HONOLULU AUTHORITY for RAPID TRANSPORTATION

MINUTES

Project Oversight Committee Meeting
Thursday, April 5, 2012, 10:00 A.M.
Mission Memorial Annex Conference Room
550 South King Street, Honolulu, Hawaii

PRESENT:	Damien Kim	Carrie Okinaga
	Wayne Yoshioka	Ivan Lui-Kwan
	Donald G. Horner	
ALSO IN ATTENDANCE:	Jim Dunn	Jeanne Mariani-Belding
(Sign-In Sheet and Staff)	Jim Van Epps	Bob Sumitomo
	Bill Brennan	Andrea Tantoco
	Aukai Reynolds	Nalani Dahl
	Gary Takeuchi	Claude Phillips
	Frank Doyle	Roland Bueno
	Russell Honma	Kevin Dayton
	Lori Hiraoka	Paul Migliorato
	Reggie Maldonado	Maurice Morita
EXCUSED:	William "Buzz" Hong	Glenn Okimoto

I. Call to Order by Committee Chair

At 10:03 A.M., the meeting of the Project Oversight Committee was called to order by Committee Chair Damien Kim.

II. Public Testimony

Mr. Kim called for public testimony. None was offered.

III. Presentation on Safety and Security Plan

System Safety and Security Manager Henry Miranda introduced System Safety and Security Engineers Roland Bueno and Claude Phillips, who presented a slide show of HART's Safety and Security Plan.

After giving a brief history of systems safety, Mr. Bueno and Mr. Phillips detailed its plan for HART's present focus on safety for revenue service. They described how FTA requirements serve as guidelines for the Safety and Security Management Plan (SSMP) and Safety and Security Certification Plan (SSCP), which will assure that all system

architecture operates with the greatest degree of safety. The SSMP and SSCP, which are required by the FTA, set forth the project's management responsibilities, organizational framework, task activities, and documentation requirements for completing the certification by the FTA. The process contains different components such as the Preliminary Hazard Assessment, under which potential hazards are identified, tracked and mitigated, as well as the Threat and Vulnerability Assessment, which addresses how potential threats to passengers and the system are quantified and resolved.

Mr. Miranda explained the Safety and Security Review Committee (SSRC) and Safety and Security Certification Work Group (SSCWG) will coordinate to ensure safety of the system and its passengers by establishing policy documents, developing safety protocols and checklists, and working together with the Safety and Security Team and contractors.

Board member Don Horner asked whether the federal government requires routine checks on rail cars. Mr. Miranda confirmed that it did, and stated that the mechanics' certifications would be performed by HART to comply with FTA standards. Interim Executive Director Toru Hamayasu stated that the FTA is often referenced because of the quality of their guidelines. Mr. Horner requested information about how the safety plan will be integrated with operational staff, and noted that in Japan, 1800 daily safety checks are done on rail cars.

Mr. Hamayasu noted that the HART trains will undergo checks similar to a preflight checklist, and also regular monitoring for wear and tear. Mr. Miranda stated that the certification and training of mechanics and the checks are performed according to a very regulated schedule. Mr. Horner asked if HART had a person on staff with experience operating and maintaining trains, and Mr. Bueno responded that HART does. Mr. Horner requested hearing from that individual.

Board member Carrie Okinaga asked whether the safety certification could impact HART's ability to obtain federal funding. Mr. Phillips replied that updated safety and security documents are conditions for the Full Funding Grant Agreement. Ms. Okinaga asked about the relationship of design elements such as gates and safety. Mr. Hamayasu delineated the difference between safety certification requirements and enhancements such as gates.

Board member Ivan Lui-Kwan asked, with regard to the preliminary hazard assessment, what kinds of hazards HART is seeking to avoid. Mr. Miranda stated that at this point, the hazards are mostly related to the safe operation of machinery. However, as the plan is a living document, the focus will change over time to concentrate on the alignment, parking lots, and stairs. Mr. Phillips stated that the preliminary hazard analysis examines the frequency and potential harm to a person or the system, and seeks to reduce the potential harm. The analysis is based on the hazard to the person first, then focuses on changing the system design to prevent the hazard.

Mr. Lui-Kwan asked Mr. Miranda about a recent rail catastrophe in China. Mr. Miranda replied that there was a lack of a safety culture in China. He stated the Chinese have

started to concentrate on safety, and that he had been to China and held safety workshops there.

Mr. Hamayasu shared statistics on platform safety doors from Japan, where some stations in Tokyo are being retrofitted with doors. Last year, there were over 3,000 incidents of people falling from the platform onto the tracks. Of those incidents, only 10% resulted in contact with vehicles, and 60% of the people who fell were intoxicated. Mr. Hamayasu stated that while these incidents are not statistically significant, retrofitting platforms with safety doors is extremely expensive and difficult. Therefore, it makes sense to include platform safety doors in the construction of the system.

Mr. Horner asked whether the design of the Maintenance and Storage Facility, which will serve as the control center of the system, has been completed. Mr. Hamayasu replied that preliminary engineering has been done so far to determine the needed space. Mr. Horner requested a presentation on the facility and its functions.

Mr. Kim asked if there was a contingency plan for the Maintenance and Storage Facility in the case of an emergency. Mr. Miranda stated that HART is coordinating with other agencies on a casualty plan, and will conduct two drills before the facility is opened. He stated the importance of training employees in this regard. The safety team will also conduct a threat and vulnerability analysis, and train employees at the facility on how to respond in an emergency. The analysis will take into account almost every kind of disaster, including hurricanes, high winds, and tsunamis. Mr. Miranda stressed that the plans being formulated by his team are living documents that change over time.

Board member Wayne Yoshioka advised that the City and State are developing a joint traffic management center, which will incorporate the City and State signals, the Fire Department, and Emergency Medical Services. HART has had discussions with the parties involved regarding coordinated responses, and a space has been provided for HART at the center.

Ms. Okinaga asked about a special budget set aside mentioned at an earlier meeting. Mr. Hamayasu stated that the Honolulu Police Department will provide a transit division, which will be reimbursed by HART. He stated that HART is already reimbursing HPD for coordination. This cost is included in the operating and maintenance budget, and will be an ongoing cost once the train is built.

Ms. Okinaga stated that State Department of Transportation security oversight will occur in the future in addition to Federal Transportation Administration oversight, and asked when that would begin. Mr. Miranda advised that they are currently developing the State program. He stated that the FTA turns oversight responsibility to the State once the system is built.

Mr. Horner asked whether trains could be used to transport passengers in the event that an accident blocks freeways completely, and Mr. Miranda affirmed that it could. Additionally, he stated that the train could be used for evacuation in an emergency

situation. He stated that, in his experience, he has used trains for police purposes. In those situations, the emergency control center would coordinate with HART.

IV. Presentation by Parsons Brinckerhoff on Progress of Execution of Contract

The next agenda item was a presentation on the progress of the execution of the Parsons Brinckerhoff (PB) contract by Jim Van Epps and Jim Dunn of PB. Mr. Van Epps detailed how PB, with its technical capacity and capability, provides project oversight in planning services, engineering and construction services, and project management support services to HART.

Mr. Van Epps stated that in its planning services oversight role, PB drafts documents regarding the FTA processes and requirements for HART's review. PB also provides oversight in the arena of environmental planning, compliance, and support, both in design and in the field. To date, it has worked on matters regarding the casting yard, environmental studies, monthly mitigation monitoring reports, required permits, and Section 106 matters. PB also provides financial services oversight support until the FFGA is issued, and on an as-needed basis thereafter. Lastly, PB provides archaeological services oversight for plans and work performed by subcontractors such as Cultural Surveys Hawaii and Royal Contracting.

Mr. Dunn explained that as the General Engineering Consultant (GEC), PB's role is to verify design reviews, conduct quality reviews, and ensure work is performed according to HART's standards. With regard to engineering services, PB primarily oversees compliance. In its role as construction management oversight, PB assesses whether the means and methods utilized are appropriate, and ensures the adequacy and execution of plans by designers and construction contractors. He emphasized that while the GEC does not do drawings or actual construction, it ensures that costs are kept under control by facilitating conversations between contractors, and by ensuring consistency of drawings and the actual execution of construction as reflected in the drawings.

Mr. Dunn further explained that the GEC's role is limited to design-build contract oversight. He explained that PB does not do quality control, which is the responsibility of the design-build contractor. Mr. Kim asked if PB will always be present during construction, and Mr. Dunn confirmed that field staff will be there during construction to resolve claims, evaluate changes, and negotiate settlements in conjunction with HART staff. For example, Mr. Dunn pointed to the shared management and technical responsibilities between HART and GEC in the Design Build Operate and Maintain contract with Ansaldo. He stated that the GEC will train and mentor HART staff in transferring knowledge and experience.

Mr. Van Epps went on to say that while quality assurance is the responsibility of the contractors, PB has also developed their own quality program. It will conduct one system audit with HART, and also conduct several minor audits. PB is also involved in the drafting of risk assessment and avoidance documents. Additionally, it drafts safety and security documents that are then forwarded to Mr. Miranda's safety and security team.

PB also oversees contract procurement, dispute avoidance and resolution, public involvement, and project management and controls.

Mr. Horner stated that he would like to see more information, as the crucial independent voice is always the contract manager. He expressed his concern that PB is ultimately involved in design. Mr. Van Epps confirmed that PB is involved in up to 30% of the design. He also pointed out that the GEC is not a construction manager, but rather, provides construction management oversight. He stated that PB does not direct contractors what or when they start work, and does not dictate their means and methods.

Mr. Horner asked who would be the "junkyard dog" who holds the architects and contractors accountable. Mr. Hamayasu stated that construction managers would be hired in the third and fourth phase of construction. Mr. Dunn stated that PB serves as HART's eyes and ears on the design-build contracts. He offered to make another presentation to the new Executive Director once he started with HART.

V. Adjournment

Having no other pending business, Mr. Kim adjourned the meeting at 11:29 A.M.

Respectfully Submitted,

Cindy Matsushita
Board Administrator

Approved:

Damien T.K. Kim
Project Oversight Committee Chair

JUL 5 2012
Date

ATTACHMENT A

Safety Certification

What is it and Why?

April 5, 2012

Agenda

- Purpose
- FTA Requirements
- Scope
- Safety & Security Certification
- Hazard Analysis
- Keys to Success

Purpose

- **Purpose: Certification …**
  - **Fulfills Federal Transit Agency (FTA) requirements**
    - **FTA definition: *"Safety and Security Certification is the process of assuring that all system architecture operates with the greatest degree of safety at the time of commissioning."***
  - **Satisfies the State Safety Oversight Agency (SSOA) requirement**
  - **Complies with HART's System Safety Program Plan (SSPP)**
  - **Establishes consistency with industry practice**

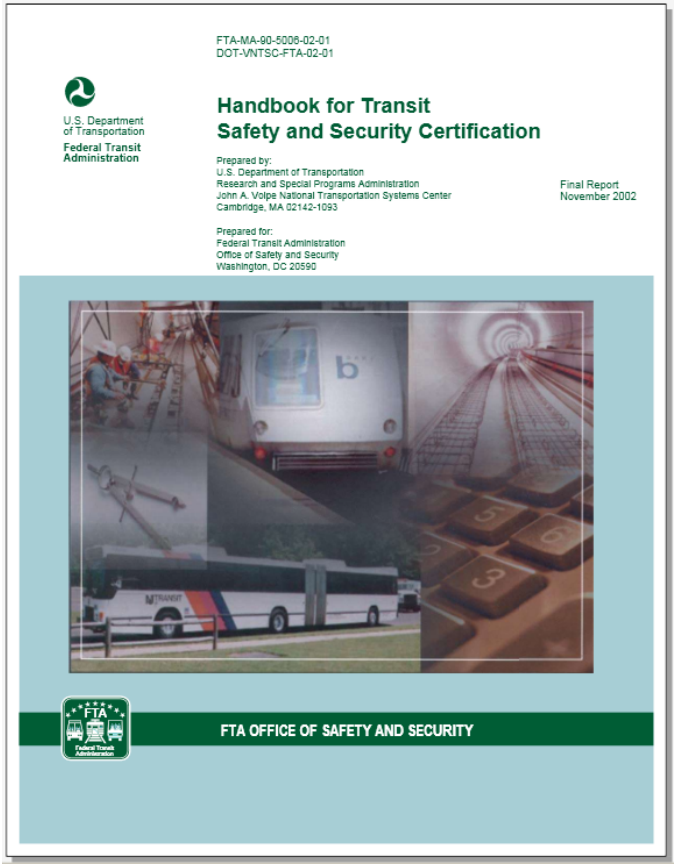
FTA Requirements

"The series of processes that collectively verify the safety and security readiness of a project for public use."

- FTA Handbook for Transit Safety and Security Certification, November 2002

Other applicable guidelines:

- Circular 5800.1 - Safety and Security Management Guidance for Major Capital Projects
- 49 CFR Part 659 – Rail Fixed Guideway Systems: State Safety Oversight
- American Public Transportation Association (APTA)
- MIL-STD 882-D

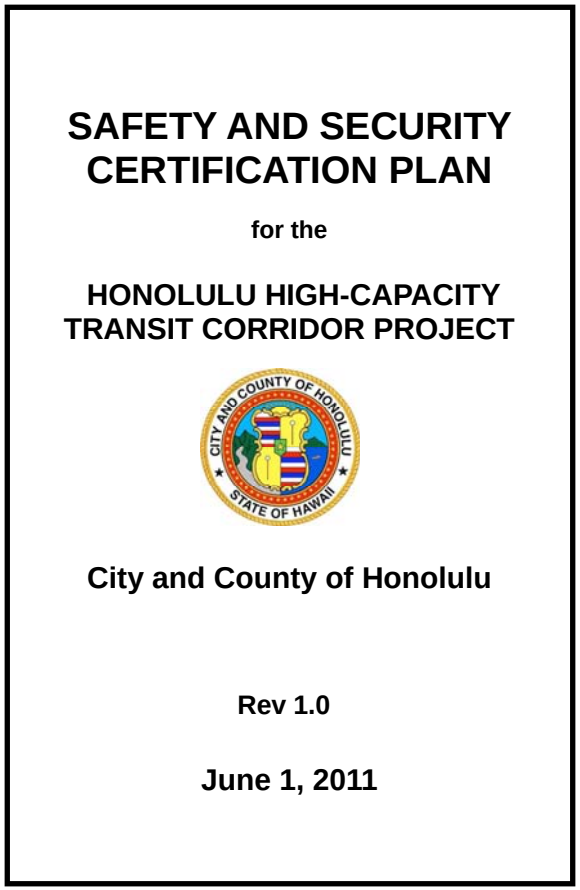


FTA Requirements

- **SSMP**
  - Circular 5800.1- Safety and Security Management Guidance for Major Capital Projects (August 2007)
    - Requires the development and implementation of a Safety and Security Management Plan (SSMP) for major capital projects covered by 49 CFR Part 633, “Project Management Oversight”, including rehabilitation and modernization projects.
    - **Lack of implementing SSMP (and supporting documents, i.e. SSCP) may impact funding**

FTA Requirements

- **SSCP**
  - **Is part of the SSMP (both required by FTA)**
  - **Establishes the Project's management responsibilities, organizational framework, task activities, and documentation requirements for completing the certification**
  - **Fully complies with the FTA requirements**
    - Project Management Oversight Consultant (PMOC)



Scope

"A well-defined project scope is necessary to establish applicability of the certification program for project elements and to encourage shared vision among the project team."

- FTA Handbook for Transit Safety and Security Certification, November 2002

- **Scope:**
  - **Certifiable Elements (system-wide)**
  - **Design Criteria Conformance Checklists**
  - **Preliminary Hazard Analysis**
  - **Threat and Vulnerability Analysis**

Safety & Security Certification

- Deliverable: Certifiable Checklists
- Certifiable Elements: components of a system in its broadest terms, such as…
  - Security
  - Fixed facilities: station, structures, track, etc.
  - Systems: traction power, signals, communications, etc.
  - Operations: procedures, rules, training, etc.

Safety & Security Certification

Certifiable Elements

1. Guideway
2. MSF
3. Stations and Parking
4. Passenger Vehicles
5. Trackwork
6. Traction Electrification
7. Train Control and Signaling
8. Fare Vending
9. Communications and Control
10. Integrated Systems
11. System Integration Testing
12. Operational Readiness

Preliminary Hazard Assessment (PHA)

- What is a Preliminary Hazard Analysis?
  - First attempt to identify and categorize hazards or potential hazards associated with operation of the system
- PHA and Hazard Tracking
  - PHA provides baseline list of hazards
  - Other hazards identified are added to tracking list
  - All hazards tracked to mitigation
  - Acceptable mitigation of all hazards provides a check and balance of the certification process

Preliminary Hazard Assessment (PHA)

- Provides early identification of hazards
- Enables incorporation of appropriate measures to address those hazards
- Delivers a safer product
- Quantifies hazards and threats before and after mitigation

Threat and Vulnerability Assessment (TVA)

- Purpose – An analysis of potential threats to the system while in preliminary design phase
- Goal – Establish satisfactory provisions for the deterrence, detection, and response to criminal and terrorist acts in the planning design and operation of the system
- Scope – Protect customers, employees, facilities, equipment, and economic viability of the region
- Like the PHA, the TVA provides baseline list of vulnerabilities that are tracked to resolution

Threat and Vulnerability Assessment (TVA)

- Evaluates susceptibility to potential threats
- Identifies corrective action(s) that can reduce or mitigate the risk of serious consequences from a security incident
- Quantifies hazards and threats before and after mitigation

Keys to Success

- SSRC: Safety & Security Review Committee
- SSCWG: Safety & Security Certification Work Group
  - Cross-functional members: must ensure they understand the vision and focus of the SSRC members they represent
  - FD Conformance Checklist and Design Criteria Conformance Documents must be fully vetted by the Cross-functional SSCWG
  - Safety and Security Team and SSCWG must work with the contractor to resolve questions and discrepancies
  - SSCWG success will result in SSRC approval of checklists with minimal comments

Mahalo!

HONOLULU RAIL TRANSIT

ATTACHMENT B

General Engineering Consultant Contract

Agreement for Professional Services between HART and Parsons Brinckerhoff

Jim Dunn | Jim Van Epps

April 5, 2012

Overview

- Planning Services
- Engineering and Construction Services
- Project Management Support Services

Planning Services

- FTA Processes and Requirements
- Environmental Planning, Compliance and Support
- Financial Services
- Archaeological Services

Engineering and Construction Services

Primary Role of the GEC

- Engineering Services
- Construction Management Oversight Services
- Surveying
- Utility Coordination

Project Management Services

- Quality Assurance
- Risk Assessment and Avoidance
- Safety and Security
- Contract Procurement
- Contract Management Services
- Public Involvement
- Project Management and Controls

Mahalo!

HONOLULU RAIL TRANSIT