Let's talk Drones

Bill's Website

Jack's Website

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NOTE: Product, pricing is as today's pricing. As always things could change.



© Bill Fortney

It's part of the DNA of a nature/ travel photographer to always be looking for new subject matter and new ways of capturing images of previously photographed material in different ways. Each year this becomes more difficult due to the plethora of competent nature/travel photographers publishing great photographs.

Drone photography offers totally different prospective on the land and subject matter than we see from the ground. We both love seeing, exploring, and capturing something new with our drones.

Not too long agon, we both began using the FUJIFILM "X" system undenounced to each other. Similarly, we both began flying drones. What's more interesting is that we both purchased the same drone, the DJI Mini 2.

Included in this document is some BASIC BUT IMPORTANT things we use and some ideas on flying drones that will certainly help you. There's a lot more to learn than what's included here, and we'll try and explain and offer many important tips and information. Everything here in this writing, pertains to the Dji Mini or Mini2. There is much overlapping of information for other drones.

The image and video quality from this little beast is amazingly good. We constantly are amazed at the technology pack into this system, at the price point.

We hope this document helps you get through some of the things we have discovered along the way. We are still learning so any tip you have, send them our way.

We'll see you in the field!

Bill & Jack



GETTING STARTED

Basics: What You Need to Get Started!



Above is the DJI Mini II, an Apple mini-iPad, the three battery pack and charger and the controller. From Amazon you can get all of this except for the iPad in what is called the Fly More package for \$599. The package comes with a propellor protector which help protect the drone as well. The "Fly More" package include spare propellors, charging cords and a charging brick. Check out (Below) the size as compared to Bills watch!



The drone itself folds up to a very small package and will fit easily in a lens spot in your camera bag. We both use different things to carry the drone and accessories depending on where we are, travelling and ease. We'll discuss these later in this document as well. You can also purchase an insurance plan from DJI when you buy the drone. It will replace your unit if you should crash or loose it within a year (for minimal cost). The cost is about \$79.00

You'll need to add a mobile device that has WIFI to this system. We both tried using the iPhone. It was too small. The Jack tried his iPad, and it was too big and heavy, so like Bill, Jack uses the iPad Mini which is just right. The basic iPad mini with 64gb of memory is fine unless you want to store lots of images and video. Having a bigger screen (iPad mini vs iPhone) is helpful. Both of us were pilots in previous lives/. We understand the need to see what's around as well as altitude and air speed etc. The iPad Mini is perfect. (About \$399.00).

Batteries give you about 30 minutes of flight time. The mini will ask you to return "home" with about 10 minutes remaining to ensure safety. We'll talk about batteries and charging more later in this article.

Your drone will download your images to your smart phone as you shoot if you have Wi-Fi turned on. In Apple devices the image will go into your photo library and will be available on your iPad and your other computers!

HERE is a link to download the DJI Mini2 Manual

BEFORE YOU FLY

One other interesting thing is that the Mini 2 weighs 249g (0.55lbs), takeoff weight. However, you still need to obey all rules governing drones as well as (un the United States) a part 107 certificate to fly commercially. In other countries like the UK, you still need to register all drones if they have a camera. It's important to be aware of this if you travel. HERE is a good article on Drone Regulations in the United States.

However, you still need to get a drone "TRUST Certificate". It's easy. Google this online.

TRÜST The Recreational UAS Safety Test (TRUST) Completion Certificate Name:

CONGRATULATIONS!

For hobby flights: You need your TRUST

certification

For commercial flights: You need your Part

107 certification

Basic drone flight guidelines in the United States

- Fly at or below 400 feet above the ground
- Always fly within line-of-sight. If you can't see it, bring it in
- Stay away from airports

Authentication Token:

Issued by:

- Stay away from other aircraft they have the right of way in the air
- Do not fly over people
- Do not fly over or close to sports events or stadiums
- Do not fly near emergency situations such as car crashes or fires
- Do not fly under the influence
- Be aware of controlled airspace use the B4UFly app, request airspace authorization before
 flying in certain areas

GETTING READY TO BEGIN TO FLY, Preparation.

Below is important information on how to know where and when to fly. Beginners as well as experienced pilots should pay attention to these important considerations before taking off. Safety is always # 1.

WE ALWAYS ADHERE TO THE FOLLOWING

- 1) Make sure batteries and remote controller are fully charged
- 2) Drone is in good working order and firmware is up to date.
- 3) Consult the apps below and make sure you are flying in a legal area. (See below)
- 4) Consult the apps (see below) regarding weather (visibility, wind etc.)
- 5) Evaluate the area, terrain, obstacles, people, etc. and any potential risks.

So how do you know if where you are flying you are "Good to GO"?

There are many websites and apps that will give you this information. All recommendations here have both website and apps that you can search for on your mobile device.



All drones work using a mobile device (Phone tablet etc.). I use an app called DRONE BUDDY to check my locations It also have basic weather as well. It will detect your location and let you know if you are good to fly. The weather can play havoc with drones. Winds and moisture are things to avoid, especially until you become proficient in flying.



B4UFLY is also a good APP (by the FAA) Click <u>HERE</u> for more info

The best drone weather information application for us:



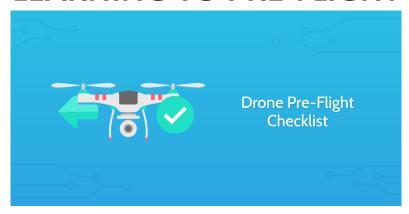
<u>UAV FORECAST</u> (UAV means **U**nmanned **Aerial V**ehicle). If you pay for the premium edition the forecasts run a week out.

MavicPilots You drone manufacture probably has good information on locations and weather as well. Additional they (especially DJI) have some good forums that I recommend joining. You'll gain knowledge and hear about trends, new products etc. MAVIC PILOTS is one I highly recommend. DRONE RUSH is a great website with lots of pertinent information.

This article (Click <u>HERE</u>) is great on explaining all the set-up procedures and what you need to know to be safe and learn your drone easily).

One you have established that all parameters as discussed are reached you're now get ready to fly.

LEARNING TO PRE-FLIGHT



Did you ever seat by a window on a commercial jet and see the pilot walking around looking at the airplane. He or she is doing a pre-flight. They do the same in the cockpit. You must get in the habit of doing the same with your drone.

Below is a good PRE-FLIGHT CHECKLIST. We recommend you copy this, print it out and carry it with you. Should you ever be consulted by anyone from the FAA etc., they will not only be impressed you are prepared, but they will also see you are paying attention to detail and doing this the correct way.

PRE-FLIGHT CHECKLIST (all points equally as important!)

1. Ensure that your drone is a 100% Functioning Drone

Inspect the drone for any damage before turning it on and make sure it is 100% safe to fly. Make sure your compass is calibrated (your screen will indicate the need to recalibrate) and that the GPS system is function properly (good signal strength.

- **2.** Make sure your remote controller is charged properly. The remote holds a charge better than the drone batteries, but make sure it is charged.
- 3. Make sure your (charged) Mobile Devic has the latest versions of the DJI Apps

Needed if you are using a DJI drone for your flight. Latest DroneDeploy app APPS can be found here

4. Up to Date Firmware

To check and update firmware if necessary, click <u>Upgrading Firmware on DJI</u> on the Support site.

5. Make sure you are using charged batteries (only use INTELLIGENT BATTERIES)

While you should always have at least one fully charged battery for your flight, we recommend having one or two or three spare batteries. Each INTELLIGENT BATTERY has about 30 minutes flight time. The drone will let you know the battery is at a low capacity when it's about 20% capacity. At a lower capacity it will let you know the level is at a critical stage and return to home (**RTH**—see pages 15 & 16). for longer flights.

6. SD Card with Adequate Space for your Images

Always **format** your SD card (see info on page35)

- **7.** Check connections of USB Cable from controller to mobile device. Use only licensed cables (see below)
- 9. Analyze your connectivity in the field before getting to your location flying, and

If you are going to be flying in an area without cellphone service, then conduct <u>Desktop Planning</u> of your flight path. Consult Google Earth before departing to your location of possible. Look for obstacles and avoidances.

10. Adequate Weather for Flight



Check with <u>UAV FORECAST</u> (UAV means **U**nmanned **Aerial V**ehicle). If you pay for the premium edition the forecasts run a week out prior to taking off. Pay attention to cloud cover, moisture % and winds.

11. Cleared Airspace for Your Flight

To ensure that the area you will be flying is cleared for drone use. Make sure you are compliant with all local drone operational laws. Consult a site like Airmap.io or



B4UFLY (by the FAA) Click HERE for more info

12) Make sure you have proper documentation as required.

.... Good to make sure of: --

Make sure you have some extra propellers for your drone in the event any of your propellers get damaged during your flight.

Familiarize yourself with the **Controller Sticks, wheels, and buttons** and how they function. **STUDY YOUR MANUAL** closely before you attempt to fly. <u>HERE</u> is a link to download the DJI Mini2 Manual





Jack used a label maker to make labels for his controller with the functions that each controller performed. In my early days of practice this came in handy. You will see that over time you won't even look at the controller when flying,

but in the beginning labeling the controls was helpful and kind of a security blanket!

(The word FORMAT (above) is a reminder to FORMAT the memory card after downloading files and prior to flying.)

FAMILIARIZE YOURSELF WITH THE SCREEN ON THE MOBILE DEVICE.



The mobile device screen will indicate speed, heights, your home point, battery level, GPS Signal strength and more. You need to be watching these indicators, and more as you fly.

You'll need to set up your parameters prior to flying: We will discuss some of these further on in this document. STUDY YOUR MANUAL closely before you attempt to fly.

HERE is a link to download the DJI Mini2 Manual

Parameters include **these and more**:

- 1) Max Flight height
- 2) Maximum distance
- 3) Screen and Camera Settings
- 4) Safety Settings.

The drone manual will walk you through this. As well you can access <u>THIS VIDEO</u> for some good information on basic flight control. <u>THIS</u> article is also a good reference for what you MUST set before you fly... (Flight max, Flight distance, height, Camera Settings etc.)

If you are new to flying a drone, don't be intimidated. It just takes practice. We are still, to this day practicing being better pilots. It's just like taking travel/ nature images with your DSLR, you need to practice! Being prepared is the most important part of flying.

GETTING IN THE AIR

We recommend starting out in a large open area. (NOTE: The Mavic Mini2 does NOT have sensors that will alert you prior to crashing into something. Other drones do.).

Now that you have done all (and more) of the above, you're ready to fly. <u>Turn your volume up on your mobile device!</u>

The drone talks to the remote controller. The drone also locks onto GPS and communicates information to the drone. You'll be told that the <u>"Home Point" is established</u>. A small box (bottom left on the iPad Mini 2) will show <u>a "H",</u> which is the home point. You'll see the image of what the drone is seeing in the screen.

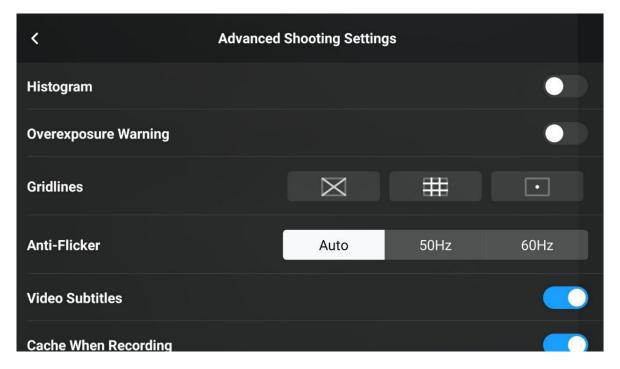
The wheel on the back (left index finger) controls the gimble(camera) up and down. In that small box (bottom left), a blue line will tell you where you have flown, the red line is your return line. follow that to get back "home" and watch your flight level and speed.

You'll also see your distance from home (you can set this to feet or meters in settings before you fly).



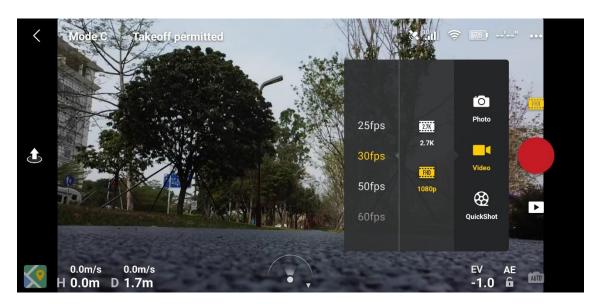
One thing that is important. DO NOT try and follow the drone in flight with your eye, unless its really close to you. You are better off looking at the screen on you're mobile device and monitor flight level, speed, disctnce and look for obsticles.

Another good thing to do is to set leves lines and grid lined on your mobile divice screen using the setting in your rempte controller. In "CAMERA SETTINGS" click on Grid settings. We have all three showing on our screens



STILL IMAGES and VIDEO:

Again you change these on the remote controller.



The button on the back right (right index finger) takes a still image our engages video You can change from still to video by tapping on the icon on the screen.

Ther are some presets built into the Mini2 called "Quick Shots". We recommend not getting into these until you are more experienced as a pilot.

RETURN TO HOME (RTH)--IMPORTANT

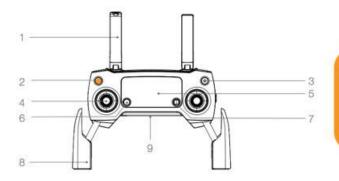
1) If you have <u>a LOW BATTERY</u> a prompt will appear on your screen and the drone will automatically ascend to the maximum altitude (you already set) and return to home within 10 seconds –IF YOU DO NOT OVERRIDE THIS FUNCTION).

If the batteries get critically low, you CAN NOT override this function. When we flew aircraft, we certainly didn't want to run out of fuel... the same with battery power.

2) I the drone loses signal for more than 3 seconds when using the remote or 20 seconds using WIFI the drone will attempt return to home. If you begin to receive the signal again, you can cancel this and continue to fly. If you, have it set to Hover then your drone will just hover in its current position, so you can walk towards it and re-establish your signal. However, if you fail to re-establish your signal and the Battery RTH is

- triggered then the drone will either return home or land depending on your Battery RTH settings. Thirdly, it can be set to land, so it'll just land in its current position.
- 3) When you tap the return to home button on your remote (or in the app) The drone will return to home automatically. It can be stopped anytime by pressing the Flight Pause Button on the remote controller (see below) or by pressing the Stop icon in the app





- 1. Antennas
 - Relays aircraft control and video
- Return to Home (RTH) Button
 Press and hold the button to initiate
 Return to Home (RTH). Press once
 again to cancel RTH.
- S. FOWEI DULLOIT

Used to turn the remote controller on and off.

Control Stick
 Controls the orientation and movement of the aircraft.

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We recommend you practice, practice, and then practice more. Theres a lot to be aware of but there is no substitute for experience. It's part of the fun!

OTHER SETTINGS (JUST SOME) OF NOTE for video and still photographing



To make good cinematic videos pay attention to how your camera is going to behave. You can customize these setting as you wish.

Adjusting your Pitch & Gimble Settings



First, we recommend getting familiar with the DJI FLY APP. You can check the drone's status, update firmware, and customize your settings.

Upgrading Firmware on DJI



There are 3 modes on the Mavic Mini 2 (and most other DJI Drones):

Cine-- Cine is the ideal flight mode for shooting stunning, cinematic footage.

Mavic Mini's rotational movement is slowed, and its control sensitivity is increased, ensuring you shoot the smoothest, most stable footage.

Normal -- Position mode is the default flight mode for your drone.

Sport-- Sport mode is designed for flying your drone with maximum speed and maneuverability. Users tend to use this mode for traveling quickly to points of interest for shooting photos and video. Make sure you use only use this mode in a safe, open area to experience just how fast you can fly!

You can adjust these settings. (Faster and slower speeds of the GIMBLE (camera PITCH up and down) and YAW (direction the front of your is facing when rotating either clockwise or counterclockwise (or left and right if you prefer) on its vertical axis.

Access <u>ADVANCED GIMBLE SETTINGS</u> (ON Mavic Mini only). It is easy to customize these setting to your own taste, However I recommend watching THIS VIDEO to clarify how to, and what the setting mean.

Pitch is controlled by the wheel on the back left side, usually by your left index finger)

<u>PITCH SPEED</u>= the **higher** the number the **faster** the gimble(camera) goes up and down), For good cinematic photography you want a slower more gradual movement.

PITCH SMOOTHNESS=The **higher** the number the **smoother** the movement will be when you let go of the wheel and stop the gimble(camera) from moving.), For good cinematic photography you want a slow motion and have the gimble(camera) stop as soft as possible.

YAW is controlled by the Left controller (turning the drone to the left and to the right.

<u>YAW SPEED</u>=The **higher** the number the **faster** the drone will turn from left to right or right to left. You want this to be slower than normal for quality video.

YAW SMOOTHNESS=The higher the number the smoother the drone will stop when turning from left to right or right to left. You want this to be slower than normal for quality video

THESE are great videos that explains these settings. Practice and find the setting you like. <u>VIDEO 1</u> <u>VIDEO 2</u>

WE ALMOST ALWAYS FLY IN **CINE** MODE!

Jack's Settings are as	follows (just what he likes)
	Tonionio Guer minutino minutino

	NORMAL	CINE	SPORT
PITCH SPEED	25	8	40
PITCH SMOOTHNESS	25	25	25
YAW SPEED	30	12	60
PITCH SMOOTHNESS	70	80	40



FROM BILL: "This tree was a special circumstance; I was out after a pretty snow and saw a tree way out in a field and wanted to shoot it, but it was behind a fence and way out in the field. I did not have my longer telephoto lens with me and then it dawned on me I could fly out to it!!! I flew the drone out across the field and then adjusted my altitude to get the composition and background I wanted and then shot it! I converted the shot to monochrome in post and my feet were dry! I didn't have to climb the fence and then walk onto private property, and I got the shot!!!"

ACCESSORIES

Just like we have a need for accessories in DSLR photographing, drone photographing requires some accessories to improve your images.

FILTERS



Yes, you need filters for your drone. We are firm believers in putting good filters on good lenses. The same goes for drones.
Unfortunately, the best filters available for

Unfortunately, the best filters available for drones are from Polar Pro (same folks who makes my Tablet mount---see below). The filters I (we) use from companies like Breakthrough Photography, Lee, B + W etc. do not make drone filters yet.

Unfortunately, Polar Pro does not make a filter system for the Mavic Mini or Mini 2 as of this writing. (Air 2s, FPV, Mavic2, Mavic Air2 and Inspire drones all can use filters from Polar Pro).



As with regular photography, two of the most useful filters for drone photography are circular polarizer (C-POL) filters and neutral density (ND) filters.

A great article on drone filters, why and how etc. can be found **HERE**.

We recommend you read, print, and study it.

WHY a POLARIZER and a ND FILTER?

- A <u>polarizer</u> removes or reduces glare and reflections and helps capture full color depth due to reducing glare.
- Much of the subject matter includes large areas of surfaces that can be reflective
- ➤ <u>Neutral density</u> are vital filters for drone photography and videography because of the limited range of exposure options in many high-end photographic drones.

- Neutral density filters will allow you to get back into moderate shutter speeds and apertures to take advantage of the sweet spot of the lens and for a more natural appearing video feed with a slower shutter.
 - **ND4** reduces light by 1/4. An ND4 filter can reduce 2 stops of light, allowing you to slow the shutter speed from 1/100s to 1/25s.
 - ND8 reduces light by 1/8. An ND8 filter can reduce 3 stops of light, allowing you to slow the shutter speed from 1/200s to 1/25s.
 - **ND16** reduces light by 1/16. An ND16 filter can reduce 4 stops of light, allowing you to slow the shutter speed from 1/400s to 1/25s.

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A great article on drone filters, why and how etc. can be found <u>HERE</u>. I recommend you read, print, and study it.



We use the <u>Tiffen</u> 6 filter ND & ND Polarizer Kit.

Click **HERE** to purchase.

QUICK GUIDE to ND FILTERS:

ND4 Sunrise, Sunset, Early Mornings and Evenings

ND8 Overcast sky, Daytime, Noo direct sunlight

ND16 Scattered sky (partly cloudy), Noon, Direct sun exposure

ND32 Clear Sky, Noon, Direct sun, Very Bright surroundings

ND64 Extreme bright surroundings (Desert, snow) ... noon time

We suggest you experiment with your ND's You'll come to your own conclusions and fine tune when and to what strength you use them.

THESE are great videos that explains these how to use ND and polarizing filters

VIDEO 1 VIDEO 2

MORE ACCESSORIES

Much like photography, drones offer a myriad of accessories.



CABLES: Depending on the mobile device you use; the cable may need other longer. The MAVIC Mini 2 remote uses a USB-C to Lightning (Apple) cable. **WARNING:**

ALL AFTER MARKET CABLES ARE NOT ALIKE).

They must say " [MFi Certified]: USB C to Lightning Cable has completed MFi certification requirements.

The Apple MFi certification ensures the safety of your Apple devices even when fast charging at the highest speed.

If not, they will not work. I recommend either buying the cable from your mobile device manufacture (APPLE etc.). We have purchased cables from **JXAUX** on Amazon. They work great.

HERE is the link to JXAUS

We also recommend cables from **APPLE**.

.... Like everything else— always carry a backup cable or two!



THUMB STICKS. We use these from HANATORA. They are a bit taller than the ones that come with the remote controller as well as height adjustable. Doe \$12.99 These make a difference, at least for us. Click HERE for more information and to buy.



Australia!

We recently purchaed these "Cine Sticks" from ScottyMakesStuff.com We have not received them yeat but bet they will be even better than what we are using now. Controlling the drone is primary and anything that helps is important. Click HERE They are made by Scotty in



extra Batteries: Model dependent! It is not uncommon to go through 4-5 when flying. Each battery for my Mini-2 lets us fly up to 30 minutes. However, at about 20 minutes the system tells us to return "home" as the batter level is low. At about 10% the system indicates it's in "critical battery mode and goes automatically into RTH mode (see pages 15 & 16) USE ONLY INTELLIGENT

<u>BATTERIES.</u> They allow the system to read levels and other information. Beware of cheaper (non-intelligent batteries). batteries. We recommend only buying the ones from the manufacture.



You will need to charge batteries often. By using <u>THIS CHARGER</u> from Mavic. We charge 3 batteries without exchanging them. It takes a good ½ or so per battery.

Don't leave home without a few charged batteries



Weather device. Click HERE to see it on AMAZON. It is important to know the speed and direction of the wind. Beware: Winds aloft can be completely different, even 100 feet above your location. The drone will let you know if the winds are too strong. This little gadget let us know wind speed, temperature, wind chill, wind gust, and Beaufort Scale, all in one compact, portable, rugged package. It fits neatly into pour drone

case.

DO YOU WANT TO FLY IN THE RAIN?



Remember bad weather makes good pictures, but moisture can debilitate and destroy your expensive drone. We both have purchased <u>THESE</u> "Wet Suits" from <u>Phantom Rain</u> for my Mini 2. Their website is great and has a lot of videos on their products (Located near Cleveland, OH).



CHARGING BASE

This item is very helpful and looks great. The DJI Charging Display Base a practical way to keep your mini drone charged. It's sleek. When connected with the DJI 18W USB Charger, the case charges and protects your DJI Mini 2 or Mavic Mini at the same time. Once charged, your drone is beautifully displayed. About \$30.00. Click HERE



PROPELLER HOLDER: The Mavic MINI 2 and other drones come with this holder, however the one we found is easier to use (just a little) than the one that comes with the drone. Click HERE, about \$15.00



LANDING EXTENSIONS: If you are not landing on even surfaces you can improve the drone's ability to adapt to the ground environment during take-off and landing and avoid ground debris to less contamination or damage to the lens filter and gimbal. If you feel good about landing on the



STARTTEC Drone Landing Pad

then you don't really need the

extensions. (Buy this pad as well)

Click **HERE** for the landing extensions, about \$15.00

HOW JACK CARRIES HIS DRONE

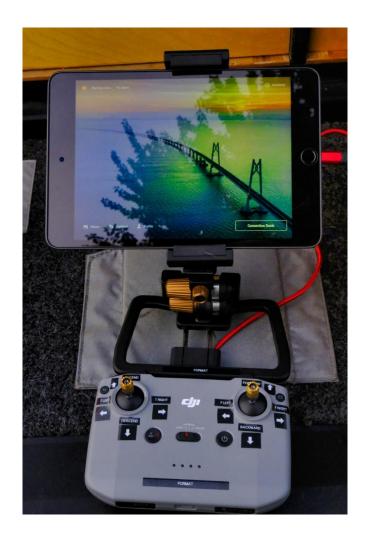


We (Jack & Bill) carry our drones differently.

Sometimes we carry them in our camera bags

Certainly, when you fly and can't carry everything you want or need. It's convenient to fit your drone into a camera bag (Batteries need to be in your checked luggage). However here at

home and locally, Jack carries his drone, batteries, remote controller, ND filters etc. in VCUTECH Mini2 Waterproof Case. \$49.99 Click HERE to buy on Amazon



HOW WE MOUNT OUR iPad Mini to the MAVIC REMOTE CONTROLLER.

First, we tried our iPhone. It was too small. The we tried my iPad, it was too big and heavy, so we both purchased an **iPad Mini**. It's just perfect.

There are many offerings out there, but this system is top of the line. (From <u>Polar Pro</u>. Its Stainless Steel and Aluminum. About \$ 125.00, not cheap but worth the price. I love the three control knobs to set to the perfect angle of my iPad Mini properly as I choose it to be.



- QR Plate System enables you to quickly switch monitors from Crystal Sky to Tablet to any ¼ 20 mount in less than 2 seconds
- Full Metal Construction Combining both Stainless Steel and Aerospace grade Aluminum the Flight Deck Base is bombproof ensuring your monitor never slips
- Stainless Steel Tilt Locks provide 256 Slip-Free viewing angles and height adjustments
- Aerospace Aluminum Knobs provide a fully tool less set-up and storage process to spend more time flying and less time fumbling tools around
- Includes: Flight Deck Base, Crystal Sky Mount, and a Tablet Mount

A MUST ACCESSORY:



This device is made by <u>HOODMAN-</u> You may know them from their loups etc. that we use in our nature/travel photography. This is well thought out and constructed, easy to use and is the top-of-the-line product that will let you fly in the sun, <u>YOU WILL NOT BE ABLE TO SEE YOUR MOBILE DEVICE SCREEN IN THE SUN</u> and if you try, you're likely to get disoriented. Get yourself one of these! About \$20.00 Click <u>HERE</u> to buy

HOODMAN AVIATOR
HAV1 SUNSHADE for iPAD MINI



©Jack Graham



SD CARDS: THEY ARE NOT ALL ALIKE and MAKE a BIG DIFFERENCE

We use the San Disc 256GB Extreme micro SDXC UHS-1 (V30, 4K) about 40.00 Click <u>HERE</u>

Up to 160MB/s read speeds to save time transferring high-res images and 4K UHD videos

> 4K UHD and Full HD Ready with UHS speed class 3 (U3) and video speed class 30 (V30)



© Bill Fortney



MAKING IMAGES and VIDEOS.



Again, there are many tutorials on You Tube regarding making videos and still images (especially Video). Shooting video takes practice. You will learn different flight maneuvers to attain

interesting perspective and cool looking videos. Seek these out online. *And like anything else, get out and practice.* Still images are like shooting your DLSR. Many of the rules (not always needed) work the same. I love hovering over a good subject and shooting straight down at different altitudes. Lines and shapes are interesting. Here are some videos with great tips:

VIDEO 1 VIDEO 2



©Bill Fortney

NOW YOU HAVE VIDEO'S AND IMAGES FROM YOU'RE DRONE, NOW WHAT?

You will start accumulating videos and images rapidly. Get your external hard drives ready. 4K videos are quite large. A fast computer helps a lot too!

In the beginning you usually will save every video you shoot. As time goes by you get selective.

The same goes for still images.

STILL IMAGES: On my Mini 2 I can shoot RAW and JPEG, just like a regular camera. The JPEGS are 12mp prior to processing. Process them in the same manner as you process your images from your DSLR.

<u>VIDEO</u> is a different story. You can shoot Raw AND REGULAR (mp4) VIDEO. There are many processing programs available for both PC and MAC. Some have some with steeper learning curves than others. What you use is dependent on your own learning curve, and what you are doing with your videos. The Djo app has a processing section for basic processing as well.

You can share your work on social media. VIMEO is a good place to share your images.

Uploading is quite easy. HERE is Jack's Vimeo link. (Note not all videos were shot using the drone... the ones not from the air were done using a GO Pro camera or my Fuji Cameras.

If you want to see some amazing world class video done with a drone, check out <u>Sam Kolder on You Tube</u>:

We hope this information helps in some way. Ther is a lot more to know. Remember, be careful out there. Fly the right way, don't cut corners. As always, there's no substitute for experience so practice, practice, and practice some more.

Bill & Jack



Bill and Jack circa 2020





Both images this page © Bill Fortney





Both images this page © Jack Graham





Both images © Bill Fortney

Both images © Jack Graham



