Technical Proposal

VS600M

Virage Simulation is pleased to submit this truck simulator proposal to support your driver training activities. Our proposed training solution is the VS600M CDL Truck Driving Simulator with our unique proficiency-based CDL Golden Training Programs along with a full suite of training scenarios allowing for self-paced as well as instructor-led training.

The proposed VS600M includes the following advantages:

- The Virage Simulation award-winning and unique, evidence based, **CDL Golden Training Programs (Golden Shifting™, Golden Mirrors™, Golden Steering™, Golden Coupling/Uncoupling™, Golden Pre-Trip™, and the CDL Tests**) for CDL basic skills training**.**
- The most extensive CDL-specific Training Curriculum and Driving Scenario Library meeting the FMCSA ELDT requirements to support your training needs (basic skills training, driver safety training, etc.).
- **The most accurate transmission simulation and the most realistic and reliable shifter on the market. A maintenance-free system with realistic kick-back and vibration on the shifter. No gears, no wear!**
- Selectable transmission layout and gear ratios with accurate RPM gaps between gears (any Eaton-Fuller transmission)
- Selectable manual or automatic transmission including the new AMT (Automated Manual Transmission).
- Simulation of the **air brake system with animated, interactive schematic** and the capability for the instructor to insert faults into the system
- The latest visual display technology using 4K, ultra-high-definition, 3840 x 2160 pixels commercial grade displays for higher durability, longer lifespan and superior brightness levels to withstand constant usage
- The best visual scene realism for superior distance and speed perception
- A full three axis motion/vibration system integrated into the cabin.
- As well as our unique **Driving Efficiency Training Program** to teach how to drive in a more energy efficient manner (EV and Internal Combustion Engine vehicles).

Virage Simulation's driving simulators will provide you with ten years or more of effective training. Our customer service team will always be there to support the equipment throughout its lifetime.

Virage Simulation is the only driving simulator manufacturer on the market to offer the evidence-based Golden Training Programs. Several independent validation studies of the VS600M training programs demonstrated that compared to traditional in-truck instruction, students can learn CDL skills up to 2 ½ time faster with the VS600M simulator-based programs. In 2018, these studies were reported in a scientific publication that won the Deborah Freund Best Researched Paper Award from the Transportation Research Board (TRB) in Washington, DC. A short video presentation of our VS600M is available online at https://viragesimulation.com/promotion.

Throughout the US and Canada, Virage Simulation has been the most sought-after simulation training solution for hundreds of high schools, Community Colleges, Technical Colleges and private training schools. What discerns the Virage systems from others is not only the range of systems to meet any budget but more importantly the evidence-based training curriculum giving the best value while training tomorrows drivers.

The largest fleets such as Knight-Swift and US Xpress, are also counting on the Virage Simulation VS600M and its advanced programs to train their new and professional drivers in their training centers throughout the US.

Flexibility is built into our simulators. The VS600M is easily upgradable with additional vehicles and training programs such as School Bus training, Solid Waste Management training, Snowplow training, Defensive Driving training, and more as your training demands evolve.

Virage Simulation training solutions are listed on several government cooperative purchasing systems to facilitate the purchasing process. Refer to the “How to buy” section of our web site for more information.

Our company, team, technology, and our proposed training solution is presented in the following pages.

Virage Simulation is excited by the opportunity to earn your business and collaborate with you on this project. We hope that this will be the first step towards a long and successful cooperation.

Best regards,

Danny Grenier, Eng., MBA
President, Virage Simulation
85 Montpellier Boulevard
Montreal, Canada H4N 2G3
Phone: 514-856-1556 (103)
Danny.Grenier@VirageSimulation.com

Deborah Quackenbush
US – Business Development
Port Orange, FL 32128
Phone: 386-566-9449
Deborah.quackenbush@VirageSimulation.com

Virage Simulation is a proud member of NAPFTDS, CVTA, ATA, TCA, NPTC, ADED, TRB, NAPT, NASDPTS, Next Generation in Trucking, Women in Trucking, Canada Safety Council, APWA, ALERT, and IACP.

VS600M CDL Truck Simulator

December 5, 2025

85, Boulevard Montpellier
Montreal, Quebec, H4N 2G3
Canada
Tel: 877-456-1556
Sales@VirageSimulation.com

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1. Proposed system

VS600M CDL Truck Simulator

The VS600M CDL truck simulator is the industry standard in CDL entry-level driver training, the most complete and realistic truck simulator on the market that is used throughout the US and Canada. It includes the Community College preferred and unique Proficiency-based CDL Golden Training Programs™ (for shifting, backing, turns, coupling/uncoupling, brakes pre-trip, CDL test exercises) validated and demonstrated to train drivers 2.4 times faster than with a real truck. Features such as the Driver Tracker™ system enhances skill development, progress monitoring, and reporting capabilities. When combined with the Debrief Station™ for post-training analysis, these tools provide a comprehensive record of each driver's performance and progression. This integrated approach allows for data-driven insights and targeted improvement strategies. This is the best-value solution for CDL driver training.

1. **VS600M Truck Simulator** including:
   - Actual truck seat (air powered), three-point seat belt, steering components and controls, pedals and shifter knob
   - 10-, 13- and 18-speed manual transmission, 18-speed Eaton-Fuller shifter knob with selectable gear-ratio software
   - Selectable manual or automatic transmission including the new Automated Manual Transmissions (AMT)
   - Digital instrument cluster (LCD touch screen) representing the selected vehicle
   - Multi-function display (MFD) for vehicle and simulator controls from the driver station
   - Three-channel visual system, 180-degree forward field of view using 55-inch LED, 4K, 3840 x 2160 pixel, high-resolution commercial grade displays
   - Additional 60-degree “out-of-driver-window view” inset in left display for angle parking and alley docking
   - Simulation of the adjustable left and right side mirrors (standard + convex on each side)
   - Simulation of the two adjustable front mirrors
   - Adjustable (tilt-height) steering wheel with adjustable (to match selected vehicle steering performance) active force feedback (low-inertia, direct-drive motor) on the steering with mechanical hard stops mimicking a real vehicle steering wheel operation.
   - High-fidelity 5.1 3D Surround Sound System
   - Multiple tractor semi-trailer configurations including flatbed and tanker
   - Straight body truck
   - Dump truck
   - Pickup truck
   - Other vehicles in demonstration mode are also included

2. **Visual scenes** (includes different terrains with elevation, asphalt, dirt, snow cover, etc.)
   - Simton, our virtual city and urban area
   - Highway, expressway and rural highways
   - Simhill, mountainous roads with a variety of surfaces, e.g. asphalt, gravel, snow
   - Countryside (rolling hills)
   - Practice field
   - CDL test area

3. **Variable time of day, variable atmospheric conditions** including fog, rain and snow fall.

4. **Virage Simulation 3-axis motion/vibration system**
   The compact motion / vibration system provides pitch, heave and roll cues to the driver. The driver feels vibrations increase as the RPM drops when the clutch reaches the friction point. Road vibrations add realism and improve drivers' speed perception and adds psychological fidelity, increasing learner engagement and transfer of skills to the road.

5. **Virage Simulation Driving Scenario Library**

6. Our unique award-winning **CDL Proficiency-based Golden Training Programs:**
   - Shifting: The **Golden Shifter™**
   - Backing: The **Golden Mirror™**
   - Turns: The **Golden Steering™**
   - Coupling Procedures: The **Golden Coupling/Uncoupling™**
   - Air brake pre-trip inspection: The **Golden Pre-Trip™**
   - Skill assessments: **CDL Tests**

7. Plus the **Vehicle Pre-trip Inspection Training** tool is included in stand-alone mode with a VS600M simulator. This interactive tool gives students the ability to practice and learn the total truck pre-trip inspection as prescribed by FMCSA. Each element of inspection is easy to see and explained as the driver navigates around the "virtual" truck. An optional online version of the Pre-trip Inspection Training tool allowing to train anywhere (works on PC, MAC, pad and smartphone) is available. Request a quote.

8. **Air brake system** interactive schematic with an associated set of selectable brake and mechanical malfunctions (faults such as air leak, slow compressor, blown tire, etc.) corresponding to the pre-trip inspection

9. Includes an easy-to-use **Operator Station** including keyboard and mouse

10. **Driver Tracker (included with the Top-of-the-line package):** a tool to track and report the driver's skill-development performance and progress (see specification)

11. **Debrief Station (included with the Top-of-the-line package):** a visual and audio recording of the driver's training session to be used for debriefing during training or record keeping (see specification)

12. **One-year, bumper-to-bumper warranty on hardware and software including full support**

13. **On-site Installation, Technical and Train-the-Trainer Training (3 days) is included.**

2. Optional Features

Option 1. Support and Extended Warranty services

After the standard warranty period, an optional extended warranty with technical support is available.

The following options are being proposed:

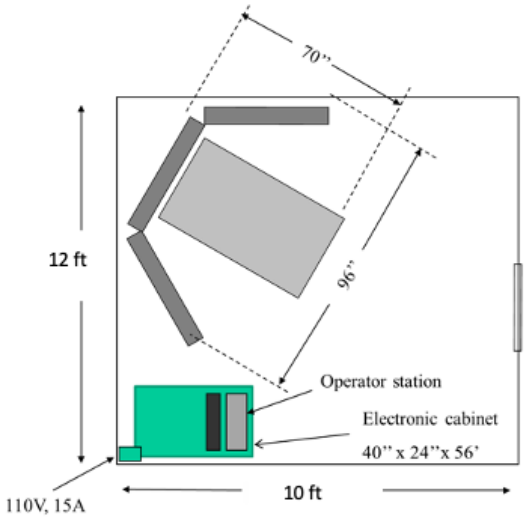
1. Technical support with extended warranty
2. Technical support with extended warranty and software upgrades
3. Technical support with extended warranty, software upgrades and an onsite preventive maintenance.

1. Technical support with extended warranty (TS + EW)	2. Technical support with extended warranty and software upgrades (TS + EW + SU)	3. Technical support with extended warranty, software upgrades and one annual preventive maintenance (TS + EW + SU+ PM)
- Unlimited online support - Unlimited mail support - Unlimited telephone support - Unlimited remote troubleshooting and support - Free remote computer connection software license - Software updates for bug fixes - Remote training as required - Remote maintenance - Equipment extended warranty.	- Unlimited online support - Unlimited mail support - Unlimited telephone support - Unlimited remote troubleshooting and support - Free remote computer connection software license - Software updates for bug fixes - Remote training as required - Remote maintenance - Equipment extended warranty - A minimum of one annual software upgrade - Access to new training programs at discounted pricing - Great plan for ensuring your simulator training programs are always up to date.	- Unlimited online support - Unlimited mail support - Unlimited telephone support - Unlimited remote troubleshooting and support - Free remote computer connection software license - Software updates for bug fixes - Remote training as required - Equipment extended warranty - A minimum of one annual software upgrade - Access to new training programs at discounted pricing - One annual onsite preventive maintenance - Travel costs for one yearly preventive maintenance is included - A full report indicating the current state of the simulator and any recommendations to ensure future simulator readiness for training - Best plan to fully maintain your simulator in working order and get the benefits of the new training programs being released.

3. Initial Setup

The initial on-site setup is included in this offer and will be performed by a trained Virage Simulation technician.

The VS600M is designed to operate from a standard 110V, 15A electrical outlet in a normal office environment. The equipment does not need special cooling, but the room ventilation system should be able to dissipate the energy generated by the simulator (1000 Watts while in operation). Virage Simulation provides electrical conversion transformers to support local power sources if different than the above. An internet connection is not needed for normal operations but is required by our technician to remotely connect to your simulator for support or updates.



The ideal space for this simulator is a 10 x 12 foot room. The following is a typical installation layout for the VS600M.

4. Training

The cost related to the on-site training is included in this proposal.

Technical training
The technical training will be conducted at the time of the simulator initial setup and is intended to familiarize the operators with the different simulator components and procedures for start-up and shutdown.

Train-the-trainer
The train-the-trainer training is also conducted at the time of the simulator initial setup and provides an introduction to the simulator technology and a review of the Virage Simulation driver training and evaluation scenarios provided.

5. Support and warranty

The warranty includes error corrections for the software and the repair or replacement of hardware parts broken under normal operations.

The support includes phone, email and remote troubleshooting and update capability. This service enables Virage Simulation's technicians to remotely access (permission required from

the simulator operator) your simulator for troubleshooting and maintenance. Through this capability Virage's technical staff can connect to your simulator to provide technical support and perform verifications as if they were on site.

6. Acceptance

Customer will sign a written acceptance certificate upon successful completion of the initial set-up.

Appendix 1 - Our Company

Virage Simulation
85 Boulevard Montpellier
Montreal, Qc
H4N-2G3

CDN 82053 7140
US EIN 98-1196369

Virage Simulation develops land vehicle simulators and associated scenarios and programs to aid in driver training and evaluation and human factors research. The company was founded in 2005 by six aviation simulator engineers from CAE with a combined experience of over 120 years developing multimillion-dollar simulator projects around the world. From our collective experience in aviation simulation, we created what we believe are the best simulators for reproducing driving environments and observing and measuring driver performance. Our product is improved continually by Dr Pierro Hirsch based on on-going research and through the guidance and suggestions of our expanding customer base. Dr Hirsch joined Virage Simulation in 2006. He has over 40 years of experience training novice and advanced drivers in basic and higher order driving skills and conducting research on driver risk taking.

In 2010, Virage Simulation was awarded the prestigious Alpha 2010 awards for the emerging entrepreneurs presented by the Chamber of commerce and industry of Saint-Laurent and in 2011, the TSX Award for Emerging Technology, given in recognition of the recent launch of its truck simulator.

Virage Simulation has delivered driving simulators to all corners of Canada and the United States. We have also delivered simulators in South America, Europe and the Middle East. Our simulators are used in driving schools for new and experienced driver training, and in research institutions, medical centers and large corporations to provide driver training or promote public awareness of driving risks like distraction and alcohol.

Virage Simulation takes pride in ensuring that our products exceed customer expectations and are used to their full potential. Our technical service team is dedicated to keeping the driving simulators operational at all times by providing support via telephone, email, and remote and on-site support as required.

Appendix 2 - Our Team

The following is a brief presentation of our team.

Danny Grenier, Eng., MBA – President

Co-founder of Virage Simulation, Danny is a professional engineer who graduated from the University Laval with a specialty in Computer Design Engineering. He is also a Concordia University 2004 MBA graduate.

Danny is a software specialist in real-time simulation and has held several different positions during his 16 years at CAE, including Systems Software Designer, Systems Group Leader, Software Systems Department Manager and Electrical Systems Department Manager responsible for over 100 software and hardware design engineers. Danny has also managed a simulated instruments manufacturing unit responsible for the production of low-cost replicas of aircraft instruments for simulator use.

At Virage Simulation, Danny has been responsible for the development of the simulator's hardware and software technology and its integration into the Virage Simulation products. He has also been responsible for the simulator manufacturing unit and deliveries as well as post-delivery customer support.

Rémi Quimper, Eng. – Business Development & Special Projects

Co-founder and former president of Virage Simulation, Rémi graduated as a professional engineer from l'École Polytechnique of Montreal and has a strong background in simulation and training from the aerospace industry. He has extensive experience in program management and for several years directed a group of engineers dedicated to the development of new simulation-based technologies and applications. His group developed a number of new products including the CAE Simfinity™, a simulation-based integrated training solution for the aviation industry. The Simfinity™ project was awarded several prestigious international prizes such as the Frost & Sullivan Technology, the Frost & Sullivan Product Innovation and the Pinnacle Award from Embry-Riddle Aeronautical University.

Rémi has been involved in all the development phases of the company and products at Virage. He was named Business Personality by the Chamber of Commerce of Ville Saint-Laurent in May 2010.

Pierro Hirsch, Ph.D. – Research and Program Development

Pierro joined the team at Virage Simulation in January 2006. Since 1976, he has studied the effects of driver training on driver behavior and crash risk from the multiple perspectives of driver trainer, teacher-trainer, driving school owner, training program developer, corporate consultant, and road safety researcher. Pierro completed his undergraduate degree at the University of California, Berkeley, a master's and Doctorate in Public Health at the University of Montréal and his post-

doctorate at the HEC Montreal. For his master's degree, Pierro studied the ability of professional driving teachers to predict the future behavior of their student drivers. His doctoral research focused on the factors associated with increased crash risk among 1,804 adolescent novice drivers during their first year of unsupervised driving. For his post-doctorate, he developed a driving simulator-based hazard response test.

Pierro is the author of many scientific publications on road safety and the use of driving simulation in driver training and evaluation. In 2017, he and his team of university collaborators won the Deborah Freund Paper Award from the Truck and Bus Safety Committee of the Transportation Research Board, National Academy of Sciences, for the article *Transfer of Training in Basic Control Skills from a Truck Simulator to a Real Truck.* He regularly presents the results of his research at academic and professional conferences. In 2018, Pierro was honored with the Distinguished Service Award by the Association for Driver Rehabilitation Specialists (ADED). He is a Board Member of the Canadian Association of Road Safety Professionals (CARSP) and a Member of the Committee on Operator Education and Regulation, ANB30, and the Standing Committee on Simulation and Measurement of Vehicle and Operator Performance, AND30, at the Transportation Research Board, Washington D.C. He is now applying his experience, knowledge, insight and passion for road safety towards the development of driving-simulator training and evaluation scenarios and programs.

Stéphane Desrosiers, Software Development

Graduate of the University of Quebec in computer science and a degree in adult education, Stéphane was the first full-time employee at Virage Simulation. Stéphane is responsible for the development of software applications and programming training and evaluation scenarios. With his expertise in Artificial Intelligence and programming, he is leading the development of sophisticated, interactive training and research scenarios with real-time monitoring and algorithm-based data analysis and reporting.

Francis Lareau, Integration and Customer Support

Francis has a diploma in Information Technology and Computer Applications and Support from the Saint-Jean-sur-Richelieu College, graduating in 2009. Before joining the team at Virage Simulation in 2014, he worked for two years as a technician in the IT department of the College and for three years as Programmer Analyst, developing software and providing customer service to aeronautic companies in the automation industry world-wide. Francis is now applying his excellent analytic and communications skills to driver-training program development and customer support at Virage Simulation.

Deborah Quackenbush – Business Development Consultant, US Operations

Deborah Quackenbush is a market expert in the implementation of driving simulation for training all types of drivers for close to thirty years. Throughout her extensive career, she has developed a far-reaching network of professional colleagues and has worked closely with businesses,

governments, educational institutions and communities to further safety and education for all roadway users. Deborah has worked in leadership positions with major simulation and defense contractors providing expertise in implementing virtual reality concepts for education, rehabilitation and assessment for military and driving simulation products.

In November 2011, Deborah joined Virage Simulation as their business development consultant/director for the United States. Her wealth of experience in product and business development and strong passion for road safety make her a great addition to the Virage team and an ideal liaison to Virage end users in the United States. Ms. Quackenbush is an active member of the National Academy of Sciences, Transportation Research Board serving on the Operator Education and Regulation Committee and the Simulation and Measurement Committee for over 20 years and currently on the Truck and Bus Safety Committee. She has been a subject matter expert contributor on several research projects and served on several national committees charged with writing standards for performance in education, training and assessment areas. Deborah Quackenbush was also a distinguished legislator from Broome County, New York being elected and serving in public office for eight years.

Appendix 3 - Our Strengths

Virage Simulation is a small, flexible company fully dedicated to building high-quality truck and car simulators for driver training, evaluation and research. Our strengths are our team, our technology and our training package.

Our Team

Presented above, Virage Simulation is an employee-owned company whose core business is developing leading edge truck, bus, special vehicles and car simulators and driver training and evaluation programs. This is what we do.

Our Technology

The VS600 and VS600M are the most realistic, immersive, and sophisticated truck simulators on the market.

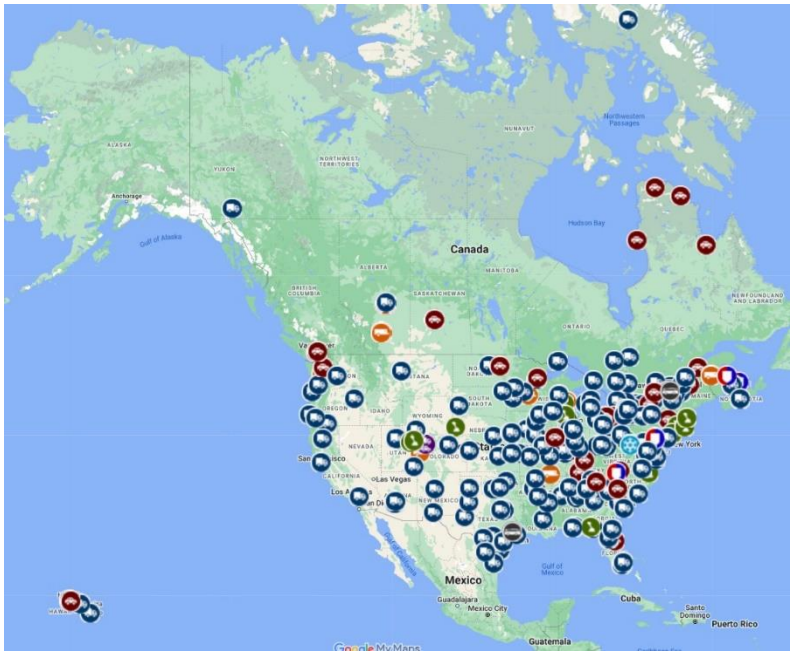
- Actual truck parts for the steering, steering controls (hazards, blinkers, tilt and height adjustment, trailer brake), seat, pedals and shifter knob
- Accurate simulation of the Eaton-Fuller non-synchronized transmissions (including all configurations and gear ratios) with accurate RPM gaps between gears
- Realistic force feedback on the shifter with vibrations and kick-back as in the real truck. A maintenance-free system using the latest technology in force feedback mechanisms. No gears, no wear!
- High-end, large visual displays provide viewing comfort and full immersion
  - High resolution 4K, (3840 x 2160 pixels per channel) displays.
- High quality visual scenes provide realistic cues for speed and distance perception.
  - High density (polygon count)
  - A large quantity of 3D elements
- Active force feedback on the steering wheel enhances the realistic feel of lateral control.
- Motion / vibration system integrated into the simulator platform (standard on the VS600M). The motion system adds to the realism of the simulator experience and provides additional cues for assessing speed. The amplitude and frequency of the vibrations vary with the speed and roughness of the road.
- Surround sound system provides feedback for engine RPM, vehicle speed and directional information from surrounding traffic. The sound system is also used to provide information and instructions to the driver during training.
- Complete simulation of the air brake system with animated schematic and the capability for the instructor to insert faults into the system. These faults should be detected by the driver if a proper pre-trip inspection is performed.
- Vehicle malfunctions

Our Training Package

- A full suite of driver training programs and CDL-specific, proficiency-based Golden Programs™, developed with leading experts and validated by independent researchers.

- Training scenarios with clearly identified objectives and performance measures.
- Fully documented scenarios with “Introduction Slide” and Instructor Guide
- Integrated Feedback System that includes
  - Objective driver performance measures
  - Driver Tracker to report the driver’s performance and progress
  - Enhanced Debrief Station for training session review
- Easy-to-use operator station to initiate and control the experimental drive, change atmospheric conditions and viewpoints, and to record or replay the simulator sessions. No computer knowledge is required to operate our simulator.

Appendix 4 - Our References



Wallace State Community College, Alabama

Wallace State Community College
801 Main Street, NW
Hanceville AL 35077

Ashley Baker
Center for Career & Workforce Development
Wallace State Community College
p:256.352.8386
c: 256.590.5171
801 Main Street NW, Hanceville AL, 35077
JBC Building; 11th Floor; Office 1110
www.wallacestate.edu/programs/workforce-development
ashley.baker@adjunct.wallacestate.edu

Jamie Blackmon
Contact on PO
Jamie Blackmon jamie.blackmon@wallacestate.edu

They purchased two VS600-M CDL truck simulators in September 2021.

Del Mar College, Corpus Christi, Texas

Lynette Cervantes
Director, Transportation Training Services
4101 Old Brownsville Rd.
Corpus Christi, Texas 78405
361-698-2707
credding1@delmar.edu

Del Mar has one VS600M installed in a trailer and five more for their training center.

Del Mar has previous experience with another simulator manufacturer and replaced them with the VS600Ms.

In 2012, Del Mar College was one of the first CDL public schools to integrate simulation-based driver training into their CDL program. Del Mar later purchased the Virage Simulation VS600M in 2016. In 2019, Del Mar College has added five more VS600M CDL truck simulators to their CDL training program two of which has been installed in the Del Mar mobile training classroom.

Hawkeye Community College, Cedar Falls, Iowa

Celeste Turner
319-296-4286
celeste.turner@hawkeyecollege.edu

Panoramic view of Hawkeye CC four VS600M simulator room
Hawkeye video: https://www.youtube.com/watch?v=punDmp1RFQo

Hawkeye has previous experience with another simulator manufacturer and decided to replace them with four Virage Simulation simulators.

Tallahassee Community College, Tallahassee, FL

Jessica D. Griffin
Program Coordinator - Information Technology & Professional Development
TCC's Division of Workforce Development

444 Appleyard Drive
Tallahassee, FL 32304
Direct: 850-201-8761
Office: 850-201-8760
Fax: 850-201-8617

Jessica has been using their VS600 since 2016 for the CDL driver training program.

Florida Department of Corrections
Santa Rosa Correctional Institution, FL

Brenda Powell-Roehrig
CTE Instructor

5850 East Milton Rd.
Milton, FL 32583
Phone: 850-981-5242
Email: Brenda.Powell-Roehrig@fdc.myflorida.com,

Brenda has just received her VS600M for CDL driver training in the corrections institution.

Skinner Transfer Corp, CDL Training, WI

Tim Kordula
Instructor/Administrator
2020 E Main street
Reedsburg, WI 53959
Phone: (608) 524-2326
Cell: (608)-717-7178
Email: timk@skinnertransfer.com

Tim was with Carl's Transport and has purchased two VS600M truck simulators, that are used in their CDL driver training program. This has been a game-changer for Karl's Transport school. Kim is

now with Skinner Transfer Corp and has one VS600M truck simulator used to train their new and experienced drivers.

Baker Technical Institute, Baker City, OR

Brody Charpilloz
Operations Manager
Heavy Equipment/Trucking School
Baker Technical Institute
2500 E Street
Baker City, OR 97814
541-524-2651
Brody Charpilloz <brody.charpilloz@bakersd.org>

VS600M in their supplied trailer. RFT (Ready for training date): Fall 2020.

Western Wyoming Community College, Rock Springs, WY

Paul Johnson
Associate Professor of Oil and Gas Technology
Business & Industry Division Chair
2500 College Drive, Rock Springs, WY 82901
307-382-1784
PJOHNSON@westernwyoming.edu

Qty 4 VS600M Del. Dec 2020, RFT Jan 2021

Western Dakota Technical Institute, Rapid City, SD

Jay Banick
800 Mickelson Dr, Rapid City, SD 57703
605-718-2990
Jay.Banick@wdt.edu

VS600M, RFT Oct. 2020

U.S. Xpress

Daniel Pemberton, CPTD
Vice President, Driver Onboarding
4080 Jenkins Road
Chattanooga, TN 37421

Office: 423.510.3610
Mobile: 423 322 3043
djpember@usxpress.com

U.S. Express selected Virage Simulation VS600M truck simulators for their new Professional Driver Development program.

The simulators are customized to look and feel like US Xpress trucks, simulating the latest Cascadia and Prostar, including new on-board technologies such as Lane Departure Warning and Collision Mitigation. The competency-aligned programs are used by the new CDL holders as well as the more experienced first-seat drivers. The driver training programs engage drivers' attention with stimulating feedback and guidance and include practice sessions for backing, a review of all basic truck maneuvers and advanced training in Defensive Driving, Crash Risk Mitigation, Adverse Weather, Hazard Perception and more.

US Xpress video: https://www.youtube.com/watch?v=JYdploCT7Ms

In an interview, Ralph Romero, Vice President of Organizational Development, said U.S. Xpress reached out to other fleets nationwide to learn about their driver training programs before developing their own approach and choosing Virage Simulation and its VS600M truck simulator. "We chose Virage Simulation as our Simulation Lab partner for the quality of their products, and especially for their research-based approach to driver training and their capability to customize their solution for our exact needs. We also wanted a simulator that would align with our key driver competencies and integrate seamlessly with our corporate data collection and reporting systems. It has been a real pleasure to work with the Virage Simulation team to get to this point. They exceeded our expectations in many areas especially with their 'augmented reality' feedback to the drivers for the basic maneuvers and their new Defensive Driving modules."

Knight-Swift

Knight Swift has been using the VS600M truck simulators for professionals sinch 2018 to train their drivers throughout the US. They have multiple simulators in over 12 locations throughout the country.

Knight Transportation Inc

20002 N 19th Ave
Phoenix, AZ 85027

Adam Johnson
Sr. Director – Top Gun
Office: (208)525-3005
Cell: (615)900-8352
Fax (623)487-6249
Adam Johnson Adam.Johnson@knighttrans.com

Appendix 5 - Conditions of sale

License

- Virage Simulation (Virage) hereby grants and Customer accepts nonexclusive licenses to the software components imbedded in the VS600M Truck Simulator (Product) as provided in this Agreement. Customer shall be permitted to use the Product for its internal business operations. Customer may not copy any of the Product or distribute or transfer the Product except as provided herein.
- Customer acknowledges that:

  i) the software programs included in the Product are the exclusive property of Virage Simulation or their respective manufacturers and suppliers and no ownership title is being granted to the Customer, or any other third party;

  ii) That the software programs included in the Product are subject to a restricted license whereby their use is restricted to the scope of the simulators being provided by Virage Simulation.

Customer's restrictions in the use of the Products

Customer shall cooperate with Virage to protect and enforce Virage's rights and title with respect to the Products.

i) May not sublicense any portion of the Product; or

ii) May not reverse engineer, decompile, disassemble, modify, translate, or copy, duplicate, reproduce for any other purpose than backup for archival purposes, make any attempt to discover the source code of the Product, or create derivative works from the Product.

iii) Should prohibit unauthorized copying of Virage's software and prohibit the transfer of the programs to any other system.

iv) Permit Virage the right of reasonable entry to visit and inspect Customer's place of business for the purpose of verifying, to the satisfaction of Virage, that Customer is performing its obligations under this Agreement.

Limited Warranties

A. Virage warrants that the Product, if operated as directed, will substantially achieve the functionality described in the documentation provided.

B. Virage warrants that, for a period of 12 months from time of Acceptance, the hardware manufactured by Virage shall be free from defects in material and workmanship under normal use and service. Parts broken under normal operation may be repaired or replaced at the option of Virage. This warranty shall not apply to parts that have been (a) subjected to misuse, neglect, accident, damage in transit, abuse or unusual hazard; (b) repaired, altered or modified by anyone other than Virage unless prior approval from Virage has been obtained. Off the shelf equipment such as displays, computers and other equipment purchased by Virage will be guaranteed according to the term of the specific manufacturer of the equipment.

   For the software and training scenarios, for a period of 12 months from time of Acceptance, Virage will provide the Customer with online support and error corrections.

Disclaimer

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A. In the event that Customer has failed to pay any amount when due, then Virage may notify Customer and if Customer has not paid the entire amount due within 90 days following such notice, then Virage may elect to terminate this Agreement.

B. Subject to any surviving obligations, Customer agrees that upon termination of this Agreement that Virage will be discharged from any further obligations under this Agreement.

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Any formal notice required by this Agreement or given in connection with it, shall be in writing.

Accepted **by:**

Name:

---------- Title:

Signature Date:

Appendix 6 – VS600 & VS600M Simulator Specifications

6.1 INTRODUCTION

This Technical Proposal describes the Virage Simulation *VS600* and *VS600M* truck simulator for driver training center and research facilities. The *VS600* is equivalent to a VS600M with smaller visual displays and without the motion / vibration system and additional options as described in this document.

6.2 THE CABIN/DRIVER CONTROLS

The VS600M truck simulator is modeled on a standard truck cabin. It consists of a fully functional pneumatic driver seat with all typical controls, a seat belt, pedals and a fully adjustable (height and tilt) steering column with integrated flashers and trailer hand brake.

A range of truck models, engine performances, transmission configurations, differentials and payloads is provided. The simulator reproduces realistic vehicle behaviors under different loading conditions and replicates the effects of gravity during hill driving.

The full set of dashboard instruments, gauges and warning lights are simulated graphically, allowing the user to select different truck types or cabin configurations without the need to change any hardware.

The Multi-Function Display (MFD) includes training aids such as:
a) Helicopter views of the vehicle progressing in its environment
b) Real-time, interactive, animated schematics of the pneumatic brake system
c) Interactive gear synchronization indicator

Simulator industry leading realism is achieved with a breakthrough, innovative design and accurate modeling of the manual transmission with realistic force feedback on the shifter. All gear ratios and transmission types available on the market can be simulated, including 4, 5, 6, 8, 9, 10, 13, 15 and 18 speed transmissions, with or without ranger and splitter.

Virage Simulation has created a new simulator industry standard with its gear shifter simulation. The force on the shifter varies as a function of the torque applied to the transmission. Pulling the lever gently before clutching or releasing the gas pedal allows for a smooth transition of the lever to the neutral position, as in a real truck. Improper gear synchronization results in realistic jerking on the lever and refusal to shift into gear.

The Virage Simulation Golden Shifter™ training package enables novice drivers to learn how to shift a non-synchronized transmission in only a few hours.

6.3 VISUAL SYSTEM

The visual system is a key component of the training simulator. A properly designed visual system increases the level of realism, provides accurate cues for speed and distance assessment and reduces Simulator Adaptation Syndrome.

The VS600M visual system comprises a 180-degree forward field of view plus rear view mirrors. The system consists of three high-resolution, 3840 by 2160 pixels 4K LED displays. The latest LED technology provides improved scene brightness, better contrast, longer life expectancy and lower power consumption. The displays are driven by the visual software at the native resolution of the displays ensuring the best possible image quality.

The 1:1 graphic-to-optic representation provides optimal perceptual cues for judging distance and speed. Objects in the visual scene move smoothly and continuously across the different display panels without distortion.

All six mirrors (normal, wide angle and front mirrors) are simulated as insets within the main screen and are fully correlated with the virtual environment. The window frames (physical frame) of the simulated vehicles and other components that mask the exterior view are reproduced graphically in the visual screens. This feature provides the driver with important feedback about the vehicle's position on the road and in relation to other road users. An additional side window view is simulated to provide realistic visual cues while backing at an angle.

The visual scenes reproduce city, highway, industrial, farmland, and mountainous environments in addition to a practice field. A full range of different road surfaces and adjustable weather conditions are included. A programmable virtual practice field increases the flexibility of your training options.

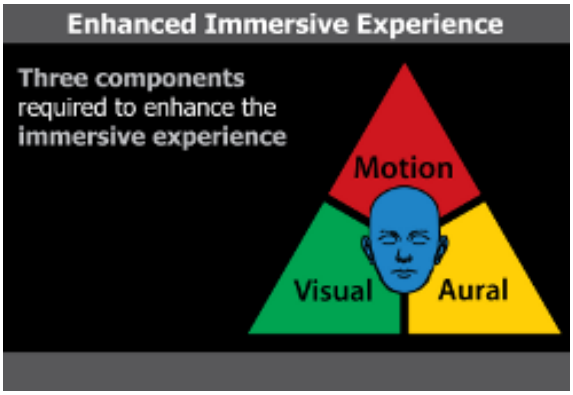
The high quality, stable, real-time rendering visual system uses a high polygon count, a large number of 3D elements such as poles, fences, road signs and optimized photo-textures with anti-aliasing and anisotropic filtering.

6.4 SURROUND SOUND

High fidelity surround sound provides additional realism with directional sound cues correlated with road conditions, engine RPM and speed. Sounds from other moving vehicles are simulated including the Doppler Effect.

The sound system also allows verbal instructions to the driver e.g. command, feedback, navigational directions

6.5 MOTION SYSTEM



Immersion in the virtual world is the key to training effectiveness. When the learner's attention is fully engaged in the training scenario, the lessons transfer to the real world and are retained longer.
Immersion is created by a combination of three sensory cues, visual, auditory and motion. The loss of one cue reduces the quality of immersion and training effects. Higher quality immersion is also associated with a reduction in Simulation Adaptation Syndrome.

A state-of-the-art motion / vibration system is a standard feature of the VS600M truck simulator (optional on the VS600). The combination of motion and vibration cues enhances the immersive experience and improve the perception of the vehicle speed.
The VS600M motion system consists of a compact, three-axis platform with electric actuators that provide cues for vehicle acceleration and deceleration, road curvature and obstacles such as sidewalks and pot holes. The system is capable of producing accelerations and vibrations at up to 100 Hertz and 1g.

The motion system is integrated under the simulator cabin. Vehicle engine vibrations are simulated as a function of the RPM. Vibrations from the tires on the road surface change as a function of the vehicle speed and road surface and are transmitted through the seat, steering wheel and the simulator platform.
For manual transmission training applications, the driver feels the vibrations under his foot as he releases the clutch slowly to the friction point and feels the movement of the vehicle.
The motion system is designed for a continuous, maintenance-free operation.

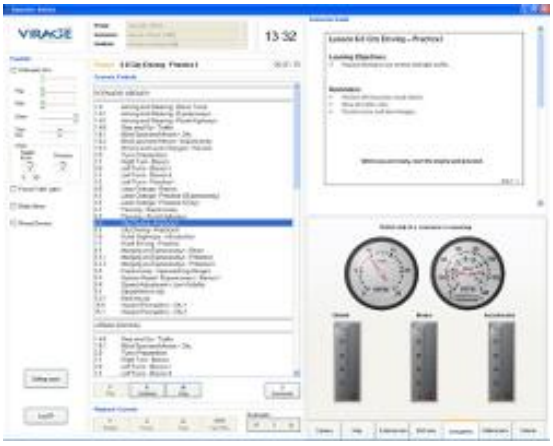
6.6 TRAINING PEDAGOGY

The aim of our VS600M truck simulator is to enhance training efficiency and increase retention with engaging and stimulating learning experiences.

What differentiates Virage Simulation and the VS600M is the training approach and extensive scenario library.

The training scenarios are based on research studies, consultations with industry experts and most importantly, feedback from our clients. Each scenario is aimed either at developing simple skills (part tasks) or combining these skills into complex skills (whole tasks). The Virage training program aims at assuring that each cognition and behavior in a complex driving sequence is understood and learned correctly, practiced extensively until mastery is achieved and then evaluated thoroughly.

The advanced technology of the Virage Simulation driving simulators makes this comprehensive training approach both possible and cost efficient. Our Instructor Guide documents the training objectives and performance criteria of each scenario in order to maintain consistent and uniform teaching standards between different trainers.



Training Control

Virage Simulation's operator station is designed for ease of use by non-technical personnel with the goal of creating a training environment where the instructor can concentrate on the training objectives and the learner's performance. At a click of the mouse, instructors can select the type of vehicle, load scenarios from the library, control objects, hazards and traffic control devices, initiate vehicle malfunctions and operate all simulator control tools.

Operator Station Features

The features of the operator station allow trainers to focus their attention primarily on observing their students' driving behavior in order to provide them with precise and timely corrections and coaching. Time of day and weather, fog, rain, snow, wind of variable intensities, are selected through a simple cursor. The helicopter view allows for a quick exterior view of the vehicle within the driving environment. The positions of the gas, brake, and clutch pedals and vehicle speed are monitored on the operator station display. Within each scenario, the instructor can, if he wishes, reposition both stationary and moving vehicles, pedestrians or objects, by simply dragging and dropping them on the map of the scene. The optional scenario-building tool enables instructors to create almost any scenario.

A camera captures in real time learners' head movements and eye-glance behavior revealing clues to the learner's situation awareness, hazard detection and decision making. The record and replay feature and alternative camera angles allow trainers to help learner's develop accurate mental models of vehicle-road-traffic interactions. Accurate mental models enable drivers to anticipate and react correctly to the vast majority of real and potential traffic conflicts they will encounter in the real world.

6.7 TRAINING PROGRAMS

The simulator scenarios cover basic driver training, evaluation and advanced training under different road, traffic and weather conditions. Lessons and objective evaluations can be performed with or without an instructor. Scenario design is based on proven pedagogical principles. Special attention is given to shifting, maneuvering in confined areas and advanced training such as energy efficient driving (ecodrive) and hazard perception.

The instructor guide describes the content and main teaching points of each scenario, including the objectives, principle actions within the scenario, specially programmed simulator features and evaluation criteria. This detailed information is automatically displayed on the operator station when a scenario is selected.

The scenarios in the VS600M library are designed to achieve training goals through simple and complex interactions with other road users, each programmed to occur at the proper time or distance from the learner driver. The careful scripting of these traffic events allows instructors to focus on observing and analyzing the learners' driving behavior and correctly distinguishing between errors of perception (identification of hazards) and response (prediction, decision and execution). These scenarios facilitate corrective feedback that is both accurate and meaningful to the learner.

6.7.1 Changing gears…. The Golden Shifter™ Training Program (Optional on the VS600, standard on the VS600M)

The Golden Shifter™ program consists of four interlinked modules designed to allow learners to achieve competence in shifting gears. Shifting tasks are segmented and learners practice each task in increasing order of complexity while receiving continuous feedback on their performance.

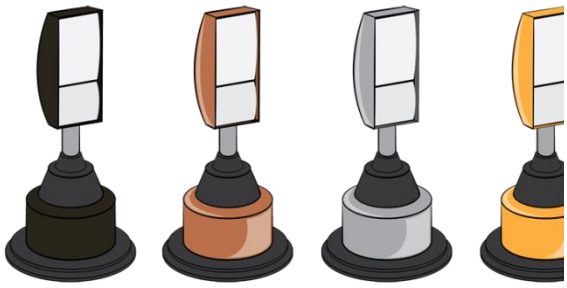
The Golden Shifter™ program was developed in cooperation with the “Centre de Formation en Transport de Charlesbourg” (CFTC) where seventeen VS600M simulators are currently in use. To date, learners and trainers have found the Golden Shifter™ experience to be the most engaging, stimulating and simple way to learn the complex task of shifting. The results at the CFTC have been so positive that the Golden Shifter™ diploma has become a prerequisite to driving the real truck.

The Golden Shifter™ is a competency-based program. Points are granted for each successful maneuver while a faulty maneuver generates instantaneous feedback to the driver and reduces the amount of accumulated points. The learner has to accumulate a predetermined score to obtain a certificate and progress to the next step.

The Golden Shifter™ consists of six modules.

Module 1, The Leather Shifter	Familiarization with the clutch pedal and the basic pedal – shifter maneuver
Module 2, The Bronze Shifter	Shifting Up
Module 3, The Silver Shifter	Downshifting
Module 4, The Golden Shifter	The last module is an evaluation scenario where the driver has to demonstrate his ability to adjust his speed according to the traffic and the road conditions.
Advanced challenge	As an advanced challenge, the driver practices shifting on hills with a full load.
Controlling the fuel pedal	A new exercise to prepare the new driver to downshifting by mastering the control of the engine RPM

6.7.2 Backing-up….. The Golden Mirror™ Training Program (Optional on the VS600, standard on the VS600M)



The Golden Mirror™ learning program for backing-up maneuvers was developed with the same training philosophy and methods as the Golden Shifter™ Program. The competency-based Golden Mirror™ program consists of five scenarios that progress from simple straight-line backing with a tractor only to a comprehensive exercise during which the driver has to park the trailer from a 90 degree or 45 degree approach.

During this program, a frame-by-frame replay of the manoeuver is available to help the driver to understand his mistakes and correct them.

As a complement to the Golden Mirror™ Program, specific scenarios have been designed to simulate the CDL test. Other scenarios have been built to challenge the most experienced drivers.

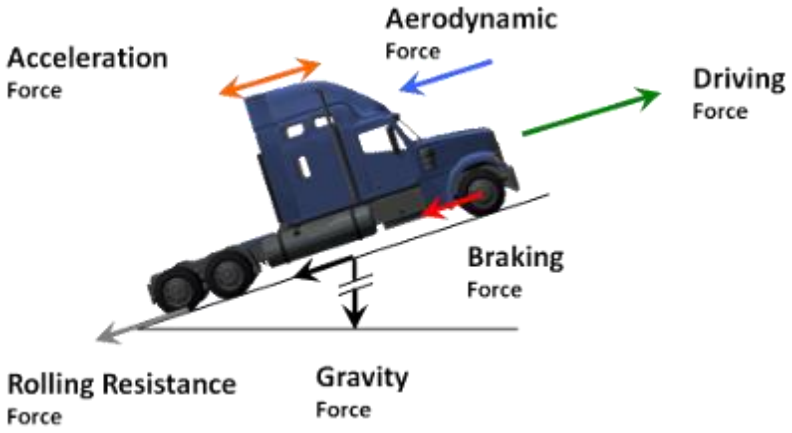
6.7.3 Maneuvering in the city….. The Golden Steering™ Training Program (Optional on the VS600, standard on the VS600M)

The learner is first guided through the different phases of a turn, with a focus on reaching the turn at the proper speed, the correct gear ratio in order to have full control of the vehicle during the turn. The Golden Steering™ learning program consists of four scenarios which include a range of different configurations of left and right turns followed by a full evaluation.

Feedback is automatically provided to the driver as he progresses through the scenarios. For the final scenario, the driver is evaluated through a series of intersections. All critical elements are evaluated, i.e. approach speed, gear ratio, smoothness of the maneuver, lane choice and position of the tractor and the trailer. Feedback is also provided on the quality of shifting.

6.7.4 Ecodrive - Fuel Efficiency (Optional on the VS600, standard on the VS600M)

Ecodriving is a new set of driving skills designed to systematically reduce the financial costs and ecological impact of driving. Travel time is not increased and may even be decreased with ecodriving techniques. Ecodriving is also associated with improved road safety. There is an apparent lack of ecodriving skills among professional drivers. Research indicates a difference of up to 35% in fuel efficiency between the best and worst drivers in an average fleet. Research also indicates that driver fuel efficiency improves in the range of 5% to 20% following training. With rising fuel costs, the potential return on investment for a fleet-wide ecodrive training program is definitely worth considering.



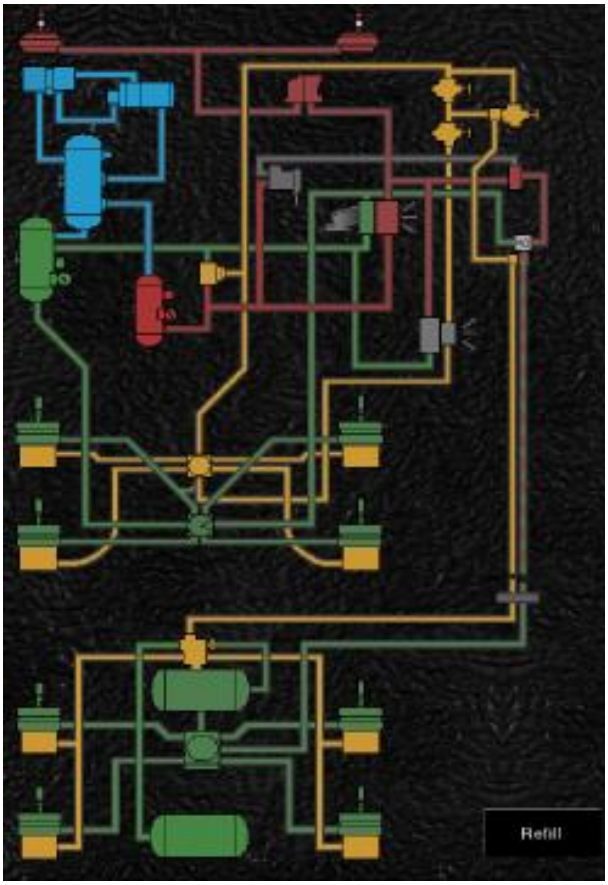
The Virage Simulation Approach to Ecodriving

The Quebec government mandated Virage Simulation to develop an ecodriving training program for professional drivers of all types of vehicles. We reviewed the existing approaches and decided to focus on two basic questions: What causes a vehicle to consume fuel? What can the driver do to reduce it?

We programmed a series of learning scenarios to help drivers understand the physical forces that cause a vehicle to consume fuel: rolling and aerodynamic resistance, inertia, braking and gravity. As the learner drives, each physical force acting on his vehicle is represented graphically on the front display. The driver receives immediate feedback on the relationship between these physical forces and his own actions on the gas and brake pedals. This direct, experiential learning bridges the gap between classroom or on-line theory and on-road practice and helps drivers understand the whys and hows of fuel efficient, ecodriving habits.

The ecodriving scenarios are designed for maximum flexibility of use and may be delivered in multiple formats ranging from one-day theory and practice courses for groups of four, to half-day programs, to one-hour lessons in specific topics such as how to manage accelerations. A 20-minute Express training for up to ten participants at a time is also available and can be used as an introduction to an ecodrive competition where each participant measures their ecodriving score against the rest of the group. The 20-minute Express training activity is ideal for raising employee awareness of fuel efficient driving skills within a business enterprise.

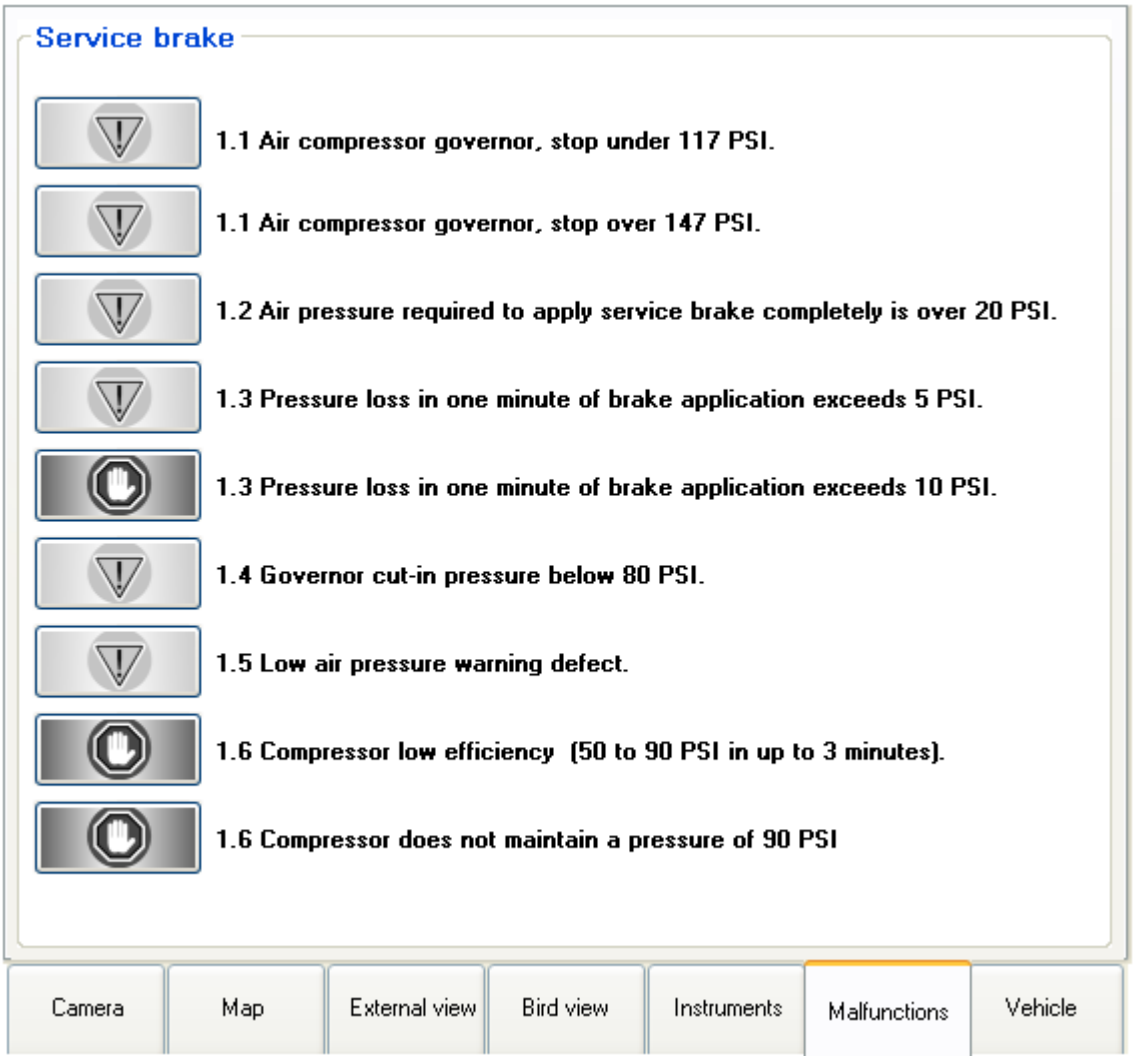
6.7.5 Pneumatic brake system active schematic (Optional)



The pneumatic brake system schematic provides a real-time, fully interactive and complete representation of the vehicle braking system. As the learners operate the brakes of the truck simulator they will feel the consequences of their actions and have a detailed view, unavailable to them in the real truck, of how the braking system functions.

Combined with the truck instrumentation and a training program to test learners on their understanding of system malfunctions, our pneumatic brake system schematic offers the ideal solution to help learners become proficient at performing thorough pre-drive checks.

The following malfunctions are available from the Instructor station and should be detectable by the driver during the pre-trip inspection.



6.7.6 Pre-trip inspection (Optional)

The pre-trip inspection module is a software program that can run on a personal computer. It was developed with the cooperation of the Centre de Formation en Transport de Charlesbourg (CFTC) to help the novice driver learn and memorize the pre-trip inspection contents and sequence.

This program can be used by the instructor for a classroom session or provided to the students for self-paced practice and can be customized as required to meet a training school or fleet's specific requirements.

6.7.7 Student / Driver Tracker (Optional on the VS600, standard on the VS600M)

The Driver Tracker represents the latest development at Virage Simulation. It is a tool to help instructors and training center managers to oversee the progress of their drivers. It provides an overview of the training sessions performed by each driver, the level of completion and the associated scores where applicable. Clicking on the displayed information provides more detailed information. This drill down approach allows for ~~a~~ quick access to all the information captured by the simulator in an understandable format while keeping an overall view of the group and the learner's overall progression.

As some scenarios can be used for practice without supervision of an instructor, the instructor can easily monitor the progress of the driver. A slower than average progression will be automatically flagged in yellow or red on the Driver Tracker. The following figure shows a typical layout of the Driver Tracker for a truck driver training center. The layout can be customized as required.

Virage Simulation
Student Tracker

Help

Student Id			Golden Shifter					Golden Mirror						Golden Steering					MDA		Usage	Notes
Name	Group	Sim	1	2	3	Eval	Mins	1	2	3	4	5	Mins	Prep	L	R	Eval	Mins	1	2	hrs	Notes
Bean Roméo	Gr12	S2					121						-					-			3.2	
Bernier Denis	Gr12	S2					87						-					-			3.2	
Caron Paul	Gr12	S2					141						-					-			3.2	
Dean Bob	Gr12	S2					101						-					-			3.2	
Bean Roméo	Gr12	S2					121						-					-			3.2	
Bernier Denis	Gr12	S2					87						-					-			3.2	
Caron Paul	Gr12	S2					141						-					-			3.2	
Dean Bob	Gr12	S2					101						-					-			3.2	
Trudeau Stéphane	Gr12	S2					224						-					-			3.2	
Lamarre Jules	Gr13_1	S2					91						43					-			3.2	

By clicking on the information displayed on the tracker, a detailed report for that scenario is displayed. The following is an example of a detailed report for the Golden Shifter.

Silver shifter

Student name :	**Smith, John (ID29_ST3)**
Group :	**GR_027**
Simulator / car :	**Simulator**
Instructor :	**Peter Jackson**
Trial date :	**2012-03-10, 09:55:25**

	Candidate		Group
	2012-03-10	**All sessions**	**All sessions**
Number of sessions	-	6	6.3
Maximal level obtained	52%	52%	92%
Total time	14m 30s	1h 24m 11s	1h 50m 05s
Number of gear changes done	117	982	1454
Number of gear changes succeeded	94	602	1124

	Errors					
Gear changes	**Out**	**In**	**Out**	**In**	**Out**	**In**
Clutch too deep	13	1	280	50	60	20
Brake clutch reached	0	0	0	10	15	0
Clutch not deep enough	0	0	0	0	10	0
Gear change without clutch	2	0	15	0	0	10
Incorrect tempo	0		5		15	
No double clutch	2		0		5	
RPM too high	2		2		110	
RPM too low	0		5		10	
Engine not stabilized	0		8		5	
Incorrect sequence	0		5		15	
Unnecessary stop	1		0		5	
Starting Sequence						
Brake released before friction point	0		0		20	
Accelerator before friction point	0		0		30	
Total :	**21**		**380**		**330**	

In addition to the above information, the Driver Tracker provides detailed statistical information on the usage of the simulator. Information can be filtered by driver, by instructor or simply used to show the global usage of the simulator.

6.7.8 Debrief Station (Optional on the VS600, standard on the VS600M)

The VS600M comes standard with a record and replay function that allows the session to be replayed in the simulator. The debrief station is an optional tool that captures the visual environment, the driver's facial expression, pedals position, speed, RPM and other parameters specific to the simulator scenario being driven. Automatic bookmarks are triggered by the simulator scenario, manual bookmarks can be inserted by the instructor at a click of the mouse. The bookmarks allows to find the pertinent information quickly during the review. The video recorded using the Debrief station can be replayed on any computer or using Virage's provided enhanced viewer. The enhanced viewer allows for a rapid zooming to the area of interest and replaying that portion in slow motion or even frame by frame, back and forth.

The debrief station has the following function and features:

Dedicated monitor/screen

- Records every session automatically
    - Exact replica of the three front driver screens plus mirrors
    - Bird's eye view drive
    - Instrument cluster of vehicle
    - Facial expressions
- Automatic bookmarking from the scenario and manual bookmarks from the instructor
- Creates a video which can be replayed anywhere on any system or with the Virage's enhanced viewer
    - Easy and intuitive operation
    - Rapid zooming to what you want to look at
    - Rapid jump/selection to the bookmarks
    - Frame by frame review
- Excellent proof…. of driver response and what happen
- Excellent tool to enhance your classroom or private consultation (record the expert, record mistakes and replay for discussion).
- The best tool to debrief with the driver after a scenario.

6 AFTER SALES SUPPORT AND SERVICE

Technical Training

Technical training will be conducted at the time of the simulator installation and is intended to familiarize instructors and operators with the different simulator components and procedures for start-up and shutdown.

Train-the-Trainer

The Train-the-Trainer program is aimed at the instructor and provides an introduction to the simulator technology as a training tool. The training is scheduled over three days and includes a detailed review of the training simulator scenarios provided.

One-year warranty bumper-to-bumper

The warranty includes error corrections for the software and repair or replacement of parts broken under normal operation for the hardware. Hardware items that need repair must be returned to Virage at the customer's expense. Travel costs, if required, in connection with the warranty, are paid by Customer.

The warranty includes our remote troubleshooting and update capability. This service enables Virage Simulation to remotely access (permission required from the simulator operator) your simulator for troubleshooting and maintenance purposes. Through this capability, Virage's technical staff can connect to your simulator and perform the verifications as if they were on-site.

Yearly support & extended warranty & update services (Optional)

The first year of simulator support and warranty is included in this proposal. After this period, Virage Simulation offers an optional yearly technical support and extended warranty service.

Services offered:

1. Technical support with extended warranty
2. Technical support with extended warranty and software updates
3. Technical support with extended warranty with software updates and an onsite preventive maintenance

A summary of our services:

Technical support with extended warranty (TS + EW)	**Technical support with extended warranty and software updates (TS + EW + SU)**	**Technical support with extended warranty, software updates and one annual preventive maintenance (TS + EW + SU+ PM)**
• Unlimited online support • Unlimited mail support • Unlimited telephone support	• Unlimited online support • Unlimited mail support • Unlimited telephone support	• Unlimited online support • Unlimited mail support • Unlimited telephone support

• Unlimited remote troubleshooting and support • Critical software bug updates • Equipment extended warranty.	• Unlimited remote troubleshooting and support • Critical software bug updates • Equipment extended warranty • Annual software update • Access to new training programs at discounted pricing • Great plan for ensuring your simulator training programs are always up to date.	• Unlimited remote troubleshooting and support • Critical software bug updates • Equipment extended warranty • Annual software update • Access to new training programs at discounted pricing • One annual onsite preventive maintenance • Travel costs for one yearly preventive maintenance included • A full report indicating the current state of the simulator and any recommendations to ensure future simulator readiness for training • Best plan to fully maintain your simulator in working order and get the benefits of the new training programs being released.

All travel costs (except for the annual Preventive Maintenance visit) in connection with these services are to be paid by the customer while all labor costs are covered by Virage Simulation.

Annex 1 - VS600-VS600M scenarios and training programs

The VS600-VS600M scenarios and training programs cover the following subject areas:

Unsupervised Driving: City, expressway, rural, mountain (various seasons/conditions), and countryside scenarios.

Winter Driving: Specific training for winter conditions in city, highway, and rural environments.

Practice Park: Serpentine maneuvers, backing up, angle parking, loading dock approach, and corridor navigation.

Basic Steering & Traffic: Aiming, turning, stop-and-go in city and rural environments.

Mirror & Blind Spot Training: Distance, speed, and lane change review using mirrors.

Turning Fundamentals: Preparation, basic right and left turns with practice exercises.

Lane Changing & Passing: Basics and practice on expressways and rural highways.

City Driving: Practice scenarios in urban environments.

Rural Highway Driving: Introduction, practice, and topography awareness.

Expressway Merging: Basic techniques and practice exercises.

Speed & Space Management: Adjusting speed in low visibility (fog) and experimentation with space.

Hazard Perception: Identifying hazards in the city and understanding move-over laws.

Observation & Vigilance: Challenges to improve eye movement and overall observation skills.

Eco-Driving/Fuel Management: Interactive presentation, natural forces, acceleration effects, and group challenges.

Basic Skills Program: Shifting, backing up, and making turns with real-time feedback.

Advanced Driving: Hill driving with loaded trucks, lane change training, skid pad exercises, and expressway merging.

Driver Assist Technologies: Integrated presentation and practice with vehicle technologies.

Golden Shifter Training (Optional): Clutch movement, upshifting, downshifting, RPM stabilization, gear recovery.

Golden Mirror Training (Optional): Backing up and parking exercises for tractor-only and tractor-trailer configurations.

Golden Steering Training (Optional): Turning exercises with evaluation levels.

Coupling/Uncoupling (Optional): Practice, guided practice, and performance-based practice.

Air Brake Pre-Trip Inspection (Optional): Brake system inspection training.

CDL Test Practice (Optional): Performance-based practice for alley docking, offset backing, and parallel parking.