Grassroots Mapping Preparations Lists: plan and pack everything

The Week Before:

Will you be flying within 5 miles (7km) of an airport? If so, find another site, or ask the airport about a Notice To Airmen (NOTAM).

Talk to the people you'll be flying over.

Check that you have everything on the packing list, and reserve a helium tank.

Find a team to go with you. Two is a team.

Email the Grassroots Mapping list.

The Day Before:

Check the next day's weather. Can you fly? (see *Quickstart Guide*)

Pick up helium.

Charge all batteries.

Clear all memory cards.

Remember, pictures aren't erased only by moving them to the computer's Trash or Recycling Bin. Empty the Trash.

Pack everything on the packing list.

Print a map of the area for each participant, using satellite imagery from google, USGS, or other source. Printed maps allow for quick note-taking.

Packing Lists

Field Stuff:

- pencil and notebook for field observations
- o printed map of area
- sunglasses & sunblock, and a hat (you'll be looking at the sky a lot)
- water to drink
- O GPS (optional)
- timer or alarm clock (optional)
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Camera Stuff:

- camera with continuous shot (tested)
- charged batteries
- o memory cards
- rubber band harness
- O spare rubber bands (heavy, #64)
- bottle rig
- scissors
- o packing or gaffe tape
- o soft bag to keep everything in
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Balloon Stuff:

- helium
- o balloon
- line winder
- o canvas or leather gloves
- carabiner
- attachment ring
- o cable ties
- o swivel clips
- o mooring weight (see Quickstart Guide)
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Balloon Flight and Return Checklists: from flight to map

1) Pre-Fill Checklist:

Re-tie all knots, inspect and trim lines if there are signs of wear.

Check all rubberbands for signs of wear, replace if frayed, tearing, or leathery feeling.

Check the camera's plastic bottle protector for rips or growing cracks, tape both sides of cracks to hold them. if they're really bad, replace the bottle.

Look for pale stress lines around the re-usable cable-ties release latches. If stressed, do not use to seal the balloon.

Set up mooring point.

2) Fill Balloon (see Quickstart Guide)

Don't let go 'till you moor it!

3) Pre-Flight Checklist:

Look around for hazards. Trees, buildings, roads, antennas, power or other lines are all dangerous places for your line.

Look at the terrain- in your path are there potholes, ditches, thorny or poisonous plants, steep drop-offs, edges of roofs, or anything else that could hurt you?

Take a GPS measurement (if you have it).

4) Test Flight Checklist

(see Quickstart Guide)

- check all knots
- o gloves on
- o go to 100-150ft (30-50m), watch the wind, obstacles
- o bring the balloon back down

5) Flight Checklist

- o check all knots again
- o set up camera
- start timer for camera's shooting time (if you have it)
- gloves on
- o fly!
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6) Post-Flight:

Discuss and write notes on the flight, note best flying locations and obstacles on the satellite map printouts.

Collect and photograph everyone's notes and maps in good light so they can be digitized and shared.

7) Upon Return:

Take the images off the memory cards.

Share the field notes with your team.

Post a research note to publiclaboratory.org on your flying location to help future expeditions.

Sort the images into a small folder of clear, straight-down, map-ready images. (see mapknitter.org for detailed instructions)

Go to Mapknitter.org and start a new map.

Share the images with your crew by e-mail or image sharing site such as Flickr. Give them the address for the Mapknitter map so they can work on it too.

Export your map.

Share findings with the Grassroots Mapping List.