iv in this example. Hence, the Table of Contents would (in the case given) have a circle folio of⑤ and be numbered in the lower-case Roman v and so on until all of the front matter has been presented. Since the "body" of the report must begin on a right-hand, odd-numbered page arabic one, there may be occasion to have an "X" or blank page on the circle folio at the end of the front matter. In any event, the circle folio of the report will always run from ① on the Technical Report Documentation Page consecutively numbered with ◯ numbered pages and/or ◯numbered pages also having an X-ed number through to the last page of the report. It could go something like this: ①, 2X, ③, 4X; ⑤, ⑥, ⑦ . . . ㉓, 24X; ㉕ and so on. Note: For a cross-check of correctness, odd and even circle folio numbers will always appear on a like numbered actual report page. X-ed numbers can only indicate what would otherwise be an even-numbered report page which is intentionally blank.

(b) Verifing Basic Data which will ensure that the cover graphics information is in full agreement with the information contained on the Technical Report Documentation Page.

(c) Preparing the Printing, Binding, Distribution, and Editorial Services Request (Form DOT F 1700.3). Instructions on the preparation of this form are contained in Appendix D.

(d) Submitting for OR&D Approval all documentation and camera-ready report material through the Division Chief and Office Director to the Administrative Officer.

(4) Receipt of Printed Report. Upon receipt of its copies of the printed report the sponsoring organization shall prepare the report for further input to NTIS and distribution to the performing organization. Since the performing organization will vary it cannot be included in the standard mailing lists. Of the 25 (See also NOTE) copies designated to the sponsoring organization, the further distribution is as follows:

(a) 12 to the National Technical Information Service (for processing see Appendix E)
(b) 10 to the performing organization
(c) 3 to the sponsoring organization.

NOTE: For TSC administered reports five (5) additional copies will be sent to the TSC office responsible for the report.

(5) Reports not considered worthy of publication but having merit to be archivally held, i.e., support data, computer printouts, etc., for limited future reference, may be provided in camera-ready form ($8\frac{1}{2}$" X 11") to NTIS as a report or volume of a report along with a brief letter indicating the item to be accessioned is intended to be available only in photo copy or microfiche. See Figure 5 for example of letter. In addition to the letter, the procedure in Appendix E should also be followed. For use of microfiche see Appendix D, paragraph 3.b.(5).

(6) Use of Report Publication Announcement. In the interest of reducing the quantity of reports published, use shall be made of a report publication announcement letter. This method will permit a wider awareness of available research information in the technical community without the attendant high cost of excessive publication and widespread distribution of the actual report. This action is normally taken by the sponsoring organization four weeks following the receipt of the NTIS processed Accession Notice (Form NTIS-79). For the procedure to be followed see Appendix F.

10. SLIDE PREPARATION FOR TECHNICAL PRESENTATIONS.

a. General. From time-to-time OR&D staff will be required to present technical report findings before a technical society, industry association or other professional body. On these occasions and when it is deemed appropriate to use visual aids in the presentation, the same high standard imposed on OR&D technical reports should be evident in the use of visual aids.

b. DOT Standard. Reference should be made to page 7.5 of the "Graphic Standards for the U.S. Department of Transportation" (Reference 3.b.) with respect to the proper use of the title slide.

U.S. Department
of Transportation

**Federal Railroad
Administration**

400 Seventh St., S.W.
Washington, D.C. 20590

(Date)

National Technical Information Service
Attention: Information Services Branch (DOT)
5285 Port Royal Road
Springfield, VA 22161

Enclosed herewith is a report to be accessioned into your system. This office will not have it published but rather made available from NTIS by photo copy.

Parties believed to have an interest in this report will be informed of its availability from NTIS by use of an announcement letter mailed four weeks after return receipt of your authenticated Accession Notice.

Upon completion of your input processing and accessioning please return the camera-ready copy to:

(name and address of sponsoring organization)

Sincerely,

(NOTE: When using this approach the camera-ready material will have to be reduced to $8\frac{1}{2}$" x 11" from the oversized paper prior to submission to NTIS.)

FIGURE 5. NTIS Letter for Photo Copy Only

c. Rules for Slides (adopted from Transportation Research Board Standards). Following the rules outlined here will ensure that slides can be easily understood and seen by an audience.

(1) Prepare Separate Copy for Slides. Good slides are very seldom made from drawings or tables that are intended for publication in a technical report. Printed illustrations usually contain considerably more detail than can be readily assimilated and characters and numbers are generally too small. A figure in a printed technical report is not the same as a slide used in a large meeting hall. A simple illustration emphasizing the point to be made about information contained in a report figure is the best approach.

(2) Never Show More Than Can Be Assimilated In 30 Seconds. Captions and details need not be shown; extraneous information should be eliminated.

(3) Be Sure That Copy Fills Image Area On Slide. In order to ensure ease of readability, original copy must be prepared so that it reduces proportionately to the mask or slide frame dimensions (35mm transparency is 15/16 x 1 3/8 inches; overhead or vugraph is 7 1/4 x 9 3/8 inches). This means that original copy must be prepared so that it reduces proportionately and is photographed so as to fill the slide/vugraph image area. The dimensions for original copy, intended for 35mm slides, given under (4) below will reduce proportionately to the area.

(4) Make Letters and Numbers as Large as Possible. The letters and numbers should not be smaller than 1/50 or 2 percent of the longer dimension of the original copy, and this ratio or percentage must hold for the projected image. The minimum letter size in relation to the size of the original copy for 35mm use is given below. Use larger letters and numbers if possible.

Original Copy Size (in.)	Absolute Minimum Letter Size (in.)
8 x 12	0.25
10 x 15	0.30
20 x 30	0.60

NOTE: Typewriter type (with the possible exception of some "orator" type) and computer printout are too small to photograph effectively.

(5) Contrast. Use a background that provides a sharp contrast with drawings and lettering. In general, black letters on a white background are best for photographic reproduction. Requesting color reversal in the photographic processing of this type of copy will reduce the glare on an audience and enhance the readability. A blue reversal is generally more pleasing than a black reversal, hence, you may wish to specify "blue reverse" on your photographic or graphics services request (Form DOT F 1710.2).

(6) Composition of Illustrative Pictures. In preparing or selecting pictorial transparencies select only those that are uncluttered with extraneous information not pertaining to the point being made. Use a close-up of what is being illustrated. In some cases, an existing transparency can be cropped by the photographic laboratory and reproduced as a close-up.

d. Putting Your Act Together.

(1) Slide Editing. First, remove slides that are too light, too dark, too out-of-focus, or just plain wrong. Then look at the remaining slides and your presentation or outline and pick only the slides that "best" tell the story.

(a) Select for content; if you want viewers to see where three machine controls are located, be sure you can see all three controls.

(b) Select for exposure; slides on the dark side have a richer color.

(c) Select for continuity; does it really "add" and contribute to the point you are making?; it should not distract.

(d) Select for compositon and color quality, which slide looks "best" to you?

NOTE: To ease this process you may wish to use a light-box (slide sorter). This device permits you to lay your slides in rows and view them all at one time as they are illuminated from behind a semi-opaque white surface. A slide sorter is available for loan from RRD-1.

(2) On with the Presentation. A few details are common sense precautions that will insure that your presentation runs smoothly.

(a) Run through your slide presentation before showing it. Make sure that all slides project right-side up and with words reading in the right direction (as on a sign in the scene).

(b) If you are using a front-throw projection, set up your screen and focus the projector before your audience arrives.

(c) To avoid distorting the picture place the projector on a flat surface and position it so the projected image is as near truly horizontal as possible. Most conference and meeting room facilities will have available on request a high projector stand for this purpose.

(d) To eliminate a harsh flash of light at the end of your presentation, block the light with a piece of 2" x 2" cardboard placed after the last slide in your tray. The 2" x 2" cardboard insert may be effectively used between slides in your presentation where you desire not to have anything showing or distracting the audience while you are making an oral only point or discussion. This technique prevents unnecessary turning on and off of the projector which caused premature failure of the lamp.

(e) Check your "screening room" for electrical outlets--availability. Will you need an extension cord for your projector? You may need a cord equipped to receive a grounded plug (3-prong).

(f) Have a spare projection lamp handy.

11. <u>GRAPHICS, PHOTOGRAPHIC, AND DUPLICATING SERVICES, REQUEST FOR</u>

a. <u>Graphics and Photographic Services.</u>

Three photo copies of Form DOT F 1710.2, Request for Graphics and Photographic Services, shall be prepared (typed) for the Fund Administrator's signature. When the form is completed and signed, one copy goes with work to be done to RAD-41.3, one is retained by RRD-5, and one held as suspense copy (along with copy of attachments) in the requesting element's file. Examples of typical requests are shown in Figures 6 and 7. The first example is to obtain a report cover graphic. It is highly desirable to use a marked up copy of a correctly formated cover (see Figures 1A and 1B) as an exhibit attached to the request. The second example portrays a request for obtaining visual aids for a presentation. For only photography work, the Graphics section is left blank.

Some useful clarification of the terms used on the new form are provided for your information.

<u>Quantity Submitted:</u> The number of freehand or typewritten pieces representing a slide, or the number of negatives/transparencies (in the case of a photography request).

<u>No. Original Requested:</u> Generally the same as quantity submitted.

<u>No. Each:</u> Quantity desired of each item (Note in example, Figure 7, how to deal with varying quantities).

<u>Total Quantity:</u> Sum of final finished pieces (in the example, Figure 7, it would be 14 slides plus 7 photo repro).

Request for
Graphics & Photographic Services
Visual Information Branch

U.S. Department of Transportation
Office of the Secretary of Transportation

Job Number	
Grand Total $	

Administration	Office/Route Symbol	Person to Contact	Phone Number
FRA	OR&D/RRD-XX	John/Jane Doe	60800
Date Submitted	**Date Due (Firm? ☐yes ☒no)**	**Authorizing Signature**	**Control Point Signature**
11/5/81	11/25/81	(Fund Administrator)	(RAD-41.3)

Justification

Cover for Technical Report to be prepared IAW DOT Graphics Standard

Title or Description of Work

Preparation of Cover Graphic for FRA Technical Report

Graphics

- ☐ Chart
- ☒ Cover
- ☐ Illustration
- ☐ Slide Art
- ☐ Vu-Graph
- ☐ Publication
- ☐ Certificate
- ☐ Plaque
- ☐ Exhibit/Display
- ☐ Mounting
- ☐ Briefing Chart
- ☐ Diagram
- ☐ Handlettering
- ☐ Photo Repro
- ☐ Other

Photography

- ☐ Color Print Size ______ ☐Matte ☐Glossy
- ☐ B&W Print Size ______ ☐Matte ☐Glossy
- ☐ Slides
- ☐ Diazo Size ______
- ☐ Motion Picture
- ☐ Video
- ☐ I.D. Card
- ☐ Assignment Date______ Time______

Location______

Quantity Submitted	No. Original Requested	No. Each	Total Quantity
1	1	1	1

Special Instructions/Intended Use

Prepare cover graphic in accordance with FRA standard layout as per attached/cover is intended for final report to be published.

Completed Work Received by: Date Received

Internal Use Only

Name	Date	Hours

Total Hours

Contractor

P.O. Number

Bidders	Quotes

Amend.	Date	Amount

Total Contract Cost

	Graphic Costs	Photo Costs
Contract		
In House		
Total		

Notes:

DOT F 1710.2 (10-81)

Graphics Log Copy

FIGURE 6. REQUEST FOR COVER GRAPHICS

Request for Graphics & Photographic Services
Visual Information Branch

Job Number	
Grand Total $	

U.S. Department of Transportation
Office of the Secretary of Transportation

Administration	Office/Route Symbol	Person to Contact	Phone Number
FRA	OR&D/RRD-XX	John/Jane Doe	60800
Date Submitted	**Date Due (Firm? ☒yes ☐no)**	**Authorizing Signature**	**Control Point Signature**
11/5/81	11/17/81	(Fund Administrator)	(RAD-41.3)

Justification

Slides are required to supplement a presentation to an audience of 150 persons.

Title or Description of Work

Prepare graphics and 35mm slides as per attached.

Graphics

- ☐ Chart
- ☐ Cover
- ☐ Illustration
- ☒ Slide Art
- ☐ Vu-Graph
- ☐ Publication
- ☐ Certificate
- ☐ Plaque
- ☐ Exhibit/Display
- ☐ Mounting
- ☐ Briefing Chart
- ☐ Diagram
- ☐ Handlettering
- ☒ Photo Repro
- ☐ Other

Photography

- ☐ Color Print Size ______ ☐Matte ☐Glossy
- ☐ B&W Print Size ______ ☐Matte ☐Glossy
- ☒ Slides
- ☐ Diazo Size 35mm
- ☐ Motion Picture
- ☐ Video
- ☐ I.D. Card
- ☐ Assignment Date ______ Time ______

Location ______

Quantity Submitted	No. Original Requested	No. Each	Total Quantity
7	7	2*	21

Special Instructions/Intended Use

Request Blue reverse on slides/Photo Repro to be used to prepare handouts, *two slides each but only one photo repro of each.

Completed Work Received by: Date Received

Internal Use Only

Name	Date	Hours

Total Hours

Contractor

P.O. Number

Bidders	Quotes

Amend.	Date	Amount

Total Contract Cost

Graphic Costs	Photo Costs
Contract	Contract
In House	In House
Total	Total

Notes:

DOT F 1710.2 (10-81) Graphics Log Copy

FIGURE 7. REQUEST FOR PRESENTATION VISUAL AIDS

When a work request is received at RAD-41.3, similar work will be consolidated in an effort to reduce overall costs to FRA. For example, a single cover graphic that is charged at the rate of $44.00 per hour or fraction thereof (i.e., minimum charge, one hour) rarely takes that long to prepare. Hence, by using a standard preprepared format requiring only title, author, date, type of report, etc., to be added as new work for graphics, RAD-41.3 is able to consolidate many requests prior to submission to Graphics.

b. Duplicating Services

On occasion there may be a need to have a duplicating job accomplished that will exceed the copying machine time of use limitation in the duplicating machine room. When this occurs and it is desired to have a duplicating job done by the duplicating room attendant form set, Form F 1700.8, Duplicating Request (5 Part) will be completed and provided to the Administrative Officer along with the item to be duplicated (see Figure 8). The appropriation to be charged will be indicated under "Special Instructions".

DOT F 1700.8 (11-69) PART 1—PLANNING COPY

DUPLICATING REQUEST

REQUISITION NO.			
ADMINISTRATION: Federal Railroad Administration, Ofc. of Rsch. & Dev.	DATE OF REQUISITION: XX/XX/XX	DUE DATE: XX/XX/XX	
REQUISITIONED BY (NAME): John/Jane Doe	ROUTING SYMBOL: RRD-XX	BUILDING:	ROOM NO.: XXXX
TELEPHONE: XXXXX			

DUPLICATING INSTRUCTIONS — NO. OF PAGES: As Applicable — QUANTITY: As Required

PAPER	KIND: Text C.W. Writing 40 lb.	COLOR: Black	SIZE: ☐ 8 x 10½ ☒ 8 1/2 X 11
	Cover Vellum 100 lb.	Black	COST
PRINT—(INK-BLACK)	☐ One side only	☒ Head to head	☐ Head to foot ☐ Head to left
GATHER	☒ As paged	☐ Other (Specify)	
STITCH	NO. OF STAPLES ☒ 1 ☐ 2	☐ Side	☒ Upper left ☐ Top
DRILL	DIAMETER	NO. OF HOLES ☐ 2 ☐ 3	INCHES Ctr. to Ctr. — POSITION ☐ Left ☐ Top
DISPOSITION	☒ Pickup	☐ Mail messenger	*

SPECIAL INSTRUCTIONS — SIGNATURE (Approving Officer) — Date

APPROPRIATION: SXX (CDC Code) 2400

*RRD-5 initials, RAD-41.3 signs

Received by ____________________ (Signature) __________ (Date)

FIGURE 8. Duplicating Request

APPENDIX A

MACHINE-READABLE PRODUCTS
SUMMARY OF NTIS INPUT PROCEDURES

1. PURPOSE. The purpose of this Appendix is to provide performing (or source) and sponsoring organizations with the information needed to complete the forms required to input software and data files into the National Technical Information Service (NTIS) for further public availability.

2. SUMMARY. For those end users who use 7-track tape drives, NTIS needs to know whether data recorded on 9-track tapes can be copied to 7-track; for example, if the data should include packed decimal numerics or if certain special characters, including lower case alpha, that require more than six low order bits to represent them are present, then the file must always be committed to a 9-track tape. If this is the case, the contributor should enter "9-track only" in Box 16 on Form NTIS-231 and in Box 17 on Form SF-277 (see Figures A-1 and A-2 respectively).

An external label should be affixed to each magnetic tape reel showing the following information:

a. Name of sponsoring organization and assigned product number.
b. Name of source organization.
c. Title of program or data file.
d. Recording mode in tracks, density, parity and character code.
e. Source computer and operating system.
f. Block size and record size in characters.
g. Number of files or programs on the tape and labeling information (including VOL=SER and DSNAME).
h. Reel number when file is multi-reel.
i. Record count and block count.
j. Date (Month/Year).

A typed record layout and description must accompany each data file. They will be reproduced by NTIS and furnished to each user of the file. Form NTIS-172 or facsimile may be used for this purpose (see Figure A-4).

Magnetic tapes are preferable to punched cards for transmitting machine-readable files, but when cards are sent to NTIS, they should have a sequence number punched in them. They should also be interpreted and listed.

Computer programs should be accompanied by documentation sufficient to implement the program on the source computer. This includes input and output layouts, if applicable.

A copy and description of all control and run cards should be included as well as instructions outlining the detailed steps necessary to actually use the computer program. These items are normally already in existence, but if not, they should be prepared and assembled in proper sequence and sent with the program.

Form DOT F 1700.7 is used for submitting paper copy documents into the NTIS collection. One such form must be typed and submitted with each documentation item. When documents and computer files or programs share a common title, their abstracts could be the same on Form DOT F 1700.7 and NTIS-231. (If no documents are involved, Form DOT F 1700.7 is not required.)

As many Form NTIS-79, Accession Notice, as needed may be typed on front and back and submitted with each computer file and document sent to NTIS for accessioning. NTIS will fill in the price code and accession number by which the item may be ordered from NTIS. These Forms will then be returned to the addressees.

In the past, NTIS has had difficulty in matching the documentation with the related tapes. This is caused by separate mailings with the items not identified well enough for NTIS to match them up. Therefore, please either transmit the items together or identify them so they can be put together when received.

When transmitting a computer file to NTIS, send to the attention of the Computer Products Support Group.

3. COMPUTER PRODUCTS DOCUMENTATION.

a. General

A computer file may be sent to NTIS for archival storing, however, a user's guide with a Technical Report Documentation Page (Form DOT F 1700.7) should accompany the file. This is necessary in order to permit NTIS to provide potential customers of the file with the user's guide in order to familiarize themselves with the file. Form DOT 1700.7 must accompany each document sent to NTIS.

b. Software Standards. An ideal piece of documentation for computer software is a detailed block diagram. However, because of time restraints, many software shops do not keep detailed block diagrams up-to-date.

By the time a software package is implemented, the original block diagram would have been superseded several times. Notwithstanding, some software shops do maintain such block diagrams. So whenever a block diagram exists it should be included in the computer software documentation package. Another pertinent piece of documentation is a flow chart. When not too generalized, a flow chart can help a prospective user become familiar with the basic application of a computer program in a very short time. Therefore, a flow chart should be included in the documentation package when possible.

A record layout of the input to a computer program is needed by any prospective user. For COBOL programs this is amply supplied in many, perhaps most, cases by way of the record description in the data division of the program. In other programming languages, this is not necessarily the case. Hence, the description of the input should be included in the user's guide or be submitted separately as a part of the documentation. The same would apply to the output file of a program.

A user's guide and any other related document(s) should be included in the standard documentation package of a software file. If such documents have already been accessioned into the NTIS data collection, then a reference to them should be included on the Technical Report Documentation Page so that any prospective user can be alerted to the existence and availability of any related document.

Finally, all documentation should be sent along with the computer file to NTIS. This allows NTIS to cross reference them when they are accessioned and announced to the public.

Documentation for Computer Products fall into two categories: Documentation for data files and documentation for software.

Even though the basic concept of documentation for these two types of products are quite different, there are some things common to both that would directly reflect on the quality of the documentation; for example, the physical size and the reproduction capability.

Each piece of documentation that is necessary to the implementation of the file must be capable of being reproduced so that it may be sent to each customer who buys the computer product from NTIS. NTIS reproduction equipment limits the physical size of such documentation to the standard $8\frac{1}{2}$" x 11". Even though original documentation may not have been designed with this constraint in mind, the source organization will be expected to rework the documentation to comply with this requirement for the physical size of the documentation. While size may not be a factor at all in the programming shops where diagrams and charts originate, it presents a real problem to the reprography shops at NTIS inasmuch as foldouts cannot be reproduced. Therefore, this material should be reduced to $8\frac{1}{2}$" x 11" or split between two facing pages.

The print on any documentation page must be dark enough to produce reasonably readable copy. Whenever possible, NTIS would like to receive the original typewritten copy. When this is not possible, then the source organization should examine each page so as to insure that good copy is being sent. It may be necessary to retype some of the pages to meet this requirement but this is preferable to sending unreadable pages to the ultimate NTIS customer.

c. Data File Standards. A minimum requirement for documentation for a data file is the record layout and/or a verbal record description. Whenever the record layout indicates that coded information exists in the record, a verbal description would be mandatory. For example, the record layout may show character 20 in a record as representing RACE. Since there are numerous entries that could appear in this column, the user would have to know how to decode character 20 in order to select data on the basis of RACE. To meet this requirement a verbalized description of the entire record would be needed to meet acceptable standards of documentation.

4. Procedure for Input of Machine-Readable Products.

a. Attach a completed NTIS Computer Products Catalog Data Sheet (Form NTIS-231) and Computer Magnetic Tape File Properties Form (Standard Form 277), shown at Figures A-1, and A-2 respectively, to the item being submitted. Note: Standard Form 185 may be used interchangeably with Form NTIS-231 (Figure A-3). Special attention and care must be taken in completing the Catalog Data Sheet. Unlike paper copy documents, NTIS cannot leaf through a tape to find what its contents are. The abstract section (block 15) should contain a concise description of the subject matter of the product, as well as the name of the source computer and operating system, record length, block length, character code, and

(1) For a computer program:

(a) Programming language,
(b) Whether programs are in source or object code,
(c) Input/Output,
(d) Disk, drum and care storage requirements, and
(e) Number of programs on the tape.

(2) For a data file:

(a) Labeling information, and
(b) Number of files on reel or number of reels/file.

b. Attach record layouts, which must be complete and reproducible by xerography, with backup explanations of character sets, special codes, format conventions, and blocking factors. Label records and other sentinel information (tape marks, end-of-file) must be defined. Form NTIS-172, or similar form may be used for this purpose. Sample form is shown in Figure A-4.

c. If the computer file is to be updated in the future, the updates must be made available to NTIS as they occur. When an update is submitted it should be cross-referenced to the file it replaces. If available, an anticipated update schedule should accompany the original submission to NTIS.

d. Supporting paper documentation to a computer application should accompany the file and must be accompanied by a completed Form DOT 1700.7 and Accession Notice cards, Form NTIS-79, as outlined in Appendix D. In addition to the Form NTIS-79 for the paper documentation another set of completed Form NTIS-79 should accompany the computer file itself. External labeling must be affixed to tape reel containers as indicated in 2. Summary, above.

e. Addressing of all machine-readable products and accompanying documentation should be as follows:

National Technical Information Service
Attention: Computer Products Support Group
5285 Port Royal Road
Springfield, VA 22161

f. Performing (or source) organizations must provide the sponsoring organization with an original and two copies of all computer file documentation along with the file to be accessioned into the NTIS system.

5. <u>FORMS AVAILABILITY AND ASSISTANCE</u>. Should there be any questions or a need for forms write to the NTIS Computer Products Support Group or call at (703) 487-4763.

☐ DELETE ☐ NEW ☐ REPLACE ☐ CORRECTION

NTIS COMPUTER PRODUCTS CATALOG DATA SHEET	1. ACCESSION NO.	2. CONTRIBUTING AGENCY REPORT NO.	3. SUBJECT

4. PRODUCT *(circle one)*

DATA FILE PUBLICATION

DATA BASE REFERENCE SERVICE SOFTWARE MODEL, SIMULATION

5. AGENCY, BUREAU, DIVISION, AND ADDRESS

6. PRODUCT NAME *(Use agency nomenclature)*

7. DESCRIPTORS OF PRODUCT *(Keywords, identifiers, etc.)*

8. DATES OF COVERAGE *(For one-time reports, use as-of-date; for software, use date and release no.)*	9. FILE SIZE IN NO. OF: REELS ☐☐☐ PUNCHED CARDS ☐☐☐☐☐☐

10. AVAILABILITY STATEMENT - AGENCY NAME AND ADDRESS, ORDER NO., ETC. *(If NTIS sells, leave blank)*

11. PRICE INFORMATION

12. GEOGRAPHIC SCOPE

13. TECHNICAL REPRESENTATIVES *(List at least one for subject and one for media)*

NAME	TITLE	PHONE NO.

14. DOCUMENTATION ☐ AVAILABLE	EXPECTED AVAILABILITY DATE

FORM NTIS-231 (REV. 6-74) FRONT USCOMM-DC 9411-P74

FIGURE A-1.

NTIS COMPUTER PRODUCTS CATALOG DATA SHEET

15. COMPUTER PRODUCT ABSTRACT

16. DATA FILE TECHNICAL DESCRIPTION

Data File produced on;

____________	____________	____________
cpu mfr.	model	operating system

File is physically coded in: ________ tracks / ________ density / ________ character code

Also available in: ________ tracks / ________ density / ________ character code

17. SOFTWARE TECHNICAL DESCRIPTION

Software is written in;

Fortran ______ COBOL ______ Basic ______ Assembly ______ Other *(Specify)* ____________

Software requires;

CPR Mfr. ____________ Model(s) ____________ Operating system(s) ____________

Minimum of ________ K bytes core. The following special features and/or additional requirements in hardware:

____

SIGNATURE OF AGENCY REPRESENTATIVE, PHONE NO., AND DATE	SIGNATURE OF NTIS REPRESENTATIVE AND DATE FORM PREPARED

FORM NTIS-231 (REV. 6-74) BACK USCOMM-DC 9411-P74

FIGURE A-1 (Continued)

INSTRUCTIONS FOR COMPLETING NTIS FORM 231

NTIS COMPUTER PRODUCTS CATALOG DATA SHEET

1. **ACCESSION NO.** Leave blank (for catalog reference).
2. **CONTRIBUTING AGENCY REPORT NO.** (If different from NTIS Accession No.) enter agency reference No. if available. e.g. "Paper No. 17; Report No. 967BA; Reference No. 589".
3. **SUBJECT** (Subject Category Code). Leave blank.
4. **PRODUCT.** Circle appropriate name.
5. **AGENCY, BUREAU, DIVISION, AND ADDRESS.** List hierarchally and give complete address. Use current federal organization manual.
6. **PRODUCT NAME.** Should describe product and subject.
7. **DESCRIPTORS OF PRODUCT.** Use words which identify the major concept of research and are sufficiently specific to be used as index entries for cataloging (terms from TEST or NTIS Business Thesaurus).
8. **DATES OF COVERAGE.** Term of data file (June '62 - June '70) or date of issue, preparation and release No. (software).
9. **FILE SIZE.** Enter number of reels of tape or number of punched cards, as appropriate. For Data Base Reference and Publications, leave blank.
10. **AVAILABILITY STATEMENT.** Information complete enough to allow ordering (purchase) of tape or cards, or how to obtain information from data base.
11. **PRICE INFORMATION.** Enter unit price per reel, card deck, search, program, issue or subscription.
12. **GEOGRAPHIC SCOPE.** Geocoding should specify geographic level and definition; such as, U.S., state, county, SMSA, tract, etc.
13. **TECHNICAL REPRESENTATIVES.** For subject: statistician, economist or program analyst. For media: compiler of file, programmer, EDP technician.
14. **DOCUMENTATION:** If available, check box; if not available enter date of availability.
15. **ABSTRACT.** Include a brief (200 words or less) factual summary of the most significant information describing the product. List such things as purpose; scope and coverage including data limitations, source documents (if significant) and publications produced by the product.
16. **DATA FILE TECHNICAL DESCRIPTION.** Enter relevant data. This entry is applicable only to data files.
17. **SOFTWARE TECHNICAL DESCRIPTION.** Special features and additional hardware requirements refers to those needed in addition to that necessary for the operating system. An example might be a plotter if the software requires it. Another might be a special print chain.

FIGURE A-1 (Continued)

FORM NTIS-231 (REV. 6-74) USCOMM-DC 9411-P74

COMPUTER MAGNETIC TAPE FILE PROPERTIES

01. Completion Date (Year / Month / Day)	02. Form Prepared By *(Name and Phone)*	03. Reel ID Number *(Property Control No.)*
04. Recording Date (Year / Month / Day)	05. File Identifier or Descriptive Title	06. Short Title *(External Label Name)*
07. Source Unavailable (Year / Month / Day)	08. Documentation (Yes / No) Available *(Enter Citation)*	09. File Position on Reel ____ of ____

10. To Be Returned (Yes / No) To Other Than The Sender	11. Submitting Organization & Address
13. Due Back Date (Year / Month / Day)	12. Receiving Organization & Address

14. Technical Contact(s) & Phone Number(s)

RECORDING SYSTEM CHARACTERISTICS

EQUIPMENT MANUFACTURER AND MODEL	15. Processing Unit	17. No. of Tracks			18. Parity		19. Density *(BPI)*
	16. Tape Subsystem	7	9	Other	Odd	Even	
RECORDING SOFTWARE	20. Operating System, Release & Version	22. Internal File Identifier					
	21. Utility Program or Data Base Language						

23. Characters Set *(Graphics)*	☐ ASCII ☐ BCD ☐ Other *(Specify)* ☐ EBCDIC ☐ FIELDATA ☐ Non-Print Codes
24. Recorded Label *(Internal Label)*	☐ Header ☐ ANSI X 3.27 Standard ☐ Other ☐ Trailer ☐ FIPS Standard ☐ None

FILE CHARACTERISTICS

NUMBER OF RECORDS	25. Physical / 26. Logical	27. Record Type ☐ Fixed Length ☐ Other Than Fixed	28. Records/Block *(Blocking Factor)*	TYPE OF FILE ORGANIZATION *(Check One Box)* ☐ One File One Reel ☐ One File Multiple Reels ☐ Multiple Files One Reel ☐ Multiple Files Multiple Reels
RECORD LENGTH	30. Physical ☐ Bytes ☐ Chars. ☐ Words (Bits/Word)			
	31. Logical ☐ Bytes ☐ Chars. ☐ Words (Bits/Word)			

SUPPLEMENTAL INFORMATION

32. Use/Handling Constraints *(Specify if Yes)*

Yes	No

33. For Submitting Organization Use

277–101

INSTRUCTIONS ON OTHER SIDE

Standard Form 277 (12–77)
U.S. Dept. of Commerce-NBS
FIPS Pub. 53

FIGURE A-2

INSTRUCTIONS

GENERAL:

The purpose of this form is to facilitate the interchange of recorded magnetic tape. This form is not intended to replace other subject matter/content documentation. If elements of documentation are available, they should be attached, or their location should be indicated in Item 8. Examples are: description of the record and/or file content; file layout; record format; record sequence; file type (data, bibliographic, source or object program; "as of" date; period of coverage; record names; file function; location and number of tape marks; character set; padding character information; last block conventions; special (record/file) separation (marks/characters); end of file or end of reel conventions (other than standard labels); and characteristics peculiar to the operating system or the practices of the generating agency. See FIPS PUB 20 for a discussion of the elements of file documentation for information interchange.

A separate form should be completed for each file.

01. **Completion Date.** Enter the date this form was prepared.

02. **Form Prepared By.** Enter the name and phone number (including area code) of the individual who prepared this form.

03. **Reel I.D. Number.** Enter the number which uniquely identifies this reel. It, generally, will be a property control number for the submitting organization. If the file is recorded on multiple reels, enter the first reel number in this item and list all others, in sequence, in Item 33. This information is used to identify the tape reels transmitted.

04. **Recording Date.** Enter the date the reels identified in Item 3 were recorded (copied).

05. **File Identifier or Descriptive Title.** Enter the name used to identify the file. If it is a generally known file, use the name by which it is commonly known. If it is not generally known, make the title as descriptive as possible.

06. **Short Title.** Enter the commonly used abbreviation or acronym which identifies the file. This will usually be the file identification written on the external (gummed) reel label.

07. **Source Unavailable.** Enter the date when your organization will no longer be able to supply a copy of this file.

08. **Documentation Available.** Enter an "X" in the appropriate box. If documentation is available, but is not being forwarded to the recipient as part of this transaction, provide in this space a bibliographic citation or mailing address.

09. **File Position on Reel.** If this is the first or only file on the reel, enter a "1". If the reel contains multiple files, enter the file's position number on the reel. See Item 29.

10. **To Be Returned.** Enter an "X" in the appropriate box. If the file is to be returned to an organization other than the sender, enter an "X" in "to other than sender", fill in Item 13, and enter the appropriate address in Item 33; or include a completed mailing label, and enter instructions for return in Item 33.

11. **Submitting Organization and Address.** Identify the sending organization. Fill in complete mailing address, including street, city, state, and zip code of the sending organization.

12. **Receiving Organization and Address.** Identify the receiving organization. Fill in complete mailing address, including street, city, state, and zip code. If possible, include the name of the individual who is expecting the file.

13. **Due Back Date.** Enter the date the file is expected to be returned, if the "Yes" box was checked in Item 10.

14. **Technical Contact(s) and Phone Number(s).** Enter person(s) or office(s) to be contacted for clarification and further information concerning the tape reel contents. Include telephone area code. Provide the organization name and mailing address (in Item 33), if different from that in Item 11.

RECORDING SYSTEM CHARACTERISTICS

EQUIPMENT MANUFACTURER AND MODEL

15. **Processing Unit.** Enter the manufacturer's name and model number of the computer used (or emulated) to record the data.

16. **Tape Sub System.** Enter the manufacturer's name and model number of the tape drive used (or emulated) to record the data.

17. **Number of Tracks.** Enter an "X" in the appropriate box. If "Other" is checked, enter the number of tracks in Item 33.

18. **Parity.** Enter an "X" in the appropriate box.

19. **Density.** Enter the number of bits recorded per inch (e.g.: 200,556,800,1600,6250 BPI). For those unusual cases where "characters per inch" must be used, explain in Item 33.

RECORDING SOFTWARE

20. **Operating System, Release and Version.** Identify the system software used to record this tape.

21. **Utility Program or Data Base Language.** Enter the name of the utility program used to copy the tape or the data base language used to create it. Identify the release and/or level.

22. **Internal File Identifier.** If there is a recorded label, enter the file identification (e.g., Data Set Name) used in the label.

23. **Character Set (Graphics).** Place an "X" in all appropriate boxes. If "Other" and/or "non-print codes" are checked, describe briefly in Item 33 and supply appropriate documentation. If nonprinting formats (such as packed decimal or three-bytes-in-four-characters) are used, specify in Item 33 and include documentation.

24. **Recorded Label (Internal Label).** Enter an "X" in all appropriate boxes. If "Other" is checked, include documentation of the label(s).

FILE CHARACTERISTICS

NUMBER OF RECORDS

25. **Physical.** Enter the number of physical records (blocks) in the file. This number is normally supplied by utility programs which copy physical records without regard to the logical structure of the tape. Labels are not included in this count.

26. **Logical.** Enter the number of logical records in the file. This number is usually supplied by the program which created the file. Labels are not included in this count.

27. **Record Type.** Enter an "X" in the appropriate box. If "Other" is checked, provide documentation on how physical and logical record length control is established.

28. **Records/Block (Blocking Factor).** If "fixed length" is checked in Item 27, enter the blocking factor.

29. **Type of File Organization.** Enter an "X" in the appropriate box. If this form accompanies a single reel of tape which contains a single file, check "one file, one reel". If this form accompanies several reels of tape which contain a single file, check "one file, multiple reels". If this form is one of several which accompany a single reel of tape containing several files, check "multiple files, one reel". Finally, if this form accompanies several reels of tape which contain several files, check "multiple files, multiple reels" and describe this file's position in the file set in Item 33.

RECORD LENGTH

If the record is not fixed length, enter the maximum size record length, and describe techniques used to control and indicate size in Item 33. Enter an "X" in the appropriate box to indicate the unit of measurement. If size is indicated in number of words, also enter the word size as "bits per word"

30. **Physical.** Enter the physical record length (block size).

31. **Logical.** Enter the logical record length.

SUPPLEMENTAL INFORMATION

32. **Use/Handling Constraints.** If the data in this file is subject to National Security classification, Atomic Energy Act classification, any Privacy Act constraints, Reproduction constraints, etc., enter an "X" in the "Yes" box. If "Yes" has been checked, indicate the security level and procedures to be followed.

33. **For Submitting Organization Use.** This area is provided for use of the organization submitting this form. It may contain any additional information useful to the recipient of the file. If information is entered here as a result of checks in other item numbers, the information should be identified by the corresponding item number. Use additional pages, if necessary

U.S. GOVERNMENT PRINTING OFFICE : 1977-

FIGURE A-2 (Continued)

FEDERAL INFORMATION PROCESSING STANDARD SOFTWARE SUMMARY

01. Summary date

Yr.	Mo.	Day

02. Summary prepared by *(Name and Phone)*

03. Summary action

New ☐ Replacement ☐ Deletion ☐

Previous Internal Software ID

04. Software date

Yr.	Mo.	Day

05. Software title

06. Short title

07. Internal Software ID

08. Software type

☐ Automated Data System
☐ Computer Program
☐ Subroutine/Module

09. Processing mode

☐ Interactive
☐ Batch
☐ Combination

10. Application area

General

☐ Computer Systems Support/Utility
☐ Scientific/Engineering
☐ Bibliographic/Textual
☐ Management/Business
☐ Process Control
☐ Other

Specific

11. Submitting organization and address

12. Technical contact(s) and phone

13. Narrative

14. Keywords

15. Computer manuf'r and model

16. Computer operating system

17. Programing language(s)

18. Number of source program statements

19. Computer memory requirements

20. Tape drives

21. Disk/Drum units

22. Terminals

23. Other operational requirements

24. Software availability

Available ☐ Limited ☐ In-house only ☐

25. Documentation availability

Available ☐ Inadequate ☐ In-house only ☐

26. FOR SUBMITTING ORGANIZATION USE

185–101

Standard Form 185
1974 July
U.S. Dept. of Commerce—NBS
(FIPS. Pub. 30)

FIGURE A-3

INSTRUCTIONS

01. **Summary Date.** Enter date summary prepared. Use Year, Month, Day format: YYMMDD.

02. **Summary Prepared By.** Enter name and phone number (including area code) of individual who prepared this summary.

03. **Summary Action.** Mark the appropriate box for new summary, **replacement** summary or **deletion** of summary. If this software summary is a replacement, enter under "Previous Internal Software ID" the internal software identification as reported in item 07 of the original summary, and enter the new internal software identification in item 07 of this form; complete all other items as for a new summary. If a software summary is to be **deleted,** enter under "Previous Internal Software ID" the internal software identification as reported in item 07 of the original summary; complete only items 01, 02, 03 and 11 on this form.

04. **Software Date.** Enter date software was completed or last updated. Use Year, Month, Day format: YYMMDD.

05. **Software Title.** Make title as descriptive as possible.

06. **Short Title.** (Optional) Enter commonly used abbreviation or acronym which identifies the software.

07. **Internal Software ID.** Enter a unique identification number or code.

08. **Software Type.** Mark the appropriate box for an **Automated Data System** (set of computer programs), **Computer Program,** or **Subroutine/Module,** whichever best describes the software.

09. **Processing Mode.** Mark the appropriate box for an **Interactive, Batch,** or **Combination** mode, whichever best describes the software.

10. **Application Area.**
General: Mark the appropriate box which best describes the general area of application from among:

Computer Systems Support/Utility	**Process Control**
Management/Business	**Bibliographic/Textual**
Scientific/Engineering	**Other**

Specific: Specify the sub-area of application; e.g.: "COBOL optimizer" if the general area is "Computer Systems Support/Utility"; "Payroll" if the general area is "Management/Business"; etc. Elaborate here if the general area is "Other."

11. **Submitting Organization and Address.** Identify the organization responsible for the software as completely as possible, to the Branch or Division level, but including Agency, Department (Bureau/Administration), Service, Corporation, Commission, or Council. Fill in complete mailing address, including mail code, street address, city, state, and ZIP code.

12. **Technical Contact(s) and Phone:** Enter person(s) or office(s) to be contacted for technical information on subject matter and/or operational aspects of software. Include telephone area code. Provide organization name and mailing address, if different from that in item 11.

13. **Narrative.** Describe concisely the problem addressed and methods of solution. Include significant factors such as special operating system modifications, security concerns, relationships to other software, input and output media, virtual memory requirements, and unique hardware features. Cite references, if appropriate.

14. **Keywords.** List significant words or phrases which reflect the functions, applications and features of the software. Separate entries with semicolons.

15. **Computer Manufacturer and Model.** Identify mainframe computer(s) on which software is operational.

16. **Computer Operating System.** Enter name, number, and release under which software is operating. Identify enhancements in the Narrative (item 13).

17. **Programing Language(s).** Identify the language(s) in which the software is written, including version; e.g., ANSI COBOL, FORTRAN V, SIMSCRIPT II.5, SLEUTH II.

18. **Number of Source Program Statements.** Include statements in this software, separate macros, called subroutines, etc.

19. **Computer Memory Requirements.** Enter minimum internal memory necessary to execute software, exclusive of memory required for the operating system. Specify words, bytes, characters, etc., and number of bits per unit. Identify virtual memory requirements in the Narrative (item 13).

20. **Tape Drives.** Identify number needed to operate software. Specify, if critical, manufacturer, model, tracks, recording density, etc.

21. **Disk/Drum Units.** Identify number and size (in same units as "Memory"—item 19) needed to operate software. Specify, if critical, manufacturer, model, etc.

22. **Terminals.** Identify number of terminals required. Specify, if critical, type, speed, character set, screen/line size, etc.

23 **Other Operational Requirements.** Identify peripheral devices, support software, or related equipment not indicated above, e.g., optical character devices, facsimile, computer-output microfilm, graphic plotters.

24. **Software Availability.** Mark the appropriate box which best describes the software availability from among: **Available to the Public, Limited Availability** (e.g.: for government use only), and **For-In-house Use Only.** If the software is "Available", include a mail or phone contact point, as well as the price and form in which the software is available, if possible.

25. **Documentation Availability.** Mark the appropriate box which best describes the documentation availability from among: **Available to the Public, Inadequate for Distribution,** and **For In-house Use Only.** If documentation is "Available", include a mail or phone contact point, as well as the price and form in which the documentation is available, if possible. If documentation is presently "Inadequate", show the expected availability date.

26. **For Submitting Organization Use.** This area is provided for the use of the organization submitting this summary. It may contain any information deemed useful for internal operation.

GPO : 1974 O - 554-655

FIGURE A-3 (Continued)

FORM NTIS-172 (7-72) U.S. DEPARTMENT OF COMMERCE NATIONAL TECHNICAL INFORMATION SERVICE	DATE OF ORIGINAL	PAGE OF
ASSB RECORD DESCRIPTION	REVISED	

RECORD TITLE	CARD	DISK	TAPE

RECORD FORM	BLOCK LENGTH	RECORD LENGTH

TAPE SPECIFICATIONS:

☐ TRACK ☐ DENSITY ☐ PARITY ☐ TRANSLATE ☐ CONVERT

ITEM NO.	ITEM NAME	TYPE C: CHAR P: PACK B: BIN	CHARACTER COUNT FROM	TO	TOTAL

(See Reverse)

USCOMM-DC 11133-P73

FIGURE A-4

RECORD INPUT AND OUTPUT LOG

INPUT TO

OUTPUT FROM

FORM NTIS-172 (7-72)

USCOMM-DC 11133-P73

FIGURE A-4 (Continued)

APPENDIX B

PROCESSING REPORTS PREPARED BY OR THROUGH THE TRANSPORTATION SYSTEMS CENTER OR OTHER AGENCIES

1. PURPOSE. This appendix describes the special handling required to process technical reports prepared by or through the Transportation Systems Center (TSC) when administering work for an OR&D sponsoring organization. The practice outlined may also be used in handling work done by other agencies for OR&D sponsoring organizations if provision is made in the basic agreement.

2. TECHNICAL REPORT DOCUMENTATION PAGE

    a. When work is actually performed by TSC or its direct service support contractor(s) TSC should be indicated as the performing organization on report covers and in Block 9 of the Technical Report Documentation Page (Form DOT F 1700.7).

    b. When work is contracted out by TSC in support of OR&D sponsored research the performing organization should be the actual contractor whose name will appear on report covers and in Block 9, Form DOT F 1700.7. TSC administration of the research effort should be indicated in Block 15 as shown in Figure 2c in the Guide.

3. REVIEW AND APPROVAL OF DRAFT REPORTS. Normally, the TSC Project Plan Agreement Manager will arrange for internal review and processing of reports at TSC. Once this process is completed, the draft report will be transmitted to the OR&D sponsor via preprinted Memorandum from the Chief, Logistics Branch, DTS-831 (see Figure B-1). The review of the draft will be accomplished as indicated in paragraph 9, Review, Acceptance, and Distribution, of the basic document to this appendix. Upon Completion of the review the transmittal Memorandum will be completed and two copies made; one for sponsoring organization file and one for the Administrative Officer. The original completed Memorandum will be returned with the annotated draft to the organization appearing in "Reply to Attention of:" The OR&D sponsoring organization shall instruct TSC to return the camera-ready copy to the OR&D sponsoring organization for further processing in accordance with OR&D procedure. See example given in Figure B-1.

4. SPECIAL REPORT DISTRIBUTION. In addition to the normal OR&D distribution practice, five (5) copies of the printed report shall be furnished to the TSC PPA Manager.

U.S. Department
of Transportation

**Research and
Special Programs
Administration**

Memorandum

Date: November 8, 1981 Reply to Attn. of: DTS-930

Subject: ACTION: Review and Approval of TSC Technical Reports Resulting from FRA PPA's

From: TSC, Logistics Branch, DTS-831

To: Federal Railroad Administration
400 7th Street, SW.
Washington, D.C. 20590

Attached for your review and approval in accordance with the memorandum of understanding are five copies of:

(Review of Technical Reports)

/X/ Document approved for publication with the enclosed recommendations.

/ / Document not approved for publication. See enclosed remarks.

Jane/John Doe
FRA Signature

11/22/81
Date

Sponsoring agency report number: DOT/FRA/ORD-81/99

FIGURE B-1. TSC Transmittal Memo

DISTRIBUTION INSTRUCTIONS

/_7 Approved for distribution to the public through the National Technical Information Service, Springfield, Virginia 22161.

/_7 Approved for U.S. Government only. This document is exempted from public availability because ____________
____

Transmittal of this document outside the U.S. Government must have prior approval of the Federal Railroad Administration.

Approved for the Federal Railroad Administration only. This document is exempted from public availability because ____
____
____

Transmittal of this document outside the FRA must have prior approval of the ______________________________
(Responsible Office)

Additional distribution instructions. Please make corrections in the manuscript according to the attached annotated copy and send the amended final reproducible (camera-ready) copy to RRD-XX for printing and distribution. TSC is not to publish. Five copies of published report will be furnished to office that produced the report.

Please review and return annotated copy of this memorandum and report reproduced review copy to the address listed below.

DTS-930
U.S. Department of Transportation
Research and Special Programs Administration
Transportation Systems Center
Cambridge, MA 02142

John W. Weaver, DTS-831
Chief, Logistics Branch

FIGURE B-1 (Continued)

APPENDIX C

REPORT DISTRIBUTION SYSTEM

1. PURPOSE. This appendix describes the OR&D technical report distribution system and establishes the procedures necessary for its most efficient operation.

2. GENERAL. The distribution system used by OR&D relies primarily upon the use of standardized mailing lists from which address labels are produced on semi-automated equipment as well as the services of the OST Distribution Requirements Section (M-482.2). Two basic types of lists are used; one for internal Department addressees and one for external (mail) distribution.

3. MAILING LISTS.

a. OR&D maintains three categories of external lists; required, general purpose, and supplementary or special lists, the latter being used only in connection with very specialized areas of research. The required lists, internal and external, provide for OR&D meeting its obligations to provide a copy of every technical report released. A general purpose list is used to cover principally the Class I and a majority of the Class II railroads. The supplemental or special mailing lists are used to direct specialized material to special interest groups (i.e., Mechanical, Engineering, etc.) on Class I and a majority of Class II railroads; and, occasionally equipment suppliers. In addition to the lists maintained by OR&D, lists maintained by other elements of the Department may be utilized for OR&D distribution as the occasion warrants.

A "Schedule of Department of Transportation Mailing Lists" is maintained by Distribution Requirements Section (M-482.2) for ready reference (available from Administrative Officer). This schedule indicates the identifying number of each list, the receipients (as a class), the publications (using the list), a contact (person responsible for list maintenance), the type of list (semi-automated, standard card) and remarks (special instructions).

A current proof card master file of all OR&D mailing lists is retained by RRD-1. The required lists and the general purpose list are established and maintained by RRD-1. Individual staff members in OR&D are normally designated to maintain the supplemental, or special lists. The Office of the Associate Administrator for Research and Development (RRD-1) is considered the "Office of Primary Interest (OPI)," as defined in the Distribution User's Manual, for all OR&D mailing lists.

b. Control. All OR&D mailing lists and maintenance of them will be controlled by RRD-1.

c. Establishment of Mailing Lists.

(1) External, Semi-Automated List. The originator submits a memorandum to RRD-1, which includes:

(a) The title of the publication(s) to be distributed and the kind of audience addressed (rail carriers, railroad chief engineers, railroad chief mechanical officers, etc.).

(b) The number of addresses.

(c) Estimated frequency of use.

(d) Degree of selectivity: None (our system does not require).

(e) Whether the publication will be for sale by subscription through the Government Printing Office or NTIS (normally not applicable).

(f) Name, routing symbol, and telephone extension of originator.

(g) Date distribution list is required for use.

Attach list of addressees to the memorandum in format for addresses as in 3.c.(3) below except leave line space for list identification blank.

(2) Internal, Standard Card or "Z" Lists. The OR&D will utilize only the already existing ZTR-16 List unless otherwise approved by RRD-1.

(3) Address Preparation for External Mailing Lists.

(a) Format. Each address must be confined to four lines with a maximum of 29 characters per line, including blank spaces. The following format must be followed:

1 Line 1 is reserved for the list identification code (not used when initially establishing a list), copy requirements (multiple copies to same address) or use of air mail (to foreign addresses only).

2 Line 2 is for the name of the company, university, facility or major organizational element being addressed.

3 Line 3 is for the subdivision or office within the major element, the routing symbol, or the official (use position title instead of person's name where possible) who is intended to receive the publication.

4 Line 4 is for the street and number or P.O. Box number. Do not use both. P.O. Box number should be used whenever it is listed as part of a mailing address.

5 Line 5 is for the city, state and zip code (use two-letter abbreviation for States as listed in the Zip Code Directory). Be sure to include a Zip Code for each address.

(b) When processing an addition or making a change, emphasis should be placed on uniformity; i.e., company names should be alike in format. For example, International Harvester Corporation and Intl. Harvstr. Corp. would not be filed together. A check of the file is necessary in each instance to see how the addressee was previously listed so as to avoid duplicate records. Use standard abbreviations to assure that the addressee can be identified by all, not just those familiar with the code name.

(c) Addresses will require less modification if they cite position titles in organizations rather than persons by name. This is particularly pertinent when line 3 is used as an "attention" line.

(d) Abbreviations should not be used in names of cities (except "St" for "Saint") or foreign countries, space permitting. The following abbreviations of the Provinces of Canada are recommended:

Alberta: ALTA

Manitoba: MAN

Newfoundland: NFLD

Ontario: ONT

Saskatchewan: SASK

British Columbia: BC

New Brunswick: NB

Northwest Territory: NWT

Province of Quebec: PQ

(e) All domestic and trust territory addresses must include a zip code.

(f) Airmail designation is limited to APO's, FPO's, Alaska, Hawaii, U.S. Trust Territories, and Foreign countries.

See Figure C-1 for examples of correct label formats.

4. <u>MAINTENANCE OF INTERNAL AND EXTERNAL LISTS.</u>

a. The Distribution Requirements Section (M-482.2) provides copies of internal, "Z" lists to RRD-1 where current lists are retained for reference. The Section also provides a deck of proof cards of the external, semi-automated lists for use in checking and maintaining the distribution lists.

a. Conventional One-copy Address Format

AAR TECHNICAL CENTER
DIRECTOR
3140 S FEDERAL ST
CHICAGO IL 60616

b. Multi-copy Address Format

2 CPS

ASSN OF AMERICAN RAILROADS
VP RSCH & TEST DEPT
1920 L STREET NW
WASHINGTON DC 20036

c. Air Mail Address Format

AM

OFFICE OF RSCH & EXPERIMENTS
LIBRARIAN
OUDENOORD 60
NL 3513 EV UTRECHT NETHERLAND

d. Multi-Copy, Air Mail Address Format

2 CPS AM

CIGGT INFORMATION CENTRE
LIBRARIAN
QUEEN'S UNIVERSITY
KINGSTON ONT K7L 3N6 CANADA

e. Standard Elements of Established Address Label

List Identification

DATE OF LAST ACTION
N=New List
A=Added Address
C=Changed Address

FRA-18G 10/29/81A 2 CPS
BESSEMER & LAKE ERIE RAILROAD (Organization)
VICE PRESIDENT - OPERATIONS (Subdivision/Title)
PO BOX 536 (Address)
PITTSBURGH PA 15230 (City/State/Zip Code)

SPECIAL HANDLING

<u>NOTE</u>: PERIODS AND COMMAS ARE LEFT OUT

FIGURE C-1. Sample Address Labels

(1) Processing Actions for Standard Card or "Z" lists will be handled by submitting changes, by memorandum, through RRD-1 to the Distribution Requirements Section, M-482.2. The original will be sent to M-482.2 with a copy retained by RRD-1 until change action is acknowledged by M-482.2. NOTE: Footnote in Figure C-4 should reflect current status of list ZTR-16.

(2) Processing Actions for Semi-Automated Lists.

(a) Additions. When addressees are to be added to lists they may be typed individually on 3 x 5" white cards or listed on plain bond paper by the originator. (See Figure C-2a).

(b) Changes may be made by typing or printing the new information on the proof card held by RRD-1. (See Figure C-2b).

(c) Deletions may be effected by typing or printing "Delete" on the proof card held by RRD-1. (See Figure C-2c).

(d) Submission Action. RRD-1 will control all submissions through use of a Mailing List Action Control Form, DOT F 1325.1. The instructions on the reverse side of the form should be carefully followed (see Figure C-3).

(e) Required Forms. Form DOT F 1325.1 can accommodate a large number of all three types of actions on a single transmittal and provides for certification that the changes have been made. Prepare original and two copies; two to RRD-1 with cards attached. Retain one copy for suspense.

(f) Completed Action. After each transmittal has been completed by the OST Distribution Requirements Section, the transmittal will be returned (together with new proof cards) to RRD-1. All delete actions will indicate the date addressee was dropped from the requested mailing list.

(3) Current Proof Card Master File. The status and addressees of active OR&D external, semi-automated lists may be determined by reviewing the Proof Card Master File retained by RRD-1. The file consists of 3" x 5" cards containing actual address labels. Lists in use are arranged in numerical and alphabetical order according to the list identification. Proof cards within a list are arranged in alphabetical order according to the Line 2 entry. The header card of each list in the file will identify the list, indicate, in pencil, the number of copies required by the list, and the date of the last review of the list and by whom reviewed (this date reflects a complete audit and not merely a change, deletion or addition action). Whenever a change, addition or deletion action is completed the number of copies required on the header card shall be corrected to reflect current status. See Figure C-2d.

ADDITION

FRA-18G
BURLINGTON NORTHERN INC
SR VICE PRESIDENT OPERATIONS
176 EAST 5TH ST
ST PAUL MN 55101

FIGURE C-2a. Addition of Address to List

CHANGE

FRA-18G
AMERICAN RAILWAY ENGINEERING ~~ASSOC~~ ASSN
EXECUTIVE SECRETARY
2000 L STREET ~~NE~~ NW
WASHINGTON DC 20036

FIGURE C-2b. Change to Address on List

FRA-18G
General Purpose

No. of Copies Required	Date of Last Change/Audit	By (Name)

Continued on Reverse Side

FIGURE C-2d. Proof Card File Header Card

DELETE

FRA-18G
UNION PACIFIC RAILROAD LABORATORY
ASST CHIEF MECH OFF R & D
1416 DODGE STREET
OMAHA NE 68179

FIGURE C-2c. Deletion of Address on List

FIBURE C-2. Master Proof Cards & Header Card

INSTRUCTIONS FOR COMPLETION OF MAILING LIST ACTION CONTROL

Prepare in triplicate. Submit original and one copy to DISTRIBUTION REQUIREMENTS SECTION, ~~xxxxxxxx~~* Retain one copy. After action is completed, the duplicate copy will be returned with a new or corrected proof card(s). *M-482.2

Date: Show date request is submitted for action.

Organization Control Number: Each departmental organization control point will assign the sequential control number for each "Mailing List Action Control" submitted to ~~xxxxxxxx~~* Refer to this CONTROL NUMBER when making inquiries regarding a request. *M-482.2

Action Office Control Number: Action Office, ~~xxxxxxxx~~ M-482.2 will assign the sequential control number.

ADDITIONS:

Mailing List Number: Indicate mailing list number on which action is to be taken.

Number of Actions: Indicate total number of Request(s) for Mailing List Action submitted on each list. Separate each list code by number. Count each addressee as an action.

Quantity: Indicate total quantity represented by the number of addressees forwarded for each mailing list number, plus the quantity for multiple copies.

DELETIONS:

Follow the same instructions as outlined above for ADDITIONS.

CHANGES:

Follow the same instructions as outlined above for ADDITIONS:

Total Actions: Total number of addressees submitted for action.

Submitted by: Signature of authorized representative in each DOT organization control point.

Organization Code: Indicate organization office code of requesting office.

Action Completed by: Signature of Action Office authorized representative.

Date: Completion date of action and return of form to originating office.

Mailing List Action Control (For Use By Distribution Control Officers Only)
(Instructions on Reverse Side)

Date ______________ (assigned by RRD-1)

Organization Control No. ______________ Action Office Control No. ______________

	Mailing List No.	Number of Actions	Quantity *
ADDITIONS	FRA-18G	1	+1
	FRA-18HH	2	+2
DELETIONS	FRA-18GG	3	-3
CHANGES	FRA-18A	2	+3
	FRA-18C	1	-1
TOTAL ACTIONS . . .	X X X X	9	X X X X

Submitted by ______________ (Signature) RRD-1 (Org. Code)

Action Completed by ______________ (Signature ~~xxxxxxxx~~ M-482.2) Date ______________

Form DOT F 1325.1 (9-77) Supersedes Previous Edition

*Number of copies affecting list total

FIGURE C-3. Mailing List Action Control (Transmittal Form)

(4) Current OR&D Mailing Lists. Current required, general purpose and supplementary lists for use by OR&D are indicated in Figure C-4. Maintenance responsibility is assigned as shown.

(5) Distribution Only Service. When printing is not required but distribution service is desired for a bulk mailing see Appendix D for procedure.

TECHNICAL REPORTS

OFFICE OF RESEARCH AND DEVELOPMENT DISTRIBUTION AND MAILING LISTS

LIST NO.	RECIPIENTS	PUBLICATIONS	MAINTAINED BY	TYPE OF LIST	REMARKS
		REQUIRED USE			
FRA-18HH	TRIS Repositories, Int'l Research Organization, & Selected Railroad Libraries	All Technical Reports	Assoc. Admin. for R&D RRD-1, x60955	Semi-Automated	Use with ZTR-16
ZTR-16*	FRA Headquarters and Selected DOT Elements	All Technical Reports	"	Standard Card	Use with FRA-18HH
		GENERAL PURPOSE USE			
FRA-18G	Railroad Operating Officials and Research Entities, AAR, RPI & AREA	All Technical Reports	"	Semi-Automated	Complements FRA-18HH & ZTR-16
		SPECIAL PURPOSE USE			
		(See Appendix H)			

*ZTR-16 includes:

ROA-1 (1) M-491.1(4) DTS-920(3)
RRD-1 (10)
RTC-30 (1)

FIGURE C-4 . OR&D Required & General Purpose Mailing Lists

APPENDIX D

PRINTING AND DISTRIBUTION REQUESTS

1. PURPOSE. This appendix establishes the procedures to be followed in determining printing requirements, specifying what printing and distribution is to be accomplished. It is an aid to office processing of technical reports for printing and/or distribution by the OST Printing Branch (M-482).

2. DETERMINATION OF REQUIREMENTS. The first consideration necessary is the determination of the audience to be reached with the information in the report. This is done by a review of the required distribution lists and the OR&D proof card master file. From this review the number of copies of a report that will be needed can be determined. To the number derived from this review must be added 25 copies needed for distribution by the sponsoring organization (see paragraph 9.c.4 in the Guide) (in the case of a TSC furnished report five additional copies will be needed). Before completing further action the proposed distribution should be approved by the Division Chief and Office Director. This can be readily accomplished by using Form RRD 100.1, Review, Approval, Publication, and Distribution of FRA/ORD Scientific and Technical Reports. See paragraph 9.c.(1) in the Guide.

3. PREPARATION OF PRINTING, BINDING, DISTRIBUTION, AND EDITORIAL SERVICES REQUEST (Form DOT F 1700.3).

a. General. The Form DOT F 1700.3 is the basic instrument for obtaining printing and/or distribution services. It provides for all the necessary instructions to these service activities. In OR&D it is necessary to xerox (2 copies) of the completed form in order to provide a copy for the sponsoring (preparing) organization record and one copy for RRD-5 since all copies of the form set are sent forward. The back of the top "INSTRUCTION" sheet of the form set serves as a work copy to provide the typist with the information needed.

b. Report Covers, Paper, and Binding. Normally the self cover will be used on OR&D technical reports. In some cases it may be appropriate to use more costly forms of cover and binding. These other methods should be used only in instances where the expected use of the report justifies the added cost. White "Offset Book" paper of Sub. 100 weight will be used for the report unless there are a significant number of photographs or bold line illustrations contained in the report in which case Sub. 120 paper is recommended. Except for the self cover all other report covers will be of "Vellum" Sub. 100 stock. Reports are side-stitched except as noted below.

(1) Self Cover. This is particularly appropriate for reports of 50-pages (25 sheets of paper back-to-back) or less. An example of the printing request is shown in Figure D-1. Items in parentheses are informational; "X", "Y", and "Z" indicate you apply the correct number or letter. This results in a report whose cover is of the same paper stock as the pages within . The binding is two staples, side-stitched.

(2) Soft Cover. If more than 50-pages are involved in a report the "Kind" of "Cover" indicated in Figure D-1 should be changed to read Vellum instead of Offset Book. A heavier paper stock is used for the cover. The binding is two staples, side-stitched.

(3) Periodical Style or Saddle Stitched Cover. This form of binding can be used when multi-person, frequent use, of the report can be expected. The cover tends to remain intact longer than the side-stitched self cover or soft cover above. This type of cover can be requested by checking "saddle" instead of "side" in item 15 on the request form illustrated in Figure D-1. In addition, as with the soft cover, Vellum should be specified as "Kind" of "Cover". Normally not used for report of over 125-pages (63-sheets). The binding is two staples in the "saddle" location.

(4) Soft-Back or Glue-Back Cover. This form of binding can be used for a voluminous, more than 125-page (63-sheet) reference-type report; one expected to have lasting or enduring value before becoming obsolete. To obtain this result, leave "Stitch" and "Position" blank in item 15 on the request form illustrated in Figure D-1 and in item 17 type in "PERFECT BINDING REQUESTED, place top of spine lettering toward front cover". This will result in a wraparound soft cover. REMEMBER: If this type of binding is used the cover graphics must include graphics for the spine (or edge).

(5) Microfiche Use as a Substitute. As indicated elsewhere in this guide there are occasions when microfiche, or simply "fiche" will be appropriate as a substitute for "paper copy" printing. This approach could typically be used for a large appendix, or separate report volume of detailed data which would be of interest only to a very limited audience. An example of a request for this type of service is illustrated in Figure D-2. If microfiche is intended to accompany distribution of a paper copy report the necessary special arrangements should be coordinated with RAD-41.3.

c. Distribution. The normal form of distribution instructions used by OR&D for technical reports is as shown in example given in Figure D-1. Other special applications are illustrated in Figure D-3a & b. When bulk items are received from others and distribution services only are required Form DOT F 1700.3 will be used to obtain the necessary distribution. In this case, the form is completed leaving items 10 through 16 blank, except in item 10 type "NO PRINTING-DISTRIBUTION SERVICE ONLY" and complete items 19 through 24.

Shaded areas for OST Printing Branch use

1. PERSON TO CONTACT ABOUT THIS WORK	ROUTING SYMBOL	TELEPHONE NO.	2. AGCY. LTRS.	3. REQUISITION No.
John/Jane Doe	RRD-XX	XXXXX	FRA	(Blank)

4. TITLE OR DESCRIPTION OF WORK
Truck Design Optimization Project, Phase II
Performance Characterization of Type I Freight
Car Trucks (Technical Report)

FORM NO. OR G P O PROGRAM NO.

RIDER ☐ REQUEST

DSO REQ. No.

GPO REQ. No.

5. PAGES (Not Sheets) OF MATERIAL SUBMITTED

MANUSCRIPT	NEGS./POS.	CAMERA COPY	TOTAL
		XX	XX

6. QUANTITY (UNITS OF FINISHED PROD) XXX

FINISHED PRODUCT UNIT: ☒ BOOKS OR PAMPHLETS ☐ BLANK BOOKS ☐ BLANK FORMS (SHEETS) ☐ PADS OR TABLETS ☐ FOLDERS ☐ SETS ☐ OTHER (SPECIFY)

SCHED. COMPLETION DATE

7. APPROPRIATION	8. EST. COST (AGCY.)	EST. COST	ACTUAL COST	9. DATE WANTED AT DESTIN.
(per appropriate code)	(Blank)			XX/XX/XX

PRINTING, BINDING, AND DELIVERY INSTRUCTIONS

	10. PAPER KIND	SUB.	FINISHED SIZE	COLOR	11. INK COLOR	COLOR NO.
TEXT	Offset Book	100	8 1/2 X 11	White	Black	
COVER	Offset Book (or Vellum)	100	8 1/2 x 11	White	Red	pms 186
OTHER (SPECIFY)						

12. PROOFS WANTED: ☒ NO ☐ YES (INDICATE KIND AND HOW MANY OF EACH) GALLEY [ ] PAGE [ ] REPRO [ ]

13. PRINT: ☐ ONE SIDE ONLY ☒ HEAD TO HEAD ☐ HEAD TO FOOT ☐ HEAD TO SIDE (SEE SAMPLE)

14. FOLD TO ☐ PERF. TRIM X ☐ 4 SIDES ☐ PASTE

15. GATHER (Assemble): ☒ AS PAGED ☐ OTHER (SPECIFY) — STITCH (NO. OF STAPLES) 2 — POSITION: ☒ SIDE ☐ SADDLE ☐ TOP ☐ UPPER LEFT

16. PUNCH OR DRILL: HOLE SHAPE | NO. HOLES | DIAM. | INCHES CTR. TO CTR. | POSITION | OTHER (SPECIFY)

17. ADDITIONAL OR SPECIAL PRINTING AND BINDING INSTRUCTIONS (USE ADDITIONAL SHEETS IF NECESSARY)

CHECK DISPOSITION OF NEGS.: ☐ DESTROY ☒ RETURN ☐ HOLD IN G P O — TYPE: ☐ HOLD ☐ DROP

18. DISPOSITION OF WORK

PICK UP ☐ BY MAIL MESSENGER ☐ CALL EXTEN. ☐ DELIVER TO DISTRIB. SVCES. DELIVER ACCORDING TO ☒ FOLLOWING DATA ☐ ATTACHED LIST

QUANTITY (UNITS)	TO
25 (required)	RRD-XX (Sponsoring Organization)
XXX	Distribution Services

DISTRIBUTION INSTRUCTIONS

19. DISTRIBUTE TO	WASHINGTON HEADQUARTERS	FIELD	MAILING LISTS
	ZTR-16 (required)		FRA-18HH (required) FRA-XXYY (optional) FRA-XXZZ (optional)

☐ 20. DIRECT SHIPPING INST. ATTACHED ☒ 21. DISTRIBUTE ON RCPT. OF WORK ☐ 22. DISTRIBUTE WHEN NOTIFIED ☐ 23. FOR INSTRUCTIONS CALL:

FOLD TO: 8 x 5-1/4 | 8 x 3-1/2 | x | Self-Mailer — COPIES

24. ADDITIONAL OR SPECIAL DISTRIBUTION INSTRUCTIONS
Return excess copies to RRD-XX (sponsoring organization), (name)

DIST. CLEAR.

IT IS CERTIFIED THAT THIS WORK IS AUTHORIZED BY LAW AND NECESSARY TO THE CONDUCT OF THE BUSINESS OF THIS ORGANIZATION, AND THE ILLUSTRATIONS ORDERED ARE NECESSARY AND RELATE ENTIRELY TO THE PUBLIC BUSINESS.

REQUESTING OFFICE (SIGNATURE)		PRINTING REVIEW POINT (SIGNATURE)		CLEARED BY (SIGNATURE)	
Fund Administrator					
ROUTING SYMBOL RRD-5	DATE XX/XX/XX	ROUTING SYMBOL RAD-41.3	DATE XX/XX/XX	ROUTING SYMBOL	DATE

FORM DOT F 1700.3 (1-74) PRINTING, BINDING, DISTRIBUTION, AND EDITORIAL SERVICES REQUEST 1 PLANNING COPY

FIGURE D-1

DEPARTMENT OF TRANSPORTATION

PRINTING, BINDING, DISTRIBUTION, AND EDITORIAL SERVICES REQUEST

INSTRUCTIONS

1. REMOVE this instruction sheet from the form set. Use the reverse side of it as your work or draft copy and retain it for your files.

2. TYPE all requested data on the requisition set.

3. SUBMIT all parts of the requisition set intact (including carbons) -- unless instructed otherwise by your agency -- to your Printing Review Point through appropriate clearance organizations your agency prescribes.

4. ITEM COMPLETION:

Item 1. Enter the name, routing symbol, and telephone number of the person in the requesting office who is most qualified to answer questions regarding this work.

Item 2. Enter the identifying abbreviation of your agency, i.e., FAA; FHWA; FRA; NTSB; OST; USCG; SLS; etc.

Item 3. Preparing offices do not use this space; it is reserved for your Printing Review Point to enter an assigned requisition number.

Item 4. Provide specific identification of the work to be processed. Include, when applicable, volume number, form title and form number and edition date, GPO Program number, or any other adequate identification. Rider requests should be so stated and appropriately referenced.

Item 5. Indicate number of pages of manuscript and/or camera copy, including illustrations furnished (count a page for each typed or printed side of a sheet), number of film negatives and/or positives furnished, and the combined total.

Item 6. Enter total quantity of finished product units required; also check the appropriate unit of finished product.

Item 7. Enter the appropriation symbols chargeable for the work to be performed.

Item 8. Agencies so desiring may enter their estimated cost of the requested service in the unshaded portion of this item.

Item 9. Provide a specific date the finished product is wanted at destinations. Do not use the term ASAP (as soon as possible).

Items 10-16. Complete all applicable data.

Item 17. Provide additional or special printing and binding instructions and/or specifications not covered in other items. Use additional sheets if necessary. Also indicate disposition of negatives, and/or type, if applicable.

Item 18. Specify the disposition of the completed work.

Item 19-24. Complete all applicable items for material to be distributed by OST's Distribution Services. Indicate, where required, correct distribution codes to provide required coverage.

Form DOT F 1700.3 (1-74)

FIGURE D-1 (Continued)

U.S. Department of Transportation

Federal Railroad Administration

Memorandum

Date:

Reply to Attn. of:

Subject: ACTION: Request for Microfiche of Technical Report

From: (Sponsoring organization)
Thru: Fund Administrator, RRD-1

To: Printing Control Point, RAD-41.3

Request that the attached report (Appendix to/or Report Number and Title) be processed in microfiche form. Pages have been circle-folioed on the back of the camera-ready copy.

Number of Microfiche Copies Required: (Quantity required for Distribution)

Microfiche is Required to Accompany Distribution of: (Report Number and Title).

#

Attachment

NOTE: Camera-ready material for microfiche must be in 8 1/2 X 11" size, hence, oversize copy will need to be clearly reduced to this size. Ninety-four (94) pages will fill one microfiche card. One master microfiche card costs $4.95 to prepare; each duplicate costs 8.7 cents. Normally the processing requires 10 work days from receipt at RAD-41.3.

FIGURE D-2. Request for Microfiche Service

18. DISPOSITION OF WORK	PICK UP ☐ BY MAIL MESSENGER	CALL ☐ EXTEN.	DELIVER TO ☐ DISTRIB. SVCES.	DELIVER ACCORDING TO ☒ FOLLOWING DATA ☐ ATTACHED LIST
	QUANTITY (UNITS)	TO		
	5	John Hopkins, DTS-732, Trans. Systems Ctr, Cambridge, MA 02142		
	10	Johnson Tool & Die Co, 14 Shady Lane, Phoenix, AZ 94612		
	65	Distribution Services, M-482.2		

DISTRIBUTION INSTRUCTIONS

19. DISTRIBUTE TO	WASHINGTON HEADQUARTERS	FIELD	MAILING LISTS
	ZTR-16 (required) RRD-XX (25)		FRA-18HH (required)

☐ 20. DIRECT SHIPPING INST. ATTACHED	☒ 21. DISTRIBUTE ON RCPT. OF WORK	☐ 22. DISTRIBUTE WHEN NOTIFIED	☐ 23. FOR INSTRUCTIONS CALL:	FOLD TO:	COPIES
					8 x 5-1/4
					8 x 3-1/2
					x
					Self-Mailer
				DIST. CLEAR.	

24. ADDITIONAL OR SPECIAL DISTRIBUTION INSTRUCTIONS

Return excess copies to RRD-XX (Sponsoring organization), (Name)

FIGURE D-3a. Direct Distribution From Printer

18. DISPOSITION OF WORK	PICK UP ☐ BY MAIL MESSENGER	CALL ☐ EXTEN.	DELIVER TO ☐ DISTRIB. SVCES.	DELIVER ACCORDING TO ☒ FOLLOWING DATA ☒ ATTACHED LIST
	QUANTITY (UNITS)	TO		
	25 (required)	RRD-XX (Sponsoring Organization)		
	80	Distribution Services, M-482.2		

DISTRIBUTION INSTRUCTIONS

19. DISTRIBUTE TO	WASHINGTON HEADQUARTERS	FIELD	MAILING LISTS
	ZTR-16 (required)		FRA-18HH (required) and 15 labels attached

☐ 20. DIRECT SHIPPING INST. ATTACHED	☒ 21. DISTRIBUTE ON RCPT. OF WORK	☐ 22. DISTRIBUTE WHEN NOTIFIED	☐ 23. FOR INSTRUCTIONS CALL:	FOLD TO:	COPIES
					8 x 5-1/4
					8 x 3-1/2
					x
					Self-Mailer
				DIST. CLEAR.	

24. ADDITIONAL OR SPECIAL DISTRIBUTION INSTRUCTIONS

Return excess copies to RRD-XX (Sponsoring organization), (Name)

FIGURE D-3b. Mailing List With Special One-Time Additional Addressees

APPENDIX E

INPUT TO NATIONAL TECHNICAL INFORMATION SERVICE (NTIS)

1. PURPOSE. This appendix provides guidance on the procedure to be followed in having technical reports accessioned into the National Technical Information Service (NTIS) system. For handling of machine-readable (or computer) products see Appendix A. In order to provide for a permanent archival storage and retrieval of technical reports, all OR&D technical reports intended for public availability shall be accessioned into the NTIS system. At least one copy of each report not intended for public availability will be provided to RRD-1 for filing in the OR&D Master Reference Library. All OR&D elements shall make use of NTIS services and contribute to the NTIS technical information data bank.

2. INTRODUCTION OF REPORTS INTO NTIS SYSTEM.

a. General. As soon as the sponsoring organization receives its copies (25) of a report from printing, steps should be immediately taken to place the report in the NTIS system, (or, at least one copy in the RRD-1 Library). This is accomplished by completing the NTIS Accession Notice card (Form NTIS-79). The card must contain at least the following information: date sent (to mail room), report number, complete title (both main and subtitle, if any), source client code, number of copies of the report sent to NTIS, and the name and phone number of the COTR or the person most knowledgeable of the report. Indicate "yes" or "no" as to whether a press release or announcement letter is planned. In the event you plan to use a Publication Announcement Notice (See Appendix F) indicate "Announcement Letter" in the planned press release box. In all, seven Form NTIS-79 cards will be completed in the same manner for each report. On the address side of the seven cards place the addresses indicated below. These cards will promptly notify the addressees of the NTIS order (accession) number and the price code. NOTE: An eighth card may be prepared for suspense file purposes in the sponsoring organization. A properly completed NTIS Accession Notice is shown in Figure E-1.

3. DISTRIBUTION OF NTIS ACCESSION NOTICE (Form NTIS-79). On the address side of each Form NTIS-79 accompanying a report place the following addresses:

a. Public Affairs Officer, ROA-30
Federal Railroad Administration
400 Seventh Street, SW.
Washington, D.C. 20590

b. Librarian, DTS-920
Transportation Systems Center
Kendall Square
Cambridge, Massachusetts 02142

c. Librarian, M-491.1
U.S. Department of Transportation
400 Seventh Street, SW.
Washington, D.C. 20590

d. Railroad Transportation Specialist
Transportation Research Board
National Academy of Sciences
2101 Constitution Avenue, NW.
Washington, D.C. 20418

e. Office of Research and Development, RRD-1
Federal Railroad Administration
400 Seventh Street, SW.
Washington, D.C. 20590

f. Performing organization
(See Block No. 9, Form DOT F 1700.7)

g. Sponsoring office submitting report to NTIS.

NOTE: Blank Form NTIS-79 are available from RRD-1 or NTIS Information Services Branch.

4. MAILING. Assemble 12-copies of the report and staple the NTIS Accession Notice Cards to the top copy of the report to be accessioned and prepare a mailing label addressed to:

National Technical Information Service
Attention: Information Services Branch (DOT)
Springfield, VA 22161

Clip mailing label to top copy of report and bundle (tie) all reports for pick up and wrapping by the mail room staff (place in front of the mail room pickup/delivery rack).

U.S. DEPARTMENT OF COMMERCE
National Technical Information Service
Springfield, Va. 22161

OFFICIAL BUSINESS

Penalty for Private Use, $300

POSTAGE AND FEES PAID
U.S. DEPARTMENT OF COMMERCE
COM-211

U.S.MAIL

Office of Research & Development, RRD-1
Federal Railroad Administration
400 7th Street, SW.
Washington, D.C. 20590

1. NTIS Accession No. *(Allow 3 weeks for ordering)* *Use when ordering or referring with prices*	**2.** Date sent 1/20/81

3. Report No. Title *(One per card)*

DOT/FRA/ORD-81/10 TRUCK DESIGN OPTIMIZATION PROJECT, PHASE II--Performance Characterization of Type I Freight Car Trucks

4. Source Client Code	**5.** Procedure No. *(If assigned)*	**6.** No. copies sent
DOT/FRA	N/A	12

7.	This Report	Planned Press Release
CONTACT Name-Number Regarding:	Jane Doe, 426-0800	None (or Yes, or Announcement Letter)

8. **NTIS DOMESTIC PRICE CODES AND CURRENT $ VALUES**

PAPER COPY	MICROFICHE	COMPUTER PRODUCT
$	$	$

(CUT HERE AND FILE BY TITLE)

U.S. DEPT. OF COMM. – NAT. TECH. INF. SERV., SPRINGFIELD, VIRGINIA

ACCESSION NOTICE

INSTRUCTIONS:

1. Address card to those needing accession number and price.
2. Fill in boxes 2, 3, 4, 5 (if required), 6 and 7.
3. Staple card to front cover of top document containing the Report Documentation Page, (Form 272,) and send to Input Branch, NTIS.
4. Please send a minimum of 11 copies.
5. NTIS will fill in boxes 1 and 8 and mail to addressee.

FORM **NTIS-79** (REV. 11-79)

FIGURE E-1. NTIS ACCESSION NOTICE

APPENDIX F

PUBLICATION ANNOUNCEMENT OF REPORT AVAILABILITY/ RESPONDING TO REQUEST FOR PUBLICATION

1. PURPOSE. This appendix provides a guide to the procedure to be followed in responding to requests for out of stock reports and for announcement of new reports to addressees not receiving the initial distribution of a new report but who may be interested in obtaining the report from NTIS.

2. REQUESTS FOR OUT OF STOCK REPORTS. From time to time a telephonic or written request is received for a report that is no longer available from the original 10-copy supply held by RRD-1 for responding to these requests. When this occurs, the requestor may be notified immediately of the NTIS source availability of the report. This may be done orally, in the case of an oral request or by letter in the case of a written request. A suggested letter format is shown in Figure F-1.

3. PLANNED PUBLIC ANNOUNCEMENT. In those instances where a report is believed to have the potential for wide interest in the technical community but where the cost of sending a report in the blind is not justified, an announcement letter is preferred. Such an announcement will normally be initiated three to four weeks following receipt of the returned copy of the NTIS Accession Notice containing the NTIS Accession Number and Price Code. To execute the public notice you should use the appropriate mailing lists not previously used in the mailing of the report itself. Further, the Technical Report Documentation Page of the subject report should be copied, the NTIS Accession Number added to Block 2 and the Price Code added to Block 22. This then becomes the Camera-Ready copy for use in the printing and distribution of the announcement folder. An example of the announcement folder contents is illustrated in Figure F-2. A sample printing request for this action is illustrated in Figure F-3.

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION
WASHINGTON, D.C. 20590

ASSOCIATE ADMINISTRATOR

(Date)

(Address)

Dear _______________:

The report(s) you requested entitled, (insert report title(s) and number(s)) is (are) no longer available through this office. However, you may wish to obtain a ( ) copy(ies) from the National Technical Information Service; Attention: Order Department; 5285 Port Royal Road; Springfield, VA 22161. In requesting this report, please reference NTIS Number (s) (insert PB Number(s)).

Orders may be placed with NTIS and charged against American Express, VISA, and Master Charge credit cards by providing NTIS with your card number and expiration date. Phone orders are accepted at (703) 487-4650. For rush orders only, phone (800) 336-4700. A priority mail surcharge of $10.00 is charged for this rush service.

We are sorry we are unable to respond to your request; however, if we may be of further assistance on this subject, please contact (name of COTR), (COTR's Phone No.), of our staff.

Sincerely,

Associate Administrator for
Research and Development

FIGURE F-1. Report Referral Letter

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION
WASHINGTON, D.C. 20590

ASSOCIATE ADMINISTRATOR

(Date)

(Address)

Dear (Sir/Madam):

We are pleased to announce the availability of our report DOT/FRA/ORD- (number), entitled: ____.
This announcement is being sent as we feel that the information contained in the report may be of interest to you. The accompanying Technical Report Documentation Page provides an abstract of the report along with other pertinent information.

Because of rising publication and distribution costs, we are unable to enclose a copy of this report. However, if you wish to receive a copy of this report it may be ordered from the National Technical Information Service, Attention: Ordering Department, 5285 Port Royal Road, Springfield, VA 22161. When ordering from NTIS, cite the number shown in Block 2 on the Technical Report Documentation Page. You may wish to use the convenient order form provided.

Orders may be placed with NTIS and charged against American Express, VISA, and Master Charge credit cards by providing NTIS with your card number and expiration date. Phone orders are accepted at (703) 487-4650. For rush orders only, phone (800) 336-4700. A priority mail surcharge of $10.00 is charged for this rush service.

If we may be of further assistance on this subject matter, please contact (name of COTR), (COTR's phone No.), of our staff. Should the address label used in sending you this announcement be incorrect, please return the label along with the appropriate correction to this office.

Sincerely,

Associate Administrator for
Research and Development

(Circle folio as 1 in non-photo blue)

FIGURE F-2. Public Announcement Letter

Technical Report Documentation Page

1. Report No.	2. Government Accession No. (Add in NTIS Number)	3. Recipient's Catalog No.
4. Title and Subtitle		5. Report Date
		6. Performing Organization Code
7. Author(s)		8. Performing Organization Report No.
9. Performing Organization Name and Address		10. Work Unit No. (TRAIS)
		11. Contract or Grant No.
12. Sponsoring Agency Name and Address		13. Type of Report and Period Covered
		14. Sponsoring Agency Code
15. Supplementary Notes		
16. Abstract NOTE: Clean copy of completed page from actual report and then fill in Blocks 2 and 22. (Circle folio as 2 in non-photo blue)		

17. Key Words	18. Distribution Statement

19. Security Classif. (of this report)	20. Security Classif. (of this page)	21. No. of Pages	22. Price (Add in Price Code)

Form DOT F 1700.7 (8-72) Reproduction of completed page authorized

FIGURE F-2 (Continued)

National Technical Information Service
Attention: Order Department
5285 Port Royal Road
Springfield, VA 22161

Please send the following order to:

____

____

____

____

____

ORDER

NTIS Order No. (type in PB number(s))	Quantity

Check as applicable

/_/ Send by Priority Mail

METHOD OF PAYMENT

/_/ Charge my NTIS Deposit Account No. ____________________

/_/ Charge to my /_/ American Express /_/ VISA /_/ Master Charge

Account No. ______________________________

Card Expiration Date ______________________________

Signature ______________________________

Phone Number ______________________________

[Circle folio as 3 in non-photo blue]

FIGURE F-2 (Continued)

Shaded areas for OST Printing Branch use

1. PERSON TO CONTACT ABOUT THIS WORK	ROUTING SYMBOL	TELEPHONE NO.	2. AGCY. LTRS.	3. REQUISITION No.
JOHN/JANE DOE	RRD-XX	XXXXX	FRA	BLANK

4. TITLE OR DESCRIPTION OF WORK	FORM NO. OR G P O PROGRAM NO.	RIDER REQUEST	DSO REQ. No. / GPO REQ. No.
PUBLICATION ANNOUNCEMENT (Title of Publication)	BLANK	☐	

5. PAGES (Not Sheets) OF MATERIAL SUBMITTED

MANUSCRIPT	NEGS./POS	CAMERA COPY	TOTAL
		3	3

6. QUANTITY (UNITS OF FINISHED PROD) * (see #17)

FINISHED PRODUCT UNIT: ☐ BOOKS OR PAMPHLETS ☐ BLANK BOOKS ☐ BLANK FORMS (SHEETS) ☒ FOLDERS ☐ SETS ☐ PADS OR TABLETS ☐ OTHER (SPECIFY)

SCHED. COMPLETION DATE

7. APPROPRIATION	8. EST. COST (AGCY.)	EST. COST	ACTUAL COST	9. DATE WANTED AT DESTIN.
(per appropriate code)	BLANK			

PRINTING, BINDING, AND DELIVERY INSTRUCTIONS

10. PAPER KIND	SUB.	FINISHED SIZE	COLOR	11. INK COLOR	COLOR NO.
TEXT: Offset Bond	100	8 1/2 x 11	White	Black	
COVER					
OTHER (SPECIFY)					

12. PROOFS WANTED: NO ☒ YES ☐ (INDICATE KIND AND HOW MANY OF EACH) GALLEY [ ] PAGE [ ] REPRO [ ]

13. PRINT: ☐ ONE SIDE ONLY ☒ HEAD TO HEAD ☐ HEAD TO FOOT ☐ HEAD TO SIDE (SEE SAMPLE)

14. FOLD TO X ☐ PERF. ☐ TRIM 4 SIDES ☐ PASTE

15. GATHER (Assemble) ☒ AS PAGED ☐ OTHER (SPECIFY) — STITCH (NO. OF STAPLES) — POSITION ☐ SIDE ☐ SADDLE ☐ TOP ☐ UPPER LEFT

16. PUNCH OR DRILL — HOLE SHAPE — NO. HOLES — DIAM. — INCHES CTR. TO CTR. — POSITION — OTHER (SPECIFY)

17. ADDITIONAL OR SPECIAL PRINTING AND BINDING INSTRUCTIONS (USE ADDITIONAL SHEETS IF NECESSARY)

a. Four Page Folder
b. Page Four Print FRA Self-Mailer (add RRD-1 to return address)
*Determined by adding the number of addresses on the mailing lists to be used plus 20 to RRD-1

CHECK DISPOSITION OF TYPE NEGS.: ☒ DESTROY ☐ RETURN ☐ HOLD IN G P O ☐ HOLD ☐ DROP

18. DISPOSITION OF WORK

PICK UP ☐ BY MAIL MESSENGER ☐ CALL EXTEN. — ☐ DELIVER TO DISTRIB. SVCES. — DELIVER ACCORDING TO ☒ FOLLOWING DATA ☐ ATTACHED LIST

QUANTITY (UNITS)	TO
XX*	Distribution Service
20	RRD-1

DISTRIBUTION INSTRUCTIONS

19. DISTRIBUTE TO	WASHINGTON HEADQUARTERS	FIELD	MAILING LISTS
	N/A	N/A	(Indicate Standard Mailing Lists to be used)

☐ 20. DIRECT SHIPPING INST. ATTACHED ☒ 21. DISTRIBUTE ON RCPT. OF WORK ☐ 22. DISTRIBUTE WHEN NOTIFIED ☐ 23. FOR INSTRUCTIONS CALL:

24. ADDITIONAL OR SPECIAL DISTRIBUTION INSTRUCTIONS

Excess copies to RRD-XX, (Name)

FOLD TO:	COPIES
	8 x 5-1/4
	8 x 3-1/2
	x
X	Self-Mailer

DIST. CLEAR.

IT IS CERTIFIED THAT THIS WORK IS AUTHORIZED BY LAW AND NECESSARY TO THE CONDUCT OF THE BUSINESS OF THIS ORGANIZATION, AND THE ILLUSTRATIONS ORDERED ARE NECESSARY AND RELATE ENTIRELY TO THE PUBLIC BUSINESS

CLEARED BY (SIGNATURE)

REQUESTING OFFICE (SIGNATURE)	PRINTING REVIEW POINT (SIGNATURE)	
Fund Administrator		
ROUTING SYMBOL RRD- 5 / DATE	ROUTING SYMBOL RAD-41.3 / DATE	ROUTING SYMBOL / DATE

FORM DOT F 1700.3 (1-74) PRINTING, BINDING, DISTRIBUTION, AND EDITORIAL SERVICES REQUEST

FIGURE F-3. ANNOUNCEMENT LETTER PRINTING REQUEST

APPENDIX G

USE AND AVAILABILITY OF UIC/ORE MATERIAL

1. GENERAL. By virtue of its membership in the International Union of Railways (UIC), the Federal Railroad Administration receives the English-language version of the technical reports of UIC's Office for Research and Experiments (ORE).

Two copies of each of the ORE reports are maintained on file whenever possible. One copy is always placed in the OR&D Master Reference Library at the Nassif Building and normally, a second copy is placed in the RRIS Repository at the Department of Transportation Library, also in the Nassif Building.

The RRIS Repository holdings can be made available to the Transportation Systems Center Library (DTS-920) on an inter-library loan basis for a period of three weeks. Researchers and Government contractors are permitted access to the UIC/ORE materials only in the two DOT libraries mentioned. This is a necessary requirement in order to maintain the restricted availability of these publications as required by UIC/ORE (see below).

2. RESTRICTED USE AND AVAILABILITY OF PUBLICATIONS OF UIC/ORE. There are restrictions on the use of ORE reports. The president of ORE indicates those reports that can be made available to third parties (industrial firms, individuals, universities, and technical colleges). For each report, a price per copy and a separate fee for the "right-of-use" is established.

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