



## United Vision Logistics – Vehicle Securement



Red Iron Labs worked in collaboration with [3D Media](#) for United Vision Logistics (UVL) to develop interactive training modules for properly securing large transportation vehicles. The training application was used to transform traditional HR training videos into interactive virtual reality experiences for showing trainees how to properly secure and check a vehicle for transportation.

View video: <https://www.youtube.com/watch?v=znV32-MpQjE>

### About the Team

The team consisted of:

- Project Owner: United Vision Logistics
- Product Review: Lance Jones for UVL
- VR Development: Lloyd Summers, Red Iron Labs
- Graphic Design: Shane Berezowski, Red Iron Labs
- Development Assistance: Darien Magnus, Red Iron Labs

### About the Project

Working with United Vision Logistics, we discovered the need of creating a comprehensive training application that closely matches their existing HR training material and meets or exceeds the FMCSA transportation guidelines. Using their training videos as a guide, we recreated their main shipping center and surrounding area to create an in-depth VR training simulation. We designed the training experience as a 5-part experience with 60 steps that takes approximately 30 minutes to complete.



The project takes a checklist style approach, walking the user through the standard operating procedures at United Vision Logistics.

## **User Interface**

To achieve a successful training application, we worked with UVL to test each section of the project as an incremental prototype, revisiting the controls throughout the project. It was challenging as operators have different comfort levels for technology and we found by the end that the simulation could take up-to an hour for new users. We addressed this by continually simplifying controls, always displaying the control schema to the users, including voice over instructions, and removing unnecessary interactivity such as teleportation and movement where we could automate the process.

Sections of the Experience

- Introduction to UVL
- Inspection of the vehicle, trailer, and protective equipment
- Proper load securement including weight, tiedowns and chains
- Transportation requirements, and safety checks, while in transit to the client site
- Walk-through on the arrival and unloading of the vehicle

Interactions include

- Specialized vehicle inspection routines such as visual, and physical validation
- Connecting and validating tie-downs requirements for different loads
- Running chains between attachment points
- Learning how to properly center and maintain a proper load weight

We recreate the client site from on-site images and drone photography.

## **Audio**

- Audio focused on the areas of importance at the moment of execution to maximize the value of the tutorial.
- Voice overs were included as a tutorial element to help walk the user through interactions.
- Haptic feedback for controls and input for hands-on learning.
- Sound effects were used to deliver information, increase the production value, and evoke emotional responses. Sound effects were associated to the valves, transfers, and physics objects.



## **Outcomes**

Following the pilot program, United Vision Logistics intends to utilize our virtual reality solution for both their new driver training initiatives, and their continuous training programs. Following the successful testing at their Broussard, LA training facility, the experience is now planned for a nationwide release.

With VR as a focal point, UVL is planning to roll out their vehicle and safety training to internal drivers and third-party companies. The following subjects are expected to be added:

### **New driver training initiatives:**

- Fatigue Driving
- PPE Requirements
- Hazmat Training and Testing
- SWA (Stop Work Authority)
- JSA (Job Safety Analysis)
- OSHA Standards
- Cargo Securement
- Vehicle Maintenance
- HOS – Hours of Service
- Log Books
- Formal New Driver Orientation Class

### **Continuous training programs:**

- ProTREAD Online Training for Drivers
- Value-Driven Driving to Go
- Critical Crash Prevention
- Mandatory Safety Meeting Attendance
- CSA Reporting and Compliance
- Retraining Program



## CONTACT INFORMATION

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