

Kite Aerial Photography

How to take aerial pictures using your kite



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KITE AERIAL PHOTOGRAPHY (KAP)

Kite Aerial Photography (KAP) is an exciting activity of taking aerial pictures with the help of a stable kite and a camera kit attached to the kite line.

KAP has scores of enthusiasts around the world. There are KAP clubs, exhibitions and even competitions. Our short manual will give you instructions on how to make aerial pictures with our kite Skymaster.

HiCam Camera Kit

HiCam Camera Kit is a set consisting of the camera mounted on a frame with slow-release mechanism (to delay taking a picture).

The origin of the HiCam camera cradle was a desire to create affordable and quality KAP. The cradle can use the widely available Fuji "Single use" camera which uses ISO800 film, or the excellent Olympus Stylus Epic, or any similar camera. The camera model should have no zoom, as zoom models are not very suitable for KAP.

When used with the Olympus results can be obtained which will compare with the best. The cradle will also suit experienced KAP'ers who want a simple light rig which can be taken hiking etc. where a radio controlled rig and large kite would be too big and heavy to carry long distances.



The rig uses a modified viscous timer originally developed by model aircraft enthusiasts and used by David Hunt in his inexpensive KAP rig. His design was part of the inspiration for the HiCam. You will note that the HiCam timer is more advanced and can be varied.

The HiCam Camera Kit is available for sale. If you wish to buy one, please contact us - click [here](#).

HiCam Camera Kit in use with Skymaster Single Line Kite



How to Assemble Skymaster Kite for KAP

Well named, this kite is perfect for KAP having a wide wind range, exceptionally stable, high angle of flight and simple to fly.

I am very biased when it comes to this kite as I have yet to find a better kite for KAP. Be that as it may any stable kite that can lift 200g for the Fuji or 300g for the Olympus should do just fine.

One useful ability of the SkyMaster is that it can be "tacked" left or right by adjusting the connecting ring. Moving the ring right as you face the kite will cause the kite to tack left.

Another useful feature is its ability to be stacked one kite above the other for greater lifting force.

Although the kite does not need tails for stability even in strong winds, adding two tails, one on each spine will cause the kite to be more docile and reduce the amount the cradle moves.

This kite has a very wide wind range especially when framed with tubular fiberglass or carbon fiber. The ideal wind is minimum that can lift the cradle easily. As the wind gets stronger cradle movement increases.



You can buy a Skymaster online right now at www.hiflykites.co.za

HiCam Camera Kit Assembly

Safety First

Your first KAP attempt should be in a wide open space such as a sports field or a beach. The wind should be steady and not strong, particularly if you are not familiar with flying kites. The amount of pull a large kite can exert, is easy to underestimate in strong wind. Beware of flying in storms or near power lines.

Step by Step Instructions:

1. Launch the kite and let out about 30 meters (30 yards) of line. In good conditions the kite will now be flying at a high angle and pulling strongly.
2. Attach the kite line to the first upper Picavet ring by means of a larks head knot. See picture on the next page:



3. Attach the kite line to the second upper Picavet ring also by means of a larks head knot. The two attachments must be at least half a meter apart.
4. Make sure the lines of the Picavet can move freely through the rings. If not adjust until they do.

Do not arm the timer, but let out more line until the cradle is at the height you want to take the picture from. Remember that the camera has a wide angle lens so the camera does not have to be very high to get an effective aerial photo.



5. Attach the kite line to an anchor or get somebody to hold the line.
6. Walk the line down until you get to the camera cradle.
7. Adjust the cradle to point in the right direction.
8. Arm the timer and advance the film on the camera. To arm the timer, you wind the timer screw anti-clockwise and once the timer arm is at its highest point push the timer screw in towards the cradle body. (if the timer screw is not pushed inwards the time will be very short.)
9. Release the cradle.
10. Repeat from point 7 for each picture.
11. Note that if you are using the OLYMPUS the timer screw must be turned almost all the way in. Adjust and test.



Frequently Asked Questions About KAP

What is the best wind speed for KAP?

Many KAP'ers regard the minimum wind that will lift the rig as being the ideal wind. Their reasoning, which I believe is correct, is that cradle movement and particularly vibration is at its minimum in light wind. Also important is that the wind is steady as gusty wind will cause more camera movement. Experiment with your kite without the cradle in differing winds so as to get a feel for how hard it pulls in varying conditions. Remember that the drag/lift increases by the square of the wind speed so that a small increase in wind speed can double the pull.

Can the HiCam be used with other cameras?

Probably. Although we have designed it to be used by the Fuji and Olympus. However since both the Fuji and Olympus are particularly small most other cameras will prove to be too big.

Is the difference between the Fuji and Olympus pictures noticeable?

Very much so. It's not that the Fuji gives bad pictures, but the difference is unmistakable. The success rate of the Olympus is also greater with less photos being lost to blurring.

How high can the HiCam go?

The timer can be set to a maximum of about two and a half minutes. That does not sound like a lot, but with a steady wind and good technique the cradle can get surprisingly high (at least 200 to 300ft). It must be remembered that most good KAP pictures are taken from about 100ft above the ground when detail is still clear and the aerial perspective is at the most striking.

What is the best film to use?

ASA400 or faster film is ideal for KAP. Very fast films ASA800 and above can be grainy limiting the amount the negative can be enlarged, but faster films have improved dramatically in the last few years.

What size kite do I need?

The kite that we use is about 2m in wing span and will lift both the Fuji or Olympus. Any stable kite capable of lifting at least 300g in a steady breeze will be fine. A smaller kite will be able to lift the rig in strong wind although the results are likely to be poor.

KAP Picture Gallery

All pictures below were taken using the HiCam camera cradle:







You can buy Equipment for KAP online right now at www.hiflykites.co.za. See you there!

