

# Meeting Minutes

Date: July 20, 2016

By: Jean Davids, Secretary Monticello Camera Club

The meeting started shortly after 7 pm and was presided over by Lynn Anderson, president. There were 19 members in attendance and 1 guest. We have 36 club members at this time.

We started the meeting differently this month by having our topic first so that we could get outside in good light to see how Drone Photography works. Matthew Breiter presented the topic. He's from Long Prairie, MN - <http://www.matthewbreiterphotography.com>. I found Matthew through the Facebook group Minnesota Photography Club. He started with a slideshow, which introduced himself somewhat. He started his photography seriously in 2013 and graduated from a 2 year program at Central Lakes College in Brainerd. He has had a photo of a barn and northern lights that was published in USA Today sometime around May of this year.

After showing part of the slideshow, we all headed out back behind the bowling alley for a demo of his DJI Phantom 3 Pro. The demo and questions lasted for around 10 minutes. We then went inside to finish his presentation and ask questions out of the heat.

I'm going to try and summarize his presentation as best I can here. It's not perfect, of course, but it is as close as I could get.

## Flying Quadcopter Drones – The DJI Phantom 3 Pro and Photography

The FAA states that quadcopters are projected to generate \$82 million in 2017. The price to purchase a quadcopter capable of photography ranges from \$150 to \$50,000.

The DJI Phantom 3 Pro includes:

- 4k video
- 12 mp still photos
- stabilization gimbal for smooth footage
- connected to satellites for easy flying
- use a tablet or phone to see footage from the vantage point of the drone
- new updates are coming out all the time
- can go 48 feet per second
- can rise 400 feet up to 18,000 feet
- can go 3.1 miles away in distance
- 23 minutes of flight time on a battery
- 2.82 lbs in weight

Cost of DJI Phantom 3 Pro is around \$1400, \$1750 with an iPad Mini. iPad Mini is clipped to the controller. Use the DJI Go app on the iPad to control camera functions as well as controlling somewhat on the controller. To calibrate the drone, you spin it around you in both the vertical and horizontal position (hard to explain but easy to do). It uses a 20 mm lens. You can get a few different types of filters for it, such as polarizing filters and ND filters. More lenses are available to use on it but they cost a lot more. There is no zoom on the camera that comes with it. When taking the drone to a new area, it takes a lot longer to

acquire satellites, just as it would with a GPS.

When it is shipped, it comes with the propellers off. That is about the only real assembly required other than charging up the battery. Recharge time is about 1 hour.

The gimbal and satellite combined fight to keep the camera steady and it appears to do a very good job of it. Matthew has flown in up to 25 mph winds but wouldn't risk it in higher winds than that.

Works well with both Apple and Android devices but it doesn't get as glitchy with Apple equipment. He went up to 15.1 meters in height and showed us the view of us as a group. We had him take a group photo of us, too. He shared that with us on Facebook.

Next step up in drones has a bit of a zoom and higher megapixels. He showed us how there is no lag between controls and when it responds. There is no audio. That is because all you would hear is the whir of the blades. It has 4 motors. The camera is the most expensive part of the quadcopter. Cannot fly when it is less than 40 degrees or greater than 100 degrees. That is because the shell of the quadcopter is plastic and would become brittle under those extremes. Batteries are specific to the quadcopter model and cost around \$150.

When we came back inside, Matthew showed aerial photos he has taken of Long Prairie and showed the video and photos he shot outside. Says he has successfully taken photos with up to 1-2 second exposures.

Future Uses:

- Security
- Rescue
- Shipping
- Medical – fly in supplies
- News Reporting
- Geological surveys
- New vehicles – flying car concept
- Marketing
- Farming

Different types of drones:

- Inspire – can go 70 miles per hour and is the step up from the Phantom series (Phantom 4 is out now)
- Octocopter – has 8 blades
- Concept drones

Uses now:

- Inspections
- Security
- Science/research
- Aerial Photography like real estate

Questions:

- How much do filters cost? Answer: Around \$50-\$60 each for things like polarizing filters which work great for shooting water.
- How does it handle flying over water? Thinks it works okay. Hasn't really tried it.

- How does it do if you fly it over a cliff? Can fly it manually to hold a line.
- Can you rent? Mackenzie Hedge looked it up online and there is a drone rental place where you can rent for \$60 a day at blueskiesdronerental.com. Note: We know nothing about them though so use caution. Might be better off checking at camera shops in the metro area to see if they rent such equipment or if other reputable businesses rent such things.
- How many motors does it have? It has 4 motors. If one goes down though, they all do. Octocopters are better in that regard as it is easier to maintain flight with more motors working for you.
- How long have you been flying your drone? Got his in June of 2015 so one year.

Did a general Q&A where they could check out the drone closer.

### Photographer of the Month

Sharon Johnson shared her Friday with my Girlfriends project that she has been working on for the last 5 years. She has taken posted them on Facebook that she shares with friends. Her husband purchased the contents from storage units. One was from a salon and came complete with mannequin heads and wigs. She had a photo studio in her old house and had her husband sit there so she could practice. Once he got the mannequin heads, he told her to practice with them. So, just for laughs, she practiced with a few of them and included herself and posted it on a Friday as "Friday with my Girlfriends". She shared about 15 of them of her favorite photos. Said a project like this is good to do as she has improved on her photography a lot in these 5 years and in working with Photoshop to now create even more imaginative images. It was a very good presentation. Thanks Sharon.

### Photo Assignment: Water

Five people submitted images this month that showed different aspects of water. They were all very good.

### Follow-up

The agenda for August was discussed briefly. Bob, Jean and Ken will all be absent for the August meeting so arrangements will be made so that assignment photos will be mailed to Lynn prior to the meeting. Jean will arrange for someone to bring in and hook up the screen and projector and use their own laptop for the presentations.

### **August 17**

- Assignment: Architecture
- Photographer of the month: Lynn Anderson will show her architecture photos from European trips
- Topic: Arne Myrabo will be doing a presentation on moths/mothing