

AARC Meeting Minutes October 10, 2021

Meeting started at 7 pm by Ed Berkowitz, N3US, presiding.
Meeting held via Zoom.

Ed said we would do presentation first followed by business meeting.

John Porter introduced our speaker, Travis Koshko, Chief Meteorologist for CBS19 News.

Presentation on Severe Weather in Charlottesville by Travis Koshko:

Travis received BS degree in meteorology in 2000, 24 years experience and 11 years in Charlottesville. The science of meteorology uses mathematics heavily with about 75% math, 25% science. There are 3 levels: Synoptic size is > 1000 km; Mesoscale is 2-1000 km; Microscale < 2 km. Weather is dynamic, fluid and occurs at boundary layer above earth's surface. Main features of weather are that air is always moving, cold and hot air, sun, and water. Temperature extremes include wind chill and heat index which apply to people and animals.

The greater the difference between hot and cold fronts, the more extreme the weather.

There are three types of lightning: inter-cloud, intra-cloud and cloud to ground. A lightning bolt can be 10 times hotter than sun's surface. One bolt is around 30,000 ka. It's one of the top 3 killers in the US. Most lightning deaths are in Florida. Around 26% of deaths due to lightning occur in open spaces. Use 5 second rule for lightning/thunder to determine distance.

Thunderstorms have 3 phases: convection, mature and dissipation. They include lightning, rain, hail and severe winds. There are 3 types: squall line, bow echo and Derecho which is a line of thunderstorms that are widespread and can cause damage over 250 miles.

He discussed thunderstorm boundaries and microbursts. Hail may accompany storms; largest hail found was 8" in diameter.

Supercells are thunderstorms spinning at high speed and can lead to tornadoes. There are many ideas among scientists about how thunderstorms and tornadoes form. Radar detection of tornadoes involves looking at hooks on radar images. Usually see parts of storm moving away and other parts moving back toward radar which indicates classic tornado rotation.

Most tornadoes occur during weather transition times of year: Spring and Fall. He talked about tornadoes of Aug. 30 and Sep't 1st in C'ville.

Talked about Fujita scale of tornadoes: EF0 – EF5. This scale references damage caused by tornadoes. Scale changed to enhanced in 2007 due to change in building standards (less sturdy structures).

Flooding and droughts: he spoke about the Johnstown floods among others.

Hurricanes and tropical cyclones are extreme events caused by ocean heating and rotation of storm. NE quadrant packs most wind speed. Discussed major hurricanes Fran 1996, Floyd

1999, Isabel 2003 and Camille 1969 which was one of the worst, and Katrina 2005 and Sandy 2012.

Winter storms include sleet which is frozen water before hitting ground and freezing rain which freezes when it hits ground. Freezing rain turns everything into sheet of ice and is most dangerous.

C'ville averages 16-21" snow per year. Winter of 2009/10 was snowiest winter. Earliest big snow recorded by Thomas Jefferson.

National Weather Service issues warnings and watches. Warning means that some weather event is imminent or occurring. Watch means there is a potential for a severe event. An advisory is a special event.

Travis showed live radar of Oklahoma weather. He talked about weather models which are good for guidance but not actual forecasts. American and European models are used.

If tornado warning, go to lowest level and strongest room. Some states recommend against underground storm shelters due to flooding and collapse of structures trapping occupants.

Best ways to keep informed of weather: NOAA weather radios broadcasts, iNWS app pushes alerts. NWS in Sterling VA. Spotter networks not very active in central VA. QnA followed.

Thanks to Travis for presentation.

AARC Meeting Attendee List

10/12/2021

27 Attendees via Zoom.

Ed Berkowitz	N3US
Dave Damon	K4DND
Steve Kramer	KN4CJI
John Porter	KK4JP
Joe DeVincentis	KO8V
Larry Eicher	K4JZQ
James Owen	K4CGY
Ian Callahan	KN4TBG
Wynn Solomon	AAI4MV
Benjamin Kidd	KG4EIF
Frank Haynes	W4NUA
Tim Freeze	KO4ELL
Bill Phillips	AD6JV
Michael Rein	KA4JJD
Ron Richey	K4RKA
Michael Ellington	KN4BFB
Dennis Terribile	WR4I
Bill Oleksy	KF4IE
Jim Wilson	K4BAV

Bill Pond	N0WP
Ken Kellerman	K2AOE
Greg Faust	N4PGS
Warren Yursik	KN4LYF
Joe Greenberg	KJ4PE
David Thomas	WD3O
Paul McKee	AK4OH
Travis Koshko	W3TJK

Business part of meeting follows:

Treasurer's report by Don Eason:

Beginning Balance: \$27,419.87

Checks: \$425.68 (Kits)

Deposits: \$1,698.67 (Donations)

Ending Balance: \$28,698.86

New members voted in:

JOHN ROBUCK CHARLOTTESVILLE VA 22911 N4AMJ Advanced

James Pruett Jr Charlottesville VA 22902 WA4QFL General - was member years ago

Steve K gave education committee report emailed by Bob Pattison, K4DU:

Our classes are well under way we have eleven students one youth, five women and a complement of eight instructors. The third session is tomorrow evening.

Publicity: Ed said Paul McKee was talking to PVCC about referring student for AARC scholarship for this Fall.

Public Service: John P. said there is an event for Oct. 30th. Dave Damon will send out detailed operating plan.

Ed said plans are for 1st Saturday in November for another swapfest at Darden Towe park with backup location in event of crowds at park.

Jim Wilson is organizing awards for presentation in December.

Ben Kidd reported on kit projects and kit sessions. People had conflicts with session times; he will try to reschedule in a few weeks. All kits have been distributed.

Ed will send email about radio school club roundup next Thursday at Baker-Butler school.

Michael Rein talked about club Facebook account. He will put photo of his shack and a few words about getting into ham radio.

Ed mentioned 10 and 15 meters wide open due to sunspot cycle.

Jim Owen said there is a new volunteer to be trustee: Dayton. Paperwork is in process.

Ed said he got email from PVCC volunteering a room where club could meet for free on Tuesdays.

Jim asked about setting up club station at PVCC.

Larry asked Jim Wilson talk about his role on new HBO special about the Watergate burglars.

Meeting adjourned by Ed at 8:30 pm.

Respectfully submitted,

Stephen Kramer, KN4CJI, Secretary