

## **Quarterly Report**

Submitted by Jimmie Hinze

University of Florida

April 1 to June 30, 2002

### **Analysis of Fall Accidents in Construction**

Principal Investigator: Jimmie Hinze

Researcher on the Project: Xinyu Huang

Progress on objectives this quarter: No work performed this quarter as this was 100% complete prior to the start of the quarter. A paper documenting the results of this research has been accepted for publication in the ASCE Journal of Construction Engineering and Management.

Work planned for the next quarter: Presentation of results at CIB W-65 Conference

### **Analysis of Trench Box Accidents**

Principal Investigator: Jimmie Hinze

Researcher on the Project: Pramod Kommareddy

Progress on Objectives this Quarter: 70% complete. Revisions have been made to the trench box survey. NUCA has also agreed to provide us with mailing labels for their contractor members, numbering over 1,000.

Problems/Challenges: The final stage of this research is to conduct a survey of contractors regarding practices involving trench boxes. The contractor members of NUCA are regarded as the best resource for obtaining this information. Once the labels have been received, no further problems are anticipated.

Work Planned for Next Quarter: The NUCA mailing labels are expected to be provided in the next few weeks. The mailing questionnaire will be finalized and submitted to the IRB for final approval. The survey should be mailed out during the next quarter and the data will be analyzed. Final results should be reported by the end of the year. The results of the analysis of accidents involving trench boxes will be presented at the CIB W-65 Conference in Cincinnati, OHIO.

### **Zero Accident Work Sites**

Principal Investigator: Jimmie Hinze

Researcher on the Project: Xinyu Huang

Progress on objectives this quarter: 30% complete The data collected from the questionnaires sent to over 450 owners (firms with large construction budgets) have been analyzed. In general this effort was disappointing as only 25 responses were received.

The research involving the interviews with owners' representatives on large construction projects is well underway. The original goal was to conduct 60 to 80 interviews. To date, 41 interviews have been conducted.

Problems/Challenges: The primary challenge has been that of identifying large projects where owner's representatives could be interviewed. To date, this

has been a major effort, but the assistance of the CII Project Team has been very helpful.

Work Planned for Next Quarter: The major effort involved in this research is that of conducting interviews. These interviews will continue during this next quarter. The interviewing should be completed during the next three months. Preliminary analysis of the data will also begin as the data collection is completed..

## **Additional Construction Safety Studies Undertaken**

### **Analysis of Caught in or Between Accidents**

Principal Investigator: Jimmie Hinze

Researcher on the Project: Xinyu Huang

Progress on objectives this quarter: 100% complete

Problems/Challenges: None

Summary of Activities to Date: Caught in or between accidents investigated by OSHA between 1990 and October 2001 were examined to identify root causes and any identifiable trends. A paper summarizing the results has been prepared

Work Planned for Next Quarter: Wait for response on paper submittal

### **Study of Substances and Materials Posing Immediate Risks to Worker Wellbeing**

Principal Investigator: Jimmie Hinze

Researcher on the Project: Guru Kulandaivel

Progress on objectives this quarter: 5% complete. Over 60 hazardous substances and materials encountered in construction have been identified.

Problems/Challenges: Currently insufficient funds to complete the research

Summary of Activities to Date: OSHA investigation reports for the past ten years have been examined and cases involving hazardous materials have been identified. A research proposal has been prepared and submitted to NIOSH for funding.

Work Planned for Next Quarter: No work anticipated during this quarter.

### **Analysis of Accidents Involving Work Zones and Signaling**

Principal Investigator: Jimmie Hinze

Researcher on the Project: Alexis Perry

Progress on objectives this quarter: 10% complete. OSHA investigation reports for the past ten years have been examined and cases involving work zone accidents and those involving signaling on construction sites have been isolated. There are approximately 200 accident reports.

Problems/Challenges: Currently insufficient funds from the NIOSH grant to support this research, but the research is continuing under a special research award from the University of Florida.

Work Planned for Next Quarter: Information contained in the accident reports will be analyzed during the next three months. It is anticipated that the research will be 50% completed by the end of the quarter.

**Opinions of Construction Industry Experts Regarding Safety and Productivity**

Principal Investigator: Jimmie Hinze

Researcher on the Project: Sherif Mansour

Progress on objectives this quarter: 30% complete. Conducted extensive literature review of studies that have examined productivity as influenced by safety. Conducted interviews and mailed out surveys to industry experts to gather their opinions about the possible existence of a conflict between safety and productivity.

Problems/Challenges: Currently insufficient funds from the NIOSH grant to support this research, but the research is continuing without funding. The research is scaled down due to the lack of funds.

Work Planned for Next Quarter: Data will be analyzed and the research results will be prepared in the form of a paper for a conference presentation or professional journal.