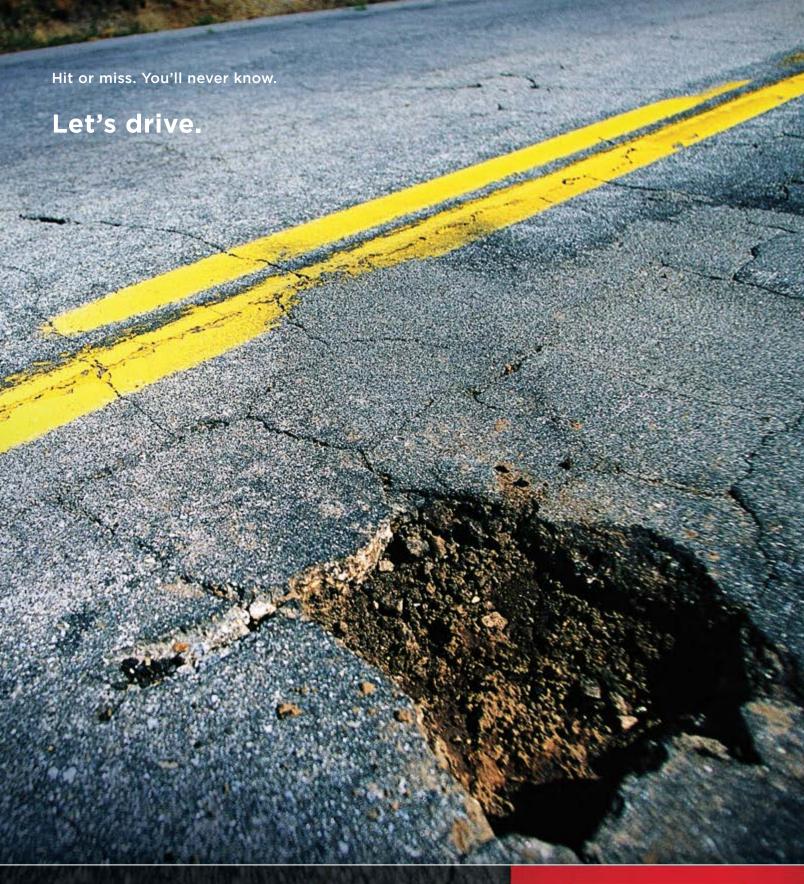
IN THIS ISSUE Great Military Museums The 2010 Allegro 34 TGA Pass-Through Basements on Front Engine Coaches



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Letters, We Get Letters . . . and Postcards and Emails

Thanks for your emails. We con-read "Traveling With Your Pets," by bound in this issue, send a longer of address card from USPS or send tinue to enjoy publishing Roughing It Smoothly from Monroe, Georgia. In late February and March, Norman Spray and I worked together race. Dr. and Mrs. Pilarczyk travel in to produce the six-part story on military museums. Norm wrote the two on the HEARTS Texas Veterans Museum and the National World War II Museum. I visited the museums at Battleship Memorial Park, the U.S. Army Aviation Museum, the Museum of Aviation at Robins AFB, and the Mighty Eighth Air Force Museum to write and produce those stories. If you like military history, I think you will enjoy this tour.

Traveling With Your Pets

Surveys show that over half of you travel with your pets. So be sure to

Dr. John P. Pilarczyk, a veterinarian specializing in small animals who practiced for 38 years in Temple Tera 2007 Phaeton. If you prefer to use the U.S. Mail, please address your Serious Tech Talk questions to:

"Traveling With Your Pets" Roughing It Smoothly 1403 Cedar Point Way Monroe, GA 30656

You can also send your questions via email to fredthompson1941@ hotmail.com. Please enter "Traveling With Pets" in the subject line.

From the Road

To tell us about your experiences on the road, you may use the postcard

letter to the address at left, but using the change by email. In the subject "From the Road" in the first line, or line, put "RIS Address Change." send an email with "From the Road" in the subject line.

To address your technical questions to Danny Inman, you may use the postcard bound in this issue, send a longer letter to the address at left (put "Serious Tech Talk" in the first line), or send an email to RIStechtalk@gmail.com

Changes of Address

Please do not call to make a change of address. We are often traveling when your calls come in and it is very difficult to handle the call on a cell phone. Please use a standard change

First Time Subscribers

Tiffin coach owners may receive a free subscription by writing to Roughing It Smoothly®, 1403 Cedar Point Way, Monroe, GA 30656 or emailing fredthompson1941@hotmail.com. Please include your phone number, the last six characters of your vehicle identification number (VIN), and the year and model of your coach. If you sell your coach, email stephanie.umfress@tiffinmotorhomes.com with your VIN, year and model, and the new owner's address. This will allow all service bulletins or recalls to reach the new owner.

Commissioned in 1942, the USS Alabama, one of four battleships in the South Dakota Class, saw brief sea duty in the Atlantic and spent the remainder of World War II in the Pacific theatre. See page 00 for the rest of the story.



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Downsize, please. But keep the amenities!

by Bob Tiffin

Three years ago Judy and I were on a trip in an Allegro Bus when, a little to my surprise, she said, "I would like to have a smaller motorhome that I would feel comfortable driving."

I reminded her that several years ago TMH had built a 21-footer. In fact, we built a thousand of them. But it cost too much to build them on the AstroVan chassis. The 27-foot Allegro was cheaper to build and was a much better value in the RV market.

"We need a small motorhome with all of the amenities of the big coaches, just scaled down—one I can drive," she said again.

The conversation jogged my memory back to five or six years ago when Leigh (our grandson who just graduated from Alabama in December) and I were over at Bradshaw High School to watch a track meet. We drove home on Cox Creek Parkway where we saw a 21-foot Vixen for sale, parked in the owner's yard.

"Leigh, what do you think about this concept?" I asked. "It's just too little, Papa Bob," he responded immediately. I agreed with him, but we did notice some features we liked.

Bill Collins, an automotive engineer with 25 years experience at General Motors, Delorean, and American Motors conceived the idea of a sleek, fuel efficient motorhome that you could park in your home garage. High on design and concepts, the Vixen encountered quality, cost, and production problems. During its three-year run from 1986 to 1989, the company produced 578 motorhomes and eventually succumbed on the auction block, although many owners are still very loyal to the product.

The Vixen's features we liked included the rear diesel engine, its low-to-the-ground profile for easy entrance and exit, and its sleek design. The Vixen was only 80 inches wide, and I felt sure that was too small for today's market.

Two weeks later we went to a retail RV show where I met three of our customers. I was surprised to hear all of them say that they would like to have "something smaller." At the same show RoadTrek was displaying a small motorhome that had some of the Vixen's features—but not the rear diesel engine.

Something like this, but a little larger; it needs a slide-out, I thought. For a floorplan, it needs to be what we were doing 25 years ago. I decided that our 27-foot floorplan with the split bath might work. Infrastructure, what do we need? Air ride, air brakes, an engine that has enough torque at a low RPM. Fuel economy—one of the major features on my list!

My fascination and excitement was growing. As customers came by to visit while they were here in Red Bay, the subject kept coming up. "Downsizing" was the buzz word, coupled with "fuel economy." The ladies often agreed with what Judy

had said. "But don't do away with all the nice amenities we have in our Phaeton," they would add.

Finally, I decided it was time to call Gary Jones, who provided the design and engineering for the PowerGlide chassis. Our sales and engineering departments put together their "want list" for this new motorhome. We gave Gary a lot of specific characteristics and features. Rear diesel engine; good fuel economy; low to the ground for easy entrance and exit, but don't give up passthrough storage in the basement; air suspension; air brakes; 70-gallon fresh water tank; 60–70 gallon fuel tank; and at least one slide-out. Almost in chorus, we were saying to Gary just what we were hearing from our customers: "Give us a chassis for a smaller motorhome, but don't take away our amenities." He delivered what we needed in less than a year.

Within three months, Gary provided us with a set of rails which allowed us to get started on a mock-up of the coach's basic box and an opportunity to start the design work for the floorplan and the interiors. He continued to work on all of the critical features of the infrastructure, carefully introducing the successful technology of our big PowerGlide chassis into the scaled down version for the Allegro Breeze.

There were many problems to solve, both at Gary's company and in the Tiffin R&D department. We worked in tandem with weekly sessions to review what each company was doing, implementing and making design and engineering changes as the product evolved.

The result: we now have a new version of the PowerGlide chassis. Side-by-side they do not look alike. However, rearranged in different places, the Breeze's chassis has the same components that have made the big PowerGlide a huge success. The chassis is built with heavier parts than you usually get on a motorhome of this size. If you want to downsize, you are going to love this chassis.

It was a challenge to keep the development of the Breeze a secret until we were ready to announce it in Louisville the week after Thanksgiving. There has been more early interest in this coach than in anything we have ever built. A plant visitor somehow walked into our R&D department last fall and took several pictures of the prototype which were soon posted on the internet. No harm done, perhaps, but it may have given our competitors a head start in building a similar product to compete with the Breeze.

The Breeze is now in the process of completing federally mandated testing to get it certified for road use. During the first week of March it passed the engine heat test with flying colors at the Caterpillar Proving Grounds in Michigan. It is now at the

Bendix Testing Facility in South Bend to test the braking systems. We plan to start chassis production in April and assembly production in May.

The first floorplan will be the 28-foot design which you saw in the last issue of Roughing It Smoothly. Later this year we will offer a 32-foot floorplan with two slide-outs: one for the galley and sofa and one for the full-size bed. The roof of the Breeze is 18 inches shorter in height than the Allegro Bus, which reduced the interior ceiling height to 6'6." With an exterior width of 96 inches, our design challenge was to create an interior spaciousness. When you get inside the Breeze for the first time, I think you will agree that we succeeded.

Since I pushed hard for this downsized motorhome with a rear diesel engine and most of the amenities that we have in our Phaetons, I took an active role in personally testing the prototype by driving it approximately 500 miles. Its handling characteristics are very similar to our front engine gas models. The steering is very responsive. If you have been driving a Phaeton or a Bus, it may take a little getting used to. In a high-wind situation, you may get moved around just a bit, but that can also happen with larger coaches. Overall I was well-satisfied with the way the Breeze handled. Keep in mind that the prototype I tested had leaf springs, but the production models will have independent airride suspension which will certainly make it handle better.

The Breeze stops better and quicker than anything we build today and without any nosediving. Its acceleration is very good—no problem with ramp acceleration to merge into interstate traffic or with moving into the passing lane to get around slower traffic. We towed a 4,000-pound Chevy Malibu for 70 miles and could hardly tell the car was back there during acceleration, cruising, and braking.

In a separate test, I drove 101 miles to test fuel economy. For those of you who are familiar with the area, I left Red Bay, drove through Belmont, and got on the Natchez Trace to the Tennessee River bridge. Then I followed Gunniford Road into Florence, turned south on US 43 to Russellville where I went through the downtown area to catch all of the traffic lights, and finally back to Red Bay on SR 24. I was not towing and did not have any significant cargo. The result was 14.22 mpg. I drove the speed limit on every segment of the trip, but did not get over 65 anywhere. Not bad for a diesel engine that had less than 5,000 miles on it. I will speculate at this point that the Breeze will get between 13 and 16 mpg, depending on load and individual driving habits.

Just a few more features that may interest you: we chose a V-8 MaxForce International diesel engine built by Navistar. It has 215hp with 560 lb.-ft. of torque at 1400 rpm. That in itself is a formula for good fuel economy. The size of this engine will exempt it from the urea additive requirement that affects our larger brands with the Cummins diesel engines. We used a 6-kw Onan Quiet Diesel generator that will provide power for everything in the coach.

I think the Breeze will satisfy a very significant market demand. What is really satisfying to me is -I think we may be in a class by ourselves!

The outcome of this story? Judy is going to have her smaller motorhome with the amenities she likes from the Allegro Bus. And so will all of you who have asked for this coach and offered many good ideas and suggestions to inspire us to design and produce the Allegro Breeze. RIS



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993449	1048856
994876	1051801
998939	1071744
1001688	1083925
1012601	1085539
1022042	1086349
1022416	1097089
1030834	1110400
1031025	1116873
1034175	1124975
1035270	1127716
1047199	
	993449 994876 998939 1001688 1012601 1022042 1022416 1030834 1031025 1034175 1035270

Note: See pages 32 & 33 for more information.

The refrigerator serial numbers listed above are involved in a recall. We do not know who the owners of the listed serial numbers are. Please check your refrigerator serial number, and if it is one of these listed please call 256-356-0205. We appreciate your help.

Tiffin Motorhomes, Red Bay, Alabama



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The Allegro 34TGA Takes the Prize

First impressions *are* important! Meeting your future spouse at a party. Your interview with the corporate recruiter. Getting your home ready for "open house."

The Allegro 34TGA has no difficulty making the grade. It makes a great first impression. The first word that comes to mind is *livability*. If you are thinking about full-timing at an entry-level price, then the 34TGA is your answer. If spaciousness is your key word, the living area with the slide-out deployed is 12'5" wide by 17'6" from the captain's seat to pantry. If you're planning to have friends over, the conversation pit seats six. Entertainment? The optional surround sound system with the standard 32-inch Panasonic HDTV, plus two optional 26-inch TVs (one over the dash, one in the bedroom) will give you a ticket to Carnegie Hall. Cokes and popcorn are on the house. A gourmet galley? You will be pleased with the 3-burner cooktop with a gas oven, plus an optional microwave-convection oven.

The 34TGA is a value-packed and feature rich motorhome. To appreciate what this coach offers, get inside, sit down, and savor what you *can see*. However, what you *can't see* is also very important and we will talk about that, too.

Let's begin with the cockpit. An optional five directional power seat for the driver upholstered in Halo leather will get you started in the right direction. This coach was built on a Ford chassis with the powerful Triton V-10, 362-hp engine, and TorqShift® 5-speed automatic overdrive with tow/haul mode. The dashboard is nicely arranged with easy-to-read gauges and switches within fingertip reach. Cruise control buttons are designed right into the steering wheel. The large black & white back-up monitor is easily viewed while you are underway, plus the views offered by the standard sideview cameras are pushbutton selectable to check what is in your mirrors' deadspots without depressing the turn signal lever. You will also notice











while sitting in the captain's seat that the HWH hydraulic leveling system is standard equipment and can be operated right from your dash panel.

Now do a quick move over to the passenger's seat and you will find a slide-out desk with a concealed writing cabinet. In the bulkhead, an electrical outlet is conveniently located to connect your laptop, which can be used enroute.

One of the nicest things about a Tiffin cockpit is the huge picture window that most of us still call a windshield. There is no center post and the wipers are out of view in a horizontal resting position when not in use. When you are driving through scenic country (and your windshield is clean), the navigator can double as the trip photographer.

When the sun gets too bright for comfort and driving safety, the driver can activate the power solar or opaque privacy shades for the windshield. RollEase® solar and privacy shades are standard equipment for the cockpit's side windows and are used throughout the coach.

The Tiffin-designed cockpit is really a control center. The

overhead cabinet in front of the passenger seat conceals a panel with several gauges and controls. You have pushbutton control for checking tank levels (fresh water, black and grey tanks, and propane), two forward slide-out toggle controls, an optional Winegard satellite, awning control with wind sensor (std. equipment), and the satellite receiver (subscription required). An optional 26-inch flat panel HDTV is located between the two cabinets. The driver and passenger each have an overhead cabinet for maps, travel records, and other materials. Those two cabinets plus the one over the exit door for your flashlights and umbrellas give you a generous 4.2 cubic feet of storage.

When you rotate the driver and passenger chairs 180 degrees, they become part of a cozy living room that seats eight. The livability mentioned at the beginning of the story takes on a special meaning when you turn on your optional surround sound system with DVD-CD player and your 32-inch mid-section HDTV.

Designed by Triple H Electronics exclusively for Tiffin coaches, the entertainment system uses component audio-video cables and HDMI to distribute input/output data from a central, easily













serviced black box (mounted under the floor). The box receives high definition broadcast *input* from the Winegard system which pulls programming from network satellites. Additional *input* comes from (1) a high-def enclosed rotating TV antenna (another Triple H invention) receiving local programming broadcast in high definition, (2) HD programming via cable service, and (3) a 5-disc DVD-CD player with high quality picture and digital sound technology. The system transmits *output* to the coach's HD-ready Panasonic televisions and sound equipment.

When any of the three televisions in the coach are turned on, one click on the remote activates a selection screen which offers "TV, DBS (cable), and DVD." Your selection will source *input* for (1) standard television reception provided by the hi-def antenna, (2) cable, (3) satellite reception (DIRECTV or DISH which you purchase separately), or (4) DVD-CD (movies or music) from the Panasonic 5-disc player. By adding four options (two HDTVs, surround sound, and a 5-disc CD player), you have placed your entry-level coach in the same entertainment league with the big units. Triple H designed simplicity of use into this system, eliminating frustration and ensuring your enjoyment.

When it is time for dinner, the 34TGA puts it all on the line for you. There is something about a real gas oven. It's just the best way to bake biscuits, make a pan of cornbread, or a batch of cookies. A real estate agent who called to make an appointment to show our house in Tampa last year said, "If possible, ask Carolyn to put an apple pie in the oven about 30 minutes before we arrive. The smell of a pie baking says, 'This is home!'" he assured me. Of course, you have the optional microwave-convection oven available when you want to speed up the preparations. And, you've got a 3-burner cooktop, a double sink, and nearly eight cubic feet of storage space in the cabinets immediately above your galley. The refrigerator with handsome custom-built wood panel inserts (optional) gives you plenty of cold storage, plus the standard freezer with a fast production icemaker (optional).

In the cabinetry under the galley's seven-foot wide countertop, you will find over eight cubic feet of storage space beneath the sink. On opposite ends of the countertop, you will notice two banks, each with three drawers. Facing into the room, the mid-section 32-inch HDTV is mounted into a hutch design which provides an additional eight cubic feet of pantry space.











Faux basketweave insets in the Key Largo decor are used in the overhead galley and pantry doors, adding another handsome touch to the galley. New for 2010, but perhaps not obvious, all Allegro cabinets have solid wood faces.

If you did a good job of selecting your site, the large picture window adjoining the dinette will give you beautiful views while you have lunch. In the Key Largo decor, the fabric for the dinette's cushions feature oversized outlines of leaves against a beige background. Light brown suede with dark brown piping is used to finish the ends of the dinette's design. The same fabrics are used in the valances. Two large slide-out drawers in the dinette's benches provide three cubic feet of storage, while the cabinets above the dinette are designed for your dishes.

Sharing the slide-out box with the dinette, the comfortable 68-inch Flex-O-Bed sofa-sleeper with Halo leather (optional) is a quick-change artist that provides you with a queen-size bed. A built-in pump inflates the air mattress in less than three minutes. The entire system stores compactly behind and under the sofa's frame. The overhead cabinets provide over five cubic feet of storage space for bedding and pillows.

Moving into the bedroom area where our doctors encourage us to spend at least one-third of our time, you will appreciate the comforts of home that Tiffin has provided. The east-west 60 × 80 queen-size bed is built into the passenger-side slide-out with visual depth provided by a light chocolate wallpaper which contrasts handsomely with the opposing walls in the bedroom. With the slide extended, the bedroom is 10'2" across \times 7'5". I am always amazed at the amount of conveniently placed storage that Tiffin architecture offers in the bedroom, and at the same time there is spaciousness for moving about.

His-n-her closets with framed mirror double doors are augmented by a shirt closet located under the bedroom's optional 26-inch HDTV. Light switches, heating and air, and slide-out controls are located just under the TV. As standard equipment, the coach has two 13,500 BTU high profile Coleman roof ACs and two 30,000 BTU ducted propane furnaces. The coach we





tested had an optional 15,000 BTU AC with heat pump in place of the front AC unit.

Under the closets and designed much like a residential bedroom chest-of-drawers, you will find five large drawers (10 × 18.5 by 9 inches deep) and a neat tilt-out clothes hamper. Located at eye-level above the bed, four storage cabinets in the slide-out offer 11.8 cubic feet of storage. An end table on the forward side



has both a cabinet and a 17-inch deep drawer. Both sides have 110v electrical service and sconce reading lamps.

Rarely found in competitors' entry-level coaches, the 34TGA provides two lavatories: one in the toilet compartment and the

other on the driver-side next to the shower. Most couples probably don't mind sharing when traveling, but separate cabinets and lavatories surely are nice. The elliptically-shaped shower is 46×29 inches, constructed with three translucent rainglass panels. The additional Fan-tastic power vent in the toilet compartment is standard as are four towel racks.

Although some will consider the 34TGA for full-timing, it can easily qualify as a family motorhome. The test coach reviewed had the optional Flex-O-Bed® Sofa-Sleeper by Flexsteel. The sofa provides a storage area for a 60×80 air mattress which is approximately eight inches thick. It has a built-in pump which inflates the mattress in less than three minutes. It is quite comfortable. The dinette quickly converts into a double bed for two children.

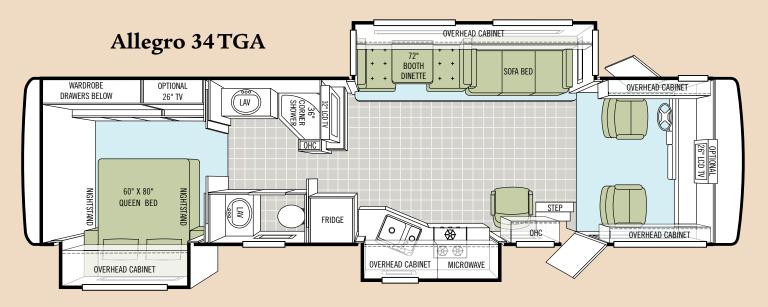
For outdoor living, the 34TGA offers as standard equipment an 18-foot awning with a wind sensor monitor and automatic retraction. The coach has outside connections for 110v service, television cable and digital antenna, and park ready phone outlet.

Now for a Look at the 34TGA's Pass-Through Basement

For the story on how pass-through basement storage in a frontengine coach was engineered and built, see "On the Production Line," page 27.

Formerly, the fiberglass box under a slide-out measured approximately 18 inches deep and had an average height of 21 inches (sloped top). Now the second and third doors of the 34 TGA's pass-through design open to a storage area that is 23.5 inches deep, 29.5 inches high, and 75 inches wide. The pass-through compartment is 48.5 inches across, 73 inches wide, and 11.5 inches high. An equally sized storage compartment on the driver's side creates 83.7 cubic feet of space. By comparison, the double-door basement storage compartment in the 43 QGP Allegro Bus has 137 cubic feet of storage.

But there's more to this design story. With the exception of the cross-section for the fresh water tank, waste tanks, and utility bay, and the first door on the driver's side, every basement door



connects to a pass-through storage compartment. The total space yields another 87.6 cubic feet of storage for a total of 171 cubic feet of basement storage.

To appreciate the accessibility of the cross-over, pass-through space, see the pictures on page 30. Not only are they accessible, each storage area is lighted and the sidewalls and floor of the compartments are lined with a heavy felt material very similar to the lining found in the trunks of fine automobiles. Each watertight storage compartment can be individually locked to protect your offseason clothes, outdoor camping accessories, and the many items that we enjoy collecting when we are traveling.

Driving the Allegro 34TGA

The Ford Triton 6.8 liter V-10 is rated at 362 hp. It produces 457 lb-ft of torque at 3250 rpm. The transmission is a 5-speed automatic with overdrive with a tow/haul mode. As with any front-engine gas powerplant, you will know it is there when you are accelerating through the gears to reach normal cruising speed. But once you are in 5th gear or overdrive, it quiets down to a pleasant hum.

The construction of the coach is very solid and tight, producing minimal noise over rough and uneven pavement. The steering has very little play in it, making it responsive to slight movements of the steering wheel.

The factors I look for when test driving a coach include ride and handling, acceleration, and the ability to maintain speed on a hill. Two passengers, a full tank of water (424 lbs), a half tank of fuel (approx. 37 gals), and a full LP tank constituted our load. We were not towing a dinghy. The terrain was very hilly.

THE RESULTS:

- 1. Rolling start (like an interstate ramp) to 65 mph: 22.9 seconds
- 2. MPH compared to RPM

40 - 150050 - 170065 - 220055 - 1900 70 - 2500 45 - 1550 60 - 2000

Needless to say, you obviously will get

much better fuel mileage if you are content to drive 55 mph.

3. On a 4 percent grade, I began at 60 mph on a half mile distance; reached top at 55 mph in 34.7 seconds. On a three-quarter mile distance with similar grade, and with no regard for fuel economy, the coach maintained a constant 60 mph while hitting 3100 rpm as it downshifted.

Conclusion

The Allegro 34TGA will compare ex-

tremely well to the competition from other manufacturers with regard to interior and exterior quality, innovation, construction, and performance. For its valueprice ratio in this category, I don't think you can find a better coach. The structural strength and utilization of available space in the new pass-through basement design is not currently matched by any Class A manufacturer. We know you can't find better service. Just ask someone who drives a Tiffin, RIS



15549 E. Hwy 52, Fort Lupton, CO 80621 tel: (800) 685-4298 or (303) 659-8221

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SPECIFICATIONS: Model tested 2010 Allegro 34TGA, Three Slides, Base MSRP* - \$117,390 MSRP as tested with options - \$123,830

STANDARD FEATURES

Structural

Laminated floor, sidewall, and roof Steel / aluminum reinforced structure Full one-piece fiberglass roof cap

Automotive

Ford TorqShift® 5-speed transmission with overdrive and Tow/Haul mode
Ford 362-hp 6.8 L, Triton V-10 engine
457 lb-ft torque @ 3250 rpm
Cruise control with steering wheel controls
Fog lights
Daytime running lights
Emergency start switch

Exterior

Fiberglass front & rear caps Tinted one-piece windshield 5.5 Onan® gas generator Two 13,500 BTU high profile roof Coleman AC (high efficiency) Quiet AC roof-ducted system Double electric step 1/4-inch thick single pane windows Horizontal mounted wipers Heated power mirrors Gel-coat fiberglass walls Full body paint Paint protective film Exterior patio light Power patio awning Slide-out awnings HWH automatic leveling jacks Convenient access doors with gas shocks Single handle lockable storage door latches

Heated water and holding tank compartments Two 6v auxiliary batteries Park telephone ready Hi-def rotating TV antenna Cable-ready connection External tripod satellite hook-up 50-amp service Black holding tank flush system Exterior rinse hose/shower Rear and side view cameras with dash monitor 110v exterior receptacle 110v / 12v converter Undercoating Roof ladder

Driver's Compartment

Entry floor light
Step switch and 12v disconnect switch
Non-powered cloth passenger &
driver seats (Flexsteel®)
Lighted instrument panel
Single CD player & stereo AM/FM
radio

Passenger slide tray / computer drawer
12v dash receptacle
Tilt steering wheel with cruise
Dual dash fans
Power solar & privacy shades
Roll-Ease® solar & privacy shades
for driver & passenger side
windows
Fire extinguisher
Snack / beverage tray

Living Area / Dinette

Large pull-out storage drawers in booth dinette Booth dinette Cloth swivel chair Cloth sofa bed Decorative wall hanging Mid-section 32-in. LCD TV

Kitchen

Single lever satin nickel sink faucet Double bowl kitchen sink Solid surface countertop accent edging Solid surface backsplashes 3-burner cooktop with oven Microwave 10 cubic foot refrigerator/freezer

Bath

Medicine cabinet Skylight in shower Satin nickel vanity faucet Second lavatory in toilet compartment with medicine cabinet Fiberglass molded shower

Bedroom

Wardrobe with automatic light Bed comforter Innerspring mattress Carbon monoxide detector LPG leak detector Bed pillows Phone jack Wall-to-wall carpeting 110v outlets in bedside tables

General Interior

Raised panel cabinet doors Vinvl headliner Medium alderwood solid cabinet doors & drawer fronts Wall-to-wall vinyl tile flooring in living room, kitchen, & bath Ball bearing drawer slides Scotchgard® treated carpet and fabrics Roll-Ease® solar & privacy shades Two power roof vents Tank level monitor system Smoke detector 6-gallon DSI gas / electric water heater Compartment door with single point latch Two 35,000 BTU ducted furnaces

OPTIONAL FEATURES ON THIS COACH

Power driver & passenger seats,
Halo leather
Winegard automatic satellite
Gas oven & convection-microwave oven
Surround sound system with DVD player
Vacuum cleaner system
Ice maker in refrigerator
LCD front OH TV
LCD bedroom TV
Flexsteel® Flex-O-Bed sofa sleeper,
Halo leather
Solid wood refrigerator panels
15,000 AC with heat pump (front
only) IPO 13,500 AC

OTHER OPTIONAL FEATURES AVAILABLE

Free standing dinette

DVD player
Power passenger & driver seats, cloth
Cooktop & convection-microwave oven
7.0 Onan generator
CB antenna
Bedroom tile
DRIVER'S SIDE OPTIONS
66" cloth jack knife sofa
66" leather jack knife sofa
66" leather jack knife sofa
68" Flex-O-Bed sofa sleeper, cloth
English chestnut solid wood cabinet
doors, cabinet facings, & drawer
fronts

MEASUREMENTS

Wheelbase - 242"
Overall length - 34'10"
Overall height with roof air - 12' 7"
Interior height - 83.5"
Overall width - 101"
Interior width - 96"

Cherry bark solid wood cabinet doors,

cabinet facings, & drawer fronts

WEIGHTS & CAPACITIES

GVWR - 22,000 lbs. Front GAWR - 7,500 lbs. Rear GAWR - 14,500 lbs. GCWR - 26,000 lbs. UVW - 18,600 lbs. CCC - 2,435 lbs. Trailer hitch capacity - 5,000 lbs.

POWER TRAIN

Engine – 362-hp Ford 6.8 L, Triton V-10
Torque – 457 lb.ft. @ 3250 rpm
Transmission – TorqShift® 5-speed
automatic overdrive with tow/
haul mode
Tire size – 235/80R 22.5 - GXRV
Alternator – 130 amps

CHASSIS

Frame - Single channel, ladder type

Frame design – 50 psi hi-strength steel with deep C-channel side rails
Steering – 50 degree wheel cut
Anti-locking braking system – Standard
4-wheel anti-lock brakes
Suspension (front and rear) – Tapered multi-leaf springs
Shock absorbers – Bilstien gas pressured
Axles – Heavy-duty Dana 17060S
Leveling jacks – Atwood electric automatic

CONSTRUCTION

Body - Laminated floor, sidewalls, roof

Roof - One-piece fiberglass

Support - Steel / aluminum
reinforced structure

Front / rear body panels - Onepiece fiberglass caps

Exterior side panels - Gel-coat
fiberglass walls

ACCOMMODATIONS

Sleeps - Eight (six adults, 2 children)
Fuel tank - 75 gallons
Fresh water - 80 gallons
Black water - 35 gallons
Grey water - 70 gallons
LPG tank - 24 gallons (can be filled to 80% capacity)

MSRP*

MSRP is the manufacturer's suggested retail price and does not include dealer prep or options. Manufacturer reserves the right to change or discontinue models offered, standard features, optional equipment, and prices without prior notice. Dealer prices may vary.

UVW

This is the approximate weight of the vehicle with a full fuel tank, engine oil, and coolants. The UVW does not include cargo, fresh water, LP gas, passengers, or dealer-installed accessories.

DEALERS

To locate the Tiffin dealer nearest you, go to www.tiffinmotorhomes.com and click on "dealer locator." If internet access is not available, call 256-356-8661 and ask the operator for the Tiffin dealer location nearest to you.

PLEASE NOTE

All options may not be available on all models. Because of progressive improvements made in a model year, specifications, and standard and optional equipment are subject to change without notice or obligation.



Love that shiny Tiffin motorhome you own, but not the hefty interest rate you're paying? If so, refinance your RV today through Essex Credit Corporation at an amazingly low rate of 5.99% and start saving on your monthly payments.

With a refinance rate this low, now is the perfect time to refinance your beautiful motorhome. You must apply by May 31, 2010 to qualify for this special refinance opportunity. Don't wait — apply online today or call the motorhome loan specialists at 1-866-377-3948 and mention promo code "Tiffin". Start saving money with your next motorhome loan payment!

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transactions only on loan amounts \$75,000 and greater with a maximum 17-year loan term. Current loan must be open for a minimum of 12 months. An application for credit must be submitted by May 31, 2010, and loan must close by June 15, 2010, to be eligible for the 5.99% refinance interest rate. Information is accurate as of April 5, 2010.

Rates and Terms are subject to change without notice.

Simple Solutions for Cleaning Your Coach — The Right Way

by Mary Findley

Growing up with a farm background and seven ornery cousins teaches you several of life's basic lessons. First: Determination to solve a problem no matter the odds against you. Second: Persistence to the point of stubbornness pays off handsomely. Third: Always do more than is expected of you. Fourth: Revenge can be a sweet reward - like the time one of those ornery cousins nailed me with a hedge ball leaving an ugly welt and a sore arm. The following Fourth of July brought that sweet reward when I caught him going into the outhouse. Waiting until he "settled" in, I lit a firecracker under the back wall. After his head hit the roof he charged out the door - pants still down around his knees.

It's been that background of determination and doing more than is expected that led to hours of research finding the right eco-friendly products for my sweet revenge against stubborn dirt. Let's tackle this maze of cleaning misinformation and resolve your cleaning issues.

Washing The Exterior

Since 2003, Volatile Organic Compound regulations (formulated by EPA) prohibit the use of lead in paint. Lead made paint quite hard to prevent oxidation. Since 2003, paint manufacturing companies have had to find a new base for their paints. The paint on Tiffin motorhomes has a polyurethane base called Diamont.

While multiple layers of clear coat sealants protect the paint against oxidation, the sealant must be protected from deterioration or the paint will oxidize faster than the lead based paints of prior years.

Paint manufacturers advise against using harsh cleaners such as Simple Green, Mr. Clean or liquid dish washing soaps. The degreasing agents in these cleaners leave a residue on the sealant, which soften and damage the clear coat in time. It's akin to the sticky residue felt on a linoleum floor after cleaning the floor with any heavy duty, degreasing cleaner.

Baby shampoo provides an effective yet gentle cleaner. Without the typical heavy degreasers of most detergents, baby shampoo cleans without fear of leaving a residue to gum up the clear coat finish. Generally one ounce is all you need per five gallon bucket of water. Also add onehalf to one cup of food grade distilled white vinegar to your wash bucket. If your water is soft, one-half cup is sufficient. Hard water requires a full cup per five gallon bucket.

Vinegar serves two purposes. First, it boosts the cleaning ability of the baby shampoo so you don't need as much. Second, food grade vinegar is made from grain and slightly acidic. The naturally occurring acid neutralizes the alkaline in the water to prevent water spots from forming. Make certain your jug of vinegar states "food grade" or "made for pickles," otherwise it may be made from petroleum.

recommended using 100% cotton pads like our Sof Wash for washing. Since the introduction of the new lead free paints, lambswool, even softer than cotton, is now recommended. Tiffin uses the lambswool pad carried by Mary Moppins. Specially designed to fit our swivel pad holder, it allows you to safely wash your coach from the ground. We also carry a 100% lambswool hand mitt for washing your vehicle.

Do not mistake lambswool with imitations. Imitation pads are made from 100% polyester, which is plastic. Plastic

While the Mary Moppins company does carry an excellent 4- to 8-foot fiberglass handle, all Mary Moppins products attach to any standard threaded handle.



Siding manufacturers for years have

Mary Findley is a veteran cleaning expert, author of The Complete Idiot's Guide to Green Cleaning and owner of Mary Moppins. Mary's cleaning tips appear in magazines such as This Old House, Real Simple, Woman's World, and Woman's Day. Her dedication to all things green has led her to presenting sustainable living seminars to help organizations, businesses, and individuals rid their lives of toxic chemicals and engage sustainable living practices. Reach Mary through her website www.goclean.com or call 800-345-3934.

imitations will scratch the finish—but the scratches are so minute that they are barely noticeable at first. Eventually, continued scratching will remove the clear coat from the surface of your coach, vehicle, boat, floor, cabinets, and furniture. For this same reason avoid microfiber products to wash or dry your RV, car, boat, airplane, motorcycle, vehicle, furniture or cabinets. Microfiber is made from 80% polyester.

Likewise avoid washing with brushes. Even though you may not see brush marks now, the damage will happen as the bristles wear down. One washing and your coach is fine but the next washing leaves it covered with scratches. Use lambswool wash pads to avoid these issues.

Use only 100% cotton towels to dry your vehicle. Be cautious of terry towels made in Taiwan or China. They are not checked for fiber content as they enter the States and usually contain up to 30% polyester.

Adding vinegar to your wash water and washing in the morning or evening will help prevent water spots. Water spots damage the exterior of your coach the same way they damage glass shower doors. They etch their way into the surface and removal becomes difficult. Prevention becomes the key. Wash one side at a time, rinse, and then dry quickly first using Mary Moppins EZE Squeegee followed by a towel placed over our Mary's patented Cleaning Head. Buff water spots immediately with a 1000 grit polishing compound or our RenewzIt, which removes water spots, scratches and oxidation.

To remove oil and grease remember Mary's #1 rule of cleaning: Give your product time to work. Dab a bit of a concentrated cleaner like our CleanEz never an orange based cleaner or one with petroleum distillates — onto a soft cloth. Apply to the oil spot and wait 10 to 15 minutes before rubbing lightly to remove the oil. Rinse immediately.

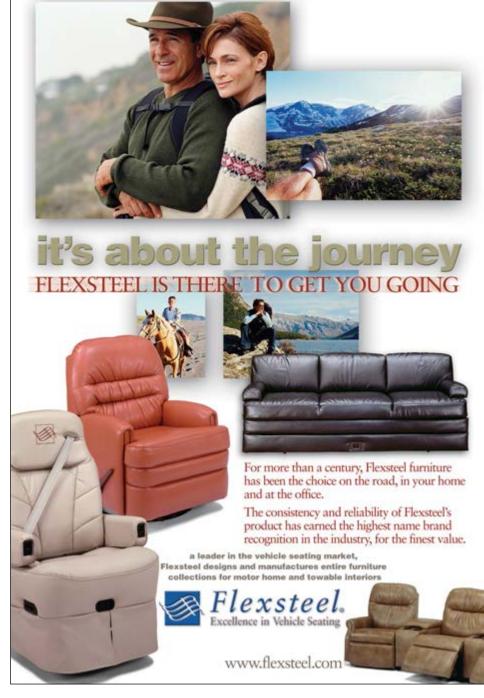
Fiberglass Roofs

Clean roofs as you do the sides. Tree sap

can usually be removed by freezing it with ice then gently scraping it off with a plastic scraper held flat against the roof. Do be careful not to gouge the surface. Then use the CleanEz or a concentrated cleaner to remove any remaining sap.

It is important to use a protectant like

more frequently than on the rest of your coach. I'll discuss waxes and protectants below. The sun's direct heat dries the roof quickly, resulting in more rapid oxidation. However, frequent application of a protectant results in a slick roof, which can cause falls. Solution? Purchase a pair of Mary Moppin's Advantage on the roof boat shoes made by Merrill or Teva called



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NEWS YOU CAN USE

Non-Skid. Made for clambering around wet boat decks, the soles on these shoes have a death grip on slick surfaces and do not mar the finish. They also provide extra traction climbing up and down ladders. Alternately purchase a roll of non-slip padding from the carpet section of the hardware store to put down on the roof. Don't forget to bring it down when you finish!

To Wax, Seal, or Protect

If ever there was a smorgasbord of options concerning care of an RV, it certainly applies to the use of wax and protectants. Let's solve a few of those mysteries.

What is the difference between wax, protectants, and sealants? Wax is made from carnauba. Carnauba penetrates through the clear coat and the paint reaching the fiberglass and seals it. Fiberglass must breathe or it suffocates and turns yellow over time.

Advantage is specially formulated for Mary Moppins and contains polymers which are called a protectant. Polymers will not penetrate the sealant or paint. They sit on the surface providing UV protection and make the surface slick so dirt and bugs slide right off, including from the back of rear view mirrors.

Furthermore, paint companies specifically advise against use of



cleaning products containing petroleum distillates. Distillates can deteriorate the clear coat causing the paint to eventually oxidize. Unfortunately companies are allowed to put a small amount of distillates in a product without stating so on the bottle. You must read an MSDS (material safety data sheet) to determine if a product contains distillates. Look for the words: aliphatic hydrocarbon, mineral oil, hydrocarbon or petroleum. Advantage contains no petroleum distillates as stated on the bottle.

Sealants, like our RenewzIt, are only necessary if your coach is oxidized, scratched or has water spots. If you need a sealant, look for a 1000 grit polishing compound that states "heavy duty cleaning" or "oxidation remover." After removing the oxidation, wait 24 hours for the sealant to harden and apply Advantage to help prevent further oxidation.

If you have been using a product with petroleum distillates, chances are it has left a dull film on your coach. Advantage will remove that film along with most of the impurities, or small bumps you feel as you run your fingers across the surface. With the film gone, the color deepens and the shine once again looks new.

Allow Advantage to haze over and remove with 100% cotton, avoiding any cloth made with polyester, including microfiber. Terry towels work quite well. Mary Moppins carries a heavy weight 100% baby diaper cloth for a professional polished finish.

Test your coach or tow vehicle every six months for oxidation by pouring a bit of your protectant on a clean, soft, white cotton cloth. Rub one spot for several minutes. If paint rubs off onto the cloth, your coach is oxidizing. If you are waxing three to four times a year then your wax contains a distillate or silicone that is damaging the finish and you must use a sealant to remove the oxidation or you will be facing a new paint job. If you are applying a protectant only once or twice a year, then check the content of your protectant and increase the application to two to three times a year.

Keep a keen eye out for oxidation on your roof. Wash it at least four times a year and test for oxidation twice a year. Apply your protectant regularly, a minimum of twice a year. Preventive care of your coach keeps you ahead of exhaustive repair issues.

Folks ask how to remove the yellowing that can form on the outside access panel to the refrigerator. Use a spray can, not a spray bottle, of Lysol or Dow Tub and Tile cleaner. Spray on, wait 5 to 6 minutes and wipe off. Do not allow it to drip down the paint. Rinse with one half cup of white vinegar per gallon of water. Apply several coats of Advantage to prevent continued yellowing. This method also removes oxidation from vinyl decals. Tub and tile cleaners are very toxic so please wear gloves and never use inside your coach.

Stay tuned for the next issue of *Roughing It Smoothly*. Mary will share her short cuts for cleaning tires, wheels, windshields and awnings.

Emissions 2010: New EPA Regs Create Benefits for RV Owners and the Environment

by Marlin Saint

New diesel emissions technology and recent improvements in diesel engines built by Cummins have met new EPA emissions standards for 2010. EPA's long-term purpose in establishing the standards was to eliminate harmful contaminants that can have adverse effects on our personal health and the environment in general.

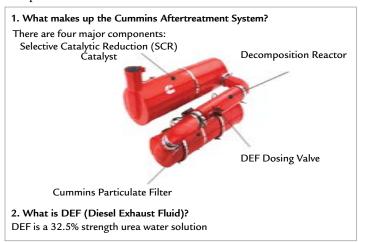
While the challenges to meet the standards were significant, Cummins met those goals prior to the EPA's deadlines. Concurrently, they implemented technology that improved fuel economy and engine efficiency.

The contaminant that has for many years been fouling our environment and jeopardizing our health is the by-product of combustion: nitrogen oxide (NO_x). A 2005 EPA national study of nitrogen oxides emissions showed that "On the Road Vehicles" was by far the largest offender, followed by "Off Road Equipment" and "Electricity Generation."

The technology that made it possible for Cummins to meet the deadline to eliminate NO_x is a system called Selective Catalytic Reduction (SCR). Urea is used in SCR reactions to reduce the NO_x pollutants in exhaust gases generated by combustion from power

plants and diesel engines. Urea is found in the urine of mammals and amphibians. For industrial use, it is converted by chemical companies into a urea-based diesel exhaust fluid (DEF).

Small quantities of the water-based DEF will be injected into the exhaust upstream of the catalyst, where it vaporizes and decomposes to form ammonia and carbon dioxide. The ammonia



Attention All Tiffin Motorhome Owners

Norcold has extended a previous recall to include 528 units involving Tiffin Model years 2001, 2002, and 2003. The following is an excerpt of the letter from Norcold. Please be advised that if you have a coach from the listed model years or earlier (from the previous recall), call Norcold at 800-767-9101 to determine if you need to take action.

Norcold, Inc. manufactures absorption refrigerators which are sold for application in Recreational Vehicles ("RVs"). On July 22, 2002 Norcold announced and undertook a motor vehicle equipment safety recall to address a potential fatigue failure in cooling units made by Norcold serving as components in Norcold refrigerator model numbers 1200LR and 1200RIM built from December 1, 2001. At this time, Norcold has determined that the recall announced on March 25, 2008 and assigned recall number 08E-030 should be extended to embrace cooling units made by Norcold serving as components in Norcold models 1200LR, 1200LRIM and 1201LRIM manufactured from March 1, 2001 to December 31, 2002. Each cooling unit under this extension has a serial number between 1273701 and 1536607, non-consecutively.

The nature of the defect is a fatigue failure in the section of the cooling unit which contains the refrigerant. This fatigue could allow the liquid solution to slowly leak from the cooling unit. If a leak occurs and the refrigerator continues to be operated after solution circulation has ceased, the heat source could generate very high temperatures. At such high temperatures the steel material of the cooling unit could soften and rupture. If refrigerant gas is still in place when the rupture occurs, hydrogen gas may be expelled and could be ignited by the high temperature, possibly causing a fire.

The cooling unit serial number is located on the solution chamber, which can be viewed through the refrigerator vent door on the outside of your vehicle. The serial number on the cooling unit differs from the se-

rial number of your refrigerator. If your refrigerator is one of the models listed above, with a cooling unit serial number in the defined range, it has one of the suspect cooling units and requires retrofitting with a thermal switch kit. Extended operation of a leaking cooling unit could cause a fire, resulting in personal injury (including death) and/or property damage. Call 800-767-9101 to report your refrigerator and get assistance to execute repair through a Norcold authorized service center or other approved dealer. Parts and labor for the repair will be at no charge. If you have one of the recalled cooling units:

- YOU should set the controls to "OFF," and unplug the refrigerator through the service vent on the outside of the vehicle.
- 2. YOU should immediately have a service center check to determine if there is a cooling unit leak.
- 3. If a cooling unit leak is detected by the authorized service center, you will be instructed to not operate the refrigerator in any mode until the cooling unit can be replaced.
- If the cooling unit is not leaking, you will be instructed to not operate the refrigerator in any mode until it can be retrofitted with a Thermal Switch Kit.

You should contact Norcold's Recall Center at 800-767-9101 or visit Norcold's website at http://www.norcold.com as soon as possible to arrange a service date and to help you locate the service center nearest you. If you use the web address, click on the Customer Support link followed by the Service Centers link. You can also check online to see if your cooling unit is under recall by clicking on the Customer Support link at the top of the page, followed by the Recall Info link. From there you can click on the 'Check Status' button to see if a cooling unit serial number is under recall.

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W 0 U S Ε E A N

produced by decomposition of the urea reacts with the nitrogen oxide emissions within the catalytic converter and is changed into harmless nitrogen and water. Let's say that again-diesel emissions will become as harmless as inert nitrogen and water!

The SCR system consists of three elements: the Catalyst, Diesel Exhaust Fluid (DEF), and a DEF dosing system.

Selective Catalytic Reduction system. It is a blend of 32.5% high purity urea and 67.5% deionized water. Urea is a compound of nitrogen that turns to ammonia when heated.

All Tiffin Motorhomes with Cummins 2010 EPA-approved diesel engines will be equipped with a DEF storage tank. Motorhomes with the NaviStar engine will use EGR (Exhaust Gas



"The Invisible BraTM" Paint Protection Film The CLEAR Alternative To The Vinyl Bra and Plastic

DIAMOND SHIELD IS THE #1 INSTALLER OF PAINT PROTECTION FILM ON NEW MOTORHOMES

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✓ Diamond Shield Paint Protection

- Film is designed to preserve the beauty of ALL exterior automotive type finishes. ✓Eliminates paint chips and damage caused by stone chips, bug acids, road salt, abrasions and weathering.
- ✓ An 8mil clear gloss urethane film which contains UV inhibitors and is resistant to yellowing.
- ✓ Standard Installation: fiberglass painted areas below the windshield, under the grab handle, around door lock and beneath the entrance door
- ✓ Exclusive Standard System wraps most edges on the hood, generator doors, their compartments and their openings. Factory installations wrap film under cap moldings and under mirrors, leaving NO visible film edges.
- ✓ Coaches without Diamond Shield **CAN** be scheduled for installation right at the Tiffin Service Dept. Call for further details!
- ✓ Diamond Shield is applied by **Factory Certified Installers** who are located across the U.S., call for the one closest to you!
- ✓ ONLY major brands of urethane films are used. NO private labels, which ensures against liability and warranty issues.

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www.Diamond-Shield.com E-Mail: diamondshield1@netzero.net

Recirculation) to meet EPA standards. The EGR system will be a story for another time.

The DEF storage tank that is being installed on Tiffin's Powerglide chassis will have a capacity of 15 gallons. DEF consumption is expected to be approximately 2% of diesel consumption. Another way to figure DEF use is with a 50 to 1 ratio. For every DEF is the reactant necessary for the functionality of the 50 gallons of diesel fuel burned you will use one gallon of DEF. If you know how much fuel your motorhome uses, you can easily calculate the amount of fuel you will use in a year. Following is an example of how to estimate the amount of DEF you might use on an annual basis.

> Miles traveled in one year = 10,000 miles MPG for motorhome = 7 mpg 10,000 miles/7mpg = 1,430 gallons DEF usage @ 2% of fuel consumption = 29 gallons of DEF/year 29 gallons of DEF/ 15 gal. tank for Powerglide = 2 fill-ups/year

This is just an example of a motorhome that gets 7 mpg. Your mileage will vary depending on your carrying weight, the terrain where you are traveling, and how many miles you travel a year. If you are a full-timer, you may travel more than 10,000 miles compared to a weekender who may travel 5,000 miles annually.

One of the often-cited concerns in implementation of the SCR system technology is the availability of DEF. Through the efforts of the U.S. Department of Energy, the Environmental Protection Agency, vehicle manufacturers and dealers, the oil industry, truck stops, and trade associations, the distribution plan for DEF is moving right along. What this means is that one will be able to get DEF almost anywhere, including truck stops large or small, diesel fueling stations, truck dealer locations, truck repair garages—even your local parts store.

Benefits to Motorhome Owner

- 1. The SCR system enables Cummins to increase horsepower without increasing the engine's size.
- 2. The SCR system permits a smaller engine and cooling system for any application, which translates to less weight and more usable vehicle space.
- 3. Cummins tests show that the SCR solution enables 5 to 7 percent engine efficiency improvement over alternative solutions—and that means better fuel economy.
- 4. For Cummins, SCR was not new tech. The company has been using this technology for five years to meet European emissions regulations. Over 300,000 vehicles are currently operating in Europe with SCR systems.
- 5. Cummins technology has achieved near-zero emissions in the last five years while delivering equipment with better long-term value that also lowers your carbon footprint: a real win-win combination.

FAOs

Below are some of the most frequently asked questions about this new SCR technology using DEF to meet 2010 emission standards.

Q1. What happens if my motorhome runs out of DEF?

Motorhomes that use DEF will have a gauge to inform the driver of the amount of DEF in his coach. There will be a low-level warning lamp to warn the driver when he is low on DEF. If you allow your DEF tank to become exhausted, the vehicle's power will be reduced enough to encourage you to refill the tank. Once the tank has been refilled the engine will resume normal power levels.

Q2. Will DEF freeze?

Yes. DEF will start to crystallize at 12° F (-11° C). In a 32.5% solution, both the urea and water will freeze at the same time. As it thaws, the fluid will not become diluted or concentrated. The freezing and thawing of DEF will not cause degradation of the product.

Q3. What happens to my motorhome if the DEF freezes in my tank? SCR systems are designed to provide heating for the DEF tank and supply lines. If DEF freezes when the motorhome is shut down, start up and normal operation of the unit will not be inhibited. The SCR heating system is designed to quickly return the DEF to liquid form and the operation of the motorhome will not be impacted. Anti-gelling products should never be added to DEF because the 32.5% solution used is very specific for the NO_x reducing properties. Any blending of an anti-gel product would greatly reduce the DEF's 32.5% solution from properly doing its job and may cause damage to the SCR system.

Q4. How should I store DEF?

DEF should be stored in a cool, dry, and well-ventilated place and out of direct sunlight. Shelf life for DEF is one year with proper storage. While the ideal temperature for storing DEF is up to 77 degrees, higher temperatures for short periods of time will not impact its quality. If DEF is stored at lower temperatures, its shelf life will be extended.

Q5. If I forget, what will keep me from pumping diesel fuel into my DEF tank?

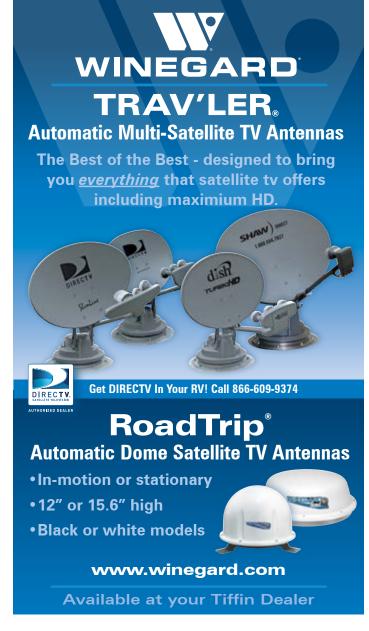
The standard nozzle for dispensing DEF has been changed to 19mm compared to the usual diesel fuel nozzle which is 22mm. In addition, the tank cap for the DEF will be blue to help differentiate it from the diesel fuel tank. The SCR System will recognize solutions other than DEF and alert the driver with an indicator light that something other than DEF has been added to the tank. Depending on how much contamination was put into the tank, the unit may require service at an authorized service center.

Q6. What maintenance is required on the new SCR system? There will be no changes to the lube and filter service intervals for the diesel engines on vehicles equipped with the SCR sys-

tems. The only job of the new SCR system is to impact the emissions produced by the engine. The only part of the SCR that will need maintenance is the DEF dosing system. The dosing filter will need to be replaced around 200,000 miles as part of routine maintenance.

Q7. How much is it going to cost me to run the new EPA engine and the SCR system?

You will find DEF dispensing pumps at all major truck stops, as well as small containers of DEF fluid. There are several sizes available for purchase, including 1, 2.5, and 5-gallon containers. Like diesel fuel, prices vary from state to state. Current prices range between \$3.00 and \$4.00 a gallon.



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Top: The staff of Bill Plemmons RV World in Rural Hall (Winston-Salem) gathered for a company photograph recently. *Below:* The locations at Raleigh, and Salisbury (Charlotte) have placed the company in close proximity to 75 percent of North Carolina's population.

ill Plemmons impressed on his son, Steve, a key maxim for running a recreational vehicle business: "The sales department can sell it once. The service department can sell it again and again."

"So many companies emphasize *making* the sale. That is just the beginning point. We are going to take care of your motorhome with excellent service and make RVing a continuing and pleasant lifestyle for you," Steve began. "Service is the core of our business. Excellent service builds lifetime relationships, which in due time will result in future sales."

Greg Bobbitt, general manager of Bill Plemmons RV World, expands on Steve's philosophy and emphasizes that selling it *right* the first time is also critically important.

Many companies have a Mission Statement, Steve said. At Bill Plemmons RV World we decided to have a Vision Statement. Our vision is,

WE ARE HERE TO HELP OTHERS PURSUE THEIR PASSIONS AND REALIZE THEIR DREAMS.

"I teach 'solution selling.' Our sales professional (SP) has a responsibility to the person who visits Plemmons with an interest in buying a recreational vehicle. Our SP has to understand the client's *need* and *wants*. That process is usually implemented by asking key questions: How will the RV be used? What is the client's budget? What features does he/she want the RV to provide?" Greg explained.

"The client's answers help the SP to focus on what customer education may be needed, what is available in Plemmons's inventory or can be ordered, and the main features of selected RVs. With that information, the SP usually can fulfill the client's need and wants with the first three selections from our inventory. If the 'solution selling' process has been handled skillfully, the first RV shown will be the right one," Greg said. "Then we work on decor and feature options. The goal of solution selling is to insure complete satisfaction."

Roots in the recreational vehicle business run deep in the Plemmons family. In the post-WWII economy, Bill Plemmons sold automobiles for a Ford agency. In 1951 he started a plumbing business, but his affinity for the automotive industry soon led him to open a dealership in downtown Winston-Salem selling used cars and trucks.

An uncle talked Bill into buying a 13-foot travel trailer to take his family on a two-week Christmas vacation to Florida with two other families. "Mom was a good homemaker and had a lot of canned goods in quart-size Mason jars," Steve remembered.

"To make the trip more economical, she packed the cabinets in the trailer with many jars of vegetables and fruits." The family of six was looking forward to a great vacation.

The first day's experience turned into a disaster. As the trailer moved down the highway, the glass canning jars shifted and pushed against the cabinet doors, causing the doors to pop open. The jars crashed and burst open on the floor of the trailer. "You've never seen such a mess. After several hours of cleaning up, mom and dad went to a grocery store and bought food in cans and boxes," Steve laughed. But within a day or two, another major problem developed. "The car overheated — the radiator failed and required an expensive repair job," Steve said. Even after the two major problems, the Plemmons still managed to have a good time.

Nevertheless, when they returned, Bill posted a "FOR SALE" sign on the trailer and put it back on the car lot. In the process of trying to sell the trailer, he told stories about their trip to Florida and how their troubles had built family memories they laughed about later. He sold the 13-footer, but knew he was hooked on the family camping lifestyle. Not long after, Bill acquired a little

As he often does for dealer events, Bob Tiffin visited the 34th Annual Open House at Bill Plemmons RV World in April 2009 to meet new TMH owners and prospective buyers in North Carolina. Bob is shown here with Steve Plemmons and his daughter, Shawna Plemmons Smith, operations manager, at the open house.



22 ROUGHING IT SMOOTHLY







A corporate president will address many different situations every day. How he responds is usually reflected in his expressions.

more accommodative 17-foot trailer for the family, and bought six units as a package deal to put on his lot and sell.

In the late sixties, Bill Plemmons RV World began selling motorhomes when they took on a dealership with the Class A Midas. By 1972 they were selling the Class C Midas Mini and two additional Class A brands, the Champion and the Titan.

"Dad believed in teaching his children to work and provided them with ample opportunities," Steve smiled. By the time he was eight, Steve was picking up cigarette butts from the graveled parking lot. He graduated into cleaning RVs as soon as he was old enough to handle the assignments. "Dad wanted me to work for other companies, which he thought would help me learn what it was like to have a boss other than a family member. This was a pivotal lesson," he said. Steve landed jobs with ACDelco, a land clearing company, McDonalds, and Hanes Hosiery. By the time Steve graduated from high school in 1972, his father had decided it was time for him to come back to the family business on a full-time basis.

"I went to Forsyth Technical Community College and learned diesel mechanics, body repair and painting, and welding," he related. "The service area was the right place for me and I enjoyed working there from 1972 through 1981."

In 1981 Steve moved into sales and dedicated himself to being the company's No. 1 salesman, an accolade he earned in 1982. "But I really didn't like sales that much. My dream was to become a NASCAR driver," he said.

In 1977 Steve built his first race car from the ground up with the help of a friend who had an engineering degree. "We built a 30×30 foot racing shop and somehow managed to win a third of all the races we entered in the Sportsman Divison. Rick McHone, now our Parts & Service Director, was on our

team," he related. "Rick is in his 28th year with Bill Plemmons RV World." Continued successes at the Bowman-Gray stadium in Winston-Salem and at the Hickory track led to racing entries at the Virginia tracks in Martinsville and South Boston. One of Steve's most memorable races was at Martinsville in 1982 when he drove against Dale Earnhart, Sr.

On June 21, 1988, everything changed. "I was too busy. I was trying to build my way to the next level of racing," Steve explained. "My family was growing up without me. I was successful, but everything centered around *me*. I made up my mind that day to sell off the race car business. Racing did give me a lot of technical expertise and background to draw from in the future after I decided to commit to one full-time job instead of two—Bill Plemmons RV World."

By 1974, Bill Plemmons RV World had outgrown its original facility in Winston-Salem. Bill found 3.8 acres that had been used as a car dealership just north of Winston-Salem at 6725 University Parkway in Rural Hall. "As Dad went into semi-retirement, we operated on that facility until he passed away in 1992," Steve explained. "Mom wanted to sell the business, and by that time Roger, my brother, had decided to leave the company. Jeff, my younger brother, and I bought it in 1994."

"Jeff and I saw the opportunity for solid growth in the Winston-Salem area and immediately bought 9.2 acres adjoining our property to provide space for more inventory," Steve continued. Ten years later, when Jeff decided to launch his own business, Steve bought his share of ownership in Plemmons RV. When a grocery building on the opposite side of his property went up for sale, Steve saw it as a good facility for training and club rallies. Plus it provided another three acres.

Steve continued the expansion with a new 14-bay service facility and a state-of-the-art 60-foot paint booth with an accompanying mixing station for exact color matching. Continuing to follow his plan for making service the core of the business plan, he assigned five of the service bays to pre-delivery inspections (PDIs) and the other nine to servicing and repair. "Today all of the major RV insurance companies will authorize repairs to be made here, including extensive body work and painting," Steve said. "David Cook, our shop foreman, has 21 years of experience and is a master-certified technician himself. Right now we have four PDI techs and nine service technicians (five master-certified techs and four certified techs). Our PDI technicians train our new owners to correctly use all of the features in their coaches."

As president and CEO of Bill Plemmons RV World, Steve has concentrated on building a management team empowered to act in the best interests of the customer. "Do what is right" has become the company's simple policy. "And if you're not sure what is right in a particular situation, do what you think is right and I will back you up," Steve adds. "Taking care of the customer first is our policy."

Steve and his wife, Sandra, have two children, Shawna and Sterling. Shawna, 29, has taken a very active role in the company. "I went to nursing school right out of high school," she said. "After one year working in the nursing field, I was sure that was not the right career for me." Shawna began learning the RV business in the parts department. After three years in parts, she was ready to learn the core of the RV business - the service department, where she wrote service orders for five years. She is now operations manager, a position which covers marketing, ordering inventory, and checking in new inventory.

"I plan all of our events which include an open house every spring and a camp-in every fall. This year we will do our 35th Annual Open House April 23-25," Shawna explained. "RV clubs serve our food; we have clowns, face painting, and drawings. The parts department puts on a 'garage sale' and we emphasize our 'Low Price Guarantee' policy during the three-day event. At our 34th open house last year, Mr. Tiffin called and asked if he could take part in it. We were so glad and honored he came. He also spent one day at our Raleigh location."

"We will have our 17th Annual Camp-in October 14-17 where we invite our customers to reserve a space for the weekend. We can do electrical hook-ups for 130 units. We block out time in the service department for our campers," she said. "The Rural Hall Fire Department arrives at 7 a.m. Saturday and begins cooking their famous chicken stew which is served at five. Dinner is followed with live entertainment. We just have a great time."

Steve brought Greg Bobbitt into the company in October 2008 as general sales manager and last year asked him to become general manager. Having Greg on board has allowed Steve to spend more time in conceptual planning for the company which now operates in three locations: Rural Hall (Winston-Salem), Raleigh, and Salisbury (Charlotte).

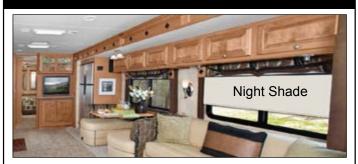
Greg opened the Salisbury location last July to allow Plemmons RV to compete effectively in the Charlotte market. Less than 25 minutes northeast of Charlotte on I-85, the division has nine specialists in parts, service, and sales. Now in its third year, the Raleigh location employs 16 and is less than two hours east of Rural Hall on I-40. Their three strategic locations place Bill Plemmons RV World within a one-hour drive of 75 percent of the state's population. All three locations stock and service Tiffin motorhomes.

Steve and Greg are nothing short of bullish on the growth prospects for RVing in North Carolina. From the amazing Cape Hatteras National Seashore and hundreds of miles of beaches in its eastern sector to the Great Smoky Mountains National Park and Appalachian mountains in its western region, plus national and state forests and lakes in between, North Carolina offers recreational opportunities which few states can match.

Greg puts convincing figures on the table. In 2009, a year branded as recessionary, Plemmons RV opened a new division and delivered more units than any year in the company's history. Greg candidly points out that "only 20 percent of our deliveries last year were motorized. However, we are shooting for a goal of 30 percent motorized for 2010. Last year we also realized our highest dollar volume in sales in the company's history," he said. In its three locations, the company has 20 salespersons and four sales managers.

"Tiffin Motorhomes will definitely help us achieve that goal,"

MCD AMERICAN DUO™ SHADE SYSTEMS



MCD . . . originator and innovator of the Day/ Night dual roller shade system. Manufacturer and supplier to Tiffin since the 2008 model year.



Upgrade your lifestyle . . . Now you can update your coach to 2011 model features with MCD shade technology -manual, fully powered, or a combination of the two.

When ordering your new coach, insist on GENUINE MCD American Duo™ Day/ Night Shades.

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800.804.1757 www.mcdinnovations.com Shawna said. "People love the Tiffin brands. We routinely sell them within a few days after we take delivery from Red Bay. I have never seen such a draw. Our call volume has gone up significantly because of Tiffin."

"Inventory management is really an important issue for us," Greg said. "Now that we are a Tiffin dealer, we pride ourselves on the fact that we carry the three Class A brands that won the RVDA Quality Circle Award at Louisville last December."

"Our biggest challenge now is the banking industry," Greg acknowledged. "But we are confident that credit restraints will loosen as we get closer to the summer season." Since 2008 the company has moved to second place in *new sales* volume in North Carolina. "I came to Plemmons RV nearly two years ago because of Steve's philosophy about service. But we also have the right product mix," Greg said, "and that's a winning combination."

"Through an ad agency that specializes in the recreational vehicle industry, we are building our reputation in the state as to *who* we are," Greg said. "We are creating our persona and stressing our philosophy of doing business."

The company spends a large proportion of its ad budget on its website. "We have improved our search engine optimization," Greg continued, "and we carefully track our leads from the website. But we also track walk-ins to learn which ad media brought them here." Plemmons RV also uses television, radio, and billboards.

Steve has focused on improving service in several ways. Working with a community college and RVIA's training programs overseen by Wade Crounse, Steve led the way to establish accredited curriculum taught by master techs from Plemmons RV. David Cook, Ken Boles, Kevin Smith, and Rick McHone have participated in the teaching program.

"I discovered we had a critical need to retain RV technicians," Steve noted. After taking a course in Excel, Steve developed a

Bill Plemmons acquired the initial 3.8 acres of the company's facility in Rural Hall (center of photo). To increase their space for more inventory, Steve and Jeff purchased 9.2 acres (top half of picture) immediately after they bought the business from their Mom in 1994. The final three acres (lower part of photo) containing a supermarket was added a few years ago.

program he named "ShopSoft." The program provides a way of measuring the techs' work and pays bonuses based on performance. The techs receive a flat rate with an hourly guarantee, plus bonuses based on productivity and efficiency. Overtime is paid when productivity and efficiency benchmarks are met. The program pays a monthly bonus based on production and efficiency. By keeping up with each technician's work on a weekly, monthly, and annual basis, the program ended up with eight different bonuses. "We saw productivity go up by 25 percent after we used the program for a year," Steve said. "I copyrighted the software and trademarked the name in 2003 and have sold the program to quite a few dealerships."

Developing the service department's operational efficiency has paid off in other ways. As high as 70 percent of the operating expenses at the Rural Hall location can be absorbed by the service department. "Because our customers continued to bring their RVs in for service during the recession, we did not lay anyone off, cut salaries, or cut benefits," Steve said. "So now that the economy is beginning to bounce back, we do not have to hire and retrain. Our award-winning staff is still intact."

In 1997 Bill Plemmons RV World joined REDEX (Recreation Dealer Exchange). Now with over 100 members, the dealers have group buying power and pass the savings on to their customers. Dealers who join the group must meet an 8-point criterium which includes financial stability, high dealership sales volume, a superior parts and service department, and an outstanding reputation.

REDEX dealers offer a "Priority RV Network" policy to customers which guarantees in the event of a disabling problem to their motorhome, they will be served within 24 hours by a REDEX dealer in any of the network's 100 locations in 36 states. Road Care includes 24/7 technical support and roadside assistance. The network offers RV insurance designed specifically for motorhomes and RVs. For those wishing to purchase a pre-owned motorhome, the network dealer selects the best units from his inventory. Each motorhome is put through a rigorous 240-point inspection before receiving a Priority RV Certification and a 90-day

Continued on page 64



Innovation..

PASS-THROUGH BASEMENT STORAGE IN A FRONT-ENGINE MOTORHOME

Until now, front-engine coaches have had shallow-depth, fiberglass, basement storage boxes, some of which were attached to the slide-outs above them. Doors to the slide-out storage boxes flipped up instead of having the more popular side-opening access found on rear-engine diesels with raised rails.

Tiffin engineers created 12 inches of useable space above the chassis rails and below the steel frame for the coach's floor by designing rectangular, slotted, steel crossmembers which simultaneously add strength to the infrastructure and provide open channels for pass-through storage - a feature that motorhome owners crave.

hen the naked chassis enters the welding shop, a welded steel frame is fabricated directly under the chassis rails that boxes in the drive shaft, exhaust pipes, and mufflers. The vertical sides of the long, boxed frame will serve as the back side of the full-height basement storage cavity.

The entire steel floor and its supporting structure that will soon be welded to the chassis rails is assembled off line and moved by crane to Station 2 in the shop's assembly line. By the time the unit leaves Station 3, the completed infrastructure will be fabricated with steel channels for passthrough storage compartments. The vertical steel members on the outside of the frame will accommodate side-opening doors. Separated from the storage compartments, the slide-outs now have a less encumbered movement.

Formerly, the fiberglass box under a slide-out measured approximately 18 inches deep and had an average height of 21 inches (sloped top). Now the second and third doors of the 34TGA's passthrough design open to a storage area that is 23.5 inches deep, 29.5 inches high, and 75 inches wide. The pass-through compartment is 48.5 inches across the drive shaft/muffler compartment, 73 inches wide, and 11.5 inches high. A compartment of equal size on the driver's side creates a total of 83.7 cubic feet of storage space. By comparison, the double-door basement storage compartment in the 40 QTH Phaeton has 100 cubic feet of storage, which is slightly reduced in total volume when it has an optional slide-out tray.

With the exception of the cross-section for the fresh water tank, waste tanks, and utility bay, and the first storage door on the driver's side, every basement door connects to a pass-through storage compartment. The space yields another 87.6 cubic feet for a total of 171 cubic feet of basement storage.

Text and photography by Fred Thompson



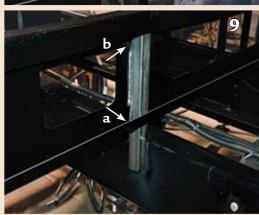


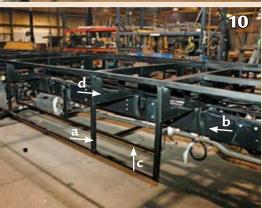










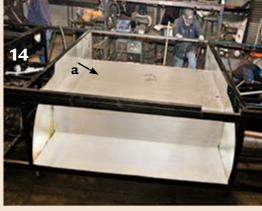




- 1 Chad Sartain fabricates a steel longitudinal box frame directly under the twin chassis rails to protect the area that houses the drive shaft, exhaust pipes, and mufflers. In this image, note the steel rails (a) running parallel to the chassis above, the cross members (b) reinforcing the lower rails of the box, and the vertical members (c) which hold the box in place.
- 2 The completed frame in this image shows the larger vertical members (a) that tie the boxed area to the chassis. Note the twin mufflers (b) and the drive shaft (c) connecting into the transaxle.
- 3 This new floor structure and its supporting members are fabricated on the table at right. Note the cross members (a) which have an even height and are the full width of the coach's base box. Also note the extra reinforcements for the entry well (b) and the points (c) where steel plates will be welded to support the driver and passenger chairs. Contrast this structure with the earlier design for floor fabrication (Picture 4). Brett Oliver prepares to move the frame to Station 2 with the overhead crane.
- 4 Two top frames are shown. The one partially lifted by the crane is for a 40 QTH Phaeton. Note this design does not yet have any "sub-frame" to it, and that each outrigger will have to be individually welded at the points shown (a). This design requires that more welding be done on the production assembly line to fabricate the sub-structures.
- 5 The new floor structure has just been lowered by the crane onto the Ford twin rail chassis. Note the vertical frame members. Their offline assembly expedites the welding time required on the assembly line.
- 6 A simple string level line (note clamps at the end of frame) is attached to both ends of the frame with clamps (a) and skid bars (b) are used to push up any slight sags before welding begins to attach the frame to the chassis.
- 7 Left-to-right lateral measurements are taken by Greg Harnage and Josh Lawler to assure the frame is perfectly centered on the chassis rails.
- 8 A final check is made of the skid bars by Josh Lawler to determine if the front-to-back level is perfect. Steel bars (a) are laid next to each cross member. Each bar is welded to the chassis rail and the cross member.
- 9 The cross member is slotted at the bottom for the steel bar (a) to pass through it. The bar fits tightly into the cross member's U-shaped (b) top edge. The bar is welded at four points. Two







welds can be seen in this picture.

- 10 As the coach's infrastructure takes shape, the framing (a) where the storage doors will be attached can be identified. This perspective shows the chassis rail (b) and the steel frame directly underneath (c) that boxes in the driveshaft, mufflers, and exhaust pipes. It also provides the back frame for the primary storage cavity. The cross members (d) provide the cavity for the pass-through storage.
- 11 Dale Holcomb welds crossbars in place to provide extra support for the fresh water tank located on the passenger's side in front of the rear wheels.
- 12 Prefabricated metal forms that perfectly fit each storage cavity are delivered to the production line for insertion into the basement area.
- 13 Tony Emerson installs the largest form first. It will have two side-opening access doors on either side of the coach.
- 14 Including the pass-through area (a), the double compartment offers 83 cubic feet of storage.
- 15 The passenger-side of this compartment is next to the entry door. It provides 11 cubic feet of storage. The pass-through area has nearly 10 cubic feet of space. The opposite side houses the HWH hydraulic system for the jacks and forward slide-outs.
- 16 The metal walls are first attached to frame members with a watertight sealant and then permanently attached with self-tapping screws.
- 17 I often have mentioned in the coach reviews over the last six years that Tiffin's welding shop puts a lot of extra steel in its chassis infrastructure. This picture makes the point.
- 18 This picture shows the perfectly finished steel work for the compartment that will house the fresh water tank. Note the heat shield over the exhaust pipe.
- 19 On the driver's side, the first compartment (a) will house the HWH electronic control systems, fuse panels, and other electrical equipment. Non-flammable boxes or containers could be stored here. The second compartment (b) houses the HWH hydraulic fluid system in the front part of the cavity, which is not available for owner storage. However, the pass-through area (c) just above it is available and provides 10 cubic feet of space. The third compartment (d) is the forward portion of the double compartment shown in Picture #14.
- ullet 20 From the passenger-side at the stepwell (a), looking toward the rear of the coach, note













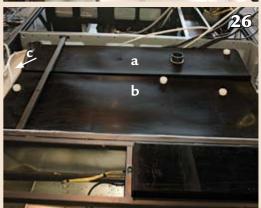
























the two HWH hydraulic power systems on either side of the double-door storage compartment (b). They will move the forward slide-out on the driver's side.

- 21 Moving to the rear of the coach, Nick Belcher and Brianna Hester install the first of three prefabricated metal compartments with pass-through storage. The total storage space for the rear compartment is 25 cubic feet.
- 22 Craig Thorn and Nick Belcher install the second compartment. On the driver's side, this compartment will house the 50-amp service and the transfer switch. The opposite side and pass-through provide 13 cubic feet of storage.
- 23 To orient your view, the rear storage compartment (a) is at the top of the picture. The third compartment in the foreground (b) is a pass-through only storage area. Under the pass-through on the passenger's side is the propane tank; on the driver's side is the Onan generator. The pass-through compartment is 40 inches wide and 96 inches across. It provides an amazing 25.5 cubic feet of storage.
- 24 Perhaps the most fascinating part of the pass-through engineering in this coach is the wet bay. The one-piece unit is built in Red Bay by Cashion Thermoplastics. As with the one-piece pre-fabbed metal compartments, this unit drops perfectly in place with a little encouragement from Chris Underwood and Marcus Smith.
- 25 The depression on the passenger's side of the wet bay will house the fresh water tank, and the right depression will house the utility cabinet.
- 26 The black tank (a) is at the top of the picture with the grey at the bottom (b). The top edge of the fresh water tank (c) appears on the left. Not shown is the utility cabinet which opens to driver's side.
- 27 Once the pre-fabbed storage compartments are sealed and attached to the cross members with screws, Craig Thorn and Brianna Hester apply adhesive and install felt covering to the sidewalls and floor of each unit.
- 28 Brianna Hester applies adhesive to install the felt covering in the adjacent unit while her coworker completes electrical installations in the pass-through compartment above the propane tank.
- 29 The finished job is pretty impressive: a double-door, pass-through storage compartment, felt-covered floors and walls, lighted areas, and side-opening doors.
- 30 Viewed from the opposite side, the success of the design is obvious.
- 31 The generator and the propane tank occupy opposite sides of this compartment. The pass-through storage space above them is now utilized.
- 32 The two rear compartments combine to offer 38 cubic feet of storage space. RIS

THE ROAD RITA N

Interviews from Florida and Arizona





Hometown: Albuquerque, New Mexico Interviewed in Mesa, Arizona

- Ray and Linda Davis own an immaculate 2005 Allegro Bus.
- They have been camping since their children were young, starting out with a pull trailer and progressing to their present rig.
- They travel three-quarters of the year.
- Ray retired as a National Service Manager for Alcon Laboratories and Linda retired as a receptionist for a doctor's office.
- They have been married 44 years.
- They have two sons and five grandchildren (1 boy & 4 girls) and 5 great-grandchildren.
- Ray does 99% of the driving, traveling no more than 200 miles a day on the side roads so they can enjoy the scenery.
- They have taken three major trips with their traveling buddies Curtis & Dianne Davidson, who they met in an RV group. They have traveled to Alaska, visited the Maritime Provinces, and from Florida traveled up the Eastern seaboard. They winter together in Mesa, Arizona.
- Ray makes beautiful wood inlaid pieces (Intarsia) & works with leather. Linda works with ceramics, pottery, and creates Swedish weaving needlework afghans. They both like to do silversmithing, lapidary and stained glass. They enjoy reading and happy hour with good friends.
- They have been to Red Bay and think everyone there listens and does great work.



Jule & Joy Raymond

Hometown: Clearwater, Florida Interviewed in Mesa, Arizona

- The Raymonds own a 2005 Allegro Bus.
- They have been motorhoming since 2000. Jule hated living in hotels with his "Road Warrior" lifestyle. His daughter suggested that they get a motorhome. It was the perfect solution.
- They travel with Sam, a 12-year-old Maltese, who according to Jule "has the final word."
- · Jule still works, running his floral customer delivery business while Joy helps out as his
- They have been together 18 years.
- They have one son and three daughters between them, three grandsons, four granddaughters and one great-grandson.
- Jule does all of the driving while Joy & Sam, as co-pilots, take in the scenery. They travel between 5 and 6 months per year, mostly to small towns across the country.
- Jule is an avid gardener when at home in Florida where his back yard is his sanctuary. Joy loves "retail therapy" (craft shows). They are both avid readers & love to watch movies (of which they have 400-500).
- If you see a 2005 Allegro Bus that has a big neon martini glass lit up in the front window, it is Jule & Joy.
- They have been to Red Bay and think that Tiffin has the best facilities and treatment in the motorhome industry.



Jim & Marty Sinquefield

Hometown: Paducah, Kentucky Interviewed in Ft. Myers, Florida

- Jim & Marty own a new 2009 Allegro Bus.
- They are "almost full-timers" & will be as soon as their home in Kentucky sells. Seven years ago they joined a group of their bicycle-riding friends on a trip to Florida for a month, staying in their travel trailer. Returning home, they promptly purchased a 5th wheel. They moved on to a 36 ft. Winnebago & traded that in for an Allegro Bus in 2007. They saw the 2009 Bus and that was all it took to trade in their 2007.
- They travel approximately 9 months a year, wintering on a site they own at Cypress Woods RV Resort in Ft. Myers, FL and spending a few months in the summer at another site they own at Tiger Run RV Resort in Breckenridge, CO.
- Jim is a retired architect. Marty was an RN and taught aerobics for 23 years.
- They have been married 42 years.
- They have two sons and one daughter.
- Jim does most of the driving, while Marty drives occasionally.
- Both Jim & Marty are outdoor people enjoying bicycling, hiking, kayaking, and reading. Marty also plays tennis. Jim is a professional archer & has the honor of being the Florida State Champion in archery for the last 2 years.
- They have been to Red Bay and say that in addition to getting quality customer service, everyone there makes you feel like family.

Editor's Note: Earl and Rita Warren retired five years ago from the Denver area and were full-timers for two years in their 2007 Phaeton. I first met Rita when she submitted an article for "From the Road." The Warrens traveled to 35 states in that brief time. "One of the best parts of exploring our beautiful country is meeting the people who make it great." In 2009 they found just the right place in the Southwest for their permanent home. Rita had done enough interviews for her "On the Road" column to take us through the Summer issue. In our Fall issue you will meet Elaine Austin.

PLEASE TAKE IMMEDIATE ACTION

OFFICIAL REFRIGERATOR RECALL



OFFICIAL REFRIGERATOR RECALL

WE ISSUED A RECALL IN 2002 TO FIX A DANGEROUS CONDITION ON SOME REFRIGERATOR MODELS: WE ARE STILL IN THE PROCESS OF LOCATING AND REPAIRING THE REFRIGERATORS.

THESE REFRIGERATORS HAVE A DEFECT THAT CAN RESULT IN FIRE. CAUSING PROPERTY DAMAGE. INJURY OR DEATH.

FIND THE MODEL NUMBER



4-DOOR

2-DOOR Models: Models:

1200LR 1200LRIM 1201LRIM



N821 N841 1082

N621

N641

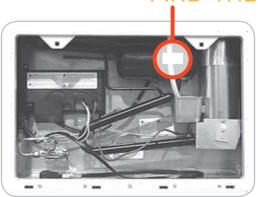


All Norcold refrigerators have an identification panel

Made in 1999 to 2000

FIND THE COOLING UNIT SERIAL NUMBER

with model number on the inside, upper right.



4-DOOR

Models: 1200LR, 1200LRIM, 1201LRIM Cooling Unit Serial Numbers: 700000 to 1536607

2-DOOR

Models: N621, N641, N821, N841, 1082 Cooling Unit Serial Numbers: 1038000 to 1099000

Remove the refrigerator's intake vent cover on the exterior of the vehicle to find the cooling unit's serial number, in plain sight on the unit's lower right, as shown here.

IF YOUR UNIT IS...

4-DOOR MODEL 1200LR, 1200LRIM, 1201LRIM, WITH A COOLING UNIT SERIAL NUMBER BETWEEN 700000 TO 1536607

2-DOOR MODEL N621, N641, N821, N841 OR 1082,

WITH A COOLING UNIT SERIAL NUMBER BETWEEN 1038000 TO 1099000

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hey didn't really plan it that way. In fact, their plan was to buy another house. But love for travel, for the open road, and especially for time with each other led full-time motorhome residency.

want to be.'

It's a 2009 Tiffin 45-ft. Zephyr, mounted on a Spartan chassis and powered by a 500-hp diesel engine. Behind it they pull a 2008 Buick Enclave SUV. Mounted on back is a hydraulic platform by Hydralift that carries their 900 lb. Harley Davidson Ultra Classic motorcycle.

This all came about after Tony, 63, sold his San Antonio area real estate business and semi-retired (though he still has an office there and still sells real estate) and Linda, 51, left a 25year career as an escrow officer in the title industry. They sold a 42-acre farm with an "old house" built in 1916 where Tony and Linda put in 36 months of hard labor to create a pristine parklike estate shaded by giant pecan trees. It became a show place but Tony, a self-confessed "maintenance freak," came to realize that keeping it up would be a full-time job.

They bought an Allegro Bus in November, 2006, and agreed

they'd travel for six months, then buy a home in San Antonio. By January, 2008, they'd put 24,000 miles on the Allegro Bus and "we loved every minute of it," Tony says, "but every place ■ Tony and Linda Forchione of "wherever we want to be" to we went, we wished for our motorcycle." They golfed together on world-class courses they found in many different states, an-The "house" they chose is one "we can drive any place we tiqued, toured attractions, and found the relaxed time together "the best thing we'd ever done for our marriage. We love being together without outside distraction."

When the time came to end journeying and buy a house, neither was ready to give up their new life style. But Linda held out for a bigger "home," particularly one with two bathrooms. The Zephyr's bath and a half solved that problem. "Having two baths makes it feel like a real home," she says.

They picked up their Zephyr in Florida in August, 2008, and drove it immediately to the Tiffin factory in Red Bay, Al. where Tiffin service people installed a desk and a computer work station, which Tony uses to stay in touch with his real estate operation and handle banking, bill-paying, etc. on-line. In 19 months, he and Linda rolled over 21,000 miles including trips to several states and visits to their four married children and seven grandchildren (and an eighth on the way).

"When we go into a state on the interstate, we stop at the

visitor center and load up on brochures describing the state's parks, trails, and attractions," Tony says.

"We rip out pages that describe things that interest us, throw them on the floor, then gather them up to guide our travels. Usually we find a good RV park to call 'home' in an area, then make day trips by car or motorcycle to visit the attractions we've

Typically Tony, who ended 20 years of military life in 1985, arises about 4 a.m. Linda sleeps until about 7. They have coffee, then go for a pedometer-measured 10,000-step walk. They're back for breakfast by about 9:30 or 10, then shower and dress for the adventure of the day, whether it's golfing, sight-seeing or motorcycling. The agenda sometimes varies when Tony conducts seminars for real estate companies along the way.

"We've never been closer," thanks to the relaxed time together, Tony says, and Linda, a "military brat" who was born in France, agrees. In the future, they hope to spend a month in each state they visit before moving on.

Full-timing is relatively inexpensive, they've found, with fuel being the biggest cost. "We just love it," Tony says, adding that he and Linda have no plans to give it up anytime soon. "It could be that we'll have another home as we get older, but we'll hope

always to travel for six months each year."

The Zephyr, Tony says, "is a real pleasure to drive. The suspension is wonderful. Linda has flower pots all over the coach and we never spill them. There's plenty of power for mountain roads." Linda also enjoys driving but says: "Anytime I take the wheel for a long stretch in the future, I'm going to seal Tony's lips with duct tape so I can drive the way I want to."

Tony says he decided on the original Allegro Bus after he'd sent an email to the Tiffin company asking about diesel power. He was "absolutely amazed" when he answered the phone at 7 a.m. the very next day to find he was speaking with Bob Tiffin, president of the company. After that, Tony tossed brochures from other manufacturers.

"We've been Tiffin folk, part of the Tiffin 'family' ever since." Since then, he and Linda have visited Red Bay several times. "Its like a second home base for us," he says. "I'm always impressed by the Tiffin service people. They take such pride in their product. One told me: 'Bob Tiffin believes he still owns this coach. It's yours to enjoy but his philosophy is that he's going to take care of it.' That kind of dedication satisfies customers and creates referrals," Tony adds. "I know it works because its exactly what I talk about in the real estate seminars I conduct." RIS



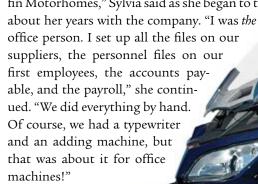
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Sylvia Massey Has at Least Three Hobbies

Text and photography by Fred Thompson

For over 37 years Tiffin Motorhomes has benefited from the tremendous amount of talent and skills found in Franklin County, Alabama, and other nearby counties in northwest Alabama and northeast Mississippi. Name the talent or skill—engineering, welding, customer service, assembly line production, motorhome design, information technology, business services, master carpentry, sales, electrical, accounting, plumbing, purchasing—and you can find the right person for the job.

Sylvia Massey was the right person for the new business office at Tiffin Motorhomes when the company was founded in late 1972. She began her career at TMH two months before the company built its first motorhome. "As I look back on it, I am glad that I got to play a small role in the start-up of Tiffin Motorhomes," Sylvia said as she began to talk



Sylvia grew up in the town

of Vina, a few miles south of Red Bay, where she graduated from high school in 1966. To improve her office skills, Sylvia enrolled at a vocational technical school in Hamilton, Alabama, and took several business courses, including courses in English and use of business machines. The courses were designed for college transfer credit which would have allowed her to complete an A.A. degree.

Her first experience in the recreational vehicle industry was with Sunliner in Tremont, Mississippi, a company that went out of business in 1972 and provided several skilled employees for the TMH start-up operation.

"Organization is the most important part of my job. I love the detail and record keeping in business services," she said. "I re- ally don't have any hobbies like crafts. You might say

that my job is my hobby."

After five years at TMH, Sylvia left the business world for a while to spend time with her family and young children, Tracy and Christopher. In recent years, Tracy

and Chris have presented her with her second hobby: four grandchildren. "I hear people say that their hobbies take a lot of time. Well, mine sure do and we really enjoy our grandchildren," she smiled. Tracy and her husband have Tyler and Anna, and Chris and his wife have Caden and Avery. "They range in age from four to

"They range in age from four to 12. One family lives in Lexington, Tennessee, and the other in

Russellville," she explained. "We get to visit back and forth pretty often and babysit when the parents need us."



"The recession from 1979 to '81 slowed the RV business down for a while and I spent five years with a Belmont company. But when I came back to Tiffin in the mid-eighties, it was like coming home," Sylvia said. "As I expected, the company's growth meant a larger office staff."

"Barbara McDowell had joined our staff while I was away and was doing the payroll. We had several high school girls who were doing internships here in the afternoons," she continued. "Phyllis Williams did the accounts payable. I initially moved into employee insurance and workmen's compensation, an area that Barbara eventually took over."

Today Sylvia does the invoicing to the banks that provide the financing for dealers' inventory, a service that the RV industry calls "floorplanning." The necessity for accuracy is critical since the banks wire payments to the manufacturer as soon as the dealer accepts delivery. She also does labeling for each coach's specifications as well as making certain that the serial numbers and vehicle identification numbers are recorded accurately.

Tiffin Motorhomes has been a family affair for the Masseys. Sylvia's husband Jerry worked at TMH for 20 years, first in the assembly plant and later in shipping. Due to a disability, Jerry took early retirement.

And what about that third hobby? It is motorcycle touring. "When I married Jerry Massey, I adopted his hobby. We have enjoyed taking motorcycle trips for many years," Sylvia explained. "You might be surprised how many people at Tiffin Motorhomes have motorcycles. It's almost an epidemic," she laughed.

"We love the outdoors. Jerry and I started out with a tent, then a pop-up camper followed by two camper trailers. Then we had a small motorhome," Sylvia said. "Several years ago Jerry and I delivered two motorhomes to California. Before driving back home, we visited the Hearst Castle and followed the beautiful coastal highway to the Monterey area and the Napa Valley vineyards."

Now as motorcycle enthusiasts they travel light and travel the backroads to see the "real America." Exploring the mountains of Tennessee and North Carolina has kept them busy over the past few years. "I like to ride and have never been afraid of it," she said. "Jerry is a very conservative and safe driver and I love taking in the view, sights, and smells of the country. You see so much more when you are riding on a motorcycle."

Jerry and Sylvia owned a Honda three-wheeler for several years, but they recently upgraded to a Can-Am Spyder. It has two

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36 Roughing It Smoothly

TRAVELING WITH YOUR PETS

My Dog/Cat Has Halitosis!

How many of us shy away from our pets because of a foul odor when they come close to our faces or try to lick us? We call this "Doggy Breath" and sometimes blame the odor on the food our pet has eaten.

The most probable cause of this odor, known as halitosis, is the buildup of tartar under the gums and on the outside of the teeth. This plaque buildup is caused by bacteria working on leftover food particles.

You need to check your pet's mouth, especially the rear molars. Tartar seems to accumulate easiest on the rear molars and premolars. Looking only at the front incisors and canine teeth can be deceptive.

When we see this buildup, our first instinct is to scrape or chip off the tartar. However, doing so is only cosmetic. Most of the damage caused by tartar occurs under the gum line, where it can produce periodontal disease.

Research has shown that certain heart conditions are precipitated by strep infections generated from the mouth. If we allow periodontal disease to develop and continue, there is greater risk of the toxins and bacteria in the mouth causing heart disease or kidney or liver disease, not to mention having the pet's teeth fall out. Losing teeth is not a sign of old age, and can be prevented with proper dental care.

The best way to prevent dental problems is to brush your pet's teeth daily or at least 3-4 times a week. This alone is not enough. Take your pet to a veterinarian at least once a year for a dental cleaning. Regular brushing and a yearly cleaning will help prevent periodontal disease and that dreaded halitosis.

Usually your pets need their first dental cleaning around 3 years of age and yearly thereafter. Don't forget about this important preventive measure for your pets as you travel across the country. Because the procedure requires your pet to be anesthe-

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tized, you will need to find a veterinarian to do the cleaning.

Those of you full-timing might check out veterinarians in a specific area that you tend to visit on a yearly basis. When visiting family members, they can advise you regarding the veterinarians they use and trust.

The procedure for cleaning teeth first involves taking a blood sample and checking your pet's blood count and liver and kidney functions so that general anesthesia can be safely administered.

Most of you at this point are probably saying, "My dog or cat is 14 years old. Isn't anesthesia dangerous?" Well, it has some risk whether your pet is 3 years old or 14 years old. However, the newer anesthesia agents are very safe. Doing lab work to pick up any signs of infection or disease will help determine the most appropriate type for your pet.

Once your pet is under general anesthetic, the dental technician or veterinarian will clean the teeth using an ultrasound machine, which removes the tartar under the gum line and along the teeth. The teeth are then polished and your pet is put on antibiotics for 7-10 days to prevent any infections.

As you can see, the worse the buildup of tartar, the longer your pet is under anesthesia, another reason why it is best to schedule regular dental care for your pet.

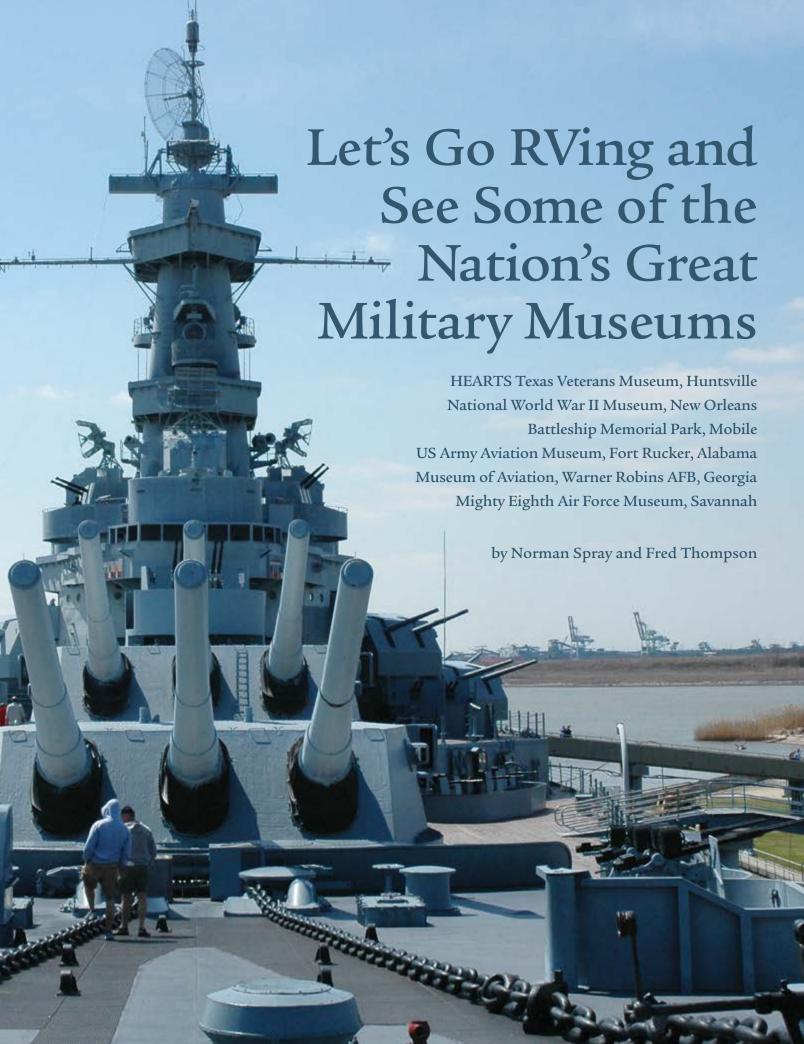
Dogs and cats seem to be resistant to cavities due to the ph of their saliva. However, they may chip or break a canine tooth or incisor while biting down on a chew toy or hard object. There are veterinary dental specialists who are capable of doing root canals and putting crowns on an animal's tooth, so their teeth do not have to be pulled.

Cats are susceptible to cervical neck lesions. This is a condition where the base of the tooth erodes away and over time the pulp cavity is destroyed, leaving only the shell of the tooth. Symptoms that may appear in the cat are jaw sensitivity, eating problems, not chewing food well, and losing weight. Treatment consists of extraction of the tooth.

I have seen some dogs and cats that have never had their teeth cleaned. When finally presented for a dental cleaning, all or most of the teeth have had to be extracted due to severe periodontal disease and bone erosion. Some of the bone erosion is so severe that the jaw fractures easily. These animals are in a lot of pain. When their teeth are removed and the cat or dog is placed on antibiotics, the owners are surprised at how alert and active their pet becomes in a few weeks. Once the gums heal, they can even eat hard food.

Even if your pet will not let you brush their teeth or you are not inclined to do so, have their teeth cleaned once a year to prevent a lot of diseases and discomfort. Happy Travels!

Dr. Pilarczyk practiced veterinary medicine for 38 years in Tampa, Florida. He and his wife, Kay, travel most of the year in their 2007 Phaeton.



AM SURE IT COMES AS NO SURPRISE to any of our readers that both active and retired military families make up a significant percentage of the U.S. population inclusion in the story. who love to go RVing. They often display decals, license plates, bumper stickers, and

of which they are justly proud. If you are not a veteran yourself, you very likely have family members or close friends who served in one of the branches of the U.S. armed forces. We all admire a sharply pressed uniform, shined shoes that reflect the sun's rays, erect posture and confident stride, and spoken politeness in which every sentence nearly always ends with "sir" or "ma'am."

flags to identify their military affiliations

A sadness comes over us when we learn on the evening news of the ultimate sacrifices of young men and women in Afghanistan and Iraq, and the permanent injuries that thousands live with who dared to fight the war on terrorism. If you have visited the war memorials in the nation's capital, you know that over 440,000 U.S. citizens died for the sake of freedom in World War II, approximately 120,000 lost their lives in World War I, nearly 40,000 perished in Korea, and 60,000 in Vietnam. "Freedom Is Not Free" is starkly engraved in black granite at the Korean War Memorial in Washington.

Not counting the museums connected to the history of the U.S. Civil War, there are at least a hundred military museums in the U.S. which have significant collections. I chose six museums to feature in this story because they each offer a unique perspective and are within one day's drive of each other, in case you would like to plan a tour based on this feature. Starting from the west, they are the Texas Veterans Museum, Huntsville, Texas; the National World War II Museum, New Orleans; Battleship Memorial Park, Mobile; United States Army Aviation Museum, Ft. Rucker, Alabama; Museum of Aviation at Robins Air Force Base, Warner Robins, Georiga; and the Mighty Eighth Air Force

Museum, Pooler (Savannah), Georgia. I wanted to include the National Museum of the Marine Corps, Triangle, Virginia, but time and distance did not permit its

The Texas Veterans Museum in Huntsville, Texas, is unique in this set of museums we set out to visit. Veterans gather here daily to teach visitors the reasons for, meaning of, and pain created by wars. They take pride in their service to their country, but with humility. One veteran who still participates regularly is 94 years old.

The National World War II Museum was funded by Congress and designated as the official U.S. museum of World War II Its design and execution is a great example of what a teaching museum should be.

At Battleship Memorial Park you can roam at will through fascinating catacomblike corridors of two great World War II fighting ships: the battleship USS Alabama and the submarine USS Drum.

At Ft. Rucker in the southwest corner of Alabama near the town of Ozark, the United States Army Aviation Museum focuses on the history of the helicopter and its almost innumerable roles in the U.S. Army. A replica of a 1911 Wright Military Flyer and several World War I aircraft including the Sopwith Camel will be of interest.

The Museum of Aviation at Robins Air Force Base in mid-Georgia offers one of the largest collections of military aircraft in existence. Construction of Robins AFB began September 1, 1940, and, spurred by the bombing of Pearl Harbor, was completed in mid-1942. It is one of three key logistics support centers for the U.S. Air Force. The Museum of Aviation opened in 1981.

The fabled Mighty Eighth Air Force played a major role in bringing Nazi Germany to its knees. Activated in less than two months after the bombing of Pearl Harbor, the Eighth was building bases in southern England by mid-February 1942. Three months later, its pilots began executing daylight, precision and strategic bombing missions against Nazi-occupied Europe.

Veterans Make Military History Come Alive in Huntsville, Texas

It is written in Scripture: there WILL be wars and rumors of war. History confirms that is true of the past. But what of the future? Can our young people, some of whom question the validity of today's war on terrorism, be counted on to defend our way of life now and in future conflicts, if they happen?

Veterans who volunteer to explain the outstanding exhibits at the H.E.A.R.T.S. Texas Veterans Museum (936-295-5959, www.heartsmuseum.com) in Huntsville, Texas, believe the answer, the key to unswerving patriotism, lies in educating voung and old alike to understandreally understand—the price paid by this nation's fighting men and women to preserve our freedoms.

The easily reached 12,000 sq. ft. museum displays artifacts, memorabilia, and military equipment in a new building just off Interstate 45. An adjacent conference facility that accommodates 900 people also serves as a FEMA-financed emergency shelter. Honoring all military groups in U.S. wars and conflicts, the H.E.A.R.T.S. Museum ("Helping Every American Remember Through Serving") is a hands-on living history facility where you can handle a machine gun or try on a flight jacket. That in itself is unusual.

What makes it unique is how veterans as old as Lt. Col. W. B. Etheridge, who will turn 95 in June, host "educational stations" and displays. These real live narrators have been to war and tell it like it was, bringing history alive. Often students like the 1700 who visited last year leave thinking an "old man" they'd seen around town has suddenly become a hero because of experiences the vet shares.

There are 12 education "stations" complete with artifacts, equipment, pictorial displays, and historical placards. Veterans explain how it was to take part in battles and activities depicted. Stations include fox holes and pup tents, the Marine Corps, Texas military heritage, military medical care, the U.S. Army, the Home Front,













Left to right from top: John Fuchs (left), a veteran who endured the hardships of Nazi prisoner of war camps, and Dan Leonard examine model of old biplane in the "hands-on" Texas Veterans Museum. Artifacts and displayed items here are to be enjoyed. If you so desire, you can pick up a rifle or try on a real World War II flight jacket. In World War II Leonard served in the Army of Occupation in France. Later, as an Air Force navigator, he flew over 100 B-52 missions, including 15 bombing runs over North Vietnam. • Lt. Col. MB Etheredge, 94, was wounded in battle at Anzio early in World War II and earned the silver star for valor. He was the only surviving officer of K Company. Enlisted men fared no better. Col. Etheredge led K Company consisting of 180 men to take an objective planned for 300 men and tanks. When they took the objective, only 14 of the 180 remained alive. After the war, Col. Etheredge served in the Texas legislature, founded three banks, and taught finance at Sam Houston State University. As an officer in the U.S. Army Reserve, he reorganized the 36th Division of Texas bound for Korea. He was assisted in this work by Audie Murphy, the most decorated soldier in World War II. Here Col. Etheredge uses his cane to point to Murphy in a photo on the wall at the Texas Veterans Museum. Col. Etheredge and Murphy became fast friends before Murphy's untimely death in an airplane crash. "He was a fine boy," Col. Etheredge said of Murphy recently. "Very intelligent but uneducated. And there is a difference." • Ms. Reva Bishop stands at the entrance of the H.E.A.R.T.S. library, named for her late husband, Leonard Bishop, a veteran of both World War II and the Korean conflict. That's a picture of her husband on the wall. She points to a pair of spoons from his mess kit that may have saved his life. A bullet meant to kill Bishop hit the spoon and was deflected Incredibly, this happened not once but twice in different engagements, once with one of the spoons and later with the other. Leonard Bishop was a charter member of the museum's board and Ms. Bishop continues to serve as secretary. • Tom and Charlotte Oleinik visit the display window of Bluebonnet Antiques store in downtown Huntsville where Charlotte organized a veterans display in 1993. It impressed local veterans who began coming into the store, where Charlotte rented space, to visit among themselves and contribute their own military memorabilia, artifacts, and keepsakes. From this beginning, the H.E.A.R.T.S.

Air Force and Army Air Corps, Navy and Seabees, Prisoners of War and Missing in Action, time line of wars, women in the military, and a video of veterans telling their stories.

Over 150 volunteers, most of them veterans, serve this museum, which had its beginnings as a window display cofounder Charlotte Oleinik arranged in a downtown Huntsville antique store. Vets began coming in to visit with each other and often left their own mementos for Charlotte to display. Many found this interaction and later work with students helped them heal painful mental scars they'd "buried" for years.

"Many vets tear up when they come here for the first time," museum director Randy Wells says. "Seeing all these displays and trading stories with others seems to unlock experiences, some of them horrible, that they've been unable to talk about for years."

Retired executive John Fuchs of Huntsville is one. He was the flight engineer on a B-17 shot down on his first bombing mission over Germany. Surviving a crash landing, he and the plane's navigator opted to run for adjacent woods when they saw German civilians approaching

Texas Veterans Museum moved to vacant retail space in a mall. It now occupies a new 12,000 sq. ft. building designed as a teaching museum for veterans to explain to young people why countries go to war and the sacrifice it takes for the United States to remain a free nation. Tom, a former Texas State Trooper, serves as manager of the 14,000 sq. ft. conference center adjacent to the museum. The center serves as a FEMA emergency shelter if needed for coastal residents evacuated from the paths of hurricanes. • William "Bill" Butler says working and visiting with other vets at the Texas Veterans Museum has been therapeutic for him and other veterans. It has helped him "open up" and deal with hurts he endured in two years of service in Vietnam and later at home when he returned. "It's made a better person of me." • Earnest "Ernie" Barron explains to visitors at the H.E.A.R.T.S. museum how military medical corpsmen care for servicemen wounded in battle. He knows whereof he speaks. He was senior intensive care corpsman on a 550-bed Navy hospital ship that treated 25,000 off Vietnam during his four years of service in 1966 to 1970. Cries of the wounded still haunt Ernie, a source of "nightmares that won't go away."

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National World War II Museum: A National Treasure

from a nearby field. The pilot, co-pilot, bombardier, and two gunners elected to take their chances with the civilians. Fuchs and the navigator were captured by "three old men with shotguns" nine days later and spent the rest of the war in prisoner of war camps. After the POWs were liberated, they learned the other crew members had been executed by the same civilians from whom Fuchs and the navigator had fled.

"Until I got involved in the museum and met other vets here, I never talked about it," Fuchs says. "Here, I learned my experience was not so special. I fit in. We all have stories to tell. Now we all feel we're part of a family." John's wife confided to Charlotte Oleinik, "You've opened John up like I've not seen in all our years together."

Earnest "Ernie" Barron's duty as senior medical corpsman in intensive care on a 550-bed hospital ship from 1966 to 1970 left him with nightmares that won't go away.

"You never forget the mournful screaming of the wounded, but volunteering here has helped," he says. During his tour, the ship treated 25,000 wounded and sent 90 per cent back to active duty.

William (Bill) Butler couldn't begin to forget or tell how he and other infantrymen had to shoot a seven-year-old girl whom the Viet Cong sent into their midst with grenades strapped on her little body. One man in the company simply "went off the deep end" mentally after that, Butler says, adding, "If you were in Vietnam, you were always one step away from disaster." Making it worse, he says, veterans of the Vietnam conflict were discharged without the debriefing soldiers get today to help them return to civilian life. They often felt mistreated and "sometimes abused." Working with other vets at the museum has helped him and many others, he says. "We're like a brotherhood here. I'm a better person because of this relationship."

Camping and Admissions

There is not an RV park with full hook-ups in the immediate vicinity of the Texas Veterans Museum in Huntsville. But traffic usually is light and it's an easy drive from the Sam Houston State Park (936-295-5644) south of the city.

We elected to stay at the very nice Heartland RV Park in Riverside (866-439-8350, heartlandrvpark@hughes.net) some 12 miles north of the H.E.A.R.T.S. Museum.

There's plenty of room for a motorhome with tow vehicle on the museum's parking lot if you want to dry camp or plan only a short visit.

On balance, the complications are small and the rewards great if you visit. There are other attractions in Huntsville, including the Sam Houston Museum and the Texas Prisons Museum. The local Chamber of Commerce will happily provide details.

Admission is free.

So you think you know World War II history? Visit the magnificent, six-acre, \$300 million National World War II Museum at 945 Magazine Street in downtown New Orleans, La. (504-528-1944, info@nationalww2museum.org) and you may think again.

Cutting edge technology forcefully, thoroughly, and quickly tells the epic story of "the war that changed the world." Even veterans who lived through that war are astounded at the volume, depth, and accuracy of the research that comes to life in this national treasure founded by the late Dr. Stephen Ambrose, acclaimed historian, author, and educator.

In the Solomon Victory Theater, you will see what may be the best overview of World War II ever produced. "Beyond All Boundaries" is a new 70-minute movie produced and narrated by Tom Hanks. As the story unfolds on a 120-foot wide screen, you feel as if you are in the war. Your seat shakes as Tiger tanks rumble past in the Kassarine Pass. When a B-17 bomber with a real nose cone seems to pass over you, your seat vibrates again and the roar-delivered through 27 speakers-is deafening. When troops fight the Battle of the Bulge in the dead of winter, you and others in the audience get snowed on. A 25-foot guard house rises in a prisoner of war camp. At another point, an anti-aircraft gun rotates and appears to fire over the audience. Cross the street and enter the museum building itself after the movie. On the ground floor, you'll see military vehicles, including an M3A1 light tank, a Higgins LCVP landing craft like the 20,000 that carried soldiers and marines to the beaches in every invasion of the war. Overhead, dangling from a three-storieshigh ceiling, are real aircraft, including a Super Marine Spitfire MKVB fighter, a German Messerschmitt BF-109E, a C-47 troop carrier, and a Douglas SBD-3D Navy dive bomber.

Displays, interactive devices, movies, and personal videos in the D-Day Museum in this building cover not only the June 6, 1945 invasion of Normandy but also Anjio, North Africa, Italy, and most of the invasions and battles fought in the Pacific islands. Start by seeing the movie, "D-Day Remembered" in the Malcolm S. Forbes Theater. Later in the same theater see "Price for Peace" which focuses on the Pacific campaign.

There's a section, often a separate room, treating nearly every major invasion and battle in detail. Tools of war, uniforms, guns, ammo, and equipment—ours and the enemy's—are displayed. In most sections, there's a booth where touching a button gets you a video-taped statement by people who lived through that particular situation. Some subjects covered: GI's in Britain, The Decision to Go, Night Drop into Normandy, The Armada Strikes, Defending Fortress Europe, D-Day, the Landing, Omaha, Utah, Juno, Sword, Gold, War Threats in Asia, Japanese Expansion 1931 to 1941, Japan Surrenders, Shatterer of Worlds—the Atomic Bomb, Downfall-the Largest Amphibian Invasion that Never Happened, Launching of the Air War Against Japan, Iwo Jima,

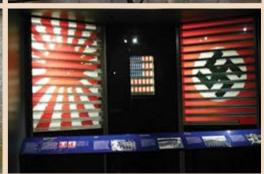












where the new movie, "Beyond All Boundaries" is shown, is the building in the foreground. The theater building also houses the Stage Door Canteen and the American Sector restaurant. • Designed with a steel superstructure, the glass-fronted Louisiana Memorial Pavilion is home to many of the WWII aircraft that made a big difference in winning the war. • Hanging from the ceiling in the Louisiana Memorial Pavilion of the National WWII Museum, this C-47 transport airplane and thousands like it were the "workhorses" that transported troops, equipment, ammo, food, and battlefield supplies. In combat, it delivered paratroopers and pulled troopcarrying gliders. • As the Navy's most advanced airplane at the beginning of World War II, the Douglas Dauntless dive bomber was made to withstand tremendous G-force as pilots dived near-vertically from altitudes up to 20,000 feet to release bombs at 1,500 feet and pull out at wave-top level. Operating from the carriers Yorktown and Enterprise, these planes sank four Japanese aircraft carriers during the Battle of Midway. • The Higgins LCVP landing craft and military trucks are displayed on the entrance floor of the National World War II Museum

Left to right from top: The Solomon Victory Theater in New Orleans. Andrew Jackson Higgins, a local New Orleans industrialist and shipbuilder, in the 1930s designed the Eureka boat, a shallow-draft craft used by oil drillers and trappers for operations along the Gulf coast and the lower Mississippi River. With a propeller recessed into a semi-tunnel in the hull, the boat could operate in shallow waters. Higgins also designed a spoonbill shaped bow, allowing the craft to be run up onto riverbanks and then back off with ease. The boats could attain high speed and turn around in their own length. The Marine Corps wanted a craft to quickly get men on a beach from troop carriers. They examined Higgins' boat and showed him pictures of a ramp-bowed boat the Japanese used in the late 1930s. Higgins' engineers built a prototype in one month which was tested in fleet landing exercises in February 1939. After the front drop-down ramp was perfected, Higgins built over 20,000 of the craft for use in World War II. In recognizing Higgins' achievement, General Dwight Eisenhower said, "Andrew Higgins . . . is the man who won the war for us. . . . If Higgins had not designed and built those LCVPs, we never could have landed over an open beach. The whole strategy of the war would have been different.'

War with No Mercy, Saipan, Biak, Enewetak, Kwajalein, Guadalcanal, Okinawa, and others. In some exhibit areas, there are short movies, for instance the nineminute "Philippine Sea and Leyte Gulf Theater," and the six-minute overview, "The Pacific War, 1941-1945."

Casualty figures and photography that often is too graphic invade the mind with the horrors of war, this one having taken the lives of 65 million people worldwide. Together, it all seems to illustrate the wisdom of the words of President Franklin Roosevelt displayed on the outside wall of the theater: "In truth, freedom can not be bestowed, it must be earned."

One, even those who lived it, can hardly walk away without a new appreciation for the price young men paid in World War II to maintain freedom as we know it. Attend a Wednesday performance of the Victory Belles, a "U.S.O." trio that reminds one of the Andrews Sisters, for a nostalgic hour of old songs in the Stage Door Canteen. Their program ends with each service's anthem ringing in your ears and you're sure to walk out with renewed pride, patriotic dedication, and respect for the sacrifices being made by our military today to protect us all from forces dedicated to destroying us.

Camping and Admissions

CAMPGROUND: Pontchartrain Landing PHONE: 877-276-7850

WEBSITE: www.pontchartrainlanding.com

	MUSEUM ONLY	MUSEUM & THEATER	THEATER ONLY
Adult	\$16	\$20	\$9
Sr. (65+)	\$12	\$15	\$7

STAGE DOOR CANTEEN: \$60 (dinner & show)

Even Hitler knew the Higgins story and recognized his heroic war efforts in ship production, bitterly calling him the "New Noah." • As the war clouds gathered around the world in 1939, the armies of Germany and Japan far outnumbered the armies of the United States and the Allies. The War Clouds Exhibit demonstrates the disparity in war readiness of the opposing armies.

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BATTLESHIP MEMORIAL PARK: The USS Alabama and the USS Drum

AVAL HISTORIANS USUALLY NAME the USS Texas as the first battleship commissioned by the United States on April 15, 1895. A coal-burning ship, it was 309 feet in length with a maximum beam of 64 feet. It displaced 6,315 tons and required the service of 30 officers and 362 enlisted men. With 12 inches of armor plate, two 12-inch guns, six 6-inch guns, and four torpedo tubes, the Texas was considered one of the most powerful ships in the world.

As one might expect, battleships got larger. Twelve years later the USS Kansas (BB 21) had twice the tonnage of the *Texas* and required a crew of 42 officers and 838 enlisted men. In 1912 the USS Kansas was launched at 26,000 tons and an overall length of 562 feet. The ship carried 58 officers and over 1,000 enlisted men. She was armed with a dozen 12-inch guns and twenty-one 5-inch guns, plus two 21-inch torpedo tubes.

Due to disarmament agreements after World War I, no battleships were commissioned from 1923 to 1941. When Germany began hostilities in Europe in September 1939, the Navy went into a building program. At Pearl Harbor eight of the Navy's battleships were sunk or severely damaged. Six were repaired and returned to service.

The USS Alabama (BB-60) was one of 140 men to operate it when firing. the last eight battleships to be built and launched by the U.S. Navy, and the last of four battleships in the South Dakota Class (length 680 ft., beam 108 ft. 2 in.). The subsequent Iowa Class battleships (BB-61 to BB-64) were approximately 200 feet longer, but still maintained the 108-ft. beam in order to transit the Panama Canal.

The South Dakota Class battleships 44,500 tons. (the South Dakota, Indiana, Massachusetts, and Alabama) were decommissioned within two years after WWII ended. With much larger weapons platforms, the Iowa Class battleships (the Iowa, New Jersey, Missouri, and Wisconsin) were brought back for shore bombardments in both the Korean Conflict and the Vietnam

War. They were modernized from 1982 to 1984 to launch Harpoon and Tomahawk missiles. The Iowa and the New Jersey were decommissioned in early 1991, but the Missouri and the Wisconsin saw action when they pounded targets in Kuwait during Desert Storm. The last battleship on active duty was the USS Missouri which was decommissioned on March 31, 1992.

The USS Alabama fought in both the Atlantic and Pacific war theaters. Its keel was laid on February 1, 1940, and she was launched just two years later on February 16, 1942. After shakedown trials in the Atlantic, the *Alabama* was commissioned on August 16, 1942.

With a wartime crew of 127 officers and 2,205 enlisted men, she became known as the "Mighty A." In 37 months of service, no U.S. sailors aboard the Alabama were lost due to enemy fire. Five men were killed in a tragic explosion in one of the gun turrets. The Alabama had fire power very similar to the Iowa Class battleships. Her nine 16-inch guns mounted in three turrets could hurl a 2,750 pound shell over 20 miles. It took 540 pounds of black gunpowder to launch each shell, but the big guns could fire twice a minute. The infrastructure for each gun turret goes down five levels into the ship and required

In addition to the big 16-inch guns, the Alabama has twenty 5-inch guns, fortyeight 40mm guns in 12 mounts, and fiftytwo 20mm guns. The three big turrets are protected with 18-inches of steel armor and the ship's side armor is 12.2 inches thick. The ship cost \$80 million to build in 1942. Its loaded displacement was

In the Pacific war, the Alabama earned nine Battle Stars and shot down 22 enemy aircraft. Wartime armies are young. The average age of the 2,500 crew members during WWII was 21 years.

Operating a ship of this size involved some big orders. Coffee in the morning required four 80 gallon pots to make 320







Left to right from top: The USS Alabama was decommissioned on January 9, 1947, after only 37 months in active service. In late summer 1945 many ships were deactivated in Bremerton, Washington, pending decisions for future use. The Alabama was decommissioned on January 9, 1947. Seventeen years and 9 months later she arrived in Mobile after a 5,600-mile tow to Mobile which transited the Panama Canal. The ship was opened to the public on January 5, 1965. • Built into three turrets which could rotate 270 degrees, each of the ship's nine 16-inch guns were capable of firing a 2,750-lb. shell every 30 seconds. Each turret extended five levels down into the ship's infrastructure and required 140 men for operation when firing. The guns had a range of 20 miles. It took 540 pounds of black gunpowder to launch each shell. During its service in the Pacific Theater, the Alabama took part in six bombardments of Japanese strongholds. • Officers lived quite well on the USS Alabama. The captain had a private dining room for meetings and entertaining

dignitaries as well as a spacious bedroom-office







and shower facilities. Of the 127 officers on board, the higher ranks had a private bedroom, but lower ranking officers had roommates. • The USS Drum was launched and commissioned in 1941. Based in Pearl Harbor, the Drum made 13 war patrols, some lasting for three months. With a crew of seven officers and 65 enlisted men, the sub won 12 campaign starts and sank 15 Japanese ships, earning it eighth place for the most enemy tonnage sent to the bottom. Of the 273 subs in the "silent service" during WWII, 52 were lost which cost the lives of 3,505 submariners. • Of the fifteen A-12s built for high altitude reconnaissance photography and CIA espionage, six were lost in crashes. The remaining nine are in museums across the nation. The A-12 is the fastest plane ever flown -3.3 mach. Its first operational mission was flown on May 8, 1968. Its last mission was June 5, 1969. • By contrast, the Boeing B-52 first flew on April 15, 1952, and its successors are still flying-an operational life of 58 years. This B-52D was flown into the Mobile airport and transported by barge to Battleship Memorial Park.

gallons. To serve beef stew, the cooks used 1,000 pounds of beef, 37 pounds of fat, 100 gallons of water, and 2,100 pounds of vegetables and other ingredients. And that was just one meal. The Alabama had an ice cream shop and soda fountain that could dish it out. When a refueling tender pulled alongside, its captain would request as many 5-gallon tubs of ice cream as the Alabama's supply officer would give him.

There are three self-guided tours of the ship, each marked with red, green, and yellow blazes. Two officers shared private compartments with bunks, one desk, and a lavatory. Enlisted men slept on air mathigh. The captain had a separate dining room due to the necessity to entertain occasional guests. Every skill required in a town of 2,500 could be found on board the ship: cobbler, tailor, doctors, infirmary, machine shop. It is all there for visitors to explore and learn how a WWII fighting machine functioned on a daily basis.

Commissioned on November 1, 1941, the USS Drum, a state-of-the-art WWII submarine, arrived at Pearl Harbor on April 1, 1942. With a crew of seven officers and first war patrol just two weeks later. Cruising off Japan, she sank one seaplane tender and three Japanese cargo ships before returning to base for refitting on June 12.

The sub received 12 Battle Stars for her service in WWII. The *Drum* is credited with sinking 15 enemy ships. Submarine service was the most dangerous assignment in the U.S. Navy. During WWII, the U.S. had 273 subs in active service. Collectively, they made 1,682 war patrols, some lasting two months or longer. In four years, 52 subs were lost, which is 19 percent of those that went out on patrols. One out of seven submariners died during WWII, for a total of 3,505 men lost in the "Silent Service." At least four subs were presumed lost when they never returned to base. In October 2008 the USS Grunion was found off the Aleutian Islands in

the North Pacific through the persistent efforts of the captain's two sons who in 2002 found information on the internet that helped pinpoint her location. Although they made up only 1.6 percent of personnel in the Navy, they accounted for more than half of Japan's sea losses.

The WWII submarine was a small vessel compared to most of the surface ships. The Drum measures 311 ft. 8 in. in length and 27 ft. 4 in. wide. Its warheads consisted of ten 21-inch torpedo tubes (six forward and four aft) and 14 reloads, for a total of 24 torpedoes available for each patrol.

Battleship Memorial Park also displays tresses on stacked frames three or four 24 planes and helicopters from the WWII through the Cold War eras. Two of military aviation's most interesting planes are included: The Lockheed A-12 Blackbird and a Boeing B-52D Stratofortress used in the Vietnam War. The A-12 is the fastest plane ever flown (Mach 3.3), but only marginally faster than its successor, the SR-71, which has nearly the same shape and dimensions as the A-12. We will see a SR-71 at the Museum of Aviation, Robins AFB, later on our tour.

The A-12 has a length of 102 ft. 3 in. 65 enlisted men, the *Drum* left Pearl for its and a wingspan of 55 ft. 7 in. Operating at a ceiling of 75,000 feet, it was designed to do reconnaissance photography over enemy territory. Its first operational mission was flown over North Vietnam on May 31, 1967, and its last operational mission was flown over North Korea on May 8, 1968. On June 5, 1968, on a test flight flown by Jack W. Weeks, both pilot and plane were lost to unknown causes and no debris or remains were ever recovered. Of the fifteen A-12s built, six were lost in test flights and nine are now on display at museums throughout the U.S.

> The B-52 first flew on April 15, 1952. It will be marking its 58th anniversary as you read this issue of Roughing It Smoothly. With a wingspan of 185 feet and a length of 160 feet, it was America's first longrange, swept-wing heavy bomber. No

> > Continued on page 64

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U.S. ARMY AVIATION MUSEUM: The History of Helicopters in Military Service

OCATED AT FORT RUCKER IN southeast Alabama near Ozark on US 231, the U.S. Army Aviation Museum is dedicated to the development, history, and service of the helicopter in the U.S. statuary of helicopter pilots presents an amazing statement made over 500 years ago by Leonardo da Vinci (1502):

"... a bird is an instrument working according to mathematical law, which ... is within the capacity of man to reproduce...."

Although the U.S. Army Aviation Museum is dedicated to the use of the helicopter in warfare, a separate wing contains historical aircraft from the first 20 years of the last century, reflecting the Army's involvement in military aviation from the beginning days of the Wright brothers and the early combat aircraft of World War I.

The Sopwith Camel is a WWI singleseat British biplane first used by the Allies in 1917. Its three biggest assets were superior maneuverability, a powerful rotary engine, and twin synchronized machine guns. The Camel is credited with 1,294 kills, more than any other Allied fighter for the pilot and two passengers, the R-5D plane in WWI.

The S.E.5A, also a British biplane, was considered by many pilots to be the best all-around fighter used by the Allies during WWI, although the Camel had more kills. Over 5,000 were produced between 1917 and 1920. The plane in the museum is a modern restoration of a U.S.- The first tests of the H-37 were conductproduced SE-5A.

Flyer was the first "flying machine" contracted for by the U.S. Army and included design considerations that were dictated to the builders based on the Army's perceived needs at that time. The one in the tinued to be the key feature that the milmuseum is a replica.

for this museum, the history of the helicopter begins with Igor Sikorsky. A Russian-American who developed and flew the world's first multi-engine, fixed-

wing aircraft in 1913, Sikorsky eventually emigrated to the U.S. and founded the Sikorsky Aircraft Corporation. He developed the first of Pan American's famous airboats that brought passenger service Army. A foyer dominated with bronze to the Atlantic and Pacific. But he is most remembered for his work in the design and development of the helicopter. In 1939 he designed and flew the Vought-Sikorsky VS-300, which pioneered the rotor configuration still used in most helicopters today. The VS-300 evolved into the Sikorsky R-4, which became the world's first mass-produced helicopter in 1942.

In 1941 Vought-Sikorsky contracted to develop a practical, functioning helicopter for the U.S. military. The R-4B on display has a three-blade main rotor powered by a Warner R-550-1 radial 7-cylinder fan-cooled engine. The R-4B was the first production model of a fully functioning flight-controlled helicopter. The 2-lever— 2-pedals control system became the standard for rotor-wing aircraft. The R-4B, R-5, H-5, and R-6 designs were used only in the Pacific Theater during WWII. The H-5 was used for air rescue. With a larger platform made the first documented air-sea rescue during the war in WWII.

The speed at which the design of the helicopter progressed is seen in the H-37 "Mojave." The U.S. Marine Corps asked for an assault transport helicopter capable of lifting 23 fully equipped troops. ed in the mid-1950s at Fort Rucker. The First built in 1911, the Wright Military Mojave is a twin-engine, single rotor helicopter with a retractable undercarriage that made possible the delivery of small vehicles and ordinance as well as troops.

Versatility, reliability, and speed conitary sought in its contracts with manu-Getting back to the primary reason facturers. The UH-1D "Iroquois" became a workhorse in the Vietnam War. Capable of handling transport for up to 14 combatequipped troops, it was first delivered in 1960 and stayed in production through









pilots flying the British Sopwith Camel shot down 1,294 German aircraft, a record unbroken throughout the war. A difficult plane to fly, the Camel was credited with winning the air war. The plane got its name from a slight hump in the fuselage forward of the cockpit. Several British companies built 5,490 of the aircraft, of which 413 were lost in combat. It also was used for strafing enemy lines, light bombing, and destroying German airships. RAF military ace William Barker claimed 46 kills in a Sopwith Camel. His German counterpart, Manfred von Richthofen claimed 80 kills. Ironically, the Red Baron was shot down over France on April 21, 1918, by a Sopwith Camel flown by Canadian Capt. Arthur "Roy" Brown. • The Wright Military Flyer on display (a replica) was the first "flying machine" contracted for by the U.S. government. Part of the contract required the plane to meet certain tests which included flying 10 miles with a passenger. An earlier prototype flown by Orville Wright crashed and killed the passenger. The 1911 version sold for \$25,000, plus it earned a \$5,000 bonus for exceeding the prescribed 40-mph minimum speed in







the contract specs. In less than five years, military aircraft had been developed that far exceeded 100 mph and operated at ceilings of more than 15,000 feet. • Developed by Igor Sikorsy, the R-4 became the world's first production helicopter. The prototype made its initial flight on January 13, 1942, and as a result of its successful flight tests, the USAAF ordered 30 for testing and training. They showed such promise after testing by the U.S. Navy and Coast Guard and the British Royal Navy, that the USAAF ordered 100 R-4Bs. The R-4B was first used in combat in May 1944. • The Bell "Iroquois" was the airframe most often converted for use as a "gunship," which was not an attack-fighter helicopter. It flew cover and provided armed escort for the troop-carrying helicopters. Using belt-fed ammunition, it usually mounted a quad M-60 machine gun or a twin minigun system. It also supported side-mounted braces of rocket pods, carrying as many as 48 rockets, 24 on each side. Its evolution saw a variety of machine gun, wired-guided missiles, cluster bombs, and 81mm mortar rounds. No one could accuse army munitions designers of having a lack of versatility. • The famed Black Hawk UH-

was the primary airlift for troop insertions and extractions and helped transform the face of mobility in modern warfare.

The CH-47A "Chinook" was designed by Boeing Vertol and selected by the Army in 1959 to become its medium-lift helicopter. The tandem rotor aircraft can transport a 33-man platoon with equipment and deploy them through the rear cargo ramp. It has also served as a light medical transport. Its longevity in service puts it in a class with the B-52D Stratofortress long-range bomber.

tests on September 7, 1965, during a U.S. Army Attack Helicopter evaluation for fire suppression during air assault operations. With a narrow fuselage design that facilitated maximum speed and maneuverability, the Army began taking delivery of 110 aircraft in June 1967. Operational deployment in Vietnam was so successful that an additional 868 were ordered in April 1968. The turret on the underside of the fuselage housed a 6-barrel 7.62mm gun which loaded 4,000 rounds fired in Gatling-gun style. It was supported by a 40mm grenade launcher with 300 rounds.

60 helicopter resulted from a competition in 1976 between Sikorsky and Boeing-Vertol to develop a Utility Tactical Transport Aircraft System to replace the Iroquois. Sikorsky was selected and in 1978 delivered the first UH-60A Black Hawks. It can carry 11 troops with equipment. The Black Hawk can perform a wide variety of missions including tactical support of troops, electronic warfare, and medical evacuation. The UH-60 in June 1979 was assigned to the U.S. Army's 101st Airborne Division. It was first used in combat during the invasion of Grenada in 1983 and in the invasion of Panama in 1989. During the Gulf War in 1991, over 300 Black Hawks participated in the largest air assault mission in U.S. Army history. In 1993 Black Hawks were instrumental in the assault on Mogadishu in Somalia. Today Black Hawks continue to serve in Iraq and Afghanistan. • The Sikorsky CH-54 Sky Crane first flew in May 1962. The U.S. Army Aviation command eventually purchased 105 of the gangling helicopters which were very successful in retrieving downed aircraft. The Sky Crane can winch vehicles and cargo up and down from a hovering position, making it unnecessary for the helicopter to land.

1968. With a cruising speed of 125 mph, it The Cobra on display was the second aircraft of this design delivered to the Army.

Built by Sikorsky, the CH-54 Tarhe Sky Crane Helicopter was very successful in Vietnam where it was credited with the recovery of hundreds of downed aircraft as well as having the ability to move artillery and supplies to firebases that were unreachable by land. In addition to lifting heavy objects by sling, the CH54 was used with specialized container units that fit equipment transport and a 24-stretcher in the open section of its body and could contain mobile command post, medical, maintenance, or troop transport modules.

Powered by two Pratt & Whitney The AH-1G "Huey Cobra" first flew in 4500-shp engines, the Sky Crane could lift 20,000 pounds. An internal winch would allow payloads to be picked up or delivered without landing. A later version with two 4800-sph engines could deliver a 40,000 pound payload.

> The narrative and pictures describe only a few of the interesting aircraft at the U.S. Army Aviation Museum. Many more will keep you interested for at least two to three hours.

Camping and Admissions

U.S. Army Aviation Museum

Fort Rucker, Alabama 36362-0610 PHONE: 334-598-2508

HOURS: 8 a.m. to 4 p.m., Mon-Sat; 12 p.m. to 4 p.m., Sun., closed Christmas Eve & Day, New Year's Eve & Day, and Thanksgiving. ADMISSION: Free

PARKING: Free. Plenty of room for motorhomes, but no overnight camping. DIRECTIONS: Traveling south of Ozark, AL, on US 231, turn right on SR 249 at brown sign pointing to the museum (10 miles).

TIME FOR VISIT: Allow at least 3 hours.

RESTAURANT ON SITE: None.

RESTAURANTS NEARBY: Several well-known chain restaurants in Ozark and Dothan.

Campgrounds

2414 N. US 231, Ozark, AL 36360 334-774-3219

Ozark Travel Park 70 paved sites 50-amp, water, sewer \$29.95/night

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The Museum of Aviation at Robins Air Force Base, Georgia

OCATED A FEW MILES SOUTH OF the city of Warner Robins, Georgia, the Museum of Aviation at Robins Air Force Base is one of the largest aviation museums in the U.S. Located on a 51-acre campus, the facility has four major buildings:

- The Eagle Building houses excellent exhibits on the 14th Air Force Flying Tigers, the Hump Pilots of the China-Burma-India Theater, the 483rd Bomb Group, a general view of World War II, the history of Robins AFB, the story of WWII ace Robert L. Scott, Jr., an aviation research The AVG and Flying the Hump library, and the Victory Café.
- Hangar One's featured exhibit is equipped and poorly trained Chinese "America's Black Eagles-The Tuskegee Pioneers." The hangar also houses several Vietnam-era aircraft and helicopters.
- The **Century of Flight** features the SR-71 and the U-2 from the Cold War Era, plus the famed F-16 "Fighting Falcon." The F-16A on display flew with the USAF Thunderbirds from 1982 to 1991. The **Hall** teaches important lessons on the U.S. Constitution.
- The **World War II Hangar** features an exhibit on D-Day and the Air Invasion of Europe.

All of the exhibits are self-guided.

Construction on Robins Air Force Base began on September 1, 1941. Spurred on by the Japanese attack on Pearl Harbor on December 7, 1941, the Army enlarged the project by purchasing 2,637 additional acres and leasing 782 more south of the depot for troop training. In May 1942, the number of construction workers peaked at 6,600. The contractors essentially completed the project by August 31, 1942. The rapidly growing town of Wellston changed its name to Warner Robins Burma, cutting off the last supply routes on September 1, 1942.

logistics bases in the nation created to support the thousands of aircraft that were needed throughout World War II (1941-45). Over 23,000 employees re-

paired almost every kind of aircraft, including B-17s, C-47s, B-29s, B-24s, P-38s, P-47s, and P-51s. Its training facilities turned out nearly 60,000 field repair mechanics for every theater of war.

With the space available and the interest and talent of hundreds of supporters in the area, Robins AFB was a natural place for the creation of the Museum of Aviation. Following are some of the exhibits that will capture your interest.

After the Japanese decimated the ill-Air Force in 1937, Generalissino Chiang Kai-shek asked Capt. Claire Chennault to come to China as Director of Air Combat Training. After retiring from his position with the U.S. Army Air Corps (USAAF), Chennault accepted and helped the Chinese procure 100 P-40s from the Roosevelt administration. He convinced 100 "We the People" Theater and Exhibit American pilots and 200 ground crewmen (who were honorably discharged when they volunteered for this duty) to join an amazing effort called the American Volunteer Group.

> Less than two weeks after the bombing of Pearl Harbor, AVG pilots intercepted ten Japanese planes headed for a bombing raid on Kunming and shot down four of them—America's "first-blood kill" against the Japanese. Better known by now as the "Flying Tigers," the AVG guarded the Burma Road, Rangoon, and other locations, shooting down 297 enemy aircraft and destroying 225 on the ground. The cost? 12 P-40s and 13 pilots. The Flying Tigers were incorporated into the USAAF in 1941 as the Fourteenth Air Force.

In early 1942 the Japanese overran to Chaing Kai-shek's struggling armies. Robins AFB became one of three key The U.S. needed to keep China in the war because its forces preoccupied hundreds of thousands of Japanese troops. The only solution left was "flying the hump," the dangerous 530-mile air route over









Left to right from top: Yes, believe it or not, the Stearman PT-17 (Kaydet) was the most widely used primary trainer during World War II in the Allied armed forces. The two-place biplane served as a flying classroom for thousands of Allied pilots. Tying the old into the new, basic aviation principles into modern planes, the Kaydet was the last production military biplane built in the U.S. The Kaydet went through several versions before retirement, including PT-13 with a Lycoming engine, the PT-17 with a Continental engine, and the PT-18 with a Jacobs power plant. The PT-27 was the first version to have an enclosed cockpit canopy. • Designed in 1940 as a replacement for the B-17 and the B-24, the Boeing B-29 made its maiden flight on September 21, 1942. Fifteen months later the Army Air Force decided not to use the B-29 in the European Theater, a decision based on a better utilization of the B-29's longrange capability in the Pacific. Planners particularly had in mind the long overwater flights required to attack the Japanese homeland from China bases. In late 1944 the B-29s began operating against Japan from Saipan, Guam, and Tinian - islands that were taken earlier in the war in hard-fought battles.

Atomic bombs dropped from two B-29s effectively ended WWII in August 1945. • By April 1944, the German Air Force was beaten and could not interfere with the invasion. On D-Day, the Allies had over 12,000 aircraft to support the invasion, including 3,500 heavy bombers, 1,400 medium bombers, 5,500 fighters, and 1,200 transports. Allied aircraft flew over 14,000 sorties and owned the air. The German Air Force flew approximately 300 sorties. The Allies lost 127 aircraft on D-Day, most to German ground fire. In addressing the Allied troops prior to D-Day, Gen. Eisenhower said, "If you see planes in the air, they will be ours." • The CG-4A Hadrian was the most widely used glider used by U.S. forces in the European Theater. Designed to be quickly and cheaply, it had a fabric-covered tubular steel frame, plywood flooring, and minimal controls. Over 12,400 CG-4As were built. In addition to the pilot and co-pilot, the CG-4A could carry 13 infantrymen in full battle gear. The gliders were often towed into the air by C-47s and attained a maximum speed of 150 mph. They aimed at landing in open agricultural fields. The Germans often staked open fields with large posts to discourage glider landings or the Himalayan Mountains between India and China. Missions started in April 1942 and continued through 1945. With pilots from the China National Aviation Corporation and Chennault's Flying Tigers, the Hump airlift kept China in the war. But the effort took its toll: nearly 1,000 men and 600 planes were lost due to the extremely treacherous flying conditions.

In an interview at the end of the war, Col. Chennault said, "It is possible for men to fight against great odds and win."

The B-17 and the Norden bombsight

The bombing runs out of England during 1942 were not very effective. After the Norden bombsights were introduced, a U.S. bombardier could place bombs within a 100-yard circle from an altitude of 20,000 feet. The B-17 was known for its speed, ruggedness, and ability to defend itself. Ground crews were constantly amazed at the ability of the plane to limp back home with parts of its wing and tail assemblies blown off.

There is a great display of the B-17's flight crew in their positions throughout the plane. The tail of the B-17E was redesigned to house twin 50-caliber machine guns. On the plane's first mission in the

tear them apart if they attempted a landing. Approximately 5,000 men became glider pilots. • The B-1B Lancer is imposingly displayed at the front entrance to the Museum of Aviation at Robins AFB. Carrying the largest payload of both guided and unguided weapons in the Air Force inventory, the B-1B is the backbone of America's long-range bomber force. It can deliver massive quantities of precision guided weapons against any adversary, anywhere in the world, at any time. The first B-1B was delivered in June 1985 and the final one was delivered in May 1988. The plane holds 50 world records for speed, payload, range, and time of climb in its class. The B-1B was first used in combat in support of operations against Iraq during Operation Desert Fox in December 1998, which was over ten years after the last B-1B was delivered. This addresses operational readiness. In 1999 six B-1Bs were used in Operation Allied Force. The six B-1Bs delivered over 20 percent of the total ordnance while flying less than two percent of the combat sorties. This fact speaks to efficiency. The plane is 146 feet in length, 34 feet in height, with a wingspan of 137 feet with wings extended forward, and 79 feet swept aft.

Pacific war, a tail gunner shot down five Jap fighters. The word got around and the Japanese pilots rarely approached the B-17E again from the rear.

The P-38 Lightning

Highly respected by German fighter pilots, the P-38 was called the "Forked Tail Devil." Its long range, high speed, and fire power made it the nemesis of the Luftwaffe. The plane's multi-engine configuration in twin fuselages reduced the P-38's loss rate due to anti-aircraft fire. One well-placed bullet in the coolant line of a P-51 could seize up the engine in minutes. The 400-mph fighter/light bomber was referred to by the Japanese pilots as "two planes, one pilot."

The B-24 Bomber

The B-24 Liberator had the ability to carry a larger bomb over longer distances than the B-17. It played strong roles in the European, Pacific, and African theaters. With over 18,000 B-24s built, it was produced in greater numbers than the B-17 Flying Fortress. It also saw duty in maritime patrol, antisubmarine work, reconnaissance, tanker, cargo and personnel transport. Winston Churchill used a B-24 as his own transport aircraft.

The Tuskegee Airmen

The 332nd Fighter Group, known as the Red Tails, was the first black flying unit in the Air Force, established as the 99th Pursuit Squadron, and commanded by Col. Benjamin O. Davis, Jr., who flew a P-51. He later became the first black 3-star general. Flying escort, the Tuskegee Airmen never lost a bomber to enemy aircraft.

The "D-Day" Exhibit

"Hitler built a fortress around Europe, but he forgot to put a roof on it." - Franklin D. Roosevelt.

The emphasis in this exhibit is the incredible size of the invasion forces. Gen. Eisenhower told his forces that the invasion was going to work because there was no backup plan. Continued on page 64

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The Mighty Eighth Air Force Museum

HE EIGHTH AIR FORCE WAS ACTIVATed in Savannah, Georgia, on January 28, 1942, at the Chatham Armory, just 52 days after the bombing of Pearl Harbor. General Ira Eaker took the Eighth's headquarters to High Wycombe in southern England in late February. In less than 18 months 74 airfields would be built from which almost daily operations would be launched against Germany.

The first operation of the Eighth Air Force Bomber Command, as it was known in the early days, occurred on June 29, 1942. Twelve RAF Douglas Boston III light bombers attacked Hazebrouck airfield in German-occupied Holland. One of the bombers was flown by U.S. Capt. Charles Kegleman. On July 4, 1942, six airmen from the Eighth's 15 th Bomber Squadron borrowed six Bostons painted with USA markings, and daringly flew a low-level mission to German airfields in Holland. Six aircraft went out — three came back. It Street in Pooler, Georgia. was a portent of things to come.

Over 26,000 airmen in the Eighth Air Force were killed in action between July 1942 and June 1945 as they courageously flew their B-17s, B-24s, and various fighter planes against German defenses in their determined effort to stop Nazi aggression. More than 28,000 airmen became POWs or MIAs, and most of them did not survive. During those three years, 350,000 men and women served in the Eighth. Their units included ordnance, armament, operations personnel, quartermasters, cooks, weather, medical, Red Cross contingents, and especially ground aircraft maintenance and repair crews for the men who flew from the 74 airfields located in southern England. It was the greatest air

*At the beginning of World War II, the German Luftwaffe was probably the strongest and the most battle-experienced air force in the world. Formed in 1935 in violation of the Treaty of Versailles that ended World War I, its purpose was to support Hitler's Blitzkrieg across Europe. The aircraft used by the Luftwaffe were technically superior to those of other nations in the mid-1930s. Its fighter plane, the Messerschmitt 109, came to symbolize German air power.

The Luftwaffe was an essential component of the Blitzkrieg. Operating as a tactical close support air force, it

armada the world had ever seen.

Once airborne, mid-air collisions were common. The planes were unheated and unpressurized. Airmen wore oxygen masks in temperatures that were often 40 degrees below zero. The planes nearly always faced flak and Luftwaffe* attacks. As the planes returned from their missions, battle-damaged B-17s or B-24s or those with wounded on board landed first.

Nearly 40 years after the Eighth Air Force completed its assigned task of bringing Nazi Germany to its knees, a B-17 bomber pilot who flew 76 combat missions during World War II organized a group of veterans and began planning a museum to honor all who served in the Mighty Eighth. Major General Lewis E. Lyle flew more combat missions than any other lead pilot. It was Lewis Lyle who played a large role in organizing the Eighth Air Force in the armory on Bull

On May 14, 1996, then in his eightieth year, his vision became a reality with the dedication of the Mighty Eighth Air Force Museum. The museum covers 90,000 sq. ft. and is situated on 13 beautifully landscaped acres in Pooler, Georgia, along I-75, near where the Eighth was formed.

When you enter the Lyle Rotunda with its soaring ceiling and bronze statues honoring the legends of the Eighth Air Force, you will inevitably experience a feeling of awe. The exhibits are compelling and powerful, each one demonstrating examples of sacrifice, courage, and patriotism. Among them are Prelude to War, Battle of Britain, From Savannah to the UK and the fighter plane Honoring the Eighth gallery.

played a major role in helping the German armies conquer the bulk of the European continent in a series of short, hard-hitting, decisive campaigns in the first nine months of the war (Sept. 1939 - May 1940). When the Luftwaffe went up against the RAF in the Battle of Britain, its role became strategic instead of supportive. Its leadership and pilots were not able to adapt and Britain defeated them-which was a tremendous embarrassment to Reichmarshal Hermann Göring who had predicted the fall of Britain in less





Left to right from top: As visitors arrive they enter the Lewis E. Lyle Rotunda with its soaring ceiling and imposing bronze statues of men who became legends in the Eighth Air Force. • Members of the French Underground were often unassuming rural families who hid downed airmen from the Nazis. At night when Germans were not operating in a particular area, Underground members would attempt to smuggle the airmen from one safe house to another, making their way each time closer to the English Channel where the men could be picked up and returned to England. Sometimes airmen would be hidden in homes for weeks at a time. If caught hiding

is a chronological prelude that details the introduction of critical technology as well as military events that led up to WWII. Some listed here are:

- 28 May 1935 Messerschmitt 109 first flew, the Luftwaffe's most important
- 22 Jul 1935 The British development One of the most interesting exhibits of "radio direction finding" equipment, which was critical in England's defense during the Battle of Britain.
 - 28 Jul 1935 first prototype of the B-17 • 5 Mar 1936 - The British Spitfire and
 - the Hawker Hurricane introduced. Enabled England to win the Battle of Britain.
 - 7 Mar 1936 Germany reoccupies the Rhineland, an area demilitarized by the





an airman, it was not unusual for the Underground member to be executed immediately. • A chapel in the style of a sixteenth-century English church is located in the Memory Gardens next to the Museum. Airmen, family members, and descendants of members of the Eighth Air Force often visit the chapel for quiet reflection on a time when the world's freedom was in jeopardy and hundreds of thousands lost their lives fighting for that freedom. • Each of the Bombardment Groups (BG) and Fighter Groups (FG) is honored with a display case showing memorabilia donated by members. This picture shows the display from the 359th Fighter Group.

Treaty of Versailles.

- 17 Aug 1939 The DC-3 is refitted for military use and becomes the C-47. Over 10,000 C-47s were purchased by the U.S. Army Air Force.
- 1 Sep 1939 Germany invades Poland.
- 3 Sep 1939 England declares war against Germany.
- 5 Sep 1939 FDR proclaims neutrality.
- 11 Oct 1939 Einstein alerts FDR to the power of the atomic bomb.
- 4 Nov 1939 U.S. repeals neutrality law.
- 9 Apr 1940 Finland surrenders. Germany invades Denmark & Norway.
- 10 May 1940 Churchill appointed prime minister.

waffe had lost the Battle of Britain.

Churchhill's tribute: "Never have so many owed so much to so few."

While the Royal Air Force advocated night bombing raids into Germany, the Eighth Air Force believed that daytime raids would be far more effective. The theory was right, but the attrition was terrible. In the 18 months before long-range fighter planes were available for escort, only one in three B-17 crew members completed his tour which required 20 missions. But once planned and in the air, a mission was never turned back.

When the P-51s and P-38s with longrange fuel tanks joined the battle in early 1944, U.S. losses were reduced significantly. When the bombing began, German Reichmarshal Hermann Göring was still confident of victory. After the fighters were introduced to escort the bombers into Germany and back home, Göring said, "The first time your bombers came over Hanover escorted by fighters, I began to be worried. When they came with fighter escorts over Berlin, I knew the jig was up."

Winston Churchill said of the air war, "Not to have an adequate air force in the present state of the world is to compromise the foundations of national freedom and independence."

When extensive raids were planned, the Eighth could launch 2,000 bombers in one day. With the supporting fighters to escort them, such operations would put more than 25,000 men in the air. The main objectives of the bombing missions were munitions factories, oil refineries, ball bearing plants, and airplane factories.

The French Underground rescued many B-17 crewmen and hid them in their homes until they could be smuggled back to the coast for pickup by military craft to get them back to England. A replica of a safe house—a private home in and Easter which airmen were hidden at the risk of ADMISSION: Adults, \$10; seniors, \$8. • 15 Sep 1940 - Hitler realizes the Luft- those who took them in—tells the story of

false ceilings, walls, attics, and basements where they were hidden, sometimes for weeks or months.

One member of the Eighth whose career after the war kept him in the public eye was Col. James M. Stewart, known to movie fans as Jimmy Stewart. Commissioned in 1942 as a captain, Stewart flew 20 combat mission in the B-24 Liberator, earning two Distinguished Flying Crosses, four Air Medals, and the French Croix de Guerre. By March 1945 he had been promoted to colonel and was serving as chief of staff of the 2nd Combat Bombardment Wing.

Designed in the style of a sixteenth-century village church, the Chapel of the Fallen *Eagles* presides over the Memorial Gardens that opens to the rear of the museum. A carillon plays familiar hymns and melodies for visitors who walk the grounds to view the marble and limestone monuments placed by friends and family to honor individual crews who flew the dangerous missions nearly seven decades ago.

An extensive library continues to expand as the details of each airman's life are learned and recorded in the archives. Yearbooks were usually printed for each bombardment group, but the library's collection is not complete.

The Crown & Eagle Pub makes lunchtime a very enjoyable experience with homemade soups and sandwiches. Open each day from 11 until 2, be sure you don't become overwhelmed with the exhibits and miss a good lunch.

Camping and Admissions

Mighty Eighth Air Force Museum

175 Bourne Avenue (Exit 102 on I-95) Savannah, GA 31402

PHONE: 912-748-8888

HOURS: 9 a.m. to 5 p.m. every day except Thanksgiving, Christmas, New Year's,

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The old saying, "He doesn't let any grass grow under his feet," was never more applicable to anyone than Bob Tiffin. While those of you who visit the Red Bay Service Center often stop by to see him, you may not know that he spends at least half of his weekends (Thursday through Saturday) going to dealer sales events to visit with customers and prospective buyers. Dealers can count on increased sales when Bob Tiffin attends their events.

That's great for dealers and owners, but just try to slip a surprise birthday party into Bob's schedule. It took a year of planning, deception, and hush-hush for Harold and Debbie Kimbrough to plan and host a celebration for Judy and Bob Tiffin's March birthdays. You may have met Harold at a Tiffin Rally, an Alabama football game, or an FMCA convention. Harold is the Onan distributor for northwest Alabama and a long-time friend of the Tiffin family.

By putting a dealer's sales event on his agenda, Bob unknowingly eluded the surprise party on his actual birthday during the first week of March. The planning team regrouped and decided a belated birthday party was the only answer. They did not want to postpone the "surprise" for another year.

Harold and Debbie recently restored the home they inherited from Harold's parents just a few miles south of Tuscumbia. The estate, called "The Oaks," was originally part of a 10,000-acre cotton plantation in the ante-bellum South. Construction on the home began in 1825. Its heart pine floors, carved woodwork, and wavy glass windows (glass poured on site) are priceless.

Behind the home, Harold's father had a large garage where he worked as an auto mechanic for 30 years. Harold cleaned out the garage, painted and decorated, and made it into his "toy barn,"

where he keeps his restored 1935 five-window Ford coupe with rumble seat and roll-down back window. He also enjoys a 1940 Ford pickup. With the vehicles removed for the evening, the garage took on a new life as the place for a great birthday celebration.

The Kimbroughs invited the Tiffins for dinner Saturday evening, April 3rd, to see the completed restoration of the main house. Friends hid in the wings of the home as Harold and Debbie greeted Bob and Judy on the front porch. As the door opened into the foyer, "Happy Birthdays" were shouted and the ruse was uncovered, much to Bob's surprise (the planners had to make Judy a collaborator a few weeks before). Judy's sister, Elizabeth Nabers, and her husband Merrill, flew in from Albuquerque for the celebration.

The party moved to the "garage" for dinner and a delightful evening. After dinner, Bob's brother, David, who operates the family business started by their father, took the microphone and revealed little-known facts about their escapades while growing up. Much more entertaining than Carson or Leno, David kept the group in constant laughter.

At western Tiffin rallies, Bob and Judy had met Charles Suniga and enjoyed his amazing performances on the electronic piano with synthesized orchestral accompaniment. Charles' talent brought back the easy listening music of the 1950s into which he injected impressions of Elvis and Louie Armstrong. His wife, Jeannine, a vocalist, joined Charles for three duets. He adds comedy to his music which on this occasion included persuading Bob to come to the stage and do an impersonation of Elvis. The planning team flew Charles and Jeannine in from Portland for the party. RIS



Bob with his sister
Beulah and brother David



Stand up comic David Tiffin



Happy Birthday to Bob and Judy



Charles got Bob to do his Elvis impression

Entertainer Charles Suniga

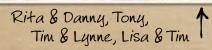


Judy with Jeannine Suniga A and sister Elizabeth Nabers

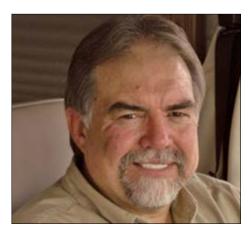




Papa Bob with Emmitt



Ε Ε S C S R O U TA



Inman's Answers

As the editor of "Serious Tech Talk," Danny Inman, 36-year veteran with Tiffin Motorhomes, invites your questions.

Please use the attached postcard and send Danny your questions about your motorhome and its operation, especially those questions that may be useful to all of our readers. If you need more space, address your letter to:

Danny Inman Roughing It Smoothly PO Box 1738 Monroe, GA 30656-1738

Danny would also like to hear your ideas, suggestions, and innovations that would make our motorhomes more useful and functional. If you have a photograph to send, please put the postcard and photo in an envelope and send it to the same address. Please send a SASE if you would like for us to return your photographs, disk files, and manuscript.

We look forward to seeing this column grow larger with each issue. For answers to urgent questions and problems, call the Parts and Service number at 256-356-0261.

Dear Danny . . .

We have a 2005 Allegro Bus with a King Dome 9702 satellite antenna system and Direct TV D12-100 receiver. The antenna system has never worked satisfactorily. The system will usually (but not always) locate a satellite but the receiver doesn't recognize the satellite. I have had the system re-programmed several times (three times at Red Bay) with a diagnostic key-

pad and it works OK for a couple of times then goes off again. Last year the tech at Red Bay had me replace my D11 receiver with the D12 which I now have, but it didn't help the problem.

I contacted King Controls concerning my antenna problem. They suggested I replace my 9702 system with a remanufactured 9704 system that they would be glad to sell me for just \$774.99 or a 9762 for \$1,234.99.

The local RV dealer (Vogt) told me Tiffin is now installing Winegard antenna systems on new motorhomes. Do you recommend replacing the 9702 with a remanufactured 9704 or going with a new Winegard? Either way we plan on having the replacement done at Red Bay. Thanks.

> E. B. (Stumpy) Thompson Weatherford, Texas

Dear Stumpy,

We have been using the Winegard over the last 18 months on some of our brands and have had good success with it. However, we have customers who prefer one brand over the other with equal fervor. At this point it would be less expensive for you to go with the remanufactured King Dome with a one-year warranty than start over with a new, more costly Winegard unit.

We have a 2007 Allegro Open Road that we bought new in September 2006. We travel and live in the unit full time. During the past year or so, we have experienced leaks when the bedroom slide is out, sometimes on both sides, sometimes only on one side. The leaking is worse in prolonged heavy rain, especially if the wind is blowing into the slideout. We always make sure the slide is fully deployed. Based on previous experience in another make of motorhome, my suspicion is that the compressible rubber strips on the inside wall of the slide and the opposing strips on the wall of the coach are not making a tight enough seal. My wife thinks it's because you can see daylight

through the bottom corner of the slide when it is out. Can this condition be fixed without having to remove the slide-out box? Can any qualified RV service center do it, or do we have to come to Red Bay?

> Bruce and Kris Rohnstock Livingston, Texas

Dear Bruce and Kris,

Water can seep in around the seals if they have weakened over the last four years. If the leak is occurring around the seals, they can be replaced without having to remove the slide-out. Most RV service units are familiar enough with the slide-out technology to make the repair. The point through which you are seeing light should be structurally checked while the slide-out box is undergoing a water test to see if the slide-out box itself needs to be repaired.

I have two problems with my 2007 Allegro Bay 37 QBD.

- (1) The flimsy inspection door on the outside of the coach at the fridge will not stay closed. As soon as we begin a trip this door flops open. It seems the tongue of the lock is too short or the material is such that it bends with wind and opens.
- (2) A breaker in the main panel that controls the Sleep Number bed, main television, and who knows what else continually trips. The dealer checked it, replaced it, and it still trips almost every time we use the coach.

We have had both problems since the coach was new—any suggestions?

Thanks for the tips on the clothes flying off the rod. A dealer told me to reduce the rear air pressure – and that cost me a new tire!

> John Horstdaniel Cedar City, Utah

Dear John,

The tongue of the lock is not seating deeply enough into the door and will require an adjustment to make it work properly. Without seeing it, I would also

speculate that the whole lock mechanism may need to be replaced. Our service department can send the lock mechanism if you determine that it needs to be replaced.

Sometimes depending on what appliances are being used in the motorhome, especially on circuits passing through the inverter, it is easy to get a circuit overloaded. When the battery charging software is involved in the situation, it will also add to the problem you are experiencing. Determine which lines are connected to the inverter, and then see if you can transfer some of the appliances to a non-inverted line. This will need to be done by a qualified service center with a good understanding of the electrical systems in motorhomes.

We have a 2005 Phaeton. Starting the day after I changed the water heater anode, the heater has weeped through the pressure relief valve. It leaks into the heater compartment then down into the storage door below it. I followed the instructions from the manufacturer's booklet and even took it to a Tiffin dealer. After the flush, it would work for about one day and then start weeping again. The only thing that stops it is to run a hot water tap for about 4-5 seconds every ten minutes after turning the heater on. What really gripes me is that the manufacturer's manual says it is a common situation and not a defect. We've had towables and motorhomes for 21 years and this is the first time we have encountered this problem. Any suggestions or help would be appreciated.

> Bill & Val Dotterer Las Vegas, Nevada

Dear Bill & Val,

As you know, when water is heated it expands. The pressure relief valve which you installed with the water heater anode is the weakest point in the closed water system. In most cases a new valve will not leak, but it is not uncommon for this to happen. First, be sure that your supply

line's water pressure does not exceed 45 psi. If it does, use a pressure regulator.

anode/pressure relief valve. If it continues to weep, then your next option is to install a small accumulator tank to the hot water line to remove the excess pressure. You can purchase an accumulator tank at Camping World or other RV supply stores. You will splice it into the hot water line and add air pressure into the tank per the manufacturer's instructions. When the pressure builds up, the accumulator tank will absorb and relieve the pressure, thus preventing the weeping.

I recently purchased my first RV. It is a

2002 Allegro 31DA. My question is when I am parked with the jacks deployed, My first suggestion is to try another any movement still makes the RV shake. Movement as little as someone turning over in bed can be felt throughout. How can I fix this? We love our RV and look forward to coming to Red Bay sometime

in the near future. Thank you very much.

Greg and Cheryl Rabalais

Crossett, Arkansas

Dear Greg & Cheryl,

With the jacks down you have four points on which the whole coach is balanced. The purpose of the jacks is to create a leveling of the motorhome. As a comparison, if your house was attached to only four concrete block piers, you would get movement in the outer extremities of the

Exterior Gravity Fill Questions

In the last issue of Roughing It Smoothly there was talk that an exterior gravity fill for the fresh water tank is no longer used. We own a 2006 Allegro Bus and travel to Mexico frequently and need to add hydrogen peroxide to the tank to keep the water safe. It is quite a pain to do so because there is no gravity fill opening. We are planning to buy a new Bus in 2010 and hope TMH will restore that feature. Can we order our coach with it? Why was the exterior gravity fill removed?

Also I would love to see the engineers find a way to run the exhaust for the generator and especially the Hydro-Hot to the roof. I hear people complaining about the exhaust odor frequently.

> Carl Godden San Diego, California

Dear Carl,

Due to pre-determined computer templates used to make the exterior walls, plumbing, and wiring, it is not possible to add the exterior gravity fill during assembly line production. It can be added as an aftermarket feature through a dealer or at our service center here in Red Bay. (See Customer Response section of Tech Talk.)

RV Systems in Decatur, Alabama, makes pipe extensions to carry the exhaust above the top of the motorhome for both the generator and Hydro-Hot. The brand name is ExhaustAway. The Camp Store at Red Bay sells the extensions for \$200 (generator extension) and \$255 (Hydro-Hot extension). You can order the extensions through Tiffin Parts and Service at 256-356-026.

We own a 2008 40-ft. Allegro Bus which is a great product. Maybe I overlooked your answer in an earlier discussion of this question. How do we get a chlorine bleach solution into the fresh water tank for cleaning and purification? Any more information on the recommended frequency for this job will be appreciated. Our coach has a filter and an electric hose reel in the water bay.

> Ingrid & Donn Ryan Louisville, Kentucky

Dear Ingrid & Donn,

Please see my answer to Carl Godden (above) and the Customer Response from Ed & Betty Burns.

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Ε Ε S C T A K S R \mathbf{O} U

home's floor. The heavier motorhomes a Cummins/Freightliner Service Center will have less movement than the lighter coaches. There is not a "fix" for this without designing a system that is considerably more expensive.

The Air Filter on Allegro Buses

We bought a 2007 Allegro Bus recently. I am having a difficult time understanding the correct way to reprogram the inverter. Could you tell me the right way to do it with either 30- or 50-amp shore power? Also, can you tell me an easy way to get to the air cleaner without having to remove all of the pipes to get to it? Thank you very much. I really like your column. You do a great job!

> Fred Barnhill Kimberly, Idaho 3. Set AGS.

Dear Fred,

Unfortunately, it is complicated to replace the filter on the 2007 Allegro Bus and older units. You may want to have

do the job. Beginning with the 2008 Bus, TMH redesigned the rear cavity to allow easier access to the air cleaner.

Following are the programming instructions for the inverter:

1. Set menu structure to "Advanced."

- a. From home screen, press Enter.
- b. Scroll down to **System**, press Enter.
- c. Scroll down to **Global Menus**, press Enter.
- d. Change to Advanced, press Enter.
- e. Press Back until Select Device is displayed.
- 2. Set the system Time.
- a. Scroll down to Clock, press Enter.
- b. Scroll to **Set Time**, press Enter.
- c. Scroll up/down to set **Hour**, press Enter.
- d. Scroll up/down to set Minute, press Enter.
- e. Scroll up/down to set AM/PM, press Enter.

- a. Scroll down to Auto Gen Start, press Enter.
- b. Scroll down to Configure Triggers, press Enter.
- c. Scroll down to **StartV:30sec**, press Enter.
- d. Scroll up/down to set at 11.4V, press Enter.

Decal Deterioration

I took delivery of a new Allegro 28DA on Jan. 17, 2004, from La Mesa RV in Mesa, Arizona. The motorhome has been in Minnesota in the summers and Arizona in the winters. In the last 12 months the decals on the side have begun to curl and peel, especially the lighter colored ones. The color option on this motorhome was called Beaches. What can be done to correct this?

Delmar D. Smith Roseville, Minnesota

Dear Delmar,

The decals can be replaced with new ones. However, the time-consuming part of the job is removing the old decals. If you plan to keep the coach for more than five years, we recommend that you replace the decals with paint. It will cost more, but you will not have to replace the decals again.

I am the original owner of a 2005 Allegro

30DA, Chili Spice, beautiful coach, but the decals are shrinking and peeling and it is getting worse. How do I address this problem? Would it be possible to bring it to Red Bay because I wouldn't trust anybody else to do it properly. Hopefully, this is something that can be covered under warranty.

> Bobby H. Counts Washington, West Virginia

Dear Bobby,

Through the years decals presented longrange deterioration problems that were not anticipated. Some of our owners have elected to replace the decals while others have removed the decals and replaced them with painted stripes. Although it is more expensive initially, this type of problem is the reason why TMH has gone to full-body paint on all of its brands. If you will bring your coach to Red Bay, we will be glad to recommend the best repair for your coach and provide an estimate.

e. Scroll down to **StartV:24hours**, press Enter.

f. Scroll up/down to set at 12.4V, press Enter.

- g. Scroll down to Enable Temp1, press Enter.
- h. Scroll up/down to **set to On**, press Enter.
- i. Press Back until **Select Device** is displayed.

4. Verify AGS works.

- a. Scroll down to Auto Gen Start, press Enter.
- b. Scroll down to AGS Mode, press Enter.
- c. Set AGS Mode to Manual On, press Enter.
- i. Verify that the generator starts. d. with AGS Mode highlighted, press Enter.
- e. Set AGS Mode to Manual Off, press Enter.
- i. Verify that the generator stops.
- f. With AGS Mode highlighted, press Enter.
- g. Set AGS Mode to Automatic, press Enter.
- h. Turn air conditioner on
- i. Verify that the generator starts.
- i. Scroll up to AGS Mode, press Enter.
- j. Set AGS Mode to Manual Off, press Enter.
- i. Generator should stop.
- k. Press Back until Select Device is displayed.

5. Set menu structure to "Basic."

- a. Scroll down to **System**, press Enter.
- b. Scroll down to Global Menus, press Enter.
- c. Change to Basic and press Enter.
- d. Press Back until home screen is displayed.

I have a 1987 Allegro with a 454 Chevy engine. It has approximately 28,000 miles on it. When my husband and I took it last June to get it smogged, they blew nitro gas into the gas tank and they probed the inside of the tank. They said that this is a new process that has to be done. Well we knew that with the age the gas lines might be brittle.

The gas odor driving home was really bad. When we got home, my husband pulled the gas tank down and fixed the gasket that had been pulled out. The gas line from the carburetor to the gas tank has about six different bends in it. Do you know where we could pick up a new gas line? I would like to get it fixed immediately so we can start using it.

Marylynn Rather Modesto, California Dear Marylynn,

You probably will not find this particular part ready-made for your purchase. You will need to locate an auto parts supplier who can use your original part as a pattern to fabricate a new one. Some parts suppliers have the equipment to bend and make the new fuel line you need.

Regarding the fuel odor coming into the motorhome, check around the fuel fill housing which is attached to the sidewall of the motorhome and be certain that you have a good seal between the sidewall and the metal housing. You can repair the seal with a sealant tape or silicone. Also check the seal where the gas filler neck attaches to the housing. The tank is vented through the filler cap. Sloshing of the fuel in the tank will force the gas odor through the vented filler cap. If you do not have good seals, the odor may be sucked back into the motorhome.

I have a 2006 Allegro Bus which I purchased in 2007. The coach has an Aqua-Hot heating system. Every winter when heating the coach, I turn the Aqua-Hot's diesel burner on first, wait a few minutes, and then set the thermostat. It takes at least 10 to 15 minutes for the blowers to come on. They blow for only a few minutes and cut off-and then come back on. Should it take that long for the blowers to come on the first time? Why do they turn off so quickly?

The slide-outs in both the living room and the bedroom are making bad indentions in the carpet which are very visible when the slides are out. Should this be happening? Can it be prevented?

> Johnny Rockhold Theodore, Alabama

Dear Johnny,

When your Agua-Hot is turned off, the temperature of fluid in the closed system that circulates to the heat exchangers will fall to the temperature of its environment under the floor. When you turn

the diesel burner on, the system will start circulating the fluid to the heat exchangers when it reaches approximately 100 degrees, causing the fans to come on to begin to distribute some initial warm air, although the temperature of the fluid in the outlying pipes may still be lower. As the fluid below 100 degrees is detected, the blowers will turn off to avoid blowing cool air. When all of the fluid in the system has been heated to 190 degrees, the system will stay on continuously until your room temperature has reached the setting on your thermostat. As the fluid continues to circulate and be reheated, the fluid temp will fall to 150 and then be

reheated in the continuous loop system.

With regard to the indentions in the carpet, this is a pretty common problem with the weight of the slide-outs. It is possible to reduce the pressure of the rollers on the carpet, but that can cause operational problems in the slide-out mechanism. This problem resolved itself after we started installing full tile floors.

I own a 2003 Allegro Bay 37DB on a Workhouse chassis with an 8.1 cu. in. engine. At 28,000 miles while driving on the interstate in Idaho, the fan blade disintegrated. It took out the shroud but did

Leaking Problems

and it's a great coach. However, we have replaced the skylight twice because it split open during the summer months. It has leaked badly both times after replacement. What can we do to stop the leaking? It is going to be an "El Niño Year" here in Modesto, California. We will be going on a trip soon. Any suggestions?

We read every issue of Roughing It Smoothly and love it. Will TMH open an RV shop near Modesto anytime soon?

Modesto, California

Dear Russell,

First, the leaking problem. After the old skylight is removed, be sure all of the old or loose sealant is removed from the top of the coach roof, clean the area thoroughly, and then reseal the entire area with a good quality, self-leveling sealant. Second, the original equipment skylight is a two-part device: one is inserted from the inside of the coach and the other is a dome that covers the insert. Skylights come in varying qualities. You can order original equipment from TMH.

Happy Daze RV Center in Sacramento will be able to help if this is not a repair you can do at home.

We have a 1983 Allegro. We have not had We have a 2003 Allegro. We bought it new much trouble with it. We took the carpet out and installed a laminated floor. Our biggest trouble now is the leaking roof. We have tried the silver seal. No luck. For the rest of the winter, we put plywood down and covered it with a tarp. Do you know of a good product that will work? We have heard there is a rubber seal. We have looked into a new roof. It cost more than we paid for the motorhome. We also checked on a spray-on like you would use in the bed liners of a truck. Can you recommend Russell Kelley something to solve our problem?

> Eddie & Donna Valentine Copalis Beach, Washington

Dear Eddie & Donna,

First, be sure to check all of the seals around the components that are installed through the roof to be sure the leaks are not originating with them. Next, try to identify locations where the roof appears to be leaking and try the roof repair products that your local RV service center has tried and found successful. We do not have any recommendations for spray-on and brush applied products since we do not use them in the Tiffin Service Center here in Red Bay. We only do fiberglass roof replacement here, but we use a local company if the owner wishes to install a rubber roof.

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Ε S Ε S C R O U TA

not puncture the radiator. The company making the repair said they had seen six other units with the same problem. We had to wait four days for parts. I am wondering why this problem has not been reported in Tech Talk by other owners. Owners should check their fan blades regularly to avoid this problem on the road where it can force an expensive repair and lost time. Workhorse did not respond to my letter or phone calls.

> H. F. Lauer El Mirage, Arizona

Dear H.F.,

the repair is made in the field we usually do not hear about it. Yes, your recommendation that owners check the fan blades regularly is a good one. Now that you have raised this concern, let's see if we hear from other owners to measure the frequency of the problem.

I have a 2007 Allegro 35TSB on a Ford chassis. The retractable steps began to fail intermittently, and finally quit working period. The motor is still getting power, but at one point it got so hot I could not touch it. Bad motor? What should I do to make this repair? Is there any warranty left on this item?

> Eugenia & Douglas Klegstad Jordan, Minnesota

Dear Eugenia & Douglas,

The entrance steps, motor, and control have a two-year warranty. Check your date of purchase. More than likely it is the motor, but it would be wise to take the steps loose and make sure they are not binding at some point and causing the motor to overheat. Be very careful while working on steps. The scissor-type design can quickly catch and mash a finger.

I have a 2008 Phaeton and am very pleased with this coach. Two previous coaches almost caused me to go back to 5th wheels

(other brands, not TMH). Thanks to Ralph Starkey for his tip about the bed handle. However, I am wondering what type of handle he used and where he mounted it. I would appreciate more information.

> Ken Laney Prairieville, Louisiana

Dear Ken,

Because of privacy laws, we cannot provide the names and addresses of other owners without their permission. Mr. Starkey did not mention where he mounted the handle or what type of handle he used. To locate him, you can use www.switchboard. This apparently is a problem, but since com and enter his name plus city/state.

> I have a 2001 Allegro with 23,000 miles on it. The front access cover to the engine compartment has become quite loose. The hinge screws will not tighten. What is the best way to take care of this problem? Thanks for your help!

> > Gary Cantrall Windsor, California

Dear Gary,

Take one of the screws in the hinge and go to the hardware store and get the next larger screw. If that does not work, you may have to use a backer plate to make the screws stay in place.

We recently purchased a 2010 Allegro 32BA which we are really enjoying. However, the first time we purchased gas we found that the gas pump nozzle was too large for the gas fill opening in the side of the motorhome. The nozzle will not go in far enough to activate the pump. The only way to make the pump work is to hold the nozzle with one hand and reach into the opening with the other hand and pull back on the rubber covering over the nozzle. This is very difficult to do. Are the pump nozzles in California different from those in Alabama?

> William Frank Palm Desert, California

Dear William,

The pump nozzles in California are different from those found in most other states, we are told. Our delivery drivers have not reported any difficulty and we have no way to replicate the problem here. Could you take a close-up picture of the pump nozzle in your coach's fuel intake and send it to us? We will try to determine if this is a problem for which we can make modifications or a recommendation.

I have a 2004 Allegro Bus. I am having a major problem with the basement doors sliding sideways far enough to overlap the one next to it and causing damage. The doors are also prone to come out of the upper lip groove that holds them in place. Do you have a solution?

> Joe & Carol Biedenbach Las Vegas, Nevada

Dear Joe & Carol,

For spacers, buy a couple of feet of insulated wire the diameter of which is slightly less than a pencil. Cut the spacers to the lengths that you need to correctly separate the doors; then position the doors in the channels with the spacers in place. To prevent the doors from dropping out again, take a hammer and use an 8-inch block of wood to tap the metal hinge enough to close and tighten the circle slightly. Note that the hinge is made by reversing two metal circles to fit inside each other.

We have a 2006 Allegro 34XB. One very annoying problem is that the cords on the day-night shades keep breaking. Help! What do we do?

> Jean Vezina St. Lambert, QC, Canada

Dear Jean,

In the last three years we have introduced Roll-Ease dual solar and privacy shades, a new technology that is nearly troublefree. Depending on the size of your windows, it is very likely this product can be retrofitted and is currently available from the Tiffin Parts and Service Center in Red Bay. Most of our dealers will be able to install this product if it is not convenient for you to visit Red Bay.

We have a 2006 40-ft. Phaeton with four slides. When the water pump is on, our water pressure is fairly good. When we are hooked up to city water, we have no pressure. We have taken the filter out, but still no pressure. All of the faucets run water the size of a lead pencil. What can we do?

> Lowell Jess Pleasant Hill, Ohio

Dear Lowell.

Since the water pump is producing acceptable pressure and the city water source is not, I would first remove the fitting where the water hose connects at the utility panel and be sure there is nothing defective. If that is okay, then go to the control valve where you select city water input or tank fill. You will have to remove the white panel to gain access to the valve. Remove the valve and check for obstructions. From this point on the water from the city water source and the on-board pump will travel through the same closed system.

We are full-timers in our 2007 Phaeton. Has any research been done on developing a wind generator for motorhomes? Do you know if there is an aftermarket system that would be compatible with a motorhome? We live in Florida for most of the summer and the electric bills are unaffordable.

> Duane Schrecongost Largo, Florida

Dear Duane.

Tiffin's R&D at this time has not done the research to make recommendations on a windmill generator that produces enough amps to operate all of the appliances including air conditioners in your motorhome. However, you may find it interestcurrently available. Put "wind generators for motorhomes" into Google and you will find a ton of information. If you do find a suitable wind generator, consult with a qualified electrician who is knowledgeable aboutyour motorhome's electrical systems. You may need an interface to switch back and forth to utilize wind-generated power whenever it is available. We do not believe that you will find a system currently available that will power air conditioners.

We have a 2004 Allegro Bus with 20,000 miles. In November we left an RV park in Arizona and got on the freeway. Fifteen miles later the motorhome began to slow down on its own and within a half mile had completely stopped. I pulled over to the shoulder during the slowdown. I used the electronic shifter to put it in neutral. I started the engine; but when I shifted into drive or reverse, it stalled out again. I did this five or six times. I waited a half hour and tried again. This time it worked fine and we drove 800 miles with many stops with no difficulty. Now we are home and all seems to be okay. Any ideas as to what may have caused the problem?

> Fred Cole San Bernadino, California

Dear Fred.

More than likely it was a false reading from one of the sensors which thought it had an engine overheating or a low oil pressure problem. Once you stopped and turned off the engine, the system cleared the false reading. Your Cummins dealer can attach a diagnostic laptop to the coach's ECM and determine what created the false reading. Cummins generally has a minimum charge for this service.

We have a 2008 Phaeton 40 QDH. The switch that controls the vanity overhead light in the bathroom keeps burning out. The power comes off the pump switch

ing to explore the internet to see what is adjacent to it. If the switch is left on for a period of time, it heats up. Over a few weeks the tips burn off at the connecting point. There has been no problem with the pump switch. Is it possible that the light has something wrong with it that is causing the switch to overheat?

> Charles Wilson Cassville, Georgia

Dear Charles.

If the switch does not have a good strong ground connection, this could cause the overheating of the power wire. The problem should be physically checked out by one of our dealers to get more information or contact one of our service advisors at the Tiffin Service Center in Red Bay and allow them to get more information about the history of the problem.

We are the second owners of a 2002 Phaeton. Does it harm the batteries to leave the coach plugged in while in storage? If so, how many hours per month should you charge them? Thanks.

> Toby Friemel Cedaredge, Colorado

Dear Toby,

It is not a problem keeping the unit plugged in while in storage. Once the batteries are charged, the inverter or converter (depending on what you have) will automatically reduce the amount of charge received. You need to check the battery water at least once a month while in storage with the unit plugged in, and add water as needed.

We have a 2005 40-ft. Phaeton. We have had an on-going problem with keeping the coach level. Once parked, the coach leans to the passenger side after a 12-to-14 hour period. The coach has HWH hydraulic jacks. Is there an adjustment that can be made to take care of this problem? John Chavez

San Bernadino, California

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Ε S Ε LK S R \mathbf{O} U TA

Dear John,

Each jack has an electronic valve that lets the fluid in and then closes to hold the fluid in the jack. It appears that the two valves on the passenger side are leaking and will need to be replaced.

I have a 1996 Allegro Bay 230 diesel pusher. Recently the heater coils started leaking. I do not know how to remove the coils. I cannot see one side of the plastic housing. I am thinking it might be necessary to remove the cowling. Can you tell me an easier way to get to the heater coils and remove them? I have already bypassed the coils so I can travel. Thanks.

> Bill F. Robertson Montgomery, Texas

Dear Bill.

Please see the Winter 2010 issue (7:1), page 51, middle column. Robert Reid had the same problem.

slides. We would like to replace the carpet in the living room with hardwood floors. Can this be done without the rollers on the slide-out scratching the floors? If so, what type of hardwood do you recommend?

> Bill & Janice Beasley Houston, Texas

Dear Bill & Janice,

We have never used hardwood under our slide-outs because it will eventually damage the wood. We cannot recommend that you use hardwood in our motorhomes.

I have a 1999 Allegro 31-ft. coach with a single slide-out. It has a Chevy 454 engine and an 80-gallon fuel tank. At the fueling station I can only pump about 50 gallons of fuel. Then I have to top it off

coach to the dealer who says it is a design flaw. Is there anything that can solve this problem? We love our Allegro but this is a bother that I can live without.

> Dan & Charlotte Parker Slidell, Louisiana

Dear Dan & Charlotte,

This is not a common problem with this motorhome. Therefore, we do not agree that it is a design flaw. The problem is most likely caused by the sagging of the Dear Brian, rubber fill hose. When the level of fuel in the tank gets above the sag in the line, the velocity at which the fuel is being pumped causes it to backfeed and shut down the pump. The solution is to raise and secure the filler hose to remove the sag.

I have a 2003 Allegro 35-ft. motorhome with two slides and a V-10 Ford engine. I need manuals on the coach and the Ford engine. Are they available?

My rear furnace works great, but the front furnace leaves the living area cold. We have a 2003 40-ft. Phaeton with three I have located two ducts in the front section and three in the rear. What can I do to get this problem corrected?

> William Jacobs Crescent City, Florida

Dear William,

The furnace has the capacity to support a third duct. The problem is finding a route behind the cabinetry or a sofa to install it. This is a job for a certified RV heating technician at a service center. The coach was designed with two ducts. The manuals for the coach can be ordered from our service center in Red Bay. The chassis and engine manuals should be ordered from Ford Motor Company.

I have a 2006 Allegro Bus and it is the nicest motorhome we have ever owned. The wiper rubber has deteriorated and using a 7-gallon gas can. I have taken the I would like to replace the wiper blade

assemblies that are mounted on a hook arm. The Dyna wiper assemblies have a pivot-looking assembly. I have searched the internet for a replacement, but can't find one exactly like the original equipment. Can you recommend a replacement assembly or do you stock one that you can ship to me?

> Brian Loescher Oceanside, California

Measure the wiper blade and call Tiffin's Parts & Service Center with the length. We should have replacement blades and arms for this model which can ship to vou immediately.

I have a 1992 Allegro. I keep the motorhome plugged into a power supply in my home. In September 2008 hurricane Ike knocked out the power in our town (Pasadena, Texas). We ran the generator for seven days. When the power to our home came back on, I shut the generator down but the motorhome would not switch back over and accept 110v power.

Another owner told me there is a device that has "a set of points that will sometimes stick and not let the electrical system go back to 110v power." Can you help me on this? The only way I can use the motorhome at this time is to run the generator when we are in a park.

> Charles Engle Pasadena, Texas

Dear Charles,

This problem should be isolated to the 110v transfer box where the outside shore power cord and the generator cord come together. On your unit, it is a relay with points that possibly need cleaning. Before you open the box, be sure the 110v power is disconnected and the generator power is off. If that does not work, you may need to purchase a replacement transfer box.

Reader Response

Suggestions for additional features

Just picked up a 2010 Allegro 32BA. Love it! A couple of suggestions: (1) A floorlight in the bedroom would serve as a good night light-similar to the floor entrance light. (2) Equip the coach with water heater and water pump "on" lights. We have owned three previous coaches and all came with these features. Thanks for listening.

> Jerry Gardetta St. George, Utah

Dear Jerry,

Your suggestions are good ones and we will refer them to the Tiffin R&D department.

Is a front-facing window possible?

In looking at the Phaeton and Allegro Bus, we noticed that the front curbside slide-out does not have a front-facing window. This obstructs the view forward through the slide-out which might otherwise allow you to see anyone approaching the coach door. Maybe it is not structurally possible, but having a window there would be nice. A kitchen skylight also seems like a good idea.

Gary & Elizabeth Grandy Thompsons Station, Tennessee Dear Gary & Elizabeth,

On the passenger side, the slide-out is only 18 inches wide, making it difficult for it to accommodate a side window. Plus the hydraulic X-bar mechanism could be seen when the slide-out is not deployed, exposing a rather unsightly mechanism. Because of the number of components already installed on the roof in this area,

it would be difficult to add a feature as large as the skylight.

Something for Tiffin to consider as an aftermarket refit

We are full-timers and own a 2009 Phaeton 40 QSH. I wanted a sunscreen at the end of my awning. Carefree said I could slide it into the existing groove at the end of the awning, but that I would have to remove the sunscreen from the groove each time before bringing in the awning. The 7×20 piece was too bulky to roll up and fit into the Phaeton's protective shell. I asked about installing an Allegro Bus awning assembly with the sunscreen drop-down, but the service center said it was too much reconstruction.

I found a company that makes shades and screens. They had the 7 × 20-foot screen I wanted. They cut a 2-foot strip from the 7-foot depth, seamed it, and attached it in the groove. A 2 × 20 piece will roll up on the existing system and can be left there permanently. Then he installed snaps 16-inches apart on both pieces. When we move, I simply unsnap the 5 × 20-foot piece and store it in the basement. No threading the big piece into the groove is necessary.

> Bob Lampman Eugene, Oregon

Exterior entrance for gravity fill to water tank

I have to take issue with your explanation of TMH's decision to discontinue the gravity water fill outlet on the side of the motorhome. We insisted on that feature when we ordered our coach. The factory refused to do it, but did ship to our dealer a hose and a locking exterior door (which can be found on any trailer). It was easy to install. FYI: it is on the passenger side to the right of the furnace exhaust.

We had almost all of the windows replaced on our 2006 Phaeton due to fogging. Tiffin accepted responsibility for the problem and that sort of leadership is the hallmark of a great company. The people in the service center at Red Bay are wonderful! We have been there twice.

Please tell Ron Emrich that "kitchen stores" sell a heat diffuser which has a bunch of little holes in a metal plate to put under your pan. No more burned rice! Danny, thanks for your column which continues to provide helpful advice to owners.

> Ed & Betty Burns Tampa Bay, Florida

Sewer Odor in Galley Area

I bought a new 2005 Allegro in June 2005. Almost immediately we had a sewer odor under the kitchen sink. The dealer changed the vent on the roof, but that did not solve the problem. Later I found a short vent pipe by the P-trap that had a rubber valve that screwed into this pipe. I took it off and found melted plastic on the rubber flap. This was the reason why it was not venting. Under warranty, I got a new one from the dealer, and I have not had the problem since.

Peter Greendyke Bonita Springs, Florida

LET US HEAR FROM YOU

"Serious Tech Talk" is a very important section of Roughing It Smoothly in which information sharing flows in both directions. Please continue to send your questions to Danny Inman on the enclosed postcard. A separate postcard is enclosed for "From the Road," a fun part of the magazine for readers to share their motorhoming experiences. If you choose to email us at: fredthompson1941@hotmail.com, be sure to put "Roughing It Smoothly" in the subject line of your email. If your communication requires an entire letter, mail it to us at: PO Box 1738, Monroe, GA 30656-1738. Tell us about the interesting places you've been, an unusual experience, a great destination, or just a good place to camp and hang out. Please share. "From the Road" contributors will receive a free tee shirt while supplies last.

—Fred Thompson, editor

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Winter Sun Fills Year's First Allegro Club Rally in Ft. Myers



Jayna James and her mom, Pauleen James, dressed up as Raggedy Ann and Andy for Carnival Day. Cynthia Skinner from the Allegro Club staff masqueraded as the carnival clown. • The Allegro Club visitors toured the Edison and Ford estates in Ft. Myers. The lumber for Edison's post-and-beam home was cut in Maine and assembled in Ft. Myers. Edison paid \$6,700 for the completed home.



by Gail Johnson

If rally coordinator Jimmy Johnson was apprehensive after five inches of rain fell on the grassy camping area at Lee Expo Center in Ft. Myers two days before 150 Tiffin motor homes were expected in for the early spring rally, his worries proved unnecessary. In spite of losing a few spaces to soft ground, the rally attendees were gracious and understanding as Jimmy, his staff of employees and volunteers, and the folks at the Expo Center worked tirelessly to make this rally a success. The rally demonstrated, as we have seen before, that when circumstances occur which are beyond our control; those challenges cause us to work even harder to create an enjoyable and memorable experience for our rally attendees, and that, I believe, was the outcome of this rally!

After a very hectic Monday getting everyone parked and registered, Tuesday proved to be a great day of good meals, interesting seminars, delightful entertainment and socializing. The day began with a hearty breakfast, followed by informative classes and seminars. We heard from Gail Johnson on convection-microwave cooking, David Humphries and Marty Vanderford from Triple H Electronics, Jim Kaskey from SHURflo, Tom Webber with Dealer Support, Tiffin Motorhomes, Mike Pratt with Industrial Finishes, and Harold Kimbrough with Onan Generators and Powerglide Chassis.

Also on Tuesday North Trail RV arrived on site with new models in the Tiffin line for folks to tour. Participants in the scavenger hunt were rounding up final items, and several ladies (and a few gentlemen) enjoyed socializing at the afternoon tea party hosted by Gail.

After a delicious evening meal, the lowed by another extensive line dance class Whitehouse Band entertained us with a great selection of old favorites as rallygoers lingered over coffee and conversation. Some of the more energetic souls actually enjoyed a spin across the dance floor, and our favorite Canadian line dance instructor, Tammy Wyatt, took advantage of some opportunities to encourage practice of some of the steps she had introduced Monday evening after dinner.

On Wednesday, once again the weather presented a threat to the day's activities. As we boarded six buses for off-site excursions, a light rain began to fall. However, that proved to be the extent of precipitation that day, and we had an excellent outing that lasted basically all day. Half of our time was spent at the Babcock Wilderness Adventure, an exciting tour in open-air "swamp buggies" through several ecosystems on this huge working farm located north of Ft. Myers. As our tour guide/ driver expertly guided us through the 90minute tour, we delighted in the beautiful and varied scenery, as well as copious wildlife we were able to observe. Many different birds, including a rare stork, alligators, wild hogs, deer, and a pair of native cougars (in a caged habitat) were observed on the ride, as well as many interesting native plants, shrubs, and flowers. As our vehicle drove right through the water in the swamp, we were able to experience up close views of towering cypress trees, ferns, bromeliads, and other living things in this beautiful setting.

The other half of our tour day consisted of a visit to the riverfront estates of Thomas Edison and Henry Ford. These beautiful summer homes and gardens were full of many original furnishings and appointments, as well as two of Ford's treasured vehicles-an old Model T and a Model A-both in mint condition. Again, we were given a guided tour, which served to impart many little-known facts and tidbits of information about these famous men and their families.

Dinner on Wednesday evening was fol-

by Tammy, with many attendees benefiting from the fun after-dinner workout!

Thursday's agenda included three additional seminars-"Small Steps to a Greener Lifestyle" by Pat Webber, two financial seminars by Richard Parker, and a Freightliner seminar by Scott Lucas.

Following a rousing game of beanbag baseball, a delicious lunch of (appropriately) grilled hamburgers and hotdogs was provided by North Trail. This was our themed event, with many participants dressing for the "Carnival" theme. Musical entertainment was provided by LeDeux. Free time was available in the afternoon and evening to enjoy the area and sample local restaurants, if desired.

Our final day, Friday, dawned clear and beautiful and quickly warmed into the 70's. Several optional activities were available, including line dance class, bingo, ladder ball, lunch, again provided by North

Trail, and entertainment on the patio provided by a great Bluegrass band—the Doerfel Family. The farewell dinner of prime rib with the trimmings was served in the evening, at which time chapters were recognized, game winners were announced, and plans were presented for future events. Special recognition and thanks were given, especially to Tiffin technicians Robert Gober and David Sparks, Allegro Club membership coordinator Cynthia Skinner, Tiffin Dealer Support Representative Tom Webber and wife, Pat, and Allegro Club volunteers Bob and JoAnn Brown, Bruce Stevenson and Tammy Wyatt, Lee and Shelia Geisler, Brian and Leslee Taylor, and Sharon Buckingham. Also noted was the Pelican Allegro Chapter of Lousiana, with 13 coaches in attendance! Goodbyes were said, and resolutions were made to see each other again, somewhere down the road... "Roughing it Smoothly!" RIS

Club members enjoyed a 90-minute swamp buggy tour through the Babcock Ranch and Telegraph Cypress Swamp. The guide provided interesting descriptions of flora and fauna.



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DEALER PROFILE

Continued from page 26

comprehensive warranty. Steve emphasizes the inspection and warranty are offered at no charge or built-in cost to customers.

"We have built a good reputation over the years for Bill Plemmons RV World," Steve noted, "and I think it is because of our great employees who have adopted our Vision Statement and our 'Do the Right Thing' business philosophy."

While Bill Plemmons RV World has received regional and manufacturers' awards every year since 1968, the greatest honor came in 2007 when RVDA selected the company as its 2007 Top Quality Dealer of the Year. The award recognizes RV dealerships that, through their professionalism, promote a positive image of RV travel, RV dealers, and the RV industry at large.

"We are very happy about being selected as a Tiffin dealer," Steve said. "In our first RV show after getting the Tiffin dealership, we were bowled over by the number of Tiffin owners who stopped by to tell us their own personal Tiffin stories." RIS

MUSEUM OF AVIATION AT ROBINS AFB Continued from page 49

Camping and Admissions

Museum of Aviation

Hwy 247 & Russell Parkway Warner Robins, GA 31088

PHONE: 478-926-6870

HOURS: 8 a.m. to 9 p.m. daily except Easter, Thanksgiving, Christmas, and New Year's.

ADMISSION: Free

PARKING: Free, but no overnight camping. DIRECTIONS: South of Macon on I-75, take Exit 142, go east on SR 96 to US 129. Go north on US 129 and follow signs.

TIME FOR VISIT: Allow a full day.

RESTAURANT ON SITE: Victory Café. Good chili, hot dogs, and sandwiches.

RESTAURANTS: For a little nostalgia, try the Perry Hotel in downtown Perry, Georgia.

Campgrounds

We did not stay in a nearby campground. Check Trailer Life and Woodall's listings for Perry and Macon, Georgia

TIFFIN MANAGEMENT TEAM

Continued from page 37

wheels in the front instead of the rear like most three-wheelers. "Jerry had shoulder surgery and this design is much easier for him to drive," she said. It really is an amazing vehicle: automatic transmission, independent front suspension with computer selection for the type of surface you are driving on, power steering, power brakes, navigation, stereo system broadcasting to the helmet receivers, CD player, and bluetooth. When they talk to each other with the helmet mikes, the system automatically interrupts the music to allow the conversation. If a cell phone call comes in through the bluetooth technology, Sylvia can answer the call. Or she can make calls while Jerry continues to concentrate on driving.

"Our dream trip is to take the three-wheeler to Yellowstone and spend time in Colorado on the way," Sylvia said with enthusiasm coming through her smile. "I love Colorado and would love to spend the whole summer there. My sister and her husband went all the way to Montana on their motorcycle and visited Yellowstone, too." With Sylvia's retirement not too far away, they are looking forward to some wonderful trips. RIS

THE MIGHTY EIGHTH

Continued from page 51

PARKING: No charge. Plenty of room for motorhomes, but no overnight camping. DIRECTIONS: Take Exit 102 on I-95 and follow signs.

TIME FOR VISIT: Probably all day.

RESTAURANT ON SITE: The *Crown & Eagle Pub* has very good soups, salads, and sandwiches.

Campgrounds

Savannah Oaks RV Resort

805 Fort Argyle Road, Hwy. 204 Savannah, GA 31419

912-748-4000

100+ campsites, 50-amp, water & sewer. Most sites are unpaved with little separation, but okay for an overnight stay. Approx. \$40/night plus taxes.

BATTLESHIP MEMORIAL PARK

Continued from page 45

plane in U.S. history has remained operational as long as the B-52. Of course, its avionics and overall technology have been updated many times. But its functional design is the same. With the last one rolling off the production line on June 22, 1962, Boeing built 744 B-52s in eight production versions.

With a battleship, a sub, 24 aircraft, and a large collection of ground military equipment, including the Pershing, Sherman, and Patton tanks, we spent an entire day at Battleship Memorial Park.

Camping and Admissions

Battleship Memorial Park

2703 Battleship Parkway E. Spanish Fort (Mobile), AL 36527

PHONE: 251-433-2703

HOURS: 8 a.m. to 6 p.m. Apr-Sept

(4 p.m. Oct-Mar)

ADMISSION: Adults, \$12; children, \$6; AAA and seniors, \$10.

PARKING: All day for \$2. Plenty of room for motorhomes, no overnight camping.

DIRECTIONS: As you approach Mobile Bay on I-10, take exits 27 or 30 and follow signs.

TIME FOR VISIT: Allow at least 3 hours. Probably all day.

RESTAURANT ON SITE: Limited. Plan a picnic or do lunch in your motorhome.

SEAFOOD NEARBY: The Original Oyster House Restaurant, 1175 Battleship Pky (US 90 & 98). Good choices of seafood (fresh and frozen). Approx. \$15-20 for dinner. B+ on price/quality.

Campgrounds

Meaher State Park

5200 Battleship Parkway E.

Spanish Fort, AL 36557

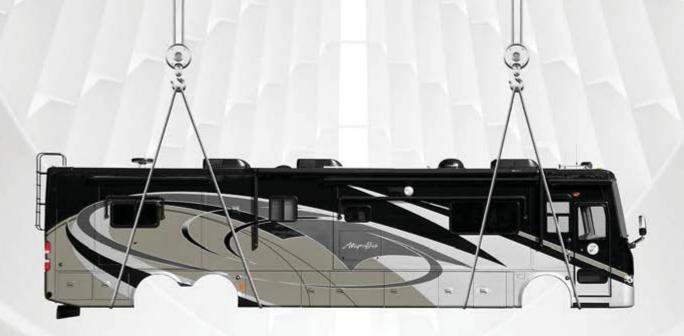
251-626-5529

56 new campsites with 50-amp, water & sewer.

1327-acre park; wetlands with boardwalk trails.

\$30/night plus taxes.

A WORK OF ART DESERVES A PERFECT FRAME.





INTRODUCING THE POWERGLIDE CHASSIS FROM TIFFIN

We figure the best way to guarantee a top-of-the-line chassis, is to build one yourself. So we do. Right here in Red Bay, Alabama. We design, custom-build, and install the chassis with the same quality standards we've used since 1972. The end result is a chassis that delivers superior performance, reliability, and customization. A true thing of beauty.

TIFFINMOTORHOMES.COM/POWERGLIDE



Well Always be There for You.

The road is yours for the taking when you are riding on a Spartan chassis. Go where you want, when you want with confidence.

After all, Spartan will be there. Day or night, that's our commitment to you.



Everything's Riding On It.®

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