

Powered Paragliders for Search & Rescue

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Providing your
Public Safety community
with the unique
capabilities of the PPG



Getting Started

1. Contact Local & State Agencies

- Call the State Police and set-up a meeting with the SAR coordinator
 - Explain the flying characteristics of PPGs
 - Explore with Officialdom how PPGs could serve the SAR community
 - Have your team listed & become known to SAR Field Coordinators

2. Join and Participate in State-Wide SAR groups

- *Example:* New Mexico Emergency Services Council – ESCAPE

3. Participate in Multi-Team SAR Drills

4. Develop SAR Team Patches and ID badges

These build team spirit and help team members get through police lines.

The PPG's Unique Flight Characteristics



The PPG can get down low and close-in for an exceptional look into areas not easily checked by other search and rescue teams.

ATVers stuck or injured in arroyos are a real problem in western states.

Training: Skill Syllabus

1. Develop proficiency flying safely at low altitude.

2. Practice Using Visual Scanning to Spot Search Targets

- *Targets should be: Out in the open, obscured by trees, shrubs and shadows*

3. Flying Search Patterns

- *Drills should include exercises for each type of pattern to be flown*

4. Navigation: *determining & reporting location of self, search targets, evidence...*

- *Using different tools, Compass, GPS, visual clues*
- *recognizing map reference. Estimating distances*

5. Communication: *effectively reporting data to Command Post or team members*

6. Working with Partners in Flying High/Low Formations

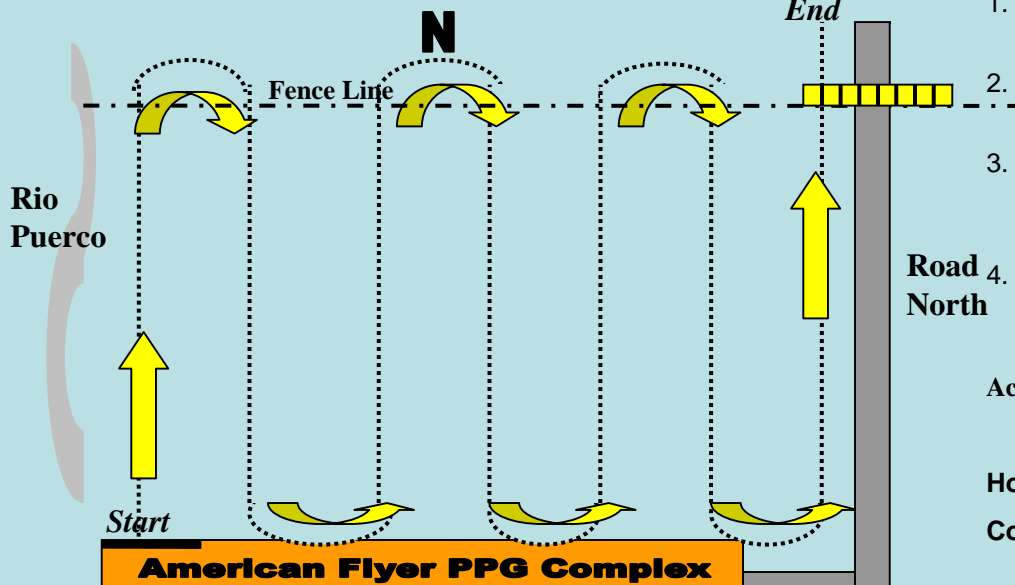
7. Preparing an Emergency Pack, “Jump Pack”

- *Items for the packs may be different in different parts of the country and reflect personal preferences. This is a great meeting night discussion topic.*

Record Keeping

Complete a report detailing your drill activity. It will be needed for:

- Yearly State Report
- Documenting Skill & Activity Level
- Assessing Skill Level Against Continuum
- Evidence for Tax purposes



PPG SAR Activity Report

Date: Aug. 13, 2005 Time: Start 7 AM End: 10 AM

Location: American Flyer PPG Ultra Light Flight Park, Rio Puerco, NM

Search Area is a 5 square mile area directly north of the Flight Park

Skill: Flying Search Patterns

Introduction: During a search mission, pilots will be asked to fly over a particular area to look for a search subject. By using a pattern, pilots will be able to effectively cover the area assigned. Field Coordinators (FC) will be counting on our ability to clear an area with great integrity to determine if the search subject is or is NOT in the assigned area. Search patterns are the best way of achieving this goal. This exercise is designed to learn to use ONE such search pattern.

Evolution: Four search target boxes have been randomly spaced throughout a 3 square mile area. Pilots are to fly the search pattern illustrated below and locate each of the target boxes. Pilots should report the results of their search to Ed Poccia at the conclusion of the exercise.

Diagram / Sketch / Notes: *on the back*

Elements to be Incorporated Into the Exercise

1. Pilots are to recognize the topographic features that define the search area. (road, river, fence line...)
2. Pilots must establish a flight path using visual clues and maintain its integrity until the flight path reaches its terminence.
3. Pilots must develop spacing between flight paths that will assure adequate and effective search of the area. Pilots are encouraged to experiment with flight paths at different altitudes to test effectiveness.
4. Pilots will keep up their visual ground scan and try to locate and identify search targets without compromising safety. **Pilots are to be aware of obstructions and each other at all times.**

Active Personnel:

Hours: _____

Report Completed by: _____

Comments:

Record Keeping

SAR Participation Record

	Locating target boxes along a flight path – Developing a visual search scan	Flying within a designated search area – Identifying visual terminence indicators	Flying a search pattern using visual clues and Communicating location of search subjects	
Apodace, Carl				
Baker. Craig				
Daniele, Jerry				
Daniele, Michele				
Dufour. Eric				
Dufour, Elisabeth				

Boxes may contain a (*check*) to simply show participation OR can be used for comments assessing individual performance.

The Call Out



1. Designated person to develop contact with Public Safety Departments. *Local Police & Fire, County Sheriff, State, Federal (FBI, EPA, Parks)*
2. Provide opportunities to demonstrate PPG's capabilities to Public Safety officials & News Media.
3. Be sure Public Safety Departments have one or more contact numbers listed on their resource list(s).
4. Create a call-up list with multiple paths to each team member. *Home & Work Phone #s, Cell Phone #s, Pager Numbers*
5. Develop a check list of information PPG contact must give to Team members. *Objective, Meeting Time & Place,*
6. Each team Member is to maintain "S&R jump pack" & Equipment Checklist

Using Hasty Teams



A single or few PPG pilots may launch quickly in an endeavor to search a particular area in an informal manner without patterns, IF:

1. Sunset is approaching and permits too little time to develop a formal pattern or more organized search
2. The age or medical condition of search subject(s) demands something be done quickly.

NOTE: Pilots are to have “Jump Pack” with supplies to last over night if they were to go down.

Pilots' Briefing (*Part 1*)

1. Welcome

Word of thanks and Statement of Objective

2. Introductions

Field Coordinators, Agencies involved, Contact personnel

3. Subject Identification:

Name(s), Age(s), wearing, w/pet, toy, car (*model/color*), ATV...

4. Area Awareness & Map(s)

Weather, Elevation, Air Space, NOTEMS, Terrain, GPS settings

5. Pattern & Team Designations

Who is flying with whom, where, and in what direction



Pilot Briefing (*Part 2*)

6. Communication

Frequencies, Cell Phone #s, procedures

7. Emergency Down Options and Procedures

Who to call, Available Extrication Methods

8. Equipment Check

- Safety, Water, Food, Extra Batteries, Cell Phone, Fuel, Oil, Tools , Spare Parts

9. Code Words

Present a list of words, phrases or numbers to “quietly” inform the CP and/or other Team members of a specific situation without revealing information to press or family.

10. Describe procedures to be followed if subjects are found.



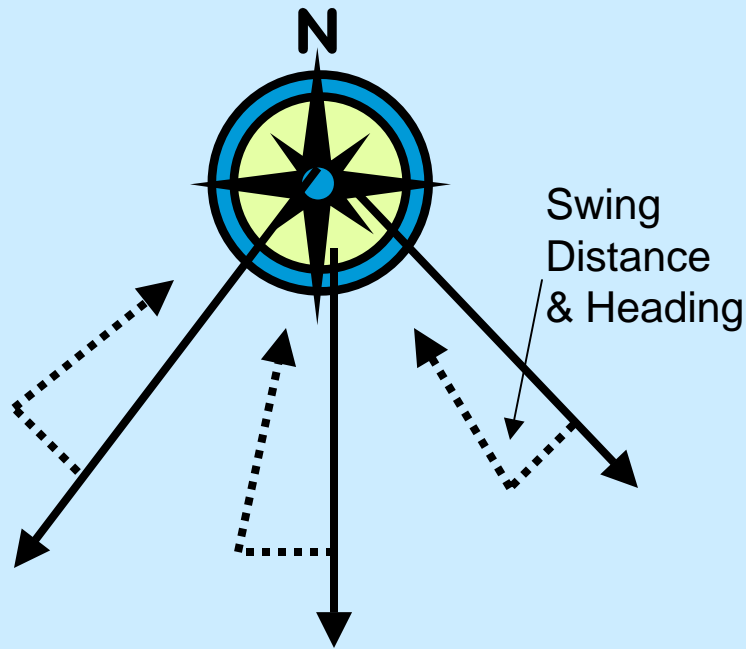
Jump Packs

Jump Packs are to be pre-packed, ready to go bags to be carried by PPG pilots while on Search missions and exercises. The items listed are a suggested minimums.

- FSR Radio and charger or spare set of batteries.
- Cell Phone
- Bottled water
- Protein Bars or other preferred emergency food stuff
- “Space Blanket”
- Pocket knife/tools
- Fire Starter
- First Aid Kit
- GPS Unit
- Whistle
- Flashlight/Chemical Light

Search Patterns

Compass Heading



Pilots are assigned a specific heading they must follow out and back with a time/distance goal, GPS mark OR a terrain referenced terminence. The best way to do this is to find a spot on the horizon and fly toward it.

Rectangular Patterns

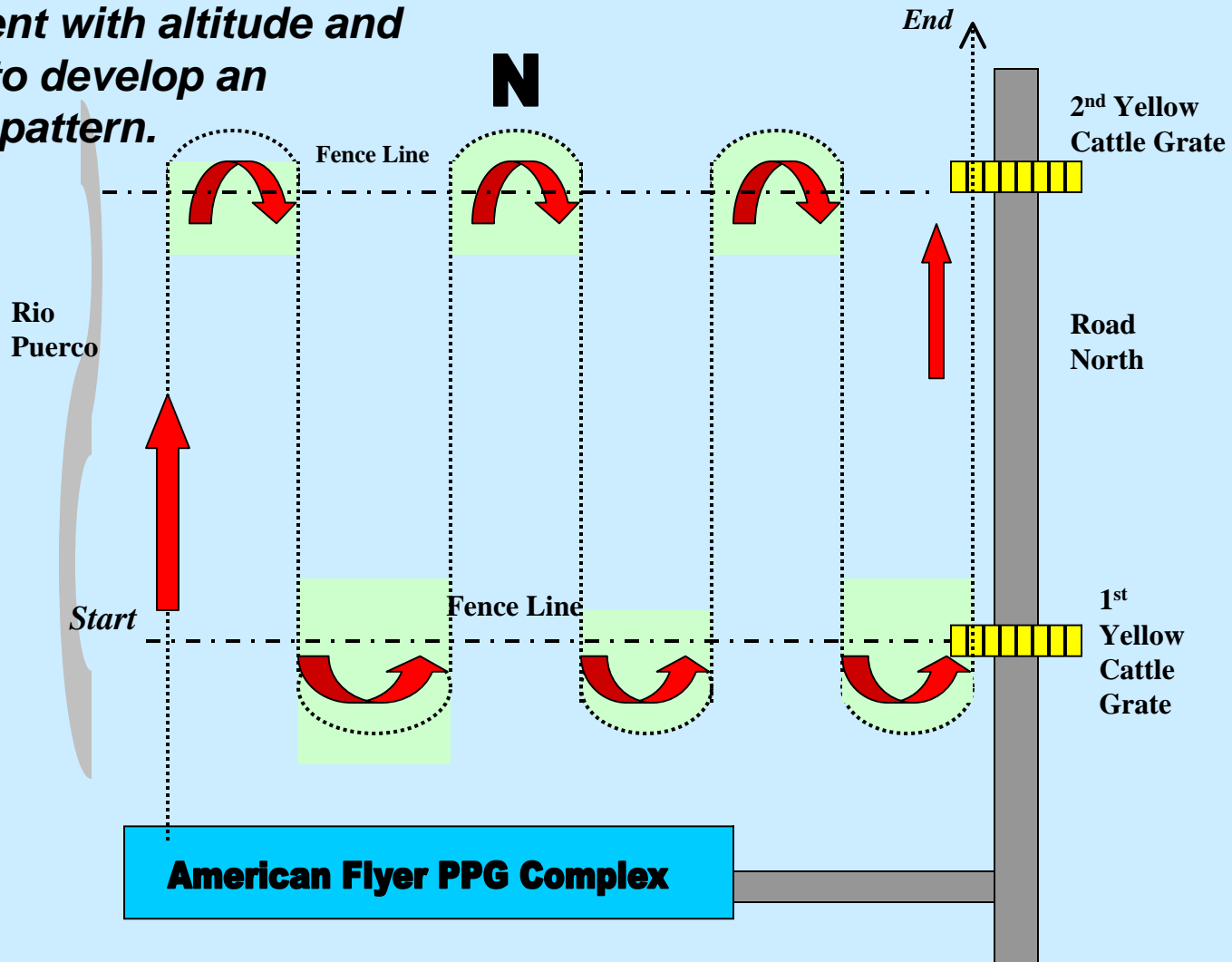


Common Compass Heading Assigned

Search Patterns

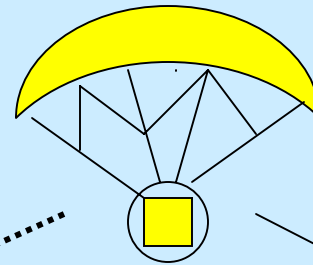
Looping Pattern

Experiment with altitude and spacing to develop an effective pattern.



High // Low Team Concept

Pilots work in Teams of Two/Three for safety, flight path assignment integrity and maximum search efficiency.



Maintaining
500 feet AGL

Ground Skimming



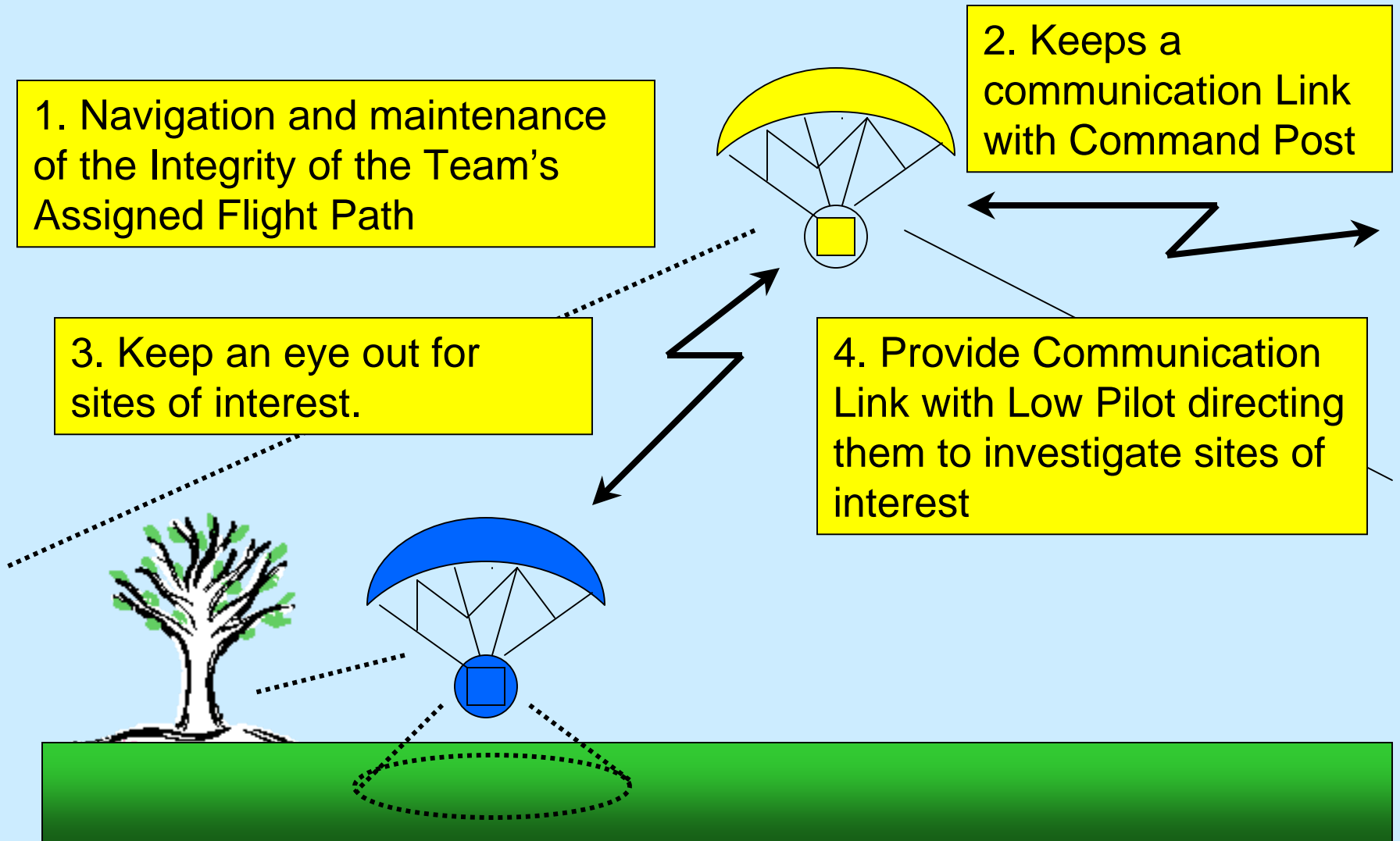
High Pilot's Responsibilities

1. Navigation and maintenance of the Integrity of the Team's Assigned Flight Path

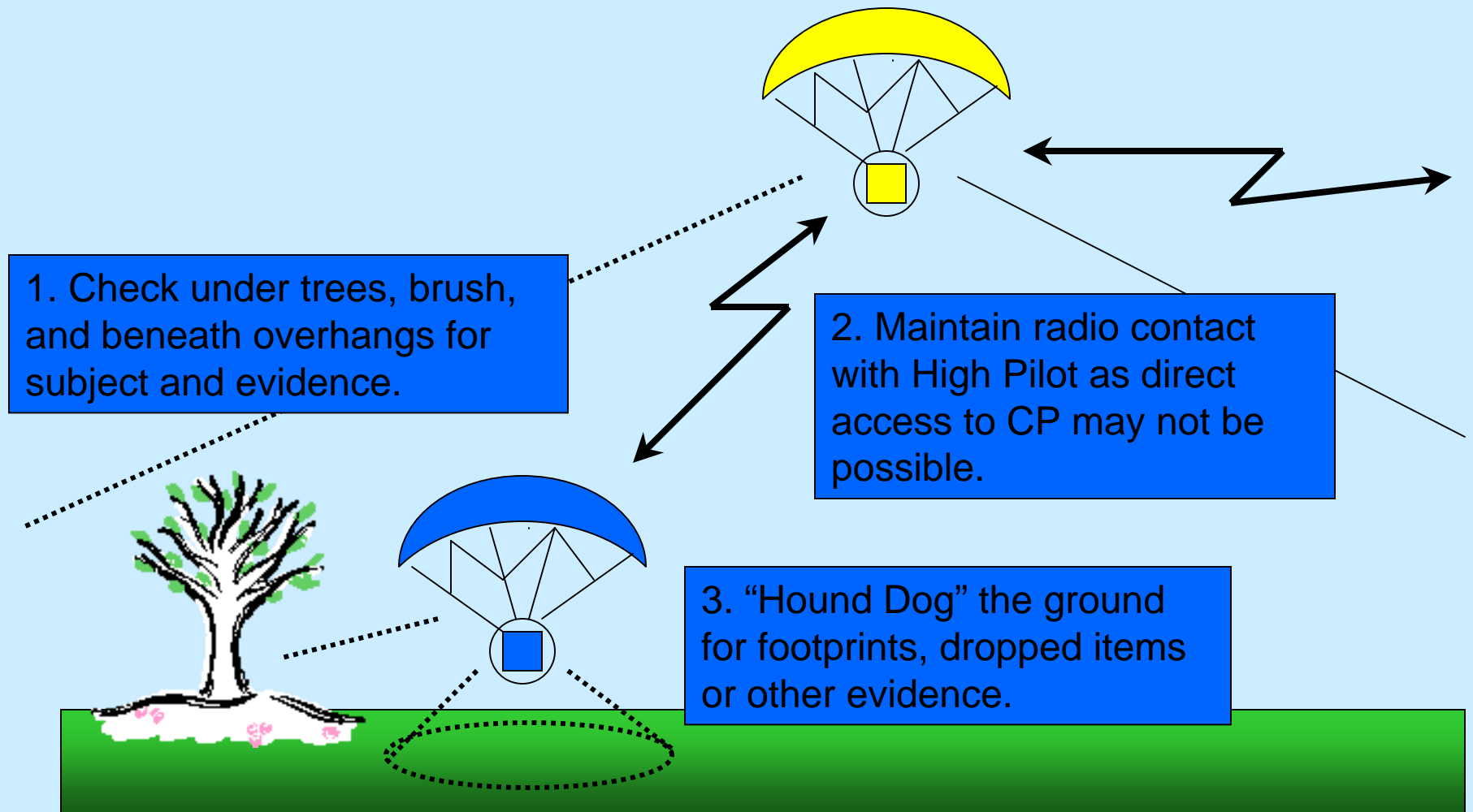
3. Keep an eye out for sites of interest.

2. Keeps a communication Link with Command Post

4. Provide Communication Link with Low Pilot directing them to investigate sites of interest



Low Pilot's Responsibilities



What If You Find Something



1. Communicate with your team member(s) & inform Command Post directly or via relay:

- Exactly **who or what you've found** & conditions of subject
- **Your location** (*GPS, miles/direction from reference point*)
- Consider using **coded** information (10-48, instead of "Hey, I found a dead kid")

2. Ask for instructions on:

- how evacuation should proceed (*This may have changed since the briefing*)
- any change in search pattern due to new evidence

3. You may land to provide assistance and give water, warmth, and First Aid (*if trained*) but do not give food due to possible allergic reactions.

After a Search Mission

1. Write a **Detailed** Report

- *This may be used in court.*
- *Who did what, when, where!*
- *Include diagrams with labels and distances*

2. Defer media interviews to Field Coordinator, Police spokesperson,

3. Maintain professional conduct at all times.

4. Perform a critique of the mission with team members, *privately*.

* *What went right?*

* *What went wrong?*

* *How can procedures be improved?*

* *What areas require additional training?*

* *What additional equipment would have been useful?*