



ACE ACADEMY/CAMP AVIATION CAREER EDUCATION

The Utah 2003 ACE Camp date is June 16-20.

Aviation Career Education Academies are FAA sponsored aviation-themed summer camps. The students will experience a wide range of aviation activities including contact with commercial aviation, Air Traffic Control, USAF, Air National Guard and private aviation. ACE students get to fly during a discovery flight.



Aviation Career Education (ACE) summer camp academies are one-week (day or overnight depending upon location) educational programs providing aviation education opportunities to children. These programs are conducted as partnerships consisting of state aviation and space education councils, state aviation offices, educational institutions, active duty, guard and reserve military units and are cosponsored by the Federal Aviation Administration (FAA). ACE has continued and flourished since its inception by the FAA in 1990, and had given the ACE Academy Camp experience to thousands of students throughout the country.

Explore your career options in Aviation and Aerospace this summer. Applicants must submit an application, a recommendation from a teacher and a 100-word essay on why they want to attend ACE by May 1, 2003. Submit your ACE application to FAA ARTCC 2150 West 700 North Salt Lake City, Utah 84116. For additional information please contact Andy McClunie at (801) 320-2552.

2003 ACE Proposed Activities:

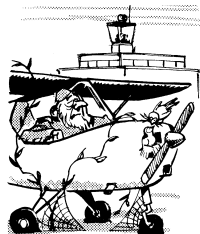
- Westminster College (SYM, dormitories, flying, classroom and tours)
- Salt Lake City Community College (Flying, tours and classroom)
- Flight simulator training • Police and Fire training airport facilities
- Airport tour • Air Carrier tour • Civil Air Patrol
- Hill Air and Space Museum • Air Traffic Facilities
- EEA (young eagles program) • Airman Medical
- LifeFlight • Utah ANG • Hill Air Force Base

ACE relies on in-kind donations and the support of local aviation leaders. This is an opportunity for you to generate very positive publicity while helping young people learn about aviation careers.

ACE Camps are conducted as partnerships. Some of the past partnerships have been:

- State Aviation and Space Education Councils
- Aviation Colleges or Universities • Community Colleges
- Fixed Based Operators • State Aeronautics Office • Military
- Federal Aviation Administration (FAA) & other government agencies
- Aviation Museums

CHECK YOUR ENGINE NACELLE!



During the long winter, many critters....mostly birds...like to build nest inside of aircraft engine nacelles.

Unsuspecting pilots come out for their first flight after a long winter absence, do their pre-flight inspection, and then attempt to start the engine. The engine roars to life! While letting the aircraft warm up to operating temperature and listening to ATIS, the pilot notices a lick of flame come from the cowl! Quickly the flames spread, and in a matter of seconds, the entire engine compartment is engulfed in flames! Sound far-fetched? It's not...it happens every spring. Take the time to check your engine nacelle for nests and save yourself a lot of grief!

FEDERAL LAW ENFORCEMENT HOTLINES

Report Any Suspicious Aviation Activities:

1-866-AIR-BUST or 1-866-GA-SECUR

GOING, GOING, GOING AROUND!

By Bruce Landsberg, reprinted from AOPA safety information.

It's called a go-around, a wave-off, an aborted landing, a missed approach, a rejected landing, or a bummer. Whatever you choose to call it, coming back for a second try at the runway is a skill that everyone needs but many lack.

Most pilots don't go around very often, and there are at least two reasons for that: We like landings and hate to waste an approach, or we loathe to admit that things weren't working out the first time and worry that it might be perceived as incompetence. One thing is for certain: The safety record here could be much better.

There are several excellent reasons to reject a landing. The first is being too far down the runway to stop safely. The rule of thumb says that if the aircraft isn't on the ground in the first third of the runway--go around. If the speed or the alignment isn't right, go for the gas. There is always a chance to play again.

One of the tricky things about go-arounds is that the aircraft is trimmed for landing—not going around. On very light airplanes this isn't much of an issue because the pilot can overpower the pitch-up tendency when full power is applied. Fly something with muscle, however, and the pilot will need super strength to keep the nose from getting too high.

The go-around sequence is much the same for all aircraft: power, pitch, flaps, and gear. This will generally work on everything from trainers to twins. As the accident scenarios prove, however, many pilots don't know the drill, and the sequence is important.

Full power is the first thing needed to get the aircraft climbing, but how it's applied is just as important as when. I remember coaching a student on what turned out to be a memorable go-around when he jammed on full throttle. The engine made an ugly sound, stuttering, gasping, and finally emitting a great snarling "harrumph." As if to get even for being treated shabbily, it then gave us exactly what we asked for, full power. All the torque and left-turning tendencies kicked in with a vengeance, so directional control became the issue of the moment. My student, usually ham-fisted with the throttle, was equally ham-footed or, rather dead-footed with the rudder. More rudder sooner is much better than less rudder later. The maneuver eventually worked out, but not without some amusement for the spectators.

Next, the pitch attitude must be adjusted from landing to climb, with a transition through level. If the go-around occurs prior to the flare, raising the nose to level should arrest the descent. In many aircraft you'll need to hold the nose level with forward pressure to keep the airplane from attaining too high an angle of attack as power is added. That's another tricky thing about go-arounds we want to go up but have to hold the nose down. A strong left arm is an essential part of a successful go-around.

The third item is to retract the flaps as recommended by the manufacturer. This usually means going to half or "approach" flaps. Single-



engine Cessnas such as the 150 or 172 sometimes won't climb with 40 degrees of flap. On the later models, Cessna limited the travel to 30 degrees to give the pilot a little more performance, and that's usually what you get, a little more. The procedure is to retract the flaps immediately to 20 degrees and then go for climb airspeed. Remember that the deck angle or pitch attitude, if you prefer, will be much lower than the normal no-flaps climb attitude. Once the aircraft has cleared the obstacle and has adequate speed, then retract the rest of the flaps.

Piper and Mooney flaps aren't quite as effective, so there is a bit more room to fumble, but we all take pride in doing it right. If the pilot retracts the flaps too quickly, there is usually a sinking spell and sometimes a stall: so, adding just enough back pressure to keep from sinking is something else to add to the skills list. On the Beech V35 Bonanza, the stall speed increases by about 12 knots as the flaps come up. On the Cessna 172, it's around seven knots; on the Piper Arrow, it's about five knots.

As soon as the power, pitch attitude, and flaps are set, retrim to take pressure off the control yoke. Want to see what it's like with full power, full flaps, and landing speed? Try a go-around at altitude. The control pressures may be surprisingly strong.

The last item is to raise the landing gear, if it's retractable. This is done only when the vertical speed indicator shows a positive climb so that if the aircraft should settle to the runway despite our best efforts, there's only a minor delay in getting airborne again, which is preferable to experiencing a belly slide. On some aircraft the gear retraction sequence actually creates more drag as doors open to accept the wheels than if the gear were left down. In many aircraft the procedure is to wait until clear of the obstacle before starting the retraction cycle.

Here's an accident that illustrates almost everything that could go wrong with a go-around. A Cessna 182RG approached a 6,000 foot runway with 40 degrees of flaps. The heavily loaded aircraft bounced twice during the landing; the pilot, deciding to go around, applied full power. The aircraft was reported to be "wallowing" in ground effect; so, to reduce drag, the pilot raised the landing gear, but the Cessna settled onto the runway.

After the accident, the flaps were found to be fully retracted. The pilot believed that the flaps were accidentally retracted when the front passenger's knee came in contact with the flap switch during the first bounce. The six-foot-seven-inch passenger had trouble sitting in the aircraft comfortably and received a bruise on his left knee in a position that corresponded with the flap switch.

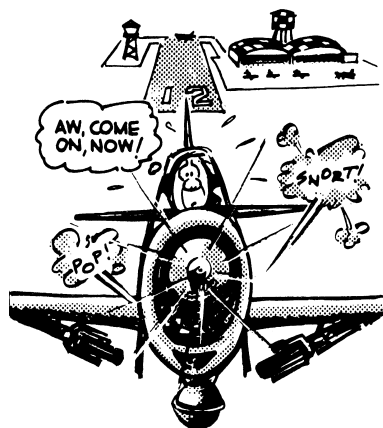
The winds were less than 10 knots, but the pilot claimed wind shear. The FAA investigator didn't buy that scenario. The probable cause was listed as an improper flare with improper gear and flap usage in a go-around. In the heat of the moment, it's tempting just to grab the nearest switch to start cleaning up the airplane. But as previously discussed, the sequence and timing are critical when operating so close to the ground.

You don't have to wait until the aircraft is sliding sideways off the runway or bouncing 10 feet into the air before deciding that a particular landing is not worth the aggravation. Good go-arounds start early in a bad-landing sequence. If it's not looking good halfway down final approach, go against your basic instincts and start on the road to recovery right then. Ask yourself, "When was the last time I did a go-around?" If every pilot did just one go-around for practice every 90 days, we could eradicate this accident cause.

EMERGENCY!

By Patricia Mattison, reprinted from FAA safety information.

What would you do if you had a bonafide emergency? How would you handle the initial confusion that is associated with an airplane ceasing to fly? Would you be able to bring the airplane to a safe landing? Could you with composure take an airplane with eight inches of prop missing and passengers on board back to the departure airport? Then, after landing, could you calmly deplane the passengers, put out a resultant fire, and coolly get into another airplane to complete the flight? A pilot recently did just that,



which begs the question, would most pilots be prepared to do the same?

The answer is those pilots trained to deal with emergency situations have a better chance of maintaining control of the aircraft and living to tell a hangar tale.

When you were a student, it seemed that every flight you took with your instructor you were constantly asked, "If the engine failed right now, where would you put the plane?" I know my instructor harped and harped on that subject. But somehow, as rated seasoned pilots, we seldom think of that old engine failure scenario. Sometimes, it's a good idea to become a "student" again and find an instructor who'll ask the right questions.

If an aircraft is going to experience engine failure and other assorted problems, it is most likely to happen during either takeoff and departure or landing. It is during takeoff that the engine is at maximum power. Stresses are placed on the engine and propeller that are not present during normal steady-state flight. If the engine or propeller has any defects, it is that portion of flight when failure is most likely to occur. During the landing portion of the flight the engine, hot from cruise flight, can sustain sudden cooling because of reduced power.

Rapid power changes can cause a pre-existing problem to reach the point of failure. Another possibility is that rapid engine cooling, especially during the winter, can cause a cracked cylinder, leading to engine roughness and possible failure. A low power setting during moisture-laden conditions is conducive to carburetor ice.

Are you ready, then, for the unexpected? Do you review the possibility of having to land off airport in an emergency? Air carriers have training programs that stress emergency procedures. Those procedures consist of engine failure during takeoff, enroute, and landing; emergency descent; and system malfunctions. Simulated emergencies are practiced by the operators on a regular basis. Pilots working for an air carrier have a currency check ride with a check airman or the FAA periodically. You can do the same for yourself by flying regularly with a certificated flight instructor, another pilot as a safety pilot, or during a courtesy evaluation from the FAA. The later is the PACE program Pilot and Aircraft Courtesy Evaluation which is an FAA program where pilots can bring their aircraft to the FAA, have it checked by FAA airworthiness inspectors, and fly with FAA operations inspectors. The inspectors brief you on any problems noted, and no enforcement action is taken.

A conscientious pilot is always improving his or her flying skills. Practice emergency procedures at every opportunity until they become second nature.

UPCOMING EVENTS

Hangar Inspections. The annual hangar inspection process will begin in the near future. Please take this opportunity to clean your hangars and remove unauthorized items.

Air Center of Salt Lake is having a "Fly-in" on the first Sunday of every month at Salt Lake Airport II (U42) located in West Jordan, Utah. Air Center of Salt Lake will provide breakfast from 8:00 a.m. until 11:00 a.m. There will be prizes for the best home built aircraft, oldest aircraft and the aircraft traveling the farthest distance. Come enjoy the fun!

EAA Chapter 23 Meeting to be held April 11th at the Civil Air Patrol Building, 2360 West 640 North, Salt Lake City, UT., 7:00-9:00 p.m. Topic: "To Be Announced." You do not need to be a member of the EAA to attend the meeting. Everyone is welcome! For more information call Glen Olsen at 801-943-2931 or check out the web site at www.eaa23.com.

Remember World War II 2003 Lecture Series. The next in the series will be held April 17, 2003. The speaker will be Fred Jensen - B-17 Ball Turret Gunner. Everyone from all ages is invited to attend, so we can honor these reluctant heroes and hear their stories. Let us remember that freedom is not free. The lectures will be held the third Thursday of each month at 7:00 p.m., at the Holladay County Library. The Library is located at 2150 East Murray-Holladay Road. Admission is FREE.

