

GOVERNMENTAL SOLUTIONS

FALL 2022

A CATERPILLAR PUBLICATION SERVING GOVERNMENTAL AGENCIES



A BETTER WAY

MORTON DEPARTMENT OF PUBLIC WORKS
DOES MORE WITH LESS

FIRE CONTROL

CAT® MACHINES HELP FIGHT WEST COAST WILDFIRES

CATERPILLAR®



- IMPROVED GUARDING
- UP TO 12% LESS MAINTENANCE
- ENHANCED OPERATOR COMFORT

816 LANDFILL COMPACTOR

CRUSH YOUR COST/TON

Building on a proven legacy of low-cost compaction and structural integrity, the new Cat® 816 Landfill Compactor can help significantly reduce your costs.

Advanced productivity

A redesigned cab delivers greater operator comfort and simpler machine control for increased productivity.

Controls include membrane switch panels, keyed ignition and electrohydraulic parking brake control switch to increase efficiency. Updates to the single Cat STIC™ system (Steering and Transmission Integrated Control) enable shorter, faster cycles to reduce operator fatigue and increase productivity.

Cab pressurization, automatic climate control, sound dampening, a Premium Plus seat and cab isolation mounts make the entire workday more productive.

Machine status is monitored via a 3G touchscreen with user-friendly interface for viewing the Vital Information Management System (VIMS™) that helps optimize machine uptime. VisionLink® technology provides online access to critical machine data such as machine location, hours, fuel consumption, idle time and diagnostic codes.

Cat Compact saves on fuel and machine wear and enables the operator to achieve higher compaction densities through in-cab guidance, machine position reporting and completed pass count.

Proven, efficient powertrain

The field-proven, 275 hp Cat C7.1 engine delivers maximum fuel economy with increased power density. Advanced Productivity Electronic Control System

(APECS) transmission control delivers improved shifting performance, achieves greater momentum on grades.

Up to 12% lower maintenance

Improved airflow technology reduces cleaning and maintenance needs. A new radial air filter lasts four times longer than the previous filter, and an air inlet restriction indicator alerts operator to airflow blockages. A screened air inlet deflects trash from entering the radiator area, while auto-reversing fan purges debris buildup. The heavy-duty main structures of the 816 are designed to be rebuilt, enabling multiple life cycles.

Sight gauges for coolant, transmission oil and hydraulics provide quick inspection with reduced contamination risk. Grouped hydraulic oil, cooler, fuel cooler and condenser service points, along with centralized grease points, further minimize maintenance time. Emergency shutdown button, battery disconnect and jump start are easily accessed from ground level.

Deflectors divert potentially damaging trash away from the frame and hood. Front guards prevent trash buildup inside the frame and protect components and hydraulic lines. Sealed belly guards provide additional protection to prevent trash intake into the frame. Striker bars and optional cleaner fingers help keep wheels free of debris.

To learn more about the cost-saving benefits of the Cat 816 Landfill Compactor, contact our dealership. ☎

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CAT.COM/GOVERNMENTAL

Includes complete specifications for all machines. Check this out and more at **Cat.com/governmental.**



FIRE CONTROL

CAT® MACHINES HELP FIGHT WEST COAST WILDFIRES

Since 1991, the National Wildfire Suppression Association (NWSA) has worked to connect local, state and federal firefighting agencies with a coalition of more than 300 wildland fire contractors in 28 states and three countries.

The results of these combined efforts are stronger action plans to combat wildland fires, given the growth of such fire activity in recent years. While wildfires are a long-term problem on the West Coast, recent years have seen the increasing effect of large and destructive blazes on urban areas.

In 2017, Santa Rosa, Calif, and the surrounding region suffered damages of more than \$1.3 billion in the loss of over 5,000 homes in the Tubbs Fire—at that point, the most destructive fire in California history. A year later, Redding was the scene of yet another destructive blaze, as the Carr Fire destroyed more than 1,000 additional homes and resulted in \$1.6 billion in damages. Months later, the Camp Fire destroyed the town of Paradise, and surpassed the Tubbs Fire as the most destructive fire in California history with 85 deaths, over 18,000 structures lost and \$12 billion in damages.

During the same period, Oregon also saw its share of destructive fires. In August 2020, the 109,223-acre Lionshead Fire destroyed the town of Detroit, Oregon. In September of the same year, the Alameda Fire was

the most destructive blaze in Oregon state history as it encroached on Medford, destroying over 2,500 homes there and in several other communities.

Together, these fires provided an impetus for change championed by the NWSA and its members. Fires have also brought about change in the heavy equipment industry, as Caterpillar and Cat® dealers among others look for ways to support those on the frontlines of the fight to keep local communities safe.

Cat Dealers answer the call

In the aftermath of some of the region's most destructive blazes, Cat machines have proven invaluable, helping clear damaged trees, burned cars, and destroyed buildings to make room for new construction and development.

Cat machines have a long history of exceptional performance in some of the world's most challenging conditions. Firefighters the world over know Cat dozers as some of the most effective fire suppression tools in the industry. As crews work to establish fire lines in rugged, challenging terrain, enclosed cabs, fire curtains and rollover protection systems ensure equipment operators can more safely access areas where a hand crew would be at much higher risk.

“Although Caterpillar machines have been used in wildfire suppression for many years, this continues to be a growing and evolving industry,” said Greg Laudermilch, a Caterpillar sales manager. “Caterpillar is proud to be the first heavy equipment manufacturer to partner with the NWSA in providing support for wildland firefighters and fuel-reduction contractors. We hope to expand this partnership in the future to better support this vital sector of the heavy equipment industry.”

Laudermilch was introduced to the NWSA in 2020 at the association’s annual conference in Reno, where he learned more about the challenges faced by the private wildland firefighting industry.

“It was also a chance to look for areas where we can partner with the NWSA to provide their members with additional resources, including operator training, member discount services, technology and additional product needs,” Laudermilch said.

Covering 100,000 square miles of territory in Oregon, Southwest Washington and Northern California, Peterson Cat was the first Cat dealer to join forces with the NWSA, and is working to increase participation in the association among its existing wildland firefighting customers. Several other dealers, including Cashman Equipment, the Cat dealer for the state of Nevada, are also engaged with the NWSA.

Caterpillar machines rented by Petersen sister company Cresco assisted crews with cleanup efforts in the burn zone of the 2021 Dixie fire. Cresco played a pivotal role in the Tubbs, Camp and CAL FIRE cleanups as well. Peterson’s Cat Rental Store in Oregon was also a valuable resource to companies battling and cleaning up from fires in that region.

Cat® machines equipped for fire suppression

Shortly after the discount program was announced,

one of NWSA’s founding members, Mike Wheelock of Grayback Forestry, headquartered in Grants Pass, Oregon, purchased his first machine from Peterson, a new Cat D3K2 mulcher. This unit is on the frontlines of the effort to reduce fuels before they contribute to new wildfires.

Wheelock’s D3 Dozer is part of a growing number of Cat tools designed for forest management. Caterpillar also makes motors and brush cutters for small excavators and compact track loaders, including the 299D3 XE. The machine is purpose-built to handle the challenges of mulching applications.

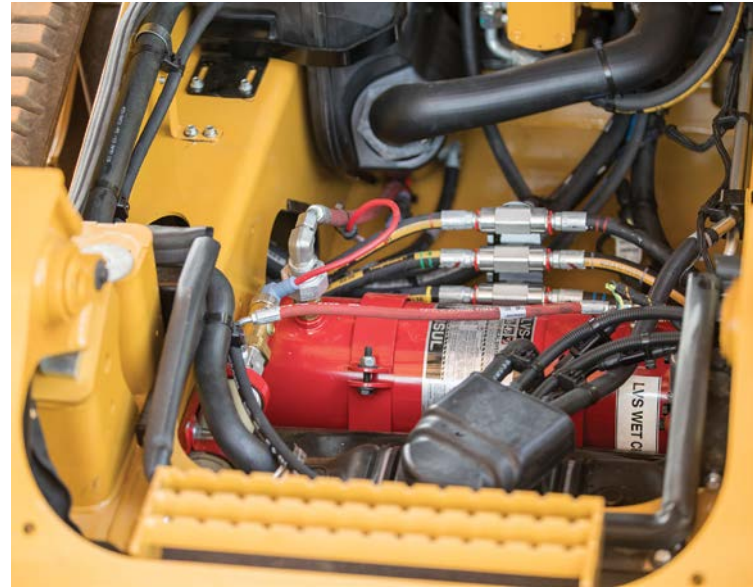
Fire suppression packages

Cat Dozers are among important machines available to prevent and fight forest fires. They create fire lines in heavy fuel and brush areas, clear safety areas and build access roads for equipment and crews along a fire line. Caterpillar offers a range of dozers for these applications all the way down to the D1 size class (80 hp/18,000 lb). In addition, Caterpillar offers a dedicated mulcher attachment for the D1 size class.

Fire suppression packages for dozers are designed to take on the demands of firefighting and prevention as well as protecting the operator and the machine. So what’s different from a standard dozer?

- Fire sleeve protection for lines and hoses
- Sweeps and screens to protect the machine from branches with external hinges for easy cleaning
- Heavy duty guarding for the radiator and lights
- Spark arresting elements for the air intake filter
- Hydrostatic winch with maximum line speed
- Manual fuel shut off
- Internal releases on screens for emergency exits





In the larger range of Cat dozers, the D5 Fire Suppression Dozer (FSD) brings significant improvements and innovations to fire operators:

- All lines, harnesses and the Diesel Exhaust Fluid (DEF) tank are fire wrapped
- Guarded all around with full width sweeps, screens on all windows, HD bottom guards, light guards
- Choice of tempered or laminated, sealed glass
- Choice of undercarriage: Standard, LGP or XtraRear for unmatched stability on slopes and in loose ground conditions
- Standard or emergency engine for United States fire agencies
- 6 lights, 54,000 lumens for great jobsite visibility
- Cab air filtration enhanced with an ember screen, powered turbine with dust ejector and high-efficiency Particulate Air filter, enable installation of a HEPA + Carbon filter
- In-cab fuel shutoff switch and quick access floor plate
- Standard and LGP blades equipped with HD brush guard
- Integrated fire suppression system with a 22-gallon stainless steel tank

Mulchers

Caterpillar offers special packages designed for customers involved in demanding vegetation management applications ranging from mulching, brush-cutting, vegetation control, and mowing. Performance matched for the 299D3 XE Land Management Compact Track Loader, Cat Mulchers reduce saplings, shrubs and trees into mulched material, making these attachments ideal for environmental maintenance, such as creating fire lanes.

** This kit has software-enabled features that must be activated by a Cat dealer and only for use with D2 and D3 Series machines. Requires Cat Electronic Technician (ET) to complete installation of this kit.*

The 299D3 XE is fitted with additional equipment specifically designed to tackle challenging applications:

- Purpose-built solution for land management applications
- High-pressure and high-flow auxiliary hydraulic system for superior productivity
- 58-gallon fuel capacity for up to 12-hour run time
- Enhanced machine sealing
- Additional protective guarding
- Reversing fan
- Large removable panels for easy cleanout
- Extra hydraulic cooling for high ambient working conditions
- One-piece sealed and pressurized cab clean, quiet, and comfortable
- Extended engine air filter life via a turbine pre-cleaner
- In-cab fire extinguisher mount
- Robust screw-to-connect auxiliary hydraulic fittings
- Fire suppression system option

Fire Suppression System

A kit includes a portion of the components needed to install an ANSUL Liquid Vehicle System (LVS) fire suppression system for use in applications or environments where combustible material or debris is present.* This system requires that additional components be installed by a local ANSUL distributor. The ANSUL distributor will also certify and register the system upon completion of the installation.

Portions of this story appeared in FIRELINE magazine. To learn more, contact our dealership. 📞



COOPERATIVE PROCUREMENT

A HOW-TO IMPLEMENTATION GUIDE

Whether you work for a city, county, school district, or other agency, you should consider the benefits of using a cooperative procurement agreement. The National Cooperative Procurement Partners have gathered information from some of the best procurement teams across the nation.

Taking cues from in-the-know procurement leaders, the following information provides a guide for asking the right questions and understanding the issues to be considered. No matter where you're located across the nation, or what cooperative organization you're considering, this guide is a helpful tool for any procurement organization.

Before you start:

- Identify and understand your needs. Know where you are going.
- Do you understand your legal authority to use cooperative agreements?

- Is your legal counsel familiar with the concept of cooperative purchasing?
- Has your agency successfully utilized cooperative purchasing in the past?
- Does your board or council have to approve the use of a cooperative, as in a pre-approved list?
- Have you considered diversity participation?
- What about social goals?
- Is there a local preference?

Analysis and evaluation process

- How long has this cooperative organization been operating?
- Does your agency have to register as a member to use the contracts? Is there a fee?
- Does the cooperative conduct its own procurement process or use another agency as the lead?

(Continued on page 8)

- Was the solicitation advertised? If so, where and how?
- What procurement laws does the cooperative follow in soliciting, evaluating and awarding contracts?
- Has the lead agency or the cooperative undergone any third-party audits, peer reviews or achieved awards for its contracting process?
- What is the level of customer service in response to questions, concerns and requests for information?
- Does the website contain accessible and thorough documentation?
- Is contact information provided to readily conduct more in-depth research?
- Is the cooperative a member of any national association that has high ethical standards for its members?

Strategic Planning

To leverage your team’s best talents and time, does it make sense to take a percentage of your agency’s annual expiring contracts or bids—particularly for the mundane and routine—and research cooperatives that might fill the need instead?

The Contract

- Does the awarded contract contain the specific solution you require?
- When was the contract awarded, and when does it expire?
- What are the qualifications, capabilities and financial health of the awarded supplier?
- Does the supplier have the capacity to fulfill your agency’s needs?


- Can you obtain a copy of all applicable contract documents?
- How is pricing addressed? Is it actual, percentage discount from list, or ceiling-based pricing?
- Can the terms and conditions of the contract be amended to meet your agency’s needs?
- Is there an indemnity clause?
- How is contract use monitored? Are usage reports available?
- Is a rebate part of the contract? How is it paid? Can it be credited against contract pricing?
- Does the cooperative have a process for resolving vendor issues or disputes?

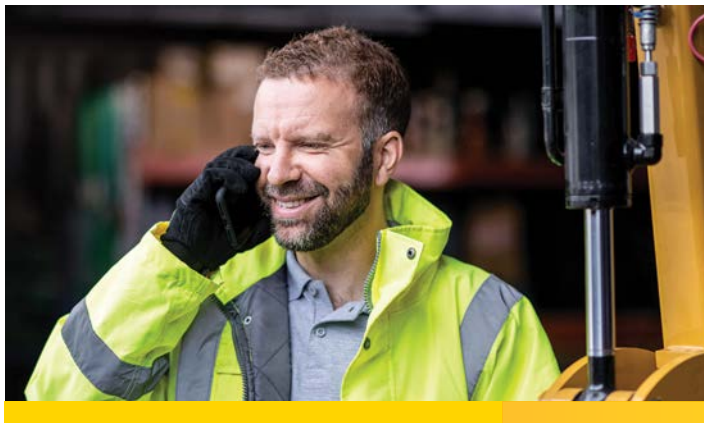
Compare

Compare contracts side-by-side. If multiple contracts are available for the same product, conduct a thorough comparison.

Checkoff list

- Legally okay?
- Cooperative checks out?
- Contract-valid structure?
- Supplier-thumbs-up?
- Advantageous pricing?
- Best value for your agency?

The National Cooperative Procurement Partners (NCPP) is North America’s premier association for cooperative procurement, leading the way in elevating the discussion, advocacy, and educational content focused on cooperative procurement. 



BUILDING THE PENNSYLVANIA TURNPIKE

ONE OF THE WORLD'S FIRST SUPERHIGHWAYS



In the late 1700s, Pennsylvanians traveled by horse and carriage over log-surfaced roads and muddy terrain. By the 1800's, they could travel across Pennsylvania by railroads and canals. As early as 1910, ideas arose to convert an abandoned railway route into a motorway. The idea of a turnpike to cross the Alleghenies was supported by the trucking industry, as well as the motoring public.

In 1938, construction started on a high-speed, divided four-lane concrete highway that would connect Harrisburg, Pittsburgh, and Philadelphia.

Named the Pennsylvania Turnpike, it was the first limited-access superhighway in the world. The highway was a new experiment in toll roads for through traffic—no grade crossings were utilized across its entire length, and local traffic was barred.

The Pennsylvania Turnpike was the first of its kind and received nationwide acclaim as an engineering marvel. It was touted as America's First Superhighway when it opened on Oct. 1, 1940, and established the national standard for superhighway design and engineering.

Construction on the route cut through the Allegheny mountains and included eight miles of tunnels that eliminated dangerous mountain driving by reducing the maximum grade to three percent. Work on the project included 172 Cat® dozers, 17



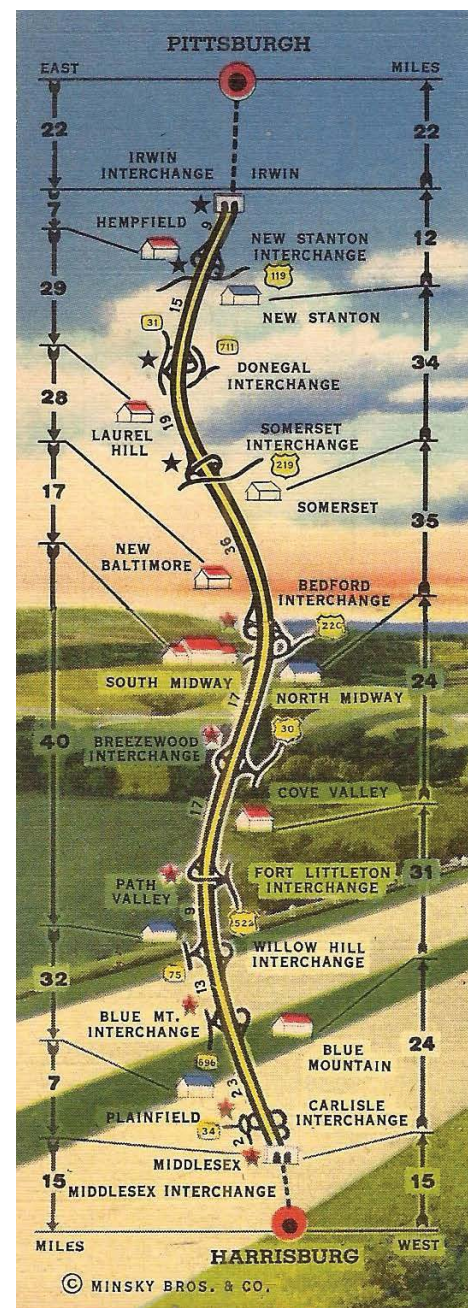
motor graders, two scrapers, and 23 generator sets.

Opened to traffic in 1940, the Turnpike was originally 160 miles long—an unbroken ribbon of concrete cutting through mountains and across valleys, bypassing towns. Planners predicted that 1.3 million vehicles would use the Turnpike each year, but early usage exceeded predictions with 2.4 million vehicles traveling the superhighway annually.

In addition to reducing travel time between Pittsburgh and Harrisburg by three hours, the PA Turnpike created an economic boom to areas along its path.

Another interesting fact is that the road originally did not have a speed limit. Due to its success, it served as a blueprint for many other toll roads that were eventually built across the U.S.

Built for \$61 million, the present-day cost of this highway would be a staggering \$1,044 billion. Today, the Turnpike continues its legacy of innovation in the ground-transportation industry and embraces modern-day technologies for faster response times, increased traffic flow, and safer trips for drivers. 🚛





A BETTER WAY

MORTON DEPARTMENT OF PUBLIC WORKS DOES MORE WITH LESS

While many public works departments struggle to handle a wide variety of tasks with limited equipment fleets, the Village of Morton, Ill., pop. 17,000, has no such concerns.

As Director of Public Works, Craig Loudermilk's approach is doing more with less. Though relatively small, Morton's DPW fleet, is well equipped to handle most any assignment.

With wide-ranging departmental responsibilities that include water distribution, water treatment, wastewater, stormwater, gas, streets, and pretty much everything else involving public works, Loudermilk mixes and matches machines and attachments to maximize productivity across the board.

"We've been trying to come together more because sharing enables us to acquire more equipment—Cat® machines like excavators, wheel loaders and backhoe loaders. We do share and try to coordinate as best we can to maximize equipment usage and operate more efficiently."

With retirements and a shrinking labor pool, Loudermilk understands that as he hires younger staff, he must pursue greater efficiencies. Plus he's always asking his team members: "What can we do better?"

This prescient approach has resulted in Morton's small team of 35 workers becoming highly efficient with their Cat fleet, which is comprised of three Backhoe Loaders, a 926 Wheel Loader, 289D3 XPS Compact Track Loader and a 306 Mini Excavator. Most of the machines log about 500 hours annually.

Morton's fleet of Cat equipment is complemented by 25 Cat attachments that add extraordinary versatility, giving the fleet far greater capabilities to perform any job, work assignment or emergency repair that could possibly arise.

"We purchase the equipment, but it's the attachments that our Cat dealer provides that really make all of this work," Loudermilk says.

Prior to the start of each new year, Loudermilk takes inventory of Morton's equipment fleet and work tools to determine what else they might need and what his DPW budget can afford, then he adds things accordingly.

"If you talk to my street crew, the cold planer attachment for the small compact track loader was a game changer for us," he says. "We do a lot of patching work, filling potholes and related work. Historically, we would grab the backhoe, soak up the patch and we'd dig it up full depth. But now the guys are so happy because using the cold planer we're only removing an inch and a half and filling that in. It's a lot better to compact against existing pavement, and we're doing more than twice the amount of patching work now, which is a big part of what we do here."

In addition to the cold planer, some of the many other work tools include a utility broom, hammers, compactor, forks, and assorted buckets, including a multi-purpose design.

Besides achieving greater efficiencies, Loudermilk adds that Morton's super-efficient fleet utilization completes so



“If you talk to my street crew, the cold planer attachment for the small compact track loader was a game changer for us.”

– CRAIG LOUDERMILK
Director of Public Works
Morton, Ill.

much more work that it has essentially enabled them to double the overall volume of work compared to the past. Jobs performed by the village’s DPW crew include:

- Installing water mains
- Repairing water leaks and hydrants
- Replacing failing pipes
- Placing manholes
- Performing sewer and drain repairs
- Doing street repair and patching
- Laying down new asphalt and concrete
- General utility work

Plus, crews excavate trenches for water distribution and a great deal of general service work, running service lines up to commercial and residential dwellings. Additionally, the village’s significant need for aggregate means Morton maintains a large maintenance yard, stockpiling material and loading trucks year-round.

Cooperative purchasing

Morton acquires its machines by purchasing through Sourcewell, a national cooperative purchasing organization that holds hundreds of competitively solicited cooperative contracts ready for use. Sourcewell helps governments, educational agencies, and nonprofits work more efficiently by offering a wide range of cooperative contracts. This enables agencies to save time and money by combining the buying power of more than 50,000 governmental, educational, and nonprofit organizations.

“Purchasing through Sourcewell saves a tremendous amount of time in the buying process,” Loudermilk says. “It ensures we secure the best possible price, and results in faster machine deliveries.”

The only exception is the Cat 926 Wheel Loader, which is leased for five-year increments to help protect against the brutal wear conditions and salt damage incurred during Illinois winters.

The village acquires its machines in five-year guaranteed buybacks, which enables Loudermilk to update the DPW fleet on a planned basis in sync with annual budgets.



The Cat advantage

When special project needs arise, such as a stump removal, Loudermilk relies on the Altorfer Rental Store for any special attachments that may be needed on a short-term basis.

Morton’s DPW operators appreciate the roadability of the rubber-tired backhoe loaders, wheel loader and compact track loader that enable them to move quickly and easily between jobsites.

Loudermilk says the stick steer on the new Next Gen 306 Mini Excavator is very popular with operators because it helps them track their production and move the machine around to places they typically couldn’t get to as quickly with previous models.

(Continued on page 12)

Cruise control is another popular feature on the mini excavator, as it enables continuous travel without holding the levers or joystick down, with the ability to safely stop the machine in several ways. It's great for tracking or grading long distances since you just need to steer.

Morton's full-time service technician handles all machine maintenance needs and appreciates the fact that all of Morton's Cat machines are equipped with activated Product Link™ to help monitor the condition of the machines, including hours logged since regular maintenance was last performed.

Further testament to the confidence that the Village of Morton has in Cat equipment is the fact that Morton facilities operate 12 Cat backup generators that serve their water treatment and wastewater treatment plants, police department, public works garage and facilities center. All generators are diesel powered except for one which is a natural gas-powered unit that provides standby power for the fire department.

The Village of Morton enjoys an excellent working relationship with Altorfer sales rep, Regan Jones, and the entire Altorfer team.

"I like working with Regan because he understands what we do," Loudermilk says. "He's been in the business and knows what we do, so that makes for a solid working relationship with him.

"He obviously has access to all my guys and communicates well—that's an expectation of mine—to talk to my mechanic and my operators. That way they can call him directly if they have any questions or concerns. And the relationship we have is great—it makes my life a lot easier with the quality of the equipment backed by highly responsive service. The bottom line is, it saves a lot of time and money for the village." 📞



CAT® MACHINES

926M Wheel Loader
306 Mini Excavator
289D3 XPS Compact Track Loader
420 XE Backhoe Loader
420F2 IT Backhoe Loader
420F2 IT Backhoe Loader

ATTACHMENTS

PC306 Cold Planer
BU118 Utility Broom
B6S Hammer
H65E Hammer
CVP16 Compactor
Multiple Mini Excavator Buckets, Forks,
Backhoe MP Buckets & Rear Buckets





CAT® COMMAND

WHEN TO USE REMOTE EQUIPMENT OPERATION

While you may not be planning to integrate remote or autonomous equipment into your agency's fleet in the immediate future, if you're doing work that involves fire suppression, bulk material handling or waste transfer stations, it's time to consider it. To be highly efficient in tomorrow's market, you'll need to approach your new sites with new and future technologies in mind.

The main reasons agencies consider remote equipment technology are safety, efficiency, and employee recruitment/retention.

Safety

Preventable safety incidents are happening every day. With technology like Cat Command available, there's no reason to put operators into dangerous or hazardous work environments, whether they involve exposure to harmful air quality or environmental hazards that could cause serious injury or even loss of life with the slightest mistake. You'll also see reduced fatigue for your team members, since using remote operating

technology eliminates noise, vibration, and movement from being in the cab for long hours.

Efficiency

"Cat Command brings a full range of attributes in machine efficiency and uptime for construction and bulk handling applications that simply cannot be ignored," says Andy Massey, a Caterpillar product support manager. "When we think about sites where machines are not fully utilized, why not switch between those machines with a single operator and fully utilize the machines?" Efficiencies increase with the adoption of new technologies—consider how 2D and 3D Grade have transformed dozing, for example.

Employee Recruitment/Retention

Remote technologies aren't replacing jobs; if anything, they're creating more. "Cat Command promotes higher

(Continued on page 14)

operating skill," Massey says. "You actually need a higher skill level and higher concentration to operate equipment remotely."

Technology offers greater appeal to younger generations, which is exactly what's needed to combat the current labor shortage in skilled trades. "This is the number one issue we see with customers globally right now—attracting and retaining good operators," Massey says. "Cat Command brings a different perspective to being a good operator and opens up this type of work to a new generation who may have never considered it, as well as a career path for disabled or highly skilled operators alike."

Remote Technology Factors

Here are some factors to help determine if you should consider using remote technologies:

- **Is your work environment harsh or dangerous?**

The ability to remove operators from potential harm is a huge benefit to remote technologies. Cat Command solutions also reduce fatigue, which means your operators' health and wellness will also benefit.

- **What does your machine utilization look like?**

If you have machine idle time of 40 percent or more, you should consider remote technologies. You can increase utilization of highly skilled operators and bring unproductive time down to as low as five percent using Cat Command.

- **Do you operate in remote, hard-to-reach locations?**

Maybe you struggle to find operators who would relocate for specific jobsites, or you work handling commodities where you don't need to run equipment continuously throughout the day. "Cat Command gives you the ability to hire operators on demand," says Massey, "so you can have an operator connect to a machine at a specific location from anywhere in the world." and run it only for the time needed.



Cat Command for Loading

Cat Command for Loading is effective for use in Small Wheel Loaders: 926M, 930M and 938M.

One of the busiest ports on the Mississippi River in Louisiana transfers cargo from barges to ships and ships to barge, and loaders play an important role in maintaining a high level of efficiency. The port makes sure every bucket is full, as a small wheel loader pushes up all scraps to create a healthy stockpile.

"We can take a hazardous environment like the one on a barge on the Mississippi River," says Joel Grimes, a global product expert for Caterpillar's Small Wheel Loader group. "If someone falls in the river, coastland stats indicate that one in seven folks don't survive. And the most dangerous part of this job is stepping from the derrick crane to the barge. By eliminating dropping this product into the barge and never putting a man or woman down in that environment, we're dramatically improving the safety aspects of doing this work."

With operations that span 150 miles of coastline, the remote operator can work comfortably from an office environment and essentially teleport into a machine up or down river—wherever the work is.

Cat Command can be utilized in a variety of Cat machines, including dozers, excavators, and skid steer and compact track loaders. Construction equipment technology is advancing day by day. It pays to look ahead and stay informed on the latest developments, even if you're not jumping into remote-control or autonomous equipment anytime soon. The more you know about available technologies, the better you'll be able to adapt to these changes when you're ready.

To learn more, go to cat.com/command, or contact our dealership for a consult to improve the safety and efficiency of your operations. ☎





CREATING **NEW** OPPORTUNITIES

In 2019, Caterpillar launched a partnership with Segs4Vets, a non-profit organization that provides Segways and ALLY mobility chairs—a modified version of the traditional Segway—to disabled veterans who lost part of their legs above the knee.

In addition to its mission of providing a means of mobility, Segs4Vets helps veterans gain independence and the ability to re-enter the workforce in ways previously not possible. Caterpillar and Segs4Vets have teamed up to provide disabled veterans with an opportunity to participate in the construction workforce like never before.

Cat® Command for Dozing

Cat® Command is a technology that enables disabled operators to remotely control construction equipment. Using Cat Command for Dozing, disabled veterans demo'ed the technology in 2019 from a Fabick Cat dealer location in St. Louis, Mo., while controlling a Cat D8T dozer in Arizona. While the system also works locally (where the operator could be on the jobsite, working in line-of-sight with the dozer) the system also performed well from several states away.

The demo process helped Caterpillar identify ways to improve Cat Command technology and implement it in the workforce. It is currently available in four applications: Dozing, Excavation, Compaction and Loading.

Future Potential

Cat Command is part of Caterpillar's vision. Cat Command Remote Control Technologies are reshaping jobsites worldwide. On jobsites

that involve working with hazardous materials or other unsafe conditions, remote control takes operators off the machine and away from jobsite dangers. Operators can work miles away from the site itself, driving bottom-line benefits.

Jobsite considerations aside, the automation technology that Caterpillar engineers develop creates career opportunities for disabled people to operate Cat machines. Imagine the possibilities when the right person for the job might be located across the country using technology to work at any location.

"This is a great example of applying technology to open up opportunities for a whole new set of operators," said Shane Matarelli, a customer solutions manager for Caterpillar. "As dealers and Cat team members, we're well aware that we have customers who are always looking for skilled operators."

More than just an innovative technology, Cat Command provides wounded warriors with a sense of purpose.

"This technology enables them to transcend their disabilities and become more engaged in their communities, and to find a purpose performing meaningful work—because they don't want pity, they want opportunities," said Jerry Kerr, founder of Segs4Vets.

"So, for Caterpillar to provide opportunities for our men and women to re-engage with a vital industry is extraordinary."

Segs4Vets has provided over 2,000 mobility solutions to American armed service veterans to help them achieve their personal and professional goals. ♿

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