Congratulations on purchasing Freestyle Made Easy (FME) Drill Cards. This user’s guide includes detailed tips for mastery and we hope it will be a valuable aid to improving your Freestyle. For “full-action” study of the drills and skills, we recommend our Freestyle Made Easy DVD. Our book Triathlon Swimming Made Easy provides a comprehensive program for learning to swim an efficient freestyle for long distances in pool or open water. Both are available from www.totalimmersion.net or 800-609-7946.

**Cards 1 and 2: One Fishlike Stroke**
A “Fishlike” stroke is balanced, streamlined, and uses energy-efficient weight shifts – rather than exhausting pulling and kicking – for propulsion. This photo sequence illustrates every critical action in a single stroke, starting with left-hand-anchored and right hand in mid-recovery and finishing with right-hand-anchored and left in mid-recovery. Here are the skills I’ve focused on developing, as illustrated in these photos:

**Sleek Bodyline** Because water is 1000 times denser than air, nothing is more important than slipping your bodyline through the water like an arrow through the air, with the lead arm, head, torso and legs always balanced and aligned.

**‘Just Enough’ Body Rotation** Pictures 2 (bottom left of Card 1) and 6 (right on Card 2) show symmetrical rotation, not to 90 degrees but enough to allow the hip and shoulder to clear the water and minimize drag. If I rolled to 90 degrees, I would feel unstable and need to use arms and legs to stabilize myself.

**Patient Hand** Study the position of my right hand throughout the sequence on Card 2. It remains forward of my head as my left hand strokes, and recovers. This “patient hand” minimizes drag, conserves momentum and keeps me on track.

**‘High Side’ Power** In each photo on Card 1, my right arm, shoulder and hip are poised to drive down. This gives me tremendous power “in reserve.” I’ll release this power – with gravity assisting – by *spearing* my hand forward, synchronized with the downbeat of my opposite foot in Photos 3, 4 and 5.

**Conserve Momentum** In Photos 5 and 6, I’ve finished stroking and am streamlining my body to travel as far and fast as possible on the momentum from my stroke. I try to feel as if I’m “skating down a track”, with my bodyline from fingers to toes acting like the blade of a speedskate. During a long swim, spending more time in each stroke cycle in this “resting” position, keeps my heart rate low and muscles fresh, without sacrificing the speed I need to perform well in distance races.
Card 1 Photo 1: Extend Bodyline (top right)
Holding a long, balanced, sleek bodyline, while rotating to breathe, is the most challenging of all swimming skills. Here’s how I do it:

- **Balance.** I keep the top of my head low (note left goggle underwater) and my left arm fully extended below my head with fingers tipped down slightly. Fingers up = Legs down; Fingers down = Legs up.
- **Streamline** Notice how little turbulence my body creates moving through the water. This is because I align the left side of my body on its Track and keep my hand extended until my right hand is about to enter the water. This, plus streamlined legs, helps me minimize drag and conserve momentum until I spear the right hand and drive my right hip to create new propulsion.
- **Begin to Grip** Tipping down the fingers on my left hand also begins to establish my hold on the water for when I drive down the right side of my body to propel past that grip.

Card 1 Photo 2: Patient Lead Hand (bottom left)
A fraction of a second later, I’ve maintained my drag-minimizing profile while putting myself in position for effortless propulsion. Here are the details:

- **Patient Lead Hand** While my right hand is about to enter, my left hand has barely moved. My arm angles down further, but my hand is still well forward of my head, setting me up to travel a long way when I spear my right hand in.
- **Still Aligned on Left Track** To be frank, my left hand isn’t on the track, but has moved to the centerline. This picture showed me I needed to give more attention to keeping that hand wider, improving lateral stability. But the left side of my body is aligned, meaning I’ll travel farther, faster, and straighter.
- **Relaxed Hand** A relaxed hand holds water effectively and avoids needless tension and fatigue in your arm.

Card 1 Photo 3: Drive Hip Down (bottom right)
This side view shows the most critical moment in the stroke – poised for the actions that propel me with maximum efficiency:

- **Left Arm Lever** Starting from tipped-down fingers in Photo 1, I’ve moved my left arm to a vertical position to create the maximum surface area to “hold my place” in the water. Slightly flexing my wrist gets my palm facing back earlier in the stroke.
- **Right Arm Spearing** I have a clear target in mind for my right hand – parallel to the spot where my left hand is positioned in Photo 1, but on the Right Track. The steep angle of my right arm ensures that the energy released by driving my right hip will “catapult” me past my left hand/forearm.
- **Synchronize** Rather than swim faster by stroking faster I prefer to synchronize all propulsive actions by driving my left foot (poised near the surface) and right hip, at the exact moment I spear my right hand. This links all my muscle and mass to work in unison allowing me to maintain good speed for long distances with far less energy cost.
Card 2 Left: Brisk Weight Shift
- **Spearing** My right hand is midway between entry and its target. My left foot has driven down, as gravity and my spearing hand drive my right side down. My right hand is on the Right Track as it spears to its target.
- **Stroking** My left hand travels down my body’s centerline as it passes under my midsection. Because that hand was near the centerline, rather than on its Track, earlier in the stroke, my hand is now a bit too shallow, which slightly reduces leverage. However, at this moment my attention is not on my left hand; I’m entirely focused on driving my right hand to its target.

Card 2 Middle: “Pierce The Water”
This photo shows the moment at which my body reaches maximum velocity. To maintain that velocity, I’m focused on:
1. Making my bodyline *as long as possible* by spearing my right hand to its target;
2. Making my bodyline *as streamlined as possible*, which is evident from head to toe.

My left hand has completed its effective propulsion at the top of my suit and is exiting, with palm still facing back. I’m releasing the water, *not* pushing down my thigh. I’ll be flat in the water for only the briefest moment, on my way to streamlining on my Right Track.

Card 2 Right: “Skate Down the Track”
I’m in my right-side-streamlined” position about halfway through my left-hand-recovery. I’ll try to maintain this streamlined position, as well as the anchored right hand, until my left hand is about to enter the water. Notice again, how streamlined I am from fingers to toes. Since I’m not generating propulsion yet, it’s essential that I conserve momentum with a long, sleek bodyline.

Card 3: Sweet Spot
**Sweet Spot** teaches head-spine alignment, a slightly-rotated body position and compact kick. It also teaches you to be more comfortable and relaxed in the water by expertly positioning your body. Your goal is to find the position that’s most comfortable, not to rotate onto your side.
- **Relaaax** I relax back until the water wraps around my goggles and touches my chin. I also focus on keeping my shoulders relaxed. Some novices shrug the shoulder up toward the ear or toward the surface.
- You’ll feel most comfortable in a slightly-rotated position. Roll as little as possible and see how you feel. If you’re uncomfortable, you may have rolled too far. Return to your back and try for less rotation.
- Both photos show that my right arm – from shoulder to knuckles – is dry. That may not happen for everyone. If you can’t get your arm “dry” with very slight rotation, don’t roll farther to make it happen. Instead, focus on comfort, and on *relaxing back* into the water.
• **Shape Like Torpedo** Notice my streamlined bodyline. Besides teaching balance, Sweet Spot is valuable for learning to minimize drag by mindfully shaping yourself like a torpedo. Once you feel consistently balanced, turn your attention to how “long and slippery” you feel.

• Note the position of my right hand “in the pocket.” Placing your hand on your front thigh helps keep your shoulders neutral. Placing the hand on the side of the leg may cause you to arch your back. Having your hand “in your pocket” will help you stay aligned when you rotate from here to a nose-down position in Fish – Drill Card #5.

• Slip through the water as cleanly and quietly as possible. If you feel more comfortable on one side (which is common), examine what allows you to feel that way and try to replicate that feeling on both sides. This will be your first exercise in improving symmetry in your positions and movements.

**Card 4: Lengthen Your Vessel**

*Lengthen Your Vessel* teaches a long, slippery bodyline and awareness of body alignment. This is the position in which you can rest comfortably between cycles of all subsequent drills; and is one of the two best positions for flutter-kicking practice (Skating is the other). As well, it’s a foundation for developing Backstroke skills.

• **Barely a Ripple** As you “sneak” your arm forward from Sweet Spot to achieve the position shown in the top photo, you should feel yourself traveling a bit faster, with no more kicking effort. In the first several hours you practice *Lengthen your Vessel* – or whenever you want to refine it further – start in Sweet Spot, then sneak your arm to the position shown.

• In the top photo, notice that my head, is exactly where it was in Sweet Spot, with water touching my goggles and parallel to the surface. I want my arm to feel like a weightless extension of my bodyline. I also focus on feeling as if my shoulder fills the space below my ear. Some swimmers close that gap by tilting the head outward. Instead keep your head aligned and extend your shoulder until your bicep brushes your ear.

• Also notice the position of my hand. It’s relaxed, slightly below the surface, and palm up. Palm out or palm up are both okay. Choose whichever feels more comfortable.

• **Minimize Drag** The bottom photo illustrates attention to alignment and creating a “slippery” position. First notice the “hand in pocket” position, which I established in Sweet Spot. As you sneak your arm, also focus on lengthening the back of your body, which helps keep your spine straight. Lengthening the front of your body will cause your back to arch.

• Being towed by a friend or partner – holding your fingers, hand or wrist, as illustrated in the *Freestyle Made Easy DVD* – can help accentuate your sense of being a long, sleek vessel piercing the water. If you do practice this way, try to feel the same sensations after being released as you felt while being towed.
**Card 5: Fish**

Fish teaches you proper head position for freestyle drills and swimming – and to maintain that head alignment as you roll to air for a breath. Maintain this head position in all subsequent FME drills and whole-stroke. This is the best place to imprint head-spine-alignment because there’s little else to think about while practicing Fish. As you move on to other drills, you’ll want to shift your focus to other skills. Fish also allows “sinkers” to feel more balanced than they do in the previous drills. If you struggled in the nose-up drills, I suggest you move expeditiously to Fish and Skating.

- **Hang your Head** This photo illustrates the head position I refer to above. You can see that my head is actually just below the surface. This will be true for most swimmers (especially men), in Fish. By using this drill to learn how you feel when your nose is pointing directly down, it will be easier to retain in subsequent steps. Because most swimmers have done millions of strokes looking forward, they often find it difficult to change, and even a small change in the angle of the head feels like a lot. To be sure your head is properly positioned, ask a friend to compare your head position with mine.

- **Follow a Laser Line** The dotted line in this photo represents a “laser line” that I visualize while practicing Fish and try to follow through the water. The drawing shows what happens to that laser line – and your bodyline – if your head tilts up. It’s not too difficult to maintain that line while in the nose-down position. But continue to focus on this as you roll between Sweet Spot and Fish to breathe. This imprints a breathing habit that will be critical to efficiency in whole-stroke freestyle.

- I’ll critique myself by noting the slightly different position of my left and right hands. While my left hand is “in the pocket,” my right is atop my leg. The hand-in-pocket position is important in keeping your shoulders aligned and avoiding over-rotation. While I often rest my hand atop my hip to enhance a sense of being totally relaxed, I’d still recommend that, while learning this drill, you keep both hands “in the pocket.”

- Once I feel I have everything properly positioned, I give 90 percent of my attention to traveling through the smallest possible “channel” in the water while disturbing the water as little as possible. My ability to swim without making waves, as illustrated on Cards 1 and 2, starts here.

**Card 6: Skate on the Track**

Skating is the essential balance drill for freestyle and the foundation for every subsequent drill. Skating teaches you proper positioning for front-to-back balance and lateral stability and helps you locate the Tracks you’ll follow through the water. The two keys to mastering Skating are (1) the head position imprinted in Fish; and (2) the proper position for your extended hand. These will determine how comfortable and efficient you’ll be in every step that follows. If you don’t feel balanced, start every practice by practicing Skating. For at least your first hour or two of Skating practice,
start each lap in the *Fish* position, then “sneak” your arm forward. Setting your head position in *Fish* is easier than doing it after your bottom arm is already extended.

**Pre-Drill Rehearsal:** Before your first attempt, extend your arm over the water, and *hang* your hand, completely relaxed, so wrist flexes and fingers point down. This will be the position of your extended hand while in *Skating* position.

- **Balance:** My aligned head position, and left hand extended below my head, keep me balanced. (If my head is up, my legs will drop as shown in the drawing at bottom right.) Also notice that my fingers are tipped down. If you simply relax your hand, yours should tip down too. This helps ensure that your hand doesn’t “scoop up” toward the surface through inattention. It also puts your hand in the best position for a firm grip when you stroke. This is the best place in the FME sequence to imprint that hand position, because you can fully concentrate on it. By the time you get to Switch drills or whole-stroke practice, you want that hand position to be a strong habit so you can give my full attention to more advanced skills.

- **Tracks and Lateral Stability** Again, I’ll critique my own position. I should have my right (top) shoulder and hip rotated slightly forward. This would occur naturally if I had my right hand “in the pocket.” Check that your lead hand is on its Track, directly forward of the shoulder, as shown in the center drawing, and that both hands are equidistant from your body’s centerline.

- **While Skating**, memorize the position of your extended hand, for use as a “target” in all Switch drills and whole-stroke. Each time spear your hand *through* that target.

- **Breathing:** When I roll back and forth between nose-up (Card 4) and *Skating* positions, I’ll concentrate on “following the laser line” which I began imprinting in *Fish*.

**Cards 7 & 8: UnderSwitch**

*UnderSwitch* drills teach you: (1) To Pierce and Track with each side of your body; (2) To spear your arm down the Track; and (3) To maintain a patient lead hand that keeps your bodyline long for more of each cycle. *UnderSwitch* is where you’ll first experience how core-body rotation can provide nearly effortless power for propulsion. Finally, one of the most useful things about *Underswitch* is that arm recovery follows your direction of travel. This helps reveal tell whether your core body rotation is clean. This photo sequence shows a single UnderSwitch, but you should devote most of your practice to Double, Triple or more UnderSwitches.

- **Ready to Switch** In this photo, my hand is reaching my goggles. The line drawings at the bottom provide a critical cue. Keep your shoulder and hip high to “save” the energy for release when you spear. And keep that hand/forearm on its Track. During your first hour of *UnderSwitch* practice, it’s a good idea to pause your hand there for a moment, to check that your lead hand hasn’t moved from where you positioned it in *Skating*. Later, eliminate the pause and switch as your hand passes your face. This visual cue is the easiest way to begin imprinting the
stroke timing, you’ll employ – without the visual cue – in ZipperSwitches, and swimming.

- **Spear to Target** In this photo, I’m focused on: (1) Spearing my right hand to the target I established in *Skating*; and (2) *Holding* water with my left hand. It will take many hours of practice to replace the instinct to *pull* with a new instinct to *hold the water* as you spear the other arm forward. First establish consistency in spearing to your target, then focus on holding the water. When both are imprinted, you can give some attention to coordinating opposite-leg-drive with your arm-spear.

- **Follow the Track.** In this photo, I’m primarily focused on two aspects of my spearing hand: (1) I make sure it follows the Track. To do this, spend several hours focused on spearing “too wide” by veering slightly outside as you extend. You should feel improved lateral stability as a result. (2) I focus on angling my fingers down. Aim to spear, every time, to the fingers-down position you established by relaxing your hand in *Skating*…then wait there until the other hand passes your goggles during the next switch. Finally, note the synchronization between my right hand spearing forward and my left foot driving down. This coordination increases the power of core rotation.

- **Stay Laserlike** The bottom photo shows how to roll to air after your final switch in a sequence. Always “follow the laser line” as you rotate to air. This should feel like you’re traveling through the water *like an arrow through the air*. And, to make it more likely that you’ll stay long, sleek, and aligned, finish your rotation in the position shown in Card 4. Take two to three unhurried breaths to normalize your breathing, evaluate about how well you executed the steps outlined here, then rotate to nose-down and repeat in the other direction.

**Card 9: ZipperSkate**

*ZipperSkate* is your most valuable balance drill because it teaches how to use the weight of an arm suspended forward of your lungs as a “tipping point” for great balance. This will contribute powerfully to relaxation as you swim.

- **Draw Forward** From *Skating* position, draw your hand forward, following the track, slightly outside your body. To improve lateral stability, keep your “Zipper” arm and your leading arm equidistant from your centerline (as shown in the drawing at bottom left). Keep the arm fairly deep in the water, and bring it forward as slowly as you can.

- **Suspend Arm** The top photo shows that my arm position is compact, but not “cramped.” I avoid tension by keeping my hand limp enough that water pressure flexes it back from the wrist as it comes forward. Then I simply suspend it – as if my elbow was hanging from a string – next to my ear.

- **Find your Tipping Point** The underwater photo illustrates effortless balance, created by the combination of (1) aligned head, (2) right arm suspended next to ear, and (3) *relaxed* lead hand angled down. If you feel stable and supported, “skate” for a few seconds with your arm hanging as a dead weight alongside your ear. Then return your arm to its starting position, and bring it forward like this one
or two more times – or rotate to the nose-up position and take several yoga breaths before “Zipping” again. Practice drawing your arm forward super slowly, yielding to the water’s resistance. Lead with your elbow for as long as possible. This will imprint the spot where the hand will spear from in ZipperSwitches.

**Card 10: ZipperSwitches**

ZipperSwitches connect hip drive to spearing/propelling action and reinforce Patient Catch timing. When you do three or more switches (relaxed and rhythmic swimmers can do as many as six) ZipperSwitches prime you to transition from skillful drilling to beautiful swimming.

- **Relax the Recovery** In the top photo, I’ve just begun drawing my hand forward, from the “in the pocket” position. As I draw it forward I’ll: (1) keep it submerged to the wrist, (2) bring it forward quite slowly, (3) keep it on its Track, and (4) lead with my elbow for as long as possible. (But I’ll focus on only one at a time.)
- **Spear from a Steep Angle** The key points in the bottom photo are: (1) the steep angle at which I’m spearing from my ear – it will go to the same position as my left hand in the top photo, and I’ll concentrate on keeping it on its Track; (2) the nearly-vertical “gripping lever” provided by my left arm.
- **Hip/Leg Drive** The drawing illustrates a common error – allowing the hand to move too far forward before spearing. When it moves well in front of the head as shown, and opens the angle between upper arm and forearm the power of the hip drive is dissipated. By spearing from a steep angle you connect hip drive to your stroke. And the left foot is poised near the surface, ready to drive down at the same moment as the right hip. This synchronization releases the maximum amount of power, while minimizing energy cost.

**Card 11: Active Streamlining**

This card illustrates the most efficient way to rotate to the *Sweet Spot* breathing position after a series of Switches. This is not a breathing position intended for whole-stroke, but allows novices to stay relaxed and controlled while practicing UnderSwitch and ZipperSwitch drills. The key points illustrated by the three photo’s are as follows:

- **Top** As I complete the final switch in a sequence before rotating to breathe, I focus on: (1) Spearing my left hand to its target; (2) Aligning the left side of my body – legs too – on its track and; (3) Taking a moment to feel my momentum along that track before I roll up to breathe.
- **Middle** Midway through rotating to Sweet Spot, I’m focused on keeping my body balanced and spearlike so I begin my breathing pause with as much momentum as possible, making it easier to take all the time I need to get air. I do this by: (1) Keeping my head low in the water and aligned with my spine; (2) Keeping my body aligned right to my toes.
- **Bottom** When I get to *Sweet Spot* I relax back into the water, and let my left hand float up and turn up to a more relaxing position. I may stay here for up to
three breaths. After breathing, I’ll rotate down to Skating position and make sure my left hand is back on its Track with fingers angled down before I begin drawing the right hand forward for the next Switch.

Card 12: Seamless Breathing
This card illustrates the key skills for fitting a rhythmic breath into whole stroke swimming:

- **Follow your Shoulder.** As I spear my left arm forward, my right shoulder goes back. I follow that shoulder with my chin, as shown in the top photo. (You may find it helpful to look back over your shoulder as well.) As I do I try to keep my head low – note that my lower goggle is in the water and I stretch my mouth to the high side to facilitate this.

- **Stay Tall.** I focus on getting taller as I roll to breathe – because my left hand spearing forward helps initiate the breath – and on staying tall until I finish inhaling and begin to return my face to the water. The tipped-down fingers on my left hand are essential to keeping this hand in place as I breathe. Again, also note that my legs/feet are streamlined as I breathe. My left hand position aids balance, allowing me to relax and streamline my legs as I breathe.

- **Spear Again** This isn’t illustrated on this card, but it’s especially important to finish the breath by emphatically spearing your hand to its target without pause. Because you roll a bit farther to the side as you breathe, you can take advantage of that to put a bit more energy into the next stroke, by spearing strongly after each breath. And when you do, you’ll travel that much farther – if the lead hand is tipped down and anchored as you do.

Card 13: Stroke Details
This card and the next show the details of a relaxed, compact recovery and clean entry.

- **Relaxed Recovery** Photo 1 shows the exit/release point of a left-hand stroke. I concentrate on the following: (1) Moving my elbow and hand in a circular motion – like the crank on a bicycle – rather than on pushing down my thigh. (2) Leading recovery with my elbow. As soon as I release the water, I want my hand and forearm to relax, almost to the point of being limp to let my upper arm and shoulder do the work of recovery. This leads to:

- **Marionette Arm** Throughout recovery I want to feel as if my elbow is suspended by a string and that my hand and forearm hang easily from the elbow.

- **Stay on Track** I also aim to have my left arm follow its Track from exit to entry, rather than having it swing wide, outside the track. This helps keep my momentum traveling forward. If my hand swings wide, I’ll have to use my lead hand in some way to stay on track. The underwater photo shows me using the lead hand to keep my bodyline long and my course true during recovery.

Card 14: Stroke Details

- **Ear Hop** Photo #3 shows a compact recovery and a relaxed left hand. Your goal is to have your fingertips barely clear the water. Visualize a bar coming from your
ear and try to “hop” your hand over that bar, then dip it cleanly in the water for entry.

- **Mail Slot** Photo #4 shows the left hand as it enters the water, opposite the elbow of the right arm. Try to slip your hand/forearm into the water as cleanly as possible, with the fingers angled down and the forearm also steeply angled. Visualize a “mail slot” on the Track in front of your shoulder. Slip your hand *and* forearm into that slot. Another focal point that will aid this is to enter your hand *silently*. At slower speeds and while imprinting efficiency, try to have the lead hand waiting patiently – and relaxed – until the other hand is just entering.

- **On the Tracks** The drawing shows that both arms should be equidistant from your centerline as you enter. In this illustration, the left arm is waiting patiently, with a relaxed hand and fingers down, on its Track, while the right arm is just about to enter the water, at a steep angle, on its Track. Keeping your arms symmetrical will improve lateral stability.

Practice this sequence of drills and skills from the Freestyle Made Easy DVD and make your own swimming better than you ever thought possible. Happy Laps!