Missed Approach

Of the many clichés or adages of aviation, one of my favourites is that there are three things that will save your life: the go-around, the 180 degree turn, and the decision not to take off in the first place. Here are a few thoughts on the first of those items.

Why?

How many can you add to this list of reasons to go around?

- Aircraft on the runway;
- Too much energy on approach (too high and/or too fast);
- Significant overshoot turning final, or otherwise not lined up early enough;
- Wind or turbulence beyond what you feel comfortable landing in;
- Your Jetstar A320 GPWS tells you “Too low – gear” on approach to Ballina because you forgot to lower it;
- Instructor wants you to show him one on your Flight Review.

How?

Everyone has practised go-arounds, or missed approaches, enough times in training to have a pretty fair idea about doing them safely. The main thing, of course, is to get the aeroplane climbing safely. Once you’ve applied full power and got that happening, then you can worry about retracting gear, retracting flaps (one stage at a time so you don’t dump a whole lot of lift at once and sink when you’re close to the ground), and moving to the dead side of the runway (or the live side at Jandakot). And if you really must yabber on the radio to tell the world you’re going around, you can do it after that.

A key point about going around, and one that many people have come to grief by ignoring, is that once you’ve made the decision to go around, go around. If you change your mind as you’re doing a missed approach, and think “Actually, I reckon I can make it now”, you’re asking for trouble.

Like all accidents, the QF1 accident in Bangkok in September 1999 (was it really 20 years ago?) had a number of contributing factors, but a key one was that when the captain (who was the non-flying pilot) saw that they were going to land long, he told the FO to go around. But as the FO did that, the aeroplane’s inertia meant it was still sinking, and the wheels touched the runway. When the captain felt that, he retarded the thrust levers and they landed. For reasons best described in the accident report, the crew didn’t use reverse thrust, as a result of which they overran the runway and, depending on who you believe, caused enough damage to write the aeroplane off. It was, of course, not written off, thus allowing Qantas to still claim they’ve never lost a big jet. The captain’s initial decision to go around was good. He should have let the FO get on with it.

Avoiding them

Everyone can make a mistake in the circuit, such as being too high and fast on final, or not allowing enough for a tailwind on base and overshooting the turn onto final. A point that won't get much argument is that it's good training and practice that enables you to get configured early on base, to judge how your profile is going and adjust accordingly, and to deal with curly crosswinds. All the tips and tricks and techniques for flying a good circuit can be the subject of another article.

Decisions

Does anyone disagree that the hardest thing about a go-around is making the decision to do it? It's easy to push on and try to land when a go-around means another 5 or 6 minutes, or another $30 or whatever the going rate is, in the air.

More importantly, it's easy to push on when the alternative is an admission of defeat. And let's face it, most of the reasons for going around, such as not getting stabilised on approach, or deciding the conditions are beyond you, are admissions of defeat. And who can argue that the typical pilot's ego has a bit of trouble with that!

Have a plan

If you're a professional pilot, chances are you have SOPs that dictate when you have to go around, such as an S-turn onto final or not having landing flap down by 300 ft AGL. If you fly twins, your training will have included engine-out landings, and you don't want to do a missed approach from close to the ground when one engine is not turning. So you'll have established a "decision height", say 300 ft AGL, and you won't go below that height unless you're certain you can land. So at 300 ft, if you think you may be too high, or you think the wind may be beyond you, or if you're not sure the idiot in front of you is going to get off the runway in time, you cut your losses and go around. And in twin training, at some stage you'll do a single-engine landing and as you're approaching the keys the instructor will tell you to go around. He's looking for you give him a firm "No – not from down here."

Since every day's a school day, and since I'm still learning, I'll share a recent "Should have gone around" moment. Because I don't like the idea of going around from close to the ground at night, I've always briefed myself on a 300 ft night-time decision height. But it's not much good if you don't make a conscious decision: "Yes it looks good" or "No I'm not sure about this." At 300 ft AGL I was too high. Because I kept going, I then ended up in a bit of a bind, clearly about to land too long but not wanting to go around at 100 ft AGL. I chose landing too long as a safer option than going around from low down, but that wouldn't have been a dilemma if I'd employed the concept of a decision height properly.