Naval ops: A problem underestimated, or... overestimated?

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1-20: Introduction

Lately, I've been doing quite some research into quite some things regarding Naval ops, and being a diver, myself, I really couldn't allow myself not to share my part in this!

There really is a lot of water around my area. Nearly every few meters or so you'll run into a moat. Making nearly every site around as guarded as half a castle. Not to mention big lakes with islands to discover, and the options of avoiding nasty things like street lights when using the water. The water is a tool grandly underappreciated so far by night-oppers, and rather avoided than used. When it could be so much more!

This guide will be devided into two parts: wet ops, and dry ops. Which basically cover what they say. Wet ops are for ops where you are allowed to get wet, dry ops are water-crossing methods rather than water-treading methods.

2-10: WET OPS

Wet ops are nighttime operations (night-ops) in which the Opper can allow himself to get wet. These are usually high-profile, low-tech operations. Before you go on Wet ops, you need to prepare exceptionally well. You can't take along anything you'd like. If you're going to take along electronics, for example, they're going to short-circuit lest you contain them in an airtight container. These containers will be cumbersome, and cause noise. Use whatever means to scout ahead as you can. Waters around these sites can be exceptionally Murky. Partner-communication is limited, as well. If you take someone along, you need an experienced wet-opper. A strong communicator, and wide array of plans to ensure each of you does as supposed. Various other risks are described in the following chapter.

--2-11: The bare necessities for water-treading

A few thinks you'll need, for certain, are <u>swimming clothes!</u> really, go in a bikini for all I care. Even though you'll hardly be seen in these, they protect your more sensitive parts from your gear (no really, I do not want my nobhead rubbing against my double-seven mm wetsuit. Or the trilaminate from a drysuit).

Next up is going to be, yes, a suit. What suit you wear varies per environment. I strongly disencourage shorties. Even when you're one of our darker skinned friends. The suit is going to help you blend in, and protect you from the outside world (the nastiest creatures live in rivers and diseases we long thought extinct live in our harbours).

Wetsuits come in various shapes, sizes, and types. There's <u>longhies</u>. They cover most of the body and are usually about 3 mm thick. There are single and double wetsuits. This mainly means if they have 1 part or two parts. <u>Double suits</u> usually give you the most warmth, and most modern double suits are designed to be a single suit with a cold-weather addition. If you live in a warmer environment, however, a <u>single suit</u> can be preferred, because you don't have to put on your cold-weather piece for that hood we are all obviously going to need. Most suits come in 5 and 7 mm thick. For extra isolation: look for <u>socalled 'semi-dry'suits</u>. They have extra seals, which keeps outside water from peeking in occasionally to steal your warmth.

This is usually pretty bearable in most environments. Lest you are an exceptionally cold person or a complete wuss. This differs when you go Icediving, however. In this case, a <u>Drysuit</u> can be preferred. They isolate your body completely and are filled with air. This means you can wear your regular clothes underneath, this means also means, however, that you'll need extra lead to sink, which results in extra encumbrance, only for the sake of encumbrance. And they are expansive. Seeing most of us operate alone, we really are fucked on these in the night-ops world. We'll need suits we can open and close ourselves: with a diagonal zipper. And those are expansive as hell. A fun fact however: DUI provides these suits for the US military, complete with camo print. However that's all the really top-of-the-bill stuff.

<u>A mask</u>. And yes, I mean a mask. No speedoes. Getting water in your nose is nasty, really. Better seal it off and breathe through your mouth.

<u>Fins.</u> And those are going to be pricey, as well. I suggest hard fins over soft extremely flexible fins. They are more reliable and we definitely prefer speed over control when we're opping. Lest you're going to infiltrate a secret CIA underwater base hidden inside the great barrier reef. Yeah, I thought so (and there the fuckers thought it was a secret). Allso, and I cannot stress this enough, *THE 40 BUCKS FOR SPRING STRAPS ARE WORTH IT. AND IF YOU USE FINS, I AM GOING TO COME OVER AND RAT YOU OUT ON YOUR OPS IF YOU DON'T USE THEM. RUBBER STRAPS ARE A RECIPE FOR DISASTER.* No really, they are. You can't get rubber straps on in time. The slow as well as the quick method of getting them back on is going to be noisy as fuck. And when you're in the heat of your op, they are going to snap, *THEY JUST WILL, PERIOD.* All spring straps require to get around your heels is one pull. ONE PULL, and there's a wire of metal tightly around

your heel. They are quick, silent, and above all, reliable. USE SPRING STRAPS, BITCH.

<u>Boots</u> to put into your fins. 'indoor' fins are a big nono for the same reason as above. It takes too long to put them on and your feet are poorly protected. Allso a quick way to get your feet cramped on during your daring escape from a police helicopter and end up nearly drowning before being dragged to jail. There's a lot of booties out there. Against the Tabi's popularity, I suggest a hard-soled bootie. This keeps water from making that squishy noise. And protects your feet best and offers manouverability. Soft boots usually only makes your feet worse.

These are about the bare basics you can get out there. From here on, we are going to decide what to do, exactly.

2-20: Snorkleing.

Snorkelling is about the easiest, safest, and most reliable way to get into sites. Some complain that it's noisy. But having been right next to the kids practicing, I can't quite agree. It's silent enough lest you're emptying your snorkel. That's why I only recommend two kinds of snorkels:

<u>The Foldable Snorkle</u>. Basically because it's easy to deal with and to put away, though you're going to have to clear it the old fashioned way.

Or the Self-clearing snorkle, with a tip. The special 'tip' on the snorkel is used to let water in downwards. To keep you from causing a fountain into the air. Next to that there's a small vent-like object next to your mouth. This often results in having to take carefull breaths after the first clearing burst. Clearing these things usually takes a few breaths. But the sound will be reduced to the air-blowing-through-plastic sound, unlike the 'pop' most normal snorkels make while clearing.

And that's about it for snorkeling! that's the only bit of other gear you need next to swimming skills!

2-30: Diving

well, this is getting more luxuous! or is it? I am not going to tip you too much on gear, because you need to know your gear by the time you are capable of doing this! there's a few things to keep in mind, though. And you might not like hearing these tips when you go diving. There's a few tips I should give you, though!

Go tec!

and with I don't neccesairily mean technical diving. You will not, I repeat NOT reach technical depths. Tec is a certain specification to contain your gear However named after it's original use, Technical diving. Nowadays it is mainly popular with Wreck divers. Keeps you from getting stuck to a doorframe or so. You can go as extreme as you want. Up to the point where your emergency regulator hangs in front of your mouth from a bungee. There's a few things you need to keep in mind, however. Take BCD's with a lot of D rings! Cressi's newer semi-wings work miracles, for example. The point to these rings is to hang gear and most importantly, your tools from. You want to keep your outline as tight as possible. This usually ends up for me with me crossing my console over my chest, and tucking the hose of my emergency regulator away.

No matter what they teach you, Snorkels get in the way.

Only take a lead belt when you really have to. For night ops, try keeping the encumbrance around the vest. This is perfect even when using a semi-wing. Most of the air will be on the back while the weight is on the front. A balance you would like to maintain during diving. Only use leadbelts when the weight in your vests exceeds a responsible amount (usually around 3kg (6lbs) per main pocket).

Some people don't like Diving. It leaves visible traces on the surface, and noise, so I've heard. One thing you need to keep in mind while you do a Diving op:

Which is to stay shallow! don't go deeper than necessary. You do NOT need to go below ten (unless, once more, you need to infiltrate the great barrier reef once more, you forgot blowing up the Black Briar files). For multiple reasons:

As you descend, the pressure under water causes everything in your body, tank, and gear, to compress. This includes gasses. what's 1Bar on the surface, is 2bar on 10 meters (aprox. 30 feet). Through that small distance, everything will be compressed to half it's size. Once you ascend, things expand again. This also happens to the air you breathe out. The bubbles you spew out ascend, increase in size, and split into more bubbles which, once more, increase in size. You'll have twice as much and twice as large bubbles hitting the surface at 30ft as you would breathe out at 1ft. Which results in more visible disturbance on the surface, as well as buttons to pop for sound!

Not only that, but ascending too quickly causes gasses in your body to expand too quickly. This would cause the blunt Nitrogen and Oxygen intake to increase. At large depths, this could very quickly mean decompression sickness. And you're pretty much going to be fucked when that happens. Don't get me wrong, I'll easily tap the 50's come up, make my stop and go back up. But in Night ops, we will not have the ability to take a 'nice and easy' dive. Next to that, mental stress could easily double our air intake. So will physical stress. It's not odd to see both on a Night Op. This is why Decompression sickness might strike us sooner than it should according to our happy blue-and white table friend and his wheel-covered brother. Same for their digital inbred offspring (yes, I mean the RDP). Next to that I can predict you are NOT going to end up with enough air for even a safety stop.

Lest you really have to, I STRONGLY Disadvise going below 30ft. It's simply not going to help you and it's not necessary, and lest you're diving in swimming-pool clear water, it's not going to be any stealthier, either. Hell, I've seen 90ft deep swimming pools and even there I can't really see much past 30. It's useless.

--2-31: Rebreather Diving.

Oh yes, we have all discussed this. It leaves no bubbles, so it's nice and stealthy. It's silent, too! Oh, did I also mention it's expansive as fuck, kills you when it breaks, require additional training, and because you're not going below 30ft, is not going to be quite as usefull with it's trimix options?

Yes, it has upsides and downsides. It's by far the stealthiest option, I confess. It has three tanks. One filled with regularly compressed air. One filled with Oxygen, and one filled with Helium. The user can change these amounts by using a computer delivered with it. Not only is this computer exceptionally accurate because it calculates the amount of nitrogen in your body exactly, this allso means you can use less oxygen when you go deeper (it gets poisonous) by adding Helium, or add more oxygen when you're staying shallow, to reduce your Nitrogen intake. Which is handy for obvious reasons.

There are downsides, however. The costs of refilling this thing when it runs out of gas runs into the hundreds. Aside from the bubbles doesn't add much to your op, and when it breaks, boy, you're fucked. As soon as you start breathing dust or your gas starts tasting funny, you can stop bothering and give up. You will not survive. I find this device to underdeveloped to use as it is. I do not recommend it at all. The potential danger is higher as well as the cost of refilling it, forget about learning it and buying it. The thing is not quite worth the trouble if you ask me. Mainly because it's intended use is too far away from what we are doing. It's main use was for deepsea exploring. Mainly used by either the military or technically capable wreck explorers.

2-40: Hi-tech gear. Did you even think of this?

I bet you couldn't wait for this one. This isn't all as high-tech as it seems though. But this a bit of a heads up on (improvised) gear you might want to consider.

First of all: light. Some of you oppers out there enjoy taking along a filtered light or so. A lot of lamps out there are free enough to be taken apart and reconfigured. Hell, preparing UK D lamps before a dive nearly makes you feel like an electrician. However, there's allso some smaller LED lamps with a lot more bang available, and ready to be taken apart quite easily. This is mainly so that the isolation rings can be cleaned or even replaced. To keep the water out. The UKSL lights are a miracle on this one. Small, Light, Cheap, easy to use, take apart, rebuilt, and come with a flexible piece to attach it to your mask. Underwater ILD's, anyone?

Diving Knives: Say what you will, there's multitools made especially for gloves (they're literally giant, though), large knives, small knives, and so on. Diving knives work GREAT as opping knives, with one difference: They have extra secure, plastic sheathes. Their sound could pose a problem. Consider a custom sheath when buying one. I can say for sure though it won't disappoint you!

There are decent containers out there! and let's be honest, padding one of these:



and ducktaping it is Ideal for keeping your lock picks from rusting underwater, isn't it? There's plenty of airtight boxes out there. Consider some small ones. Luckily enough, our big friend DUI allso delivers waterproof bags for the military. (shoot-through)weapon bags, radio bags, amphibian assault packs, gas mask and optics bags, all waterproof and for military diving use.

If you're used to walkie-talkie-ing with a partner. There is quite a simple option there! Problem is, it's going to need more than underwater Radio, like a full-face mask for example, anything that will allow you to use your mouth. Some companies, like Divelink, use fully customized full-faced mask. It can be as simple as a rather large earpiece with a small nob to place under your mask band. It's expansive, but definitely out there.

3-10: DRY OPS

Dry ops are Nighttime Operations (night ops) which require you to cross a body of water, but require you to stay Dry. These options are oftenly ops at which point you KNOW you are going to have to cross a body of water that can be just out of jumping range, but you can't bother with taking your entire swimming or diving kit along. I run into these a lot of times. Even though there's just as much to explore on the water. I oftenly run into moats I have to cross and it's starting to piss me off! This is what initially caused me to write this guide. This can range from taking a boat, or crossing a body of water in a few steps.

--3-11: Rumors surrounding Sui Ren.

Allright, I know there are some enthousiastic authentic Ninjutsu practitioners out there. Hence I am going to state here, as a disclaimer, that the following tools and techniques will be described and inspired by only concepts mentioned. By no means do I claim that the techniques below are authentic. However, this is what I learned from reading up on Sui ren and inspired my solutions.

Figures that as much as my troubles bothered me, the Ninja's all us oppers take inspiration from (come on, who can't remember the old 'ninja style vs. Military style' threads?) had PLENTY of ways to cross the water. Allmost too much it seemed, yet we never learned from those! So below, I will describe some basic concepts of the tools.

3-20: Moat crossing methods.

A moat is a relatively small body of water. The other end doesn't seem too far away, Usually it's too much for jumping over. If you live in a mainly agraric area, moats are mostly used for irrigating farm fields, Or used to assign borders and show people what piece of land belongs to who. Locally, this has caused the country to be cut up into millions and millions of small rectangles owned by diffirent farmers. People would even sell and buy eachother's rectangles so they could bundle them together near their homes. Other uses of moats are (Rather effective) defence. Used for decoration or preserving local waterbird-life. Though it hardly looks intimidating, silly even for a body of water. It can be just too deep for us to walk through and stay dry enough to stay soundless, and too wide to jump. It's like an elementary school bully dangling your lunch overhead just inches out of jumping height (wait, you mean they're in middle school too? Did all mothers die before they could raise their children?).

--3-21: Modern Taru Ikada.

Taru Ikada were small buckets the Ninja would stand in. And move over the water. Usually supporting himself on a staff, by the looks of it. Either that, or make the buckets long enough to be able to walk through the moats. Both these options exist, nowadays, though prepare to be disappointed. The latter would be, for examples, a kind of restoreable fisherman's pants. Isolated pants with their own boots to keep the water out and keep you dry. It looks rather silly and probably isn't as storable right now. The other are two big inflateable banana's with foot holes, and two sticks with a waterproof flap attached to them, which are made for propulsion. However, usually these things are long enough so you could rather inflate them and crawl over them to the other side. Not to mention they're bright yellow. And you're not going to have the luxury to carry around those two sticks and two bright yellow banana's. The best bet would most probably be to construct two floating buckets (try an isolated wooden one with a double bottom!). And our good old oak bo!

Xanatos informed me of a man named Donovan who managed to keep his feet dry in knee-height water by wearing trash bags around his legs. Trash bags come in various shapes and sizes, luckily. It should not be difficult to Mcguyver your own fisherman's pants. And hopefully a lot more concealable ones then there are currently, too.

--3-22: Fierlieppen.

Allright, this is not quite Ninjutsu, but it wouldn't be surprising if it were used! Fierljeppen is a mainly Frisian (usually classified as dutch) sport. Where people use a long pole, stick it into that muddy moat, leap, climb up the pole, and land on the other side. It's basically a form of Pole Jumping (far jumping), and has even been a Olympic summer sport for a while (believe it or not). It was a very common technique around farmers to cross eachother's moats, and a beloved summer game. Sounds gold, doesn't it? Problem is that staff is going to need a bit more than six feet for you to jump over. Your best bet would be to improvise something extendable. Currently I have not brain stormed much on this. But the theory exists.

--3-23: Rope Methods.

Probably the most readily available option, the easiest to carry along, yet the hardest to execute. Not to mention you are going to need attachment points on either side of the body of water. I personally don't have that luxury. There are military field manuals on rope usage readily available. So I am not going to go into those too deeply. A few tips, though:

Using a rope does not necessarily mean you have to hang from it. Try seating yourself on it! A lot of moats are guarded by wooden planks kept in place by wooden posts on their edges. Try those as an anchoring point instead of something higher up!

If you're on one side and need to attach a rope to the other side: Bring tough gloves and a weight! If you swing angular (as if you're going to 'indiana-jones' it), letting the rope slide through your hand can extend your reach quite surprisingly! It might be usefull to get it to the other side and back, if not, try actually indiana-jonesing it. If your weight goes over the rope instead of under it, it has a chance of keeping your rope in place. On the other side, fasten the rope with a pulley knot and take the releasing piece of rope with you so you can release it from the other side. I'm not sure if 'indiana jonesing' it is really a reliable method, however, it'd have to be investigated.

3-30: LCBM: Large Body Crossing Methods.

Allright, you're not going to nearly have enough rope to cover climbing this. And waddleing around on Taru Ikada for that long is going to get you to fall in the water guaranteed. You'd need a Pole about as large as my dick, too, before you can hop over this size of water! we're going to need a boat of sorts...

--3-31: The Hasami Bune

The Hasami Bune was made to at least transport the Ninja's gear over bodies of water. Though perhaps with some modification, it can hold a person? The Hasami Bune was basically a collapsible, diamond-shaped box. Designed to be collapsible, and floatable. And we can all build a square box from a pile of plywood, can't we?

--3-32: The Mizu Gumo

Siad to be inspired by water-walking bugs. What the Mizu Gumo mainly are are four floating elements tied to a seat for the Ninja. Who takes a seat and is kept afloat by the Mizu Gumo around his hips. Though this implied that the Ninja would have to dangle his legs in the water. Quite undesireable for a dry op. Though Perhaps it could be tweaked for knee-sitting? Perhaps a waterproof bag of air is all it takes to really stay afloat. In which case there are easy alternatives...

--3-33: The Shinobi Bune: Not that much of a secret.

The Shinobi bune was, according to some sources, made from a few floating pots and bamboo sticks tied together. Wait a minute... don't we all remember building rafts from blue plastic barrles and wooden bars? Well shit. And there we thought this was one of the big Ninja mysteries of all time. Remember these can come in various shapes and sizes, though not very concealable. Consider taking along concealing materials so you can store your little boat for a while during an op.

--3-34: Cheap disposeable transport: Ductape and Cardboard.

Yes, it appears to be doable. Take some good, sturdy cardboard. Simply cut a bottom, a side wall, and a top. And wrap it in a lot of ductape. Tuck the corners in with cardboard over the ductape, and cover that in ductape again! There's a detailed explanation on Instructables. If it works, it's just Ideal. It can be sunk or even burned when you need to get rid of it, and it's cheap as fuck! It's not very transportable, however.

--3-35: Another man's junk.

Perhaps a very underestimated one, but hey, Windsurfing can be done anywhere, so if you're in an area with a lot of water nearby, It won't be odd to find a stray surfing board. Some companies allso have a tendency to loose large blocks of Polystyrofoam. It can't get any more Ideal than a raft of that stuff on the calmer waters! Keep your eyes open for anything that could float.

--3-36: Say what you will, but it's easier than carjacking.

Well, stealing a boat is! Just cut the line and if the boat is small enough, I suggest you paddle at will! And yes, paddleing really is the option, so I suggest finding small boats. Baby sailers or small Zodiac's are ideal. Try not to use the engine or the sail. One will generate noise and the other will generate an indisputeable silhouette.

--3-37: How to propel the damn thing?

Well here's some ideas: With your goddamn hands! You can plan ahead and bring paddles of your own along, use a stick and stick it in the bottom. In some stories, Ninja's attached an open Fan to a stick of bamboo for use as a paddle. Anything with a flat surface in a stick can be used as a paddle. Hell, if you have one, a small shovel works if you're too proud to use your hands...

4-10: Conclusion

All in all: a few things are clear

Wet Ops are the more covert and easier ways to go. Yet require out-of-the-ordinary gear. Large body crossing can be done: but you need to really need to do it, or have a way to silently transport a small boat with you on land, or be able to hide and easily return to it. Moat crossing is and will remain to be a complete bitch.

All in all, a universal solution to take along does not yet exist. So you need to prepare on your op properly, and really think over if you are going to need your tool, or not. Most options are cumbersome and not as much of a plus on any op as they should be. There definitely should be some research and development be done on the modern possibilities of using water-crossing methods on Night Ops. A lot needs to be done.

FIN

(This document was originally posted on night-ops.net forums. It has been converted in pdf form by secant, who has made minor formatting alterations. The document's content has not been modified.)