

# OLE VIRGINIA TIMES

## August 2019

### Next Meeting: Tuesday, August 20, 2019

#### PRESIDENT'S LETTER:

Greetings, I hope everyone is doing well and staying cool. This is really the dog days of Summer. Luckily for me most of my work has been inside in the air conditioning this month.

There are a couple of things coming up later this month. The first will be the Saturday morning breakfast get together at the Yorkshire Restaurant at 8:00 am on the August 17th. It is normally held one the Saturday before the Tuesday club meeting. I am looking forward to a good breakfast, seeing as I had to miss the last two get-together's since I was out of town those two Saturdays. I also missed the last meeting so I have some catching up to do. The second thing happening this month is, of course, our club meeting. I am looking forward to it and I'm looking forward to seeing you there.



Next month our club is participating in two events that I am aware of at this time. The first will be the Mini-Tri on the 15th of September. I was able to help out with the last one which was a lot of fun. Thanks to Ray / KM4EKR for stepping up while Andy / KJ4MTP was away. I hope that I can man the same position for this next one. Keep an eye on the reflector for sign up information from Andy / KJ4MTP. The next event we will be OVH providing communications support for the Prince William Half Marathon for the fourth year in a row. This is another great event and it is the marathon's fourth year and our fourth year helping out. It's really a good one to try if you have never helped out before. Wayne / N7QLK is handling the planning for our participation and coordination with the event sponsor. . As usual look to the OVH's closed reflector for details about signing up. The Prince William Half Marathon will take place on the 29th of September.

A couple of other things I wanted to mention: 1. One of our club members

**Cont'd on Page 3**

# Ole Virginia Hams Amateur Radio Club, Inc.

Post Office Box 1255  
Manassas, Virginia 20108

## OFFICERS

President:	Byron Dillon	AK4XR	222-2095
Vice Pres:	Jeff Fuller	WB6UIE	791-5916
Secretary:	John Heartney	KG4NXT	257-3566
Treasurer:	Don Meyerhoff	WA2SWX	597-3211

## DIRECTORS

Don (Butch) Blasdel	W4HJL	369-2877
Arthur Whittum	W1CRO	791-4330
Charlie Dale	WA4YGI	361-3091
Bob Zaepfel	K4HJF	282-2451

## WEEKLY FM REPEATER NET COORDINATOR

Thurs - 8:00 PM Local Time	JOHN / KG4NXT	257-3566
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## HAMFEST 2019 - Chairman

Don	WA2SWX	597-3211
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## FIELD DAY 2019

Byron	AK4XR	222-2095
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## CLUB ROSTER / DATABASE

Arthur	W1CRO	791-4330
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## EDUCATION

Mark	WA4KFZ	818-8033
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## CLUB EMERGENCY COORDINATOR

Open

## ARES - EMERGENCY COORDINATOR

David Lane	KG4GIY	703-628-3868
		email: <a href="mailto:KG4GIY@ARRL.NET">KG4GIY@ARRL.NET</a>
Prince William County ARES website		<a href="http://pwcares.org">http://pwcares.org</a>

## FINANCE

Arthur	W1CRO	791-4330
Mark	WA4KFZ	818-8033
Don	WA2SWX	597-3211

## GENERATORS

Steve	N4OGR	361-0008
Al	KB4BHB	368-4794

## HISTORIAN

Theresa	KG4TVM	257-3566
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## WEB COMMITTEE — W4OVH.NET

Kevin	KX4KU	540-439-3289
Andy	KJ4MTP	786-4651
John	KG4NXT	257-3566
Ken	KN4DD	

## TWITTER & FACEBOOK ACCOUNT MODERATOR

Jeff	KM4FTK	830-4155
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## EMAIL REFLECTOR — [w4ovh@googlegroups.com](mailto:w4ovh@googlegroups.com)

David Lane	KG4GIY	628-3868
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## JOTA - 2018

John	KG4NXT	257-3566
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## LEGAL

Bob	K4HJF	282-2451
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## MEMBERSHIP CHAIRMAN

Luther	WA3FMO	361-4885
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## NEWSLETTER

Paul	W4ZB	754-0910
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## NEWSLINE FOR THE WEEKLY NET

John.	KG4NXT	257-3566
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## PROGRAMS

Jeff	WB6UIE	791-5916
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## QUARTERMASTER

Steve	N4OGR	361-0008
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## REPEATER CONTROLLERS

John	KG4NXT	257-3566
Ken	KE2N	753-8587
George	K4GVT	791-5956
Arthur	W1CRO	791-4330
Butch	W4HJL	369-2877
Steve	N4OGR	361-0008
David	KG4GIY	361-3042

## W4OVH — TRUSTEE

Wayne	N7QLK	571-237-0520
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## W4PVA — TRUSTEE

Arthur	W1CRO	791-4330
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## SCHOLARSHIP

Sandy Knight	KM4JUS	901-4664
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## SUNSHINE

Theresa	KG4TVM	257-3566
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## TECHNICAL COMMITTEE

Ken	KE2N	753-8587
Andy	KJ4MTP	786-4651
George	K4GVT	791-5956
Arthur	W1CRO	791-4330
Butch	W4HJL	369-2877
Bob	K4HJF	335-1939
David	KG4GIY	628-3868

All telephone numbers listed above are for Area Code 703 unless otherwise noted. This is the official monthly publication of the Ole Virginia Hams Amateur Radio Club, Inc., a §501(c)(3) organization, dedicated to the promotion and enhancement of Amateur Radio. Copyright © 2019 by the Ole Virginia Hams. The OVH ARC regular monthly meeting is at 7:30 p.m. every third Tuesday at the Buckhall Volunteer Fire Department Station, 7190 Yates Ford Road, Manassas, Virginia. Members, prospective members and other interested persons are invited to attend without obligation. Local information can also be obtained through the OVH's FM repeaters on 146.970-, 224.660-, 442.200+ and 443.500+ MHz. The OVH's two D-Star repeaters on 146.865- and 442.5125+ MHz are temporarily operating with limited D-Star capabilities. Up to date information about OVH activities and its meetings is also available during the OVH's nets on its FM Repeater each Thursday night at 8:00 p.m. or through the OVH's web site at <http://w4ovh.net>

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( George / K4GVT ) took a direct strike from lightning to his vhf vertical antenna on his tower. It blew it to pieces, literally there were tiny pieces of the fiberglass covering all over his yard. Some pictures and remark about that event were reported in the July 2019 OVH Newsletter. It damaged a bunch of George's radios, televisions and some other electronic devices (GFCI receptacles). It has me wondering what precautions I should be taking at my shack. I plan to do some investigating on my own but if you have any suggestions I would like to hear them. Also, see later in this Newsletter for more information (including back references to the older OVH Newsletters on this topic) for various aspects of how radio amateurs should deal with lightning risks. 2. Has anyone tried the new FT4? I have read a little but have not had any time to download it and try it myself. It is amazing that the T/R cycle is getting shorter and shorter. 3. The DSTAR gateway is back up again! If you didn't see that on the OVH email reflector, Ken / KE2N, got it up and running. From his description it wasn't an easy fix either. Thank you, Ken for getting it up and running. Now I need to learn how to program my HT to use the DSTAR again. 4. At the end of August I have been asked by the men's group at my church to talk to them about Ham radio. Our church is big into emergency preparedness so that will be my theme. I am hoping to show a few things like repeaters, digital communications (FT8, JS8CALL, Winlink) and if I can connect to Mark / WA4KFZ's work from my church, AERDEN. It's not till the 28th so if you have any other suggestions I would love to hear them. I am hoping to get a few to sign up for Mark / WA4KFZ's classes in November. 5. I signed up for the CW OPS classes but I am a little disappointed that I have to wait till January since the classes in September are full. However, I have started listening to the homework sessions since I figure it can't hurt. I did find out that I will need to get a paddle for when the classes start. Again any suggestions regarding what type or brand would be appreciated. Okay so there was more than a couple things.

Finally, I hope everyone will be able to make the upcoming regular OVH meeting on Tuesday evening, August 20th at 7:30 pm at the Buckhall Fire Station, Manassas. Hope to see you all there!

73 BYRON AK4XR

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## Sunshine Corner:

Happy birthday in August to OVH members: Kristin / NoCall, John / KK4TCE, Karl / W4KRL, Stu / W4PR, Ronnell / KK4ZUR, Vern / K0LVS, Chick / KC1PIA, Duane / KK4BZ and Raymond / KF4AQR.

If you are a new member and you do not see your birthday listed in a correct month, please shoot me an email ( kg4tvm@hotmail.com ) and let me know. The on line applications don't have a space for this information.

Welcome to new OVH members Mike Campbell / KM4EFG and Joseph Kitchell / KM4UYA who were voted in at the July 2019 OVH meeting.

Coming up very fast - barely 6 weeks away now, on Sunday, September 29, the OVH will again be providing communications support the 4th Annual Prince William Half Marathon event for that event's fourth year - each year since the event began. Last year, the race had 1400 runners who signed up and ran, plus an additional 500 runners in the shorter included 5K race. The OVH itself had 18 members participating to provide communications - the event sponsor as well as the public and the police, fire and EMS personnel were all

**Continued on page 4**

impressed by the OVH performance! To participate, you will need either a 2 meter FM handheld transceiver or a 2 meter FM mobile rig. Just about all OVH have one of these, but loaners are available in case you don't. Please save the date and contact Wayne / N7QLK at Tel: 571-237-0520 or at email w99phi@gmail.com.

The Sunshine Corner is taking a break to enjoy the summer - see you back here in September (even though I've already prepared some material for August)! Even though I am taking a break, you may still send me items which should be reported: email: kg4tvm@hotmail.com or tel: 703-257-3566 or post them on the OVH email reflector, but I'll be away part of time so please do not expect me to be able to respond.

In the meanwhile, please try to check in to the Thursday night VHF/UHF FM net at 8:00 pm. You will hear updates and information on everything going on! How to do that is on the OVH web site at <http://w4ovh.net> and you can now also check in either by radio or via Internet connection.

73 Theresa KG4TVM

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## Minutes of the Ole Virginia Hams Amateur Radio Club Meeting held on Tuesday, July 16, 2019:

OVH Vice-President Jeff / WB6UIE, called the meeting to order at 7:30 pm on July 16, 2019 in the training room at the Buckhall Volunteer Fire Department Station.

After the Pledge of Allegiance, all present stated their names and callsigns.

Treasurer report by Don / WA2WX: Balances reported. Treasurer's report was approved

The Minutes of the June, 2019 meeting as reported in the July 2019 OVH Newsletter were approved without amendment.

Membership Report by Luther / WA3FMO: James Richey / KJ4MBI was read in to be voted on at the August meeting. Mike Campbell / KM4EFG and Joseph Kitchell / KM4UYA read in at the June meeting were voted in.

No Training Report.

Field Day reported by John / KG4NXT since Byron / AK4XR was away on vacation: Field day was successful and results are on reflector and in the Newsletter. The Fox Hunt participants used all available antennas.

No Sunshine Report.

IT Committee report by Kevin / KX4KU: Ken / KN4DD is continuing to train as the new IT Committee member.

ARES Report by Greg / KM4CCG, and Ray / KM4EKR: Training session cancelled. The next Mini Tri event will be on July 28 – contact Ray to help.

Wayne / N4HCR, reported on a successful antenna approval by his HOA.

CERT report by Greg / KM4CCG: The Manassas Park CERT is having National Night Out on the evening of August 6th at Signal Hill Park.

Jeff / WB6UIE, reported that the club had received various radio donations. There was as

**Cont'd on page 5**

discussion of silent auction or ebay to dispose of them. Byron has a TS-520 and a tuner to be given to a deserving ham.

Jeff / K9VEG, gave the program on his home brew air cannon. Jeff explained how he built it and also demonstrated how he uses it. He and his team hung at least 6 antenna lines at field day.

The meeting was then adjourned.

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## **Reminders about some upcoming events / calendar dates:**

### **HAMFESTS:**

Sunday, October 6, 2019, gates open at 6:00 am for tailgators, 8:00 for public - CARAfest hamfest put on by the Columbia (Maryland) Amateur Radio Association at the Howard County (Maryland) Fairgrounds, West Friendship, Maryland. More information at the CARAfest web site: <http://carafest.org> and in their hamfest flyer below.

### **HAM RADIO RELATED:**

Friday - Sunday, September 20 - 22, 2019, Detroit, Michigan - the 38th Annual ARRL and TAPR Digital Communications Conference ("DCC"). Years ago and originally, the DCC was focused on amateur packet radio systems and operations, but in more recent years, it has included many presentations on and relating to many of the "new" digital HF modes, customized ham radio related computer systems (e.g., using the Raspberry Pi), etc. Many of the most active ham participants in those particular activities attend from around the US and from around the world, and there is always something new to learn. The location of the DCC moves all around U.S., each year so if Detroit is too far away for you, check it out next year. Lots more information at <https://www.tapr.org/dcc.html>

### **HAM RADIO OPERATING / CONTEST EVENTS:**

The ARRL has a Contest web page at its web site, but a much more comprehensive, up-to-date, and long range planning contesting calendar with links to the rules for the various events is maintained at <http://www.hornucopia.com/contestcal> by WA7BNM. If you get the radio contesting bug or just want to find out what and how much is going on, that is a good place to look!

### **PUBLIC SERVICE / ARES EVENTS**

Sunday morning early, September 15, 2019 - another Mini-Tri event at the George Mason Campus in Manassas. The OVH will again be providing communications support for the MiniTri there. Contact Andy / KJ4MTP and see info on W4OVH.NET about how to participate.

Sunday morning, September 29, 2019, early through midday - the OVH will again be providing communications support for the Fourth Prince William Half Marathon event for the 4th year in a row. Please save the date and plan to volunteer. Wayne Phillips, N7QLK at (571) 237-0520 or at [w99phi@gmail.com](mailto:w99phi@gmail.com) is again coordinating the OVH's participation in this event. Check the OVH closed email reflector for more details.

Check the online Calendar by David / KG4GIY at <http://pwcares.org> for the latest PWC ARES updates. David maintains a comprehensive calendar for upcoming events at that web site. Complete direct contact information for David appears on page 2 of this Newsletter.

# VP's Corner

Jeff Fuller  
WB6UIE

With the event filled months behind us, we slide into the slower days of summer and a sweltering heat wave. HF propagation is at its worst in many years. If the low sunspot blues have you down, check out six meters. There have been a number of afternoon sporadic E openings as far as the midwest and southern Florida.

Time for a virtual cool down as we explore the exceptional contributions of a young ham named Art to several polar expeditions and to the field of HF radio communications. Born in 1909, Art took an early interest in emerging wireless technology. Licensed at the age of 14, he assembled his own station in the attic of his family's midwestern home.

Art first gained the attention of polar explorers during the McMillan expedition to Greenland in 1925. Knowledge of propagation was limited then and the expedition was unable to term with the Navy's radio station in Washington, DC as planned. Art was able to copy their transmissions at his home station in Iowa and walked them up the street to the telegraph office for relay to DC. A member of that expedition, Richard Byrd, would years later remember Art when he needed radio equipment for his own polar expeditions.

As Art's technical skills progressed, he recognized one problem plaguing the day's new vacuum tube HF radios - frequency stability. He began building crystal controlled transmitters by hand and advertising them in QST. Demand soon grew and by 1931 Arthur Collins had his first factory in the basement of his Cedar Rapids, Iowa home.

When the Byrd Antarctic expedition of the 1930s planned its communications, Collins equipment was specified throughout for both mobile and fixed stations. The first gear was carried across the ice by dog sled to the outpost which became known as Little America.

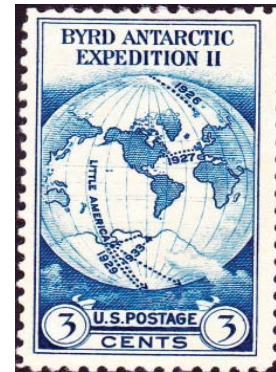
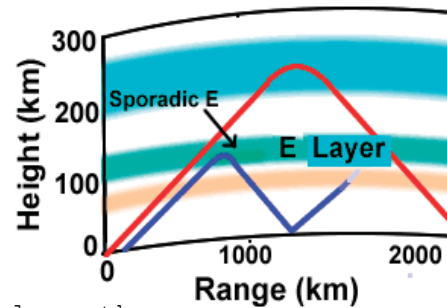
In the decades which followed, Collins gear continued to provide reliable comms for scientists wintering over in Antarctica. I can still remember the thrill of my QSO with KC4USA in the 70s.

Collins Radio continued on to still more firsts, and became known for its reliable line of HF SSB radios. Arthur Collins died in 1987, leaving behind a proud legacy of quality, reliability and innovation.

## Further reading

1. National Academy of Sciences Memorial Tributes Vol 5 1992 "Arthur Collins"  
<https://www.nap.edu/read/1966/chapter/13>

2. The First 50 Years A History of Collins Radio Company  
<https://www.americanradiohistory.com/Archive-Catalogs/Collins/Collins-First-50-Years.pdf>



[https://commons.wikimedia.org/wiki/File:HAM\\_RADIO1956.jpg](https://commons.wikimedia.org/wiki/File:HAM_RADIO1956.jpg)

Amateur radio in Antarctica during the winter of 1956.



QSL card from Little America

A few more images from the 2019 Manassas Hamfest - not enough room last month to include these. Special thanks to photographers Cat / KM4PBD and George / K4GVT for these pictures!



## Some Possibly Interesting or Useful Information

1. The major lightning strike incident that George / K4GVT experienced in early July (referred to in the July 2019 OVH Newsletter and on the OVH closed email reflector) was bad. His antenna mast was destroyed, but also with damage to some very expensive items; one of the real downsides from this is the waste of time attempting to “settle” with insurance adjusters (assuming insurance coverage exists); even worse, the time wasted having to replace the stuff you want or need to replace and to get it all working again - an annoyance for which you can never be compensated. Notwithstanding all of the equipment and property damage in George’s case, he was truly fortunate that everyone at his house - who were mostly enjoying themselves outside on a summer day - noticed the storm approaching and went back inside just a few minutes before the lightning strike actually occurred; luckily no one was injured or killed which could have happened had they remained outside.

2. Personal safety should always be paramount - to equipment safety. Seek cover inside a house, building, enclosed automobile or shelter if lightning or a thunderstorm is nearby. Under a tree outside is not good! Serious, permanent injury from a close by lightning strike is much more likely than an immediate death from lightning. I have a business associate whose (normal) teen age sister was permanently disabled 35 years ago by a very close by lightning strike outdoors; she has been in an institution since then, severely disabled; it is very sad to hear him talk about his regular visits with her. Lightning is always dangerous and hams need to know about it! For personal safety info, go to: <https://www.weather.gov/safety/lightning> and <https://www.cdc.gov/features/lightning-safety>

3. Google the following word strings: `site:w4ovh.net filetype:pdf lightning` all together in your web browser to find how often “lightning” has been mentioned in OVH Newsletters in recent years! Quite a few times - although the emphasis has been almost exclusively been on how to protect a ham station and electronic equipment from a direct or nearby lightning strike! See, the Newsletters for April 2007 at page 8, April 2008 at page 9, April 2009 at page 6, May 2010 at page 5, September 2011 at page 8, March 2012 at page 7 and November 2015 at page 10; each of these can be read or downloaded from W4OVH.NET. The very useful [blitzortung.org](http://blitzortung.org) web site [ Blitzortung in German means “lightning location” ] mentioned recently during a OVH VHF NET discussion about lightning, was mentioned in the 2008 and 2015 Newsletters referred to above, More about that below.

4. The March 2012 OVH Newsletter reported on a very close by lightning strike at your editor’s QTH. No ham equipment was damaged because, as a safety precaution, equipment is routinely disconnected from outdoor antennas if not in use; still, there was considerable damage to electrical power switches, wiring, built in light fixtures and electrical outlets within and on the outside of the house; as well as to an assortment of electronic / computer equipment (network cards, Ethernet switches, computers, fax machine, satellite TV splitters and PBX telephone extensions) and Ethernet cables. As it turned out, the most expensive single component for the damage, was to the two 100 year old white oak trees quite close to the house which were struck. A photo of what appeared to be an only slightly damaged upper part of one of the trees, 70’+ tall, and located about 10’ from an edge of the house appeared in the 2012 article. At the time, the damage appeared so slight that I thought the tree would recover - even though an arborist had cautioned otherwise. As it turned out, that tree and the other similarly sized tree about 15’ further from the house had both been struck. Neither tree did very well during the summer of 2012 and by the summer of 2013 neither tree has any new leaves - both were dead, and each had to be carefully cut down and removed the following summer - an expensive job.

5. My QTH is near the top of a local hill and with lots of tall trees all around. Over the years there have been many lightning strikes nearby; several are particularly memorable. In the early 1990’s, a tall



hickory tree about 40 feet from the house was directly struck by lightning. I was not around when it happened, but noticed the damage signs immediately upon return: wood splinters and torn and broken wood fragments and wood pieces were scattered everywhere on the ground on one side of the tree. The lightning had struck the tree and ripped / exploded out and splintered a deep 30' section of the tree trunk facing away from the house. Anyone been standing nearby might have been killed by the shrapnel like wood fragments from the tree - aside from electrical based injury from the lightning. Amazingly, the tree partially healed itself and lived another 20 years; eventually succumbing to insect damage through its exposed interior and its weakened condition; it too had to be removed. Five years ago, an 80' tall, tulip poplar tree about 200' from the house was either struck by lightning or snapped by a sudden microburst downdraft during an intense local convective storm. The tree trunk broke about 20' above ground in an almost clean cut; the top 60' of the tree fell off sideways, crashing down, crushing and breaking everything in its path. Good that no one was nearby when that happened. Tulip poplars are the tallest growing trees in Virginia and I had been planning to connect a support line for a wire antenna to that tree before it fell.

6. Atmospheric electricity is a complex subject, but some very good basic material exists for it online: [http://www.atmo.arizona.edu/students/courselinks/spring15/atmo589/ATMO489\\_online/CONTENTS.html](http://www.atmo.arizona.edu/students/courselinks/spring15/atmo589/ATMO489_online/CONTENTS.html) That site includes extensive discussion of basic lightning mechanisms and phenomena from physical, chemical, electrical and meteorological viewpoints. Very interesting - for those who have not delved into this before - is how high voltages and electric currents exist in the atmosphere under "normal" conditions; relatively simple equipment can be used to measure them near the earth's surface. The remainder of these notes this month will discuss the use of simple tools available to track or predict the approach of lightning.

7. The blizortung.org web site has already been mentioned; a related web site [lightningmaps.org](http://lightningmaps.org) offers similar information. There is also a "free" iOS [iPad/iPhone] app known as Blitzortunglive which can present continuously updated lightning data on a scrollable / zoomable map. I have been using Blitzortunglive for 5 years and find it extremely accurate and useful at ground level most of the time if a good Internet connection exists. Observed nearby lightning flashes or thunder heard usually can be correlated with "new" events depicted on a zoomed-in blizortung map within a fraction of a mile within 10 to 20 seconds. Remarkable for a "free" app which depends upon distributed sensor data accumulated and forwarded by volunteers (worldwide) via the Internet. The blizortung system can be used to watch the approach of weather with high levels of electrical activity; when lightning activity is within 5 to 10 miles or closer, risk is high for a nearby strike and extra safety precautions should be undertaken immediately.

8. Relatively few lightning discharges (<20%) are cloud-to-ground rather than intra-cloud or cloud-to-cloud, but almost all lightning is associated with deep moist convective weather. Precipitation from such weather is routinely tracked by ground weather radars which do not themselves detect lightning. Many web sites (and apps) offer precipitation tracking weather radar displays. A very useful one which is readily customized is: <https://aviationweather.gov/hemst> On that, if you observe approaching "precipitation" with "red" or "yellow" colors, expect lightning to arrive nearby shortly, and it's time to turn on your blizortung display to monitor the approach of the related electrical activity. For an overview of the location of major (not all) convective weather, go to: [https://aviationweather.gov/adds/data/airmets/airmets\\_CB.gif](https://aviationweather.gov/adds/data/airmets/airmets_CB.gif) - the "red" enclosed areas show the current (and within 2 hour expected) major convective storm locations, updated every two hours. Go to [https://radar.weather.gov/Conus/full\\_loop.php](https://radar.weather.gov/Conus/full_loop.php) for a quick overall picture of precipitation and storm movements. Be sure always to note the valid times on the displays which are always given in Z (GMT) time. For a web site which provides computer model generated future precipitation and storm movement forecasts, hour by hour, for 18 hours, go to [https://wrf.nssl.noaa.gov/refl\\_loop.html](https://wrf.nssl.noaa.gov/refl_loop.html) Experimental sites that are sometimes accessible through <https://rapidrefresh.noaa.gov/hrrr> sometimes provide hourly updated forecasts at 15 min. intervals. Any basic textbook on meteorology will provide more information about convective weather and its movement.