



The Down and Dirty Drill Card

Drill Description Sheet

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Pause Arms-Away

Purpose: To promote timing at the release, and an unrushed motion out of bow.

Execution: As the rower finishes the drive and the hands come into the body, the rower wants to push the hands away smoothly and gently, stopping once the elbows are straight. The body should remain with layback 10° towards the bow and the legs should be flat. The rower waits in this paused position until the command is given to row.

Pause Arms & Body Away

Purpose: To promote a smooth movement out of bow after the release where a proper flow and order of motions is maintained. It helps to remind the rowers that the order of arms first and setting the body angle come next before the knees begin to rise to any great degree. Helps to counter the urge to compress all motions into one movement creating poor position and timing at the catch.

Execution: As the rower finishes the drive and the hands come into the body, the rower wants to push the hands away smoothly and gently, leading the body over, and thus setting the forward body reach or body angle. The rower then stops and waits for the command to row. The hands should be at or past the knees at this point.

Pause @ 1/2 Slide

Purpose: Pausing at the 1/2 slide position acts as a gathering point for the rowers. The object being to for all the rowers doing the drill to move through the body positions and slide and arrive at the same points at the same time. It teaches control. Given its use as a gathering point, the movement to the catch can be controlled so that all rowers are in sync. Pausing at 1/2 slide is a relatively uncomfortable place to pause and therefore takes a sense of relaxation and ease of movement for the rowers to maintain proper boat balance.

Execution: After moving away from the finish/release, the hands should lead the arms out, body over and pull the rower up the slide gently after the hands pass over the knees. The rower will pause as they get to 1/2 slide until the command is given to row again. One the command to row is given special care should be made to keep the slide speed under control and hand movements controlled so that the rower arrives at full slide and the catch with their fellow oarsmen.

Pick Drill

Purpose: This drill, often used as a warm-up before the start of a workout session, is used to help establish the parts and order of the rowing stroke. Likewise it also helps establish a sense of timing and rhythm between rowers.

Execution: Rowers starts by doing a series of strokes, between 10 and 20, at a given position. Usually the pattern is as follows: arms only, arms and bodies away only, 1/2 slide rowing, full slide rowing. More experienced crews may additional add 1/4 and 3/4 slide rowing to the sequence as well. It is important that the rowers not merely go through the motions of the drill, but strive to perfect the motions so proper technique is established.

Pick Drill x 8

Purpose: This advanced version of the pick drill demands a high level of concentration, relaxation, and timing. This drill can be used to help establish rhythm and precise technique amongst an entire crew. The drill when performed correctly all often build confidence. It should be noted that if the crew in question is struggling and can not perform it with at least some level of set and clean rowing that it is best to abort usage of the drill.

Execution: Done as per the regular pick drill, it is now done with all rowers at once. To establish a solid base or to recover from shaky technique it can be helpful to drop our two rowers (in sweep, or one sculler) to hold keel while stability is reestablished.

Russian Drill

Purpose: This advanced drill teaches timing, rhythm and concentration. It is very similar to the pick drill.

Execution: The drill is simple in theory but hard to execute cleanly which is why it can be used to help crews relax, focus, and follow. The sequence is done without pauses from start to finish and goes like this (one stroke each):

Arms

Arms, arms and body

Arms, arms and body ,1/2 slide

Arms, arms and body ,1/2 slide, full slide

Arms, arms and body ,1/2 slide



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Arms, arms and body
Arms (drill ends)

Easy-All

Purpose: This drill promotes consistent finish and release timing, power through the finish, and overall balance.

Execution: The rowers (usually all) maintain a strong finish with level hands to the body. Next, the goal is to release the blade and move the hands cleanly away finishing with the arms straight out and the oar handle resting on the gunnels. The body should remain with layback, shoulders relaxed. If executed properly the oars should remain off the water with the boat on keel.

Easy-All w/ Row Out

Purpose: This advanced version of the Easy-All adds an emphasis on slide control and smooth recoveries.

Execution: The rowers (usually all) maintain a strong finish with level hands to the body. Next, the goal is to release the blade and move the hands cleanly away finishing with the arms straight out and the oar handle resting on the gunnels. The body should remain with layback, shoulders relaxed. If executed properly the oars should remain off the water with the boat on keel. After a moment in the easy-all position the coxswain gives the command to row and the rowers move forward while attempting to maintain perfect keel (boat balance) until they can stabilize the boat with the next catch and drive. Generally several solid strokes are taken before this is attempted again.

Alternate Feathered/ Square Blades

Purpose: Alternating between feathered and squared blades forces a rower to be very aware of where they carry their hands on each stroke. Consistent handle heights on the recovery have a great impact on boat keel and catch speed. This drill reminds the rowers to keep their handle heights consistent throughout the stroke. The rowers can also look at their blades during the drill to get a visual cue as to how their adjustments affect blade height off the water.

Execution: On the coxswain's command the rowers alternate one stroke on the square (blades perpendicular to the water) with one stroke on the feather (blades parallel to the water). This alternating pattern continues until the coxswain or coach halts the drill.

Square Blade Rowing

Purpose: This is one of the most basic drills in a coach's arsenal. Rowing on the square helps keep the rowing stroke in its most basic form. Being the square allows the rower to concentrate on blade placement at the catch, handle heights/blade height off the water, and clean releases without the worry of feathering at the right time. It is easier for the coxswain, coach, and rower to identify basic blade work problems. For novices the simple nature of rowing on the square allows the rower to focus on the important body motion sequences.

Execution: Simply put, the rower keeps the blade perpendicular to the water, or square, at all times. This drill can be done with any number of rowers at a time. Having all rowers in a boat row on the square at the same time is a challenging feat even for experienced rowers; doing so forces a crew to focus on moving together, timing, handle heights, and smoothness on both the recovery and drive. At the most advanced level a crew can do this drill while performing starts or short sprint pieces to force rowers to be clean at the release and catch. Do these last maneuvers with caution.

Half Slide Rowing

Purpose: Half slide rowing can serve two functions: 1) to help a rower learn proper slide position and control, or 2) quickness of blade entry and drive engagement. The first option allows a rower to learn just where they are on the slide during the recovery and give them a point at which to meet the timing of the other rowers in the boat. The second option is about learning quick placement of the blade and solid connection on the drive with the legs. The rower has to be in sync with their teammates to make the drive feel effortless and solid.

Execution: The recovery should be controlled and smooth. This is critical as the shortness of the slide motion often prompts the rowers to speed up the stroke rating on the recovery versus the drive and hands away. The rowers need to visually check their position on the slide with help from the coach to make sure they are not going past half slide. It needs to be emphasized that body prep be maintained. Once these factors are taken into account the lesson turns to a quick drop of the blade to the water with immediate leg drive with no lift of the body until the legs are engaged. The strokes will be short and quick, but should be done with as much ratio as possible. A true challenge! Do this drill with an combination of number of rowers.



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Stand-Up Sit-Down

Purpose: This drill tries to emphasize the connection between all body components, the oar and the water. Good drives come from an unbroken between the rower and the water.

Execution: Stand Up Sit Down is probably one of the hardest drills to explain to a crew. Usually done by pairs or by fours, what you ask a crew to do is start by sitting at the catch. Check for good body positions, and buried blades. The coxswain then gives the command to row. The object is for the rower to hang their full weight on the oar handle, drive the legs, and stand up in the boat. As the rower stands up they maintain the connection to the oar by continuing with the back and arms as they near full upright position. Done properly the rower will stand up and come to the finish, in a standing position, before gravity drops them back onto the seat deck. If the rower falls back before they are standing they are breaking the connection somewhere in the stroke.

Top ¼ Drill

Purpose: The Top ¼ Drill focuses on rhythm and power application. The object is to make connection of the oar to the water fluid, and make leg connection the first and foremost element of the drive.

Execution: Usually done by pairs or fours, the rowers start by sitting at the catch, blades buried. With the command of “row” the rowers press of the foot stretchers and use just the very top ¼ of their slide. They then release and repeat this action. Body reach is maintained, and arms remain straight. You are looking for the legs, and only the legs, to make things happen. On the coxswain’s command, the rowers then shift to using just the top ½ of their slide. No back, no arms are used. Then the rowers go to using the full slide length, still no back, not arms. Next body swing is added, and finally normal strokes are taken. Putting the pieces together should provide the feeling of using the legs throughout the stroke and keep connected to the foot boards as the back and arms are added as well.

Add-In Drill

Purpose: The object of the drill is give the rowers a sense of heaviness throughout the stroke, no matter how much boat speed there is. The rowers want to feel like they are always connected to the footboards and are moving the boat with strong power concentrated in the legs.

Execution: The first thing to note is that rowers with weak backs or poor core strength should be watched closely as they do this drill so that lower back injury is prevented. Start with the stern pair and have them take 20 strokes at 90% pressure, maintaining proper form and moving the boat efficiently. As the 20 strokes is ending the coxswain calls to add in an additional pair of rowers and another 20 strokes are taken. The emphasis for the original two rowers is the same, but now they must be quicker on the drive and be even more connected to feel the “heaviness” they are applying. All rowers are working to pick the boat up and move it with power. At the end of the second 20 strokes another pair is added in. This process continues until all in the crew are rowing and a final power 20 is taken. At the end of the sequence, all rowers are told to drop out except the second pair of rowers from the sequence, who then start the sequence all over. Most often this drill is done with square blades until the entire crew is rowing together on the last 20.

Slap Drill

Purpose: Used to improve catch timing and crew rhythm.

Execution: An unusual drill in the sense that it breaks from standard rowing technique to teach something important. The rowers row a normal stroke, then as they move through the recovery, the rowers physically slap the feathered blade against the water as they approach ¾ slide and then take the catch together. The slap acts as a very tangible timing point for everyone in the boat. They are all aware that after the slap the catch comes immediately next and they must be prepared for it. There should be no hesitation between the slap and taking the catch. No pause of any kind.

Release-to-Catch

Purpose: A classic drill. This drill is used mainly to work on timing and rhythm in the boat.

Execution: Note, if done with all members of the crew at once, the boat can be very unstable. Do not do so with novices. With the boat sitting still in the water, the rowers sit at the finish. The body should be relax, while sitting tall and the oars should be buried. On the command of “row” the rower should release cleanly and together, and proceed with the rowing stroke to the catch. The drill is now complete. The command “back to the release” is given and the rowers should return to the finish. Every motion the rowers make should be an exactly mirror image of each other from the release from the water to the placing of the blade at the catch. Coaches and coxswains should be strict with rowers. If the rowers start the drill by releasing at different times, the drill should be stopped and rowers reset. It is important that the coach and coxswain relay to the rowers where the error in technique and how they can correct it to allow for proper execution of the stroke. This drill is really about quality above all else.



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Release-to-Catch with Top ¼

Purpose: Almost the same as Release-to-Catch, this drill adds the element of engaging the legs at the top of the stroke. By adding the legs the rowers can feel how they are taking the catch and starting the drive. It becomes even more obvious if someone is out of sync with the rest of the boat. The drill helps give that feeling of starting the drive together.

Execution: Done in the same manner as above. However, once the blade is placed at the catch the rowers engage the legs and use the top ¼ of their slide and then release the blade from the water. There should be good press of the legs and no back lift.

Cut-the Cake

Purpose: Another timing and rhythm drill, this one emphasizes arms motion and synchronization on from the release away from the body.

Execution: Can be done with any number of rowers. The rowers take a full, normal stroke. At the finish, the rowers release the blade from the water, feather, and move the hands away while holding the shoulders in the bow. Once the elbows are straight, the arms are then brought back to the body where they touch the body and move away again. The hands then lead out and the rower takes another full stroke before repeating the "cut." It is important that the rowers do all motions in unison. The hands away motion at the release is one of the most important timing points in the rowing stroke, and this drill really works that idea.

Feet Out

Purpose: This drill focuses attention on the need to stay connected to the footboards as the rowers finish the stroke. Pressure from the legs should be maintained up until the rower releases from the water. Proper timing of the legs/body/arms overlap help maintain the needed connection between body and water.

Execution: The rowers either take their feet out of the shoes or simply untie them so they are very loose. The rowers then row normally. Some shortening of layback may occur. If the proper pressure is maintained on the oar handle. . . legs provide pressure through the entire stroke sequence, the back engages and maintains momentum, and the arms begin and finish as the back ends, the rower should be able to keep their feet against the tops of the shoes. The finish with the arms must be solid. If the rower flies away from the shoes a great deal, then connection is being lost somewhere in the stroke.

Wide Grip

Purpose: Wide grip rowing helps to emphasize the role of the outside arm and also helps to establish proper shoulder rotation as one approaches the catch. Used with sweep rowers, the drill establishes the slope and rotation of the shoulders as the rower comes through the top quarter of the slide and into the catch. The shoulders want to closely parallel the angles created by the shaft of the oar. The outside shoulder should be somewhat higher than the inside shoulder, which itself should be relaxed.

Execution: Done on the square (no feathering), the rower keeps their outside hand on the end of the handle, but moves their feathering hand until it is sitting on the carbon fiber of the shaft. How wide a grip is up to the coach, but usually the inside/feathering arm elbow remains straight for most of the stroke. To resist the temptation to grip or feather with the inside hand, it works to make a loose fist and rest in on the oar shaft instead of gripping the shaft. Rowers should be reminded to maintain proper body movements, keep their chins level, and follow the guide that the oar itself creates as they move around the arc of the stroke.

Outside Hand Only

Purpose: Similar in to rowing wide grip, Outside Hand Only puts the focus on proper motions by the outside arm. The outside arm leads the motions out of the bow and is also very much part of the catch action at the top of the slide. Proper outside hand control helps set up the body motions out of the bow after the release and helps ensure proper handle/blade height so a quick and clean catch can be had. Ultimately the outside hand follows the arc created by the handle and helps position the shoulder rotation at the catch.

Execution: Keeping the blade on the square, the rower places their feathering/inside arm either behind their back or as a fist resting gently on the shaft of the oar. The rower then rows a normal stroke while keeping a close watch on their technique. Coxswains and coaches should watch rowers carefully to make sure that the outside hand leads first all movements away from the bow and then out past the knees as the stroke advances. Proper handle heights should be maintained on each stroke and easy release of pressure of the handle should allow the blade to drop to the catch just as the rower reaches full slide.



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Juggling

Purpose: This drill is used to differentiate the roles between the insides and outside hands during the stroke. This is an especially important differentiation that can be made with more experienced novices or intermediate rowers.

Execution: During the drill there will be only one hand on the oar at a time. On the drive, the outside hand brings the oar from catch to finish while the inside hand hovers above the handle. Just as the oar is released from the water, the inside hand grabs the oar handle, and feathers the blade while moving it away from the body, the outside hand is removed from the oar and hovers over the handle. The rower advances through the recovery motions, feathering the blade square, and letting pressure come off the handle so the blade can move towards the water. As the blade strikes the water, the outside hand takes hold of the oar and the rower proceeds through the drive.

Eyes Closed

Purpose: This advanced drill is all about boat feel and rhythm. The rowers must work together to feel the motions in the boat as they move through the stroke sequence. Taking away sight allows the rowers to feel the speed and smoothness of the recovery, the catch timing, the application of power and the sense of relaxation at the release as the boat runs out to its max speed. It allows each rower to feel the impact that their motions are having on the flow of the whole boat. This is an advanced drill.

Execution: On the coxswains or coach's command the rowers are told to shut their eyes. Usually done starting at the catch. Depending on the skill of the rowers, the drill can be done continuously or can be broken down into segments, such as 20 strokes eyes closed and 20 open, or the like. Anytime the technique deteriorates or the rhythm of the boat falters greatly it is best to have the crew open their eyes until proper motions are re-established. The drill can then be restarted. It is all about quality. It serves no purpose to row badly with your eyes closed and have that feeling be what is learned.

Release and Hold

Purpose: A drill for more experienced rowers, this drill works on a rower's ability to release cleanly and be patient with their motions afterwards. The rowers essentially pause right after the release, hence the reason this may not be the best drill for use with novices. Novices do not want to learn to pause anywhere in the stroke, but to keep the cycle continuous and flowing.

Execution: The rowers take a full stroke, and pause just after the release of the blade from the water. They should be sitting tall with layback, blades square and clear of the water, and handles against the body. When the coxswains gives the command to row, the rowers should feather the blade and move away with the hands before allowing the body to move out of the bow. Coaches should watch to make sure the rowers are bringing the handle all the way to the body before they release from the water.

Circular Rowing

Purpose: To teach rowers to hook and lock into the catch with the blade. Also good for getting a crew to move together and trust in their technique as a boat.

Execution: The rowers row with a very exaggerate handle motion. The hands form something of an oval as the hands dip down to the gunnels mid way through the recovery and then rise smoothly right into the catch. It should be emphasized that the circular motion is create with the hands along and that other body motions should maintain the established proper technique style practiced by the crew.