



SAFETY

To go around or not to go around – that is the question

Rob Grimwood on when discretion is the better part of valour



OK, so I'm no Shakespeare, but how many times have you landed with a feeling of relief, but also with a feeling of luck that you are in one piece because you should really have gone around?

There are too many reasons to list why you may need to go around, including being too high, too fast, too slow, not being on the centre line, being in the wrong flap configuration or just encountering unexpected turbulence close to the ground.

Obviously the more experience you have, the better equipped you'll be to deal with these situations, but even the best of us get it wrong sometimes and need to go around.

Going through this year's accident reports, there's a trend of accidents that would almost certainly have been avoided if the pilot had elected to go around. There have also been accidents caused by either a late decision to go around or where people have mishandled the aircraft during a go-around which has then led to an accident.

As we know, every landing is different and therefore has the ability to throw something at us that we are not expecting.

The first stage in a successful landing is to be prepared, so as-

sess the conditions and the airfield. Is there a strong gusty wind? Is there a crosswind coming across trees? Is it an unfamiliar airfield, or a shorter than usual runway?

Understanding the conditions and being prepared for what to expect will really help you, but ultimately you should be prepared to go around. The problems associated with going around are:

- Not actually going around. That sounds obvious, but I have seen people go off the end of a runway, land in the field off the side of the runway and indeed crash on the runway because they got the landing wrong and just didn't go around. When asked why they didn't go around, most answered: "Because I wasn't thinking about it".
- Leaving the decision too late. Sometimes this will not only not prevent the accident, but actually make things worse. Imagine the scenario where you land a bit too long on the runway thinking you will have enough runway to stop, but you've forgotten that the grass is wet, and the braking effect is not as you expect. You finally make the decision to go around, but don't leave yourself enough runway to take off and end up hitting the hedge on full power and at high speed.
- Mishandling the go around. Like everything in flying, conducting a safe go-around is a skill, and as such should be



Mmm, on second thoughts, maybe I should have gone around



FLIGHT PLANS

details contact Chester Potts on 07590 012108.

No fixed date: Isle Of Mull Fly-out. A Northern Aviators event. See mullflyout.weebly.com. Visit one of Scotland's most beautiful islands. Hotel on site and accommodation nearby, free camping and Tobermory nightlife! All aviators welcome for a social and a few beers. Contact Chester Potts on 07590 012108.

International events

24-27 Jan: USA. **Sebring Sport Aviation Expo.** Venue: Sebring Regional Airport, Florida. Details on sportaviationexpo.com.

10-15 Apr: USA. **Sun 'n Fun.** International fly-in and expo at Lakeland, Florida. Details on flsfnf.org.

18-21 Apr: GERMANY. **Aero Friedrichshafen.** Aeronautical trade show at Friedrichshafen Messegelände. Details on aero-expo.com.

25-29 Jun: FRANCE. **Franglais Friendly.** Fun event at Banadets, Albe-feuille Lagarde, with a not too onerous competitive element, just to make it interesting. Organiser: Rob Keene. More details on bmaa.org.

23-29 Jul: USA. **EAA AirVenture.** Fly-in and convention at Oshkosh, Wisconsin. Details on eaa.org/en/airventure.

2-3 Sep: FRANCE. **ULM Blois.** French homebuilding and microlight show. Details on www.ulm-blois.com. □

CLUBS! Planning an event? Mail details to mfeditor@bmaa.org for inclusion in Flight Plans.

READERS! Dates and details of events notified to the BMAA are subject to change and we cannot guarantee their accuracy. Please use the contact details to check with organizers before going to an event or making bookings.

6-7 Jan: NORTH COATES FLYING CLUB. **Annual Brass Monkey Fly-in.** Microlights welcome. Food and hot drinks. Free museum. Free parking for visitors by road. Frequency 120.15MHz. Airfield number 01472 388850.

27-29 Apr: SYWELL. **National Eurostar and EuroFox fly-in.** Contact Paul Kiddell at paulpam.kiddell@btinternet.com for details.

5-6 May: POPHAM. **Microlight Trade Fair & Fly-in.** One of the major events on the BMAA calendar, incorporates BMAA 2018 AGM. More information on popham-airfield.co.uk or from 01256 397733.

14-16 Jun: WYCOMBE AIR PARK. **AeroExpo UK.** Three day GA show. Details on aeroexpo.co.uk.

No fixed date: Druridge Bay Fly-in. A Northern Aviators event in aid of the Forces Childrens' Trust. See druridgebayflyin.weebly.com. No landing fee, just a donation of your choice to our charity. Barbecue, beach and free camping at a beautiful location. For

practised regularly so that when you need to use it you will react promptly and execute it correctly.

From a mishandling point of view, I would like to point out the common things which go wrong and how to avoid them.

When you decide to go around, commit to it, react quickly and make sure you use *full power*.

Often people just apply full power without using the correct pitch input. Remember, to transit from a descent to a climb the correct use of controls is: Power and attitude together, then trim (PAT).

So apply full power at the same time as raising the nose to the safe low-level climbing attitude, then retrim the aircraft for that attitude. If you just apply full power without raising the nose, you will initially just accelerate on your descending path towards the ground!

There can be a substantial torque and slipstream reaction with the application of full power which could roll and or yaw the aircraft off from the centre line if directional control is not maintained and the aircraft is not kept in balance. Beware of obstacles such as trees just off the side of the runway.

In a complex fixed-wing aircraft, there can be more things to juggle, which can present more of a challenge when going around.

When on an approach, you'll normally be at a low power setting with full flap. On many aircraft this means that nearly full aft trim is required to remain at the hands-off trim (HOT) position. This presents two problems when a go-around is initiated.

Firstly, on application of full power the nose will try to abruptly pitch up above the climbing attitude, due to the trimmer being aft.

Secondly, due to the flap setting hugely increasing the drag, the attitude for a safe low-level climb is much shallower than the normal attitude for a safe low-level climb.

These two factors work together to give potential for a serious accident. The unwary pilot applies full power, the nose pitches up far too high and the high drag slows the aircraft rapidly to the point of the stall, at which point control is lost and the aircraft may also enter a spin if the stall recovery is not executed properly.

It's not a good situation to be in at any point, let alone just above the ground.

The correct course of action is as follows:

- Simultaneously apply full power and raise the nose to a **Shallow climbing attitude** safely above the stall speed, but taking care not to exceed the flap limiting speed (V_{FE}). Be prepared for the aircraft being well out of trim and the associated high stick force on some aircraft.
- Continue to fly the aircraft and make sure you are in balance. On many aircraft a positive rudder input will be required along with the application of full power, in order to keep the aircraft in balance.
- Once the aircraft has a positive rate of climb, start to remove the flap in stages and raise the nose incrementally as the flap is reduced until you end up in your usual climbing attitude.
- Retrim the aircraft so that it is HOT in the climbing attitude.
- When you do go around, depending upon the particular airfield layout, you may want to move slightly onto the deadside as you climb away.

So in summary, *be prepared* to go around, *make the decision early* and keep in practice with your skills. Next time you do your hour with an instructor, why not practice a few go-arounds?

Every landing is optional, so when on approach think about it as "on approach to go around" unless everything is perfect, in which case you can land. □

GASCo

General Aviation Safety Council

GASCo, the General Aviation Safety Council, is a charity whose members are aviation organisations. Its aim is to make aviation safer through education. It presents the CAA safety evenings, runs seminars and provides safety information through its magazine and website, gasco.org.uk.

CHIRP

CHIRP, the Confidential Human Incident Reporting Programme, reviews and analyses reports from pilots, then publishes them so others can learn. Get the app at chirp.co.uk.

PILOTS!

Are your documents up to date for you and your aircraft?
If not, your insurance may be invalid.