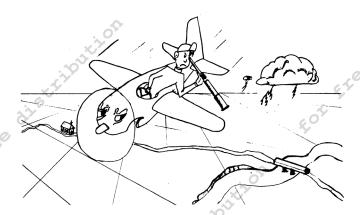
Department of Transportation

FEDERAL AVIATION ADMINISTRATION

VFR PILOT EXAM-O-GRAM* NO. 18

LOST PROCEDURE - PILOTAGE



It seems that all who fly cross-country are destined to lose their way or become 'temporarily misplaced' at one time or another. Therefore, we should give some forethought to procedures and practices that may be used to lead wandering birdmen out of the wilderness. Confining our problems to the typical VFR dilemma, we can start with the general and proceed to more specific rules.

1. GENERAL:

<u>Don't fight the problem</u> -- try to solve it! <u>Stay loose</u> -- don't hit the panic button, thus virtually assuring that all the thinking gears will grind to a halt.

Analyze and evaluate as to: <u>Fuel</u> available and consumption rate. In other words, how much longer can you fly insofar as fuel is concerned? <u>Be conservative</u> -- not hopelessly optimistic.

Weather -- is it good, bad, indifferent, improving, or deteriorating?

Equipment -- is everything functioning? Do you have lights (cockpit, landing, navigation, etc.) or survival gear of any description?

<u>Terrain</u> -- is it open, flat country, mountains, marshes, semi-desert, sparsely or thickly populated?

<u>Daylight</u> -- hour remaining (if any). Have you had night or instrument flying?

Once you have a reasoned assessment of the situation, you are better prepared to make vital decisions. One of the first is to decide if help is available, or are you all by your lonesome?

KNOW and ABIDE BY YOUR LIMITATIONS AND THOSE OF YOUR EQUIPMENT

URONUROWN (with no radio)

SPECIFIC:

Condition One:

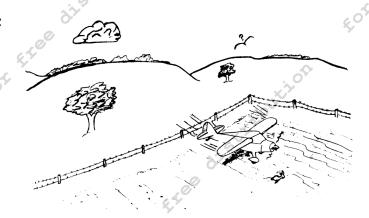
(a) Low on fuel

(c) Inadequate experience and darkness imminent

(b) Weather deteriorating (d) Engine or equipment malfunctioning

While (d) is not necessarily associated with being lost, the solution which follows would certainly apply if the situation were serious enough.

SOLUTION:



GET IT ON THE GROUND! Most accidents are the product of mistakes which have multiplied over a period of time. Getting lost is no exception. Don't push your luck. It may well be that in doing so you have added the final mistake which will add another figure to the statistics on accidents. How much better to be on the ground than in it. If terrain or other conditions make it impossible at the moment, don't waste time, for it is of the essence. Don't search for a field comparable to Idlewild. Anything usable will do. Remember, most people on the ground know where they are. You know you do not. This state of ignorance may well become permanent because the triple "whammy" of getting caught while "dangling, dark, and dreary" will rob you of virtually all control of the situation. If there is any alternative whatsoever . . .

NEVER fly until the petrol peters out. There are few things so nerve shattering as the rustle of the wind when an engine has coughed its last.

NEVER fly until the sun slowly sinks in the golden west. It may be a beautiful sight but the goblins will get you if you don't watch out.

NEVER fly until the biggest, meanest goblin of them all, Ole Bad Weather, falls flat on his face. He will do his best to take you with him.

Remember the NEVERs, lest in the blink of an eye, they become FOREVERs.

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Condition Two:

(a) Plenty of fuel

(b) Plenty of daylight

(c) Plenty of good weather

SOLUTION:

Establish an "Error Semi-Circle".

- 1. Straighten up and fly right -- straight, that is. Establishing a course by hunch or because you "got a feeling" is for the birds. Don't wander aimlessly.
- 2. Use knowledge of last known position, elapsed time, approximate wind and ground speed, (airspeed is better than nothing), to establish how far you may have traveled since your last check point.
- 3. Use this distance as a radius and draw a semi-circle ahead of last known position on the chart. For example, you estimate your ground speed at 120 mph. If you have been flying 20 minutes since your last check point, then the no-wind radius of your semi-circle is 40 miles projected along the direction of your estimated track. If you believe your wind is from the right, then you are most probably in the left quadrant of your semi-circle. Of course, unless you were sure about the wind, you could not ignore the right quadrant. The use of a simple computer can materially reduce the effort required in solving problems of speed, time, distance, and fuel consumption.
- 4. If you have been flying a steady compass heading and keeping a reasonably accurate navigation log, it's not likely you will have too much difficulty. If you've been operating "fat, dumb, and happy" too long, your search is going to be more difficult.
- 5. In either case, loosen up the eyeballs and start some first-class pilotage. DON'T OVERLOOK THE POSSIBILITY OF BEING LOST, YET RIGHT ON COURSE OR VERY NEARLY SO. First, look for something big. Don't concern yourself with the minute or trivial at this point unless nothing better is available. Often there will be linear features such as rivers, mountain ranges, or prominent highways and railroads easy to spot and identify. By turning either to the right or the left, you CAN'T miss them. If preferable, you can use them simply as references for orientation purposes. In other words, you can use them as landfalls or backstops, and thus find them of great value in fixing your approximate position.

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Once you have utilized such features to the fullest extent possible, or if there are none available, you can use anything that might help -- don't pass up a thing. Double check all landmarks. Compare and analyze -- analyze and compare railroads and highways, topographical features (man-made and natural). Check for available air markers with names on 'em. But don't go down on the deck and stay there. As a general rule, it is both safer and easier at higher altitudes.

Remember this point. Be sure you have up-to-date charts, including those adjacent to the one in use. Everything which appears on the chart will usually be on the ground, but no standard chart is so detailed that everything you can see on the ground can also be found on the chart. If you either habitually or occasionally fly without suitable pilotage charts, you deserve to incur the full wrath of every goblin that ever hounded airmen. Every VFR flight is involved with pilotage!

One final word -- an ounce of preflight planning is worth far more than a pound of in-flight desperation. Sound, adequate preflight work will always pay off. It can prevent getting lost in the first place or at least simplify the task of fixing a position if you are "temporarily misplaced".

It can mean the difference between an enjoyable, satisfying experience and a palm-sweating ordeal.

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