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Workshop sponsored by the:

Hawaii Local Technical Assistance Program
in cooperation with the
Hawaii State Department of Transportation,
University of Hawaii's Department of Civil &
Environmental Engineering
and the Federal Highway Administration

Safety Inspection of In-Service Bridges

Registration Procedure

1. Please contact Gail Ikeda at 808-956-8367, 808-956-8851 (FAX) or giked@hawaii.edu by **Friday, November 21, 2008**.
2. Attendance is limited to 40 participants, and preference is given to local government employees.
3. Private company participation is on a space available basis at a fee of \$1,800 per person.

Parking

Parking is available at the University of Hawai'i lower campus parking structure and is \$3/day upon entry.

Payment Method

Payment can be made via Check – payable to the Research Corporation of the University of Hawaii (RCUH), Purchase Order, Credit Card (Visa & MasterCard) or Purchasing Card. Please mail payments to:

Hawaii LTAP
University of Hawaii at Manoa
Dept. of Civil & Environmental Engineering
2540 Dole Street, Holmes Hall 383
Honolulu, HI 96822

Cancellations

Please contact us if you must cancel your registration or if someone will be substituting for you. Refunds will be made if notice is received at least 3 workdays prior to the workshop date.

University of Hawai'i at Mānoa,
Campus Center,
Rooms 307-308
2465 Campus Road
Honolulu, Hawaii

December 1—12, 2008
(Monday through Friday)
8:00 a.m.—4:30 p.m.

Registration begins at 7:30 a.m.
Lunch is not provided.

Hawaii Local Technical Assistance Program
University of Hawaii at Manoa
Department of Civil & Environmental Engineering
2540 Dole Street, Holmes Hall #383
Honolulu, Hawaii 96822



Course Description:

This course is based on the "Bridge Inspector's Reference Manual" and provides training on the safety inspection of in-service highway bridges. Satisfactory completion of this course will fulfill the training requirements of the National Bridge Inspection Standards (NBIS) for a comprehensive training course.

Mid-term and final examinations based on course content will be administered to participants. The sponsoring agency/State may monitor the examinations and retain the scores to qualify or certify bridge inspectors. The sponsoring agency is responsible for grading the examinations. An answer key will be provided.

Target Audience:

Federal, State, and local highway agency employees involved in inspecting bridges or in charge of a bridge inspection unit. A background in bridge engineering or completion of NHI course FHWA-NHI-130054 Engineering Concepts for Bridge Inspectors is strongly recommended.

Course Outcomes:

Upon completion of the course, participants will be able to:

- Evaluate a variety of bridges and determine the critical areas for inspection, including fatigue-prone details, and common points of deterioration and/or distress
- Review as-built plans and previous inspection reports and, based on this review, plan and conduct an effective safety inspection for common bridge types and bridge-length culverts
- Provide documentation of defects in various materials and of bridge configurations
- Recognize the need to inspect the underwater portions of bridge structures, describe the types of deficiencies to look for (e.g., scour), determine when an inspection is necessary, and identify the procedures and types of equipment available and the advantages and limitations of each
- Evaluate the severity of material deterioration and member distress and assign ratings according to coding guidance as developed by FHWA and/or the State highway agency.
- Determine when it is necessary to close the bridge (or recommend closure) because of imminent danger
- Discuss the equipment requirements for a complete inspection and demonstrate proficiency
- Recognize when further inspection, such as nondestructive testing (NDT), is required beyond the usual visual and hand tool inspection and decide what type of further inspection should be conducted

Instructors:

Philip Fish

Phil Fish will be the lead instructor for this presentation of the course. He has taught the Bridge Inspector course and other bridge inspection courses many times. He is a nationally recognized expert in the area of non-destructive testing of structures and in bridge inspection. He is a committee member for the "Infrastructure Technology Institute" at Northwestern University, which is involved in the development of advanced nondestructive methods. He also has served on the Federal Highway Infrastructure Committee as a technical advisor and Federal Highway Committee on rewriting the Bridge Management Recording Coding Guide.

While employed by the Wisconsin DOT, he Performed Quality Assurance Field Reviews for Bridge Inspection Program in Wisconsin., supervised the Specialized Inspection Program for Fracture Critical and In-Depth bridge inspection, and supervised a specialized repair program that included heat straightening of girders and major rehabilitation on bridge structures.

Ronald J. Ladyka

Ron Ladyka is a Bridge Engineer with experience in the design, analysis, inspection and testing of bridges for various county, state and federal agencies. This experience includes the preliminary and final design of several steel and concrete superstructures as well as the analysis and design of reinforced concrete substructures. He also has extensive experience in the inspection of numerous structures including complex structures. He is an instructor for many bridge inspection training courses.