

MAINTENANCE SOFTWARE: Streamlining Shop Tasks

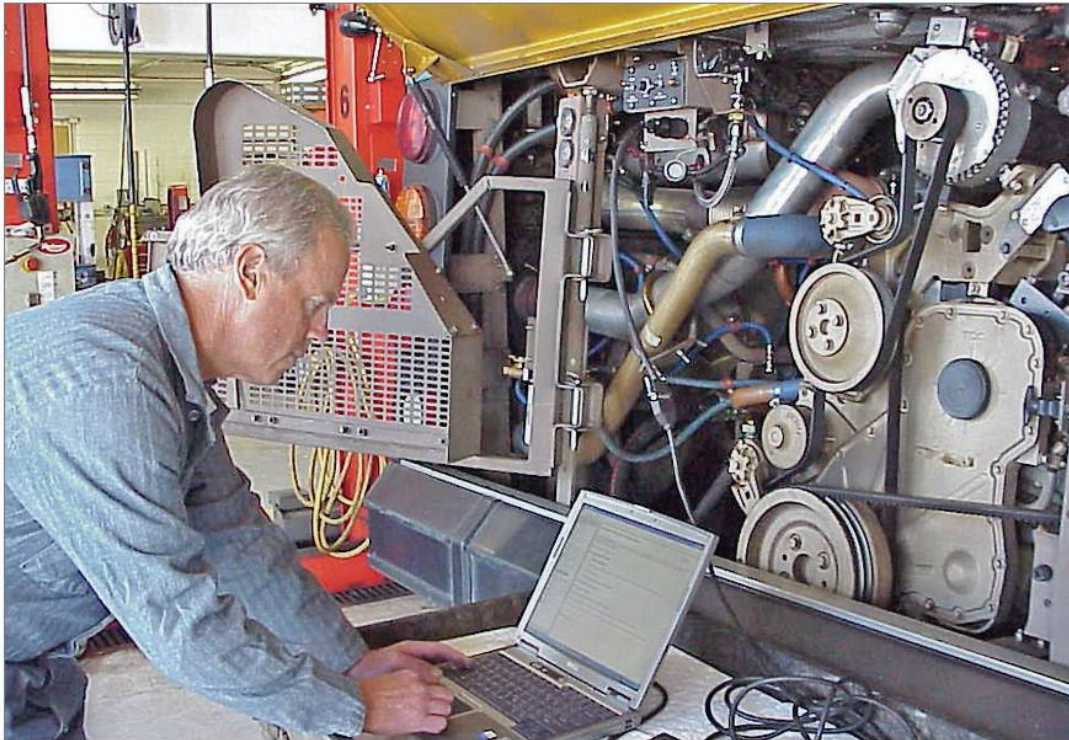


Photo credit: King County Metro Transit

Maximus

www.maximus.com

Maximus' complete transit solution software, Fleet-Focus FA, covers a comprehensive spectrum of fleetware, such as asset management, work order management, inventory control, mobile computing, purchasing and labor management, as well as scheduling and ad hoc reporting.

For smaller transit organizations, or even various larger ones that have a million tasks to complete, Maximus offers an extended hand.

"We offer to host the software for the customer," says Maximus' **John H. Hines III**, president of marketing division. A Maximus host is ideal for transit and rail operations that don't have enough time or personnel to watch over the fleet data.

Clever Devices' AVM system is considered the backbone for on-vehicle operations, automatically

Highlighting some of the latest PM scheduling solutions that help make fleet maintenance easier and more efficient.

Valdas Karalis,
Editorial Assistant

collecting operational performance data and exporting this data to Maximus. Fleet-Focus FA accepts this information and uses it to automatically generate work orders and schedule preventative maintenance programs.

Highlights of asset management include equipment records covering the item types, serial numbers, model number/IDs, manufacturers, purchase/lease dates and locations. It also provides warranty information on all equipment units and components.

The solution enables users to view all work orders assigned to an individual, identifies work as warranty or non-warranty and uses bar code support for labor and parts data.

The full life-cycle component uses PM scheduling to keep warranties in affect and avoid expensive fleet-wide repairs.

TRANSFORMING THE WAY YOU **VIEW** YOUR BUSINESS



HIGH-QUALITY MOBILE VIDEO. Fast wireless system access.

Integrated GPS and vehicle data. R⁵ Mobile Suite provides remote multi-vehicle management, wireless system diagnostics and automated downloads. March Networks™ software and digital video systems are providing transit authorities around the globe with the performance and reliability they demand. Visit our website to learn more.

R⁵
VISUAL
INTELLIGENCE



www.marchnetworks.com
1.800.563.5564

Morris, business director for Hansen Transit and Rail.

On the infrastructure of transit and rail operations, Spear 3i uses a stethoscope to listen to buses and then uses its technologies to tap into the buses' mainframe. Once connected, the solution watches over the fleet and begins to manage bus movement in real-time through equipment scheduling and transfer processes.

The technology also looks after the release of vehicles and provides key performance indicators, such as counts of vehicles by type and operating status.

When a part is removed from one bus, rebuilt and installed in another, Spear 3i tracks all of the part's movement and carries over all equipment readings for future use.

Another key function is its intelligent alarm reading system, which enables specification of reading limits and setting of alarm triggers. These alarms will be set off at crucial points when the buses are affected by

mileage, hours, temperature, oil pressure, voltage, brakes, fluid consumption, or other factors. The goal is to completely eliminate human error through manual data entry by automatically obtaining the readings with onboard event recorders and fluid management systems.

"Previously PM inspections were set up every two weeks and sometimes were late depending on what route buses were assigned and how many miles the buses would run on a daily basis," states **Ann Warrington**, maintenance planner for the **Kansas City (Mo.) Area Transportation Authority**. "Now all of our inspections are being performed on time."

Another Spear 3i hardware option geared toward assisting workforces is the Spear TouchPoint System. This option allows mechanics to work easily with stations that are similar to the touch screen kiosks used at airports for flight check-in.

TouchPoint enables workers to walk up, clock in, manage time and deci-

pher workloads without using a PC or clicking a mouse.

These kiosks tap into what needs to be done and makes it easier for employees to complete the job quicker. TouchPoint even enables on-the-fly parts ordering to help speed-up parts delivery.

Back in 2002, San Francisco's **Muni** paid nearly \$4 million for the software license, maintenance agreement and implementation services.

"Our seven maintenance divisions have standardized their approach to maintenance activities as a result of the Spear 3i technology," says **Jannet Thoms**, Muni's chief information officer. "Our mechanics are recording their repairs and inspections, researching vehicle repair history, using online check sheets and schematics and are more productive."

Clever Devices

www.cleverdevices.com

Clever Devices produces intelligent fleet management software called Au-

meister

**There is no substitute for
EXPERIENCE!**

- SERVING THE TRANSPORTATION INDUSTRY FOR OVER 30 YEARS
- OVER 20,000 COMMUNICATIONS PRODUCTS IN PROVEN SERVICE

- ✓ CCTV SYSTEMS FOR BUS & RAIL
- ✓ LED & LCD DESTINATION SIGNS
- ✓ NEXT-STOP ANNUNCIATION SYSTEMS
- ✓ PASSENGER VISIOTAINMENT SYSTEMS
- ✓ TRAIN-TO-WAYSIDE SYSTEMS (TWC)

Tampa:
meister electronics, Inc.
4801 George Road, Unit 120
Tampa, FL 33634 / USA
Phone +1 813/886-7797
Fax +1 813/886-7805

Cologne:
meister electronic GmbH
Kölnler Str. 39-45
D-51149 Cologne
Phone +49 (0) 22 03 17 01-0
Fax +49 (0) 22 03 17 01-30

**MEET US IN
SAN JOSE**

meister
Your Global Partner for Public
Transport Information Systems
Tampa/USA • Cologne/D • Berlin/D



Spear 3i's product suite, featuring an intelligent alarm reading system that uses onboard event recorders and fluid management indicators, has helped the Kansas City Area Transportation Authority stay on top of scheduled PM inspections.

automatic Vehicle Monitoring (AVM). Since 1987, Clever Devices has believed that now more than ever people need to have transportation choices other than driving a car. The AVM technology keeps transit systems on their feet and fully functional.

AVM seamlessly integrates with all on-vehicle systems through the Clever Devices Intelligent Vehicle Network (IVN) controller, providing a single, common source of obtainable diagnostic data. The AVM system collects and reports on fault and operational data from on-board systems such as the engine, multiplex or transmission.

When an AVM-equipped vehicle is in range of the Clever Devices BusLink wireless LAN located at the depot, all fault and operational performance data is transmitted to the BusLink Server, where it is loaded into the AVM database for instantaneous processing and analysis.

Maintenance personnel are notified of fault conditions on-screen via

the AVM Client software, as well as through automatically generated e-mail reports or printouts. The software is logically organized to display all of a fleet's AVM-equipped vehicles in a single window.

The system allows users to customize views of information by selecting different levels of grouping and filtering and can be interfaced with existing Maintenance Management Information System (MMIS).

Vehicle health is graphically displayed, using AVM Client software's color-coded status icons. Detailed views of information are modified to transfer from single-vehicle analysis to fleet-wide condition reports.

"As these buses become more complex, they become harder to maintain," says **Joseph Saporita**, AVM's product manager. "We are integrated into all these systems and monitor them to make sure they're working properly."

At many stations spotters are used to check buses as they return to home

base. AVM assists them by automatically printing out the status of each bus at the time of pull-in. These printouts allow the spotter to triage the bus and let maintenance know exactly what problems to look for and where, like nurses giving patients x-rays in a hospital.

AVM has benefited the **Washington Metropolitan Area Transit Authority (WMATA)** by freeing up manpower to help make repairs and identify potentially serious problems before they occur.

"WMATA is using new technology to perform inspections of key components and systems without using manpower," says **Phillip C. Wallace**, the agency's general superintendent.

Vehicles equipped with camera setups, event data recorders and brake monitoring systems can have those systems monitored to ensure they are functioning properly before being placed in service. Similar to a black box on a plane, event data recorders allow re-creation of an accident scenario in cases where a transit authority might be held liable.

Once hooked into the monitor, the buses continue to communicate with the operating mechanic to go more in depth on safety precautions. AVM examines the brake-monitoring systems to watch over dangerous items such as a dragging brake, a common cause of bus fires. Climate control and supplemental heating systems are also closely observed on all buses to ensure rider comfort.

For buses equipped with Clever Devices' CAD/AVL solution, CleverCAD, vehicle status can be sent to a radio dispatcher in real time. This information



**Total Accessibility
Solutions for Over 30 Years.**

1-800-322-2884 ■ www.riconcorp.com



INNOVATION IN MOBILITY™

can enable agencies to provide immediate assistance in case of breakdown.

Chevin Fleet Solutions

www.chevinfleet.com

Chevin's FleetWave is a true, Web-based management system that can be accessed from anywhere in the world at anytime. The only requirement to view the system is an Internet connection. The software is ideal for larger fleets with multiple locations and operations.

Launched in 2001, FleetWave provides users "live" up-to-date information, giving customers real-time data from status and compliance reports. Users can add their own text, various fields, calculations and corporate branding.

A unique feature of FleetWave is its multi-level password-controlled system access. By applying passwords, personnel can be limited to certain screens, administrative functions, and if necessary, specific fields.

The solution offers a driver portal, allowing managers to provide remote users with limited access to the system to update specific data without having to navigate the entire system. With the ability to validate data entered within the system, FleetWave helps to eliminate data abuse, such as entering faulty mileage and fuel readings and allows the entry of accident claims from anywhere.

It can also quickly identify warranty claims, check the status of fleets as a whole and view stock levels at other depots. Reminders are sent automatically to users via e-mail or text messaging to alert personnel of overdue tasks and warnings that need to be attention to.

Chevin automatically expenses tires, fluids, parts and many other items. It also reports on mechanic proficiency; tire mileage; inventory minimums and maximums; and individual bus performance levels, regarding fuel consumption, oil consumption and repairs.

The company's suite of fleet management software is designed for complex transportation operations that want to gain operational control of its fleet. Identifying problems at an early stage and increasing cost awareness to avoid loss is key in bringing results quickly and efficiently to fleets everywhere. **M**

Think FMVSS 302 Protects Passengers and Equipment?

THINK AGAIN!



F.R. Cushioning
(meets FMVSS 302)



CR SAFGUARD™ XL
Fire-Resistant Cushioning

Both seats above were subjected to BS 5852 Source 2 Ignition.

SAFGUARD™ XL Fire-Resistant Cushioning...

- Complies with advanced F.T.A. fire safety criteria.
- Minimize risk and liability related to vehicle fire safety.
- O.E.M. and maintenance seat retrofit applications.

Call for specifications. Easily added to seating requirements within vehicle bid packages.



Chestnut Ridge
Foam, Inc.

Telephone: 800-234-2734

Fax: 724-537-9003

e-mail: crfoamsales@verizon.net

MAN Axles - Innovation and engineering



www.manaxles.com

MAN Axles -

Assembled in the U.S., adapted for 102" bus designs and meet the "Buy America" clause.



As a leader in innovation and engineering, **MAN** is a major source of power for the world's roads and seas. Always at the forefront of new technology, **MAN** quality axles are proven, bench and field-tested designs that provide reduced life cycle costs. For competitively priced drum and disc brake designs with maintenance-free components, contact us today to learn how your fleet can depend on **MAN**.

(800) MAN-2842 / (954) 946-9092 / fax: (954) 784-3275
email: info@manaxles.com

MAN Engines & Components Inc. - a division of the MAN Group.

