

PERSONAL STROKE ANALYSIS

Your freestyle, read frame by frame.

SWIMMER

Henrique Rodrigues (sample report)

VIDEO

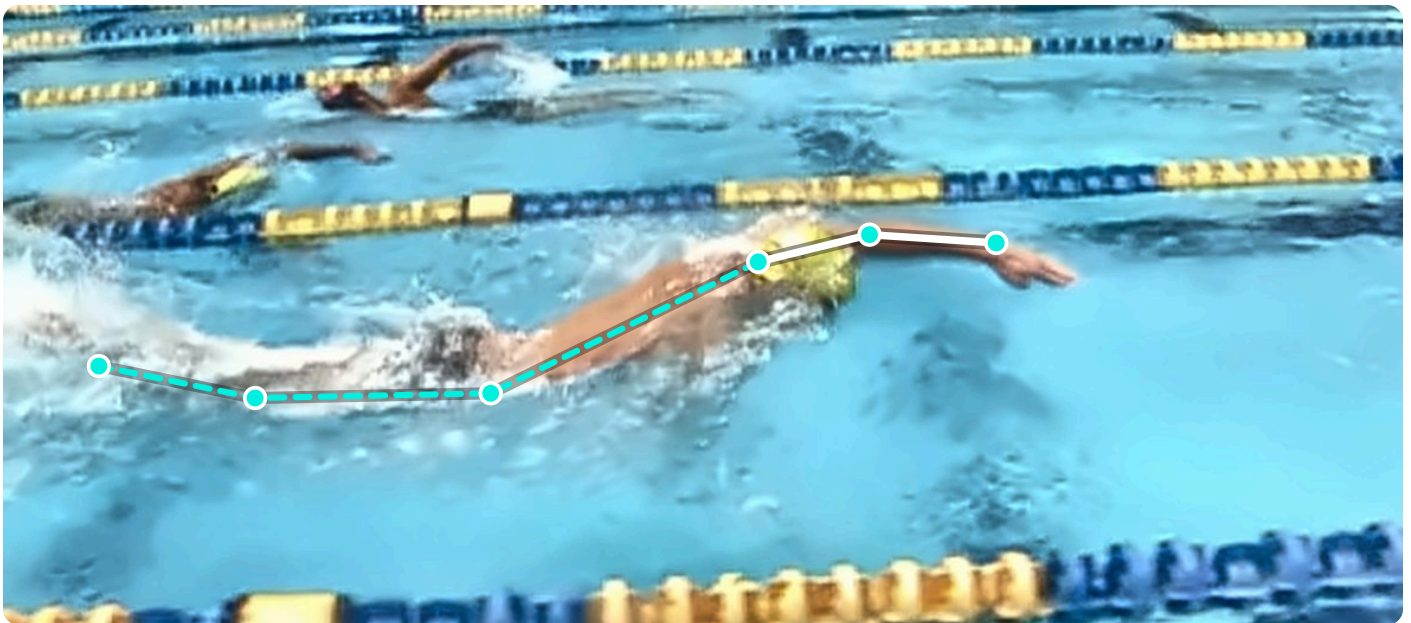
Deck video plus an underwater clip, 5.8 s · 173 frames reviewed

STROKE

Freestyle

ANALYST

Henrique Rodrigues, two-time Olympian

0:02.6 · Full body in your deck video. Dashed line: shoulder, hip, knee, ankle. [Watch your stroke in motion](#)**CONTENTS**

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The short version

Your recovery, kick and timing are solid. The speed you are leaving in the water is in the first half of the pull: the elbow stays straight too long, so the hand pushes the water down instead of back.

43

stroke cycles per minute
(1.4 s per cycle)

173°

elbow when the hand
starts to press

86 to 96°

elbow in the recovery
over the water

FIX THESE, IN THIS ORDER

1 Bend the elbow early in the catch

Costs you: the hand slips and lifts you instead of moving you

2 Pull back under your body

Costs you: a short pull with nothing to hold on to

3 Right hand in line with the shoulder

Costs you: a crooked start to every pull on that side

ALREADY WORKING

- ✓ High elbow in the recovery: 86° to 96°
- ✓ Long arm at entry: 176°, almost straight
- ✓ Finish past the hip
- ✓ Kick, shoulder roll and arm timing

PHASE BY PHASE

Hand entry, left	GOOD
Hand entry, right	NEEDS WORK
Catch, start of the pull	PRIORITY
Pull, hand moving in under the body	PRIORITY
End of the pull	PRIORITY
Finish past the hip	GOOD
Recovery over the water	GOOD
Kick	GOOD
Shoulder roll	GOOD
Arm timing	GOOD

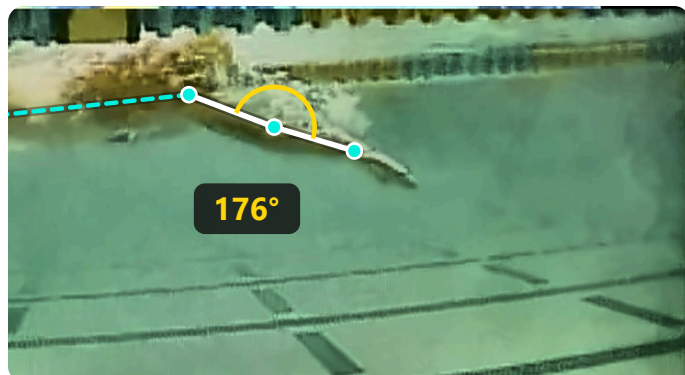
Ratings from a past coach evaluation of this freestyle, checked against the frames in this report.

If you change one thing this month, change the catch. The rest of your stroke is ready to use the extra grip.

FROM YOUR UNDERWATER CLIP

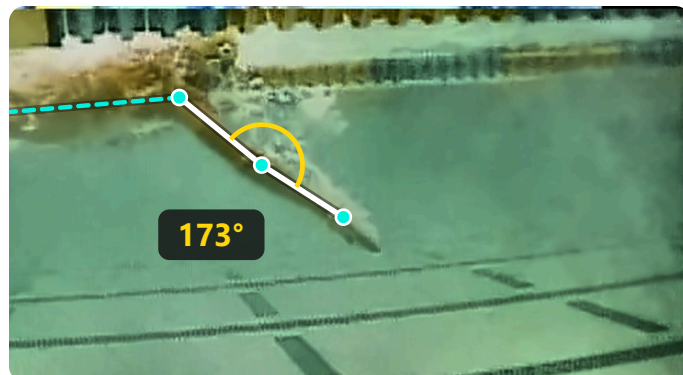
Below the water: catch and pull

Four frames from one stroke of your near arm, a tenth of a second apart. Watch the yellow number at the elbow.



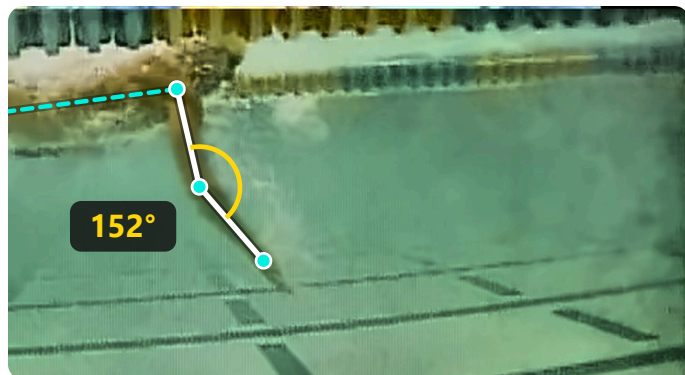
0:02.3 · arm 19° below the surface · elbow 176° **GOOD**

Entry and reach. The arm is long and the hand is already below the shoulder. Good start.



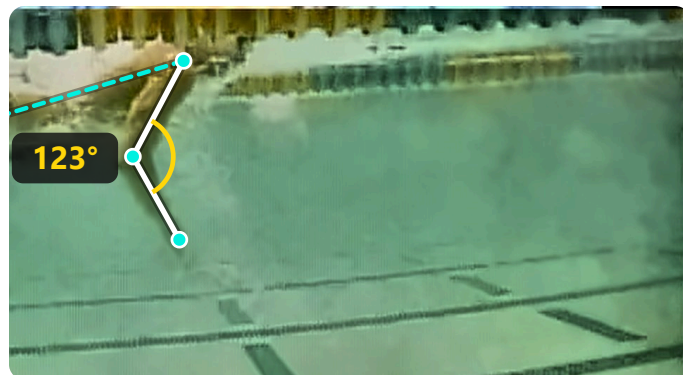
0:02.4 · arm 36° below the surface · elbow 173° **PRIORITY**

The press starts. The hand moves down, but the elbow is still straight. This is where the catch should begin.



0:02.5 · arm 63° below the surface · elbow 152° **PRIORITY**

Arm past 60°. The elbow has barely bent. The forearm faces down, not back, so the water goes down.



0:02.6 · arm 91° below the surface · elbow 123° **PRIORITY**

Arm under the shoulder. Only now does the elbow bend. The useful part of the pull starts late.

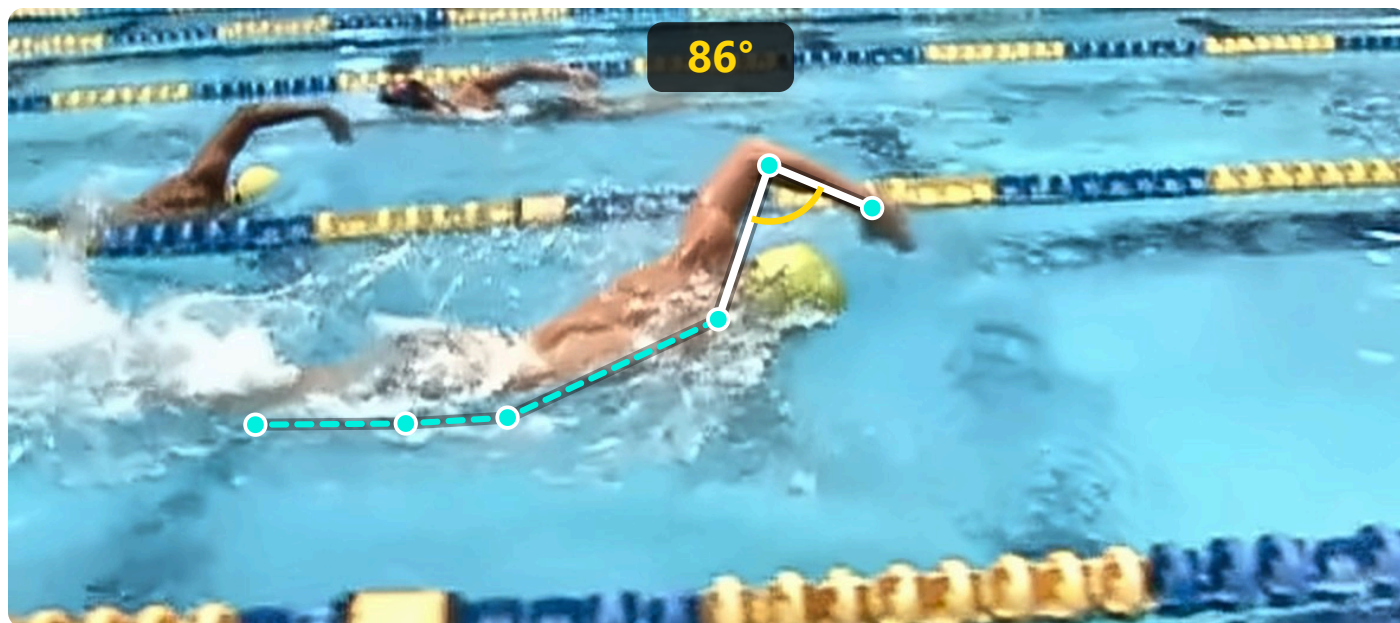
Watch these frames in motion, with the angles live

What it means: from 176° to 152° the elbow barely moves while the arm drops about 44°. The first third of every stroke pushes water down instead of back. [See Fix 1](#)

FROM YOUR DECK VIDEO

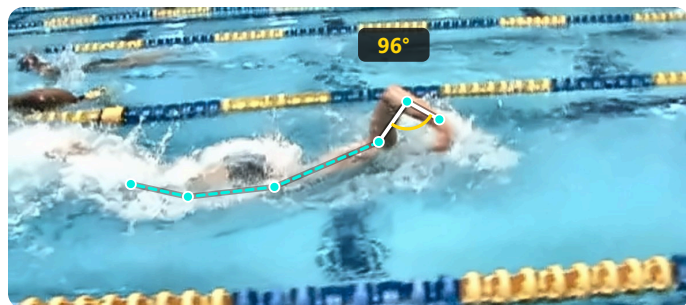
Above the water: recovery and body line

This part of your stroke is already strong. Keep it while you change the catch.



0:02.5 · recovery · elbow 86° **GOOD**

Elbow leads the recovery. High elbow, relaxed hand. The shoulder is not fighting the arm.



0:03.1 · recovery · elbow 96° **GOOD**

Same shape on the next stroke. The recovery repeats, so the rhythm stays steady.



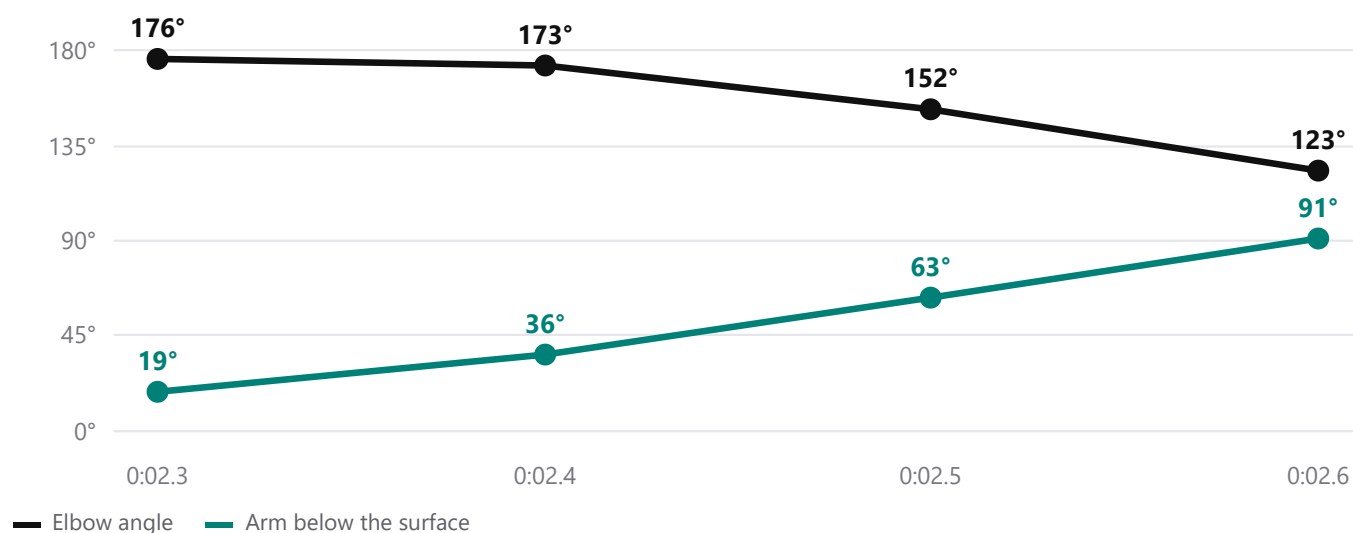
0:03.7 · extension below the water · elbow 178° **GOOD**

Body line. Your hips sit about 7 to 9 degrees below your shoulders and the legs stay close to the line of the body.

All angles in this report are measured on the 2D side view, so treat them as close estimates, not lab numbers.

FIX 1 OF 3 · SEEN IN YOUR UNDERWATER CLIP

Bend the elbow early in the catch



In a strong catch the black line drops early, while the arm goes down. In your stroke it stays flat until the arm is past 60°.

WHAT I SEE

Your elbow stays almost straight while the hand presses down. At 0:02.4 the arm is 36° below the surface and the elbow is at 173°. At 0:02.5 the arm is 63° down and the elbow is still at 152°.

WHY IT SLOWS YOU DOWN

Water you push down lifts you up instead of moving you forward. You spend the effort, the hand slips, and the stroke feels heavy even when you are fit.

WHAT IT SHOULD LOOK LIKE

By the time your hand is under your head, the elbow is bent and sits above the hand, with the forearm pointing toward the bottom of the pool. Hand and forearm work together like one paddle facing back.

DRILLS

1. **Sculling, arms in front, 4 x 25 with a pull buoy.** Elbows high, fingertips down, small side-to-side presses. You are learning what holding the water feels like.
2. **Catch-up with a pause, 4 x 25.** On every stroke, stop for one second with the elbow bent and the forearm pointing down, then pull.

WHAT IT SHOULD FEEL LIKE

Pressure on the inside of the forearm, not only on the palm. The elbow stays close to the surface while the hand goes down.

Read more: [The freestyle catch: why your arm slips and the fix](#)

FIX 2 OF 3 · SEEN IN YOUR UNDERWATER CLIP

Pull back under your body

WHAT I SEE

At 0:02.6, with the arm already under the shoulder, the elbow is only now bending (123°). From the side I can see that late bend. The inward path of the hand needs a front view: the coach evaluation marked it as the weakest phase on both arms.

WHY IT SLOWS YOU DOWN

A pull that only goes down and back is short. When the hand travels in under your chest and belly, the big muscles of your back do the work and the stroke gets longer.

WHAT IT SHOULD LOOK LIKE

After the catch, the hand moves back and slightly in, passes under your belly button, then pushes out past the hip.

DRILLS

1. **Single-arm freestyle, 4 x 25 each arm.** The other arm stays extended in front. Watch your hand pass under your chest on every stroke.
2. **Fist freestyle, 2 x 50.** Closed fists take the palm away, so only a forearm that faces back can move you.

WHAT IT SHOULD FEEL LIKE

The hand passes under the middle of your body before it finishes past the thigh.

Read more: [The freestyle push phase: finishing the stroke past your hip](#)

FIX 3 OF 3 · SEEN FROM THE DECK

Right hand in line with the shoulder

WHAT I SEE

The coach evaluation rated the left hand entry good and the right one as needing work. A diagonal deck video shows clearly where the hand lands. The deck camera in this sample sits level with the swimmer, so I am not guessing: your diagonal check-in video will measure it.

WHY IT SLOWS YOU DOWN

If the right hand lands toward the middle, the whole pull on that side starts crooked and the body snakes to correct it.

WHAT IT SHOULD LOOK LIKE

Fingertips enter first, in line with the right shoulder, and the arm reaches forward under the surface before the catch.

DRILLS

1. **Catch-up drill, 4 x 25.** One hand waits in front while the other finishes a full stroke and lands right next to it. A crossed right hand shows up at once.
2. **Fingertip drag, 4 x 25.** Drag your fingertips along the surface during the recovery, all the way to the entry.

WHAT IT SHOULD FEEL LIKE

Both hands land at the same width, like on two rails.

Read more: [How to move your hands in freestyle swimming](#)

Your 4-week plan

No extra sessions. Do the drills in the warm-up of three swims a week, then swim your normal set holding the cue. Tick a box after each swim.

WEEK	DRILLS, IN YOUR WARM-UP	CUE FOR THE MAIN SET	DONE
Week 1 Feel the catch	4 x 25 sculling, 4 x 25 catch-up with a pause	Elbow up, fingertips down	☐ ☐ ☐
Week 2 Catch into the pull	4 x 25 sculling, 4 x 25 single-arm each side, 4 x 50 full stroke	Forearm faces back early	☐ ☐ ☐
Week 3 Longer pull	4 x 25 single-arm each side, 2 x 50 fist, 4 x 50 full stroke	Under the belly, past the hip	☐ ☐ ☐
Week 4 Put it together	4 x 25 catch-up (right hand in line), 8 x 50 full stroke, film your check-in	Two rails, early elbow	☐ ☐ ☐

When it feels slower, keep going. A new catch feels weaker for the first one or two weeks, because you are using muscles in a new order.

Week 4 check-in

HOW TO FILM

1. **From the deck, on a diagonal.** Two lengths at your normal pace, whole body in the frame. This is where I check the right hand entry.
2. **Optional underwater clip.** GoPro or waterproof phone, side view, so I can measure the catch and pull again.
3. **Same pool, same time of day** if you can, so the comparison is fair.

WHAT YOU GET BACK

- ✓ Old and new frames at the same phase, side by side
- ✓ New angles for the catch and the pull
- ✓ What improved, what did not, and your next fix

[Send my check-in video](#)

Questions before then? Reply to the email this report came with. I read every one. **Henrique**

This sample uses Henrique's own archive footage and a past coach evaluation of his freestyle. Your report is built only from your videos: the deck video always, the underwater clip when you send one.