Post-EQ Safety Mobile Data Acquisition

ATC-20i

Jon A. Heintz
Director of Projects
Applied Technology Council

Users manual:
Mobile postearthquake building safety evaluation data acquisition system (Version 1.0)
ATC-20i

- Personal digital assistant (PDA) application of ATC-20
- Electronic evaluation forms
- Mobile data collection system
- Database management tool
- Paperless...

Almost!
Introduction & Overview

- This tutorial unit will address
  - Installation procedures
  - Use of the handheld application
  - Use of the desktop application
  - Electronic data management
  - Procurement considerations
  - Deployment considerations
Introduction & Overview

- Simple! *except*...
  - How will this interact with my current PDA-sync software?
  - If I click on ‘exit’ will I lose all data?
  - Once uploaded, can inspections be edited?
  - What happens if I accidentally click delete?
  - Will inspection data sit unused like all my digital photos?
Development

- Conceived by Haresh Shah
- Project Director: Chee Song Chern, Buildfolio
- Pilot study: SF Dept of Building Inspection
- Oversight: Thalia Anagnos, Nesrin Basoz, Frank Chiu, Nick Delli Quadri, Ron Gallagher, Steve Pelham, Jim Russell, Michael Sabbaghian, Calvin Wong
- Funding: ATC - H.J. Degenkolb Endowment Fund
Hardware/Software

- Windows 95, 98, 98SE, NT, ME, 2000, XP
- Palm Treo device (for wireless functions)
- Palm OS 4.0 or earlier (update to 5.0 in progress)
- Printer with wireless infrared port
Procurement Options

- **Annual license**
  - PDA/desktop software
  - Database hosting and backup services
- **Event license**
  - Software and database services for event
- **Purchase Software**
  - PDA/desktop/database software for your use
- **Freeware**
  - Free trial version without database access
Installation

- Read manual and follow installation instructions

Tip: Don’t uninstall other sync software. Just install ATC-20i sync software
Handheld Application

- Starting the application

Main Menu

Used for data management and control
Handheld Application

- Running the Rapid Evaluation

Saves Data or current changes

Like "Exit" – Current data will be lost

Caution! Data will be lost
Handheld Application

- Printing the Placards

- Align with infrared port
- Load paper
- Press “Print”
Handheld Application

- Wireless synchronization

Controls access to database records

Admin can direct new inspections remotely
Desktop Application

- Desktop synchronization

- Run Palm HotSync Application
- Enter login/password
- Press HotSync button

Note: Desktop Application must be linked with the database through an IP address.
Data Management

- Accessing the Web Page  [www.buildfolio.com/afc](http://www.buildfolio.com/afc)

  - Used for data management and control
  - Add new inspection
  - View/edit existing inspection
  - Query database
  - Administration
Data Management

- Viewing/Editing Inspections

Provides list of inspections for login name

View Web-based Form

Make changes where necessary and “Submit”
Data Management

- Deleting Inspections

- “OK” to confirm
- “Cancel” to reject
- Sync with handheld to delete from PDA device

Note: Inspections cannot be accidentally deleted from PDA’s
Data Management

- Searching and Reporting

View Statistics:
- Occupancy
- Construction
- Posting

Or list all records matching search criteria

- Inspection Date
- Damage level
Data Management

• Administration and Control

- View list of all users
- Add, delete, or modify user privileges
Procurement Issues

• Preparedness is required!
• Order in advance/set up system
  – Identify administrators/data repository
  – Choose wireless/desktop sync (or both)
  – Secure phone service with data
• Prepare deployment plan
  – Train inspectors
  – Collect/store adequate supplies (PDA devices, printers, placards)
Deployment Issues

- Remember, it’s a disaster area!
- Contingency planning is required
  - Devices on hand, and charged
  - Power could be out...
    - Car chargers, portable generators
  - Wireless service could be out...
  - Desktop sync
  - Access to internet could be down...
  - Collect data and upload later
Conclusions

- ATC-20i technology makes data collection and data management easier
- Dependence on technology can leave us vulnerable
- Preparedness is the key for successful mobile data acquisition

Thank you!