June 2017

Waterline

LAFAYETTE
Sailing Club

Inside this issue

Summer has finally arrived!

It's summer and sailing is upon us! Wednesday Navy, Moonlight Sails, races and regattas. Lots of things in this newsletter. We have a new ships store with LSC logoed apparel. The 2017 summer schedule of events, the burning of the socks, how weather radar works, trivia questions and other items. So its time to get your boat out on the water!

Lafayette Sailing Club
located on Lake Freeman, Indiana

LAFAYETTE
Sailing Club

Commodores Message

Donna Keller

Ahoy Fellow Sailors!

Spring is here and we are enjoying longer days and cool weather. Don't give up hope-summer is right around the corner. LSC events are in full swing with moon-light sails and picnics, racing, and cruising.

Racing starts on May 13th and is a great way to learn to become a better sailor. Plan on coming out and racing with us this sum-mer.

Two cruises have been completed. Randy and Lewie enjoyed Lake Carlisle while David and I, Steve Titolo and Tom Eismin enjoyed Lake Monroe.

Sailing school starts May 17th so invite your friends and col-leagues to come out and learn about sailing.

Come sail on Wednesday with us and earn a Wednesday Navy Sailing burgee. The lake is generally less crowded on Wednes-days so sailing is very peaceful and a nice way to relax.

We have a new way to order club merchandise so if you are wanting a new shirt, bag, etc. just click on the link below and order what you want.

https://www.coralreefsailing.com/index.php/club/lafayette-sailing-club.html.

Looking forward to a warm summer with great winds for sail-ing. See you all soon.

Commodore Donna Keller

LAFAYETTE
Sailing Club

Membership Highlights

Membership in the Lafayette Sailing club is open to anyone. Membership applications can be downloaded from the club website at www.lafayettesailingclub.com.

New applicants must obtain the signatures of two active members as sponsors before submitting an application. One way to obtain the required signatures is to visit the LSC Harbor at Lake Freeman on a weekend during a scheduled activity, e.g. races, etc..

All memberships are family memberships. There are three levels of membership with different costs and privileges. There is also a new member price at each level for a families first year of membership. All memberships include the use of club sailboats, as well as attendance at all LSC activities.

Membership with voting rights, harbor launch privileges and (1) boat storage—$285/$225 (first year)

Membership with voting rights, but no harbor launch privileges or boat storage—$245/$185 (first year)

Membership with no voting rights, harbor launch privileges or boat storage—$75/$55 (first year)

Additional boat storage for any class of member is $85/year/boat.

Board of Governors

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Commodore-Donna Keller

Vice-Commodore—Sam Guffey

Recording Secretary—Carl Hagar

Treasury Secretary—David Klenosky

Directors

Membership —Rex Henthorn

Club Fleet —Jacob Bleier

Publicity —Kirk Gilbert

Race —Steve Titolo

Sailing School—Michael Nolan

Grounds—Ron Reehling

Website—Deac Karns

Ships Store—Barbara Nolan

Social—(currently open)

Cruising-Kirk Gilbert

Newsletter—Michael Nolan

Members at Large

Voting Member—Eric Mortensen

Voting Member—Brendan Morreale

Burning of the Socks!-History.

(excerpted from the *Wall Street Journal*)

Boating Season Is Here and You Know What That Means: Time to Light Your Socks on Fire. In a growing ritual, sailors across the country gather each spring to peel off their no-longer-necessary winter socks and set them ablaze—all while drinking and reciting poetry; expanding to jeans, panty hose and bras.

ANNAPOLIS Md.—The ritual began one Saturday last month with the introduction of Gov. Larry Hogan or, for this day's purposes, the "chief sock-burner of the State of Maryland." "I'm honored," he replied, then joined the mob of sailing enthusiasts heading for the beach near the Annapolis Maritime Museum on the Chesapeake Bay.

First, poetry was read:

"Goodbye to winter, Only deck shoes we wear! For the socks we are burning, Leave a stink in the air!"

Gov. Hogan threw the first offering, a worn-out pair of athletic hosiery that kicked up a shower of sparks as it plopped into the flames of a crackling fire on the beach. Onlookers cheered. Soon other doomed textiles soared in over people's heads—red socks, argyle socks, black socks, grimy-greyish socks. "Let's face it," Steve Schuh, a local-county executive, told the crowd before the ritual began, "you people just hate socks."

Indeed, many sailors and boatyard workers consider socks annoying wintertime wear. They prefer to spend warmer months bare-toed inside their deck shoes. So at marinas and yacht clubs around the U.S. in the springtime, increasingly, they get together to immolate them. And read poetry and drink and try not to burn themselves, then avoid wearing socks until it gets cold again.

In Georgetown, S.C., sailors celebrate "Burn Your Socks for the Equinox" around a fire pit, reciting sock-burning verse. At Lake Texoma, on the Texas-Oklahoma state line, they incinerate stockings and switch to flip-flops.

Williamsburg, Va., kicks off canoe season by burning socks before a paddle trip down Taskinas Creek and York River. "I'm not sure I would describe it as sacred," said Corrina Ferguson, a representative for the event. "But we love any event that celebrates spring."

Ms. Ferguson said she believed the tradition dated back 100 years to the U.S. Naval Academy in Annapolis. The keeper of the Annapolis fire had his own exotic theory. Brian DeGraw, who has tended sock-burnings for years, once figured the practice must date to some ancient ritual—perhaps a Viking sacrifice to the gods on the first spring day, he imagined, in which Norsemen lobbed woolen socks into flames and drank mead. A Naval Academy historian said the tradition started in Annapolis, but not at the academy. Mr. DeGraw was "sorely disappointed," he said, when he finally found out the rite most certainly harked back only several decades, not to ancient peoples.

It got its start, it appears, in 1978. Annapolis Harbor Boat Yard's then-owner, Bob Turner, had survived a long winter shaving aluminum for boats, which got helical shards in his socks. "Even talking about it 40 years later, I still wince," he said. One day that spring, he procured a 12-pack of Budweiser longnecks and invited employees. "I'm burning my socks," he told them. "It's time to move on and go sailing." He tossed his into a paint tray, soaked them in flammable adhesive remover and lighted them. Passersby stopped and donated socks in exchange for beer.

He did it again the next year, and more gathered with their own sacrifices. One year, after the event moved to a local yacht club, he said, a package arrived from Cambodia with old socks and a note asking to burn them. Over the years, the ritual spread along the Coast and the Gulf, and to the Great Lakes and West Coast. "It's a celebration," said Roger Herrick, vice commodore of the Skidaway Island Boating Club in Savannah, Ga. "We take off our socks and get ready for summer."

Robin and Lance Van Auken host a burning in Williamsport, Pa., on a cliff overlooking the Susquehanna River. "We're wannabes who relocated to Pennsylvania 20 years ago from Florida." said Mrs. Van Auken. This year, a snowstorm killed their sock party when it buried the fire pit. Mr. Turner moved to Georgetown, S.C., in 2010 and performed the ritual in his backyard, drawing curious neighbors. Then he read of the South Carolina Maritime Museum's sock burning and requested to be invited the next year. They asked how he knew of the tradition. "I started it," he told them, and he was in.

His rite dwindled in Annapolis for some years, he said. It rekindled in several local events, including the Annual Oyster Roast & Sock Burning, which Gov. Hogan attended. This year, it was a catered affair with live music that drew 1,110, who dined on gourmet oyster dishes and sipped top-shelf rum and craft beer. Gov. Hogan attended the third year in a row. He wore no socks in his deck shoes. A woman with socks affixed to her jacket circled the fire. A man carrying a bag reading "sock widows" handed out old lone socks to people who had none.

Mr. DeGraw, who digs the fire pit each year, said his primary job is keeping well-lubricated celebrants from setting themselves on fire. "I use this," he said, gesturing to an 8-foot teak dowel salvaged from a boatyard he uses to tap people's feet when they get too close. It doubles as a staff to stir socks into the fire. Socks aren't aerodynamic, so best throw them balled up, advises Mr. DeGraw, a captain and sailing instructor who lived on his sailboat in Annapolis for 12 years and now lives on his boat in Baltimore. One year, he erred by dousing the coals afterward. "That was a mistake—billowing clouds of sock-burning steam."

Some landlubbers toss in synthetic-fleece socks, which "turn into a stinky plastic ball," said Molly Winans, editor of SpinSheet, a local sailing magazine. "Wool and cotton are better." Illicit sacrifices sometimes sail into the flames, including jeans, underwear, pantyhose and bras at past events. Mr. Turner disapproves of non-sock offerings. "I'm happy to see it embraced all over as a spring ritual," he said, "but that's not really in the spirit of it." "**You have to embrace the maritime history of it all. It's really all about getting rid of those socks because it's time to put your deck shoes on.**"

Burning of the Socks—Lafayette Sailing Club

A similar tradition was begun this year at the spring harbor cleanup. Commodore Donna Keller penned a poem and led the LSC "burning of the socks".

Them Lafayette sailors got an odd tradition
When it comes to Harbor Appreciation,
They build a little fire down along the docks,
They doff their shoes and they burn their winter socks.

Yes, they burn their socks at the Equinox;
You might think that's peculiar, but I think it's not,
See, they're the same socks they put on last fall,
And they never took 'em off to wash 'em, not at all . . .

So they burn their socks at the Equinox
In a little ol' fire burning nice and hot.
Some think incineration is the only solution,
'Cause washin' 'em contributes to the Lake Freeman's pollution.

Through the spring and the summer and into the fall,
They go around not wearin' any socks at all,
Just stinky bare feet stuck in old deck shoes,
Whether out on the water or sippin' on a brew.

So if you sail into the Harbor on the Harbor Appreciation,
And you smell a smell like Limburger sautéed with laundry hydration,
You'll know you're downwind of the LSC docks
Where they're burning their socks for the Equinox.

(
Original by Jefferson Holland, Poet Laureate of Eastport, 1995.
Commodore Donna Keller, LAFAYETTE SAILING CLUB VERSION, 2017)

A few recommendations for those of you planning to participate next year.

- Hold the sock burning while it is still light out, just after work, and end it before dark.
- A small modest fire made from driftwood on a rocky little beach is ideal. A bucket or wheelbarrow works as a portable fire pit in a pinch.
- Bring your dog. The more wet dogs to mess up the ceremony and annoy anyone who expected a fancier party, the more authentic the experience.
- Drink beer, pulled right out of a six pack. You won't be around long enough to need a cooler.
- Remember, the tradition marks spring, which is a busy time in the maritime industry. No time for hangovers.
- Have someone say a few words about spring or sailing... or not. One by one, drop your socks into the fire in a slow, orderly procession until all of your ankles are cold. Then go home.
- No need to wear socks again until October after boat show.

2017 Racing Schedule

Day	Date	Time	Type
Saturday	13-May	12:00	Series Races (3)
Saturday	20-May	12:00	Series Races (3)
Sunday	4-Jun	1:00	Long Distance Races (2)
Saturday	10-Jun	12:00	**Regatta** and Series Races (3)
Sunday	11-Jun	1:00	**Regatta** and Series Races (2)
Saturday	17-Jun	12:00	Series Races (2)
Saturday	24-Jun	12:00	Series Races (3)
Sunday	23-Jul	1:00	Series Races (2)
Saturday	5-Aug	12:00	Series Races (3)
Saturday	12-Aug	12:00	**Regatta** and Series Races (3)
Sunday	13-Aug	1:00	**Regatta** and Series Races (2)
Saturday	19-Aug	12:00	Series Races (2)
Saturday	26-Aug	12:00	Long Distance Series Races (2)
Saturday	9-Sep	12:00	Series Races (3)
Saturday	16-Sep	12:00	Series Races (2)
Saturday	23-Sep	12:00	Series Races (3)
Saturday	30-Sep	12:00	Series Races (2)
Saturday	14-Oct	12:00	Series Races (3)

Trivia Questions—Test your knowledge

Do you know the origin of these sailing expressions?

1. Above Board
2. As the Crow Flies
3. Bitter End
4. Fits the Bill
5. Footloose

(Answers are on page 18. No peeking!)

LAFAYETTE
Sailing Club

Club Get-togethers and Communication!

Join us on the following dates (after the races) to sail and socialize!

- Sunday, June 11, 5:30 PAST COMMODORE'S COCKTAIL PARTY
- Sunday, August 13, 5:30 BOARD OF GOVERNERS PICNIC

There are two ways club members can communicate with each other via smartphone/computer.

GroupMe is a smartphone/computer app that the racers use to communicate with each other on short notice. If we decide to cancel, delay or postpone a scheduled race we will communicate that via a GroupMe text message.

If you wish to be added to our GroupMe message board, email mnolan@purdue.edu and provide your primary cell-phone number.

GoSailing is a mobile phone app provide by the American Sailing Association for free. It can be downloaded at www.gosailingapp.com. This app connects captains with those looking for crew and vice versa. It is a nationwide app that you can use to post a need for crew and/or if you want to crew for someone else.

You can also use this app to find events offered by various sailing clubs. LSC is a registered club, and a couple of our events are already online. The app is free and useful! Download it now and give it a try!

New ships stores-club logo apparel available!

LSC has partnered with Coral Reef Sailing to produce LSC logoed apparel and other items. The apparel is high quality and includes the LSC logo and name on each item. Two more lines of custom text can be added to most items if you wish. LSC receives a small percentage of each sale, so your purchases help out the club! LSC has been added to the SHIPS STORES link on Coral Reefs ships stores page, but you can directly access our page at https://www.coralreefsailing.com/index.php/club/lafayette-sailing-club.html.

There are only about 20 items shown on the page, but almost ANYTHING in the catalog can have the LSC logo added to it.

Cotton Hat (Lafayette Sailing Club)

$22.00

Unisex Mesh Polo (Lafayette Sailing Club)

$32.00

Men's Short Sleeve Tech Shirt (Lafayette Sailing Club)

$32.00

Men's Long Sleeve Tech Shirt (Lafayette Sailing Club)

$35.00

S/S Adult Cotton Tee (Lafayette Sailing Club)

$22.00

Columbia Women's Benton Springs (Lafayette Sailing Club)

$62.00

Columbia Men's Steens Mountain Fleece (Lafayette Sailing Club)

$60.00

Unisex Hooded Rugby Pullover (Lafayette Sailing Club)

$58.00

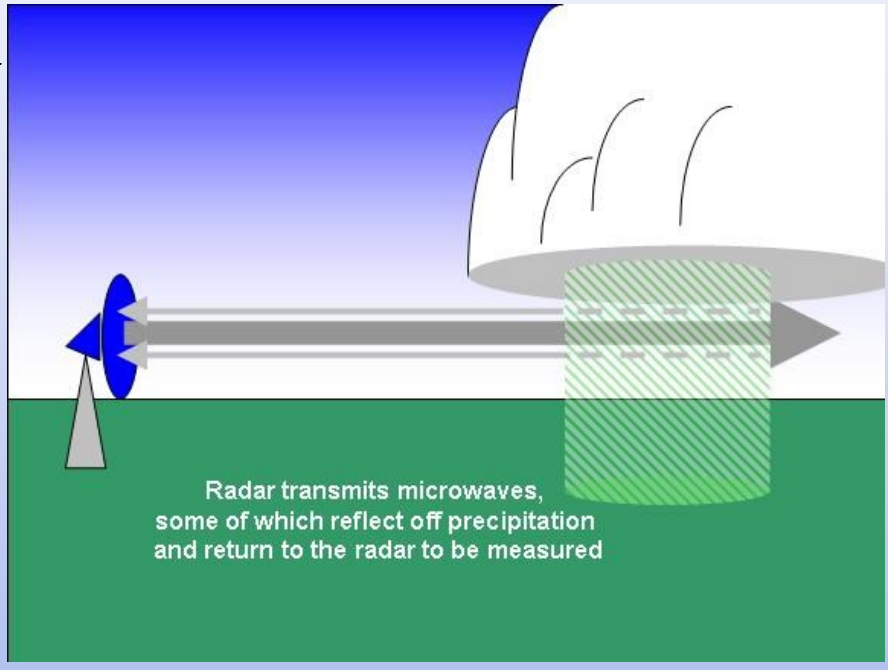
Weather Radar

How it works and how you can use it.

We use weather radar a lot as sailors. The national network of weather radars is operated by the National Weather Service, a service of the National Oceanic and Atmospheric Administration. Regardless of how you view these images, they all originate from these federally funded radars called WSR-88Ds.

The basics of radar is that a beam of energy, (radio waves), is emitted from an antenna. As they strike objects in the atmosphere (such as rain or snow, but NOT clouds), the energy is scattered in all directions with some of the energy reflected directly back to the radar. The larger the object, the greater the amount of energy that is returned to the radar. That provides us with the ability to "see" rain drops in the atmosphere. In addition, the time it takes for the beam of energy to be transmitted and returned to the radar also provides is with the distance to that object.

Doppler radar systems can provide information regarding the *movement* of raindrops as well as their position. By measuring the *shift (or change) in phase* between a transmitted pulse and a received echo, the raindrops movement directly toward or away from the radar is calculated. This then provides a velocity along the direction the radar is pointing, called radial velocity. A positive phase shift implies motion toward the radar and a negative shift indicates motion away from the radar. The phase shift effect is similar to the "Doppler shift" observed with sound waves.

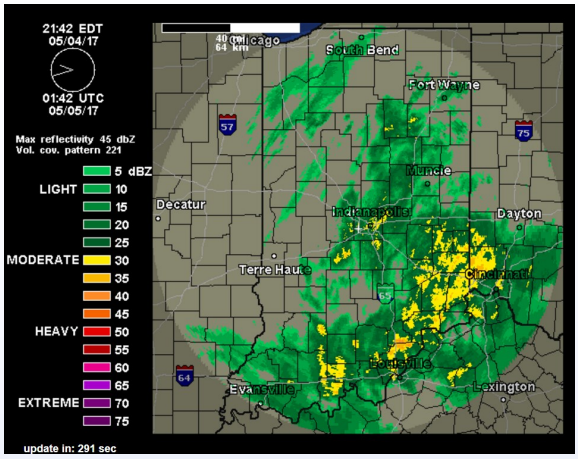


NWS Doppler radar employs scanning strategies in which the antenna automatically raises to higher and higher preset angles, called elevation slices, as it rotates. These elevation slices comprise a **volume coverage pattern** (VCP). Once the radar sweeps through all elevation slices a volume scan is complete. In precipitation mode, the radar completes a volume scan every 4-6 minutes depending upon which volume coverage pattern (VCP) is in operation, providing a 3-dimensional look at the atmosphere within about 200 miles of the radar site.

There are many different types of images that can be obtained from the basic radar information. Here are some of the most basic, but there are over 20 different types of images available to NWS forecasters.

Reflectivity

Reflectivity images paint a picture of the weather from the energy reflected back to the radar. Reflectivity images are the vast majority of radar images you will see on television as well. There are two types available on the web; **Base Reflectivity** (½° elevation) and **Composite Reflectivity**.



Base Reflectivity Image

Base Reflectivity

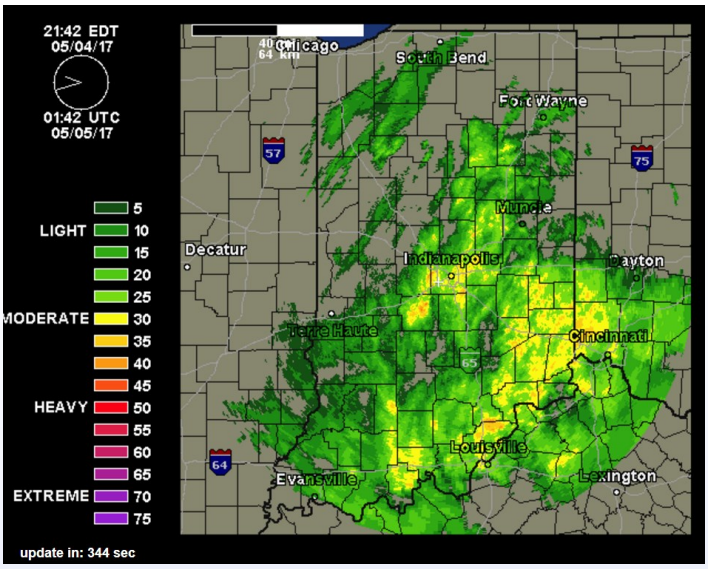
Taken from the lowest (½°) elevation scan, base reflectivity is excellent for surveying the region around the radar to look for precipitation. This image (right) is a sample base reflectivity image from the Indianapolis Doppler radar during the spring cruise! The radar is located in the center of the image. The colors represent the strength of returned energy to the radar expressed in values of decibels (dBZ). The color scale is located at the lower right of each image. As dBZ values increase so does the intensity of the rainfall. Value of 20 dBZ is typically the point at which light rain begins. The values of 60 to 65 dBZ is about the level where 1" (2.5 cm) diameter hail can occur. However, a value of 60 to 65 dBZ does not mean that severe weather is occurring at that location. Severe weather may be occurring with values less (or greater) than 60 to 65 dBZ due to:

- Hail that is totally frozen (without a thin layer of water in the surface). "Dry hail" is a very poor reflector of energy and can lead to an underestimate of a storm's intensity.
- Atmospheric conditions such as ducting. When ducting occurs, the radar beam is refracted into the ground (indicating stronger storms than what are actually occurring). However a worse case is when subrefraction is occurring and the beam is overshooting the most intense regions of storms (indicating weaker storms than what are actually occurring).
- Doppler radars that get out of calibration. The radar can become "hot" (indicating stronger storms than what are actually occurring) or "cold" (indicating weaker storms than what are actually occurring).
- The radar beam spreads with distance so the most intense part of the storm so the reflected returns will be an average of the weaker and stronger portions.
- And, last but not least, the radar beam increases in elevation as distance increases from the radar. At increasing distance, the radar is viewing higher and higher in storms and the beam may overshoot the most intense parts.

Composite Reflectivity

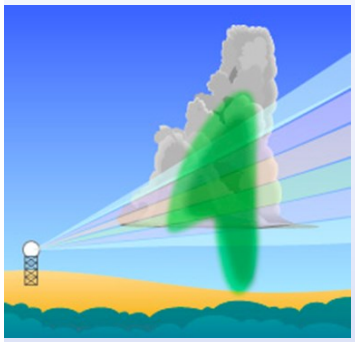
When all returns from all elevation scans are compiled together an image is created which takes the highest dBZ value from all elevations. This is called Composite Reflectivity. It is a picture of the strongest returns from all elevations. When compared with Base Reflectivity, Composite Reflectivity can reveal important storm structure features and intensity trends of

storms. This is important because often during the development of strong to severe thunderstorms, rain-free areas (or areas with light rain) develop as a result of strong updrafts. Yet, because it requires all elevation scans to be completed, unlike the Base Reflectivity which is the first image created, Composite Reflectivity is the last image created in each volume scan.

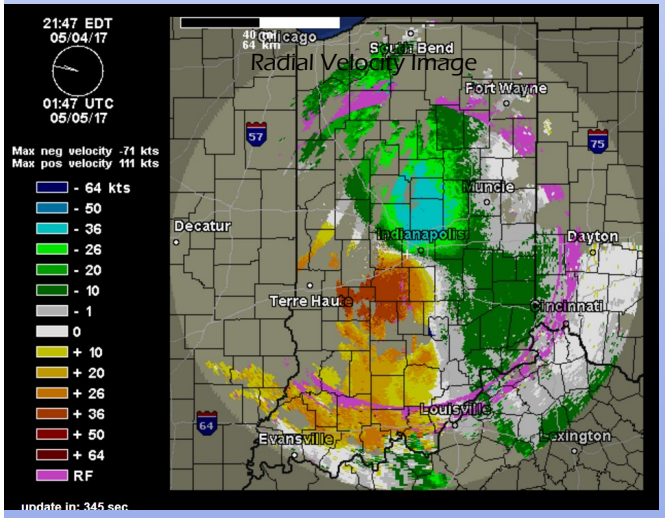


Composite Reflectivity Image

Therein lies an important point when viewing composite reflectivity images; always check the time of the image. Often, the base reflectivity image and composite reflectivity image will not have the same time with the base reflectivity image being the most recent. When compared with Base Reflectivity, Composite Reflectivity can reveal important storm structure features and intensity trends of storms. One other note of caution, due to the time it takes to produce and transmit an image, all radar images show what **HAS** happened and **NOT NECESSARILY WHAT IS** happening.

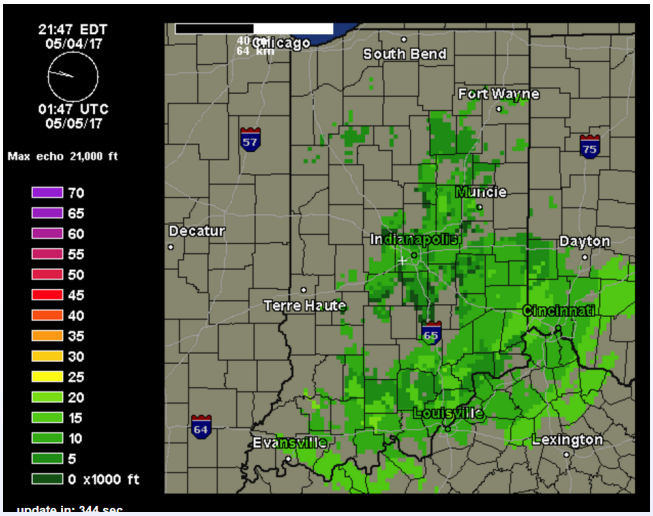


Base Radial Velocity is the velocity of the precipitation either toward or away from the radar (in a radial direction). No information about the strength of the precipitation is given. This product is available for just two radar "tilt" angles, 0.5° and 1.45°. Precipitation moving toward the radar has negative velocity (blues and greens). Precipitation moving away from the radar has positive velocity (yellows and oranges). Precipitation moving perpendicular to the radar beam (in a circle around the radar) will have a radial velocity of zero, and will be colored grey. The velocity is given in knots (10 knots = 11.5 mph). Where the display is colored pink (coded as "RF" on the color legend on the left side), the radar detected an echo but was unable to determine the wind velocity, due to inherent limitations in the Doppler radar technology. **Storm Relative Mean Radial Velocity** is the same as the Base Radial Velocity, but with the mean motion of the storm subtracted out. This product is available for four radar "tilt" angles, 0.5°, 1.45°, 2.40° and 3.35°.



Radial Velocity Image

Strong Storms and Tornadoes



Echo Tops Image

The **Echo Tops** image shows the maximum height of precipitation echoes. The radar will not report echo tops below 5,000 feet or above 70,000 feet, and will only report those tops that are at a reflectivity of 18.5 dBZ or higher. In addition, the radar will not be able to see the tops of some storms very close to the radar. For very tall storms close to the radar, the maximum tilt angle of the radar (19.5 degrees) is not high enough to let the radar beam reach the top of the storm. For example, the radar beam at a distance 30 miles from the radar can only see echo tops up to 58,000 feet. Echo top information is useful for identifying areas of strong thunderstorm updrafts. In addition, a sudden decrease in the echo tops inside a thunderstorm can signal the onset of a downburst–a severe weather event where the thunderstorm downdraft rushes down to the ground at high velocities and causes tornado-intensity wind damage.

Storm Total Precipitation is estimated accumulated rainfall, continuously updated, since the last one-hour break in precipitation. This product is used to locate flood potential over urban or rural areas, estimate total basin runoff and provide rainfall accumulations for the duration of the event.

The 1 Hour Running Total Precipitation image is an estimate of one-hour precipitation accumulation on a 1.1x1.1 nm grid. This product is useful for assessing rainfall intensities for flash flood warnings, urban flood statements and special weather statements.

Some commercial providers add **Lightning Strike data** to their radar images. Lightning is NOT detected by radar! Most sites use a network of Boltek lightning detectors around the United States and Canada. These detectors all send their data to a central server where software systems triangulate their data and presents the results in near real-time. Note that due to errors in sensor calibration and large distances between some sensors, lightning data may display skewed or be missing in certain regions.

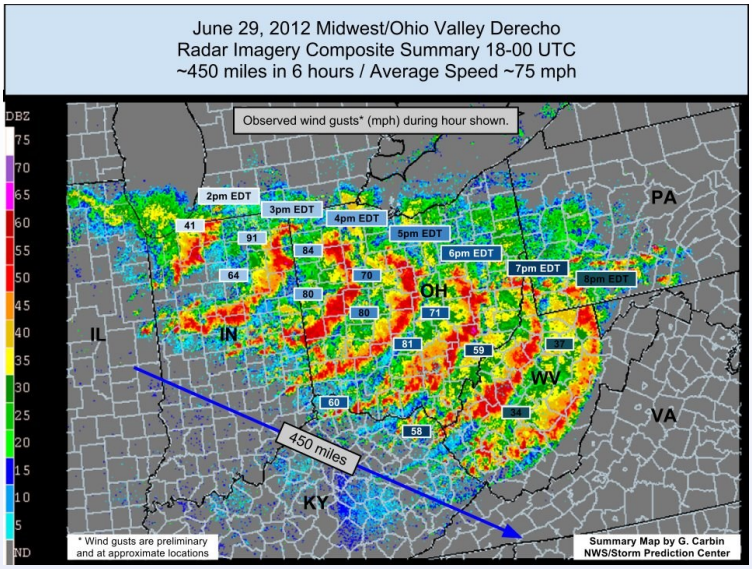
Image shapes

There are a couple of images that you should pay particular attention to. These include **Bow Echoes** and **Tornado Vortex Signatures** (hook echoes).

Squall Line

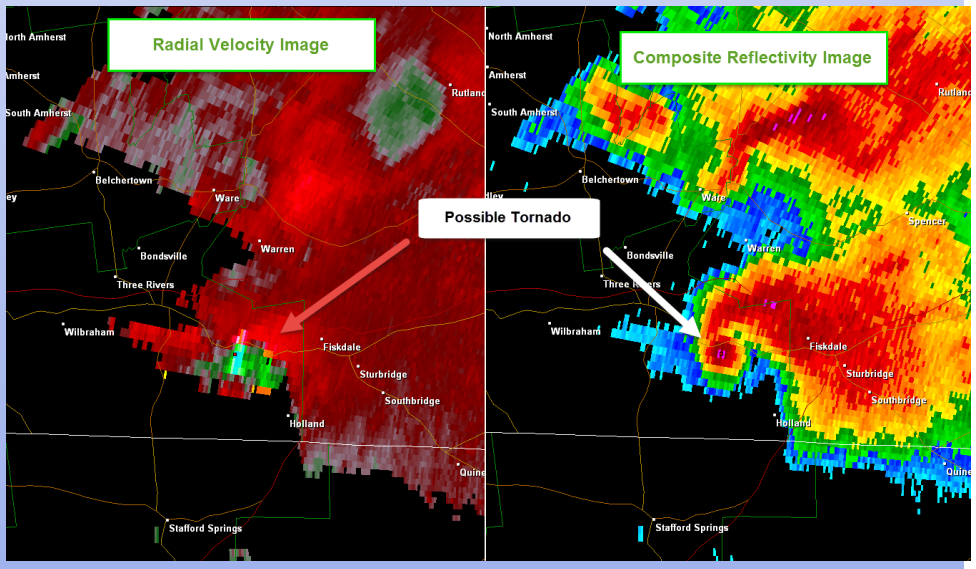
Squall lines and multicell storms occasionally develop the appearance of a "bow echo" on radar. When the bow shape opens toward the strong mid-level winds (10 to 20 thousand foot level winds of 40 knots or greater), there is an excellent chance that the

strong mid-level currents have been transported to the ground in a downburst, forcing a portion of the squall line or multicell storm to accelerate forward. Macroburst and microburst winds are common with these storms, and 100+ MPH winds have been reported in extreme cases. Weak to occasionally strong tornadoes may occur with the comma head, while gustnadoes may form on the strong bow echo gust front. Bow echoes usually only travel a hundred miles or so, but have been known to travel much farther. These long lived bow echoes are known as Derechos.



Forecasters and storm spotters have learned to recognize certain thunderstorm features and structures that make tornado formation more likely. Some of these are visual cues, like the rear-flank downdraft, and others are particular patterns in radar images, like the tornadic vortex signature. When a Doppler radar detects a large rotating updraft that occurs inside a supercell, it is called a mesocyclone. The mesocyclone is usually 2-6 miles in diameter, and is much larger than the tornado that may develop within it. Researchers discovered the Tornado Vortex Signature (TVS), a Doppler radar velocity pattern (the left side image-below) that indicates a region of intense concentrated rotation. The TVS appears on radar several kilometers above the ground before a tornado touches ground. It has smaller, tighter rotation than a mesocyclone. While the existence of a TVS does not guarantee a tornado, it does strongly increase the probability of a tornado occurring.

A "hook echo" (right side image) looks like a hook extending from the main radar echo, usually in the right-rear part of the storm (relative to the motion of the storm). A hook is often associated with a mesocyclone and indicates favorable conditions for tornado formation. The hook is caused by the rear flank downdraft and is the result of precipitation wrapping around the back side of the updraft. Forecasters can also look at velocity images to detect tightly spinning areas of a thunderstorm that might be a tornado or a "pre-tornado". In addition certain radar technology can now detect the presence of random shaped and sized targets like leaves, insulation or other debris that are kicked up by actual tornadoes! This gives meteorologists a high degree of confidence that a damaging tornado is on the ground, and is especially helpful at night when tornadoes are difficult to see with the human eye.



Moonlight Sails!

Join us for moonlight sails on the following Fridays. People meet around 7pm at the harbor for dinner (bring your own....a grill is usually available). Sailing starts around sunset and lasts as long as you'd like!

May 12

June 9

July 7

Aug 4

Sept 8

Oct 6

Nov 3

Club Boats

LSC has three club boats for use by members. We own a Sunfish, Laser and a Capri. The sails, rudders, and sign out book are located in the shed.

The boats are open for use by all club members. All we ask is that: you sign in/out the boat when you use it. That way we can track how much use the boats are getting.

If you have not sailed the boat you'd like to check out, work with a BOG or other club member to insure that you know how to rig, launch, right, and retrieve the boat.

This process will help keep the club boats in better shape for a long time. Many clubs don't have general use club boats, we are lucky to have three, so feel free to use them!

LSC has teamed Up with BoatU.S!

BoatU.S. provides a vast range of services, information and savings to recreational boaters, including:

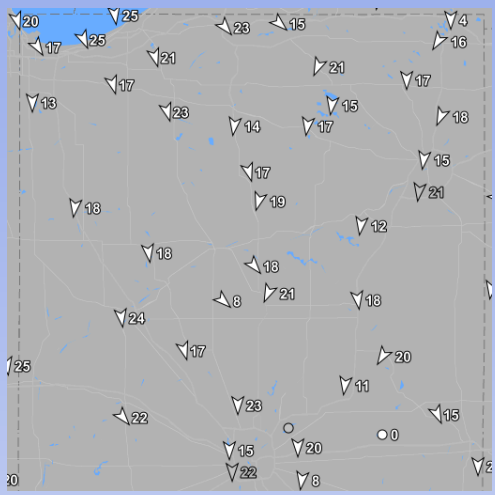
- Members-only discounts and Member Rewards with West Marine equipment purchases
- Discounts on fuel, overnight slips, and repairs at more than 900 marinas nationwide
- BoatU.S. will pay up to $50 per incident On-The-Water Towing with your basic membership
- Access to high-value, low-cost group-rate boat insurance
- Full year subscription to the award-winning BoatU.S. Magazine

Now you can get 50% off of annual Membership dues when you join the nation's largest association of recreational boat owners. You pay one-half of the regular BoatU.S. dues of $30 – that's just $15.00 a year! For more information, go to http://www.boatus.com/ and be sure to mention our Cooperating Group ID number GA84516S to get the specially reduced rate.

LAFAYETTE
Sailing Club

What are your favorite sailing apps!

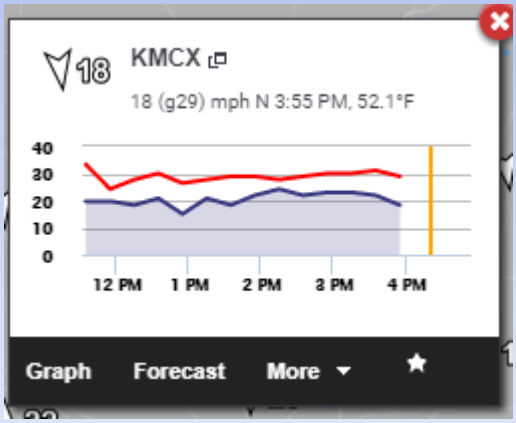
This is a new section of the newsletter where we will highlight everyone's favorite sailing app! It can be a PC based or a mobile phone app. Email the name of your favorite app, why you like it, and how to use it to mnolan@purdue.edu and we will get it into a future newsletter.



Current Wind conditions

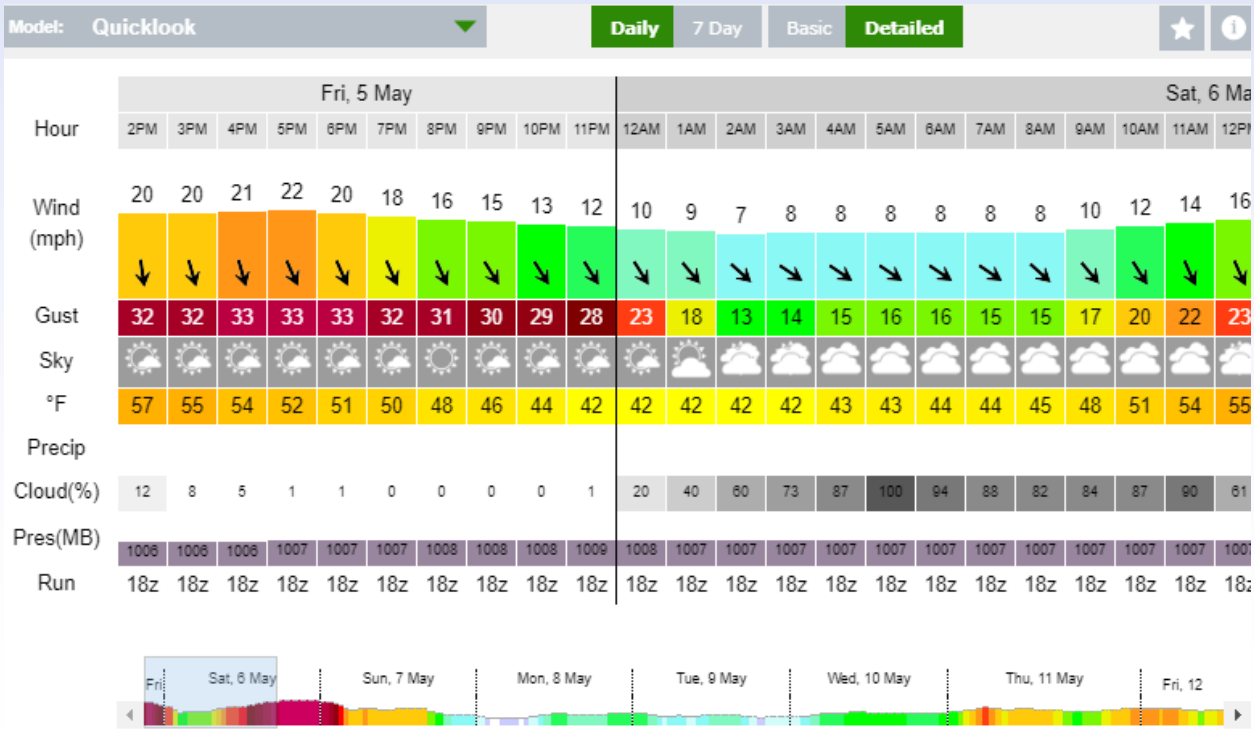
Sailflow

Sailflow, available for both desktop computers and mobile phones, provides custom wind forecasts for many lakes and areas. It uses many different forecast models to come up with the best forecast for the lake you plan to sail on. In particular, for Lake Freeman, it gathers data from the Monticello airport instead of relying on weather data from Lafayette or Logansport.



Past wind speeds and gust at Lake Freeman

You can view current information, save your favorite lakes, and seek forecasts. The free version is somewhat limited but still very useful. The paid version gives you access to many different types of forecast models useful primarily to expert users or weather geeks. www.sailflow.com



Detailed 7 day forecast

LAFAYETTE
Sailing Club

Summer and Fall Cruising Schedule

LSC cruises are designed to accommodate, benefit and contribute to the social function of LSC and as such are restricted to members in good standing. Coordinators of each cruise will communicate directly with members planning on attending each cruise. Interested members should contact the cruise coordinator for detailed date, harbor and marina information.

July 15-22	Summer Cruise, Grand Traverse Bay, MI	Kirk Gilbert, coordinator
Oct 20-22	Fall Mini-Cruise, Holland, MI	Dave Keller, coordinator

Trivia Answers

1. **Above Board**-Pirates would often hide much of their crew below the deck. Ships that displayed crew openly on the deck were thought to be honest merchant ships known as "above board."
2. **As the Crow Flies**-The most direct route from one place to another without detours. Before modern navigational systems existed, British vessels customarily carried a cage of crows. These birds fly straight to the nearest land when released at sea, thus indicating where the nearest land was.
3. **Bitter End**-The last part of a rope or final link of chain. The end attached to the vessel, as opposed to the "working end" which may be attached to an anchor, cleat, other vessel, etc. Today the term is used to describe a final, painful, or disastrous conclusion.
4. **Fits the Bill**-A Bill of Lading was used to acknowledge receipt of goods and the promise to deliver them to their destination in good or like condition. Upon delivery, the goods were checked against the Bill of Lading to see if all was in order. If so, they "fit the bill."
5. **Footloose**-The word comes from the name of the bottom of a sail – the foot – which must be attached to the boom. If it is not properly attached it may become "footloose" causing the vessel not to sail properly.

Software
LAFAYETTE
Sailing Club

The Lafayette Sailing Club is an organization composed of individuals and families interested in sail boating and sail boarding. The club was originally formed in 1969 by a small group of Purdue University and Lafayette area individuals interested in sailboat racing.

Membership is open to anyone interested in sailing. The club maintains it's own harbor on Lake Freeman. Members may park their boats at the harbor. The club also owns three sailboats available to any member.

Membership information can be obtained at http://www.lafayettesailingclub.com