TTAP Video Catalog
Phone: 1-800-252-ROAD (inside TN)
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## TTAP Bridge Videos

### *A Page from the Past…A Bridge to the Future*

USDA - Forest Service 29 minutes Video ID # 1

Explains the TIMBER BRIDGE INITIATIVE and the roles given the USDA-Forest Service; i.e.: research and development; utilization and evaluation within the National Forest transportation infrastructure; technology transfer through demonstration and standards development.

### *Aesthetic Bridge Rails & Guardrails*

FHWA / US DOT 1993 8 minutes Video ID # 2

Gives a general overview of how safety and aesthetics are combined in roadside safety hardware. Crash testing is used to demonstrate the effectiveness of steel-backed timber, pre-cast, masonry stone guardrails, and aesthetic bridge rails.

### *Alumadeck Bridge System*

Reynolds Metals Company 1997 19 minutes Video ID # 328

Discusses when, how, and why an Alumadeck bridge system can be used. These new aluminum bridge deck systems can help reduce total construction time, total project costs, civilian inconveniences, and help increase live load carrying capacity of bridges.

### *Bridges Unbroken: Timber Bridges*

FHWA / Univ. of Maryland 1989 20 minutes Video ID # 4

Discusses the problems of timber bridge piling failures. Describes testing procedures for in-place inspection of timber bridge pilings, with emphasis on ultrasonic testing.

### *Concrete Bridge Railings, Cable Guardrails, Modified Thrie Beam Guardrails*

FHWA / US DOT 1993 37 minutes Video ID # 5

The video covers the new AASHTO design guidelines for bridge railings. Reviews bridge railing tests and designs for all classifications in accordance with the new AASHTO guidelines.

### *Countermeasures for Hydraulic Problems at Bridges*

FHWA / US Geological Survey 29 minutes Video ID # 6

A series of slides identifying different types of hydraulic problems at bridges. Indicates the possible countermeasures as well as a testing procedure to help select the proper countermeasure for each case.

### *Hatchie River Bridge*

FHWA 17 minutes Video ID # 207

A 'home video' type production at the site of a failed concrete bridge whose middle section collapsed into the river. It records the process of inspecting the collapsed structure above and below the water, recovery of debris and investigating the cause.

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***Modern Timber Bridges: A New Return for Old New England***

Rhode Island T2 1992 15 minutes Video ID # 7

Explains the timber bridge demonstration project in the Town of Foster, Rhode Island. Discusses how the use of locally abundant timber can result in cost savings over steel and concrete while achieving the same traffic load bearing capability.

***Non-Destructive Testing of Bridges***

CalTrans 1988 13 minutes Video ID # 8

Discusses the role of non-destructive testing in the evaluation of bridges. The following three testing methods are described in detail: liquid penetrant, ultrasonic, and radiography.

***Pennsylvania Bridges: Maintaining the Past - Preserving the Future***

PENNDOT/FHWA 10 minutes Video ID # 301

Highlights the concept of performing maintenance activities at the proper time to a particular bridge. Discusses the importance of maintenance and inspection procedures to ensure bridge safety. Illustrates the importance of a solid bridge maintenance schedule, applying proper maintenance procedures to each type of bridge and the consequences of.

***Pile Cap Replacement***

Oregon T2 / OR DOT 1991 12 minutes Video ID # 9

Shows the procedure for replacing a timber pile cap beneath a concrete surfaced bridge while the bridge remains open to traffic. Replacement of the cap is aided by the use of rollers mounted on brackets that clamp to the cap's supporting plate.

***Prefabricated Timber Bridge Deck Panels***

USDA Forest Service 10 minutes Video ID # 208

This video illustrates a relatively low cost method for fabrication of timber decks over steel girders using methods developed by county engineer John Smolen.

***Pre-Stress Concrete Bridge Inspection***

PennDOT 1987 56 minutes Video ID # 10

Various techniques of bridge inspection for a two-person team. The team checks tools and equipment and organizes a field trip to assigned bridges. The program shows a run-through of a bridge inspection and examples of various bridges prestressed concrete beams.

***Scour: The Bridge Engineer's Dilemma***

PennDOT 1988 20 minutes Video ID # 11

Designed to alert bridge inspectors to the problem of scour and its potential for bridge damage. Explains the best remedies for correcting a scour problem.

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***Steel Truss Bridge Inspection, Intro to Bridge Inspection***

FHWA / Oregon DOT 1978 75 minutes Video ID # 12

Step by step explanation of the procedure for inspecting bridges. Discusses the different types of equipment used and reporting form for documenting the inspection process.

***Stowell Road Bridge Reconstruction***

Town of Merrimack, NH 1990 21 minutes Video ID # 214

Details the use of pre-fabrication to restore the Stowell Road Covered Bridge.

***Timber Bridge #2***

PennDOT 1992 28 minutes Video ID # 14

Shows how modern timber bridges can be installed by local construction firms or municipal employees at lower cost and in less time than traditional bridge construction.

***Timber Bridge Inspection in Oregon***

FHWA / US DOT 1985 50 minutes Video ID # 15

The video shows how to inspect a timber bridge. Since many of the bridges are made of concrete rather than timber, there is a lack of expertise in inspecting the timber bridges and in evaluating the results. The additional references (manuals) are also suggested.

***Timber Bridges: Build Better & Save with Modern Timber Bridges***

FHWA 1988 22 minutes Video ID # 13

Presents the concept of modern timber bridge construction as an alternative to metal structures. It describes how modern timber bridges differ from the wooden bridges of the past and discusses issues ranging from erection methods to durability.