
2011 ON-SITE SECURITY REVIEW OF THE ANGELS FLIGHT RAILWAY COMPANY

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ACKNOWLEDGEMENT

The Rail Transit Safety Section of the California Public Utilities Commission conducted this system security program review. Staff members directly responsible for conducting security review activities include:

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1. EXECUTIVE SUMMARY

The Rail Transit Safety Section staff (staff) of the California Public Utilities Commission (Commission) conducted an on-site review of the Angels Flight Railway Company (AFRC) system security program in October 2011. The review was comprehensive in nature and addressed AFRC programs and practices that ensure system and passenger security.

Staff interviewed management and performed records reviews of the AFRC security program to ensure compliance with operational requirements and state regulations.

The review results indicate that AFRC has a comprehensive system security program and that AFRC effectively implements the AFRC System Security Plan (SSP). Staff did not make any recommendations or findings requiring corrective action on the 4 checklists that were used as a basis to conduct the security review.

The Introduction and Background sections of this report are presented in Sections 2 and 3 respectively. The Background section contains a description and brief history of the AFRC system. Section 4 describes the review procedure, and Section 5 provides the review findings and recommendations. Appendices attached to the back of the report include the report acronyms list, the checklist index, a recommendations list, and the review checklists.

2. INTRODUCTION

Commission General Order (GO) 164-D, *Rules and Regulations Governing State Safety Oversight of Rail Fixed Guideway Systems* requires Commission staff to perform a review of each rail transit agency's implementation of its system security program plan at a minimum of once every three years. The purpose of the triennial review is to verify compliance and evaluate the effectiveness of each rail transit agency's System Security Plan (SSP) and assess the level of compliance with GO 164-D as well as other Commission security requirements. This is the first security review of AFRC since Angels Flight was re-opened in March, 2010.

On September 8, 2011 staff scheduled security review activities with the AFRC President. At that time of scheduling, staff provided the 4 checklists that would serve as the basis of the review. Staff conducted records reviews and interviews to confirm implementation of requirements from the SSP and standards referenced in the SSP.

In addition to this security review, a safety review by staff of AFRC was performed. The results of the safety review are issued in a separate report.

3. BACKGROUND

Angels Flight is a landmark funicular railway that was originally built in 1901 in the Bunker Hill region of downtown Los Angeles. Since 1997, Angels Flight has been effectively owned by the Angels Flight Railway Foundation (Foundation) via a 99 year long-term ground lease with the Community Redevelopment Agency of the City of Los Angeles (CRA/LA). The Angels Flight Railway Company (AFRC) operates Angels Flight on behalf of the Foundation.

Between 1901 and 1969, Angels Flight was owned by 6 different entities. CRA/LA was the eventual owner of Angels Flight and dismantled the funicular in 1969. In 1996, after 27 years of storage, CRA/LA oversaw the project to restore and reconstruct Angels Flight and the funicular was reopened to the public after being reinstalled 2 blocks south of its 1969 location. The track structure was rebuilt and the drive system was redesigned. In 2001 the redesigned drive system failed resulting in one of the cars freefalling down the 33 degree incline before colliding with the other car resulting in several injuries and a fatality. The accident was heavily investigated by CPUC and the National Transportation Safety Board (NTSB), and the funicular was shut down.

In January 2007, AFRC met with CPUC staff to notify staff of their intent to refurbish and re-open Angels Flight. AFRC contracted the engineering and manufacturing services of POL-X West Inc, Jewett Engineering, Wespac Automated Ltd, and Murray Latta Inc. to refurbish Angels Flight. In March 2010 Angels Flight was once again reopened to the public with improved safety features that included a secondary safety cable, redundant fail-safe braking, and fail-safe carrier track brakes. The mechanical drive was once again redesigned, a state of the art controller was installed, and the entire system was refurbished in conformance to funicular standards (ANSI B77.2 – 2004) developed by the American National Standards Institute.

The rail transit safety section (RTSS) regulates AFRC as a rail transit agency (RTA) operating a rail-fixed guideway funicular system. A funicular is a system that operates on an incline with simultaneous ascending and descending carriers on guideways counterbalancing one another. Carriers reciprocate between the terminals, propelled and controlled by a wire rope or other flexible element operating through drive and tensioning equipment installed at the terminals. Safety standards specified in GO-143B for light rail transit are not directly applicable to funiculars; therefore RTSS oversees AFRC safety and security matters according to GO-164D requirements and ANSI B77.2-2004 standards.

4. REVIEW PROCEDURE

Staff conducted the review in accordance with the Rail Transit Safety Section Procedure RTSS-4, *Procedure for Performing Triennial On-Site Safety and Security Reviews of Rail Transit Agency*. Staff developed four (4) checklists to cover various aspects of system security responsibilities based on Commission requirements, the AFRC SSP, security related AFRC documents, and staff knowledge of the system. The 4 checklists are included in Appendix D.

Each checklist identifies security-related elements and characteristics reviewed or inspected by staff. The completed checklists include review findings. The methods used to perform the review included:

- Discussions with AFRC management
- Review of rules, procedures, policies, and records
- Observations of operations
- Interviews with rank and file employees

The review checklists concentrated on requirements that affect the security of rail operations and are known or believed to be important in reducing security issues.

**5. FINDINGS AND RECOMMENDATIONS
(CONFIDENTIAL)**

“Warning: This record contains Sensitive Security Information (SSI) that is controlled under 49 CFR parts 15 and 1520. No part of this record may be disclosed to persons without a “need to know” as defined in 49 CFR parts 15 and 1520, except with the written permission of the Administrator of the transportation security Administration or the secretary of Transportation. Unauthorized release may result in civil penalty or other action. For U.S. government agencies, public disclosure is governed by U.S.C. 552 and 49 CFR parts 15 and 1520.”

APPENDICES

- A. Abbreviations List
- B. 2011 AFRC Security Review Checklist Index
- C. 2011 AFRC Security Review Recommendations List
- D. 2011 AFRC Security Review Checklists

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**APPENDIX A
ABBREVIATIONS LIST**

Acronym	Definition
AFRC	Angels Flight Railway Company
ANSI	American National Standards Institute
CCTV	Closed Circuit Television
Commission	California Public Utilities Commission
SED	Safety and Enforcement Division (of CPUC)
CPUC	California Public Utilities Commission
CRA/LA	Community Redevelopment Agency of the City of Los Angeles
Foundation	Angels Flight Railway Foundation
GO	General Order
LAPD	Los Angeles Police Department
NTSB	National Transportation Safety Board
RTA	Rail Transit Agency
RTSS	Rail Transit Safety Section (of CPUC)
SOP	Standard Operating Procedure
SSP	System Security Plan
SSPP	System Safety Program Plan
Staff	Rail Transit Safety Section Staff
TVA	Threat and Vulnerability Assessments

APPENDIX B
2011 AFRC SECURITY REVIEW CHECKLIST INDEX
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APPENDIX C
2011 AFRC SECURITY REVIEW RECOMMENDATIONS LIST
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APPENDIX D

2011 AFRC SECURITY REVIEW CHECKLISTS (4 CHECKLISTS TOTAL)

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