#### Introduction

P&H do not have a composite fast sea kayak (FSK) like the Taran or the Pace in their lineup so the arrival of the RM (rotomoulded plastic) Valkyrie has been much anticipated. The Valkyrie is based on the excellent Pyranha Octane/Think Nitro RM surfski, which was tested in OP #58. I enjoyed paddling the Octane so much that I now own a carbon fibre surfski! The prospect of an economically priced "fast" sea kayak built from tough RM is very enticing, particularly for those solo paddlers who like covering the ground fast on circumnavigations where rocky landings and launches are difficult without help. So I had great expectations of the Valkyrie!

Although surfskis are fast, they do have significant hull differences to typical FSKs like the Taran. They have much more overall stem rocker which starts at the cockpit. This helps them catch fast waves and also loosens the rear end so that a relatively small rudder can correct an early broach and keep a surfski running fast and straight down the waves. Surfskis also have a much more tapered (and so low volume bow) than an FSK. The taper starts at the cockpit. In comparison FSKs are more parallel sided and carry significantly more volume towards the bow. Surfski bows are designed to pierce the wave in front and not slow down ((especially when planing down wind). Traditional seakayaks with flared bows (and to a lesser extent FSKs with parallel vertical sides but higher volume bows) tend to rise over the wave in front more than a surfski. This increased pitching causes deceleration but gives a much drier ride.

### Test conditions and paddlers.

The Valkyrie was paddled nearly every day for six weeks on the Solway coast of SW Scotland. Conditions varied from flat calm to very rough with winds up to F5/F6. Offshore the spring tidal rate is 4 knots and there are tide races at the headlands and round the islands where the flow is accelerated. Prevailing SW wind against ebb spring tides (which are nearly 9m high) create breaking waves which stretch out well beyond the emptying bays. During the seven weeks testing the Valkyrie, rescue services (including cliff rescue coast guards, two lifeboats and a helicopter) were called to five separate incidents in the area involving kayaks and small boats. All in all, these were ideal test conditions for a boat like the Valkyrie. The main tester was 73kg and 172cm tall. Five other testers (who varied up to 92kg and 190cm) paddled the Valkyrie though the largest paddler could not paddle it far due to being too cramped for his 84cm inside leg/size 46 feet. Paddler experience ranged from advanced to occasional summer paddler. It was paddled with a mixture of wing and Euro paddles. It particularly suits wing paddles which were used by the more experienced testers. During the test the Valkyrie was paddled alongside a Taran 18, Taran 16, Atlantic RM, Cetus MV, Scorpio MV, Aries 155 and Think Zen surfski.

# Construction and Fittings.

The Valkyrie hull is made of CoreLite X and is remarkably stiff and light for a RM boat. In comparison with its Octane surfski sibling it is still remarkably stiff, despite not having the Octane's longitudinal foam stringer. Despite its length, this is the stiffest RM kayak I have paddled. A good test for stiffness (you can try in a kayak shop) is to get someone to help you carry it, one on each end. A soft boat will "boing" as you walk. The Valkyrie does not. It has been built light (the one I have on loan weighs 26.5kg including two extra optional hatches) but my experience of CoreLiteX on a series of demo boats is that it is more than tough enough. Standard of moulding is exceptionally high with very well defined water release planing edges to the under hull. Composite kayaks and surfskis tend to lack these sharp edges as they would be too fragile. I am sure much of the exceptional downwind planing performance of the Octane/Valkyrie is due to these. The surface finish of the hull is a mixture of matt and gloss plastic, which looks very smart. I was delighted that the sides of the bow and the back deck were gloss as these make excellent mounting areas for suction action camera mounts (which do not stick to matt plastic). On the foredeck there is a compass recess and a flat to mount a mast base for a sailing rig. A pair of deck line RDFs are fitted laterally to the flat to mount side stays for the mast. Unfortunately, this borrowed kayak lacked the other fittings for a sail so I was not able to try it out paddle sailing. The Octane I paddled in 2017/18 did have a sail but I felt that it was unnecessary and an encumbrance on an open cockpit surfski. However, I think a sail on the decked Valkyrie would be very manageable and great fun. It could make a great difference, especially if loaded with camping gear. The boat comes with good sized Pyranha alloy carrying handles at bow and stem and a security/tow line mount behind the seat. The carrying handles are streamlined and at the bow create much less spray than end toggles would. The test boat was one of the first out the

mould and was leaking at the stern where the hull is pierced by a tube for optional end toggles. The manufacturing problem has been identified and has been corrected on production boats. There is a full set of deck-lines and deck elastics. The deck elastics on the foredeck wrap round the front of and interfered with closing the forward mini hatch. I addressed this with a bit of cable tie to hold the elastics forward of the cover. A clip will be supplied with production versions. The seat is mounted really low and can easily be adjusted 6cm fore and aft with thumbscrews, which screw into threaded inserts on the bottom of the hull. The backrest has ratchet adjusters attached to the thigh grips. The footrests/rudder pedals are the very easy to operate SmartTrack system and can be adjusted using wands with extend rearwards. These are easy to reach and operate. The rudder cables adjust for footrest position automatically. The rudder is the excellent SmartTrack over-stern unit. It is fitted with a 28cm rudder, which extends 22cm under the hull. The KajakSport hatch covers all fitted easily and were totally watertight.

### Paddling the Valkyrie.

My first outing in the Valkyrie was a pleasant F4 to F5 wind over an ebb tide. Within the first 5 minutes I was totally hooked by the Valkyrie's speed, performance and ability to generate fun. It has a lot more primary stability than the Octane (which has a surfski's higher seat to maximise paddling efficiency). As a result I had to shorten my paddle a bit compared to what I use on surfskis but the Valkyrie was only marginally slower on flat water than my Think Zen Ultimate carbon surfski. Paddling out through steep wind over tide waves it was a much more comfortable ride than on the carbon Zen, which slams and shudders in these conditions. Obviously being 16kg heavier than the Zen, it lacked acceleration in comparison and downwind I missed a few waves I would have caught on the Zen (which in a race would have been critical, but not when just having fun). However, once on the wave, the speeds were very similar. It would be difficult to find a faster kayak than the Valkyrie without spending a serious amount of money. One feature I am glad has been carried over from the Octane surfski is the paddle cut out on each side of the hull in front of the cockpit. This allows paddle entry as close to the hull as possible enabling a very efficient stroke. However, it does impinge on the room for your feet. I had to come in and change my size 43 Lomo boots for my much neater windsurf boots.

One of the other testers (with a Northshore Atlantic RM) would like to buy a Taran 18 or Pace 18 for fast touring expeditions but has just bought a house and has a limited budget. He was keen to discover whether the very affordable P&H Valkyrie might be a rotomoulded plastic equivalent. The short answer is yes the Valkyrie is a fast (very) sea kayak but it has three significant differences to mainstream FSKs, like the Taran. Two have been mentioned in the introduction. From its surfski heritage, it has more stern rocker and a more tapered, lower volume bow than FSKs. The third difference is its overall volume is significantly less than an FSK. The Valkyrie volume is 3341 which is almost 50l less than a Taran 18 (3831). Not surprisingly these design differences create performance differences between the Valkyrie and other FSKs.

First of all the increased stem rocker makes the Valkyrie incredibly quick to turn after going out through waves. I have paddled the Taran 16 more extensively than the Valkyrie and the Taran 18 a bit less. In both Tarans the turning circle is such that I would look for a wide, flat spot between bigger sets to turn in so that I could set myself up ready to catch the next big wave. Even though the Valkyrie I tested does not have an under hull rudder, it still turns like a surfski. (An understern rudder will be available soon.) I could turn tighter and faster than in an FSK, starting just in front of an approaching bigger wave and still have a good chance of catching it. The increased stern rocker on the Valkyrie (and surf skis in general) also means it is easier to catch faster waves and once on them, it is easier to steer diagonally across them without broaching. Many who paddle British style sea kayaks only manage to catch waves when they slow down in the shallows and form surf. Faster deep water waves just pass under such kayaks' hulls. Paddling unloaded alongside a Taran 16, Scorpio MV, Cetus MV and Aries 155 the Valkyrie consistently caught more waves and disappeared ahead. Swapping paddlers with the Taran 16, the Valkyrie still had the advantage. The downside of the increased stern rocker is that on flatter water the Valkyrie is not as fast as an FSK. Also although the Valkyrie is more manoeuvrable than an FSK it is more rudder dependent. With the rudder up the Valkyrie weathercocks significantly more than an FSK like the Taran, making it very much harder to paddle. The Taran 18 owner disliked this feature of the Valkyrie, especially as he normally surfs the Taran with the rudder up. I had no problem with keeping the rudder down in all conditions except reversing into caves! Second, the reduced

volume bow of the Valkyrie compared to an FSK means that the bow does pierce through short, steep waves rather than rising over them, even when unloaded. This happens in surfskis too but most of the green water washes off the smooth deck before the cockpit. Unfortunately, on the Valkyrie the water hits the raised forward hatch cover and sprays everywhere including your face. Third, you could not carry as much gear for a long expedition in a Valkyrie as in a Taran or Pace due to the overall reduced volume. However, if your plan was for a weekend outing, say to a distant headland with a tide race or some decent swell curling round, then the Valkyrie would tick all the boxes, especially if there was a rocky landing involved.

Another advantage of the Valkyrie's is manoeuvrability combined with its tough CoreLite X RM construction means that I have taken it to places in conditions that I would never dream of taking a composite FSK or my carbon fibre surfski. It is obviously not such a specialised rock-hopping tool as its sibling the Delphin but it is reassuring to know that choosing a fast kayak like the Valkyrie does not stop you getting up close to the narrow channels and caves of the rocky bits of our coast!

I was worried that the over-stem rudder fitted to the Valkyrie would be less effective than the under-hull rudder of the Octane. So I decided that a longer downwind run along the exposed Solway coast between Kirkcudbright Bay and Fleet Bay would be a great test. On the day a force 4 gusting 5 SE wind was blowing parallel with the rocky coast and running straight into the tide which was SE going, again parallel to the coast. This created some lively sea conditions. Conventional British style kayaks tend to broach in these conditions and require much steering input to keep on course, which slows your progress. The Valkyrie stormed ahead of the British style kayaks on this coast by running true and straight and not broaching once. It was fun, fun, fun all the way, as one screaming run on the plane followed another. Despite the steep, short period waves, I was not aware of the rudder coming out of the water when running down-wind (it does come out when paddling out against the waves, but that doesn't matter as you are going so much more slowly.) So the Valkyrie has lost little of the Octane's response to the rudder or its ability to turn quickly. On flat water turning around a buoy or when turning between waves for the next run in, you can feel the Valkyrie's stem skidding round as it turns tightly, just like on a surfski.

A couple of the testers have said they would prefer it if the Valkyrie tracked straighter without a rudder. Well, another friend had a straight tracking P&H Quest expedition kayak. He had a retractible under hull rudder fitted but it proved next to useless for turning. There is always a compromise with kayak design. The rudder could not overcome the Quest hull's straight tracking. The Valkyrie is designed to be used with a rudder and like a surfski has the loose stern to make it very responsive. Some may ask "what if the rudder fails?" Well the Valkyrie is supplied with the excellent SmartTrack rudder. This is a simple robust design and the Valkyrie is fitted with very strong control lines. I have never experienced or heard of a jamming or failure of this rudder. Whatever, I am more than satisfied that the move to an over-stern rudder on the Valkyrie has lost little of the control or manoeuvrability of the Octane with its under-hull rudder. For those that really want it, P&H do offer an under hull rudder as an option on the Valkyrie but personally I would not bother and just go for an Octane instead.

Despite the lively testing conditions I did not accidentally capsize the Valkyrie once. However, I can report that it is extremely easy to roll and once up quickly settles in the vertical position due to its excellent primary stability. It is also one of the easiest kayaks to do a solo remount on.

# Ergonomics

One advantage of having a test boat long term is that you can really get a feel for ergonomic issues that might be missed on a short paddle at an open day or symposium. The low seat is very comfortable and gives a very stable paddling position. The paddle cutaways in the hull forward of the cockpit really let you get a clean catch, close to the hull. The back rest was very comfortable and it was easy to adjust to just the right tension so as not to inhibit trunk rotation. I only used the thigh braces when rolling. The cockpit was wide enough to allow a knees together and up position for performance paddling. The boat was paddled by six different people. Four had no problems with foot room but the tallest and shortest had significant problems so this is a boat I recommend trying before you buy. My inside leg is 74cm and I have size 43 feet. The test boat was fitted with the forward mini hatch and my toes were restricted between it and the rearmost lateral fore deck elastic RDF mounting points (which extend inside the hull). I found this to be so

uncomfortable that I could not paddle the boat for more than 2-3 hours at a time. During my time with the Valkyrie I made the open crossing to the isolated island Ailsa Craig, a 36km round trip. A fast boat like the Valkyrie would have been ideal, especially since the RM construction would have aided the landing on the granite boulder beach. However, I took a much slower composite Aries instead, solely due to foot comfort. With short legs I would order a Valkyrie without the mini hatch but even then the RDF mounts would still get in the way. Four of the six testers had no problems with the RDF mounts catching their toes. The footrests/rudder pedals are mounted very low and the pedal axles slope down and in rather than being horizontal as recommended in the SmartTrack installation manual. The arch of my foot was on the rudder pedal rather than my toes (as is the case with the systems fitted to other fast sea kayaks or the Octane). This is not ideal for performance paddling but a couple of the less experienced paddlers who tried it though it felt great. The Taran 18 paddler and myself both prefer higher mounted pedals. P&H are phasing in an alternative mount which may suit you better. SmartTrack also offer mounting adapters.

### Paddling the Valkyrie loaded.

I weigh 73kg and to test carrying capacity I loaded it with just over 30kg of camping gear. This was just within the recommended overall load limit of the boat. Packing it proved easier than I thought as there is a lot of volume in the shallow but broad stern. So the Valkyrie has enough volume to carry a fair bit of gear but its performance changes as you load it and it would be easy for a heavier paddler to overload it especially at the bow. Like other Swede form designs, like the Cetus, I found a bias to rear weight distribution worked best. Neither the Octane nor the Epic V7 touring surfski have bow hatches (although both have rear hatches) and my experience suggests that it could be too easy to overload the bow of a surfski type hull. Loaded up In a fresh to strong offshore wind with flat water, the Valkyrie still proved easy to hold on any course with the rudder. In short steep waves its surfski heritage showed a disadvantage to a similarly loaded Taran 18 and Cetus MV paddling along side. The Valkyrie stuck its bow deep in every wave, up and down wind. What was a fun feature enhancing downwind speed when unloaded now caused a very wet ride. So although the Valkyrie has a similar overall volume to the Cetus MV, the slower Cetus makes a much better all round camping and touring boat.

#### Wear and tear.

The only sign of wear and tear was some corrosion in the alloy carrying handles where they are secured by stainless steel bolts. This is a common problem with such fittings used in salt water and also affects my carbon fibre surfski. I wash with fresh water after every outing and have used some silicone grease between the bolt head and the handle to try and reduce this.

#### Conclusions.

So what sort of kayak is the Valkyrie and who it would suit best? In the current market it has a pretty unique set of features. In performance terms it is fast yet manoeuvrable. Over the last 17 years I have had the privilege of testing some really great kayaks but seldom have I had such fun and enjoyed myself as much as in the Valkyrie. It is the fastest RM kayak I have ever paddled. Down wind and wave most composite British style touring kayaks will not keep up with the Valkyrie and it is also more than a match for FSKs in these conditions. Unsurprisingly given its origins, the Valkyrie is more related to surfskis than to other FSKs. The Valkyrie is a whole heap of fun on shorter trips when it is more manoeuvrable than an FSK in the turn or on a wave and it is easy to catch fast open water waves. However, in a variety of conditions on longer trips an FSK will carry more gear, faster (and drier). Horses for courses perhaps and these days it is great to have a choice.

I think the main market for the Valkyrie will be as a second or even third kayak. I think it would be ideal for someone who already has (and wants to keep) a conventional British style sea kayak for touring but who also likes to paddle fast for fitness or fun or even enter an occasional race. The Valkyrie is a fantastic alternative for those who do not want to go to the expense of getting a composite fast sea kayak (or surfski). The fact that a kayak with the performance of the Valkyrie is available in tough RM construction is an incredible bonus to those that might not have the nature to care for a lightweight and fragile composite kayak. It might also tempt some traditional sea kayakers into down wind, open water, surfski type paddling who might not yet be ready to take the jump to a pure surfski. I think anyone has been paddling for some time and is feeling a bit jaded should consider the Valkyrie. Once you get it out in the waves and experience the acceleration and planing as you catch your first fast wave, your paddling will be rejuvenated. I

cannot overemphasise how much fun it is. The fun is pretty similar to the fun I get windsurfing, you don't actually need go anywhere to have windsurfing fun either.

# Specifications.

Length: 540cm, Width: 54cm, Internal cockpit length: 82cm, Internal cockpit width: 41cm, Weight (measured as tested): 26.5kg, Volume: 334l, Load range: 60-115kg. Price £1495, +£73 Forward mini hatch, +£130 Day hatch and bulkhead.

# Conflict of Interest.

With thanks to P&H and Sea Kayak Oban I have had free use of the demo Valkyrie from 13/6/2019 until 5/8/2019. I have had a long standing unpaid relationship with Pyranha/P&H in which I have access to new products/prototypes in exchange for feedback. I own several personal kayaks from Dagger, Pyranha, P&H, Rockpool, Think and Valley so I am not dependent on Pyranha/P&H to go paddling!