

EMERGENCY

(91.3, 91.123, 135.19, 121.533, 121.535, 121.537, 121.557, 121.559, 121.565, AIM 6-1-1 & 6-1-2)

Just like Sully did — TELL them the problem.

■ **TELL them** what you're doing about it (e.g., "We are descending / turning *NOW*")

■ **TELL them** what you need them to do — **DO NOT "REQUEST" A DAMN THING!**

TAKE CHARGE — YOU ARE the BOSS

DO NOT LET ATC CRASH YOUR AIRPLANE!

During ANY EMERGENCY:

1. **Do NOT "request" a damn thing! TELL THEM WHAT YOU'RE DOING.**
2. Do *NOT* try to maintain an altitude or heading that you cannot maintain when there is a problem.
3. Example — Do *NOT* wait for a "request" to be granted before turning back to the airport with an engine problem or FIRE! Just **START TURNING BACK TO the AIRPORT. Do what you have to do IMMEDIATELY! Talk about it later.**
4. **An uncountable number of pilots and passengers have been KILLED waiting for a "REQUEST" to be granted!!**
5. **JUST DO IT! Tell them about it LATER!**
6. Take charge of the situation — **YOU become the BOSS — ATC becomes your ASSISTANT.**
7. Example —

you Falcon 123T has a FIRE in the right engine we are descending and turning back to the airport *NOW*. Need vectors for the ILS as close in as possible.

them 123T understand—are you declaring an emergency? (The controller will *never* ask this question—ATC automatically goes into emergency mode whenever *anything* out of the ordinary happens.)

you Call it what you want — **We need PRIORITY — please give us that heading NOW.**

BOTH the Dispatcher **AND** the Captain have the responsibility and authority to **declare** an **EMERGENCY**. 121.557

"PRIORITY" will get you exactly what you want RIGHT NOW!

"Emergency" and "Priority" mean the same to a controller. See 91.123(d)

91.3 Responsibility and Authority of the Pilot In Command:

- (a) The **Pilot In Command** is directly responsible for, and **is** the **final authority** as to the **operation of that aircraft**. (Notice it says nothing about **after** the pilot declares an emergency.)
- (b) In an in-flight **emergency requiring immediate action**, the Pilot In Command **may deviate from any rule** to the **extent required to meet that emergency**. (Again, nothing about **after** saying the "word".)
- (c) "Upon the request of the Administrator", you **may** be required to supply a written report of the incident [Usually, only when they think you might have had some part in **causing** the incident].

- ➔ The fact that a pilot does not formally declare an emergency on his radio does not preclude reliance on 91.3(b) as a defense [NTSB 2015].
- ➔ **You do NOT have to FORMALLY DECLARE an EMERGENCY** before deviating from a clearance when dealing with a potentially life threatening situation.
- ➔ Just do what has to be done to get the aircraft on the ground as soon as possible.
- ➔ You have the power to ignore every regulation in the book if you need to.
- ➔ **Do what you have to do, tell them about it as soon as you get a chance.**
- ➔ Chat about semantics later when you get on the ground — **ALIVE!!!**

The point is:

Don't be afraid to **say** the "E-word" but also don't be afraid to **do what is necessary BEFORE** getting permission.

When it becomes necessary to SHUT-DOWN an ENGINE, a LARGE AIRPORT with a LONG RUNWAY and an ILS providing GLIDE SLOPE information is definitely an important consideration with a large aircraft and/or bad weather in any aircraft.

However, one must also consider **91.7(b)**, which has been interpreted to mean; "the pilot, in an emergency situation, must land at the first AVAILABLE and 'SUITABLE' airport at which a safe landing can be made. But he is *NOT REQUIRED* to land at the first AVAILABLE airport if it is not 'SUITABLE'." According to the FAA, **safety is the paramount consideration. Convenience and comfort are not considerations at all.**

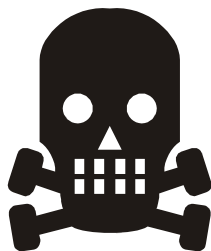
The pilot is required to land at the "**FIRST AVAILABLE**" location "**CONSISTENT** with **SAFETY**".

So, in other words, **do not shut an engine down, then fly another 100 miles, passing several "suitable" airports** along the way, **just to get the airplane back home where your car is!** Somebody at the local FSDO may not consider that "consistent with safety", and you'll probably be hearing these words—**"you're in a heap-o'-trouble Boy!"**

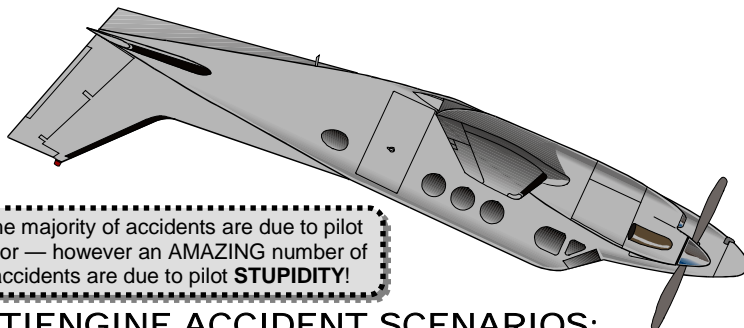
HOW TO CRASH AN AIRPLANE EQUIPPED WITH A PERFECTLY GOOD SPARE ENGINE

Single engine airplanes fall out of the sky all the time. Here's the scenario: → engine quits — the pilot realizes immediately he forgot to bring along a spare engine — pilot immediately says two words — **"Oh S#!T!"** An **OFF airport landing** is **usually inevitable** and may or may not be survivable.

Multiengine airplanes always bring along a spare engine. In the event of an engine failure there may be some screamin' goin' on, but an **ON airport landing** should **always be inevitable** and **survivable**. A spare engine is the cheapest life insurance you can buy. Plus, **YOU get to collect** on this type of insurance. Unlike that other insurance only your wife benefits from!



The majority of accidents are due to pilot error — however an AMAZING number of accidents are due to pilot **STUPIDITY!**



Because an accident did **not** happen — you never hear about the uncountable times that twins lose an engine and land safely.

COMMON MULTIENGINE ACCIDENT SCENARIOS:

1. Pilot continues **VFR** flight into **INSTRUMENT CONDITIONS** — without any instrument skills!
2. Pilot **RUNS OUT OF GAS!** Usually **two miles** from the destination airport, after passing several others.
3. Pilot becomes **PARALYZED** at the controls, **FAILS to FEATHER** the ailing **ENGINE** — Complacency can lead to a brain meltdown when trying to remember all those "proper procedures". **Every takeoff should be viewed as an emergency.** Before every takeoff discuss with yourself what you're gonna do if ya lose one right after liftoff. By the way, there's only **ONE "procedure"** to feather an engine in virtually any airplane — **PULL** or **PUSH** the **CORRECT FEATHER LEVER** or **BUTTON RIGHT NOW!** Everything else will usually take care of itself if you have the gear up and maintain *at least* V_{XSE} .
4. Pilot **FEATHERS** the **WRONG ENGINE** — Take that extra few seconds to **VERIFY** you are preparing to **feather** the **engine NOT running** as opposed to the engine that *is* running. Remember: → **STEP ON THE BALL** — **DEAD FOOT = DEAD ENGINE.** Also: → **LOOK at** the **ENGINE GAUGES** (but be conscious to the fact that a *completely dead* piston engine will show approximately 30" of manifold pressure).
5. Pilot **FAILS to RAISE** the **GEAR** after losing one at lift off — **CLEAN UP** the **DRAG!**
6. Pilot **FAILS to MAINTAIN AIRSPEED**, airplane falls out of the sky — Airspeed is everything when low and slow. Especially when hot, high and heavy — carry a little extra speed before liftoff so you have an airspeed "cushion" to work with while sorting things out if you suddenly become single. **Do NOT allow the airplane to stall.** Any excursion below V_{XSE} or V_{MC} may be your last! Once the propeller is feathered, **TRIM** for **1/4 to 3/4 ball-width out** and **3° bank** towards the **OPERATING engine.**
7. Pilot uses **EXCESSIVE BANK** while turning — As bank angle increases; stall speed increases and climb decreases. Use conservative bank angles when low, slow and single (especially into the dead engine).
8. Pilot gets **TOO LOW** and **TOO SLOW** on final, airplane does not make it to the runway — Always stay a **little high** and a **little fast** on the **glidepath** during final approach. **Do NOT allow yourself to get below** the "**power curve**". Do not put the gear down or flaps down until you're **positive** you can make the runway. It's almost always better to land a little long than land a little short.
9. Pilot **LANDS LONG** and **GOES OFF** the **END** of the **RUNWAY**, airplane is banged up but pilot OK — If you are much **TOO FAST ON FINAL**, the lack of drag from the feathered propeller can contribute to a "floater" landing that can consume a lot of runway and could put you off the end. If you have some altitude to work with, try to find a **LARGE AIRPORT** with a **LONG RUNWAY** and an **ILS** or **VASI** providing **GLIDE SLOPE** information. Flying that few extra miles to a larger airport is *usually* a good idea. Plus the larger airport will probably have a much **nicer hotel** and a **better restaurant.**
10. Pilot attempts **SINGLE ENGINE GO-AROUND** — Single engine landings in a relatively small twin should be considered a one-shot deal. Make your approach as precise as possible. A host of factors including type of airplane, weight, temperature, elevation, pilot skill and good old fashioned luck make the single engine go-around a hair-raising choice of action. **Do NOT SCREW UP** the **APPROACH!!!** **KEEP YOUR SPEED UP** — **DO NOT GET BEHIND** the **POWER CURVE** — **PICK** a **BIG AIRPORT.**