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The REMR Bulletin

News from the Repair, Evaluation, Maintenance,
and Rehabilitation Research Program

VOL 1, NO. 2

INFORMATION EXCHANGE BULLETIN

APR 1984

Mobile District Hosts Third Field Review Group Meeting



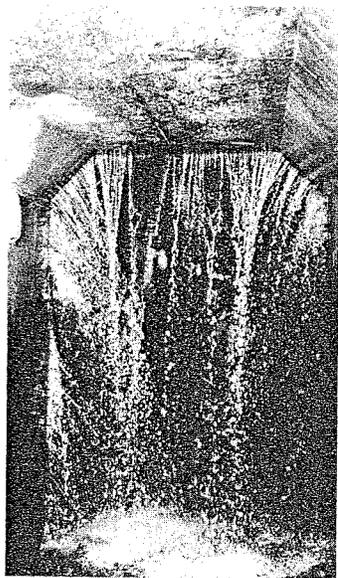
The US Army Engineer District, Mobile, hosted the 3rd Field Review Group (FRG) meeting for the Repair, Evaluation, Maintenance, and Rehabilitation (REMR) Research Program on 20-22 March in conjunction with the FY 85 program review. Ninety-five participants met to review research accomplishments to date and discuss FY 85 research plans. Among those in attendance were six representatives of other federal agencies and nine from various private concerns.

The FRG meets at least twice annually as part of its function in performing broad technical review of REMR problems, providing continuous field input to the program, recommending research priorities, and assisting in technology transfer efforts. The Mobile meeting was the first to include participants from outside the Corps. However, given the interest these participants showed in the program and their contribution to the meeting's success, open sessions to include interested individuals and groups from outside the Corps will probably be a regular feature of the spring FRG meetings.

The other federal agencies represented at the meeting were the US Bureau of Reclamation, the Federal Energy Regulatory Commission, the National Bureau of Standards, and the Western Area Power Administration. The private sector was notified of the meeting through an announcement in the March 6, 1984 issue of *Commerce Business Daily*.

During the first 2 days of the meeting, researchers for the seven problem areas in the program (Concrete and Steel Structures, Geotechnical, Hydraulics, Coastal, Electrical and Mechanical, Environmental Impacts, and Operations Management) briefed the attendees on accomplishments in the 12 work units initiated on October 1, 1983, and on plans for nearly 50 new starts proposed for FY 85. Among items cited as completed were:

- Field evaluation of an existing acoustic bottom profiler for use in detailed mapping of the surface of stilling basin floors.
- Partial review of the performance of maintenance materials for concrete structures as documented in more than 2000 periodic inspection reports, and limited laboratory testing to develop a battery of acceptance tests for evaluating existing repair materials.
- A draft of the first segment of a *Nondestructive Evaluation Selection Guide* for field use in planning evaluations of metal structures for damage caused by corrosion, metal fatigue, and other damage causing mechanisms.
- A survey of Corps Districts having major problems with levee underseepage, based on which an April 19th workshop was held at the Waterways Experiment Station (WES) for the Foundation and Materials Branch Chiefs from Rock Island, St. Louis, Memphis, Vicksburg, and New Orleans Districts to assist the researchers in refining the survey results and identifying potential solutions.



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- An assessment of current practices in improving liquefiable foundation soils beneath existing structures.
- Review of current practices in consolidation grouting of rock masses with emphasis on identifying methods to evaluate and monitor this process.
- An analysis of field data in preparation for a hydraulic model study of causes of severe and excessive scour downstream from high-level emergency spillways. Also, a site for the model has been selected and model design initiated.
- An agreement with North Pacific Division for collection of detailed data for use in determining exact failure modes of rubble-mound breakwater toes.
- Implementation of an optimal grid scheme for representing meandering coastal channels in a three-dimensional hydrodynamic model.
- Development of a budget information system (the Maintenance Budgeting System, or MBS) for storing inventory and condition information on Corps projects and for generating reports on such items as expected maintenance budget requirements, inspection scheduling, and economic analysis of maintenance alternatives.
- A working draft of a technology transfer plan outlining the best means of approaching and executing technology transfer for the program.

During the course of discussions, a consensus

was reached on a number of features of the program, including the need for

- Continued emphasis on aggressive technology transfer throughout the program.
- Insuring that the focus of the program remains flexible so that field needs identified as the research progresses can be addressed in a timely and responsive manner.
- More extensive promotional efforts to insure that potential users both inside and outside the Corps are aware of the program and its objectives, the importance of field input to the program, and opportunities for technology transfer.
- Tapping existing sources of information in developing a comprehensive data base for the program.
- Smaller group meetings between the researchers and their close counterparts in the field offices in developing and reviewing plans for research.
- Expediting transfer of technology to the field offices, relying heavily on the *REMR Notebooks*, a collection of loose-leaf binders being developed to give guidance to the field on materials and methods to be used in REMR activities.

The 4th meeting of the FRG is tentatively scheduled for August at WES to permit more of the principal investigators to attend the sessions and thereby interact directly with the FRG members. Watch for details in later issues of *The REMR Bulletin*.

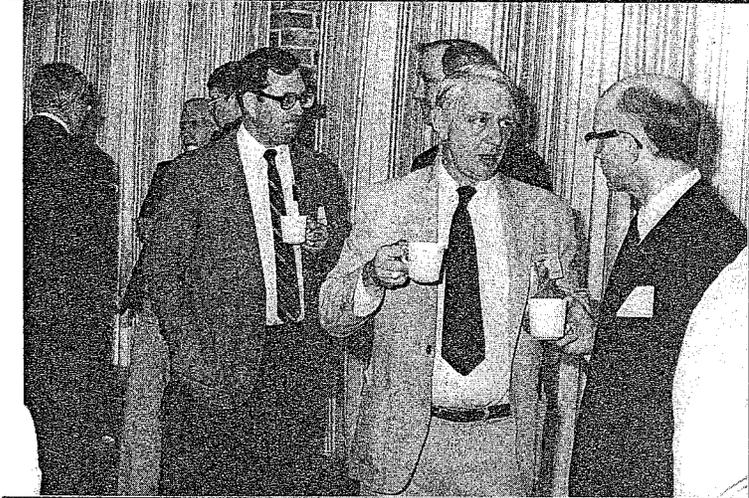
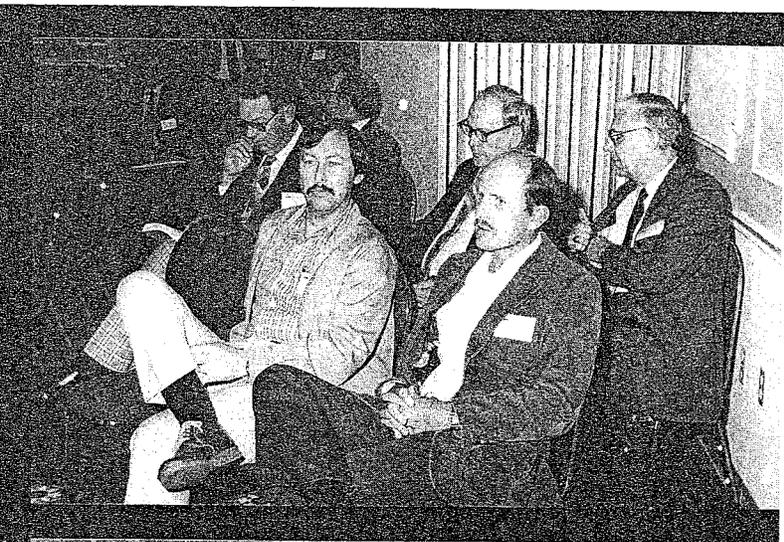
McDonald Named Contact For Committee On Infrastructure

Jim McDonald, REMR problem area leader for Concrete and Steel Structures, has been named as the Mississippi Section's contact member for the Committee on Infrastructure of the American Society of Civil Engineers (ASCE). The Committee on Infrastructure has been formed to coordinate activities touching on infrastructure issues throughout ASCE. As a first step, the committee is to identify the magnitude of infrastructure capital costs within each ASCE section's area.

ACI Seminar Asks: "Rehabilitate or Rebuild?"

Committee 364 on Rehabilitation of the American Concrete Institute (ACI) is sponsoring a 1-day infrastructure seminar, "Rehabilitation of Concrete Structures," at several locations this fall. The sessions will begin with consideration of factors that influence the decision to either restore an existing structure or construct a new one. Then, the entire decision-making process will be followed from the initial evaluation through the actual rehabilitation project. Dates and locations are: September 12, Arlington, TX; October 3, Atlanta; October 11, Detroit; and October 17, Cincinnati. For more details, write: ACI Education Department, PO Box 19150, Detroit, MI 48219, and ask for the brochure on the Rehabilitation of Concrete Structures Seminar.

Scenes from 3rd FRG meeting





REMR Research Program

KEY PERSONNEL

	<i>Office</i>	<i>Office Symbol</i>	<i>Commercial No.</i>	<i>FTS No.</i>
HQUSACE Directorate of R&D				
Jesse A. Pfeiffer, Jr.	Civil Works Programs	DAEN-RDC	202-272-0257	272-0257
HQUSACE Technical Monitors				
John R. Mikel	Operations Branch	DAEN-CWO-M	202-272-0242	272-0242
Tony C. Liu	Structures Branch	DAEN-ECE-D	202-272-0223	272-0223
Bruce L. McCartney	Hydraulic Design Branch	DAEN-CWH-D	202-272-0228	272-0228
Program Management				
William F. McCleese (Program Manager)	Structures Laboratory, WES	WESSC	601-634-2512	542-2512
Timothy D. Ables (Technology Transfer)	Structures Laboratory, WES	WESSC	601-634-2587	542-2587
Problem Area Leaders				
James E. McDonald (Concrete and Steel Structures)	Structures Laboratory, WES	WESSC-R	601-634-3230	542-3230
G. Britt Mitchell (Geotechnical—Soils)	Geotechnical Laboratory, WES	WESGE-E	601-634-2640	542-2640
Jerry S. Huie (Geotechnical—Rock)	Geotechnical Laboratory, WES	WESGR-M	601-634-2613	542-2613
Glenn A. Pickering (Hydraulics)	Hydraulics Laboratory, WES	WESHS-L	601-634-3344	542-3344
D. D. Davidson (Coastal)	Coastal Engineering Research Center, WES	WESCW-R	601-634-2722	542-2722
Jerome L. Mahloch (Environmental Impacts)	Environmental Laboratory, WES	WESEP-W	601-634-3635	542-3635
Paul A. Howdyshell (Electrical and Mechanical; and Operations Management)	Construction Engineering Research Laboratory	CERL-EM	217-352-7244	958-7244
Field Review Group				
OPERATIONS MEMBERS:				
Robert E. Pletka	Missouri River Division	MRDCO-O	402-221-7289	864-7289
James C. Wong	New England Division	NEDOD-P	617-647-8411	839-7411
Stanley R. Jacek	North Central Division	NCECO-O	313-226-6797	226-6797
John J. Sirak, Jr.	Ohio River Division	ORDCO-M	513-684-3418	684-3418
Donald E. Hambidge	South Pacific Division	SPDCO-O	415-556-8549	556-8549
Neal H. Godwin, Jr.	Southwest Division	SWDCO-O	214-767-2429	729-2429
ENGINEERING MEMBERS:				
William R. Hill	Lower Mississippi Valley Division	LMVED-T	601-634-5919	542-5919
Eugene Brickman	North Atlantic Division	NADEN-TF	212-264-7556	264-7556
John G. Oliver	North Pacific Division	NPDEN-T	503-221-3859	423-3859
John D. Parsons	Ohio River Division	ORDED-T	513-684-3006	684-3006
Howard S. Kobayashi	Pacific Ocean Division	PODEN-T	808-438-2837	
James W. Erwin	South Atlantic Division	SADEN-F	404-221-4256	242-4256

REMR Research Program

RESEARCH CONTACTS FOR DIRECT USER ASSISTANCE

For assistance with your repair, evaluation, maintenance, and rehabilitation problems, call the following Corps research contacts:

<u>Contact</u>	<u>Problem Area</u>	<u>Commercial No.</u>	<u>FTS No.</u>
Jim McDonald	Concrete and Steel Structures	601-634-3230	542-3230
Britt Mitchell	Geotechnical (Soils)	601-634-2640	542-2640
Jerry Huie	Geotechnical (Rock)	601-634-2613	542-2613
Glenn Pickering	Hydraulics	601-634-3344	542-3344
D. D. Davidson	Coastal	601-634-2722	542-2722
Paul Howdyshell	Electrical and Mechanical; or Operations Management	217-373-7244	958-7244
Jerry Mahloch	Environmental Impacts	601-634-3635	542-3635

Distribution List

As this is only the second issue of *The REMR Bulletin*, we may well have made some mistakes in preparing address labels. Please take a moment to check your label for correct name, office symbol (if applicable), address, zip code, etc., and notify us of any changes that should be made. You can help speed the process of correcting errors by including your address label with your corrections.

Also, if you are not already on our distribution list but wish to be, send us a request to be added.

Send your address label corrections or your request for addition to our distribution list to: Commander and Director, U.S. Army Engineer Waterways Experiment Station, ATTN: WESSC, PO Box 631, Vicksburg, MS 39180.

REMR Personnel Changes

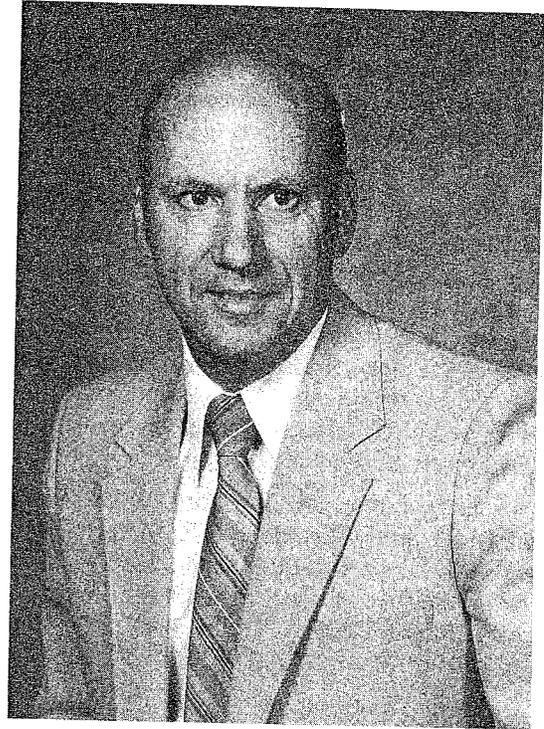
Readers should note that the list of key personnel on page 5 of this bulletin includes several changes. In addition to William F. McCleese replacing John M. Scanlon as Program Manager, note that G. Britt Mitchell and Jerry S. Huie are shown as leaders for the two Geotechnical subareas (Soils and Rock), replacing Clifford L. McAnear; Glenn A. Pickering replaces John L. Grace as Hydraulics problem area leader; D. D. Davidson replaces Dr. Robert W. Whalin as Coastal problem area leader; and Dr. Paul A. Howdyshell replaces Dr. Gilbert R. Williamson as leader for the Electrical and Mechanical and the Operations Management problem areas. Also, in the list above Pickering replaces Grace as the research contact for direct user assistance on problems in the Hydraulics area.

McCleese Succeeds Scanlon As REMR Program Manager

William F. McCleese has been selected from among more than 60 applicants to serve as Program Manager (PM) for the REMR Research Program. As such, he will have overall responsibility for planning, coordination, and execution of the program. McCleese succeeds John M. Scanlon who, in addition to his duties as Chief of the Concrete Technology Division (CTD), Structures Laboratory, WES, has served as PM since the program's inception and previously headed the interdisciplinary team that drafted the "REMR Research Program Development Report."

McCleese is a 13-year veteran of the WES Office of Technical Programs and Plans where he provided staff guidance to officials of the five WES laboratories in planning, developing, programming, analyzing, and reviewing their workloads. He was responsible for formulating and disseminating substantive policies and procedures to govern the WES research program. Prior to that assignment, he was a research civil engineer for 4 years in the Concrete Division at WES.

An Equal Employment Opportunity (EEO) counselor since 1970 and currently EEO counselor for



**William F. McCleese
REMR Program Manager**

class action complaints, McCleese has also served since 1971 as technical reviewer on the WES Board of Awards for R&D Contracts. He chaired one study group and served on three others since 1980 dealing with management alternatives and decisions. McCleese was also transition team leader for relocation of the Coastal Engineering Research Center to WES in 1983.

The PM's office will be an element of the CTD. McCleese can be reached at 601-634-2512 or FTS 542-2512.

Request For Articles

The next of *The REMR Bulletin* will focus largely on field experiences in repair of concrete and steel structures. If you have experience in this area, we would appreciate your drafting an article describing your work. If so desired, we can provide editorial assistance in preparation of your article. Along with your article, please furnish any illustrations you have (original glossy photographs, slides, or line drawings) that relate to the article.

One of the chief purposes of *The REMR Bulletin* is to provide Corps field personnel with a means to pass on to others their experiences in REMR activities. Exchange of such information with others in the Corps will substantially add to the success of the program. Articles may be submitted by persons outside the Corps and will be considered for publication so long as they are relevant to REMR activities of the Corps.

Let us hear from you by June 15th. Write to: Commander and Director, U.S. Army Engineer Waterways Experiment Station, ATTN: WESSC, PO Box 631, Vicksburg, MS 39180. Or call: Tim Ables at 601-634-2587 (FTS 542-2587) or Jim McDonald at 601-634-3230 (FTS 542-3230).

The REMR Bulletin is published in accordance with AR 310-2 as one of the information exchange functions of the Corps of Engineers. It is primarily intended to be a forum whereby information on repair, evaluation, maintenance, and rehabilitation work done or managed by Corps field offices can be rapidly and widely disseminated to other Corps offices, other U.S. Government agencies, and the engineering community in general. Contributions of articles, news, reviews, notices, and other pertinent types of information are solicited from all sources and will be considered for publication so long as they are relevant to REMR activities. Special consideration will be given to reports of Corps field experience in repair and maintenance of civil works projects. In considering the application of technology described herein, the reader should note that the purpose of *The REMR Bulletin* is information exchange and not the promulgation of Corps policy; thus, guidance on recommended practice in any given area should be sought through appropriate channels or in other documents. *The REMR Bulletin* will be issued on an irregular basis as dictated by the quantity and importance of information available for dissemination. Communications are welcomed and should be made by writing the Commander and Director, U.S. Army Engineer Waterways Experiment Station, ATTN: T. D. Ables (WESSC), PO Box 631, Vicksburg, MS 39180, or calling 601-634-2587 (FTS 542-2587).



TILFORD C. CREEL
Colonel, Corps of Engineers
Commander and Director
Waterways Experiment Station



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