

# DOGFIGHTING With Chandelles

The term “chandelle” originated from a maneuver performed by WWI pilots. Does that give you a clue about how tricky they are?

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**A**erial combat, otherwise known as “dogfighting,” came into existence during the first war to end all wars. For the first time, aircraft were used as instruments of war, and pilots soon learned they had to develop evasive moves to avoid being shot down by the guy in the other plane. One of the moves they developed was called a “chandelle.” A chandelle is an aeronautical maneuver in which the pilot of an aircraft combines a 180-degree turn with a change in altitude. It presents the attacker with an ever-changing line, which makes hitting the lead aircraft much more difficult. It is no surprise that target setters use this same move, for the same reason, on every sporting clays course.

A chandelle is a fitting description of this presentation, as that is exactly what the target does. It makes a near 180-degree change in direction and confuses the shooter with an elevation change. This can be a technically challenging presentation for most shooters, as it does not present a straight line anywhere along its flight

▼ Chandelles present a technical challenge, as there's so much going on that getting a good read can be difficult.



PHOTOS BY THADDIUS BEDFORD





▲ It's crucial to know which type of target — full-size, mini, midi, rabbit, or battue — you're seeing in a chandelle presentation.

path. Since it is in constant transition, the common shooting techniques, such as maintained lead, are not good choices for this presentation. This means the shooter needs a few more tools in his kit to consistently break the target.

It is important to understand that a chandelle is a type of presentation and not a type of target. A presentation describes the flight path of a target. A type of target includes full-size, midi, mini, rabbit and battue. Any of these types of targets can be presented as a chandelle presentation, and the type of target affects the flight path. Knowing which type of target is being presented as a chandelle is a critical piece of data for the shooter.

A typical chandelle is

launched on a relatively steep upward angle and travels in a parabolic path across the sky. It usually has an obvious transition point at its apex, which also corresponds to its minimum forward velocity. The target bleeds off speed rapidly on the way up, and then gravity accelerates it back to near launch velocity on its trip back to the ground. The parabola drawn by the target can be tall and narrow or much flatter and wider. And all of this can be done with any type of target; which target type is used greatly affects the rate at which speed is lost and recovered.

So, what are the rules for successfully shooting a chandelle? They are the same rules as for any other target. First, you must select a hold point

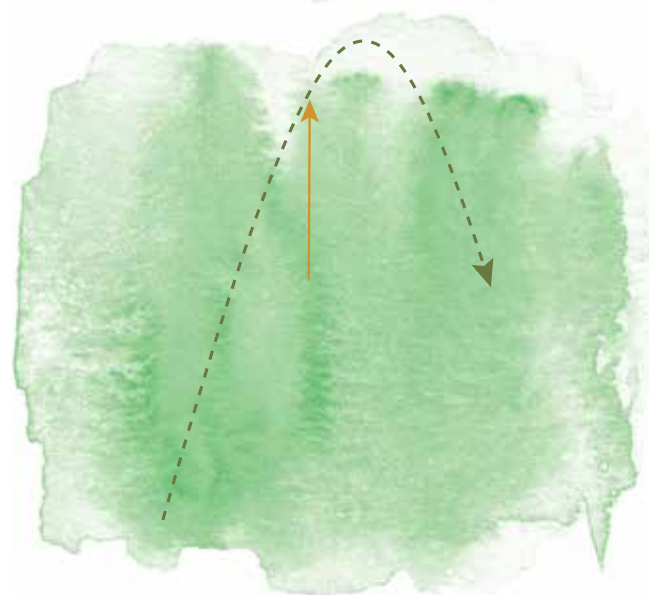
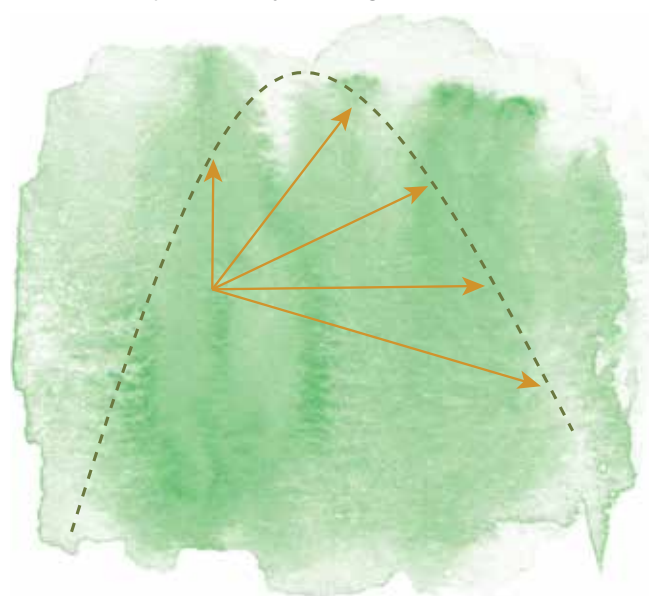
that is under the line of the target. For a chandelle, this means somewhere within the parabola. Second, the line drawn from your selected hold point to your selected break point must be perfectly straight.

And that's about it. A look at Figure 1 shows the range of possibilities one has for a

typical chandelle. The dashed line represents the path of the target, and the orange lines represent several options for shooting the target. Notice that for all options, the two rules are honored. Which option is best? That depends on the shape of the parabola.

Figure 2 illustrates a chandelle with a very steep

▼ FIGURE 1: You can break a chandelle in any number of possible locations, as represented by the orange lines.

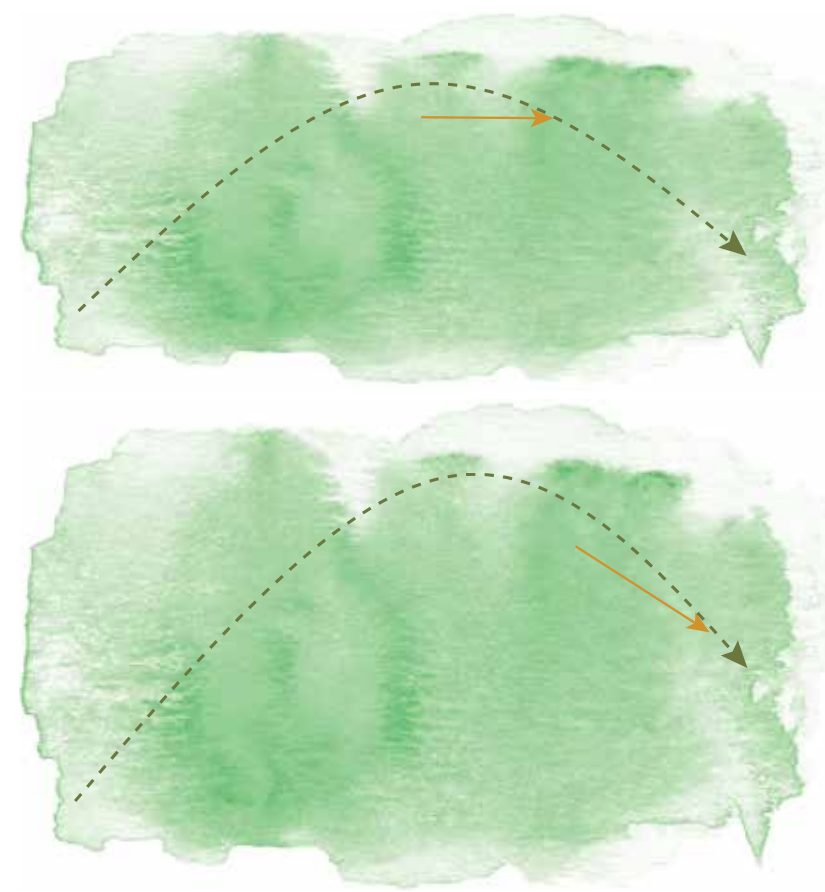


▲ FIGURE 2: A chandelle that's launched at a very steep angle is usually best broken while the target is still on the way up.

launch angle, resulting in a narrowly shaped parabola. I find the easiest way to shoot (and teach to shoot) this type of chandelle is to break it on the way up. All you need to do is pick a break point prior to the transition zone and place your barrels directly beneath this point. Then, when the target is launched, you simply raise your barrels straight up and shoot. Some people call this an intercept shot. Some call it "trapping the target;" others call it "cutting off" the target. The bottom line is, no matter what you call it, it works and it is very simple to learn and execute.

Shooting a target with this method requires a shooter to trust his skills implicitly. Trust leads to broken targets, which leads to confidence. Confidence leads right

▼ FIGURE 3: A chandelle with a flat trajectory is basically one long transition zone from start to finish. Pick a break point on the descending side of the target line and place your barrels at exactly that elevation within the arc.



▲ FIGURE 4: In this example, the break point is selected late in the flight path. The hold point is still within the parabola, and the line from hold point to break point is straight.



a straight line parallel to the ground (in the same direction as the target). As your barrels move across the sky, the target will drop onto your rib and you can release the shot. This is the same concept and approach as the target shot in Figure 2, with everything just rotated 90 degrees.

There are a couple of things to remember when shooting a chandelle with a level swing. First, matching barrel speed to target speed

◀ A chandelle loses speeds rapidly on the way up, then speeds up as it falls.

back to trusting more. This is a loop that, once you get into it, will drive your hit percentages higher and higher. You will also be amazed at how easy this target becomes when you simply trust your hands to go to the right spot and let your subconscious release the shot.

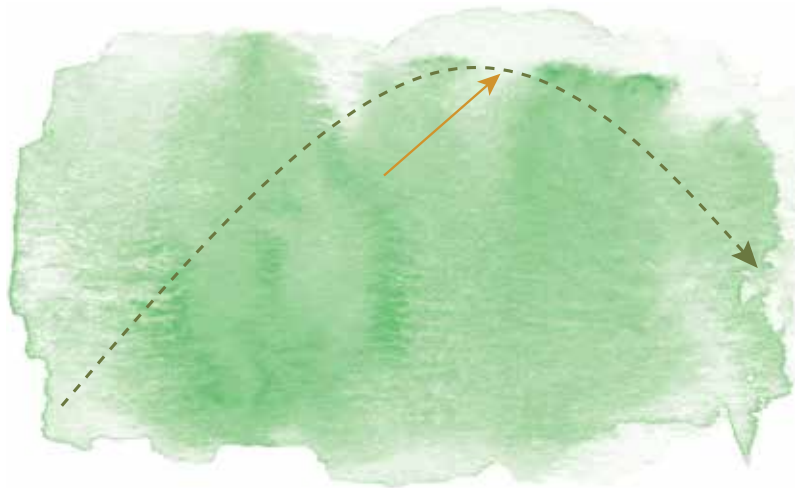
Figure 3 illustrates a chandelle with a much flatter trajectory. The transition zone on this type of presentation is very large and usually encompasses the entire flight line of the target. I find the easiest way to shoot (and teach to shoot) this type of presentation is to select a break point on the descending side of the parabola and then place your barrels at exactly that elevation within the arc. Then, when the target is launched, you simply move your barrels in

is critical to success with this approach. Second, when shooting a chandelle with this technique, it is critical to maintain a crisp focus on the leading edge of the target. This takes a little practice, as most shooters have trouble letting go of the view right over the rib. Don't worry. Keep your focus on the leading edge of the target and your peripheral vision will

see the rib as it traverses the sky. As the two merge, you should release the shot just as they come together. In fact, it might appear that you are shooting directly at the target. But if you trust your subconscious to release the shot, you will be pleasantly surprised with the results.

Figure 4 illustrates another way to shoot a chandelle. In this example, the break point is selected late in the flight path, and the approach angle is adjusted accordingly. The hold point is still within the parabola, and the line from the hold point to the break point is perfectly straight. For a rapidly accelerating target, this angle of approach is easier for some shooters and provides a larger margin of error than trying to maintain a perfectly level swing.

Figure 5 illustrates yet another way to shoot a chandelle. While this approach honors the shooting rules we have highlighted and will con-



▲ **FIGURE 5:** Breaking a chandelle with a line of approach that's perpendicular to the flight line is very tricky and requires perfect timing, but it's a good thing to practice.

sistently break a chandelle presentation, the timing on this shot is much more critical, as the approach angle is nearly perpendicular to the flight line of the target. Therefore, beginning and intermediate shooters will find this approach angle much more challenging to execute. However, practicing this approach

angle during your practice sessions is a good thing to do on occasion, as you never know when it will come in handy.

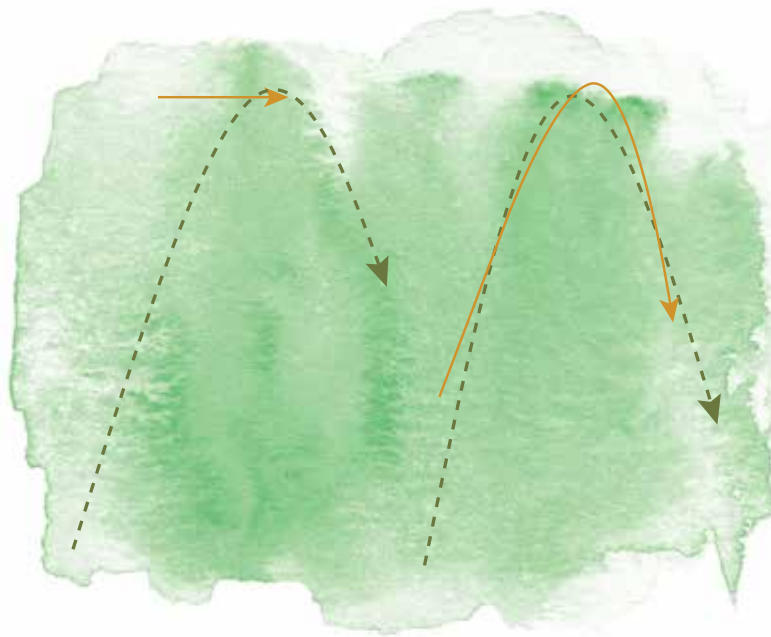
Figure 6 illustrates the two most common mistakes shooters make when shooting a chandelle. The most common mistake is when the shooter attempts to break

the target near its apex but selects a hold point outside the parabola. This results in a visual disconnect with the target just prior to the shot being released. This is corrected by keeping the hold point within the arc of the target.

The second most common mistake made is trying to "trace" the target across the sky, which results in the shooter violating multiple

shooting rules. The chances of success with this approach are significantly reduced. Unfortunately, I see a large percentage of shooters who use this approach on almost all chandelle presentations. This presentation is challenging enough — let's not help the target setter any more.

I recommend that during your practice sessions, you attempt to break your chandelles with several different approach angles. Learn which method works best for you for each variation of this presentation. Then the next time you crawl into your Sopwith Camel and head for your local sporting clays course, you can feel confident when the target in your sights pulls a chandelle move on you. **CTN**



▲ **FIGURE 6:** The big chandelle mistakes are (left) selecting a hold point outside the parabola of the target path, and (right) tracing the target across the sky.