

DISCUSSION GROUP

October 12, 2019

AERIAL PHOTOGRAPY

Mary MacDowell and Jay Petersen

Folks this was a great session. It was uplifting (pun intended) and kept us all fascinated with the ways in which our members take to the skies.

KITE PHOTOGRAPHY – Jay Petersen

Jay talked about his foray into KITE PHOTOGRAPHY. He was inspired by some websites that described early efforts in KAP (Kite Aerial Photography) Here are some interesting links the history of KAP:

KAP History <http://www.geospectra.net/kite/history/history.htm#invent>

1907 KAP in SF <http://robroy.dyndns.info/lawrence/landscape.html>

KAP video UC Berkeley professor <http://kite.org/activities/aerial-photography/>

Never one to be bored, Jay began to think about doing aerial photography after his retirement. At that time, the best amateur option for aerial photography consisted of flying a kite with a camera attached. If you check out the web sites above, you will see some interesting history of this technique which dates to the late 1800s. The San Francisco earthquake really brought this technique into the public realm in the early 20th century with the first aerial photography of the devastation of the city.

Jay was self-taught on how to fly a kite with a camera. It was very interesting to hear how he tried various cameras, stabilization devices to prevent the swing and sway of the camera and implement the required automatic shooting. Here is the website of a store that specializes in KAP equipment.

KAP store <http://www.kapshop.com/Starter-Kits/c86/index.html>

Jay showed us images as he became more skilled and the resulting photographs were actually very good.

He got his best results using refurbished small Canon point and shoot cameras (which can be purchase for less than \$50). He was able use these cameras because he found a book [Canon Camera Hackers Manual](#) which was published by folks who reverse engineered the Canon point and shoot. The initial reverse engineering project blossomed into a worldwide open source project called CHDK (Canon Hackers Development Kit). CHDK sets out the process to turn these cameras into fully

functioning units by adding software changes to the camera. The key features that this software provides for KAP are interval timing, fixed focus and manual control exposure control. However, the software also provides an amazing range of other enhancements, including raw image capture, motion detection, lightning detection, focus stacking, etc. (It should be noted that a similar project is underway for Canon DSLRs. The project is called Magic Lantern and it used the same software enhancement process, but for Canon DSLR cameras). We're mentioning these projects in case anyone has a hankering to use their old point and shoot Canon (or even their Canon DSLR) camera in a unique and groundbreaking way. Google these projects to find out more information.

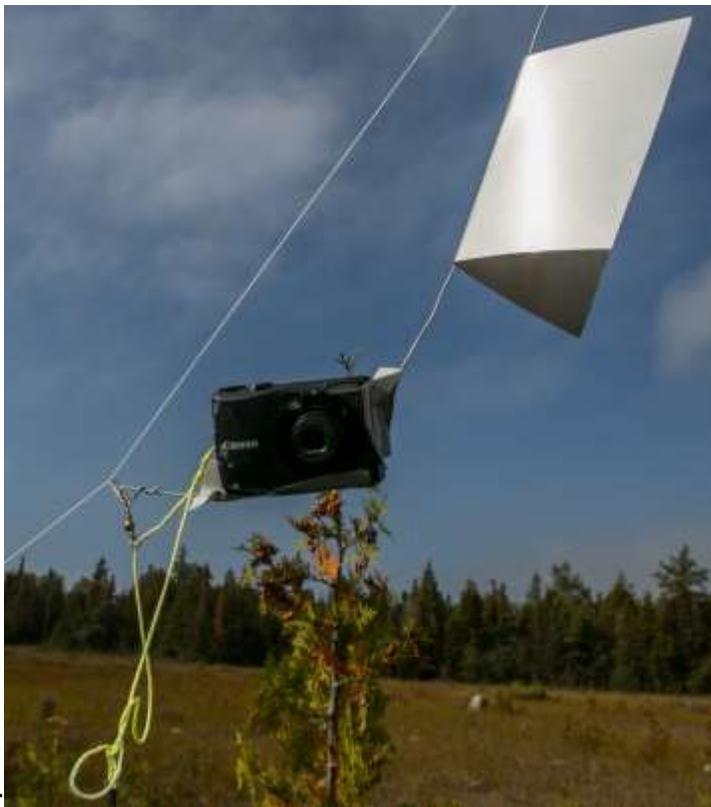
Here are a couple of links from website for the CHDK project, where you can download the needed software for a variety of Canon point and shoot cameras - but only Canon cameras!

CHDK <https://chdk.fandom.com/wiki/CHDK>

CHDK manual https://chdk.fandom.com/wiki/CHDK_1.4.0_User_Manual

Here are a few of the images Jay shared with us.

Jay's first camera stabilization rig:



The rig in use at Hessel Harbor in the UP



A view of the Asbury Park, NJ boardwalk and beach



Mackinac Island from a kite



Jay also mentioned that with the advent of drones, kite flying has pretty much gone by the wayside. But if anyone is looking for a challenge, this might be up your alley.

Connie Trabold and Jeff Trabold: How to take pictures from an airplane.

First, you build an airplane.



Connie Trabold and her husband Jeff built a great two-seater airplane from scratch. It took a while; twenty years, four moves and lots of riveting. Jeff is a licensed pilot and has been involved in aeronautics since his days in the military. The couple have taken this hobby to new heights by combining her love of photography with his love of flying. Connie described some of the challenges of learning to photograph at 100 mph, in a small cockpit with sun coming through the plexiglass. She has done a great job and shared her many photos of the area with us. They fly out of Kalkaska where they live and journey all over this area from Traverse City to Sleeping Bear and environs. Connie is snapping shots all along the various routes.



They flew to Oshkosh Wisconsin for the Air Adventure rally.

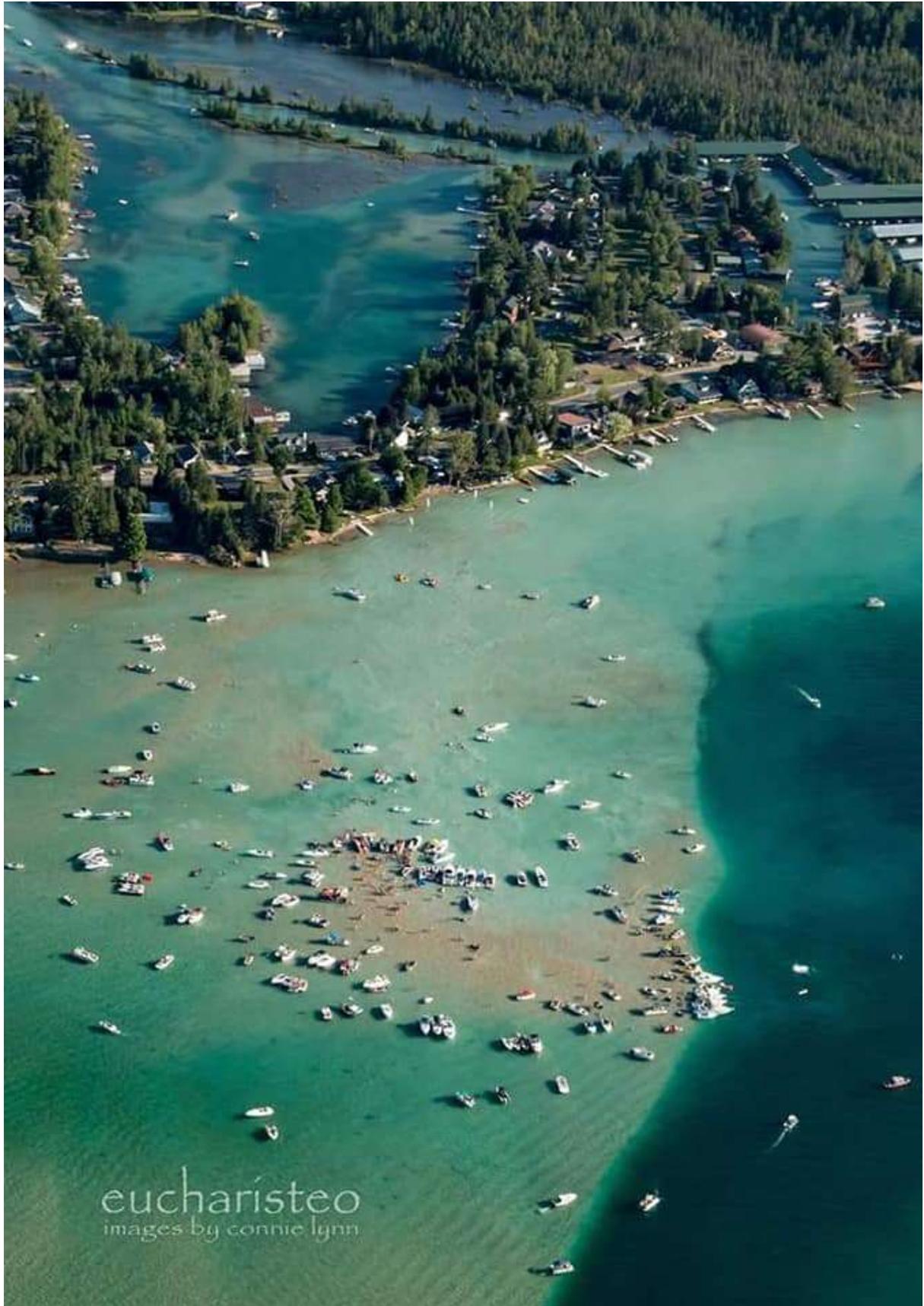
<https://www.eaa.org/airventure> and shared some great pictures of the event.

Interestingly, Terry and Jody Clark, who were at this discussion group, also have flown their plane to this event many times. TACC has accomplished folks who are great not only with a camera but also in many other interesting areas.

We really enjoyed this presentation both on both levels, air flight and photography.

Here are some of the aerial photos that Connie shared with us:





Jerry Stutzman: Drone photography

Jerry showed us his DJI drone and walked us through the machine.

<https://www.dji.com/> Jerry is happy with this brand and model as he upgraded from his first drone.

It is a compact but powerful machine. Jerry indicated that it is easy to operate but it must be used with caution as the rotors can be quite dangerous. He is always cautious flying it. There are areas where it can't be flown, for instance drones are not allowed in the National Parks or near airports. The machine comes with software that advises the operator if they are within restricted zones.

The machine can be operated by smart phone or iPad. It has good range and generally stays in contact by wi-fi...unless the signal fails. It has amazing capabilities.

The camera has a flat lens and is stabilized in flight. The camera is remotely operated by the phone/iPad and the images are seen in live view. Jerry uses this both for still shots and video. He is working with a vineyard in the area to produce advertising for their wine and winery.

Here are some of the drone photos that Jerry showed us:





The next picture is a composite marketing poster that Jerry created for Bregman Brothers



Please join us for the Discussion Group. You never know what you may learn and what may peak you interest to try.