

# Accuracy circuit planning

Andy Webster discusses circuit plans applicable to both classic and paragliding accuracy.

In a previous article [March 2013] the wind speed penetration check was discussed. **GENERALLY ALL FLIGHT CIRCUITS SHOULD BE PLANNED TO END WITH THE SAME PENETRATION CHECK AND EASY TURNS ON TO THE FINAL APPROACH.** Pilots therefore need to determine the wind direction at the target so that they can get to the common position, alongside the target in relation to the wind, for the penetration check. In accuracy you can be approaching the target from a downwind, upwind or crosswind position, and each approach needs a particular circuit plan to get into the correct position for the penetration check.

Fig. 1: Downwind approach

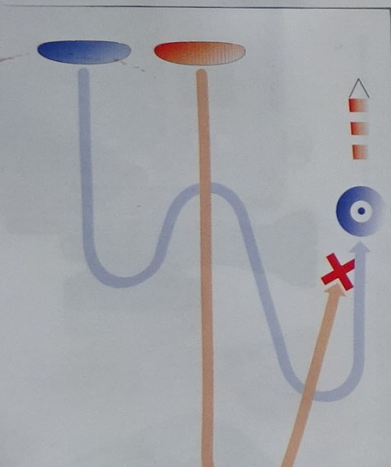


Fig. 2: Upwind approach

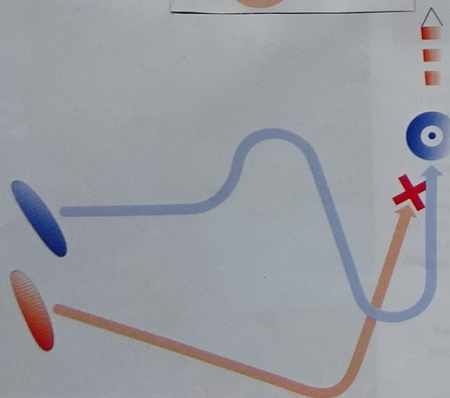


Fig. 3: Crosswind approach

PHOTO: ANDREW WEBSTER

A circuit plan is required for approaching this target in Austria's Stubai valley



The blue flight path in Fig. 1 shows a pilot approaching the target from a downwind position and performing a penetration check level with the target before slipping back for the final approach. Note that the blue flight path is of sufficient distance to the side of the target to allow an easy sequence of turns on to the target. The red flight path in shows a pilot falling short of the target,

having either underestimated the wind strength or been flying in ridge lift, believing they can easily reach the target. In low wind conditions where a penetration check is not necessary the red flight path would be suitable.

The blue flight path in Fig. 2 shows a pilot approaching the target from an upwind position, completing a

PHOTO: MARTIN ROSE

A well-planned approach allows top UK pilot Andy Shaw to make a perfect target arrival



target as they have underestimated the wind strength and flown too far downwind of the target. Again, in low wind conditions where a penetration check is not necessary, the red flight path would be suitable.

The blue flight path in Fig. 3 shows a pilot approaching the target from a crosswind position and crabbing into a position to achieve a penetration check level with the target before slipping back for the final approach. The penetration check is less important here as the pilot is already getting a good feel for the wind while crabbing to the target area. The crab approach is necessary to avoid drifting too far downwind of the target, shown by the red flight path in which the pilot falls short. Again, in low wind conditions where a penetration check is not necessary, the red flight path would be suitable.

Another complication in paragliding accuracy is that wind-direction information at the target may not be readily available at hill take-offs, which in many cases are out of sight of the landing field. Wind conditions at launch can be completely different to those at the landing field, and take-off can be many hours after a pilot last saw the wind conditions there.

Assuming that the target wind indicators are not visible from the launch point, a pilot's first priority after take-off is to determine the wind direction so that a circuit can be planned. Pilots on their final approach ahead of you will give a good idea of the wind direction, but beware that the wind direction can change between incoming flights, and it cannot be guaranteed that a pilot is approaching the target into wind! But circuits can be initially based on pilots ahead of you, with final confirmation as the target wind direction indicators come into view.

In summary, determination of the wind direction at the target is essential, so that a circuit can be planned that takes a pilot to a common position for the wind speed penetration check. The circuit should allow an easy sequence of turns to get on to the final approach, and should never involve turning your back on the target. Never assume that the wind direction will be the same as in a previous flight, or the same as that experienced by the pilot in front.



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