

Propeller Accident Risk (PAR) Worksheet

ROUGH DRAFT
Not Ready for Use

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Propeller Guard Information Center

PropellerSafety.com

This worksheet is part of a larger document titled,

[Consumer Guide to Propeller Guards and Other Propeller Safety Modifications for Their Specific Boat and Operating Conditions](#)

All disclaimers on that site, post and the other associated documents also apply to this one.

We welcome any comments you may have about this document, please email them to polsong@virtualpet.com AND make sure the word propeller is the first word in the message subject line.

Please circle the appropriate answers with a red or brightly colored pen. Write or indicate answers in the yellow box if there is one on that line. Otherwise, circle the answer to the left.

Boat Specifications

Boat Specifications					
				Information Only	Questions
					Boat type (runabout, bowrider, ski boat, wakeboard boat, pontoon, cruiser, houseboat, inflatable, etc)?
					Boat length in feet?
					Number of people typically on board?
					Maximum speed in miles per hour?
					Cruising speed in miles per hour?
					Drive type (inboard, outboard, stern drive, jet, etc)?
				Yes or No	Does boat have a swim ladder?
No			Yes	no ladder	If swim ladder, is it clearly visible from the operators station?
	Yes		No		Does boat has a swim platform?
No			Yes	no platform	If platform, is it clearly visible from the operators station?
				Yes or No	Has a swim gate? (go through a latching gate to swim)
Yes			No	no water slide	Water slide near propeller area?
No			Yes	no swimming	Swimmers near the stern are clearly visible from the helm?
					Propeller Diameter inches?
					Propeller number of blades?
					Propeller material (stainless, aluminum, plastic)?
More Than Once	Once		No		Has this boat ever overturned on the water?

Operator Experience and Environment

					Information Only	Questions
	No		Yes			Are you the only operator?
0-1 year	1-2 years	3-6 years	> 6 years			How many years of boating experience do you have?
0-1 year	1-2 years	3-6 years	> 6 years			How many of those years were in boats similar to this one?
Yes			No			Do youth 19 or younger operate this boat?
No			Yes			Have you ever taken a boater safety course?
No			Yes			Have you taken a boater safety class in the last 3 years?
No			Yes			Have you read the USCG Propeller Safety brochure this year?
Rowdy, partying	High performance	Lots of towing	quiet & reserved			Describe the environment (laid back cruising, water skiing, tubing, fishing, partying, poker run, high performance, mixed, how rowdy is it, etc)? Describe in yellow box, then circle one or more if appropriate.
Often	Sometimes	Rarely	Never			Is alcohol used by boat operator prior to being on the water?
Often	Sometimes	Rarely	Never			Is alcohol used by your boat operator while on the water?
Often	Sometimes	Rarely	Never			Is alcohol used by passengers prior to being on the water?
Often	Sometimes	Rarely	Never			Is alcohol used by passengers while on the water?
Often	Sometimes	Rarely	Never			Other boaters in our area are wild and rowdy
More Than Once	Once		No			Have you seen people near your propeller while it was rotating? (within a 15 foot danger zone).
More Than Once	Once		Never			Have you ever backed your boat up to retrieve a skier or tuber?

Operator Experience and Environment Page 2

Operator Experience and Environment Page 2						
					Information Only	Questions
Always	Often	Sometimes	Never			I wear a lanyard kill switch
Often	Sometimes	Rarely	Never			I boat near or after sundown OR near or before sunrise? (reduced visibility)
Very Experienced	Experienced	Some Experience	Novice			Other boaters in my area tend to be _____ boaters.
Often	Sometimes	Rarely	Never			I see some other boaters acting wild and unpredictably in my boating area.
More Than Twice	Twice	Once	Never			People have ALMOST fallen out of my boat
More Than Once	Once	Almost	Never			People have fallen out of my boat
Over Three Times	Two or Three Times	Once	Never			I have rafted my boat (tied it up with 3 or more other boat to form a large floating raft)
Over Three Times	Two or Three Times	Once	Never			My boat has been operated on waters I felt were too busy to be safe.
Never	Sometimes	Often	Always		I boat on small water	If I boat on a large lake, or ocean my boat has or I carry a Marine VHF radio
Never	Sometimes	Often	Always		I boat on large water	If I boat on a small lake or river, I carry a cell phone and it works there
Never	Sometimes	Often	Always			If I boat on a large lake or ocean my boat has or I carry a GPS and a map

Water Conditions

Water Conditions					
				Information Only	Questions
					I normally boat in _____ (lakes, rivers, ponds, ocean). List the specific locations. (List salt water if you boat in it)
Often	Sometimes	Rarely	Never		How often is the water pretty rough? (large waves, boat wakes, etc)
Often	Sometimes	Rarely	Never		The water _____ has a strong current (river, tides)
				Yes or No	My boating area has some seaweed, sea grass issues.
Very Shallow	Shallow	Deep w/ some shallows	Deep		Most water in my area is _____.
Several	A Few	One	None		My boating area has _____ known underwater obstructions (trees, logs, slightly submerged rocks, etc).
Often	Sometimes	Rarely	Never		My boating area _____ has floating or slightly submerged floating debris (logs, trash, brush, junk, limbs, wood, etc).
	Yes		No		My boating area has sandbars that move.
Often	Seasonally	Rarely	Never		Water levels in my boating area _____ change drastically
Yes			No		Water levels in my boating area are at or near historical lows
Often	Sometimes	Rarely	Never		My boating area _____ floods
				Soil or Rock	Shorelines in my boating area are mostly?
Often	Sometimes	Rarely	Never		My boating area _____ has fast moving storms
Often	Sometimes	Rarely	Never		The water when I boat is _____ very cold (hypothermia cold)

Activities On and Near My Boat

Activities On and Near My Boat						
					Information Only	Questions
						Questions regarding the people with my boat
						TOWED WATER SPORTS
Often	Sometimes	Rarely	Never			My boat is _____ used for water skiing, tubing and other towed sports
Often	Sometimes	Rarely	Never		Don't tow	I _____ tow more than one person at a time
Often	Sometimes	Rarely	Never			My boat is _____ used for kite tubing (tubes that go significantly airborne)
Yes			No			People wake surf behind my boat (ride waves on a board without a rope)
Yes			No			People teak surf behind my boat (hang onto swim platform) Note this is discouraged by the Coast Guard and illegal in some states
Often	Sometimes	Rarely	Never			People _____ ski or tube behind my boat on significantly shorter than normal ropes
Never	Rarely	Sometimes	Always			My boat _____ has one person focusing on the position of towed tubes and individuals riding them in the area.

Activities On And Near My Boat Page 2

					Information Only	Questions
						SWIMMING AND DIVING
Often	Sometimes	Rarely	Never			Besides towed water sports, people on my boat _____ go in the water for a swim
> 5	3-5	2	1		No swimmers	When people on my boat go in for a swim, there are usually about ____ of them in the water at once
Often	Sometimes	Rarely	Never			People from my boat are _____ in the water just floating on inflatables (rafts, air mattresses, tubes, etc)
Often	Sometimes	Rarely	Never			People _____ sit on my swim platform while underway
Often	Sometimes	Rarely	Never			People _____ ride in the bow of my bowrider while underway
Often	Sometimes	Rarely	Never		No water slide	The water slide on my boat is _____ used
						Questions regarding people not on my boat
Often	Sometimes	Rarely	Never			I _____ see PWCs in my boating area OR use one with my boat
Usually	Often	Sometimes	Rarely		No towing	I _____ see others water skiing, tubing, wake boarding or participating in other towed sports in my boating area
Often	Sometimes	Rarely	Never			I _____ see swimmers or people floating in the water outside of designated swimming areas that are not with my boat
Often	Sometimes	Rarely	Never			I _____ see SCUBA or free divers in my boating area
Never	Rarely	Sometimes	Always			Divers in my area are _____ properly flagged

Activities On and Near My Boat Page 3

					Information Only	Questions
						Questions about ROPES, LINES & NETS
						I sometimes pull things besides skiers and tubers
					often, rarely, never	I or others _____ fish off the back of my boat
					often, rarely, never	I _____ see lobster pots in my boating area
					often, rarely, never	My boating area is _____ rod fished by others
					often, rarely, never	My boating area is _____ trot lined, jug fished, or otherwise line fished.
					sometimes, rarely, never	Large fishing nets (seines or commercial nets) are _____ used in my boating area
					sometimes, rarely, never	I _____ see large fishing nets (seines or commercial nets) adrift in the water
					Yes or No	I have an anchor
					Rope or Chain	If I have an anchor, it is on a rope or chain.
						Other types of ropes or lines in my boating area are _____

Scoring the Propeller Risk Worksheet

1. Ignore the column marked “Information Only” with the yellow boxes. It will be of use later when selecting propeller injury avoidance devices.
2. In general, the more circles you have the further to the left, the greater your risk. The more circles in the far right column (just immediately to the left of the yellow, “Information Only” column), the lower your risk.
3. Note - not all the questions are of equal weight. For example extreme use of alcohol and rowdy behavior are far more risky than just having a water slide.
4. The worksheet is meant to provide food for thought and discussion as you work to minimize your propeller risks, as well as to point out some opportunities for reducing your risk you may not have considered.
5. More information on scoring the worksheet, along with suggestions for sorting through possible interventions, and an opportunity to comment on the process is online at:

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NOTES