



United States Professional Diving Coaches Association, Inc.

TOWER DIVING

By Richard J. Kimball
Diving Coach University of Michigan
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Tower diving is one of the most breath-taking and exciting sports in the world. It is a sport that takes real coordination, balance, timing, flexibility and strength, as well as courage, determination and desire. It does not make any difference how many times you dive tower, it takes gumption just to do a swan dive off a platform thirty-three feet high. After all, a diver's body is traveling at about thirty miles an hour when it strikes the water.

A person should be a fairly proficient springboard diver before attempting tower. You don't necessarily have to be a great springboard diver to succeed on tower, but you must be strong on springboard. By strong I mean the diver must be able to hold his body firm with his arms and hands pressed tightly together overhead on the entry so he doesn't collapse underwater. A diver who does not keep his body tight on the entry can receive shoulder or neck injuries quite easily. The best way to keep from collapsing underwater is to tighten all the muscles in the body, stretch the arms overhead, hold the hands together and squeeze the arms to the ears by locking the elbows tightly.

Strength is a necessary pre-requisite for learning tower, but courage, determination and desire are equally as important. Divers usually do not learn tower without being encouraged to do so by a coach or someone with knowledge of tower diving.

Almost everyone is afraid of tower diving when they first begin learning because of the height and because of their fear of landing wrong. Generally a person can land flat on the back or the stomach and get only minor bruises. The fear divers have for tower at first is probably good because it teaches them to have respect for the platform.

There are a great many similarities and differences between springboard and tower diving. The beginning springboard diver has to spend a lot of time working on board work while a beginning tower diver would be wise to learn the fundamental stunts of tumbling. Tumbling develops coordination, balance, timing, flexibility, and strength. The coordination developed in tumbling will aid the tower diver greatly. You also acquire body control, courage and confidence by attempting tumbling stunts. Tumbling is a tremendous asset to a tower diver, because all the forward and backward approaches are done with a tumbling take-off. There is no spring in a tower, so you have to depend upon your own leg power to get you off.

The diver should approach the end of the tower with more speed than he would use on a springboard approach. The high hurdle used in springboard diving has no place in tower diving. If you use a short, high hurdle on tower, your knees will buckle because of the solid material underneath you. To keep your knees from buckling, you must take a long low hurdle like that used in tumbling.

The arm movement used in the tower hurdle is also very different. The arms swing up overhead during the hurdle and remain there as you land on the end of the tower and until they

are moved downward to start the dive. This arm action is the type used by tumblers when executing front somersaults on the mats. This is unlike the springboard arm action where the arms are swung down as you land on the end of the board.

The lack of spring on the take-offs presents quite a problem for some beginners, especially if they have not done any tumbling before. The inward take-off is tricky for beginners because they can't imagine how they are ever going to get spinning without the use of a spring. The inward take-off is done without the normal springboard arm swing. Instead you just draw the arms up overhead and throw them down, with elbows locked tightly, immediately following the jump with the legs.

In the back take-off on tower, you use an arm swing similar to the one used on springboard, but the arms do not play the same role as they do on springboard. You use the armswing on springboard to start the board moving, and then again when you extend off the board, the arms lift to get you up in the air. On tower, the arms go through the same motions as the springboard except there is no emphasis on the downswing; instead the emphasis is on the upswing to pull you off the tower.

The knees are not bent very much on tower take-offs, because the legs would buckle. On springboard, the knees are bent quite deeply on some dives. To keep the legs from collapsing on the take-off, you should bend the knees only slightly, and then extend them straight rapidly the way a tumbler would when attempting a back somersault on the mats.

The take-off for a standing forward or reverse type dive is done exactly like the back take-off.

Another type approach used on tower is the running reverse approach. There are two ways to do the running-reverse approach. The method used by most divers is the one where you walk to the end of the tower, take a skip step just before reaching the edge of the tower, and place one foot on the end of the tower, then kick up the other leg to get the dive started, and to take you away from the tower. The other method is really only different in the way you approach the edge of the tower. Instead of taking the skip step, you merely walk to the end of the tower, so your last step ends up with the foot at the edge of the tower. The amount of force that the leg is kicked up with on either approach depends upon the dive you are doing.

All of the tower approaches and take-offs can be practiced on the side of the pool or on a low tower, one or three meter. Once you have developed some skill and have gained experience by practicing on the low tower, then you are ready to begin learning the dives off a higher tower. An excellent learning level, and a good stepping-stone for learning ten-meter, is the 7.5-meter tower. The 7.5-meter tower is high enough to learn all the ten-meter dives, and it doesn't scare the beginner as much. It is a tremendous jump from a three or five meter tower to a ten-meter tower. If you can dive off 7.5-meter to help build your confidence before attempting ten meters, it will aid you greatly.

Tower diving is really quite easy to learn after you develop a tumbling take-off and providing you are a fairly proficient springboard diver and know how to stretch tightly on your entries. The psychological aspect is what discourages most divers from trying tower. The saying about how the ten-meter tower is thirty-three feet up and one hundred feet down has real meaning for the beginner. You have to want to learn tower and be willing to take a few bad slaps on the water to succeed. Make up your mind to go off the tower right away, without standing for "hours" between dives. You can't learn anything until you get off the tower, so you might as well go right away and try and do the best job you can, even though you may be deathly afraid.

You have got to take a chance in order to learn - like our recent astronauts did. Once you are in the air, the dive will feel very much like it does off springboard. Even if you make a mistake in the dive, you will learn a great deal by attempting it. The second time through you are much less likely to make a mistake.

The timing of the dives on ten meters where you don't have a spring is similar to the three meter springboard where you have a spring. The technique used on tower take-offs is quite different from springboard, but once you are in the air the dives are done pretty much the same as on springboard.

There is no set learning progression for tower, but I would suggest getting the diver off the tower head first a few times by having him just fall off the tower to do a front dive, so to speak. After the diver gains some confidence, have him attempt a front one and one half somersault or a jackknife. The armstand somersault is another way for tower divers to begin their lists. At first, have your divers do dives with forward-type entries so they can see the finish easily. As the diver gains more and more confidence, you can continue to teach them all the dives they will need for a diving contest. Most divers will have done all the dives on springboard before going up on tower, so it shouldn't take them long to learn their tower dives.

You must be patient with beginners because they are bound to be scared. Encourage your divers, but don't try to push them into learning something they are not ready for. If you can keep a beginner from getting hurt, he is less likely to get discouraged.

When you learn all the dives necessary for a diving contest, you will have to spend hours practicing them to gain perfection. It is important on tower, as well as springboard, to have a system to your practice session. Do all your dives every day at least two or three times each. If you are having difficulty with one particular dive, repeat it several times at the end of the workout. Don't spend all day practicing one dive.

Tower diving is an extremely strenuous and tiring sport, and it takes a great deal of strength to work out every day up there. Take a day off once in a while to let your muscles recuperate. The rest will be good for your diving because it may help you come back with new strength and enthusiasm. Dive springboard every day; it will help your tower diving greatly.

Our present tower diving program in the United States is not good, or what it should be, and the main reason for this is the lack of tower facilities throughout the country. There are only a few ten-meter towers and most of them are outdoors and can be used only three months a year. There is almost a complete lack of indoor towers in the United States, and the few that we do have are not ten meters. We need more indoor ten-meter towers so we can train our tower divers the year around.

Another reason our tower diving program is weak is because there are only a few places where divers can go to learn tower. There is a general need for qualified diving coaches to teach the youngsters about tower. Our present diving coaches are going to have to learn more about tower, so they can encourage their divers to begin learning earlier.

There are several things that could be done to improve our present tower situation. We could start an age group tower program and have tower competition off a three-meter tower. We can use our present three-meter standards and convert them into towers without too much trouble, so we wouldn't need to build more facilities to start such a program. We need to provide more tower competition for our divers. The way things are set up now there are only a couple of tower meets a year. The Junior National Tower meet is good competition for a diver trying to

make a name for himself, but this meet is confined pretty much to one area of the country. The Senior National Tower meet is about the only competition we have for our good tower divers to compete in. We have many springboard meets each year to help prepare our divers for international- competition, yet we have only one tower meet a year.

The last thing that I will mention that we should do to improve our present program is to get more printed material out on tower diving. There are several good books out on springboard diving that our young divers can use for reference, but there aren't any out on tower. When we can supply divers with more information about tower techniques, etc. we are likely to get more participation in the sport.

In conclusion, I want to emphasize how much fun tower diving is. It is a real challenge and a thrill to learn tower, and I certainly hope to see more divers attempting tower in the future. I have tried to give a brief introduction to tower diving in this article, and I hope to write about other aspects of tower diving in more detail at another time.

About the Author: **Dick Kimball** is a past President of the U.S. Professional Coaches Association, Inc., a five-time Olympic Coach (nine of his pupils have medalled at the Olympics), and a two-time World Championship Coach. He has had tremendous success on the collegiate level and has been a part of five NCAA national championship teams and 33 Big Ten Conference championship teams. He was the first to put a spotting rig over a diving board, developing many new dives. Now retired after 43 years as Diving Coach at the University of Michigan, Kimball resides in Ann Arbor Michigan with his wife Gail.