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**ENGINEERING
TECHNICAL
INFORMATION
SYSTEM**

FIELD NOTES • TECHNICAL REPORTS • TEXTS
DATA RETRIEVAL • CURRENT AWARENESS

VOLUME 7 NUMBER 9

Field  Notes

**Organizational Directory
Washington Office Engineering Staff**

Washington Office Engineering News



FOREST SERVICE

SEPTEMBER 1975

U.S. DEPARTMENT OF AGRICULTURE



ENGINEERING FIELD NOTES

This publication is a monthly newsletter published to exchange engineering information and ideas of a technical or administrative nature among Forest Service personnel.

The text in the publication represents the personal opinions of the respective author and must not be construed as recommended or approved procedures, mandatory instructions, or policy, except by FSM references. Because of the type of material in the publication, all engineers and engineering technicians should read each issue; however, this publication is not intended exclusively for engineers.

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**ORGANIZATIONAL DIRECTORY
WASHINGTON OFFICE ENGINEERING STAFF**

MYLES R. HOWLETT, Director (703) 235-8035
Ivonne A. White, Secretary

TECHNOLOGICAL IMPROVEMENTS

Heyward T. Taylor, Jr., Assistant Director (703) 235-8087
Frances L. Bryan, Secretary

Adrian Pelzner, Chief Materials Engineer — Provides leadership and direction concerning the application of engineering technology to various construction materials such as soil, rock, asphalt, concrete, metal, and wood. (703) 235-8031

Romaine E. Thompson, System Development Engineer — Investigates, develops and implements engineering computer applications and systems. (703) 235-8024

Farnum Burbank, Chief Equipment Development Engineer — Plans and programs the Forest Service Equipment Development Program. (703) 235-8114

Donald L. Sirois, Equipment Development Staff Engineer — Provides programing and technical guidance for Service-wide equipment development and testing. (703) 235-8115

Theodore A. Lupien, Civil Engineer (Fort Collins Computer Center, Fort Collins, Colorado) — Develops, designs, and implements computer programs primarily for use in road design. (303) 484-2274/75

Benjamin N. Litten, Civil Engineer (Fort Collins Computer Center, Fort Collins, Colorado) — Develops, designs, and implements computer programs primarily for use in road design. (303) 484-2274/75

Harvey C. Krantz, Civil Engineer (Fort Collins Computer Center, Fort Collins, Colorado) — Develops, designs, and implements computer programs primarily for use in road design. (303) 484-2274/75

CONSULTATION AND STANDARDS

- Charles R. Weller*, Assistant Director (703) 235-8098
Ruth G. Kenestrick, Secretary
- Victor M. DeKalb*, Transportation Systems Planning and Operations, Engineer — Provides leadership in transportation analysis and operation of the Forest Service transportation system. (703) 235-9845
- William F. Kopfler, II*, Water Resources Engineer — Provides leadership, consultation, and guidance of Federal Power Commission projects. Forest Service contact for USDA in coordination of projects with the Federal Power Commission. Guidance on engineering aspects of water resources projects. (703) 235-8059
- David L. Jones*, Materials Engineer — Provides technical guidance in the application of engineering technology to construction materials. (703) 235-8030
- Theral R. Nielsen*, Chief Highway Design Engineer — Provides leadership in preconstruction activities for the Forest Service Transportation System. (703) 235-9846
- Larry Hendrickson*, Water Resources Engineer — Provides technical leadership, guidance, assistance, and direction to the Forest Service dams program of work. (703) 235-8084
- Jerry Hyde*, Structures Engineer — Provides technical leadership and assistance to the field in design, construction and maintenance of the buildings by reviews, coordination with other divisions and agencies, and preparing material for Forest Service Manuals and Handbooks on policy and standards. (703) 235-8084
- Lawrence D. Bruesch*, Chief Highway Structures Engineer — Provides leadership in the field of highway structures for the Forest Service transportation system. (703) 235-9844
- William C. Kolzow*, Sanitary Engineer — Provides technical guidance in the water supply and sanitary engineering programs of the Forest Service. (703) 235-8010
- Harry Coorsh*, Electrical Engineer — Provides assistance to field offices in design and evaluation of electrical facilities. Reviews the compatibility of utilization equipment with the electric supply system. (703) 235-8084
- Willard C. Clementson*, Highway Safety Engineer — Provides leadership to a highway safety program in complying with (703) 235-8073

the Highway Safety Act of 1966. Cooperates with National Highway Safety Administration on projects that are concerned with accidents and highway safety on National Forest Development Road System.

Allan J. Hessel, Sanitary Engineer — Provides technical leadership in programs on solid waste activities. Coordinates public health and pollution control activities with other Federal agencies. (703) 235-8010

Gerald W. Larsen, Cadastral Engineer — Provides technical and professional leadership, direction, and coordination to the Forest Service cadastral engineering program. (703) 235-8085

Marion E. Unruh, Chief Construction and Maintenance Engineer — Provides leadership in construction and maintenance of roads and trails in the Forest Service Transportation System. (703) 235-8104

Ronald W. Rhoads, Landscape Architect, Roadside Controls — Provides leadership in roadside landscape development, traffic control, and signing. Coordinates with engineers in applying advanced techniques to adapting highways and roads to the environment in an esthetically acceptable, safe, and functional manner. (703) 235-8073

Charles F. Dwyer, Chief Engineer — Cableways (Denver). Provides leadership and guidance in the field of aerial passenger tramways, ski lifts, and tows. Forest Service Representative to: American National Standards Institute Committee on Aerial Passenger Tramways B77; International Organization for Transport by Ropeway; and Association of Recreational Tramway Authorities. (303) 234-3841

OPERATIONS

Harold L. Strickland, Assistant Director (703) 235-8046
Margaret K. Angyal, Secretary

Administrative Management & Data Retrieval Group

Sterling J. Wilcox, Operations Engineer — Provides supervision and guidance to the Forest Service Engineering Technical Data System, Training and Development, Graphics and Atlas, and to general and unique operational problems. (703) 235-8104

- Position Vacant*, Technical Recruitment and Development Engineer — Provides technical direction in recruitment, career aspects of the Service-wide Engineering program. Analyzes manpower needs, assists in recruiting technical experts and formulates programs to provide needed training. (703) 235-8077
- Amon L. Colley*, Engineer, Technical Data Systems — Plans, organizes, and operates systems for technical information storage and retrieval. Coordinates activities for Engineering Directives, Field Notes, Technical Reports, and Current Awareness Program. (703) 235-8077
- Gordon L. Rome*, Publications Specialist — Provides leadership in preparation, coordination, and production of publications (periodicals, reports, brochures, visual aids), directives, and forms. (703) 235-8198
- Inez Fitzgerald*, Technical Information Specialist — Develops and implements engineering information subsystems in support of FS Renewable Resources Technical Information System; supervises operation of Technical Information Center. Represents Engineering in coordination with information Sciences programs. (703) 235-1424
- Frank J. Hammond*, Management Engineer — Controls, reviews, or responds to Congressional mail. Coordinates Forest Road and Trail Pollution Abatement, and other Engineering reports, program budget inputs and field allocations. Provides statistical information on R&T system. (703) 235-8042
- Position Vacant*, Management Engineer — WO Pollution Abatement coordinator and generalist. Formulates and recommends policies for adoption Service-wide on engineering standards, procedures, and practices for planning, formulating, controlling, and executing programs to obtain maximum practicable yield. (703) 235-8042
- Ollie A. Broadway, Jr.*, Equipment Management Engineer — Provides leadership and technical expertise in all phases of fleet management units in the field. Coordinates this activity with other agencies in the USDA, other Government Departments and Bureaus, and private industry. (703) 235-8155
- Robert L. Hartman*, Equipment Management Engineer — Works with representatives of the Staffs of Fiscal and Accounting Management, Administrative Management, and Administrative Services in development of management and accounting systems applicable to the rental, acquisition,

operation, management, maintenance, disposal, and replacement of equipment. Plans, directs, and makes studies to test and evaluate a wide variety of complex equipment and systems for equipment and accessories for use in Forest Service programs.

Graphics and Atlas Section

Lewis C. Glover, Graphics and Atlas Chief — Provides leadership to the Graphics and Atlas Section and gives guidance on drafting and illustration needs to all WO Staff Units. (703) 235-8071

Office Support Section

Gloria Wenzlaff, Office Support — Provides leadership for business management functions of the Engineering Staff Unit. Supervises and coordinates functional areas of financial management, procurement, property management, and personnel management. (703) 235-8635

Geometronics Development Group

Donald D. Loff, Chief Geometronics Engineer — Provides national leadership in Geometronics activities. Is responsible for direction and coordination of plans and standards, formulation of policies and procedures and investigation of new or improved methods and equipment for recording, handling, and displaying resource, terrain, and cultural data in support of Forest Service activities. (703) 235-8184

Dirck L. Rotty, Geometronics Engineer — Coordinates, schedules, and plans work for all Geometronics technical support activities and coordinates mapping activities with other Federal agencies. (703) 235-8184

Terry W. Gossard, Geometronics Engineer — Project Leader in the area of automated cartography, specializes in the development of methods and equipment to compile, maintain, reproduce and store maps and other geometronic data. (703) 235-8184

Raymond P. Allison, Geometronics Cartographer — Project Leader in the area of advanced remote sensing techniques, specializes in the applications of remote sensing technology to resource management problems. (703) 235-8184

Richard L. Liston, Geometronics Cartographer — Project Leader in the areas of computer-assisted imagery analysis of remote sensing and evaluation resource data. Develops computer systems to gather, manipulate, and display remote sensing data. (703) 235-8184

Richard O. Mahan, Geometronics Engineer — Project Leader in the area of engineering photogrammetry, provides technical development in the area of acquiring, handling and displaying terrain and geographic data through photogrammetric/computer techniques. (703) 235-8184

Tommie Gadberry, Geometronics Engineer — General Photogrammetry Unit head, provides support services to project leaders related to digital manipulation, automated cartography and cartometric compilation. (703) 235-8184

Alfred E. Forstall, Cartographer — Digitizing and Electronic Drafting Unit Leader, provides support services to project leaders related to digital manipulation, automated cartography and cartometric compilation. (703) 235-8638

Robert H. Mahoney, Programmer — Digital Manipulation Unit head, provides support services to project leaders in computer programming and related ADP techniques. (703) 235-8184

GEOMETRONICS SERVICE CENTER

Roger P. Chamard, Director — Responsible for procurement or construction of all phases of the Service-wide base series mapping program and related activities. (801) 524-4140

James F. Dixon, Assistant Director for Production — Responsible for the production of the primary and secondary bases, orthophotography, and project photogrammetry. (801) 524-4140

Ross Snedeker, Assistant Director — Responsible for Computer systems, aerial triangulation, cartographic creation, automated cartography, and staff support. (801) 524-4140

Brooks Watson, Administrative Officer — Provides staff support for Accounting and Fiscal Management, purchasing, personnel, operations, and contract administration. (801) 524-4140

ENGINEERING STAFF



MYLES R. HOWLETT
Director of Engineering

(Washington Office)



HEYWARD T. TAYLOR
Assistant Director
Technological
Improvements



CHARLES R. WELLER
Assistant Director
Consultation &
Standards



HAROLD L. STRICKLAND
Assistant Director
Operations



ROGER P. CHAMARD
Director

Geometronics Service
Center

TECHNOLOGICAL IMPROVEMENTS



HEYWARD T. TAYLOR
Assistant Director



ADRIAN PELZNER
Chief Materials Engineer



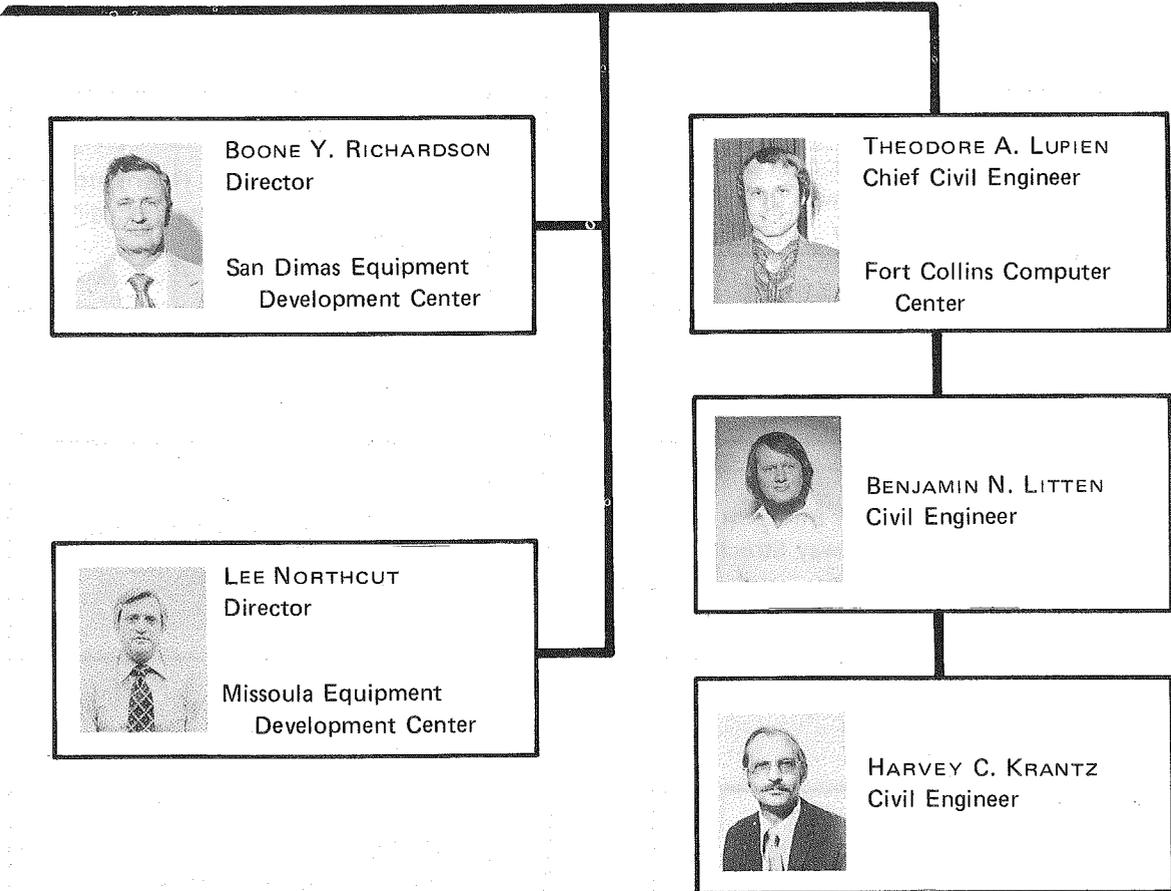
FARNUM BURBANK
Chief Equipment
Development Engineer



ROMAINE E. THOMPSON
Systems Development
Engineer



DONALD L. SIROIS
Staff Engineer



BOONE Y. RICHARDSON
Director

San Dimas Equipment
Development Center



LEE NORTHCUT
Director

Missoula Equipment
Development Center



THEODORE A. LUPIEN
Chief Civil Engineer

Fort Collins Computer
Center



BENJAMIN N. LITTEN
Civil Engineer



HARVEY C. KRANTZ
Civil Engineer

CONSULTATION AND STANDARDS



CHARLES R. WELLER
Assistant Director



VICTOR M. DEKALB
Chief Transportation
Engineer



WILLIAM F. KOPFLER, II
Chief Water Resources
Engineer



THERAL R. NIELSEN
Chief Highway Design
Engineer



LAWRENCE HENDERICKSON
Water Resources Engineer



LAWRENCE BRUESCH
Chief Highway Structures
Engineer



WILLIAM C. KOLZOW
Sanitary Engineer



WILLARD C. CLEMENTSON
Highway Safety Engineer



ALLEN J. HESSEL
Sanitary Engineer



DAVID L. JONES
Materials Engineer



JERRY HYDE
Structures Engineer



HARRY COORSCH
Electrical Engineer



GERALD LARSEN
Cadastral Engineer



MARION E. UNRUH
Construction and
Maintenance Engineer



RONALD W. RHOADS
Landscape Architect



CHARLES F. DWYER
Chief Cableways Engineer
(Denver, Colorado)

OPERATIONS



HAROLD L. STRICKLAND
Assistant Director



STERLING J. WILCOX
Operations Engineer



FRANK J. HAMMOND
Management Engineer

(Position Vacant)
Technical Recruitment &
Development Engineer

(Position Vacant)
Management Engineer



AMON L. COLLEY
Technical Data Systems
Engineer



OLLIE A. BROADWAY, JR.
Equipment Management
Engineer



ROBERT L. HARTMAN
Equipment Management
Engineer



GORDON L. ROME
Publications Specialist



LEWIS C. GLOVER
Graphics and Atlas
Chief



INEZ FITZGERALD
Technical Information
Specialist



GLORIA J. WENZLAFF
Office Support Group



DONALD D. LOFF
Chief Geometronics
Engineer



TOMMIE GADBERRY
Geometronics Engineer



DIRCK L. ROTTY
Geometronics Engineer



ALFRED E. FORSTALL
Cartographer

TERRY W. GOSSARD
Geometronics Engineer



ROBERT H. MAHONEY
Programmer



RAYMOND P. ALLISON
Geometronics Engineer



FREDERICK E. PEYTON
Cartographer



RICHARD L. LISTON
Geometronics Engineer



RALPH E. FORTUNE
Photographer



RICHARD O. MAHAN
Geometronics Engineer

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Assistant Director



BROOKS WATSON
Administrative Officer



ROSS SNEDEKER
Assistant Director

WASHINGTON OFFICE ENGINEERING NEWS

TECHNOLOGICAL IMPROVEMENTS

Heyward T. Taylor
Assistant Director

This fiscal year just started; however, we must be thinking about project proposals for FY 77. Regional ED&T Board meetings will be held late in September or early October. The regional inputs to be developed at these meetings are ideas turned in by the forest personnel. The people sitting around a conference table have not dreamed up the problems to be solved. These problems come from on-the-ground operations that are made difficult, impractical, or uneconomical because of inadequate equipment, materials, techniques, lack of manpower, training, environmental concerns, and many other factors.

Let your ideas be known now! Get in touch with your Regional ED&T representative. They are:

R-1 Stan Wood	R-5 Frank Winer
R-2 Lloyd Newland	R-6 Ray Connelly
R-3 Dick Monteith	R-8 Jerry Edwards
R-4 Bill Ellison	

EQUIPMENT DEVELOPMENT PROJECT RECORDS AVAILABLE

In the December 1974 issue of Field Notes we gave a list of Project Records that were available. Response to this information was very good indicating that there was a need for more publicity for the Project Records. Therefore, the following is a list of those that have been issued by the Centers since that last article was written:

ED&T 2546	Catalytic Converter Temperature Tests - Preliminary Report, July 1975 (San Dimas)
ED&T 712	Qualification Tests of Two Fire Retardant Chemicals Firetrol 931-N and 931-P, May 1975 (San Dimas)

ED&T 1838 Small Check Dam Energy Dissipator, April 1975 (San Dimas)

ED&T 1983 Limited Accuracy Tests of Two Inductive Loop Counters, November 1974 (Missoula)

ED&T 1416 Analysis of Reflective Overglow and Readability of Forest Services Logo: NF, April 1975 (Missoula)

ED&T 2034 Carrier Dusts - Feasibility for Forest Insect Control (Transactions of ASAE-1974) Special Report (Missoula)

ED&T 2034 Experimental Blends of Dry Liquids, February 1975 (Missoula)

ED&T 2353 & 2425 Aerial Spray Evaluations - Pine Butterfly Test, Bitterroot National Forest, Montana 1973 - January 1975 - Special Report (Missoula)

ED&T 2257 Comfort Station Interior Finishes, February 1975 (San Dimas)

ED&T 2402 Equipment for Orthographic Projection in Timber Sale Layout, September 1974 (Missoula)

ED&T 2239 Development of Marking Systems, December 1974 (Missoula)

ED&T 2427 Wildlife Habitat Management Needs, October 1974 (Missoula)

ED&T 1417 Evaluation of the Vari-Dozer, December 1974 (San Dimas)

ED&T 1444 Earth Sciences Equipment Needs: An Introductory Plan, November 1974 (Missoula)

ED&T 2281 Teckmar FT-4 Marine Toilet, March 1973 (Issued July 1975) (San Dimas)

Since the Washington Office has only a very limited supply of these Project Records, we suggest you contact the appropriate Center directly to obtain copies.

CONSULTATION & STANDARDS

Charles R. Weller
Assistant Director

TIMBER SALES AND RELATED ENGINEERING ACTIVITIES

Considerable effort is being expended this summer in analyzing selected Timber Sales in the western United States.

M. R. Howlett, Director of Engineering, and R. E. Worthington, Director of Timber Management have been requested by the Chief to make an activity review of Regions 1 through 6. The review of Timber Sales will particularly concern (1) requirements for road standards and cost of complying with construction specifications; (2) utilization standards established for individual sales or areas; and (3) harvest techniques, especially in the use of skyline and helicopter logging.

Engineering and Timber Management Staffs are reviewing sale data while Howlett and Worthington are reviewing field activities.

The final report will address:

Policy or guidelines that need to be modified or eliminated;

Additional guidelines needed to implement training for developing logging engineering, economic analysis, and transportation planning skills; and

Certification of personnel.

The review could result in new direction on analysis procedures for Timber Sale preparation.

FEDERAL HIGHWAY ADMINISTRATION ACTION PLAN

In July, we cooperated with the Federal Highway Administration in reviewing the "Action Plan" used for coordination on Federal Highway Projects such as Forest Highways.

A review was made of the problems arising from the first year of use. Wording and process were changed as necessary. We expect a revised edition about November 1, 1975.

TRANSPORTATION INFORMATION SYSTEM (TIS)

During the past three years the Washington Office and Regions have been exploring ways to develop a computerized Transportation Information System which will provide a data base for rapidly analyzing Transportation Activities. A TIS should cover a wide spectrum of data and be easily accessible, through terminals, to all levels. Updating the system would be done by National Forests.

The road, bridge, and network inventories have developed a prototype computerized system. In September, regional representatives will meet in Denver to discuss the characteristics of the prototype system and develop an "Action Plan" to complete development of a system and to implement it on National Forests. Most of the Regions will contribute time and manpower to accelerate implementation.

We will keep you advised of TIS development as work progresses.

OPERATIONS

Harold L. Strickland
Assistant Director

The Forest Service has participated in three hearings in the past six months which will possibly have significance in the future of the Transportation System in the National Forests.

DEPARTMENT OF INTERIOR AND RELATED AGENCIES APPROPRIATION FOR 1976

These hearings, before both Houses of Congress, indicate a growing concern for funding the Renewable Natural Resource Program of the United States. Of particular interest is the concern for investment and return rates, and the adequate and timely provision of access. Timber credits vs. appropriations is again an issue, as yet unresolved, but receiving its share of attention from members of both the Sub-committee and full Committee. The Hearing Record of the House of Representatives is recommended for reading, with particular attention to pages 363-378, where discussion of timber, timber credits, road access, and investment and returns are recorded.

TIMBER CREDIT TRANSFER

Hearings were held this spring in both Houses by the Public Works Sub-Committee on Transportation. The central issue in this legislative proposal and hearing is the "government borrowing of interest-free capital from the private industry sector." As a result of time frames involved, timber credit road construction is, in fact, a form of "free government borrowing for a time period of one to (in some cases) five years."

Transfer of credits between sales within the same forest by a purchaser would permit shortening the "loan term" or provide earlier repayment of the purchaser's capital outlay.

Timber Management has had the lead in working with this proposal; A law to affect such transfer is expected in this session of Congress.

FOREST ROAD AND TRAIL PROGRAM OVERSITE HEARINGS

During the hearings on timber credit transfers, it became apparent that other issues were just under the surface.

Senator McClure of Idaho made a statement to the record at the Senate hearings to the effect that the entire National Forest Transportation Systems Development would be covered in subsequent hearings. He was and is particularly concerned with our use of the National Forest Roads and Trails Act of October 13, 1964, Sect. 4(2).

On June 25, 1975, the Secretary of Agriculture was advised of a hearing to be held on July 14, 1975; on the same date, Senator Randolph requested from the Chief a large amount of background material. Negotiations with the Senate Transportation Committee staff were necessary because of time limitations, and actual preparations were started on July 1.

The general concern expressed in these hearings was the need to have in place, an adequate transportation system, as indicated by the Act of October 13, 1964. Further, the committee strongly indicated its feeling that the Executive Branch had not followed through in providing such a system.

It is anticipated that the outcome of these hearings will be new definitions and constraints in the FY 1975 Federal Aid Highway Act for use of purchaser credit and appropriated funds in developing the Forest Road and Trail System.

Each Region will be furnished a package of background material concerning the above hearings, and it is felt that it would be appropriate reading material for anyone concerned with Resource Management and related Transportation Systems and programs.

ENGINEERING FIELD NOTES

Invitation to Readers: Every reader is a potential author of an article for FIELD NOTES. If you have a news item or short article you would like to share with Service engineers, we invite you to submit it to FIELD NOTES for publication.

Material submitted to the Washington Office for publication should be reviewed by the respective Regional Office to see that the information is current, timely, technically accurate, informative, and of interest to engineers Service-wide (FSM 7113). The length of material submitted may vary from several short sentences to several typewritten pages; however, short articles or news items are preferred. All material submitted to the Washington Office should be typed double-spaced, and all illustrations should be original drawings or glossy black and white photos. The Washington Office will edit for grammar only.

Each Region has an Information Coordinator to whom field personnel should submit both questions and material for publication. The Coordinators are:

R-1 Bill McCabe	R-5 Jim McCoy	R-9 Norbert Smith
R-2 Allen Groven	R-6 Kjell Bakke	R-10 Bill Vischer
R-3 Bill Strohschein	R-8 Ernest Quinn	WO Al Colley
R-4 Fleet Stanton		

Coordinators should direct questions concerning format, editing, publishing dates, and other problems to Gordon L. Rome, or Rita E. Wright, Editorial Services, Engineering Staff/WO, Forest Service, USDA, Washington, D.C. 20250; (703) 235-8198.

This publication is distributed from the Washington Office directly to all Regional, Station, and Area Headquarters. If you are now receiving a copy and would like one, ask your Office Manager or the Regional Information Coordinator to increase the number of copies sent to your office; use Form 7100-60 for this purpose. Copies of back issues are also available from the Washington Office, and can be ordered on Form 7100-60.

