

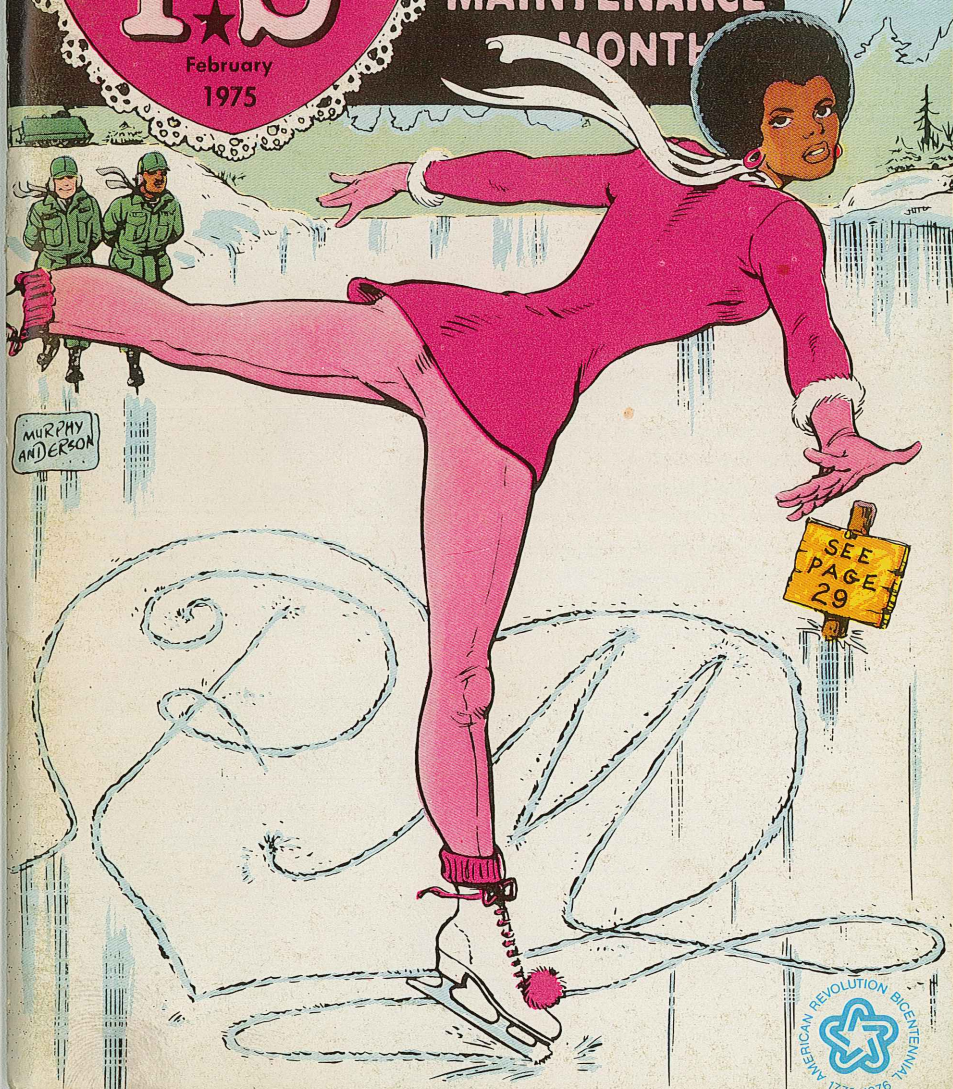
Issue 267

PS

February  
1975

# THE PREVENTIVE MAINTENANCE MONTH

THE BEST  
VALENTINE  
EVER  
FOR YOUR  
GEAR...



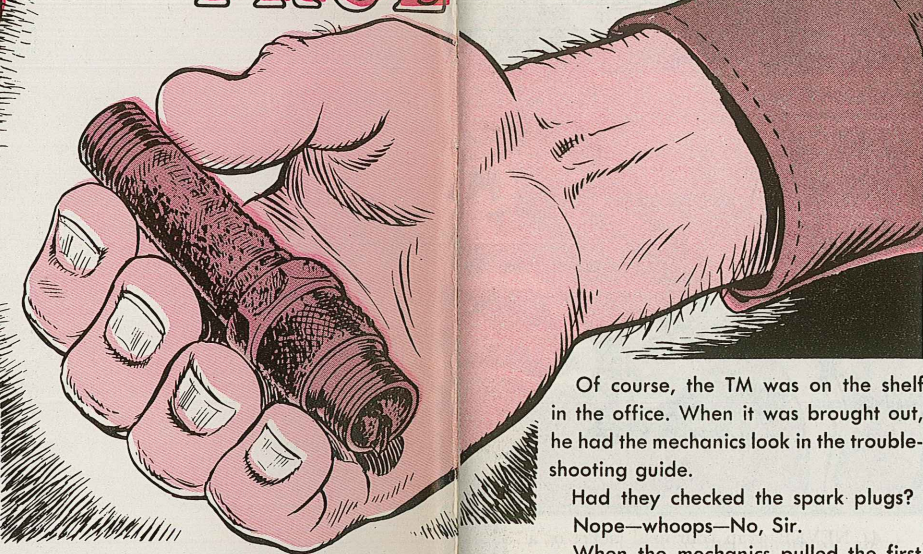
MURPHY  
ANDERSON

SEE  
PAGE  
29

AMERICAN REVOLUTION BICENTENNIAL  
1776-1976



# TIME WAS WASTED... A TRUE STORY



You don't have to be a sailor to know when your ship is sinking.

And you don't have to be a mechanic to see when maintenance is fouled up.

Take the honcho of one outfit we heard about. (This poop came from a maintenance news sheet, but we've changed the story a little so's not to embarrass the unit. They've got enough trouble already.)

It seems this unit had a 1/4-ton truck that wasn't running right. The mechanics had changed carburetors three times. They said the rebuild people hadn't adjusted the carburetors right. And the 1/4-tonner still wouldn't run.

Next, the mechanics checked the engine timing—and found it was OK.

Next, they opened the distributor to check the points.

At this point, the ol' man came on the scene.

"Where's the TM?" he asked.



Of course, the TM was on the shelf in the office. When it was brought out, he had the mechanics look in the troubleshooting guide.

Had they checked the spark plugs?

Nope—whoops—No, Sir.

When the mechanics pulled the first plug, guess what they found?

Right—a bad plug! Elapsed time: 1 minute.

There was the time and effort wasted by the mechanics in changing carburetors. There was the PLL clerk running his legs off going to the DX point. There was the old man showing 63B20-types the first and simplest rope in their MOS.

Troubleshooting is like doctoring.

How'd you like a doctor performing open heart surgery on you—before he checked to see if you had a bad case of indigestion?

THE  
PREVENTIVE  
MAINTENANCE  
MONTHLY

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PS wants your ideas and contributions, and is glad to answer your questions. Name and address are kept in confidence. Just write to: Or call: AUTOVON 745-3503.

M S G Half-Mast  
PS Magazine  
Lexington, KY.  
40507

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## SHERIDAN

## SHOTS

Taking care of the air compressor in your M551 Sheridan is a real no-sweat deal.

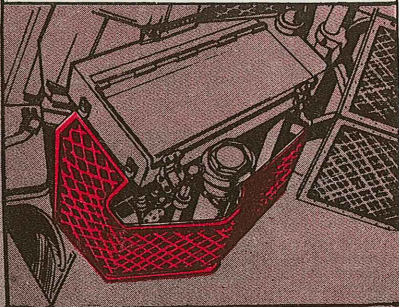
Actually, there are a few simple rules.

1. DO use the right kind of oil for your compressor. NSN 9150-00-985-7099, MIL-L-23699 will get you a quart of it. Keep a case of this oil in your support vehicle, and check the compressor oil level daily.

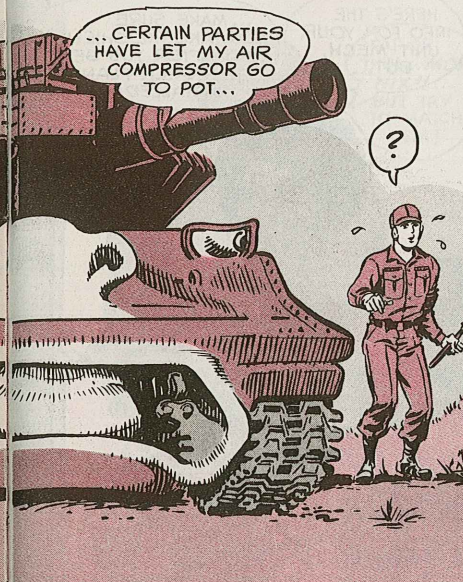
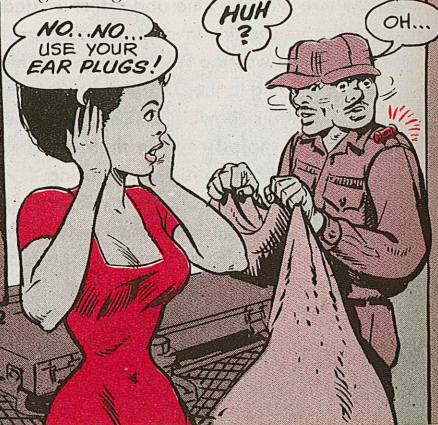


2. NEVER try to run the compressor on battery power or low engine RPM. This will burn the motor commutator and brushes.

3. DO keep the screen in place around your compressor. Without the screen some heavy-foot could step on the compressor and break off a cylinder and piston assembly.



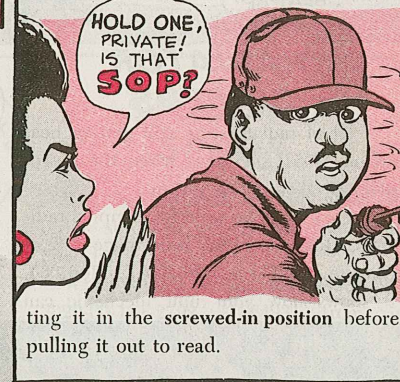
4. NEVER wrap your field jacket or a blanket around the compressor to muffle the noise. This cuts down the cooling air flow; your compressor needs all the cooling it can get.



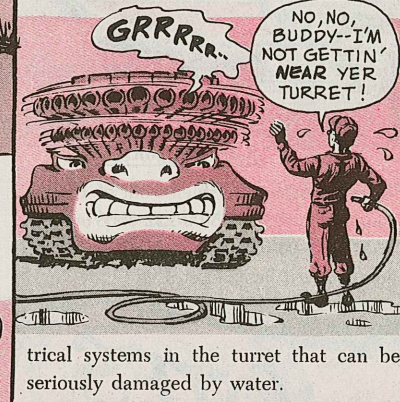
5. DO exercise the compressor about 30 minutes every week even if the vehicle is going to stay in the motor pool all week.



6. NEVER read the oil level without first wiping off the dipstick and then putting it in the screwed-in position before pulling it out to read.



7. NEVER use a water pressure hose inside the turret. There are several electrical systems in the turret that can be seriously damaged by water.





I'M SO MORTIFIED...  
I LOOK A MESS!!  
MY RADIATOR IS  
ALL BATTERED AND  
BEAT UP!

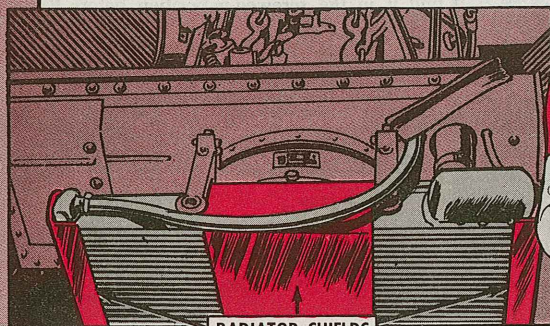
## RADIATOR SHIELDS

A lot of radiators are still getting beat up on M551 Sheridans when the power plant is taken out or put in.

There's really no need for rumpled radiators. Just read and heed page 9-8 of Change 4 to TM 9-2350-230-12 (Jun 66). It shows how your unit mechanic can

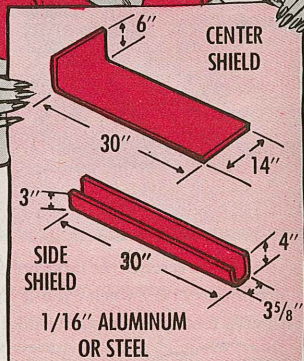
HERE'S THE  
INFO FOR YOUR  
UNIT MECH,  
BUT...

... MAKE SURE  
YOU TAKE THE SHIELDS  
OUT AFTER YOU GET  
THE POWER PLANT  
INSTALLED!



RADIATOR SHIELDS

make the protective shields out of 1/16-in aluminum, NSN 9535-00-232-6868 or steel, NSN 9515-00-027-0656. Aluminum is the first choice if he can get it.



## NOTES

You Sheridan crewmen can make these notes in your copy of TM 9-2350-230-10-2-2 (Mar 73), the Operator's Manual for turret maintenance on the M551:

Page 1-19—After the last line which ends "...and all exposed areas," write:  
3. 136.1—AFTER OPERATION SERV.  
ICE.

Page 1-20—After the last line of Item 7 which ends "...down condensation," write: **Fully depress the gun launcher.**

Page 1-22—After the last line of Item 8 which ends "...cut down condensation," write: **Fully depress the gun launcher.**

KNOW WATCHA MEAN!  
JUST LOOK AT ME...  
I GOTTA **THIN** SPROCKET  
WHEEL ON ONE SIDE...  
AND A **FAT** ONE ON  
THE OTHER!

## SPROCKET SPOOK

You can get real spooked when you order sprocket wheels for your M551 Sheridan.

When you ask for sprocket wheels NSN 3020-00-181-2792 (11664931) from page 272 of your TM 9-2350-230-24P/1 (Jun 71), you might get the 2 1/8-in thick wheels that number calls for... or they might send you a thinner sprocket wheel—1 7/16 in thick, NSN 2520-00-914-1002.

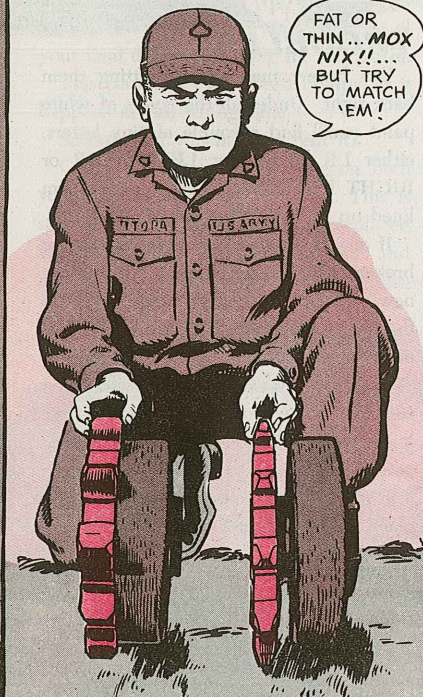
Try to match the sprocket wheels on your vehicles, regardless if supply sends you fat wheels or thin wheels.

The fat wheels wear longer and cause less wear in the window area of track shoes.

The fat wheels are the only ones now being made and, in time, that will be the only thing supply will have.

Meanwhile, if you get the thin wheels, use 'em in good health.

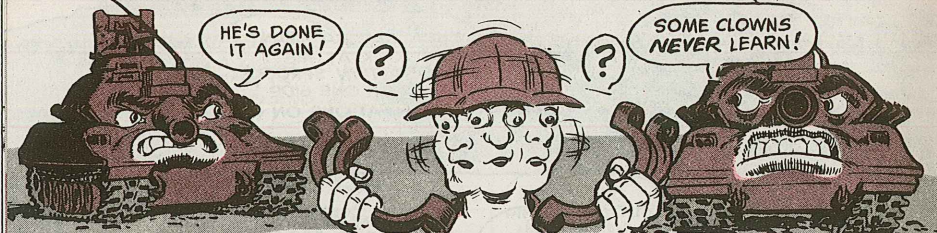
FAT OR  
THIN... **MOX  
NIX!!**...  
BUT TRY  
TO MATCH  
'EM!



WHENEVER  
YOU RUN THROUGH  
THE DRILL, INCLUDE  
THIS NEW INFO.  
NEW EDITIONS OF  
THE TM WILL  
HAVE IT.

PS MORE





## TRUNNION TROUBLES

Mix up your transmission trunnion caps and you've got yourself a freshly-mixed mess of trouble.

This is what you'll find out:

1. The transmission trunnion caps from one Sheridan won't fit on another Sheridan.

2. The transmission trunnion caps from the same Sheridan won't fit if you mix the left and the right.

3. You can't even put them back if they're turned end-for-end.

The only way you can work it is to have both trunnion caps fitted exactly the way they were when they were taken off.



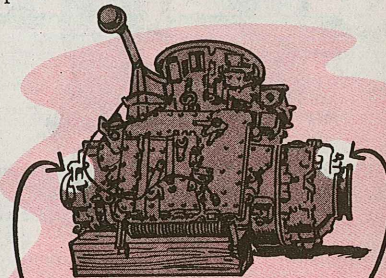
YOU GOTTA BE **FUSSY!** THE CAPS ARE LINE BORED WHEN THE VEHICLE IS ASSEMBLED AND EACH ONE IS A **CUSTOM JOB!**



You have some help in putting them back right. Under all the layers of white paint you'll find a couple of tiny letters, either LR or RR—for LEFT REAR or RIGHT REAR. That'll help you get 'em lined up the way they should go.

If one of the trunnion caps gets lost or broken, it's a job for support. Ordering a new replacement trunnion cap won't do the job for you. New caps are blanks and must be machined to size.

The best deal is not to get the trunnion caps lost or mixed up. Color code the caps in the vehicle before you pull the power pack. That way you can get them back into the right vehicle and into the right place in that vehicle.



TRUNNION CAPS SHOULD HAVE .002 TO .010 INCH CLEARANCE AFTER TORQUE

Paint your color lines clear across the caps and an inch or so along the transmission so you can see where they're supposed to fit.



## M60 SERIES TANKS FINAL DRIVE— NO BULL!

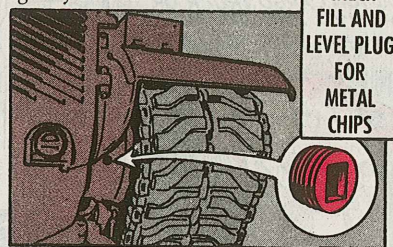
If the bull gear chips apart, the rest of your final drive is not long for this world.

This could be a real head bumper if it happens at the wrong time.

So how can you help prevent it?

Check the fill and level plug on both your final drives every few days. This is 'specially necessary with new and replaced final drives. The plugs are magnetic and if you find they're holding metal chips,

get the word to your mechanic. You'll be glad you did.



CHECK  
FILL AND  
LEVEL PLUG  
FOR  
METAL  
CHIPS

## ENGINE SUMP DRAINING

HOPE HE FORGETS ABOUT BOTH PLUGS...

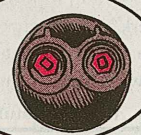
YEH! THEN US HARMFUL DEPOSITS CAN BLOCK THE OIL FLOW!

When you're draining the crankcase of your M60A1 tank or other vehicle with an AVDS 1790-2A engine, keep this in mind.

There're 2 oil sump plugs, each draining a different compartment. Unless you take 'em both out, harmful deposits will build up in the engine oil pan and you'll have a blocked oil flow. Naturally, this can cause overheating and contribute to early engine failure.

Get the vehicle as level as possible when draining the engine oil. Keeping the oil coolers clean will also help prevent heat build up.

ENGINE  
CRANKCASE  
DRAIN  
LOCATION





## LIBERATED WINDSHIELD WIPERS

With a couple of simple fixes, you can save trouble for yourself and for those windshield wipers on your Gama Goat—

—EITHER THE M561 1 1/4-TON CARGO TRUCK OR THE M192 AMBULANCE.

WHY SO GLUM, CHUM?

WE GOTTA PROBLEM-- AND IT WIPED THE SMILE RIGHT OFF MY FACE!

First, take off the wiper stowage clips. Then the blades can't be held tight. This means the wiper motors won't get burned up if someone accidentally flips on the switches.

THESE CLIPS HAVE BEEN USED FOR WIPER BLADE STORAGE WHEN THE WINDSHIELD'S REMOVED—LIKE FOR AIRDROP OPERATIONS. IF THE WIPER SWITCHES GET FLIPPED ON ACCIDENTALLY, THE MOTORS BURN UP.

Second, do away with the automatic "park" position for the wiper blades. This's the feature that returns the blade to the down position when you turn the switch off. And this feature is what makes wiper

adjustment so complicated. With "park" taken out of the electrical circuit, you can adjust blade travel just by repositioning the blades on their shafts.

Start out by turning on your master switch and flipping on your wiper switches to see if your wipers work OK. If they don't, get 'em fixed. Then remove the circuit breaker panel on the cowl. Move Cir-

Now get in there where the wiper motors are and unhook the cannon plug for Circuit No. 102 at each motor.

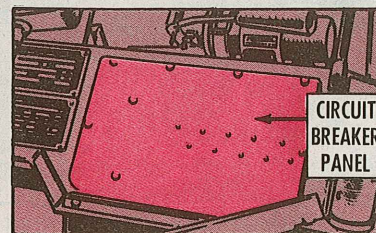
Cut the wire about 3 inches from the plug. Tape the exposed end of wire.

That's all there is to it.

Careful, though! Be sure to cut the motor end of Circuit No. 102. If you cut Circuit No. 102 at the switch end, you'll cut off power for your wiper motor and also for the horn.

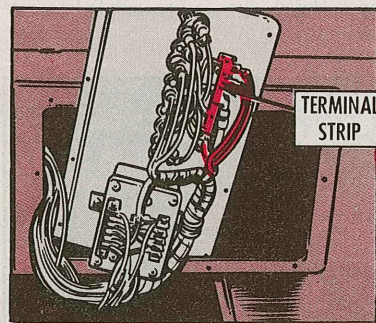
All fixed up? But you find that the wiper blades stop on the windshield right where they were when you turned the switches off? And that bugs you? You'll just have to turn the switch on 'n' off till you get the blades where you want 'em.

ANOTHER ADVANTAGE OF THIS CHANGE IS THAT YOU CAN NOW USE THE MOTORS IN EITHER LEFT OR RIGHT POSITION.



CIRCUIT BREAKER PANEL

cuit No. 116 (Terminal No. 7) to Terminal No. 1 on the terminal strip.



TERMINAL STRIP

## Got A Problem? Write

Got a problem with your Army equipment? Don't keep it to yourself. Write to Half-Mast about it. He will give you an answer. The address: MSG Half-Mast, PS Magazine, Lexington, KY 40507.



# WET RATT-RIG



Talk about a headache!

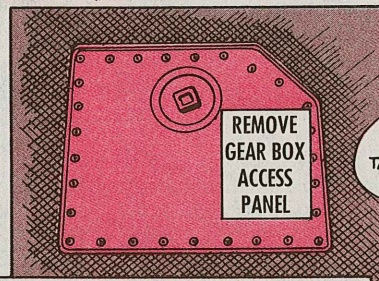
You've got an M561 1 1/4-ton truck carrying a commo shelter—the AN/GRC-122 Ratt-Rig, for instance. And water—rain or wash water—piles up on the carrier floor. It can't get out because of the tailgate's watertight seal.

If there're any breaks in the shelter's watertight seal, this water'll get inside and cause lots of damage.

So what can you do about it?

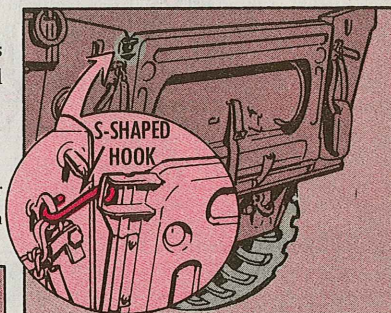
A couple of different things.

Take off the access panel for the rear steering gear box. Then water will drain out through the bottom of the carrier.



**PUT PANEL BACK ON WHEN YOU TAKE THE SHELTER OFF AND BEFORE YOU SWIM YOUR GOAT**

Or you can make 2 S-shaped hooks out of heavy wire or rod and use 'em to "crack" your tailgate. These'll hold the tailgate almost closed—open just enough to let water drain out.



SO WHY NOT JUST LEAVE THE TAILGATE HANGING WIDE OPEN?

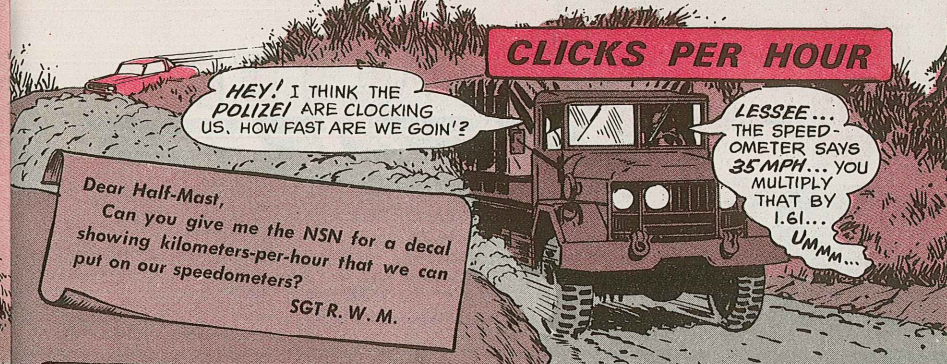
NOT ON YOUR LIFE!

IT'LL GET MASHED BY SOMETHING—THEN IT'S SHOT!



I HATE TO THINK WHAT HAPPENED TO THAT EQUIPMENT IN THERE.

WHAT'S GOIN' ON BACK THERE?



Dear Half-Mast,  
Can you give me the NSN for a decal showing kilometers-per-hour that we can put on our speedometers?  
SGTR. W. M.

## CLICKS PER HOUR

HEY! I THINK THE POLIZEI ARE CLOCKING US. HOW FAST ARE WE GOIN'?

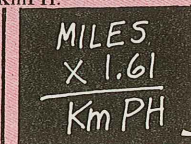
LESSEE... THE SPEEDOMETER SAYS 35 MPH... YOU MULTIPLY THAT BY 1.61... UMMM...

Dear Sergeant R.W. M.,

Nope, I can't—because there's no such decal in the Army supply system.

If your command requires this, they'll get it for you. They may be able to local-purchase a decal on the commercial market—although it may be only a sticker showing the conversion from miles to kilometers.

Or you can make your own. To convert miles to kilometers, multiply miles by 1.61. For example, 25 MPH converts to 40 KmPH.



## MAKE DRY BATTERY WET

So you got a new lead-acid battery. A 2HN or 6TN. Charged and dry. Yep, dry. No electrolyte in it.



What you need now is Sulfuric Acid Electrolyte, NSN 6810-00-249-9354 for 1 gallon.

After you fill your battery with electrolyte, you put 'er on a charger.

But, you say, it's already charged. It comes that way.

Right, but it'll last longer if you charge it up before putting it into operation.

You get the dope on charging in TM 9-6140-200-12 (Sep 73).



# TACHOMETER PARTS

SOME OF THE REPAIR PARTS I NEED FOR THE TACHOMETER SETUP IN MY 2 1/2-TON TRUCK ARE NOT IN TM 9-2320-209-20P (OCT 72).

Dear Half-Mast,

Some of our M35A1 2 1/2-ton trucks are always Amber on their ESC's because they have no tachometer—they missed out on MWO 9-2320-209-30/5 (Sep 66), which was rescinded.

We've got the OK from topside to install tachometers, but we don't have a complete list of the parts needed.

Can you lend a hand?

SFC J. E. T.

Dear Sergeant J. E. T.,

This tachometer parts roundup should be of interest also to anybody who's already got the tachometer, since some repair parts are not in TM 9-2320-209-20P (Oct 72) and others are hard to find in that -20P.

- Adapter (takeoff), NSN 6620-00-084-7621
- Gasket (takeoff adapter), NSN 5330-00-011-5449
- Adapter Assy, 90 degree (engine), NSN 6680-00-084-7622

- 2 each Bracket, cable (1 at 2nd cylinder head cover bolt and 1 at left front cylinder head cover bolt), NSN 5340-00-179-3601
- Bracket, cable (on left front air compressor mounting stud), NSN 2815-00-455-9497
- Bracket, mounting (tachometer), NSN 6680-00-737-2727
- 3 each Clamp, loop (for 3 cable brackets), NSN 5340-00-088-1254
- Grommet, rubber, split (in dash panel), NSN 5325-00-174-9038

- 5 each Nut (3 for cable brackets and 2 for tach mounting bracket), NSN 5310-00-088-1251
- 2 each Screw (for tach mounting bracket), NSN 5305-00-068-0505
- 3 each Screw (for cable brackets), NSN 5305-00-068-0501
- Shaft, NSN 6680-00-021-3497
- Cable Assy, NSN 6680-00-732-0561
- Tachometer Assy, NSN 6680-00-825-2076

- Decal, warning (red arrow on face of tachometer), NSN 7690-00-999-7807

UNTIL THIS NSN GETS IN THE AMDF, ORDER THE ARROW BY "EXCEPTION DATA." RIC IS AKZ.

HALF-MAST

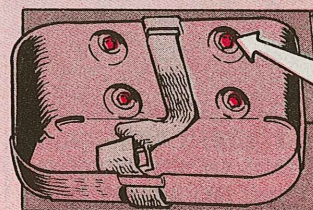
SCREW HEAD INSIDE OF TOOL BOX ...  
... NUT OUTSIDE—IN FUEL CAN BRACKET

Travel is tough for your canvas tool bag—when it gets torn up by those screws sticking into the tool box on your M35A2 or other TM-209-series 2 1/2-ton truck.

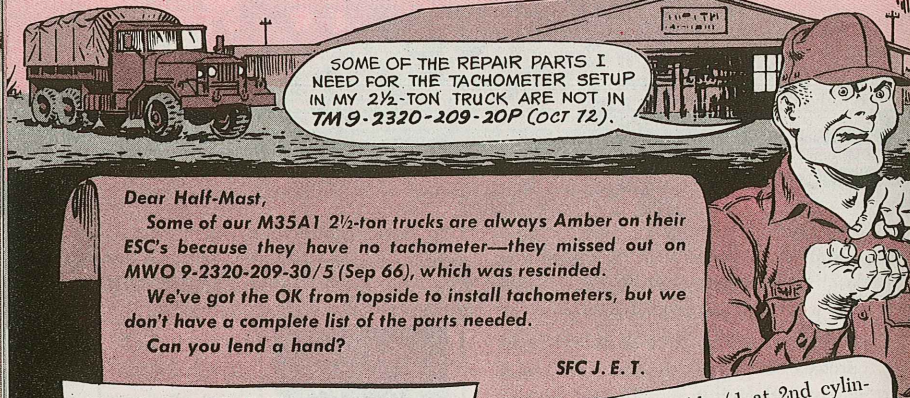
These're the 4 screws that mount your fuel can bracket.

So change the screws. Get 'em under NSN 5305-00-958-0610. They're "pan-head" instead of hex-head. And they're shorter—5/8 inch instead of 3/4 inch.

Put the head end of the screws inside of the tool box.



You use the same nuts — NSN 5310-00-950-0039. This nut isn't listed in TM 9-2320-209-20P (Oct 72) with the fuel can bracket, but it is in the -20P with the brake system hydraulic line clamps.



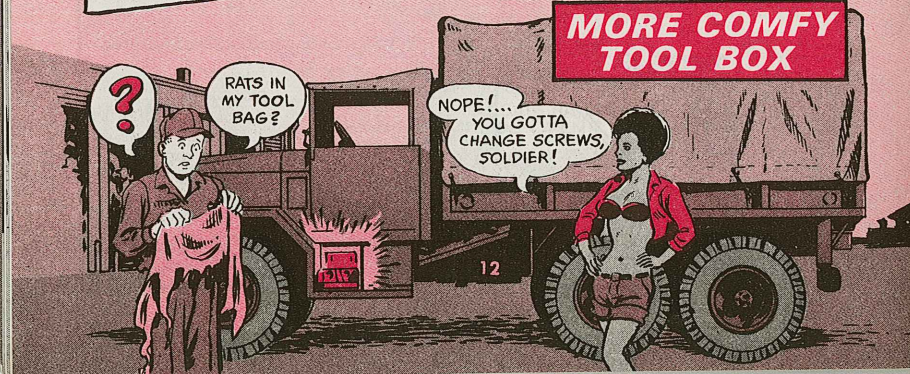
MY DEUCE-AND-A-HALF DOESN'T EVEN HAVE A TACHOMETER, IT MISSED OUT ON THE MWO!

COOL IT, GUYS!

HALF-MAST'S LETTER BELOW HAS A RUN-DOWN ON ALL THE PARTS NEEDED TO INSTALL TACHOMETERS ON TRUCKS THAT DIDN'T GET 'EM IN PRODUCTION.

AND SOME OF THESE ARE WHAT YOU NEED FOR THE TACHOMETER SETUP YOUR TRUCK GOT IN PRODUCTION.

MORE COMFY TOOL BOX

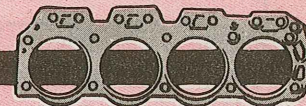


RATS IN MY TOOL BAG?

NOPE!... YOU GOTTA CHANGE SCREWS, SOLDIER!



# HEAD (ACHE) Gasket?



**HOLD IT! BEFORE YOU TEAR THAT ENGINE APART, SEE IF THERE'S REALLY A GASKET LEAK. IT MIGHT ONLY BE GASKET CEMENT BUBBLING FROM THE HEAT.**

A lot of guys say they're having trouble with leaking cylinder head gaskets on their M151A2's and other TM-218-series 1/4-ton vehicles.

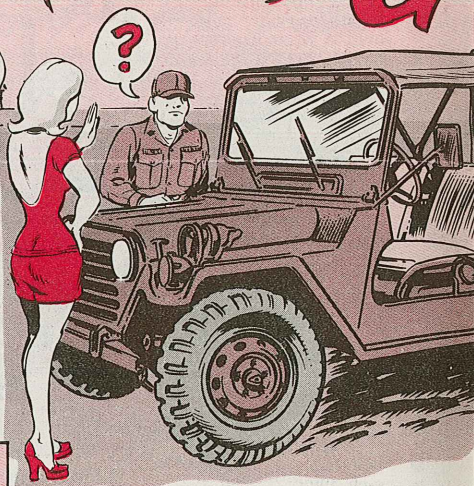
You won't go wrong if you make sure you're safe on all of these points when you're installing a new head gasket:

—Gasket surfaces on both the head and block are clean and free of nicks 'n' burrs. If there's any old gasket sealer on there, get it off.

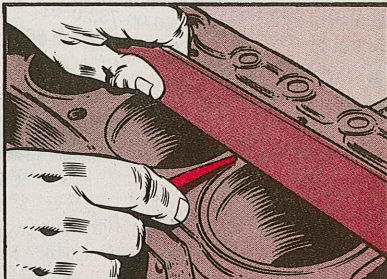
**FIRST, WIPE OFF THE CYLINDER WALLS WITH A CLEAN RAG DAMPENED WITH SOLVENT. THEN STUFF EACH CYLINDER WITH PAPER TOWELS DAMPENED WITH OIL. ALL THIS'S TO KEEP GRIT 'N' DIRT FROM FALLING INTO THE CYLINDERS AND STICKING THERE.**



**NOW USE A HEAVY FILE WRAPPED WITH SANDPAPER TO GET MOST OF THE OLD GASKET CEMENT OFF. SCRAPING AND A WIRE BRUSH WILL GET THE STUBBORN SPOTS.**



—Both head and block are perfectly flat where they come together. Use a straight edge to check 'em. The gasket and sealer may make up for a little unevenness—but don't bet on it.



**WITH A STRAIGHT EDGE ON THE CLEAN BLOCK—AND THE HEAD, TOO—USE A .005-IN FEELER GAGE TO CHECK FOR HIGH AND LOW SPOTS. MORE THAN .005 IS TOO MUCH.**

**YOU'VE GOT NO HEAD GASKET PROBLEM IF YOUR ENGINE CHECKS OUT OK WITH THE CYLINDER COMPRESSION AND MANIFOLD VACUUM TESTS -- PARA 2-28 AND PARA 2-29, TM 9-2320-218-20.**

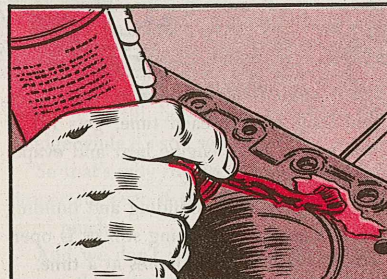


**CHECK, TOO, FOR COOLANT IN THE ENGINE OIL, LOW COOLANT LEVEL, ENGINE MISSING AND LOSS OF ENGINE POWER.**

—Bolt holes and bolts are clean. Threads are true and free of burrs.

—Use only Gasket, NSN 5330-00-678-1367. It's the improved job.

—Use Sealer, NSN 8030-00-543-4384, on both sides of the gasket and on the bolts. Spread a real thin coat of sealer on the gasket—no globs or gobs left over.



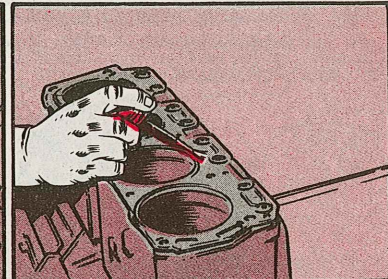
**THE SECRET IN SPREADING ON THE SEALER IS TO COVER THE AREA COMPLETELY BUT AS THIN AS POSSIBLE. SAFEST BET IS TO COAT THE SURFACES ON BOTH THE BLOCK AND HEAD. THEN ...**

—Torque the head bolts exactly like it says in TM 9-2320-218-20 (Sep 71), Figure 2-46, page 2-92, and para 2-32b, page 2-92, and para 2-32b, page 2-96.

What? Still leaking?

Then it comes down to one of two things—either the bolt holes in the block are not deep enough or the head bolts are too long. The bolts are bottoming in the holes before they put a real squeeze on the head. Check 'em out—you may need new bolts. Or maybe a washer under the bolt head will "shorten" the bolts enough to do the trick.

Remember, all of the parts have to be in top shape before you start—or you're just wasting your time. You can get some good stuff on this in your Direct Support's TM 9-2320-218-34 (Jan 72)—paras 4-42, 4-44, 4-47, 4-57 & 4-102. You'll get more details than you find in your -20 TM.



**... SPREAD SEALER ON ONE SIDE OF THE GASKET. SET THE GASKET IN PLACE ON THE BLOCK AND COAT THE TOP SIDE. WITH THE HEAD ALREADY COATED, YOU PUT IT ALL TOGETHER.**



# ENGINE IS WATER-MAKER

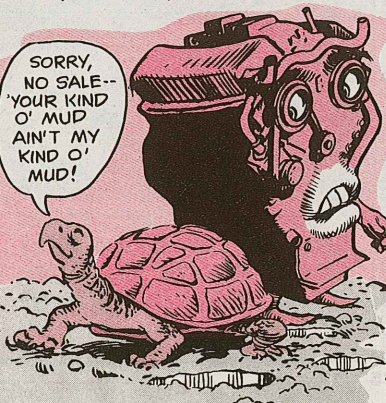
Dear Half-Mast,  
Our unit has many more vehicles than drivers. Because of low manpower, there're some vehicles that're operated only to perform the ESC. And there're others that're driven only 50 to 100 miles over a period of several months.  
Yet they require periodic changing of the engine oil, which seems to be a foolish and wasteful use of oil.  
Can you make what looks wrong seem right?

CW3 D. J. S.

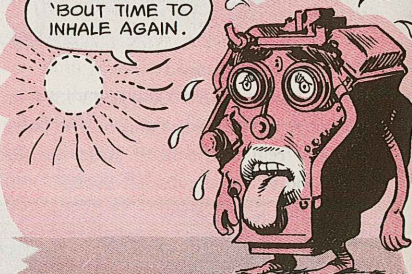
Dear Mr. D. J. S.,

It's not a matter of "seem"—it's a fact that water builds up faster in an engine that's operated rarely than in an engine that's operated often.

An engine generally is not air tight. So air moves in and out of the engine with temperature changes—as from day to night. When warm, moist air is cooled, you get condensation—water. This goes on day in and day out.



GETTIN' ALONG 'BOUT TIME TO INHALE AGAIN.



An engine that's operated frequently, and long enough each time, gets rid of this water. High engine heat and evaporation take care of it.

But water keeps building and building in an engine that's sitting still or is operated for only a few minutes at a time.

Water is a poor lubricant in an engine. It rusts and corrodes bearing surfaces. Mixed with the oil, water causes sludge—that black, mud-like stuff you find in the bottom of the oil pan. Sludge is a poor lubricant, too.

WHADDAYA MEAN THIS TRUCK'S UP FOR AN ENGINE OIL CHANGE?



IT HASN'T ROLLED UP 200 MILES IN THE PAST 12 MONTHS!



SO THAT OIL'S PROBABLY IN WORSE SHAPE THAN IF THE TRUCK HAD BEEN OPERATED 200 MILES EVERY MONTH IN THE LAST 12.

OH-OH, GOODBYE, HOME SWEET HOME!

Worse, though, sludge blocks oil passages in the engine. (The main reason for draining oil right after engine operation—when it's still hot—is to drain off this sludge while it's still suspended in the oil.)

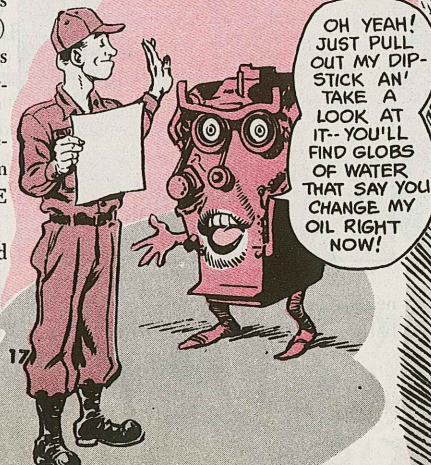
So that's why regular changing of oil is important even if the engine is not operated much.

And we don't get off the hook just because the oil change interval has been doubled by DA MSG DALO-SMM-E 261852Z Feb 74.

If we find that our oil is contaminated with water, we change oil—right now!

Half-Mast

NOPE! TH' NEW RULES SAY YOU'RE NOT UP FOR AN OIL CHANGE FOR ANOTHER 6 MONTHS.



OH YEAH! JUST PULL OUT MY DIP-STICK AN' TAKE A LOOK AT IT—YOU'LL FIND GLOBS OF WATER THAT SAY YOU CHANGE MY OIL RIGHT NOW!

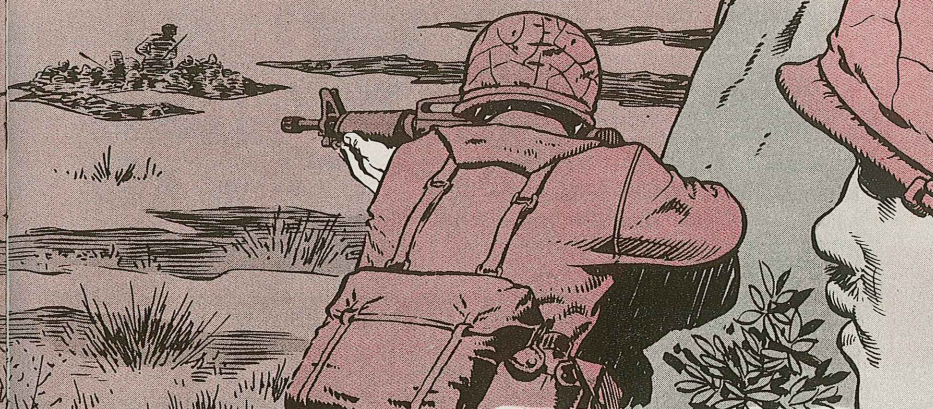
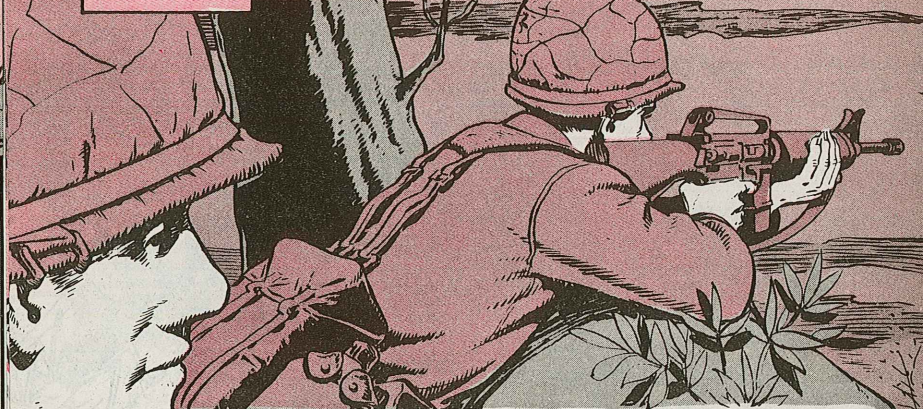




FOR  
LOW  
LEVEL  
LIGHT...

THE

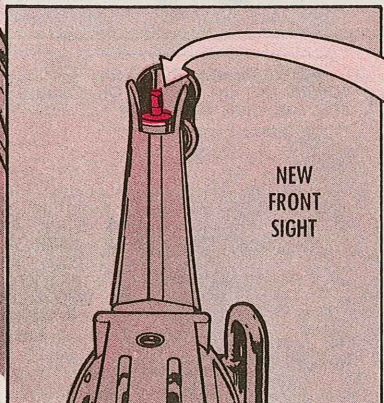
# PROMETHIUM SIGHT



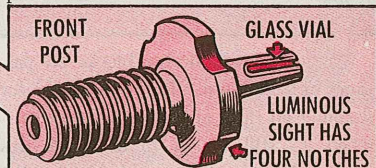
Listen up, M16A1 experts!

The all-new Low Light Level Sight System (L.L.L.S.S) is the greatest thing yet for use in dusk, fog, haze or artificial illumination.

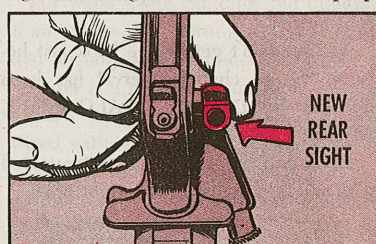
The front post has a tiny glass vial (look close!) which holds the luminous material. And, there're 4 notches on the base of the front sight post. A standard front sight post has 5 notches.



NEW  
FRONT  
SIGHT



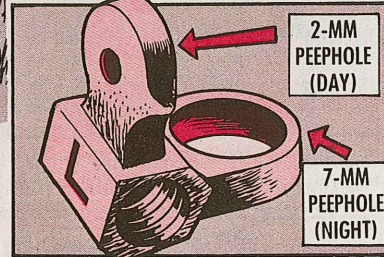
The promethium sight system's rear sight has a large (7-MM) unmarked peephole.



NEW  
REAR  
SIGHT

But it needs special attention, too. You never tamper with, abuse or alter this baby.

hole and a 2-MM peephole stamped with an "L."



Under normal conditions the luminous material in the sights present no radiation hazard. But any time you break or damage a low light level sight, turn in your weapon to support, pronto!

You store and use your M16A1 with a luminous sight just the same as rifles with standard sights. But that glass vial on the front sight needs extra cleaning care.

F'rinstance, keep metal brushes, knives and anything else that's sharp away from the front post. A cut or cracked vial means a zapped sight.

Mud, grease or other gunk on the front sight will snuff out your glow. Use RBC—rifle bore cleaner—for this cleaning chore. Wipe carefully with a clean rag. Then lightly lube with LSA. You want a generous batch of LSA on the front sight post screw, detent and spring. Be careful, tho, LSA can dim your glow. Make sure you keep the luminous vial free of LSA.

Clean 'n' lube the rear sight—same way—while you're at it.

Lower your sights on the M16A1 manuals—TM 9-1005-249-10 & -20.





# BATTERY P.M. BEAUTS

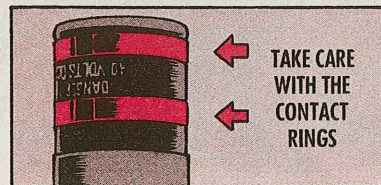
**HOLD ONE!**

WHO NEEDS A  
FARM FULL OF  
EXPENSIVE, DEAD  
REDEYE TRAINER  
BATTERIES?

OR MAYBE  
A HOSPITAL  
CONFINEMENT?

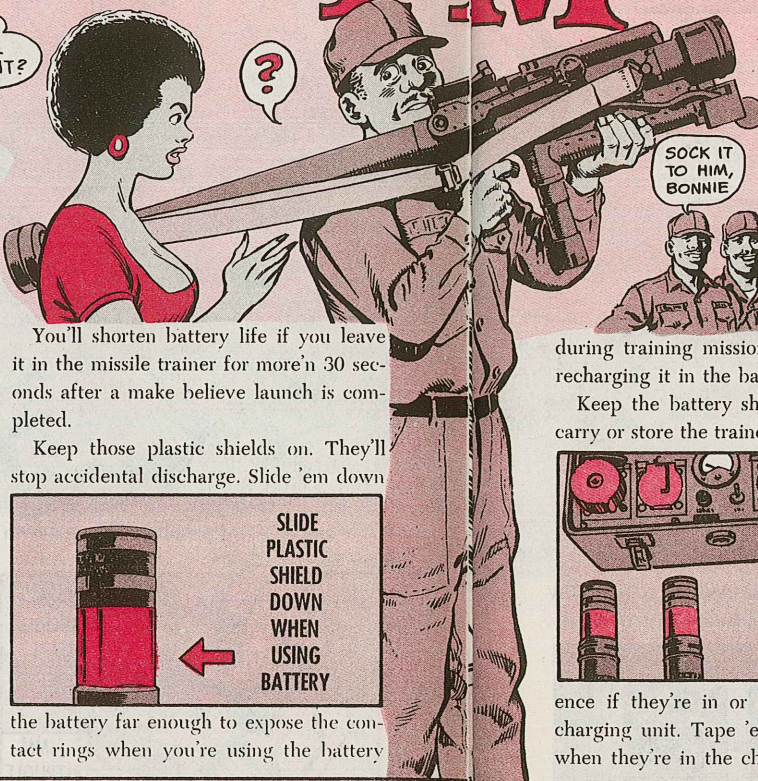
That's what you'll have if you treat those BA-523 batteries unkindly, Battman.

F'rinstance, you'll get a painful shock or burn if you touch the contact rings of a fully-charged battery. Same hurt goes for



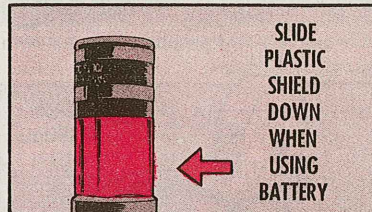
metal objects or liquids that you let short across 'em. Either way, you'll get less than high performance from the trainer on your next mission.

Sure, you'll get 15—maybe 20—missions from a 100 per cent charged battery, but any discharge or shorted out battery means downtime—up to 8 or 12 hours! That's how long it takes to fully recharge a BA-523 nickel cadmium beauty.



You'll shorten battery life if you leave it in the missile trainer for more'n 30 seconds after a make believe launch is completed.

Keep those plastic shields on. They'll stop accidental discharge. Slide 'em down



the battery far enough to expose the contact rings when you're using the battery

**TIP:** Here's how you can tell if the shield's in place when the batteries are stored in the charger: Press the "State of Charge" button. If you get no reading, the contact rings are covered.

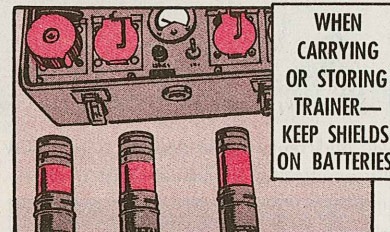


**NO READING? CONTACT RINGS ARE COVERED!**

during training missions, or when you're recharging it in the battery charger.

Keep the battery shields on when you carry or store the trainer. Makes no differ-

A dirty, wet, crummy battery receptacle in the battery charger is guaranteed to shorten the life of a battery. Or kill it dead! Clean 'n' dry is the word, Missileman.

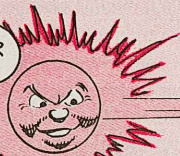


ence if they're in or out of the battery charging unit. Tape 'em down, Battman, when they're in the charger for storage.

A good reading of TM 9-6920-428-12 (Aug 69) will pay off in PM savings—downtime and dollars. Like maybe \$400 for a nickel-cadmium battery.

## M49 REDEYE TRAINER ...

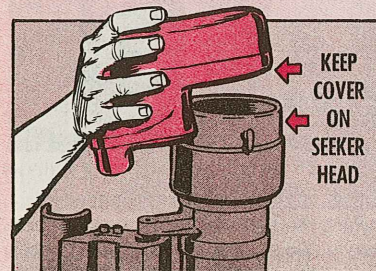
**HA!...ANOTHER  
SEEKER HEAD  
ZAPPED!**



Keep the M49 Redeye tracker head trainer's infrared seeker head covered as much as possible.

F'rinstance, be sure to re-cover the seeker head during the 3 minutes between

**NO, NO, SOLDIER!  
NEVER POINT AT  
THE SUN!**



firing sequences, or right after cleaning the seeker head window...and when piggybacking or a-truckin' the launcher.

Never point the seeker head straight at the sun. Direct sun rays on the seeker head can put your launcher out of commission for several hours.

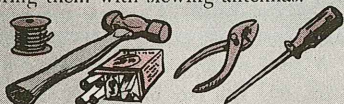
This same good cover-up PM goes for the M41 Redeye missile launcher during the team drill and firing deal, too.



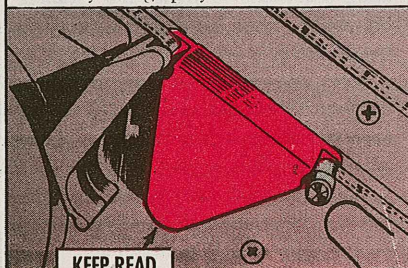


Components of the Improved Hawk missile system put out longer when you adopt "Clear, Clean and Cool" as your basic PM rule.

Little things like clearing tools and other objects from atop cabinets to avoid clobbering them with slewing antennas.

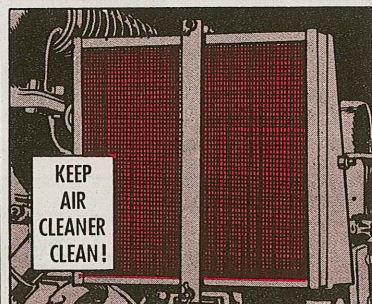


Or, cleaning the read head to insure a cool ICC tape (get *all* the crud off the head by using spray contact cleaner).



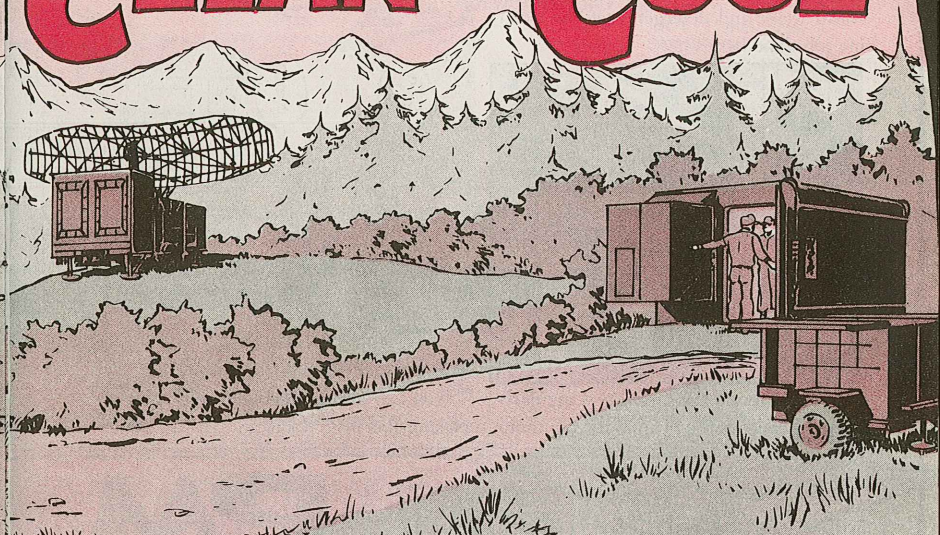
**KEEP READ  
HEAD CLEAN**

And, replacing or cleaning your 60-KW generator's air cleaner at least quarterly.

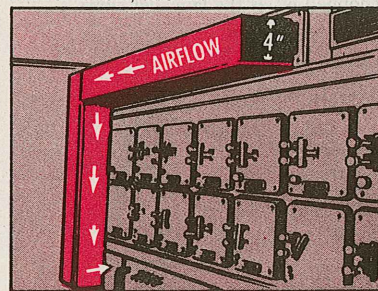


When the air cleaner gets cruddy, it draws oil off the valves and raises oil pressure... which can blow the engine seals. You can get a replacement air cleaner with NSN 2940-00-633-6392.

# CLEAR, CLEAN AND COOL

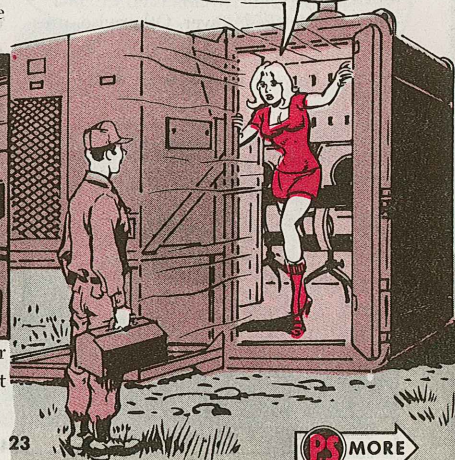


You can really go into the cool bit big, with your commander's permission, by running some home-made ducting from your BCC's left air conditioner vent to the blower motor, like so:



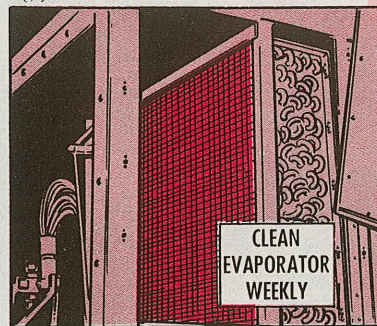
That way, the blower feeds the cool air into the chassis, further reducing heat buildup.

...AND YOU STILL GET PLENTY OF COOL AIR IN THE SHELTER FROM THE REMAINING AIR CONDITIONER VENT.





You can even mix your cool and clean. For a cooler BCC, clean the air conditioner evaporator weekly. A typewriter brush, warm water and detergent get the cleaning job done best.



If the evaporator isn't cleaned regularly, water collects in the evaporator fan motor



housing and damages the blower.

You can also protect the evaporator by closing the BCC doors and the air condi-

**POW**

OWW!

GEE, CONNIE-- WE ONLY CLOSED TH' DOOR TO PROTECT TH' EVAPORATOR!

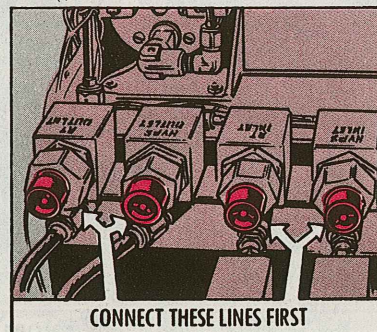
NOT T' MENTION SAVING TH' AIR CONDITIONER FROM CONSTANT RUNNING!

tioner panels. That prevents constant running of the air conditioner and possible freezing of the evaporator coils.

## GENERAL PM

## REMINDERS

**IPAR LIQUID COOLER**—Connect the HVPS and RT inlet and outlet lines before you connect electrical power. Otherwise, pressure builds on the gages, forces seepage on the blower blades and does other damage.

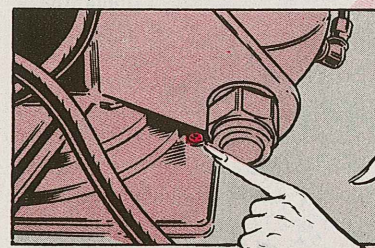


**LAUNCHER**—Replace the level cap after you inspect the level. That prevents the cap and retaining chain from being chopped off as the launcher slews.



**ICC AN/TPX-46V**—Replace the transmitter and low voltage power supply in the TR unit together... to prevent matching problems.

**LOADER-TRANSPORTER**—The boom main support bearings have top and bottom grease fittings (2 bearings; 2 fittings), so don't forget the bottom one.



WITHOUT LUBE, THE BUSHINGS AND BEARINGS WEAR OUT. THE BOTTOM ONE IS UNDERNEATH THE BOOM--- ALMOST DIRECTLY BELOW THE TOP FITTING.

**60-KW GENERATOR**—Trying to cure an actuator problem by adjusting the governor resistors can make bigger problems. So, when fluctuation shows up on the **FREQUENCY** and/or **AC VOLTS** meters (generator control panel), have your DSP (direct support platoon) check it out.



SQUAWWWWK!

# WAWK NOISE

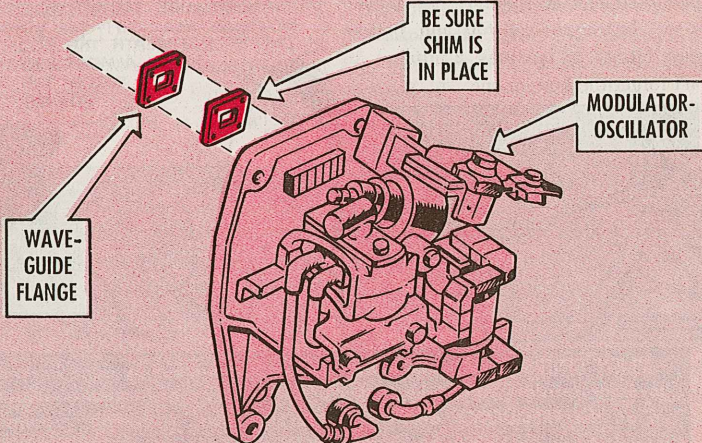
# STOPPERS

HEY, CONNIE ...  
THANKS FOR THE  
TIP...

RIGHT ON! OUR ICWAR  
IS SO QUIET NOW, I COULD  
SWEAR I HEAR IT PURRRING!

A snug bolt, an O-ring in place and a tight cable connection can reduce noise in your ICWAR AN/MPQ-48 radar set almost to the point where you can hear a kitten purr. It's as simple as...

- Replacing all 4 screws when you install the modulator-oscillator ... instead of just 2. And, snug the screws all the way up, with the waveguide shim carefully in place. Be sure that gold-colored shim is in place.



PURRRRR...  
? BURP?  
PURRRRR!

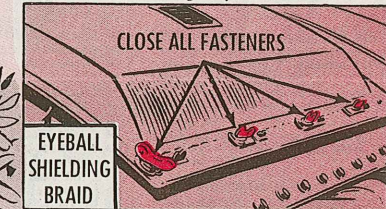
- Being sure all conductive O-rings are in place in the receiver portion.

- Having all connections tight in the receiver portion. Loose connections can run a noise line all the way across the zero velocity line on your scope ... or just give you noise, period.

An important point: Those O-rings must be the conductive type, which you get with NSN 5330-00-613-4152. On-site repairmen can check the O-rings with an AN/PSM-6B multimeter. Make a resistance check across the O-ring, and if you get an ohms reading of less than 150,000, the O-ring is all right.

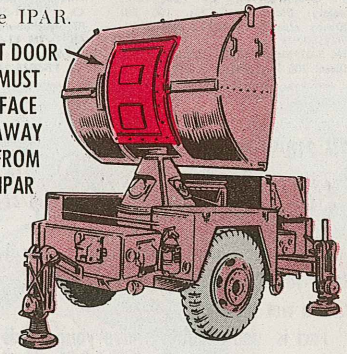
MAGNETIC  
SCREWDRIVER  
IS A NO-NO

When securing the receiver-transmitter door on the antenna assembly, close all the fasteners and be sure the shielding braid and contact surface are mated properly. If not, the IPAR can unlock the receiver as it sweeps by the ICWAR.



And, as your TM says, close all equipment doors when making a receiver-transmitter check ... and place the antenna so that the R-T door doesn't face the IPAR.

R-T DOOR  
MUST  
FACE  
AWAY  
FROM  
IPAR



Another TM reminder: never touch the modulator-oscillator with a magnetic screwdriver ... and don't work anywhere near it with magnetic tools. The tools prevent de-magnetizing the magnetron.

SOME JOES  
HAVE BEEN  
FORGETTING THE  
SCREWDRIVER BIT...  
AND HAVE BEEN  
MAKING PROBLEMS  
UNNECESSARILY.





URP: TM'S  
ARE  
DEE-LISHUS!

# PUBS

RIGHT ON!...  
BUT FM'S ARE  
EASIER TO  
DIGEST!

TM  
TM

FM  
FM

This is a selected list of recent pubs of interest to organizational maintenance personnel. This list is compiled from recent AG Distribution Centers Bulletins. For complete details see DA Pam 310-4 (Aug 73), and Ch 3 (Apr 74), TM's, TB's, etc.; DA Pam 310-6 (Jul 74), SC's and SM's; and DA Pam C (310-9) (Mar 73), COMSEC Pubs.

## TECHNICAL MANUALS

TM 5-2420-206-20P Sep Tractor, Wheeled Diesel (Clark 290M)  
TM 5-3805-239-20P Aug Loader, Scoop Type Diesel 2½ Cubic Yard (Allis-Chalmers 645M)  
Ch 1, TM 5-3805-251-20P Sep Loader, Scoop 2½ Cu Yd (J.I. Case Model MW24B)  
TM 5-4310-250-20P Sep Compressor, Rotary Diesel 250 CFM, 100 PSI (Dovey Models M250RPV, 6M250RPV, 9M250RPV)  
TM 5-6115-400-24P Oct Generator Set, Diesel 200 KW (200-MD/C1ED)

TM 9-1425-485-10-1 Aug LANCE  
TM 9-1425-485-ESC Oct ESC for LANCE  
TM 9-1425-485-1 Jul List of LANCE Publications  
TM 9-1430-529-24P Aug Radar Set AN/MPQ-51 Improved Hawk  
TM 9-1430-560-20P-2 Aug AN/TSQ-51  
TM 9-1440-485-20P Sep LANCE  
TM 9-1440-585-20P Aug Carrier Chaparral  
Ch 4, TM 9-2300-257-20 Aug M113A1 Series Carriers  
Ch 10, TM 9-2350-217-20 Aug M109/M109A1 SP Howitzers  
Ch 1, TM 9-2350-230-10-2-2 Jun M551/M551A1 (Turret Maintenance)  
TM 9-6920-470-12 Aug TOW  
Ch 5, TM 11-5070 Aug PP-327(G)/GRC-9Y Power Supplies  
Ch 6, TM 11-5095 Aug AN/URM-80 Frequency Meter  
Ch 6, TM 11-5805-262-12 Sep SB-22 (I)/PT switchboard  
Ch 1, TM 11-5810-221-12P Aug TSEC/KW-7 Security Equipment  
TM 11-5815-263-20P Nov AN/FGC-56,

-58(I) Teletypewriter Sets  
Ch 4, TM 11-5820-398-12 Aug AN/PRC-25 Radio Set  
TM 11-5820-820-12 Aug AN/URC-80 Radio Set  
Ch 3, TM 11-5830-254-14 Aug AN/UIC-5 Intercommunication Set  
TM 11-5855-203-10 Aug AN/PVS-2(I) Night Vision Sight  
Ch 4, TM 11-5895-213-10 Aug GR-8 Sound Ranging Set  
TM 11-6125-206-14P Nov DY-86 Dynamotor  
Ch 1, TM 11-6140-203-15-3 Aug Non-aircraft Nickel-Cadmium Batteries  
TM 11-6625-454-14 Sep AN/USM-223 multimeter  
Ch 1, TM 11-6730-231-12 Jul Graflex Master 500 & 750 Projectors

## MISCELLANEOUS

CS120-IL (Microfiche) (NSTAG) Oct  
C3940-IL (Microfiche) (NSTAG) Sep  
SB 11-131 Sep Vehicular Radio Sets and Authorized Installations

TM-218-Series 1/4-Ton Truck . . .

## Bow Rod No Handhold!

You'll get a permanent kink in your 1/4-ton's rod if you handle it too rough. It'll sag like a wet noodle.

Fact is, you shouldn't have your hands on it at all. Some guys hold onto it while they're riding. Or they grab ahold of it when they're climbing into or out of the vehicle.

That's what's busting the horizontal bow rod on M151A2's and other TM-218-series 1/4-ton vehicles. The joint where the rod folds can't take it.

And there's no good way to fix it once it's been mangled. You've got to get a new one: NSN 2510-00-132-0919 for the rod.

NSN 5305-00-144-9929, attaching screw.

NSN 5310-00-159-1577, nut.

## No 2406 Required

DA Message DALO-SMM-F 022108Z Dec 74 removed night vision devices from Materiel Readiness Reporting. So, DA Form 2406 is no longer required for the AN/TVS-2(I), AN/PVS-2(I), AN/TVS-4(I).

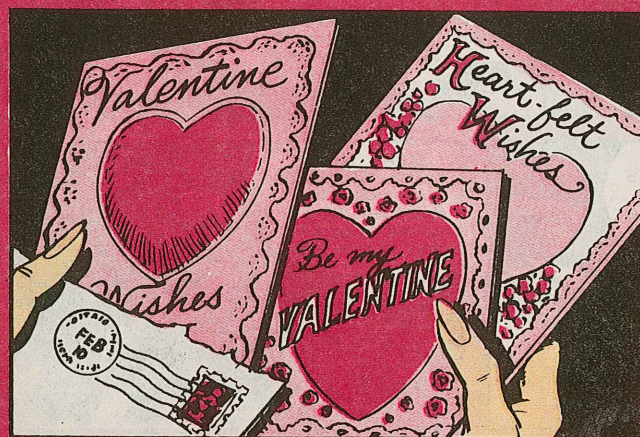
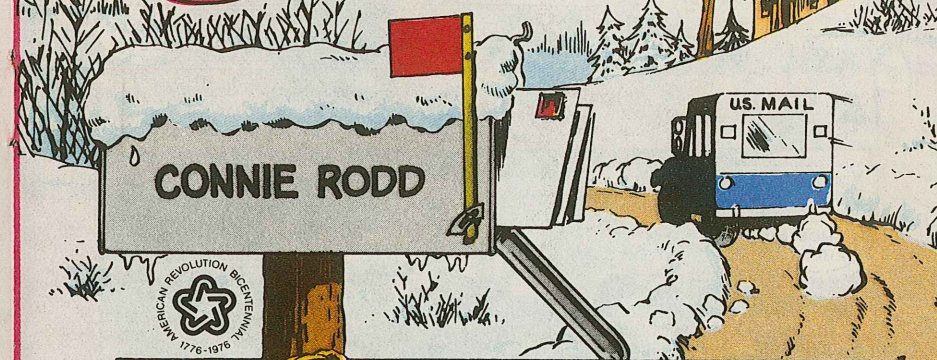
You can delete those entries from page C-7, Appendix C in TM 38-750.

## Frozen Batteries

You'll have no trouble with lead-acid batteries freezing—even at temperatures 'way below zero—if you keep 'em fully charged. A weak battery means weak electrolyte. And that invites freezing. Keep batteries charged up by the book—TM 9-6140-200-12 (Sep 73).



COMBAT  
VEHICLE  
PM  
POINTERS





*Dear Connie —  
Remember me? Last fall when you  
came out to maneuvers at Hohenfels and...*

"I WAS BEING TAKEN  
CROSS COUNTRY BY MY CREW...  
AND I WAS SURE IT WAS MY **LAST**  
TRIP..."

WHAT'S TH'  
MATTER WITH THIS  
OL' BUCKET OF BOLTS?

DUNNO.. IT'S SHAKIN',  
SMOKIN' AND BELCHIN'  
TERRIBLE!

HEY--  
NOW IT'S  
STALLED OUT!

**KLUNKETY  
KLANK**

**SPUT**

"THEN MY LUCK CHANGED--  
**YOU** DROVE UP!--

PROBLEMS,  
MEN?

**CONNIE  
RODD!**

I'LL SAY WE  
GOT PROBLEMS--  
THIS OLD TRAP  
HAS HAD IT!

"AND THEN  
YOU LAID IT  
ON 'EM..."

**HOLD  
IT!** THAT **BLACK SMOKE**  
COMING OUT THE EXHAUST MEANS  
YOUR AIR CLEANERS  
ARE DIRTY!

GUYP

YOUR ENGINE'S  
STARVED FOR  
AIR-- THE FUEL-  
AIR MIXTURE  
IS TOO RICH.  
YOU LOSE  
POWER AND  
WASTE FUEL.

CLEAN 'EM  
EVERY 750 MILES,  
QUARTERLY OR  
MORE FREQUENTLY  
UNDER SEVERE  
DUST CONDITIONS.

...HOLDING THE  
ELEMENT BY THE  
SEALING END--  
SHAKE OUT THE  
DUST!

LIKE  
THIS...

**WOW!  
LOOKIT  
THAT!**

GOFF

NOW-- WHEN YOU GET BACK TO THE  
**MOTOR PARK**, GET THE REST OF THE  
DUST OUT BY:

1. BLOWING IT OUT  
WITH LOW PRESSURE  
COMPRESSED AIR.
2. WASHING WITH  
WATER-- WITH OR  
WITHOUT A NON-  
SUDSING DETER-  
GENT.

Note: Never hit the  
element against any  
surface. See pages 3-  
18 and 3-19 of TM  
9-2350-232-10.

ANOTHER POINT-- YOUR VEHICLE  
SOUNDED LIKE THE TRACK MIGHT  
BE LOOSE.  
THAT CAN SWERVE THE VEHICLE AND  
PERHAPS CAUSE A BAD ACCIDENT.\*

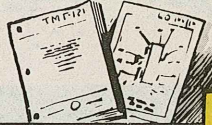
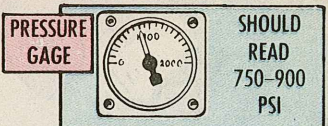
BETTER GET  
THAT CHECKED OUT--  
**PRONTO!**

RIGHT ON,  
CONNIE!

\*Track tension should be within the limits shown in the -10TM for the particular member of the M60 family you may have.

OTHER THINGS  
THAT COULD GIVE  
YOU TROUBLE  
ARE...

1. A leak in hydraulic brake system.  
(Driver's compartment pressure gage  
should register 750-900 PSI.)
2. Generator blower airline not con-  
nected. (Dirt sucked in by blower  
motor can short generator and start  
a fire.)
3. Low oil. Check daily before opera-  
tion. (Without oil, engine can burn  
up).



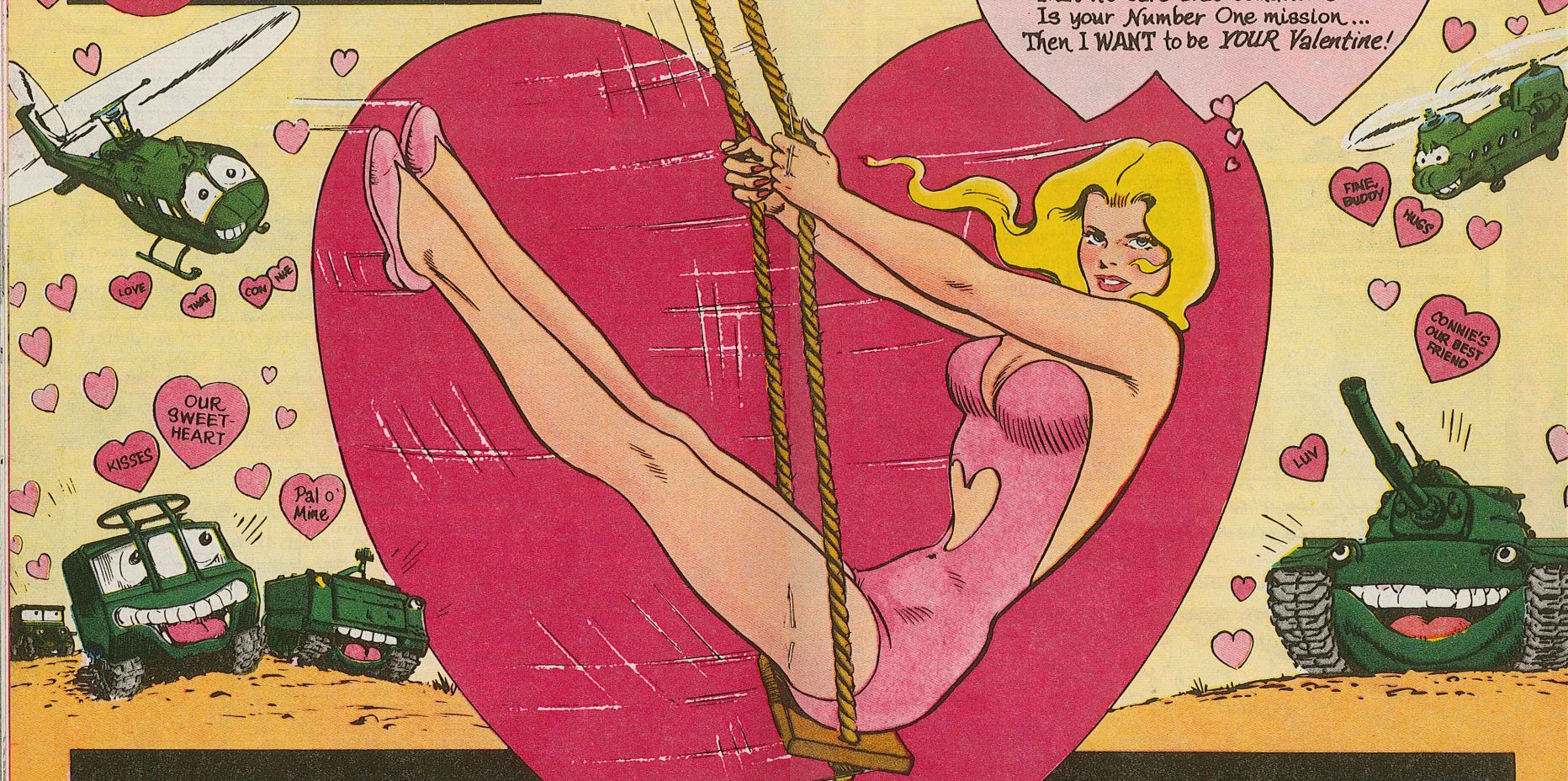
*Well, that  
advice did it,  
Connie. I'm now in  
"tip-top" shape.  
Your valentine,  
Ol' M60*

SEE NEXT  
PAGE FOR  
CONNIE'S  
VALENTINE  
TO ALL HER  
BUDDIES.



# Joe's Dope Sheet

If you lay that PM on the LINE  
And you give your EQUIPMENT the sign  
That its care-and-condition  
Is your Number One mission...  
Then I WANT to be YOUR Valentine!

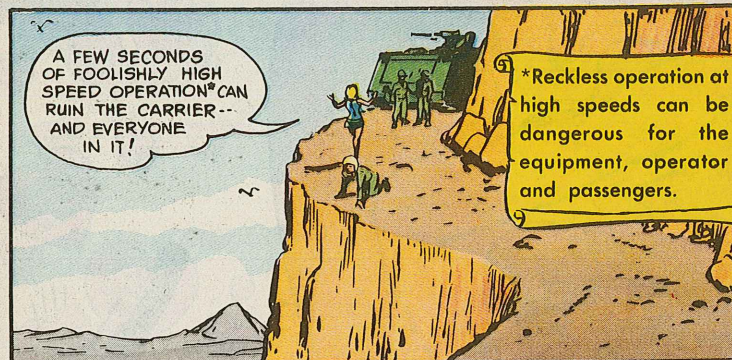
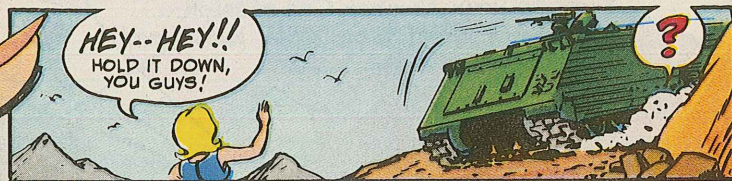


WE HAVE THE WORLD'S BEST EQUIPMENT ... *Take care of it*

IF YOU WANT TO DISPLAY THIS CENTERPIECE ON YOUR BULLETIN BOARD, OPEN STAPLES, LIFT IT OUT AND PIN IT UP.



Dear Connie:  
Just a note from your Valentine in Korea...  
Seems only yesterday when you stopped my crew  
just in time to save us all...



\*Reckless operation at high speeds can be dangerous for the equipment, operator and passengers.

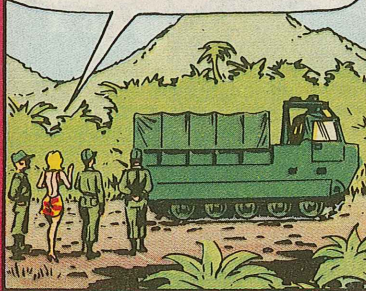
You really impressed 'em! My "boys" were awarded "Safe Drivers of 1974".  
Gratefully - your pal,  
"P.C." M113A1

HIYA, CONNIE:-  
VALENTINE GREETINGS AND A  
CHEERY "ALOHA" TO THAT "SPECIAL"  
FRIEND WHO IS RESPONSIBLE FOR ME STILL  
BEING OPERATIONAL! REMEMBER LAST SPRING...



"YOU BRIEFED SFC McGEE AND HIS MEN ON SOLUTIONS FOR THE PROBLEMS OF OVERLOADING..."

FIRST, MEN -- THE CARGO PAYLOAD OF AN M548 IS ONLY 218 ROUNDS OF 105-MM AMMO OR ABOUT 80 ROUNDS OF 175-MM AMMO.



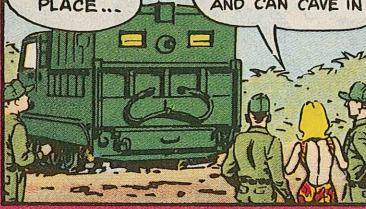
TO FIND OUT HOW MANY ROUNDS YOU CAN SAFELY CARRY, JUST DIVIDE THE WEIGHT OF A ROUND (WHICH YOU CAN GET FROM TM 9-1300-203--ARTILLERY AMMUNITION--) INTO 12,000.



"THEN YOU CLEARED UP THE CAUSE AND PREVENTION OF REAR DOOR PROBLEMS..."

FELLAS-- THIS DOOR SUPPORTS THE 2 SIDES... SO YOU MUST KEEP IT IN PLACE...

...IF THE VEHICLE IS DRIVEN WITHOUT THE DOOR, THE SIDES GET TOO MUCH STRESS AND CAN CAVE IN.



"NEXT, YOU FILLED THE MEN IN ON PROPER MAINTENANCE OF ENGINE COOLANT..."

PARA 3-43 OF TM 9-2350-247-10 (MAY 74) SPELLS IT OUT.



Check coolant level daily before operation and add coolant as required. Maintaining a proper coolant level is very important to prevent overheating.

REMEMBER ALSO, GUYS, THAT SERIOUS DAMAGE TO THE ENGINE CAN RESULT IF ITS OPERATED FOR LONG PERIODS WITH COOLANT TEMPERATURE GAGE ABOVE 230° F.



PAGE 1 - CHANGE 3 TO -10TM HAS THE WORD.

"THEN IT HAPPENED... THE INCIDENT THAT WOULD HAVE DOOMED ME IF YOU HADN'T BEEN ON THE SPOT AND..."



"I WAS DISABLED! A **S-TON** WAS BEING HITCHED UP TO TOW ME **MORE** THAN 30 MILES BACK TO CAMP... ON THE HIGHWAY!"



WHEN YOU TOW A DISABLED **M548** MORE THAN 30 MILES OR FASTER THAN 10 MILES PER HOUR, YOU'VE GOT TO DISCONNECT THE UNIVERSAL JOINTS BETWEEN THE DIFFERENTIAL AND FINAL DRIVES.

IF YOU DON'T, YOU'LL DAMAGE THE TRANSMISSION AND DIFFERENTIAL... OVER HEATING... LACK OF LUBRICATION.

I DIDN'T KNOW THAT!



SO THANKS AGAIN, CONNIE--  
YOUR HAWAIIAN  
"C.C." **M548**

... AND TO THINK I FEARED I WASN'T GOING TO GET A **VALENTINE** THIS YEAR!



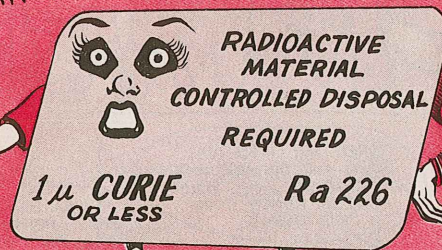
HAPPY VALENTINE'S DAY TO ALL!

## CONTROL RADIATION ON CONTROLS



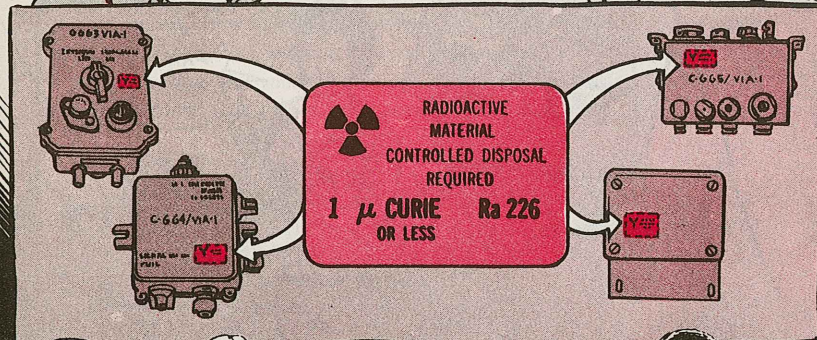
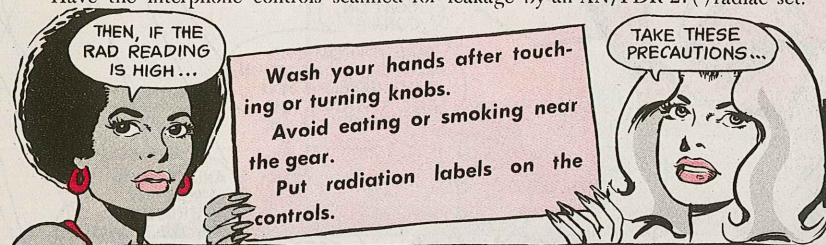
PICK ME UP AND USE ME, BIG BOY!

I MAY BE A REAL LIFE-SAVER!



Your AN/VIA-1 auxiliary interphone equipment's control boxes have luminous radium markings which may be leaking dangerous radiation.

Have the interphone controls scanned for leakage by an AN/PDR-27() radiac set.



YOU CAN GET THE LABELS FREE FROM:

Commander  
US Army Electronics Command  
ATTN: AMSEL-SF-H (Safety Office)  
Fort Monmouth, NJ 07703

TELL HIM HOW MANY YOU NEED.





# PM FOR A MAST

# IS THE MOST

WHEN THE CHIPS ARE DOWN AND THE **HOT WORD** **MUST** GO OUT, WILL **YOUR MAST** BE READY FOR THE TASK?

IT WILL BE IF YOU'VE PERFORMED YOUR **PM** CHORES.

RIGHT ON, CONNIE!

TAKE IT FROM ONE WHO'S EXPERIENCED IN **MAST** UPKEEP-- YOU GOTTA WATCH FOR CORROSION!

AND I KNOW FROM MY EXPERIENCE ... YOU HAVE TO WATCH YOUR **GUYS**...

...FOR **FRAYS** OR **BREAKS**. THAT IS!

Getting that booster communication signal up and out along the airways is no simple task. But, it'll be a lot easier when PM's pulled on a towering antenna like the AB-577/ CRC mast.

Nothing will cut a conversation shorter than to be without a wind-defying mast and its components . . . and not a tree or pole around for miles in any direction.

So, before you and your antenna mast are given the go-ahead to move out and set up, give your mast a good going over from top to bottom.

IF ANY OF THOSE STAKES, COUPLERS, CLAMPS, GUY WIRES, GUY ANCHORS OR TOOLS ARE MISSING, GET 'EM REPLACED, **PRONTO!**

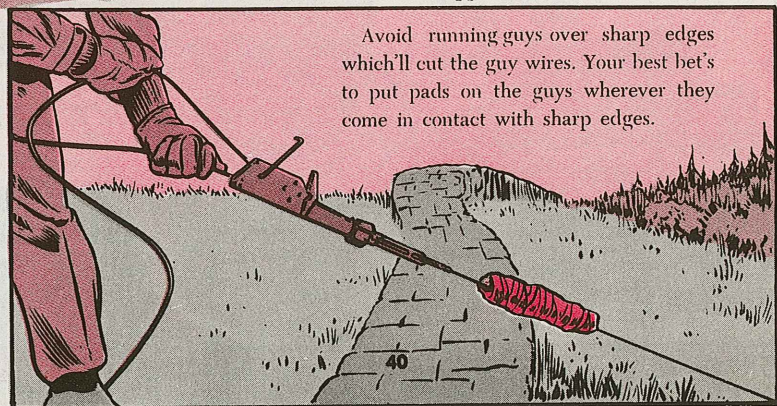




Make sure all the metal surfaces of the mast are free of corrosion. Should you spot any, use a wire brush or sandpaper to get rid of it. Then, touch up the spots with a coat or two of paint.



Give those guy wires a good eyeing to see to it they don't have frays or breaks in 'em. Without a good, firm grip on a guy wire, that AB-577 could be left doing a balancing act you wouldn't believe. And this probably wouldn't last long, 'cause without a guy wire the mast will teeter and topple.



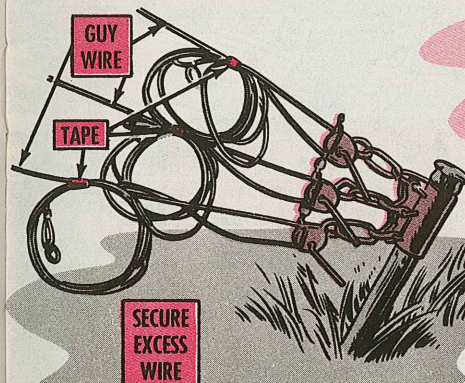
Avoid fastening the guy wire too tight, putting a bow in the mast. You could be setting up for a catapulting antenna.

Same goes for leaving the guys too loose.

A FEW GUSTS OF WIND CAN SNAP TH' TENSION RIGHT OUT OF THE GUY WIRES!



When those guys are fastened like they're supposed to be, loop the extra length of wire and tape the loop to the secured guy. This'll keep it out of the mud and dirt and out from under foot.



If a guy is hard to come by, get the next longer one and adapt it to your need. Like, if it's the 39-footer you're needing but it's not on hand, get a 47-ft guy and adjust it to what length you want.

While giving a good eyeballing to those mast parts, take a look at the canvas items.

Mildew and fungus can shorten the life of canvas, so get rid of 'em. Use a stiff brush to whisk that stuff away.



If it's too much for the brush, use a cloth dampened in a cleaning compound.

Before raising that antenna base, keep an eye out for overhead power lines.

If there're any around, set up that mast away from them—at least twice the distance of the height of the structure you're putting up.



AIR MOBILITY



GATHER 'ROUND, WILD-BLUE-YONDER TYPES, AND LET'S RAP ABOUT YOUR KIOWA!

HEAR THAT, HERM--? LET'S GO!

YEAH, MAN...

(OH-58A)

### Ask Connie

Need any of the back issues of PS Magazine? The PS office has many of the issues since No. 211. If you need 1 copy or 100, they're yours—free — if you write to: PS Magazine, Lexington, KY 40507.

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**I**t's a long time from one Preventive Maintenance Periodic to another, Kiowa crew chiefs. Which is a mighty good reason why you want to give the PM Daily your best professional touch.

Find and correct minor problems before they become major ones. Follow the inspection poop in TM 55-1520-228-PMD (Nov 71) and stick with the wear and damage limits in TM 55-1520-228-20 (Oct 72). Then, your baby will get to the 300-hr Periodic without a lot of unscheduled maintenance.

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PS MORE



CAN THAT CRITTER REALLY FLY ORVILLE?

WRIGHT ON, WILBUR--  
'SPECIALLY IF IT KEEPS  
ITS NOSE CLEAN!

**WINDSHIELD, WINDOWS**—Scratched, cracked, punctured, dirty.

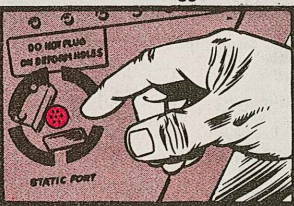
(NOTE: Never use solvent to clean transparent plastic or you'll craze the plastic. Those minute cracks turn the plastic hazy and ruins it. Use transparent plastic polish, NSN 7930-00-634-5340 to clean the plastic.)

**INTERIOR**—Dirty, equipment damaged, connections loose.

SCAN THE EXTERIOR FOR DEFECTS!

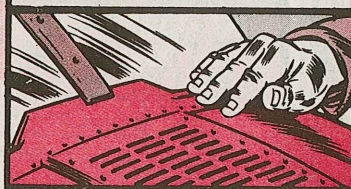
CAN'T SEE NARY A ONE, BONNIE!

**STATIC PORTS**—Plugged with dirt.



# NOSE

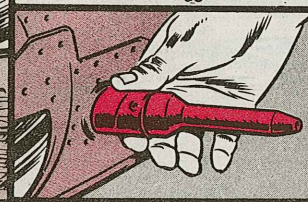
**NOSE EXTERIOR** — Skin cracked, punctured.



**FORMS, RECORDS**—Time entries on the DA Form 2408-12 incorrect. Squawks written up on the DA Form 2408-13 not corrected. Info on other forms incomplete.

CRACKS AND PUNCTURES CAN MEAN A **BIG BUST**--WHEN YOUR BIRD IS AIRBORNE!

**PITOT TUBE**—Plugged with dirt.

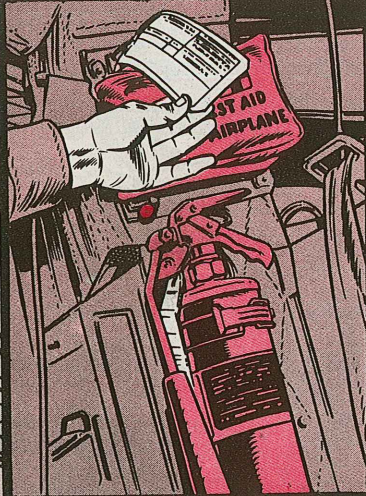


**VERTICAL SPEED INDICATOR DRAIN LINES**—Blocked.





**FIRST AID KITS**—12-month inspection called for in bird pub overdue. Check kit per TM 55-1500-328-25 (Jul 72). Seal broken . . . enter it on the DA Form 2408-13.

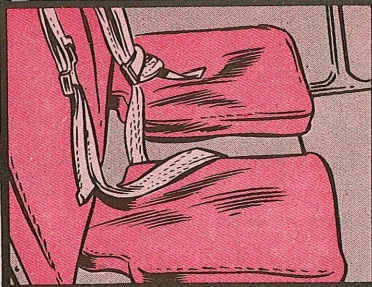


**FIRE EXTINGUISHER** — 6-month weight test overdue.

**EXTERIOR SKIN** — Cracks, dents, punctures, loose rivets.

**CABIN**—Dirty. Tools and other equipment not stowed.

**PASSENGER SEATS**—Cushions frayed, torn, fasteners loose. Seat panels cracked, dented.



# CABIN

**FUEL**—Dirty.

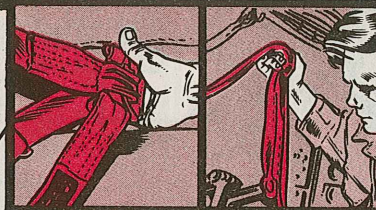
(NOTE: Latch onto a jar and drain a fuel sample. Eyeball the fuel for dirt. Water doesn't settle out as fast in JP-4 as it does in AvGas. So, use the capsules in detector kit, NSN 6640-00-892-2264, to find out if you have water in the fuel.)



**SAFETY BELTS, SHOULDER HARNESS**

— Cut, frayed, loose. Hardware corroded.

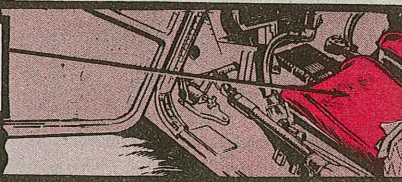
Test the inertia reels for positive locking.



**PILOT, CO-PILOT SEATS**—Cut, torn.

Tears, cuts and holes greater than 1 inch length or diameter are not allowed.

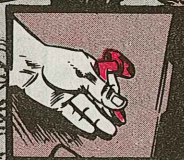
(NOTE: The rashel knit bottoms carry the load so get 'em replaced every 2 years.)



EXTERIOR  
A-OK,  
CONNIE!

GREAT--  
NOW CHECK  
OUT THE  
INSIDE!

**DOORS, WINDOWS**—Skin cracked, dented. Seals worn. Latch handle loose, hinges worn. Windows dirty.



PS MORE



**ANTI-TORQUE PEDALS**—Move freely without any obstruction?

## CABIN (CONT.)

**COMPASS CORRECTION CARD** —  
Smeared with oil, grease, not correct  
... not readable.

**CYCLIC CONTROL** —  
Moves freely?

**COLLECTIVE, THROTTLE** —  
Moves freely thru range? Throttle  
binding?

**INSTRUMENTS**—Glass dirty, loose,  
cracked. Range markings not in accord-  
ance with TM 55-1520-228-10 (Sep 72).

## LANDING GEAR

**LANDING GEAR**—Excessive spread.

(NOTE: Eyeball your baby from a distance to see if she's sitting pretty. Chap 4 of the bird organizational maintenance pub has detailed inspection poop if your chopper has dropped in for a hard landing. Move in close to see that the nut plates are not cracked, the gear is securely attached to the fuselage and the tubes are not corroded, or cracked.

HERE THEY  
COME--AND I  
CAN'T GET BACK  
IN MY BURROW!

CASE OF  
EXCESSIVE  
SPREAD!

## TRANSMISSION, PYLON

**PILLOW BLOCK**—Retention bolts cor-  
roded, slippage marks not aligned.

**MAIN ROTOR BLADES**—Scratches?  
Nicks? Dents? Cracks? Erosion of the  
leading edge and evidence of bond fail-  
ures? See Chap 8 of the Kiowa pub  
for other inspection info.

**BOOT**—Cut, loose.

**MAST**—Loose. Visible areas nicked,  
scratched, corroded. See Chap 7 in the  
OH-58A pub for damage limits.

**MAIN ROTOR HUB**—Nicks, scratches,  
gouges beyond the limits given in Fig  
8-2 in TM 55-1520-228-20. Latch loose,  
blade retaining bolts loose, corroded.  
Retaining nut damaged, lock loose.

**RESERVOIRS**—Sight glass on grip  
and pillow block reservoirs nicked,  
scratched. Reservoirs leak.

**SWASHPLATE, LEVER, SLEEVE, CON-  
NECTING LINKS**—Grease leakage at  
swashplate seals? Swashplate and sup-  
port free to operate? This is no place  
for misplaced tools or other foreign ob-  
jects. Look sharp!

**GRIP**—Seals leaking.

(NOTE: Replace shot packings and  
seals to stop leaks. Change the  
sight glass if you have trouble  
reading the oil level.)

(NOTE: Seal replacement is required if,  
after a grip has been properly serviced,  
there is no oil visible in the reservoir sight  
glass when the chopper has not been  
operated for 24-hrs.)



# TRANSMISSION,

## TRANSMISSION, CONNECTIONS

Secure? Oil visible in sight glass.

(NOTE: If the sight glass is badly stained or cracked you could be getting false oil level readings. Change it.)

Pylon support links cracked?

**PARTICLE SEPARATOR**—Cracked, filter elements clogged. Mounting screws and nut plates loose. Ejector opening clogged. Eyeball Chap 5 in the bird pub for damage limits.

**ENGINE AIR INLET**—Clear?

**EJECTOR CLOGGED?**

**MAIN DRIVE SHAFT COUPLINGS**—Nicks, scratches, leaking grease. Chap 7 in the Kiowa pub has the damage limits.

**CYCLIC, COLLECTIVE CONTROLS**—Bolts, nuts, cotter pins in place?

ALWAYS  
ACCOUNT FOR  
YOUR TOOLS—  
PREVENT  
FOD!

# PYLON

**TRANSMISSION COWLING**—Cracks, tears, punctures. Hinges and fittings worn, broken. Windows scratched, cracked.

(NOTE: Window damage that prevents visual inspection of the inlet plenum or lets in air or dirt is a no-no.)

## HYDRAULIC COMPONENTS

Secure? Excessive leakage? Table 6-1 in the Kiowa pub has all the allowable leakage limits.

Reservoir need servicing? Collective actuator bellcrank cover—Flipper in place? Flipper to cover bond OK?

**FUEL CONTROL (N1), POWER TURBINE GOVERNOR (N2) RIGGING**—Unbutton the insulation blanket at the rear of the cabin. Rigging secure with all nuts and cotter pins in place? Controls operate freely?

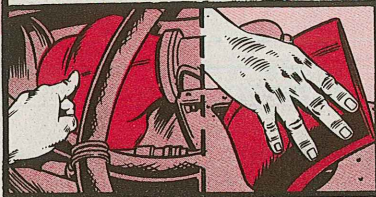
**HYDRAULIC FILTERS**—Both red buttons popped, indicating possible hydraulic fluid stoppage.

(NOTE: Those buttons can pop out due to low temperature, pressure surges and too much vibration. So, reset the buttons. If they're extended on your next Daily, clean and inspect the element. You may need a new element.)

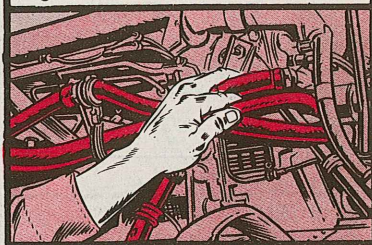


# ENGINE

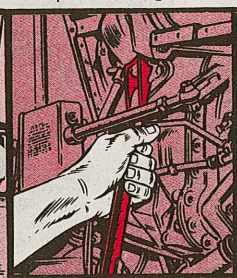
**COMBUSTION CHAMBER HOUSING, TURBINE SUPPORT, EXHAUST COLLECTOR, TAILPIPE**—Cracked, dented, buckled.



**ACCESSORIES, CONNECTIONS** — Tight? Lines worn, chafing?



**MOUNTS**—Loose, cracked. Cotter pins missing.



**SIGHT GAGE**

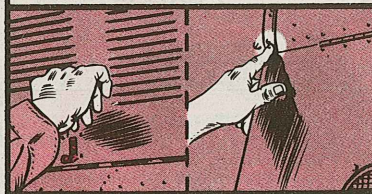
**I.D. TAPE ON OIL LINES?**

HOW'S THE  
BYOI BIT  
GOING, SARGE?

NO SWEAT--  
ER--  
ULP--  
I MEAN--

HE'S GOING  
GREAT, CONNIE!--

**COWLING, FAIRING**—Cracked, dented. Fasteners and latches broken.



**OIL TANK**—Loose in mount, oil lines leaking, missing identification tape on lines. Tank not serviced.

(NOTE: If you crew chiefs have any doubt about the oil tank sight gage, open up the tank and make the finger test.)



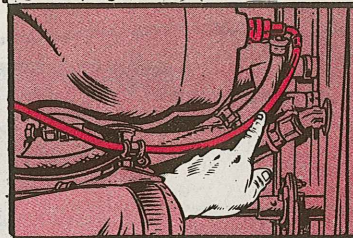
**OIL COOLER BLOWER, DRIVE SHAFT BEARINGS**—Cracks in the blower impeller, housing loose, air intake dirty, drain hole plugged.

(NOTE: If there is no drain hole in the bottom of the blower your baby needs one to get rid of trapped moisture. Drill a 0.188 to 0.194-in diameter hole at the bottom center of the shroud, 0.250-inch forward of the aft edge.)

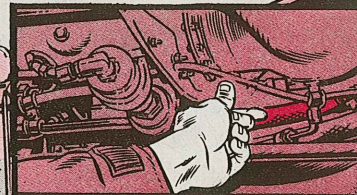


**BLOWER**

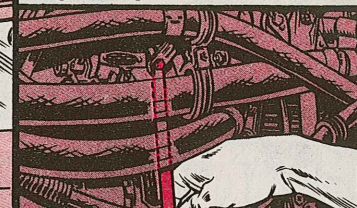
**ELECTRICAL CABLE, EXCITER, LEADS, IGNITOR PLUG**—Broken cable strands, ignitor plug loose.



**FUEL NOZZLE, LINES**—Lines loose, leaking.



**N1 LINKAGE** — Controls binding, chafing.



**FORWARD TAIL ROTOR DRIVE SHAFT**—Moves freely in splined adapters?



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PS MORE

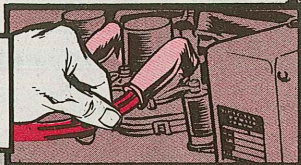


# AFT FUSELAGE

**EXTERNAL POWER RECEPTACLE DOOR**—Hinge broken, does not latch.



**ELECTRICAL EQUIPMENT CONNECTIONS**—Wires chafed, broken, connections loose.



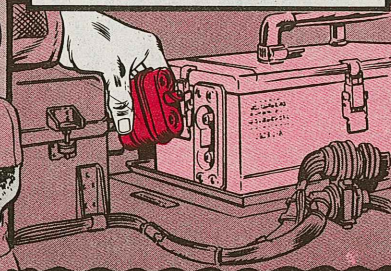
NAME'S MURPHY--

NEED A HAND?

WHA--ER--

NO--NO! THANKS A HEAP!

**BATTERY**—Secure? Leaking? If the avionics compartment is loaded with tools, hardware, paper, rags and what not, clean it out.



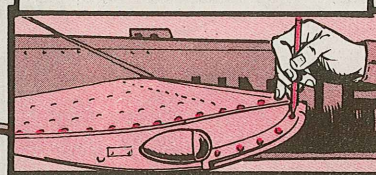
(NOTE: You want a clean area, free from foreign objects that could short out the works.)

HUH? OH YEAH--TH' AVIONICS COMPARTMENT IS REAL HANDY FER STORAGE!

?!

# TAIL BOOM

**HORIZONTAL STABILIZER**—Cracks, dents, loose rivets.

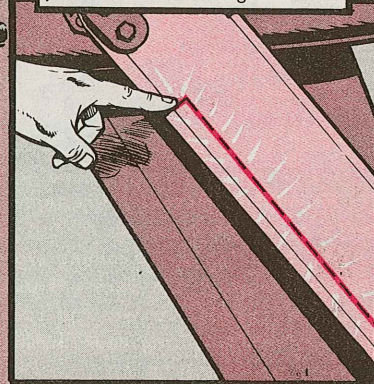


HEY, CARPENTER--WHAT MAKES IT SHAKE LIKE THAT?

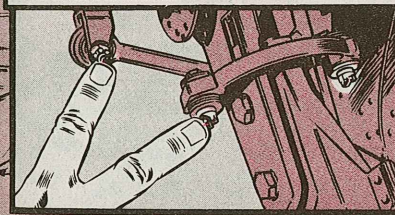
**EXTERIOR SKIN**—Cracks, dents, punctures, scratches, buckles, loose rivets. Eyeball Chap 4 in the maintenance pub for damage limits on scratches and dents.



**TAIL ROTOR BLADES**—Nicked, scratched, dented. Voids in bonding. Focus in on the blade 7 inches outboard from the butt end and 1.5 inches aft on the entire leading edge. If you spot any cracks the blade has to be changed.



**TAIL ROTOR HUB**—Secure? Scratches? Nicks? Dents? Burrs? Cracks? Corrosion? Hardware safetied?





# TAIL BOOM (CONT.)

## TAIL ROTOR CONTROLS—Loose

HIYA, TROOPERS--  
SORRY I WAS  
DELAYED...

BIG  
DEAL,  
WINDY--  
WE'RE  
THROUGH  
NOW!

## TAIL ROTOR DRIVE SHAFT, BEARINGS

—Scratches on shaft? Bearing over-heating, as indicated by metal discoloration? Bonded fitting secure? Splined adapters move freely?

Slippage marks aligned?

## TAIL LIGHT EXTENSION— Loose, cracked.

(NOTE: 'Tis mighty important! Slippage is a good indication of an impending bearing failure. Change the bearing when the marks don't align. If you hot shots spot grease coming from a bearing it's not cause for changing the bearing. The excess is usually the result of over-packing during manufacture. Never wash or spray the bearing or hanger with any type of solution during your inspection. Use a clean cloth or towel to clean the assembly.)

**TAIL ROTOR GEAR BOX**—Loose, cracked. Seal leaking. Oil level low, vent plugged. Sight glass cracked, stained so you can't read the oil level.

(NOTE: Remove the filler cap and look for water in the oil. If the oil looks dirty or milky there's water in it. Drain and flush the gear box. For leaking seals—the total static or dynamic input drive quill leakage can't exceed 2 drops per minute. Total gear box leakage at all places can't exceed 6 drops per minute.)

**VERTICAL STABILIZER, TAIL SKID, ANTENNA LEADS**—Mounting bolts and nut plates loose. Vertical fin cracked, dented. Rivets loose.

(NOTE: You can easily spot a loose rivet, knucklebusters. The rivet works in place and produces residue, due to friction, which shows up as a dark stain around the rivet. Get loose rivets replaced.)

# POWER CHECKS

## PITOT HEATER—Heats tube?

## WARNING, CAUTION PANEL LIGHTS— Operate?

## INTERIOR LIGHTS—Working?

## EXTERIOR LIGHTS—Operating?

That's the way to pull a complete Daily on your Baby, knucklebusters . . . sign'er off. There are no lube chores. Just service the bird with oil and fuel and you're ready for the wild blue.







# STATUS CARDS

DOCUMENT  
IDENTIFIER  
CODE\*

**ROUTING IDENTIFIER  
CODE OF YOUR SUPPORT  
\*WHEN YOUR SYSTEM  
USES IT.**

**DOCUMENT NO.  
FROM YOUR  
REQUEST**

**JULIAN DATE  
AND DOCUMENT  
SERIAL NUMBER  
FROM YOUR REQUEST**

**SUFFIX CODE USED  
IF THE  
STATUS CARD  
REFERS TO A  
PARTIAL ISSUE\***

ADDRESS CODE  
OF RECEIVING  
ACTIVITY\*

**ESTIMATED AVAILABILITY  
DATE YOU CAN EXPECT  
ITEM TO BE SHIPPED.  
IF THE CARD IS A  
REJECTION OR A  
CANCELLATION  
NOTICE,  
THIS AREA IS LEFT  
BLANK.**

UNIT PRICE  
OF ITEM

**TRANSACTION DATE  
IS THE DAY THE  
SUPPLY DECISION  
WAS MADE. FOR SAILS SYSTEM,  
THIS COLUMN MAY  
BE BLANK.**

**ROUTING IDENTIFIER  
CODE OF YOUR  
SUPPORT (MAY BE  
BLANK FOR SAILS  
SYSTEM).**

ESTIMATED AVAILABILITY  
DATE. FOR SAILS SYSTEM,  
THIS IS THE JULIAN DATE  
THE CARD WAS PROCESSED.

DISTRIBUTION CODE.  
FOR SAILS, IF ADVICE CODE  
IS CA, EXPLANATION  
CODE APPEARS HERE \*

PROJECT CODE  
FROM YOUR  
REQUEST.\*

**SUPPLY STATUS/  
REJECTION CODE\***

PRIORITY

**MEDIA AND STATUS CODE.**

STOCK NUMBER  
OR PART NUMBER  
OF THE ITEM.

UNIT OF ISSUE

**FUND CODE FROM  
YOUR REQUEST\***

**QUANTITY  
TO WHICH  
STATUS  
APPLIES**

**NOTE: INFORMATION CAN APPEAR IN TOP OR 2nd LINE  
DEPENDING ON SYSTEM USED.**

\* FOR MORE INFO ON CODES SEE AR 725-50

The rules of the game change from one system to another . . . and one deck of cards to another. Are you using the new SAILS system, DLOGS, or BASOPS? DD 1348 or DA 2765 cards? Whatever system your command follows, make sure you're using the same rule book as your support.



# FOR SHIPMENT STATUS CARDS

DOCUMENT IDENTIFIER  
CODE INDICATING  
SHIPMENT STATUS.\*

ROUTING IDENTIFIER  
CODE OF YOUR SUPPORT  
\*WHEN YOUR SUPPLY  
SYSTEM USES THIS  
CODE.

STOCK OR  
PART NUMBER  
OF THE ITEM.

DOCUMENT NO.  
FROM YOUR REQUEST

JULIAN DATE  
AND DOCUMENT  
SERIAL NUMBER  
FROM YOUR  
REQUEST

SUFFIX CODE IF  
CARD REFERS TO  
A PARTIAL ISSUE.\*

ADDRESS CODE  
OF RECEIVING  
ACTIVITY.\*

GOVERNMENT BILL  
OF LADING OR  
TRANSPORTATION  
CONTROL NUMBER.  
IF ITEM IS  
SHIPPED BY  
PARCEL POST  
THIS SPACE WILL  
BE BLANK.

TRANSACTION DATE  
IS THE DATE THE  
SUPPLY DECISION WAS  
MADE AT SUPPORT.  
FOR SAILS SYSTEM,  
THIS IS THE  
ESTIMATED DATE  
THE MATERIAL WAS  
RELEASED TO  
TRANSPORTATION.

MODE OF  
SHIPMENT  
CODE\*

DA FORM 2785, 1 JAN 67 USE EDITION OF 1 JAN 64

94681-04/0000

REQUEST FOR ISSUE OR TURN-IN (DA 710-2)

WABCAA2090001 C Y6253Y

GBL832WX316

AS1 BXB 586000803524 EA 00006 AGTVRS 14 095 A 094

UNIT OF ISSUE.

QUANTITY TO WHICH STATUS APPLIES

HOLD CODE. EXPLAINS WHY SHIPMENT MAY BE HELD UP AFTER RELEASE BY SUPPORT.\*

FUND CODE FROM YOUR REQUEST.\*

DISTRIBUTION CODE FROM YOUR REQUISITION\*

ESTIMATED DATE SHIPMENT WILL BE RELEASED. FOR SAILS SYSTEM THE DATE THE ITEM WAS SHIPPED.

TRANSACTION DATE

MODE OF SHIPMENT CODE\*

DA FORM 2785, 1 JAN 67 USE EDITION OF 1 JAN 64

94681-04/0000

REQUEST FOR ISSUE OR TURN-IN (DA 710-2)

WABCAA2090001 C Y6253Y

GBL832WX316

AS1 BXB 586000803524 EA 00006 AGTVRS 14 095 A 094

UNIT OF ISSUE.

QUANTITY TO WHICH STATUS APPLIES

HOLD CODE. EXPLAINS WHY SHIPMENT MAY BE HELD UP AFTER RELEASE BY SUPPORT.\*

FUND CODE FROM YOUR REQUEST.\*

DISTRIBUTION CODE FROM YOUR REQUISITION\*

ESTIMATED DATE SHIPMENT WILL BE RELEASED. FOR SAILS SYSTEM THE DATE THE ITEM WAS SHIPPED.

TRANSACTION DATE

MODE OF SHIPMENT CODE\*

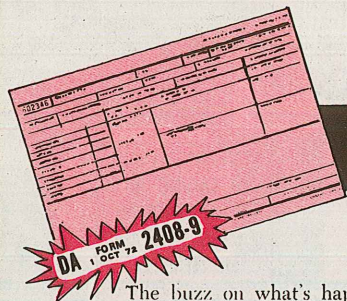
NOTE: INFORMATION MAY APPEAR IN CORRESPONDING  
CARD COLUMNS IN TOP OR SECOND LINE OF  
THE CARD DEPENDING ON SYSTEM USED.

\* FOR MORE INFO ON CODES SEE AR 725-50.

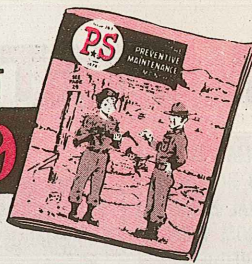
But just dealing cards out to support won't win the hand . . . you've got to use the cards support deals back to you to make a royal flush. So, when you get a supply or shipment status card back from support, read it!

Once you've mastered the fine art of supply poker, you're ready to take on any request your unit can come up with. Deal 'em, pardner!





# UPDATE ON 2408-9 ARTICLE

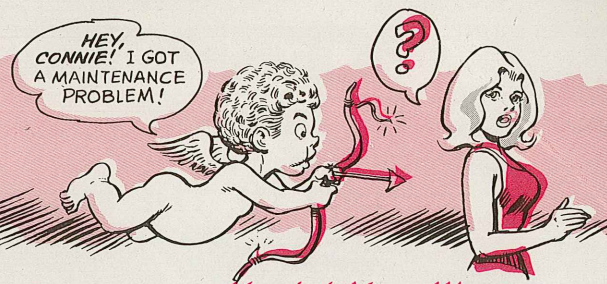


The buzz on what's happening is a coupla changes to the article on DA Form 2408-9 in PS 263 (Oct 74).  
Make these changes on your copy of pages 58 and 59.

	BLOCKS	ACCEPTANCE	USAGE/ REBUILD/OVERHAUL	GAIN/ TRANSFER/LOSS
4	No entry (except for commercial vehicles enter appropriate code from Table A-15)	1-3 Entries: Name, Location, UIC of User or Hand Receipt Level (Reporting Unit not BDE or DIV UIC)	Same for all uses.	
5	No entry (except for commercial vehicles enter appropriate code from Table A-15)	4 No entry	Code from TM 38-750 Table A-7 (most eqpt) or A-15 (comm vehicles)	Same as for Usage/Rebuild/Overhaul
6-10	Entries in corresponding blocks are the same type for all uses.	5 No entry	Code from Table A-15 (comm vehicles only)	Same as for Usage/Rebuild/Overhaul
6-10	Entries in corresponding blocks are the same type for all uses except for commercial vehicles. Block 7 will show the LIN and Block 8 will show the ACVC.	6-10	Entries in corresponding blocks are same type for all uses.	
18	No entry except for weapons	18 No entry	Total accumulated hours, miles and/or rounds that apply to eqpt (include readings from replaced meters DA 2408-10)	Same as for Usage/Rebuild/Overhaul

There's 1 other use for DA 2408-9--control of registration numbering of Army vehicles and equipment as spelled out in AR 708-1. ~~This reporting was eliminated last Oct 73 for tactical and combat vehicles. But these copies never show up anywhere. So a card that -9 Even tho it doesn't have 9 lives, it may come back to haunt you.~~

ALSO  
DELETE THESE  
SENTENCES!



## No DA Form 2404 In Logbook

The synopsis to Change 1 to TM 38-750 says that the DA Form 2404 will be kept in the logbook when it reflects ESC status. Not so! It's up to your unit to choose the best way of keeping the form. Para 3-4, d (3) has the best guide to handling a completed 2404 on ESC status.

## Julian Wins

Checking TM 38-750 for info on filling out a DA Form 2402 Exchange Tag? Para 3-2c(b) says enter the calendar date the item was prepared for exchange in Block 2. However, Fig 3-1 shows the Julian date. The answer: Use the Julian date.

## Non-Stocked Item File

We gave you a bum steer on page 64 in PS 264 on non-stocked item file cards. You review the file to toss out any cards that've collected NO demands in the 2 most recent review periods (180 days).

If in the last 90 days the item has received a demand, hold onto it. That demand can count with the next 90 days' demands. Then, when you collect 3 demands within 2 review periods, the item moves to your PLL.

## Headed Your Way?

A T53-L13B engine was shipped out of overhaul with some incorrect paper work, address unknown. So, if S/N LE 15124 arrives on your pad, air types, contact the head shed —AVSCOM (AMSAV-LVP)—for the correct TM 38-750 records.

## Hand Guard NSN Switch

Using the NSN and descriptive info in SC 1005/35 (Jul 73) to get new M16A1 rifle hand guards could get you a fistful of the wrong kind. Use NSN 1005-00-056-2251 to get LH hand guards and NSN 1005-00-056-2252 for RH hand guards. Change No. 4 to the SC has the story straight.

## Sample Leeway

Taking oil and hydraulic fluid samples when you pull routine PM on your aircraft saves time and elbow grease. So, look for a revision to TB 55-6650-300-15 (Aug 70) which will give you the green light to use these hourly ranges:

SAMPLE INTERVAL	ALLOWABLE RANGE
5	4-6
12 1/2	10-14
25	22-27
100	90-110

☆U.S. GOVERNMENT PRINTING OFFICE: 1975 - 657-030/7

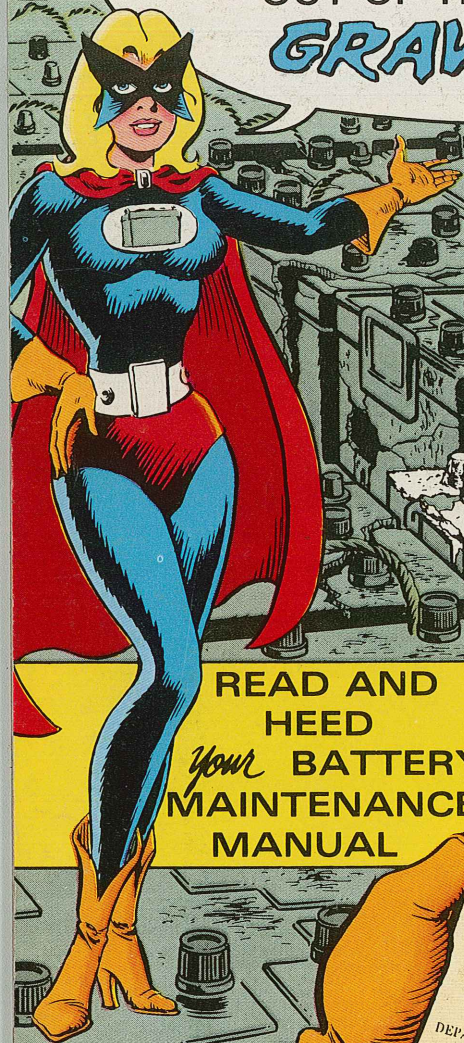
Would You Stake Your Life <sup>right now</sup> on the Condition of Your Equipment?



# KEEP YOUR **BATTERIES**

OUT OF THE BATTERY

## GRAVEYARD



READ AND  
HEED  
*Your* BATTERY  
MAINTENANCE  
MANUAL

