

# Midwest Navioneers

2018 Newsletter #1 May

## -Contents-

- ATIS: The Latest Happenings and what you need to know.
- Left Seat: Flying Tips, “Pilot Reports” , and stories.
- Feature: Anything interesting / Relevant.
- Tech Session: Maintenance / Technical information & stories.
- Log Book: A look back at old articles, events, and things of interest.
- Presidents Message: Words and thoughts from the President.
- Fly Market: For Sale, Trade, Wanted, Etc...

### ATIS:

We are currently working on coordinating some flying get-togethers for 2018; if you or someone you know has an idea or suggestion for a fly-in please get in contact so we can get the word out to members!

The logistics of a Pre-Oshkosh event in Burlington are not favorable due to scarcity of lodging in the area as that weekend coincides with a music festival in the area. However if you care to stop in Burlington (KBUU) on your way to the Big Gig, let me know and I’ ll do what I can to accommodate you and share some camaraderie, as well as provide support if necessary.

I recently spoke to several members regarding the nature and frequency of fly-ins and the consensus is to provide a “message board” type of schedule including any and all events that members may be flying their Navions to. While I still feel a weekend long social event is a central part of the Midwest Navioneers, it seems there is a

lot of room and need for ad-hock get-togethers where pilots can meet for a day trip or local event. In my years as a member of the Navion type clubs I can attest, that you can stretch any event as long as you care to, so by no means should these events be viewed as limited, there is always a possibility for interested parties to stretch a day fly-in into an overnight or weekend long stay if they choose.

The Midwest Navioneers website has been updated, including a digital copy of the current newsletter and our membership application. Visit at: [MidwestNavioneers.com](http://MidwestNavioneers.com)

### Left Seat:

Erich Rempert writes:



### “Pilot Report – Navion Aerobatics”

I think this subject has been beat to death and no common ground has been found.

The official position has to be; it's illegal and unadvised. No one can argue these points.

That said, those who DO choose to do "gentleman's aerobatics" (NO ONE I have seen is arguing that the Navion is an acceptable platform for anything beyond that) have proven for many years that the airplane can and does complete those maneuvers as well

as a Navion does everything else (IE the Navions not the "best" at anything, but it's "pretty good" at everything.)

The key point here is; no one is twisting anyone's arm to go out and do a few rolls or loops in their airplane. Likewise, while a dose of forewarning is appropriate, arguing that nothing beyond a 45\* bank should be "attempted" is silly.

While a lot has been made about the fact the Navion "Is not 'CERTIFIED' for aerobatics" what does that really mean? It means it hasn't been proven to meet the requirements of an airplane that IS CERTIFIED for aerobatics. (So what you might think, what's the difference?) Well here's an example, today I was working on a Champion Decathlon, which IS certified for aerobatics, however the airplane was placarded "This aircraft is not certified for aerobatics in its current configuration". Why; because the owner has an all clear one piece door installed that cannot be jettisoned in flight. Now let's do a thought experiment... Can the airplane still safely Loop, Roll, Spin, Hammer Head, Split-S, Etc...? Sure it can. "It" doesn't know the pilot isn't wearing a parachute and doesn't have a jettison-able door, nor does it care. It's aerodynamically the same as it was before. It's the government, "keeping us safe" that dictates you can't do a roll, not the airplane.

The Beechcraft F33C, the "Aerobatic Bonanza", or the Cessna 152 "Aerobat", they are "Certified for Aerobatics"; and you will say "they're all beefed up, and that's why they can do loops and rolls". Well, yes they are beefed up, but not as much as you'd think, (go look at one) and they still have similar limitations to the Utility Category versions. A Navion is "already beefed up" in comparison, (a point I think we all agree upon to one degree or another), but there ARE other considerations, a couple of which I have already touched on; the jettison-able door and the parachute. They also put other limitations on in terms of weight and CG but the lion's share of what the FAA requires for their blessing has more to do with how to get out and how to operate, rather than structural strength.

I'll also point out that the F33C and 152 Aerobat are virtually identical aerodynamically to their Normal Category counterparts.... I'd also be remiss if I didn't point out that the Rockwell 114, Aero Commander 500 Series, Saberliner 60, Piper Aerostar, and Lear 24 all are not certified for aerobatics and yet the FAA has approved ALL of them to perform aerobatics for demonstrations at one point or another. "But they're not Navions" I hear the mysterious voices from the shadows say... True, however Mac McLauflin performed THREE FAA approved AIRSHOWS in a Rangemaster H in the 1970's! There's 8mm video of one of them but has no sound (I've seen it along with Mac narrating in person and it was absolutely stunningly beautiful).

My point here is the airplane is certainly aerodynamically capable of these maneuvers, it has been proven as a fact. Common sense dictates



weight and CG should be scrutinized similarly to what is recommended by Beechcraft, Cessna, and the FAA in the F33C, the 152 Aerobat, and what was waived for the performances of these other non-aerobatic certified airplanes, but otherwise "the airplane doesn't know it's not 'Aerobatic'..." Rather than picking sides and becoming divisive over the topic, we all need to respect both sides, and each consider the other's viewpoint.

I have heard the "age" thing brought up a lot too; a 1700 TT Navion that's 75 years old doesn't know it's 75 years old, it knows it has 1700 hours on it. Corrosion should not be allowed to exist to virtually any extent in any airplane, and if yours has corrosion that makes you fearful of pulling G's, FIX THE CORROSION! (You're FAR more likely to overstress the airplane in weather than in maneuvering flight). Not every T-6, P-51, T-34, T-28, F33C, etc has been "rebuilt from the ground up with all new parts" and yet many are as old as or older than our Navions and still out getting sunshine on their bottoms... Using the same mindset as one would approach a Curtiss Jenny is unwarranted. Making sure your airplane is 100% structurally is something we ALL should be striving to do (that's what you're paying for when you get an annual). If you really feel your airplane might come apart during a roll, I don't see how you can confidently fly in turbulence. Install a G meter; you'll be surprised what your airplane sees on a regular basis on a bumpy day.

Lastly, I posted a video of a guy in South America doing aerobatics in his Navion with 3 souls aboard (foolish) to show "what 'others' can & have done". It's by no means a recommendation or meant to be "proof it's OK". I think back seat passengers are a bad idea (but I don't necessarily agree the plane was "overloaded" {first time any Navion owner has claimed a Navion was overloaded BTW}) and there was a low pass that was pretty low. I do know the video was taken during a "performance" for a fly in. There is another video of the same airplane and another Navion (which had one of its main gear hanging the entire time) from the ground on another flight doing a bunch of cringe-worthy low passes at the same event. This to me points to less than perfect judgment, but also bolsters the argument that you "Don't" need to be "Bob Hoover" to roll a Navion....

Just the view from my hangar-

*-Erich Rempert, Navion D*

P.S. Many Canopy Navions have the canopy handle on the floor which would likely cause the canopy to come off the airplane in flight if pulled briskly and far enough, as well as bucket seats which were intended to accommodate parachutes... -Just sayin'... (I hope this post brings some closure to the topic, but I think there will be a couple out there who will choose to debate this article as well. To them I say; to each their own- Personally I don't, and have never felt the need to try any aerobatics in MY Navion.)

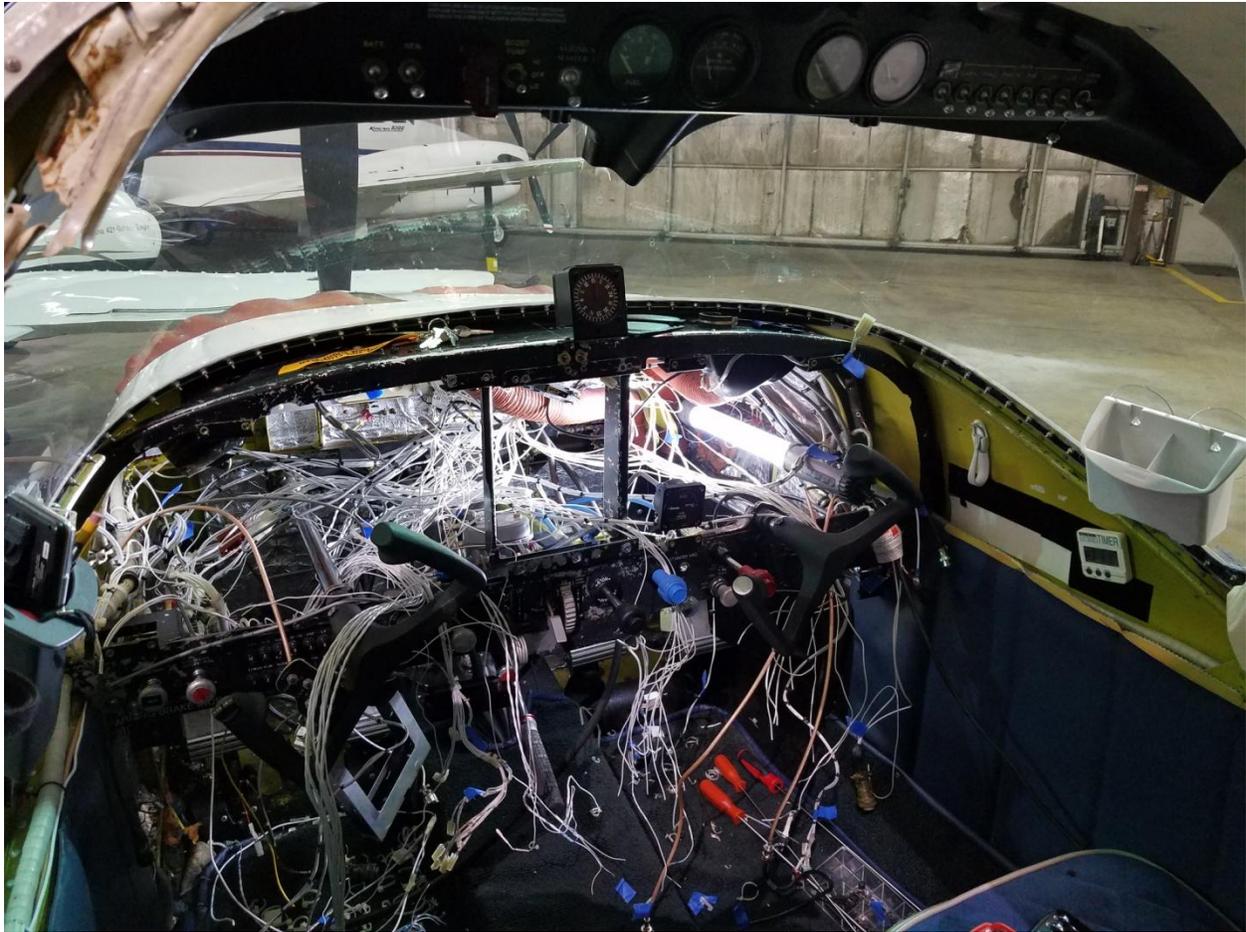
## Feature:

Erich Rempert writes:

“Spring seems to be “Navion Annual Season” all across the country!”



This spring has brought 3 Navions to my shop in Burlington, WI for modification, repair, and maintenance! A Rangemaster G, for many upgrades including a new instrument panel, fuel tank sending units, overhead panel, avionics including ADS-B, engine monitor, back up alternator system, and LED lighting including landing gear leg mounted landing lights. A Rangemaster G-1 for flush fuel cap, shoulder harnesses, GAMI fuel injectors, nose gear retraction tuning, interconnect cable rigging, and annual. And a Navion A for annual and general maintenance including nose gear overhaul and canopy refurbishment.



Having 3 distinctive Navions in one shop at one time is an attention getter for Navion lovers and the average pilots alike. It has been a honor to have the opportunity to work on and improve our Midwest Navion Fleet! Installation of the shoulder harness gussets and inertia-reels was performed in less than half the estimated time quoted by Sierra Hotel, and the fuel cap was done in less than a day. If you have a Rangemaster without shoulder harnesses, I strongly recommend the installation of them. You will need to modify your headliner, so be prepared for that can of worms! There have arisen many options for LED lighting replacements on GA aircraft recently, and I can attest you get what you pay for... The Aero LED replacement lights are by far the best performing in my opinion, but also at the higher end of the price range.

When it comes to annuals, weather if you are working with a mechanic, doing it yourself, or handing over the books, there are a few publications I feel are “MUST HAVE” items.

- Navion Service Manual for your airplane. There is a version for the Rangemaster I recommend for all D,E,F,G, & H airplanes.
- Navion Parts Catalog. Make sure you have a catalog that is applicable to your airplane.
- Navion Structural Repair Manual. The Navion is an animal unlike the average Brand-X, and making proper repairs is critical. The Navion is Stressed Skin in design, and AC43.13 does not satisfy the requirements for strength necessary for the Navion.
- Ron Judy’ s collection of Tech articles. I’ d like to put this as item #1, but decorum prohibits it. This book is worth its weight, if you don’ t have one, get one.
- L-17 Erection Manual. This publication was written to guide GI’ s on how to build up an L-17 delivered in a crate in Korea. You can imagine its worth.
- Navion Special Instructions from ANS. This is a gathering of historical publications regarding the Navion from when the factories were active. The Letters, Instructions, and Bulletins cover many topics, and having the book may have exactly what you need. (Like installing gear leg mounted landing lights).
- Navion Annual Inspection Checklist. This is subjective to some degree, there are many in existence, our friends in SNAG have some great ones, I hear the will barter for good whiskey-

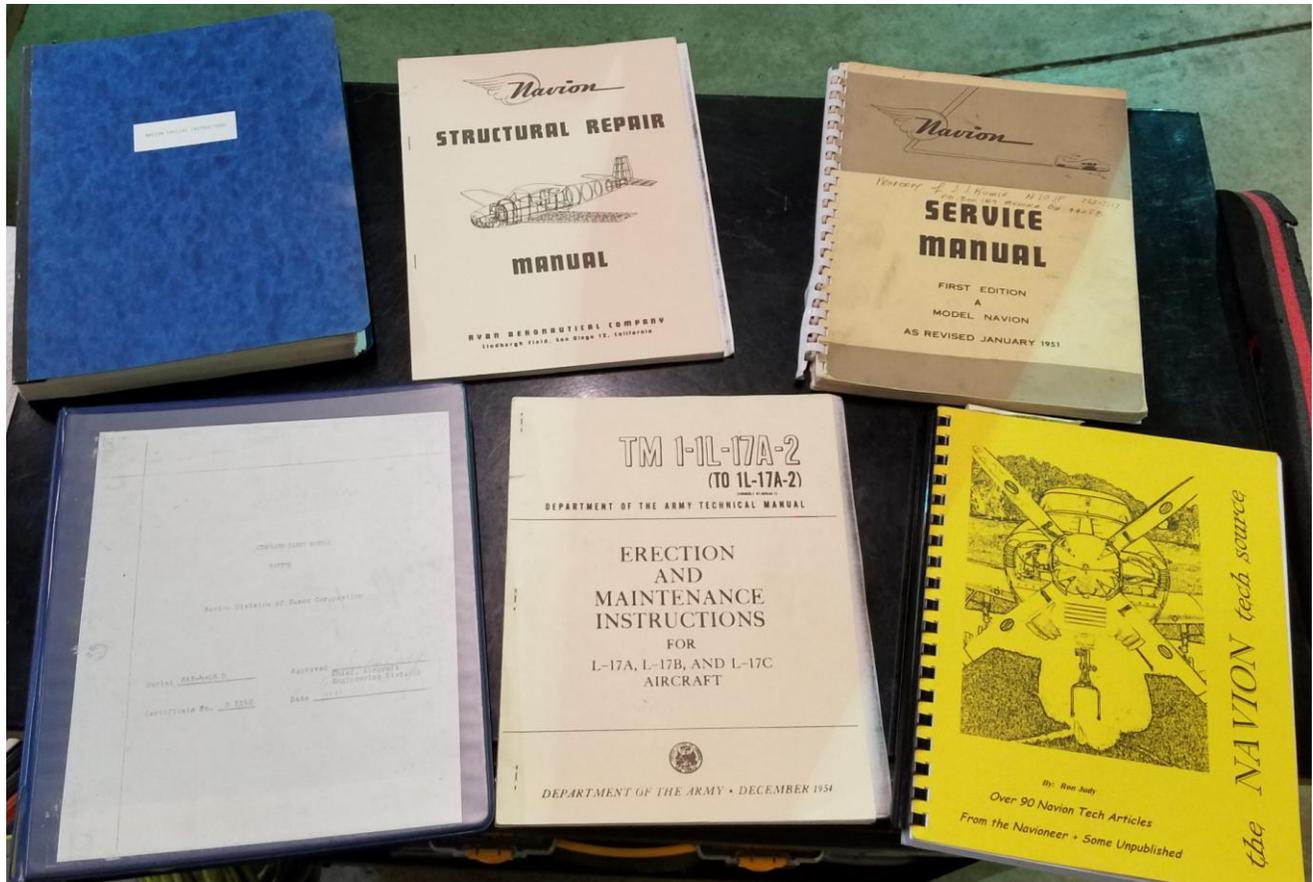




Airworthiness Directives should be reviewed each annual of course, and of the recurring AD' s on the Navion airframe none are invasive or expensive (unless you are opting to pressure test your fuel selector valve instead or replacing it.)

There is one AD that has a terminating action and a relatively early issue date that can be overlooked by most mechanics; **AD 52-26-01** which pertains to cracks in the horizontal stabilizer forward attach fitting and forward spar gussets. In my view this AD should be considered recurring for EVERY Navion regardless of production date or previous compliance. My uncle lost his live in a V35B Bonanza because the tail failed, and if left to fester, the cracks that can develop that this AD pertains to can cause the same type of failure of the tail structure resulting in a fatal accident.

It takes about a half hour to accomplish, and the peace of mind is priceless. It' s worth noting: the cracks generally appear when the horizontal stabilizer is mishandled with loads applied during ground handling; "Operating Tips for Better Navion Flying" suggests pulling the tail down and rotating the aircraft via the tail skid and VERTICAL stabilizer rather than the HORIZONTAL stabilizer.



Other things to consider: when it comes to parts I recommend:

- Chuck at the American Navion Society **970. 835. 5096**
- Jeff Bontz at Classic Aero **402. 694. 0171**
- Carrol at DeLuca (Tom' s wife, must Have Part Numbers or Item Numbers) **951. 849. 7594**
- Ryan Douthitt at Navion Customs **909. 597. 5360**
- Sierra Hotel Aero **651. 306. 1456**

And of course you can call me, your Midwest Navioneers President; Erich Rempert **815. 679. 8209**

*-Erich Rempert, Navion D*

## Tech Session:

Heath Flemming Writes:

### “Landing Gear Strut Re-Seal Tips”

I did my first strut re-seal last year. I found the service manual and the parts manual to be great resources. Here's the blanks that may not necessarily be filled in by those two resources:

#### Consumables:

- Go ahead and buy a big ol' can of hydraulic fluid from spruce. You'll use quite a bit.
  
- Skip the leather packing rings and get yourself some of the Teflon scraper rings. The leather rings were a AN spec part, a cross reference will take you to a split Teflon scraper.
  
- Buy about 50% more scrapers and O rings than required, just in case.
  
- Don't forget new Schrader valves and crush gaskets for the valve stems, buy extra of those too.
- Get new hardware for the stuff you take apart (scissor, washer & stop nut on extension rod, etc)
- Cotter pins (unless you want to do all this with the wheel on too...)
  
- Parker O-lube

#### Tools:

- Jacks that you can trust and lock in place. It will take a full day if it's your first time, you have all the parts & tools, and nothing goes askew, and your strut is good and shiny.... how often does that happen?
  
- Nitrogen bottle with a high pressure regulator. Probably a couple on your field but make sure you can have access to it when you do the work and a few days after when you check your work.

### Prep:

-Wear clothes you never want to see again. They will end up covered in 5606 and smelling like it.

-Big drip pan, maybe a drop cloth under that.

### Execution:

-Service manual has the step by step.

-I disconnected my brake lines and put plugs in. In retrospect, I'd have just taken apart the brakes and wired them up and out of the way... It gave me an opportunity to bleed my brake lines... (I've got Cleveland's and squirting from the bleeder is the way to go here)

-You might be able to save a little bit of the mess by removing the Schrader valve, putting a tube on the valve stem and working the strut up/down but that would deprive you of the fun of the 5606 bath. That's up to you.

-Jack it until the tires clear. It's not too terribly tough to push the over-center link up and pull the gear inboard to let you work on it. Swinging it inboard and putting a jack stand on it was helpful (I don't have gear doors though)

-Leather of indeterminate age that has been living in hydraulic fluid becomes stiff and cantankerous. Make sure you get it all out of the housing. Even that "extra" one that the previous owner left for you.

-When you're putting it back together, lube up your o-ring and experiment with the overlap on the split Teflon scrapers so you have a mental picture of how they need to go in. I recall that what worked best for me was putting the scrapers in and then working the o-ring between the two. Inspect it with a light and mirror to make sure it looks good.

-Use new hardware everywhere you took it off. As you re-assemble the extension rod, make sure you put a new stopper on there and you have a ruler on hand to ensure the proper 7.0" extension.

-Torque spec on the valve stem is somewhere between "Really?" and "Holy Cow!" and this is where I experienced my leaks. Based on my tools, the fitting and the location I couldn't get a torque wrench on there but through trial, error, and leaking nitrogen I ended up putting a full arm into it on a 10" wrench.

-Go slow while adding the N2. There's no pressure given and my regulator didn't have a gauge... Put a little in, wiggle the wings, see where it sits, and repeat.

-Make sure you swing the gear when you're done; it's much better to discover anything you've gooned up while on jacks than in the air.

### **Tips:**

-Watch it for the next few days/weeks. I had problems with leaks at the valve stem. (This is also why it's nice to have a buddy with a bottle you can hold onto for a little while). This required more torque and once I got it to "Are you sure this is a good idea" my leaks stopped and I've done nothing other than look at them with pride and occasionally wipe them down with clean hyd fluid since.

Reference the "servicing the shock struts" discussion on page 5 of the service manual as well as the jacking discussion in the service manual and the expanded parts diagram on 44 of the parts manual. Dig through that diagram and build the mental picture. Grab your SAE wrenches and your creeper and you're off.

It's a might adventurous the first time through. If you're uncomfortable working without a Chilton's manual type script, might want to have an A&P buddy walk you through the first one. (And of course have them check in on you before signing it off) But if you've got all your consumables lined up before you get under the wing and there's no corrosion on your strut when you pull it out, it's a pretty easy job.

The November 1984 issue of "The Navioneer" gives all the details of rebuilding the nose gear.

*-Heath Flemming*

*Editor's Note: Contact me if you would like a PDF of the Nov. '84 issue of "The Navioneer"*

Log Book:



# AIR world

*combined with Aircraft-Age*

JULY  
1946

20¢  
35¢ in Canada

In This Issue  
**WINNERS**  
of  
**\$1500.00**  
PRIVATE PLANE  
CONTEST

**THE FUTURE OF THE  
A. A. F.**  
By  
General Carl Spantz

**ADVICE TO VETERANS**  
By  
Capt. Eddie Rickenbacher

## Presidents Message:

Erich Rempert Writes:

This last winter has been a very busy time for Sue and I. I planned to get paper copies of the previous newsletter out in the mail and failed to do so.

Every week that passed I felt worse and worse for not living up to my own expectations. That said I did get a good newsletter out via the website, email, and Facebook. I got a dozen or so Questionnaire's returned and only one asked for a print version of the newsletter. While I would still very much like to produce a version you can hold in your hand, I feel timeliness is more important than longevity for the time being. I have physical copies of the newsletters and digital files that can be added to the archive in the future for enjoyment in years to come.

I have talked with a few members regarding fly-ins and activities, as well as the purpose of the Midwest Navioneers as a Chapter. I sense there is a strong need for technical information and flying tips to be passed down from one generation to the next. I can do this to some degree, but I call on ALL of YOU "charter member" types in our ranks to write ONE piece (or more if you like) to contribute to the newsletter. (I'm not sure how enjoyable a newsletter written solely by me will be beyond a few issues)

Ron Judy was a Godsend to the Navion community, I grew up listening to the hangar talk at fly-ins and that's how I "learned Navions". WE need to pass this information and these stories on to the younger and newer owners.



If you have a story about; “That time… Whatever” we want to hear it! If you have tech information, you can share, we want to hear it! (If you want to withhold details I can do that as well!) The point is, WE are the Midwest Navioneers, the collective knowledge is why people are members, it’s why they join, and it’s why they come to fly-ins. We need the newer members to come to breathe life into our club, and we need the old members to come to impart the knowledge.

Aviation is a small world, and Navions are a small part of the aviation universe. I recently met a pair of guys looking at an Aerostar for sale on my airport, and they were from Titusville, FL. Turns out they knew “Blackie”, many of you may remember him, I barley do. When I started coming to fly-ins in the late ‘80’ s there were many more people with Navion experience to draw from, now their numbers dwindle. I ask you all, PLEASE contribute, PLEASE come meet the new owners, PLEASE tell your stories, and share your old pictures… Sharing a few words about Blackie brought back so many memories, and reminded me how important it is to have face to face interaction with the people in our orginazation.



One thing I am sobered to find is the amount of enthusiasm for participation in our club is very limited. We all want to change that, many of you have done your part many times over. But we need to provide a desirable product to new owners to carry on, and continue our legacy. WE are that product.



Additionally, I STRONGLY urge you all to like the Midwest Navioneers Facebook page, I hope this page can be utilized as a message board to post events members will be flying to or attending. It doesn' t need to be a "Navion Fly-in" to be a Navion Fly-in. If there are 2 or 3 Navions in a group, I' d call that a Fly-in or at least a gathering. Owners and pilots seek comparison and contact with other Navion owners, pilots, and their airplanes. If that' s at a local pancake breakfast, or lunch fly-out, so be it. If we can organize a lunch trip of 4 Navions on a Saturday in the Milwaukee area, that would be amazing in my book.

I really want to make time for a weekend fly-in for the Midwest group (A Mini-National call it) with social events, points of interest, and flying activities as we have historically done, but I think our current group can make time for one of these a year at this point, next year may differ, I hope so. To fill the gaps, I hope people can use the Facebook page or contact me to put out an email to all members for upcoming local events that are not Navion specific, but where several Navions are hoping to attend.

I am open to suggestions, please get in touch with your thoughts, but remember this is YOUR club, and it is what WE as a group, make it.

You can contact us at:

**Midwest Navioneers**

**Erich/Sue Rempert**

**3241 Lockwood Blvd.**

**Lake Geneva, WI 53147**

**815.679.8209**

**[N7OER@yahoo.com](mailto:N7OER@yahoo.com)**

(E-mail is preferred and will likely get the best response)

Stay tuned for more information as things develop, I hope to see many of you (and your Navions!) in the coming year-

*-Erich, Navion D*





## Membership Application/Renewal/2018 Dues

To renew your current membership or sign up for a new membership in the Midwest Navioneers chapter of the American Navion Society:

1. Print out this form,
2. Fill it in,
3. Mail it with your annual payment of \$15 in a check made out to Midwest Navioneers.

Mail to:

Midwest Navioneers  
c/o Dick Bihler  
3669 Willow Beach St. SW  
Prior Lake MN 55372

If you need help or have questions, please contact the Membership Coordinator at (612) 749-7323 or [rbihler@integra.net](mailto:rbihler@integra.net) or email [navioneers@aol.com](mailto:navioneers@aol.com). Also, be sure to check out our Facebook page (Go to [Facebook.com](https://www.facebook.com), search for Midwest Navioneers) or visit our website at [midwestnavioneers.com](http://midwestnavioneers.com).

I'm renewing my existing membership

I'm a new member

Full Name \_\_\_\_\_ Spouse \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_ Zip \_\_\_\_\_

Home phone \_\_\_\_\_ Cell phone \_\_\_\_\_

Email address \_\_\_\_\_ Spouse email \_\_\_\_\_

Aircraft data

N# \_\_\_\_\_ Model \_\_\_\_\_ Year \_\_\_\_\_

How would you like to receive communications/newsletters, etc.?

e-mail     postal mail

**Dues are \$15 per year. Thanks for your interest in Midwest Navioneers!**

## Fly Market:

For Sale: N2401T Rangemaster G-1. IO-470-H, McCauley 2 blade prop, appx 1,350 TTSN Airframe and Engine. \$29,000 Contact **Erich 815.679.8209** call or text



Wanted: Rangemaster vertical stab, rudder, and fin cap. Possible trade for Navion A/B stab, rudder, and fin cap with rotating beacon. Contact **Erich 815.679.8209**



For Sale: E-Series / Neo-Air "Lot", new old stock air filter, bird guards. Best Offer. Contact **Erich 815.679.8209** call or text



Wanted: YOUR Ads! Free advertizing to the membership, send me your desired ad, (I' d prefer to keep them short as suggested by the examples above) \*All ads are subject to approval, and will only run for one issue unless renewed.

# Questionnaire

Please complete the following and return so we can adapt our Club to better suit our member' s needs and help support Navions and Navion Enthusiasts everywhere!

1. Are you a: Current Pilot, Non-Current Pilot, or Enthusiast?
2. Are you a: Current, Past, or Future Navion owner? (Please circle)
3. Tell us about your Navion(s); Year, Make, Model, Engine, Length of Ownership, anything else you wish to share:
4. When was the last Navion Fly-in you attended?
5. Do you have any interest in attending an up-coming Midwest Navioneer or any other Navion Club' s Fly-ins in 2018? Which ones, and why or why not?
6. How would you prefer to receive our newsletter; Hard Copy by mail, Email, via the Website, or on Facebook. (circle all you wish to receive)

7. Do you feel Technical Articles should appear regularly in the newsletter? Would this add value to the newsletter for you?
8. Do you feel Members should be able to post ads in the newsletter for items sought or offered? Would this add value to the newsletter for you?
9. Is there any means by which you' d be willing to contribute to the club like; submitting photographs, articles, stories, technical information, or by taking on organizational responsibilities in the future?
10. Please give us your feedback and suggestions on what YOU want the Midwest Navioneers to DO, and to BE.

Please fill out and return to the President::

**Erich Rempert**  
3241 Lockwood Blvd.  
Lake Geneva, WI 53147