# **Show Skiing Rider Guide** ©

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# I. PURPOSE OF THIS GUIDE

This guide is to help familiarize you with a broad overview of the duties and techniques utilized in the boat riding/pin pulling position. THIS IS NOT TO BE USED AS A DEFINITIVE REFERENCE MATERIAL. There is no way that any guide can cover all of the possible situations that you will encounter while riding/pin pulling! You will have to use a combination of this guide, your personal experience, and your gut feeling to make the best decisions regarding the safety of the skiers that you are riding for. It is expected that this guide be used in conjunction with a classroom lesson to allow the use of demonstrations and the ability to ask questions as you go through this guide. It is also to your benefit to read and be familiar with the most current NSSA Show Rules and Safety Handbook.

# II. DUTIES OF THE RIDER/PIN PULLER

## **ENSURE SAFETY OF THE SKIER**

This **IS** one of the definitive parts of this guide. Your main job as rider/pin puller is to ensure that the person or persons skiing behind your boat are safe! This means paying your undivided attention to those behind your boat, having the release rope in your hand at the appropriate times, keeping eye contact with the skiers, and having a good knowledge of your duties. (Be aware of the skier's abilities) **THEIR LIVES ARE IN YOUR HANDS!** Treat the job with the respect and importance that it demands!

#### BUILDING THE CONFIDENCE OF THE SKIERS

One of the most important aspects of riding/pin pulling is building the confidence of the skiers who are skiing behind you. The skiers know better than anybody the dangers they face while performing the maneuvers that they do in the course of a show ski performance, and therefore, need to feel confident that the person in the boat is qualified to be doing that job.

Building confidence takes time. There is no short cut to making it happen. Some of the things that you need to do to facilitate this process are to take it seriously, understand the importance of your job, pay close attention to the skier, (keep your eyes on them at all times and give them your undivided attention) don't be overconfident or cocky, and willingly accept criticism! A good habit to get into is to take the initiative to ask the skiers how you did. Ask them if there is anything you can do to make them more comfortable on the water. Ask them if the pin pulls were too early or too late. If they have a problem, ask them how to remedy it. Remember everybody is different. You can

not take the opinions of one or two people and apply them to everyone. You didn't think this was going to be easy did you? This will all come with experience.

There will be times when a skier will ask that someone else ride for them. **DO NOT TAKE IT PERSONALLY!** It has happened to all of us. Remember how much the skier has at stake. The skier has to be comfortable that he or she is safe to perform to the level that we expect. If this happens, ask the new rider if he or she minds having you ride along so that you can watch and learn. Not all riders like having someone sitting close to them, so again, respect their wishes and don't take it personally.

Lastly, **BE HONEST IN YOUR ABILITIES!** If you are not familiar with the act going on the water or are not comfortable with pulling pin for it, there is no shame in you asking for help! The skier will respect you for the decision.

## COMMUNICATE THE SKIERS WISHES TO THE DRIVER

Communication between the driver and the skier is very important. However the driver is not in an optimal position to do this by his or herself. That is where the rider comes in. You are the liaison between the skier and the driver. You must know the signals and be able to relay them to the driver.

Thumb up or down indicates speed up or down respectively. During a show, the skier may shake his/her head back and forth, meaning slower, up and down meaning faster. Tapping the top of the head means that the skier is ready to head back to the landing area. Finger in the air in a circular motion signals turn around. A hand motioned across the throat says stop immediately.

Jumpers have some unique signals and a reinterpretation of one of the fore mentioned. Finger in the air in a circular motion states that a jumper will be performing a helicopter. Tapping the front of their helmet signals a front flip, as tapping the back means a gainer. Two thumbs pointed together or apart indicates the boat needs to be closer, or farther away from the jump as it passes respectively. Learn these signals and be able to quickly relay them to the driver.

# BE PREPARED TO ENTER THE WATER IN AN EMERGENCY

No matter how many precautions that we take to minimize the risk involved in this sport, bad things still happen. When it does it is imperative that we do everything in our power to prevent the situation from escalating. As a towboat rider, more often than not, you are the first responder if someone is injured. This means that you have to be ready to jump in the water to assist the injured skier should he or she need it. Remember to stay calm. If you appear anxious or excited this will make the injured skier anxious or excited. Remain calm and collected.

All riders should be expected to take the NSSA Safety Coordinator Course. This is an excellent course that covers how to safely immobilize and transport injured skiers. There are a number of qualified instructors who can schedule a clinic with you to get all of your riders trained in this very worthwhile skill.

Each day you get into your towboat you should make sure that there is a life vest that is properly fitted and ready for your use if the need arises. It is also a good idea to

place your valuables somewhere safe that they won't get wet if you must go in the water in a hurry. TAKE THE SAFETY COURSE!

## **HANDLING ROPES**

Another important job that the rider is responsible for is handling ropes. This can include pulling in ropes, handing ropes off, hooking and unhooking the leaders on outboards, making quick pick-ups, keeping the ropes from snagging on the boat, rolling ropes, etc. Your driver will let you know when he or she wants the ropes handled and when not to.

Pulling ropes in is the most common job. This can be a rather physical job so be prepared. You may want to use a pair of ski gloves to help you get a good grip on the ropes and to prevent blisters. As a rule, when you are handling ropes you should always leave it hooked to the boat until the ropes are pulled all the way in, or you are about to perform a handoff. This will prevent them from slipping from your grip and getting lost or run over by another boat. When pulling in ropes after an act has finished, quickly pull all the ropes at the same time neatly circling them in the back of the boat. When the handles get to the boat take care to not beat the sides of the boat with them.) Place the handles neatly on top of the pile of ropes then unhook them from the boat. When offloading the ropes simply hand the handles to the dock person and the ropes should come out of the boat without knots. As the ropes are pulled out of the boat you need to protect the interior and exterior of the boat from rope burn by holding the rope away from the boat letting it slide loosely through your hands.

Another reason for pulling in ropes is if one or more skiers in a group falls and the loose ropes are hampering or endangering the other skiers. There is a few ways to do this but the main determiner is if the ropes are on release or not.

If they are **not** on release, you can simply pull the ropes that are dragging quickly into the boat. Keep the handle near you, as you will need to toss it back in the water as soon as the other skiers let go. Be sure not to have the loops of rope near your feet, as you do not want to follow the rope into the water or get a nasty rope burn. This is done to make it easier to hand the ropes back to the dock person without knots. If the boat is traveling too fast to pull the ropes all the way in, you can pull the ropes in part way so that the handles are not near the skiers. Be aware that the handle bouncing creates a great deal of spray that gets into the skiers face so pull it far enough to eliminate that. When you have it pulled in far enough, wrap the rope around the tow bar several times and hold the loose end. When the rest of the skiers let go, again unwrap the rope and let it out.

When dropping ropes off at a dock simply hand the rope ends or twinks to the dock person. Make sure that the ropes do not snag on something in or on the boat. Whatever you do, do not throw the ropes at the dock person. This makes it very difficult for the dock person to do their job and often results in ropes floating in the water where they may get lost or wrapped up in a boat propeller. If the ropes are in the boat simply hand the handles to the dock person.

A task that is unique to the outboards is hooking and unhooking the leaders. The leader is a very large piece of rope hooked to the back of the outboards. This is used whenever large numbers of skiers are being pulled.

When hooking up the leader remove the loose end from the tow bar. Using a metal clevis, attach all the ropes to the leader. As the boat pulls away from the dock carefully guide the clevis and leader out the back of the boat being careful not to scratch the boat or motors with the heavy metal clevis. Make sure the leader is not hooked on anything in the boat or going over the top of the rope guard. Quickly sit down and brace for the pull.

When unhooking the leaders use the small rope attached to it to carefully pull it back into the boat. Undo the clevis, hand off the ropes or pull them in and re-hook the leader to the tow bar. Occasionally the leader can get caught in the propellers of the boat as you are pulling it in. If this happens the driver will tilt the motors in the air and you will have to climb into the splash well of the boat to get them unwrapped. The splash well is often full of water so be prepared to get your feet wet.

Doing quick pick-ups is another area you will be needed to help out in. Make sure to ask your driver how much help he wants in hooking ropes up to the boat. Some drivers prefer to do some of it themselves and some want their rider to do all of it. Pick-ups can be as simple as handing off old ropes at the dock with your right hand and grabbing the new ones with you left and hooking them to the tow bar as the boat goes slowly past the dock or as difficult as grabbing a short rope and hooking it to a carabineer as the boat passes the dock at 30 m.p.h. There are countless ways to do quick pick-ups so rely on your driver to let you know which one to use in which situation.

Ropes snagging on the boat is another problem that you have to be alert for. This usually happens when ropes are being fed out for a dock start but can happen at any time. This is more frequent in the outboards but can also occur in the inboards. If you see this occur get up and fix the snag. If you cannot do it safely before the ropes come tight yell for the driver to stop and then fix the snag.

Lastly, learn how to properly wind a rope and tie it off. Not only should every member know how to do this but also if you have some time in between pulls you can really impress the skiers if you wind the ropes properly before you bring them back to shore.

## **PICKING UP SKIS**

Due to the large number of skiers on the water towboats are often asked to act as pick-up boats and collect skis. When this happens have your driver tell you which side of the boat he or she wants you to pick up skis from. Sometimes due to the handling characteristics of the boat you may have to go from side to side at the discretion of the driver. Brace yourself against the side of the boat and firmly grab the ski as it goes by. Be ready for a considerable amount of drag from the water against the ski. Due to the speed of the show there is not time for more than one try at each ski so make sure you grab it firmly.

After you have lifted the ski out of the water **carefully** place it in the boat. Throwing skis into the boat can cause a great deal of damage to the gel-coat and interior.

These are both very expensive repairs that the club is responsible for. Please be careful! This should be obvious but needs to be said.

Also, be careful not to lean so far out of the boat that you fall out. If the driver does not get close enough you will have to let it go and try again. Yes people have fallen out of the boat, so be careful!!

#### HELP COMMUNICATE BETWEEN SHORE AND OTHER BOATS

You may be called on to help the driver handle the radio in the boat. No not the stereo, the handheld radio. There will be times when the driver needs to use the radio but is too busy to do it himself. He or she will tell you what needs to be said and you will need to make the transmission. To do this simply hold the radio approximately 1 foot from your mouth, press the large button on the left side of the radio and talk calmly and clearly into the radio at a normal conversational level. It is not necessary to chew on the radio and yell into it to be heard.

It is also a good idea to get use to listening to all the transmissions. Not only will this let you know what is going on but occasionally the driver will be concentrating on driving and not hear the call and you can relay the message to him or her. Remember that the radios are very important safety tools so please keep the non-essential conversation to a minimum! Inane chatter may be keeping an important call from being heard.

#### **BOAT ASSISTANT**

The more that you ride the more you will notice all the ways that you can make the drivers and skiers jobs easier. When the boat is sitting at the end of the dock, help the driver to hold it in place so that it doesn't bang against the dock. Assist the skiers getting ready in the boat. This could include zipping up their dry suits, helping them get into their skis, floating a ski they lost to them, etc. Help the driver load and unload the boat prior to and after skiing. If you cannot back a trailer or load a boat, you can hold the boat on the dock while the driver backs the vehicle in. It is also expected that you help wipe down the boat after skiing. It is the driver's responsibility to provide the necessary materials to do this. For full time riders you should also expect to assist the driver in keeping the boat clean and help ready it for tournaments.

## III. PULLING PIN

## **OPERATING THE SAFETY RELEASE**

One of your most critical tasks as a rider is to operate the safety release. The safety release is the device in the boat, which allows the skier to be disconnected or

released from the boat in the case of an unsafe situation. It consists of a short curved piece of steel rod (the pin) held in place by a lever with a section of rope with a handle attached to it. It is commonly called a safety release, release, or pin. They all mean the same thing and are interchangeable. To open the release simply pull back on the lever and the pin will release. To close the release just push the pin back into the lever and it should snap back into place. If you can not push hard enough on the pin to get it to rehook, then you can pull back on the lever with your free hand, push the pin back, and release the lever.

Release handles are color coded red, yellow, and green to collate with the twinks used by skiers to combine ropes. The color-coding matches the bow lights, **green** on the **right**, **red** on the **left** and yellow in the middle. For Ballet or other acts requiring more than three pins, you will see red/yellow or green/yellow to indicate the side of the middle pin the twink belongs on. It is VERY IMPORTANT not to twist these twinks when hooking them up. Skiers or dock dudes will hand them to you in the order to be hooked, please avoid twisting or crossing them. This can be very dangerous.

When putting ropes into the release get in the habit of giving the ropes a couple swift strong tugs to make sure that the ropes are in the release and the release is set correctly. Make sure not to over load the release. If there are too many ropes for the release to close properly, use twinks to reduce the rope count.

After hooking the ropes grab the handle of the release. As a release person you are allowed to operate no more than two releases at a time, **one for each hand**. If you are new to pulling pin it is a good idea to operate only one release at a time until you become more proficient. Operate releases on the left side of the boat with you left hand and releases on the right side with your right hand. In the inboards it doesn't matter where you sit in the observer seat due to the unique way the release rope is routed around the towbar. This allows the release to work no matter what angle you pull the rope in.

In the outboards it is important that you stay as close to right behind the release as you can. Sitting in the observer seat is fully acceptable, however if there are additional pin people they need to locate them selves as close to the centerline of the release as they can and still see the skiers clearly, and not get into the way of the driver or other release people.

Hold the release rope firmly in your hand and leave a good amount of slack in the rope. This accomplishes two things. First the slack in the rope will make it less likely that you will accidentally pull the pin when going over a wave or the boat moves suddenly. Secondly, having a little slack in the rope, allows your arm to get moving before the rope comes tight giving you more power to release the pin.

There may be times when you need to operate the release by holding the lever itself. You may have to do this if the release rope is too long for you to pull it tight or if you have to reposition to see the skiers better and can't position yourself behind the release. Put as many fingers on the lever below the pin as you can to get a good grip. When operating the pin in this way be careful not to put your other hand on top of the release. The pin releases and swings up to the top of the release with great force! Ouch!

When it comes time to pull the pin, pull very firm and very fast. There can be a great deal of pressure on a pin, especially if there are many skiers on the release. Be aware that if you pull a pin late and the skier is dragging in the water the pressure on the pin can be **EXTREME!** Do not let it get to this point!

As the skiers complete their acts and you can confirm that they no longer need to be on pin, it is a good idea to drop the release handle so that you don't accidentally release the skiers. This happens most often after their last pass as they are skiing in. If the skiers are using harnesses you must make sure they have disconnected themselves before you drop the handle!

Remember, as you operate the release it is very important that you give the skier your undivided attention. Do no take you eyes of them at any time, and block out any outside distractions. Feel free to remind other people in the boat that you are not in a position to be distracted.

## WHICH ACTS GET PUT ON RELEASE?

The basic rule of when to put someone on release and when not to is as follows: If the skier is not holding the rope in their hands, is ever between the handle and the boat, is going over or under the rope, has the rope wrapped around themselves, or is skiing backward in close proximity to immovable objects, they must be on release. There are only two exceptions to the above rule.

The first is 360 around the boat. In this act the skiers do in fact cross under the rope however, there is much more danger involved in releasing the skiers than there is getting caught by the rope. Also, as the ropes go around the boat they will wrap around the release rendering it useless.

The second exception is barefoot tricks. There are times when the barefoot skier doing a trick run will put their foot in a toe hold or bite on a tooth hold and therefore not be holding the rope. The holds that the barefooter uses are designed to not grab the skier in the case of a fall. It is also believed, that due to the great speeds at which barefoot falls occur, that no pin person can react fast enough anyway. If you or the skier feels safer with it on release then there is no reason not to. It can't hurt, but it is not required. However, as of 2015 there is a new rule that states that in order to use one of these specialized handles without the use of a release you must meet with the Chief Judge with the handle prior to competition to have the handle inspected. Failure to do so could result in a safety deduction for not having the act on release.

Some of the acts that **need** to be on release are as follows: back barefoot circle, ballet line, jump, swivel, strap doubles, trick ski, sky ski, shoe ski, and strap trios. Some of the acts that **do not** need to be on release are as follows: barefoot pyramids, pyramids, 360, barefoot line, barefoot tricks, front barefoot circle, barefoot starts, and conventional doubles. One notable act that has a little bit of both is the one act show.

# BACK BAREFOOT CIRCLE/WHIRLPOOL

Back barefoot circle/whirlpool is a unique act in that the barefooter is traveling at a high rate of speed in close proximity to several docks. This is especially true when doing a quick pick-up of a skier from the main starting dock. Because of this we need to put this act on release.

As a rider your job is to be the eyes of the skier going backwards. It is up to you to watch and determine if the skier is in danger of hitting an obstacle. You have to make this decision as soon as possible due to the fact that the skier is traveling at a great deal of

speed and will skip across the water before slowing down. Be aware that as soon as you release the rope the skier no longer has any control. Only pull release if you are sure that there is a reasonable chance of an accident. It is a good idea that you ride along several times to get a feel of how the skiers perform the act before you actually take over the release.

#### **BALLET LINE**

Ballet line is a difficult act to pull pin for, due to the large number of skiers to watch, and the fact that multiple releases are used. The first thing to do as the ropes are feeding out of the boat is to determine which girls are on your releases. Often there will be more than one pin person so communicate with each other where the break point is, between the two halves. Then you will have to determine where the break point is in your half of the line.

When you are pulling pin for a large group of people you need to focus on the group, not specific individuals. Keep the entire group you are pulling pin for in your view at all times. What you are looking for is sudden movement in your group during periods that require the release. You have to very, very quickly determine if it is just a bobble or an actual fall. If it is a fall, pull the release. If you can **clearly** see the **handle** of the rope pop out, do not release the group.

The times at which you really need to pay attention are; when the girls are putting the rope between their legs, or putting their heels in the handle, while they are performing these maneuvers, and when removing the ropes from these positions.

Be aware that occasionally ropes will get crossed during the "twinking process" on the dock. If this occurs all ropes involved must be released if a pin is required. Also be aware that ropes from fallen skiers, which travel all the way to the inside of the circle, pose a danger to the ballet line in the event that the pin is applied. At this point, all ropes on the inside of the downed rope must be released if a pin needs to be applied. It is also very important to keep an eye on any skiers who falls and has to swim to the center of the circle. This is an extremely dangerous spot as the ballet rope that is now in the center dragging can catch an unaware skier. Should this be the case, all ropes must be released immediately.

#### **JUMP**

Pulling pin for jump may be one of the most difficult release jobs. You are dealing with a combination of speed, numbers, and variety of jumps. The number one thing to remember as you pull pin for jump is to not pull pin until the person who is in trouble is just about to hit the water. It is very possible to make the situation worse if the pin is pulled too early. Jumpers are very dependent on the rope to keep control. When you release the rope they no longer have any ability to right themselves before impact. Even if someone is wrapped in the rope they can still minimize their impact in the air. Don't take that control away from them. Without the rope they are unguided scud missiles. Also, there is often more than one jumper on the same release. Waiting for the last minute to pull pin for the affected person also gives those other jumpers a chance to

finish their jump or at least some of it lessening the chances that they get hurt by being released.

Now that you know how to pull the pin, when do you pull the pin? Well, that depends on what jump is being performed. One thing that is universal for all jumps is going out the front. This is where the skier lands and very quickly gets snapped forward. There is good chance of the skiers arm going through the handle and getting dragged so we need to pull pin. This happens very fast so be ready. This is most prevalent with front flips as skier is already rolling forward in the air and sometimes over rotates and goes out the front. Again, if you see the handle free and clear of the skier, there is no need to pull the release.

When pulling pin for helicopters the thing you need to watch for is if the skier doesn't finish the helicopter. This can cause the rope to still be wrapped around his body. You can not let a skier hit the water with the rope still wrapped around him. If the skier does not finish the full helicopter and the handle is between the boat and the skier you do not have to pull pin. Not finishing the helicopter happens most often with new jumpers and with multiple helis where the skiers ski tips hit stopping them from rotating.

For front flips other than the jumper over rotating and going out the front the most common thing to look for is the skier flipping into his or someone else's rope. If this happens then the rope will be wrapped between their legs and needs to be released just prior to hitting the water. Also watch for the skier to severely under rotate. This is where they don't complete their full flip and the rope may be underneath the skier.

For gainers (back flips) the biggest things to watch for are back flipping into their own rope or under rotating and catching the tips of their skis on the water.

In general, the easiest way to pull pin for jump is to watch the ropes and handles. If you can account for all of the rope and handles you shouldn't need to pull pin. It is when you can no longer tell where all the ropes and handles are that you have to very quickly decide if you need to pull pin.

Remember, that pulling the pin can do as much damage as the fall itself. You must be very judicious in your use of the release during jump. This is but a small sample of what can happen during jump. It is almost impossible to list all the things that can happen. Experience is the only way to become proficient at pulling pin for jump. Do not be ashamed to ask for help during this or any act.

## **SWIVEL**

The biggest misconception about pulling pin for swivel is that you only have to pull it when the skier has it in toe hold. This is flat wrong. Swivel skiers fall under the same rules as the other disciplines. You must man the release any time the skier is between the handle and the boat and any time that the skier is spinning under or around the rope. This includes but is not limited to overheads, presses, wraps, etc.

On overheads there is the potential for the rope to wrap around the girls hands or arms as she spins under the rope. This is more common when doing multiples. In presses there is the potential that as the girl leans away from the boat against the rope that the ski can slip toward the boat. This will cause the girl to fall toward the handle and it can loop over her arms. Just like any other release act if the skier falls and you can not see all of the rope and the handle pull the pin.

Obviously you must also pull pin any time the skier has their foot in the toe hold or their leg in heel hold. One thing to be aware of involving swivel toe hold handles is that they are called bear traps. This is because the harder they are pulled on the tighter they get. Do not expect a swivel toe hold to let go itself or just pop off.

## STRAP DOUBLES/STRAP TRIOS

Strap doubles and strap trios add another twist to the pin pulling puzzle. The twist is that the skiers do not hold the rope themselves. They attach the rope to a harness that they wear around their waist. This means, that **at all times** you have to be paying close attention to the skiers. From the start off the dock, throughout the whole show course, and around the corners the skiers have to be watched as they can fall at anytime, and need to be released. Resist all temptation to take your eyes off of the skier while they are connected. Falls can happen anywhere...even in the corner! You can not let your guard down until you can see that all of the skiers have disconnected themselves and are holding the ropes in preparation for landing.

The most important person to watch is the guy hooked to the rope. The only time that you would pull pin for the girl is if she falls directly forward on to the rope. Use caution to not pin the rope too early. As the guy's skills improve, he will make every effort to clear the girl from the rope himself, if you pin too early, he looses all of his skiing control, and it becomes an out of control crash. If she falls to the side or backwards do not pull pin if the guy is still skiing. He is expected to release himself and stay with her. If the guy does not release himself then by all means pin him. (In doubles, the girl *typically* does not wear floatation, as it becomes another obstacle when trying to perform a routine.) The hazard for the girl is, during a fall, its common to get the wind knock out of her, or to hit her head on skis on the way in to the water. For these reasons it is very important for her partner to be with her in the water. Guys are routinely reminded to release themselves and to stay with their partner, but sometimes they forget in the heat of the moment.

Focus on the guy or guys when pulling pin for this act. Obviously, if he falls, pull the pin. Be aware of the abilities of your skiers. Veteran skiers with high levels of skill may be able to pull out of some very difficult situations so give them the benefit of the doubt when pulling pin. However, if the guy is in the water there is no saving it and must be pulled. Do not wait until they are in the water to pull the pin. It must be pulled before they go under. You can not imagine how much pressure is put on the skier when they are dragged under water by their waist. There is a serious potential for significant injury any time a skier is dragged under water. As of 2015, there is a new starndard for when a safety deduction will be given for the above acts. Any time the skier is down far enough for any part of the rope to touch the water they must be released. Failure to do so will result in a safety deduction.

# TRICK SKI, SHOE SKI, AND SKY SKI

This will be the shortest chapter in this guide. Trick and shoe ski follows the rules of swivel and sky ski follows jump protocol. Look for the same things as stated in the respective chapters.

## IV. IN CLOSING

## BE KNOWLEDGEABLE AND BE ALERT

There is no guide that can spell out every situation you will encounter out on the water. All you can do is be knowledgeable about the basics and be alert to what is happening to the skiers. After that it is up to you to ask questions and put in the time to gain experience. Watch and learn from veteran boat riders, skiers and drivers. Just remember that no matter how long you do this for, you will never see it all! Be humble and strive for excellence, the skiers will appreciate you for it and you will be a better rider because of it.

#### THANK YOUS

This riders guide is something that I have wanted to do for quite some time and frankly, have felt that was necessary for even longer. I never imagined that it would be so difficult. Those things that come second nature in a split second while in the boat become very difficult to conjure up when you are sitting at the computer in the middle of the winter. Fortunately, I am on a club whose members are some of the most knowledgeable people in water skiing. After a rough first draft, I asked some of them to read through it and make necessary changes. This final draft is the result of their input and I am grateful for the help. Those that helped with this are Gerry and Cathy Luiting, J.R. Wilson, Dave Rezin, Matt Klay, Jim and Nicole Kumlien, Rich Vermillion, and Joel Shapiro. Thank you very much for your time and effort in making this guide happen.

## A QUICK NOTE ABOUT THIS GUIDE

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