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VEHICLES & FLEET

Patrolling Beyond
the Streets



Lt. Frank Borelli (ret.)

Editorial Director



We appreciate comments and feedback. Please feel free to send your thoughts to editors@officer.com.

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A Few Things That Might not Come to Mind

Welcome to the 2020 Vehicle & Fleet Supplement. Here's a look at what you'll find included...

When any command staff get together and start discussing the equipment that needs to be maintained by their officers or deputies, the list will inevitably include their sidearm, long guns, electronic control devices, radios, and more. What sometimes doesn't get discussed but is easily the most used piece of equipment an officer has is the patrol vehicle. When patrol vehicles are brought up in the conversation, fuel usage and visibility are often more talked about than maintenance. Oddly, regular and proper maintenance is perhaps the one thing that has the greatest impact on both fuel usage and service life of any patrol vehicle.

In this 2020 edition of the Officer Media Group Vehicles & Fleet Supplement, we take a look at those items along with a few other topics that might not come to the top of the list during such discussions. One of the more entertaining topics we're going to look at is alternative vehicles in law enforcement. There are far more than sedans and SUVs in use for law enforcement—think airboats, snowmobiles, and ATVs. Here, we tell the tale of two agencies set in very different environments.

Mounting equipment inside of any patrol or special use vehicle can be a challenge. Between the power harness (electrical) and the airbags, etc., how and where you mount laptops, rifles, emergency kits and more can be a challenge, not only for space but for safety. Once all of that equipment is mounted, the vehicle does need to be regularly maintained so we reached out to a fleet maintenance manager to ask him: what are the five things you wish an officer would tell you when dropping off their patrol vehicle for maintenance? His answers and justifications are included herein.

Finally, while we've looked at the value of armored personnel carriers (APCs) in the past (see our 2019 Vehicles & Fleet Supplement), we didn't discuss customizing them to agency/emergency team need. We spoke with the Commander of Calvert County (Maryland) Special Operations Division and got a few pointers on the how and why of some APC customizations.

Read on and stay safe! ■

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PAC's Vertical Rifle Mounting Kit safely and securely mounts rifles and shotguns. The kit uses the Stow-N-Lok at the top of the barrel to provide a secure grip. The Stow-N-Lok strap makes it easy to adjust for various size guns. The base plate firmly holds the base of the gun in place. This mounting system can be mounted to PAC Trac or any other stable surface/material.

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Rugged rear storage for the PI Utility

Gamber-Johnson's Trunk Box cargo storage features a sliding drawer with a full width, aluminum polished drawer pull for easy access and rear vent cut-outs to keep equipment cool in any climate. A dual lock system ensures the safety of gear and equipment while out in the field.

The inverted top with non-slip lining provides additional mounting space, maximizing cargo storage capabilities. In addition, a cargo net can be attached to the knockouts around the frame to keep equipment in place. The Gamber-Johnson Trunk Box easily mounts to the 2020+ Ford Police Interceptor Utility Leg Kit for a complete cargo storage solution.

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Custom APC Options

Do you know exactly what your team needs from your APC? **By Lt. Frank Borelli (ret)**

While often unappreciated, law enforcement personnel regularly put their lives on the line, taking risks to prevent the community from being exposed to the risk. While officers and deputies take these in full awareness, they don't take them blindly or without making every effort to minimize them. With focused training and equipment specifically for the highest risk situations, our special operations personnel manage the greatest threats. One tool they use, very strategically, is the armored personnel carrier or APC. Every different team can have a different set of needs, so the basic APC needs to be customized to suit the team's need.

Some of the customizations are actually design features that need to be built in and specified when ordering the APC. Of course, some APCs aren't ordered; some are "take what you get" surplus from DRMO or a larger agency that is handing it down. In that case, while the APC might not fulfill your team's every need, it can be far better than the best SUV you have. If your agency has a need for an APC but is facing budget challenges, securing an APC from a surplus source is your best option while you build your case for funding a new one. During the process of building your case, you should also be identifying your needs and requirements so that when you secure the funding, you know exactly what you're ordering from the manufacturer.

We spoke to Major Steve Jones, Commander of the Calvert County,

Maryland Special Operations Division. With about two decades of experience in special operations, Major Jones' first comments were of warning: "An APC isn't like every other vehicle. It requires dedicated and trained personnel. You can't just make assumptions and let the best driver on your team take the driver's seat. There's more to managing an APC than that."

He points out such design features as underseat storage and driver's/passenger's weapon mounts. Since



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they don't necessarily lock, anytime the APC is deployed an operator has to be dedicated to keeping it secured. You never lose money betting on the audacity or lack of common sense for some members of the community; you know the ones—they'll walk right up to your APC while it's deployed in a high risk area and decide it's the perfect time to take a look at all the cool stuff inside.

Any equipment that is mounted on or in the APC has to be used properly and any restrictions understood. For example, a winch. Winches are rated for certain maximum weights and how they're used takes training. Any team operator that might be assigned

to be the APC driver/operator should meet the training requirements for all included equipment. That list will evolve as the use of the APC evolves.

Major Jones also discussed what customizations might be required. Due to the infrastructure and specific threat concerns in his jurisdiction, his team needed to add radiological/biological/gas detection equipment. The addition of the equipment also meant the addition of training time for each team member. While each team member can carry portable detectors for such threats, they may or may not be, depending on the situation, and having the detection equipment mounted in the APC offers another layer of detection/protection for the team's safety. Interestingly, the most common "gas" threat mentioned was leaky/leaking propane tanks. While we often think about large gas storage facilities, we are far more likely to encounter propane tanks at an incident scene and they can be quite large dependent on use. A leaking one can present a major threat.

The greatest strength Major Jones identified for the team's APC was the most basic: its ballistic protection. With a great deal of rural space in his jurisdiction, it's not uncommon for the team to have to traverse several hundred yards of open field while approaching a potential threat or target location. That entire space presents an open field of fire if a bad guy sees the team coming. Approaching in the APC offers the team protection to cross that hot zone. Likewise, it also offers protection if the team, or just a couple members thereof, have to enter a field of fire to rescue another officer or an innocent/hostage.

For that specific use, Major Jones voiced his regret that his team's APC doesn't have a door in the floor. The APC wasn't ordered with such and having one installed after the fact is a hefty expense. It gets chalked up as a lesson learned about needs and requirements for future APC purchase.

Why a door in the floor? With one, the APC can be driven up straddling a downed officer or prone out hostage and they can be lifted into the APC without exposing the rescuing officers to further threat from weapons fire. Without the door in the floor, any officer inside the APC has to be exposed to potential incoming rounds by either exiting the vehicle or using it simply as cover while extracting whomever is being rescued.

An option that Calvert doesn't have on its APC, but some agencies in more urban areas do, is an extendable ladder/ramp system mounted on the roof, used for reaching entries into second or third floor levels in a target structure. Such systems can be used both directions meaning that they can be used to insert operators through those elevated entries or for extracting hostages/innocents from those levels.

A battering ram mount and/or pull chain/hook on the front of the APC can be a handy option. Veteran special team members can usually give you an example of a dynamic entry they were part of that required either removal of a steel "storm" door to get to the regular door and/or ramming that main door open with an APC due to the high risk/threat of exposing team members as they spent time attempting a more traditional breach.

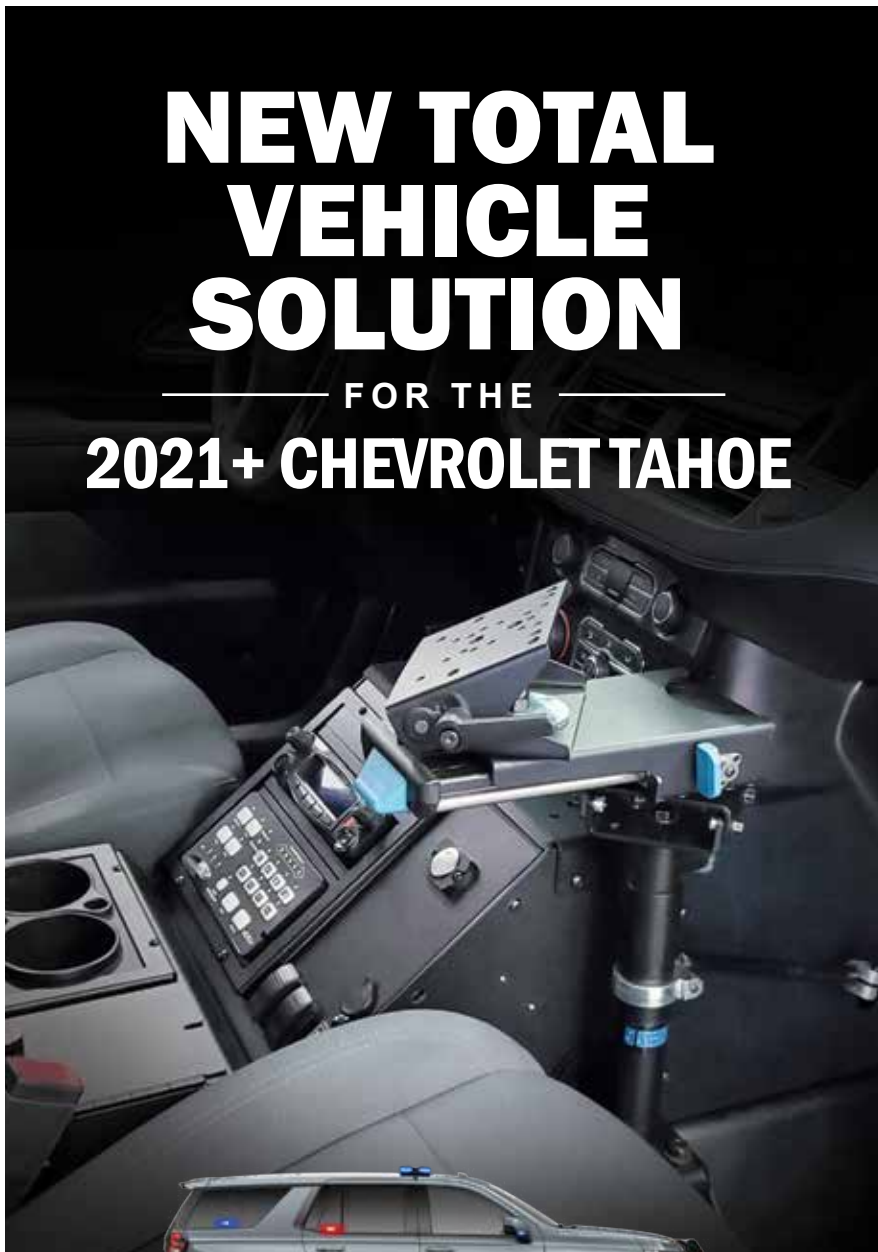
Perhaps the easiest customization any agency can make to its APC is to mark it. There is no need for your APC to remain unmarked and, in fact, you can probably avoid some misunderstanding (or a defendant's claim thereof) by clearly marking your APC with your agency's special operations logo and large "SHERIFF" or "POLICE" lettering front and rear.

"Don't let the APC's use make you complacent," reminds Major Jones. "The ballistic protection properties are great but just because they exist doesn't mean you should readily put yourself in the position to need them. Always find a lower risk way and only use the APC when no other option exists." ■

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Patrolling Beyond the Streets

Alternative vehicles allow law enforcement agencies ways to access areas traditional patrol vehicles can't.

By Paul Peluso

When patrolling the streets, speed may be the key, but what about patrolling different areas such as in and around lakes, swamps and trails? In those environments, versatility and mobility take priority. Alternative vehicles provide a solution for many law enforcement agencies and continue to grow in popularity.

Lt. Shane Magnuson with the Hennepin County Sheriff's Office Water Patrol Unit in Minnesota says that the agency, which assists with patrols in downtown Minneapolis while also patrolling Lake Minnetonka and rural areas of

the county, must take into account the differing terrain. "We can have protests in downtown Minneapolis and then have to respond to a missing person in a park on the rural west side of Hennepin County. We just had a missing kid in the river. We literally go from the protest, and we're shuffling resources up there to do that," he says. "Our mission can change very quickly."

The Water Patrol currently has six Polaris Ranger Utility Terrain Vehicles (UTVs), two Polaris Sportsman 570 All Terrain Vehicles (ATVs), two American Airboats, and eight Polaris 550 Fan Cooled Snowmobiles along with the unit's ten boats and its

standard patrol vehicles. All of the alternative vehicles used by the Hennepin County Sheriff's Office serve a purpose while on patrol or responding to a major event.

On a Saturday morning in February, the agency responded to a small four-seat plane crash that left the pilot dead. The crash occurred in a swamp in a remote location in the area of the Crow-Hassan Park Reserve in the northwestern part of the county. The Hennepin County Sheriff's Office used UTVs as well as snowmobiles. The agency had just recently purchased an additional four-door Ranger UTV. "Their application (UTVs) for that, they are so usable. You've got the bed; we

were able to transport crime scene people and the medical examiner. Unlike a snowmobile where as far as capacity and passengers you are much more restricted.”

Patrol on the water

Traditional boats can be used to patrol most bodies of water, but when that water is extremely shallow—or frozen—agencies must find another way to get around. In South Florida, the Miami-Dade Police Department Hammocks District’s Agricultural Patrol Section has long faced a serious problem when it comes to patrolling 900 square miles of land dotted with hunting camps and in the flight path for multiple airports that are surrounded by the wetlands. Gaining access to the land through the shallow marshes and swamps was once only possible by helicopter and was both a drain on resources as well as time consuming.

“After a string of incidents in the Everglades where the department had to rely on other agencies and private companies for transportation to scenes, the department decided to purchase its own airboat,” says Sgt. Richard Zahalka with the Agricultural Patrol Section. An airboat is a flat-bottomed vessel powered by an aircraft-type propeller that operates above the waterline, allowing the boat sit on the water and not in it.

After consulting with other agencies that already operated the vessels, the department purchased a 20-foot long by 8-foot wide Panther Airboat, which cost \$75,000 and was paid for with funds primarily from the department’s Law Enforcement Trust Fund instead of taxpayer dollars. Zahalka says the boat will help save time during life and death situations.

The airboat allows the Miami-Dade Police Department to access those areas for search, rescue and recovery operations. These types



After a string of incidents in the Everglades where the department had to rely on other agencies and private companies for transportation to scenes, the Miami-Dade Police Department decided to purchase its own airboat. Miami-Dade’s Panther airboat is powered by a General Motors 6.2 Liter supercharged engine by Levitator Performance Airboat Engines. The engine produces approximately 550 horse power, which is connected to a belt drive system that spins a four-bladed 82-inch carbon fiber propeller.

Miami-Dade Police Department



Part of the Hennepin County Sheriff's Office fleet of eight Polaris 550 Fan Cooled Snowmobiles. While the Hennepin County Sheriff's Office's airboats are mainly used during the Spring and Fall, they do use them in the winter too. Polaris UTVs outfitted with tracks have proven to be one of the best options for cold weather for the Hennepin County Sheriff's Office.

Hennepin County Sheriff's Office



of operations are typically conducted by multiple agencies, which include Miami-Dade Fire Rescue, Florida Fish and Wildlife Commission, and in some cases, Everglades National Park. "Having a good working relationship with these agencies and conducting joint patrols and training help prepare for major incidents," says Zahalka. The airboat is also being used to combat illegal dumping and animal cruelty on the water.

The airboat is designed to comfortably carry eight full-size adults, and in the event of having to transport large pieces of equipment, such as an ATV, the front row of seats can be removed and the grass rake drops for easy loading. It is powered by a General Motors 6.2 Liter supercharged engine by Levitator Performance Airboat Engines. The engine produces approximately 550 horse power, which is connected to a belt drive system that spins a four-bladed 82-inch carbon fiber propeller.

Magnuson says that while Hennepin County's airboats are mainly used during the Spring and Fall, they do use them in the winter too. Lake Minnetonka, which is a popular recreational and fishing lake, is broken up into different bays which go under bridges to create channels that can



remain open year round. "With the airboats we don't have to worry—unlike with an ATV or snowmobile—about falling through the ice," he says. "We're able to cross those channels and get from bay to bay to be able to do our job in the winter. We also use the airboats to mark the channels as open water or unsafe ice."

Patrol on the snow

Since Minnesota gets its share of snow in the winter months, Hennepin County has to be prepared to respond, no matter how treacherous the conditions are. While the agency has both airboats for the ice and snowmobiles for the ice and snow, Magnuson said that the Polaris UTVs outfitted with tracks have proven to be one of the best options for cold weather.

"We've found that the tracks on those float the machines as well as the snowmobiles," he says. "The deputies and all of the staff prefer to use UTVs over snowmobiles. They can work with a partner just like they are in a squad car. You've got a cab with heat and air conditioning and you can set up your mobile computer and ticket writer and write tickets just like you're out of a squad, but with the ability to go out on ice and trails. In the winter, the agency carries ice rescue gear all the time, no matter what. On a snowmobile it can be a lot more challenging as far as ice rescue suits and line bags can be tricky on those. On a UTV, we just throw them in the back."

Last winter, Polaris allowed the Sheriff's Office to use three XP UTVs at the Lake Minnetonka Klondike Dog Derby. Magnuson says there were about five to six thousand people on the ice for the dog sled race.

He says that the UTVs serve multiple purposes and have become a fixture of the unit since it received its first less than a decade ago. "Even in an urban environment—we use them for large-scale protests and even parades—it's much easier to get UTVs through crowded areas and across sidewalks than squad cars. You're also much more

approachable and it's easier to talk to people than in a car, but you are still as mobile as you would be in a vehicle."

Since the purchase of its first UTV about 8 years ago to the purchase of its most recent earlier this year, Magnuson says that there have been a lot of changes made in both technology and comfort. "The advancements in them are absolutely incredible over the past few years," he says. "They sit a little bit higher, which isn't as big of a deal, but the suspension while crossing ditches, they are a lot more controllable, they just drive better. It's a lot like driving a really old car versus a newer car. The suspension and handling have just become remarkably better."

He noted that the newer models come with more "creature comforts," allowing deputies to focus on the job at hand during long shifts. "If you are spending 10 or 12 hours in a vehicle, having a good heating and cooling system is really nice," he says. "The layout Polaris has included in the police package now comes equipped with emergency lights and siren, so we don't have other vendors tapping into those wire systems. They more you add on after market, you can certainly have issues. Now that we can directly order all of that done from Polaris is a huge advantage." ■

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How Many Miles are on Your Patrol Vehicle?

Do you measure your vehicle use in miles or hours? There might be a benefit to one or the other.

By Lt. Frank Borelli (ret)

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It's interesting that an agency can be either too big or too small to have personally assigned vehicles. Too small and they can't afford it; too big and they can't afford it. Usually, an agency with ten sworn at a minimum is where you start seeing personally owned vehicles assigned. That usually works in the budget until you get over 2,500 to 3,000 sworn and the cost can get prohibitive. The cost of the vehicles isn't the only issue though. The cost of maintenance can get pretty expensive. The big argument is whether it's more or less expensive to maintain personally assigned vehicles or pool cars that are shared.

It's no surprise to any officer that a personally assigned patrol vehicle is usually better cared for. The officer, after all, has to get in it day in and day out and is held responsible for it's cleanliness, appearance, maintenance of gear, etc. Pool cars tend to be a bit more abused as you never know what condition it's going to be in when you get it and no matter what gear it does or doesn't have, unless an unsafe condition is created, it's what you're

stuck with. In that case, most officers bring the stuff they have to have for a shift, fully expecting that they'll do the vehicle inventory and document what's missing for the tenth time.

Almost every agency tracks how many miles are put on their cars, personally assigned or shared, and many have a cap—a target number of miles at which the vehicle is set for replacement. For some agencies that number might be 50K; others might be 100K. Some might be, “when it dies we'll have to replace it.”

Consider the difference in appearance and maintenance of a personally assigned vehicle versus a patrol vehicle when they both have 50,000 miles on them. The personally assigned vehicle will be in better condition both inside and out, and the maintenance records will be properly documented. The shared/pool car? Probably not so much. Aside from pride of possession and responsibility, what makes the difference so glaring is how those miles are put on.

A patrol vehicle that sees mostly highway miles, such as those used by highway patrol or state troopers,

is usually considered less abused. Sure, the average speed might be a bit higher, but the miles are “easy” as compared to the stop and go and time spent loitering with the motor running in any city patrol vehicle. The difference in appearance, maintenance and general use could require that the city vehicle be replaced at 50K while the highway vehicle might see another 50K to 100K before needing replacement.

Is there a better way?

Enter the police agencies for many a large international airport in the U.S. They certainly keep track of miles put on patrol vehicles for the purpose of justifying vehicle count and patrol function, but for the purposes of maintenance and replacement, the HOURS of use are tracked and used. These patrol vehicles are outfitted with a device that tracks the number of hours the motor is run. By using that number and the number of miles on the vehicle in a given date range you can see the average miles per hour of use that are put on the vehicle.

It should come as no surprise that the lower the miles per hour are, the more maintenance the engine and drive train will require. The consumable vehicle fluids, such as oil, transmission, break and power steering, are usually serviced based on the number of miles driven, but should they be?

As was discussed, an eight hour shift in the inner city is usually much harder on a vehicle due to all of the stop and go and idling use as compared to a highway patrol vehicle where much of it is simply cruising. Should those two vehicles receive the same maintenance at 3,000 or 5,000 miles? Or might the inner city vehicle need the same maintenance at 3,000 miles that the highway vehicle doesn't need until 5,000?

It might surprise you to learn but the average patrol vehicle driven primarily for highway patrol only averages 35mph across the life of its use. Why? It still has to go from driveway to station to patrol to calls to patrol to meal stops to patrol to station (you get the idea). It's not ALL highway miles and speeds. An inner city patrol vehicle is far less—sometimes in the 10 to 12mph range. All of the stop and go, idling and top speeds of 30mph between lights really drags the total average MPH of the vehicle down across its lifespan.

By tracking the number of hours on your patrol vehicles in addition to the total miles driven, you can get a good idea of the average speed the vehicle sees across its service life. The maintenance schedule should obviously be adjusted so that the vehicle gets serviced more frequently when it has a lower average life span speed of use and a less frequent service schedule when it has a higher average life span speed of us.

The biggest challenge many fleet managers will have in justifying this type of maintenance schedule and tracking is the addition of the equipment to track the hours the vehicle

is run. Some manufacturers have this time tracking built into their vehicle software/firmware capabilities but only in higher trim packages. If it's not already available in the vehicles your agency is purchasing (usually not your choice because it's on a bid contract), then the equipment would need to be purchased and installed.

That's more cost and more work, but if it saves you time and money in maintenance through the life span of the vehicle, does the savings offset the initial expense? That's something you have to track and figure out for your agency before you take the suggestion up your chain of command, it might prove well worth it in the long run. ■

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The Right Rugged Mount: A Selection Guide

There's a lot of equipment and technology modern patrol vehicles need, here's a brief guide on what you need to know when buying your next solution. **By Jonathan Kozlowski**

The modern law enforcement patrol vehicle has become more of a mobile office than merely a car with a lightbar on the top wrapped in a themed graphic paint job. There's officer protection inserts, mounted firearms, tactical equipment, first responder gear, traffic safety items, a computer, a radio (or two)—and maybe a teddy bear. That's barely the tip of the iceberg and it all has to be secured (maybe not the bear).

If you're searching for rugged products online, what type of products are you likely going to find? You'll find keywords like durable, strong, dependable, maybe even tough. At the end of the day, it's often said that rugged products for mounting equipment in a law enforcement vehicle were designed to withstand use in hostile terrain and must reliably work in the harshest environments. At a minimum, any item labeled as "rugged" should be designed to at least last the life of the police vehicle. That life includes being used day-in, day-out, for eight to ten hours a day.

Figure out your pain points and wants

When in the market to select a mount, the first thing you should do is determine what type of device (or devices) you are mounting. Whether it's a computer, tablet, or firearm there are multiple solutions for each one. Know if and when plans include upgrading the device(s). The footprint of an upgraded laptop might not change from model to model, but more consumer brand computers tend to be slimmer than popular more rugged models.

"Make and model of devices that require mounting is critical for us to spec out the correct solution," says Michael Inglima of RAM Mounts. "We are starting to see a trend in police cruiser technology switch to more of a

phone-turned-computer type of deployment, for example Samsung DeX powered devices synced up to a monitor and keyboard is a very popular solution we're currently enabling across the nation."

Are you using a docking station? If not, have you considered if it meets the needs of your agency? A docking station might work better for some policies that leave the computer in the vehicle. Otherwise, it may be a lot of steps to take the computer in and out each shift. Consider all the equipment and tools mounted in the vehicle—from the cab to the truck, even onto the walls of your APC.

Officers should make sure that the version of storage solution is going to meet their needs, to match special weapons or special equipment. "For instance," explains Don Fenton of TruckVault, "we build units that contain breathalyzers [and/or] drones basically for any make model of vehicle on the road, whether it be SUV, pickup, van, or sedan."

This is also the part of the process where you need to define why you are selecting a new solution. If it's as simple as upgrading equipment, great. At the same time, know where the current item sits in relation to you and if you want to move it. There are options to give the passenger more or less room. Analyze the ergonomics of your current equipment and note if you'd like things closer or removed quicker/easier. Curt Hatton of Jotto Desk put it quite simply,

"At the agency level, it's all about ergonomics, ease of operation, and the amount of room it takes up... at 5'11" 190 pounds [without gear on] you don't nearly take up the amount of room as a cop that has a duty belt and a gun and a taser and two sets of handcuffs and two magazines and body armor on."

That said, analyze your environment and how often your vehicles are being driven in rough terrain. For example, while the paved

A special thank you to the following companies for their assistance:

- Havis Inc.,
- Jotto Desk,
- RAM Mounts, and
- TruckVault Inc.

roads are mostly flat, the intersections of Albuquerque, Ariz. dip to manage water flow that could cause equipment to jostle. Knowing your area will help you determine how rugged or heavy duty of a solution you actually need.

TruckVault's Fenton recommends asking a lot of questions: know what you're securing, if you need fire protection, heat protection, etc.

Know the make, model, and year of your car

This may be a no-brainer to note, but it is a vital piece of information to figure out which product will fit *with* you in your vehicle. I say "with" because all your equipment must work with you ergonomically. Why purchase new equipment or invest into something that brings you a brand-new list of pains?

Often mount manufacturers will receive CAD from the major vehicle brands. Where changes from one year to another may not affect anything of the interior, it will make a big difference if a shifter just happens to move from the dash to the floor, or should the vehicle manufacturer have a subtle change in how much vertical space the new SUV has to clear the gate.

Know the make and model of everything else

Look, you have a lot of stuff in your car. Each of these items are likely attached to something else. Make a list of every mount you aren't replacing and note how they're secured to the vehicle. What type of console do you have? Do you have a partition? Do you mount the patrol rifle or shotgun on it? Know your radio. Even if the mount is a competitor's product, knowing if it's mounted in one way or another can make all the difference to ensure your new solution is compatible with the products you're keeping. It's all vital data for the manufacturer to help you reach the right product.

There are situations where manufacturers will be proactive to ensure new products will work with "complementary" competitive products. For example, Havis received a demo vehicle from Ford while developing new products for the 2020 Interceptor Utility. "We took all of our 3D scans designed to fit that vehicle but had no idea what Setina or ProGuard was going to design for that vehicle and how they're going to fit... when ProGuard introduces a partition to the market, and we get our hands on one, and we try to install it with some of our parts."

Sometimes a redesign or correction may be needed, so it can be imperative to be able to provide any pertinent information. At the same time, other manufacturers like RAM Mounts state that they've focused more on universal solutions.

Tip: Have a plan for the printer. This can be an often overlooked item but having an idea on where you want it placed will aid the conversation—and all driving officers.

Installation

Some mounting and in vehicle storage manufacturers/distributors have a network of installation shops, if the in-house fleet manager isn't installing 50 side-console docking stations, so be sure to inquire about installation. If installation is being done in-house, ask the manufacturer if there are experts on hand for questions and how to contact them.

Tip: Try to take photos of the situation. While the seller may have the CAD and measurement numbers at hand, a visual aid might be the thing needed to help you solve your problem.

Don't be afraid to ask for a T&E

There may be a test and evaluation option to make sure the mount will work. Ask about if there is a program and the details. As complicated as it can be, your mobile office must conform to and work with you. Plan ahead. There's no need to rush this decision. ■

Editor's Note: This article was designed to act as a guideline only. Factors such as budgets, customer service, personal preference, and others may weigh in your selection.



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5 Things Your Fleet Maintenance Manager Wishes You'd Say

By Lt. Frank Borelli (ret)

Any officer with a personally assigned vehicle is also responsible for making sure the vehicle gets its needed maintenance. For most agencies, this is done on a regular three to five month schedule depending on how many miles are put on the vehicle and how quickly. The fleet maintenance manager we spoke with said that they usually started vehicles on a four month schedule for preventative maintenance, and then as the vehicles came in, they looked at the mileage and adjusted the next appointment date accordingly.

During "regular" preventative maintenance (PM) the vehicle gets an oil change and all fluids topped off. Tire pressure is checked and corrected as necessary. Every other PM the tires are usually rotated and a new air filter put in as well as the other normal PM services. We found it interesting that windshield wiper blades are usually only replaced if requested rather than on a fixed schedule.

We asked the fleet maintenance manager (FMM), "What are the five things you wish an officer would tell you when he brings his car in for service?" The answers, in order given with justification follow.



"I'm here for regularly scheduled preventative maintenance."

Apparently some officers drop off their cars for work that is outside the scope of the usual PM but don't mention the fact that the vehicle is also due for PM or will be soon enough that it should be done. If the vehicle is being dropped off for work other than PM or in addition to PM, the FMM would very much like to be told that it's also there for PM. Few things are apparently as annoying for an FMM as having a vehicle in for service of a specific problem and then getting it back less than a week or two later for PM. Apparently officers don't always react well when asked, "Why didn't you get the PM done when it was here last week?" The FMM admitted that such a question is usually asked in a very annoyed tone of voice accompanied by body language and facial expressions that add to the level of expressed annoyance. Can you believe that officers don't react well to that some times? Solve the problem proactively: When dropping off your vehicle just

for PM, tell them that. If you're dropping it off for something else and the PM will be anytime in the next four weeks, tell them that too. Let them decide whether or not to go ahead and do the PM. It can't hurt.



If there are any warning lights showing on your dashboard, which ones? If there is a timing or speed relationship to the light display.

Apparently, officers regularly take vehicles in for PM and don't advise the FMM about any warning lights that are regularly showing up. When the tech/mechanic servicing the vehicle gets in and turns the key to put it in his work bay and sees the lights, he goes to the FMM asking for information; and the FMM has none. Sometimes it's an easy fix: hook up the right piece of equipment to read vehicle codes and find out why the lights on. Sometimes the fix takes a bit more time than that. Either way, no matter what is found, there is added time on the PM. This hurts the efficiency of shop scheduling in an unexpected fashion. Such could be avoided with a bit of communication. Tell them up front about the lights and any additional information you can provide about when it shows up, conditions, speeds, etc.



If you are experiencing any performance problems—such as delays in acceleration, unusual drops in power at certain RPMs or when changing gears, etc.

Some such problems are easy to diagnose and fix, but with the increase in computer use and software technology controlling the motor, the problem might not be mechanical at all. It might be related to an already identified problem for a particular make and model of vehicle, or it might be something new (as it often is with newer vehicles). Either way, if the FMM isn't aware of it, it can't be fixed. If it's discovered during the post service test drive, once again it adds time to the service schedule. That's a headache for the FMM and the shop and aggravates you when you can't get your vehicle back when it was promised to you. Avoid being stuck with a pool car for an extra shift or two by communicating such challenges when you drop the vehicle off. (ADDED NOTE: Having the FMM like you never hurts. They run the shop and if you're a regular inconvenience for them, your time will get wasted—a lot.)



If you are hearing any weird or unidentifiable noises.

The more detail you can provide about the conditions under which the "weird" noises arise, the better the shop can diagnose the problems and fix them in a timely fashion. Is it an exhaust problem? A timing problem? A spark plug issue? Some of the details you can provide will assist in limiting the amount of diagnostic work the shop has to do. Do yourself and the shop a favor and pay attention; communicate as much as you can to them when you drop the vehicle off.



Report any front end/handling or suspension problems you perceive.

Let's be realistic: especially in pursuits, most patrol vehicles get driven pretty hard. That means hitting bumps and taking turns in conditions that might not be the best for your suspension and all of the mechanical parts that control your steering. If you're taking your vehicle in for PM and even think you might be experiencing some issues with the steering or suspension, the FMM wants to hear about it. It's especially easy to check the related parts during a PM when the tires are being rotated. Most shops will check the tire balance during a rotation anyway, but if you mention a handling issue, they will definitely check the balance for each tire as well as looking at control arms, linkage, etc. Again, this is a time saving communication. If the mechanic or tech doesn't know about a steering problem until he takes the vehicle out for a post-service test drive, you've added to his work load, the manpower demand in the shop, and created a potential scheduling challenge for the FMM.

These five items might seem common sense, but the FMM we interviewed rattled these five items off without hesitation—adding that these were his TOP five. There are others he'd be happy to hear, essentially covering anything you think might be wrong with your car. When you're picking it up isn't the time to ask if they also fixed something when it was only dropped off for PM. Such lack of communication inevitably results in frustration for both the officer, who is now unhappy with the service, and the FMM who has to find a way to provide the service that he didn't even know was needed.

A little prevention goes a long way toward saving long term maintenance and vehicle purchase costs. Do your part to keep both minimized and reasonable by communicating properly with your shop when you drop the vehicle off. ■

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