FOUNDATIONS OF FLIGHT
LANDING PRIORITIES

Brought to you by Niklas Daniel and Brianne Thompson of AXIS Flight School at Skydive Arizona in Eloy. Photos by Brianne Thompson. For more skydiving educational content and professional coaching services, visit axisflightschool.com.

In many cases, jumpers who are unable to finish their landing flares lack the optimal arm alignment in their control stroke. Misalignment impedes movement and requires a greater energy expenditure. When performed correctly, a flare feels relatively effortless because the arms are in the most mechanically efficient position. Proper technique enhances performance by providing the pilot greater authority over the steering lines. Physically speaking, most jumpers have no problems transitioning from full flight to roughly quarter brakes. It is going into deeper brakes where some struggle. While some can muscle their way through the control stroke, others feel they are not strong enough to finish. In most cases, this is a problem with technique, not strength or equipment. Learning new movement patterns may be necessary if one wishes to improve the landing quality. A small tweak to an existing technique can make a big difference.

Technique

Once your hands reach about shoulder level, move your elbows back. Keep your hands close to your torso throughout the flare as you rotate your knuckles toward the ground. At the finish, the hands should be far away from the guide ring located near the top of the rear riser.

To facilitate the movements required for a responsive flare, try using an alignment cue. As your hands move below your shoulders, brush the knuckles of your thumbs down your rib cage.

If properly seated in the harness, you may be unable to finish your flare moving your hands into your crotch. If your feet and knees are together your thighs may block the path of your hands. It is acceptable to have your hands to the sides of your hips if you keep them close to your body should a PLF be necessary.

Bad Habits

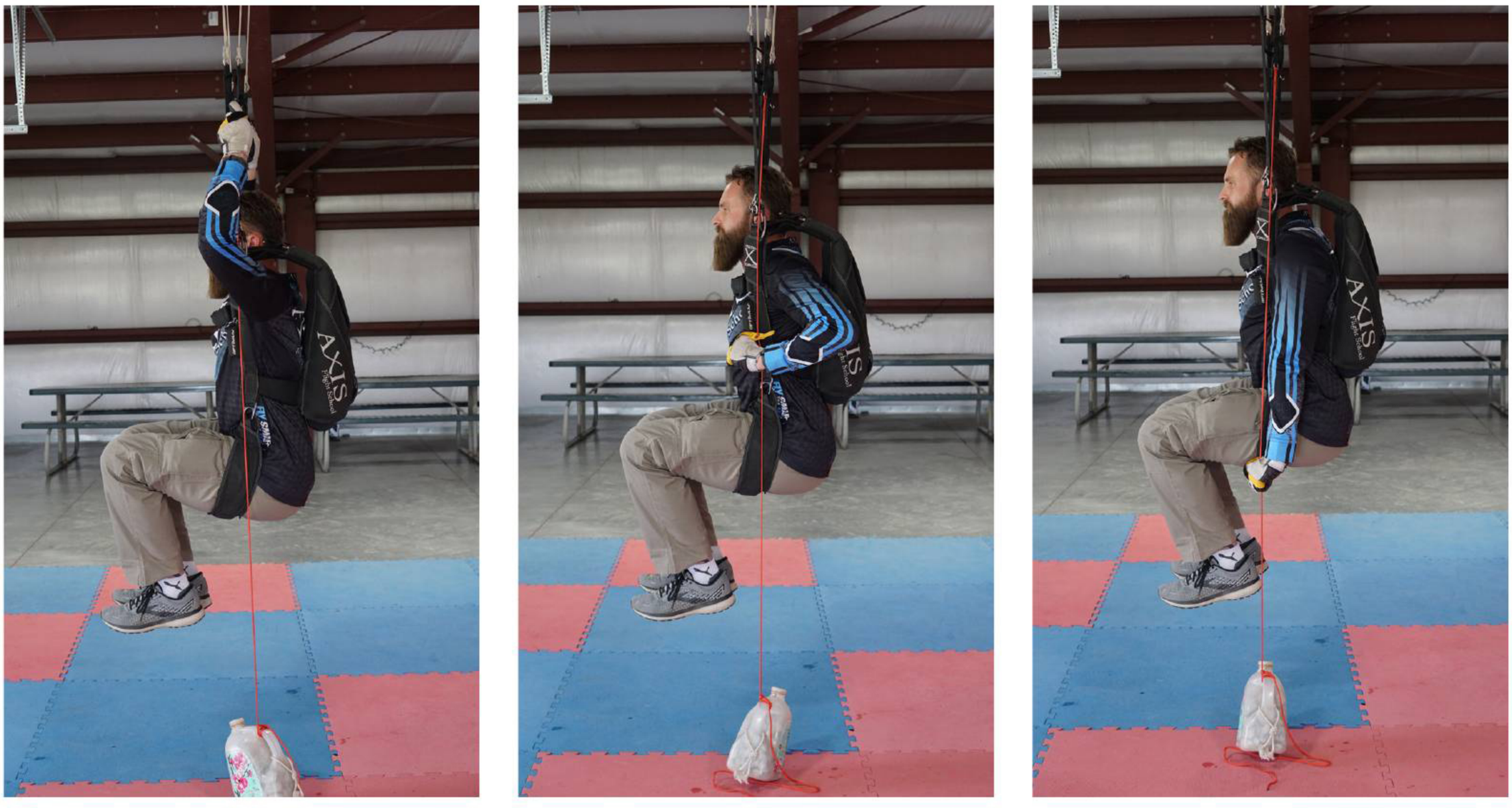
Bad habits are formed by repeating faulty movement patterns until they become automatic. Poor alignment, and therefore insufficient muscle recruitment during a landing flare, causes unnecessary strain on the body. Possible signs that you are using poor technique include an inability to finish a flare, which creates an inability to slow down or stop your canopy before touching down. Pain or soreness in the triceps, shoulders and/or elbows may be an indication of poor technique. Two of the most common problems when tracing the path of a pilot's hands in space are:

- The Iron Cross (like a gymnast on the rings) involves keeping the arms completely straight with elbows locked. The hands move in a large circular path toward the legs (resembling a jumping jack).
- The Triceps Extension starts once the hands have reached about shoulder height and the elbows are pinned against the torso. The hands then trace a circular path toward the legs exclusively relying on the triceps muscles to finish the movement.

Flaring a parachute effectively during a landing requires timing, strength and coordination. If your landings are neither soft nor consistent, hire a qualified coach to film and assess your landings. Video helps reveal important details in your movement execution. Refine and polish your technique repeatedly using specific skill-building drills at altitude to improve results.

An exercise video is available at youtube.com/watch?v=CP_tLi--E88.

The authors intend this article to be an educational guideline. It is not a substitute for professional instruction.



The author demonstrates proper arm mechanics for a toggle stroke using a hanging harness and a red rope that acts as a guide for the pilot's hands. Connected to the guide rings on the rear risers, the toggles are free to slide up and down the red guide rope.