

# DESIGN

A canoe or kayak can only be as good as its design. And a design can only be as good as its designer. At Dagger, that's Steve Scarborough.

In the past decade, tremendous strides have been made in canoe/kayak design. Computer-assisted design, previously limited to use with yachts and other large boats, has become a valuable tool in designing paddle craft. New shapes, once thought to be impossible, have been created thanks to improved materials and manufacturing advances. And, as the technique of paddlers has improved, especially in whitewater, fundamental changes have been required in the shaping of their craft.

Dagger represents the leading edge in modern design. No Dagger is built on outdated design ideas. Nor is any model derived from chopping up shapes from other hulls to create a "new" boat. Each of our models is completely new, drafted by Steve Scarborough, who combines uncanny technical design wizardry with superb paddling skills that have won him numerous national championships.

*"A computer is a valuable tool for helping maximize the performance that can be obtained with a hull shape. Only by following a set of carefully derived formulae can one maximize the desired qualities. Speed and maneuverability, for example, are traits that most paddlers think are mutually exclusive. But that doesn't have to be! A boat doesn't have to be slow just because it is maneuverable. To get both qualities, the designer must understand how all these traits interrelate. It's really just a matter of understanding some basic laws of hydraulics and design. But maximum performance cannot be obtained by simply modifying existing designs."*

—Steve Scarborough

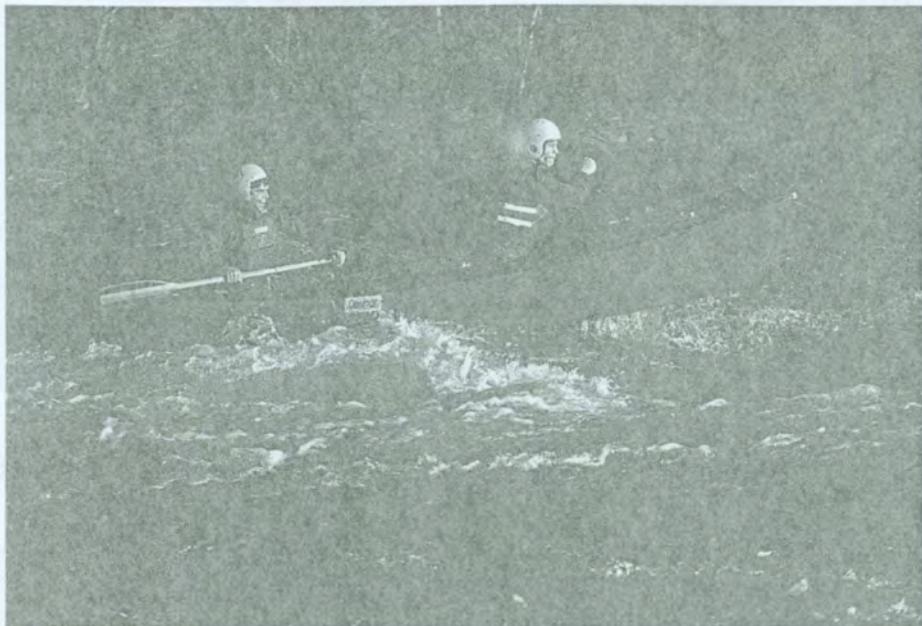


*"It's slow and expensive, but the woodstrip prototype method is still the only way to get a balanced design. An idea becomes a set of numbers, then a set of computer-derived shapes. I convert these to hull lines on paper, then to wooden forms covered with cedar strips. The woodstrip prototype is paddled, and only when the performance is just right is it put into production."*

—Steve Scarborough



# DIMENSION



Unlike other Royalex canoes that masquerade as whitewater craft, the Dimension was designed from the hull up for even the most difficult whitewater. The Dimension will spin into eddies where other tandem boats fear to venture. Deep flared ends all but guarantee dry running in large waves, over drops, and through holes. Full, rounded bilges give the Dimension excellent primary and secondary stability. Paddling positions mounted close to center accentuate dryness, stability, and maneuverability. Midsection tumblehome with a straight gunwale line encourages proper strokes and keeps the Dimension narrow enough for solo paddling. Tandem kneeling thwarts are standard. Cane seats are a no-charge option.

*"I've dreamed of this beast for twelve years! We've had a blast paddling the Dimension tandem on the Ocoee — without flotation!"*

*I won't guarantee that everybody can jump into one and do that the first time, but the boat is just so dry and so stable, especially in those sometimes unexpected and turbulent moments. And just wait 'til you plant one on the face of a big wave!" —Steve Scarborough*

## SPECIFICATIONS

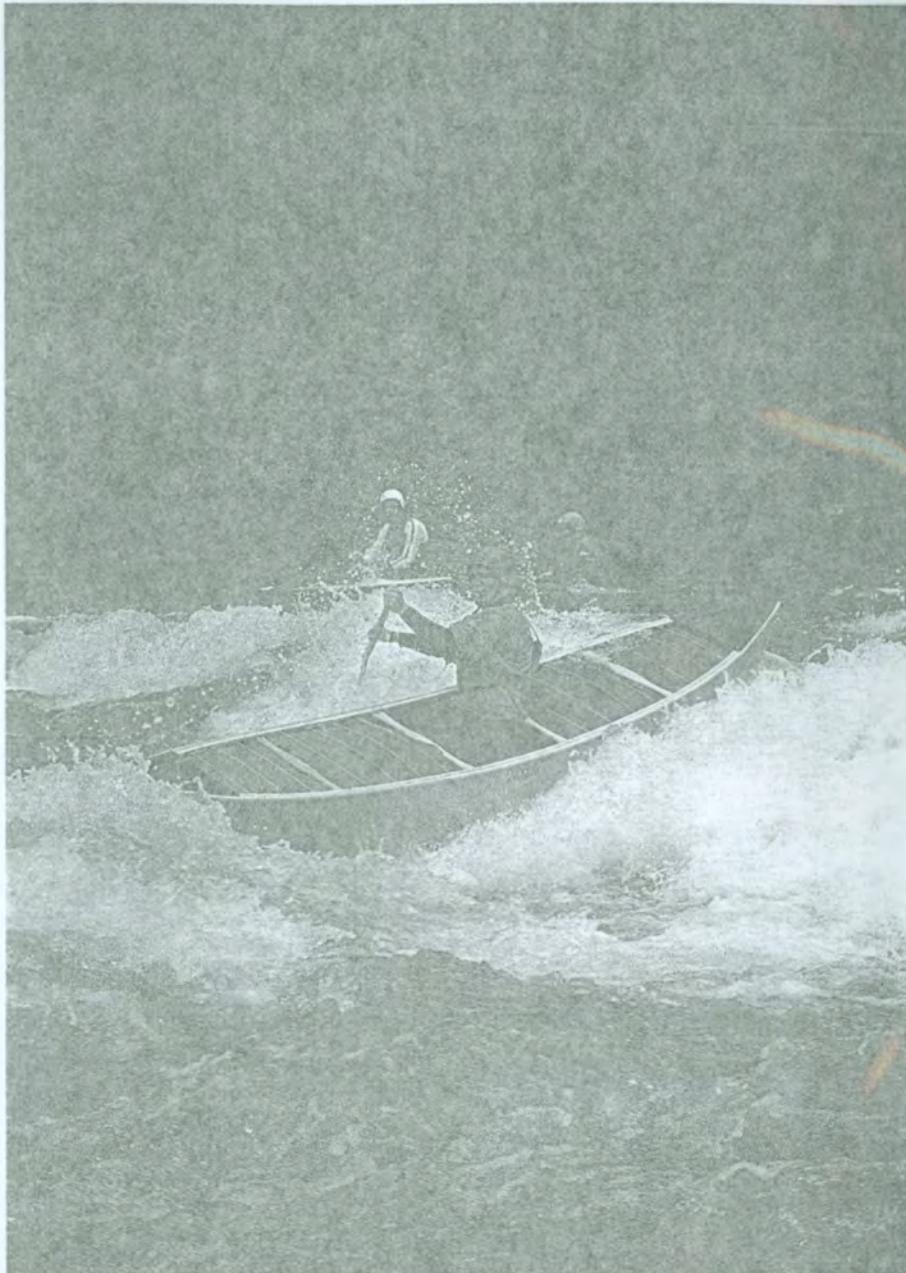
Length.....	16'
Maximum beam.....	34"
Beam @ 4" w/l.....	32.5"
Beam at gunwales.....	33"
Depth midsection.....	15"
Depth ends.....	17.5"
Rocker.....	5.5"
Approx. weight.....	67-75 lbs.
Shape/ends .....	rounded flare
Shape/midsection.....	tumblehome
Hull symmetry.....	symmetrical
6" freeboard cap.....	850 lbs.**

# ENCORE

Small and quick, the Encore is the high performance solo playboat for advanced paddlers! Combining true slalom turning ability with explosive upstream acceleration, this is absolutely the hottest Royalex solo canoe available. Great for tight, technical runs **and** for big, crashing whitewater. Exceptional secondary stability allows the paddler to concentrate on the next hot move. The center depth and deep flared ends give the Encore an uncommonly dry ride and volume enough for larger paddlers. Yet the Encore is narrow at the gunwales, allowing even smaller paddlers to take effective strokes, onside or offside. Center mounted kneeling thwart is standard.

*"The Encore has some really advanced design features. It's slightly asymmetrical for increased speed. Its modified shallow arch cross section makes for terrific dynamic stability — that is, once the boat is in motion, especially in turbulence, it's really solid. Above all, the Encore is a playboat. It's great surfing waves and side-surfing holes, and it's really simple to roll!!!"*

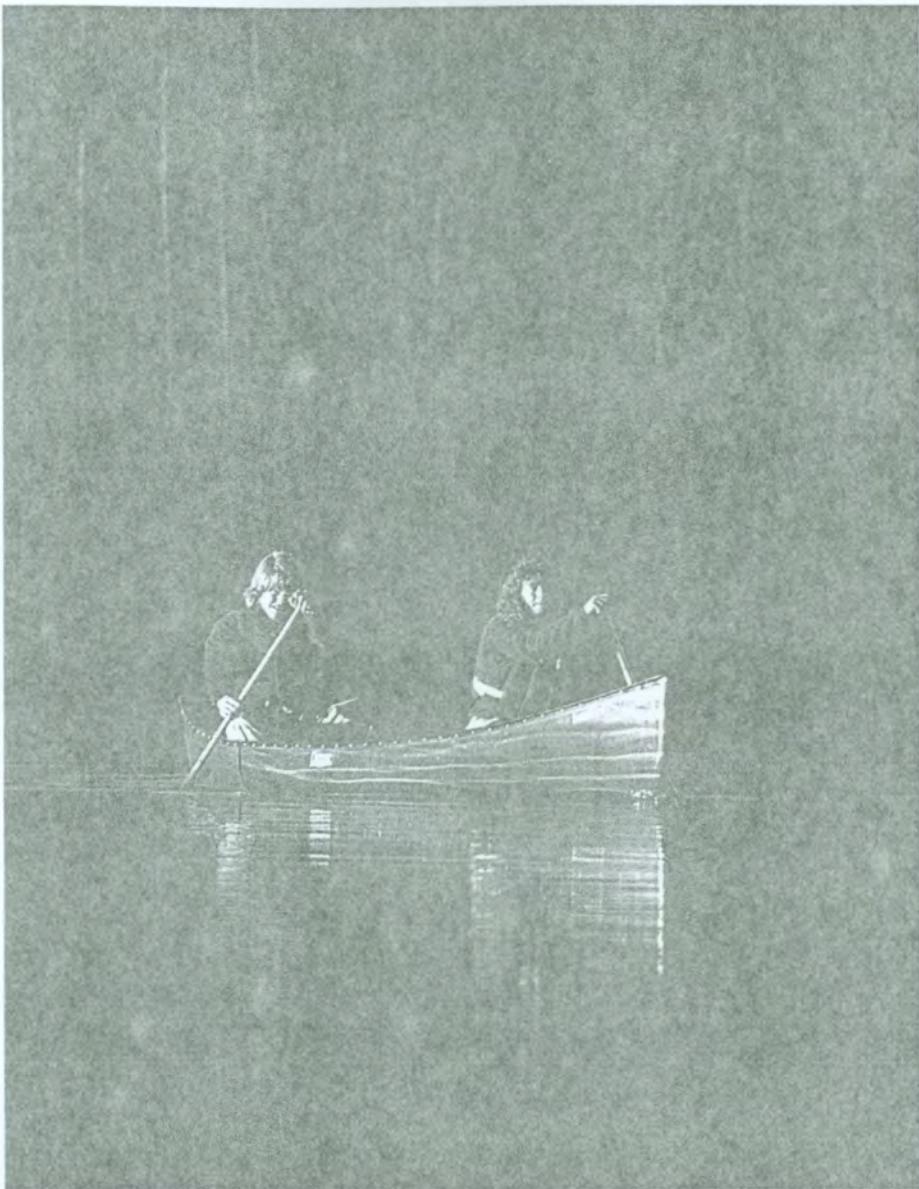
—Steve Scarborough



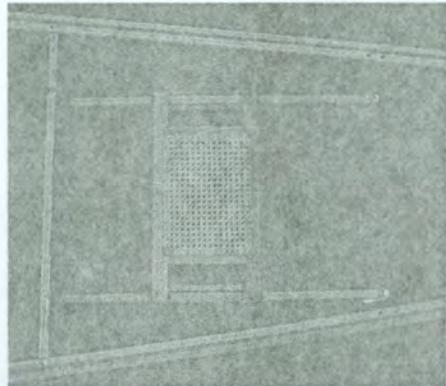
## SPECIFICATIONS

Length.....	13'2"
Maximum beam.....	30"
Beam @ 4" w/l.....	27.5" $\frac{7}{8}$
Beam at gunwales.....	28.5" $\frac{1}{2}$
Depth midsection.....	15" $\frac{3}{8}$
Depth ends.....	17" $\frac{4}{3}$
Rocker.....	5"
Approx. weight.....	50-56 lbs.
Shape/ends.....	rounded flare
Shape/midsection.....	tumblehome
Hull symmetry.....	asymmetrical
6" freeboard cap.....	550 lbs.**

# INTERLUDE



BILL BURGER



Cane seats are standard.  
Bow slider is optional.

We've broken all the rules with the Interlude! An efficient, fast flatwater boat that's dry and turns well enough to handle moderate whitewater! And made of Royalex. Sound impossible? Try one out! Our advanced design and manufacturing techniques result in a boat that is light, stiff, and fast. More arch in its cross-section than our other boats gives the Interlude outstanding speed, a little rocker helps it carve smooth, graceful turns, and its secondary stability is outstanding.

*"I've long wanted to design a good boat for our southern blackwater rivers. They require as much maneuvering as most whitewater, but you really want a boat that you can hammer in the straights. And you need to be able to carry a couple of days gear. Being able to build such a boat from Royalex is a real plus!"*

—Steve Scarborough

At the 1989 National Whitewater Open Canoe Championships, held on 14 miles of class II-III whitewater on Maine's Dead River, a Dagger Interlude was the fastest of 57 Royalex canoes in the competition! Second fastest—a Dagger Legend!

## SPECIFICATIONS

Length.....	16'6"
Maximum beam.....	34.5"
Beam @ 4" w/l.....	32"
Beam at gunwales.....	34.5"
Depth midsection.....	14"
Depth ends.....	17"16"
Rocker.....	2.5"/1.5"**
Approx. weight.....	62-68 lbs.
Shape/ends.....	slight flare
Shape/midsection.....	straight
Hull symmetry.....	asymmetrical
6" freeboard cap.....	850 lbs**

\* bow/stern

# CAPER

The standard of comparison in white-water solo canoes, the Caper is a true high performance craft with exceptional maneuverability, lightning quick acceleration, and the driest ride available in a solo boat. Easy to roll and great for surfing waves and holes, the Caper makes a great big-water playboat. Unlike wider solo boats, an unusually straight gunwale line amidship allows for proper and efficient paddle strokes. Excellent primary and secondary stability with good tracking make the Caper an easy boat to paddle, regardless of skill level.

Center mounted kneeling thwart is standard.

## CAPER T

Add two kneeling thwarts to a standard Caper and voila — the Caper T.

The Caper T is an ideal tandem boat for advanced (or smaller) paddlers. Paddling positions are mounted close together for maximum maneuverability and dryness. And there's no loss of its solo ability!

*"We've taken a hull with plenty of speed for blasting over to those tight technical spots in whitewater, and combined that with the spinning ability to make the cut the instant you get there. Sitting on a big wave in the Caper is a blast! This boat is ready to go anywhere at any instant."*

—Steve Scarborough

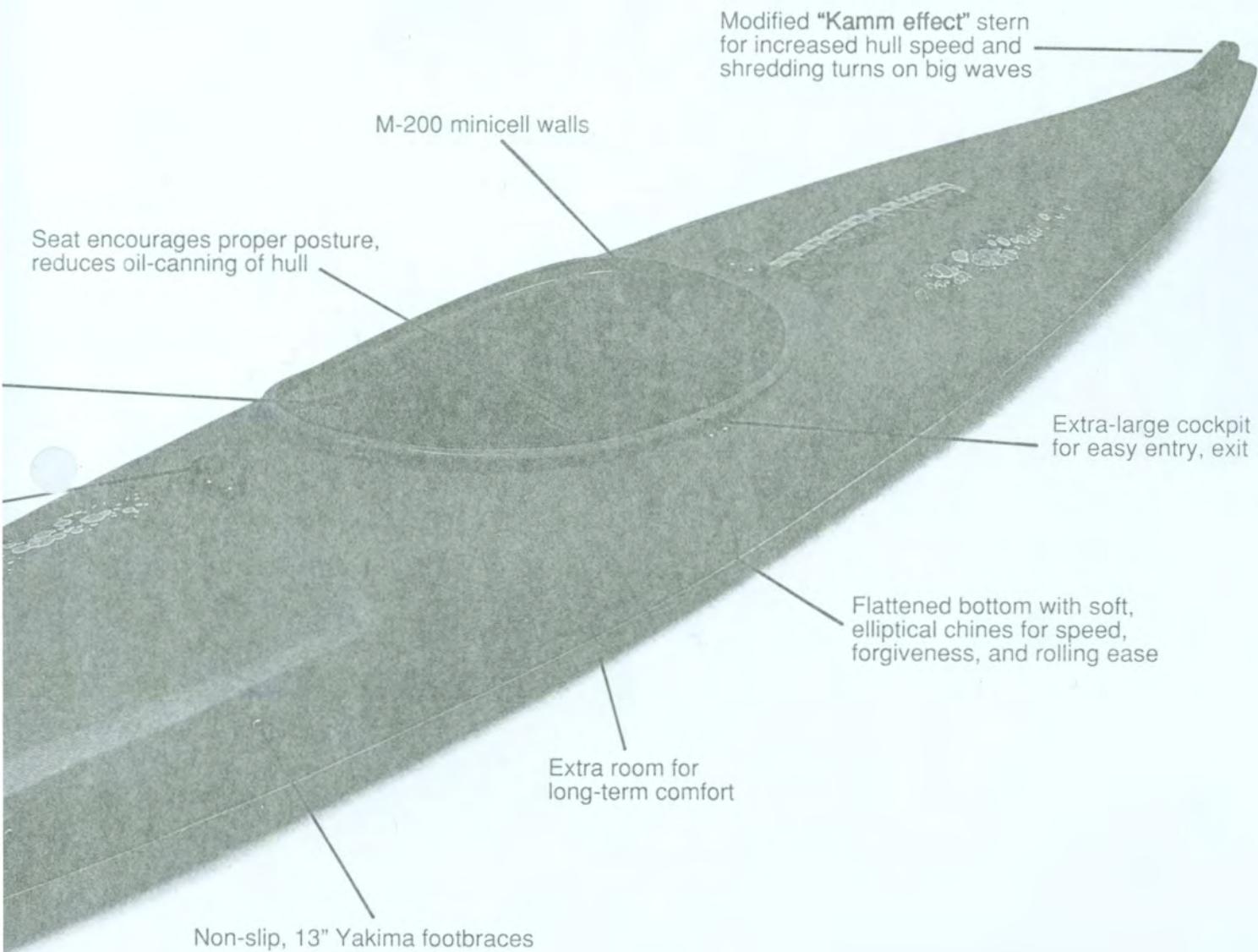
## SPECIFICATIONS

Length.....	14'4"
Maximum beam.....	31.5"
Beam @ 4" w/l.....	29"
Beam at gunwales.....	31.5"
Depth midsection.....	15.5"
Depth ends.....	17.5"
Rocker.....	5"
Approx. weight.....	57-63 lbs.
Shape/ends.....	rounded flare
Shape/midsection.....	straight
Hull symmetry.....	symmetrical
6" freeboard cap.....	800 lbs.**



BILL BURGER

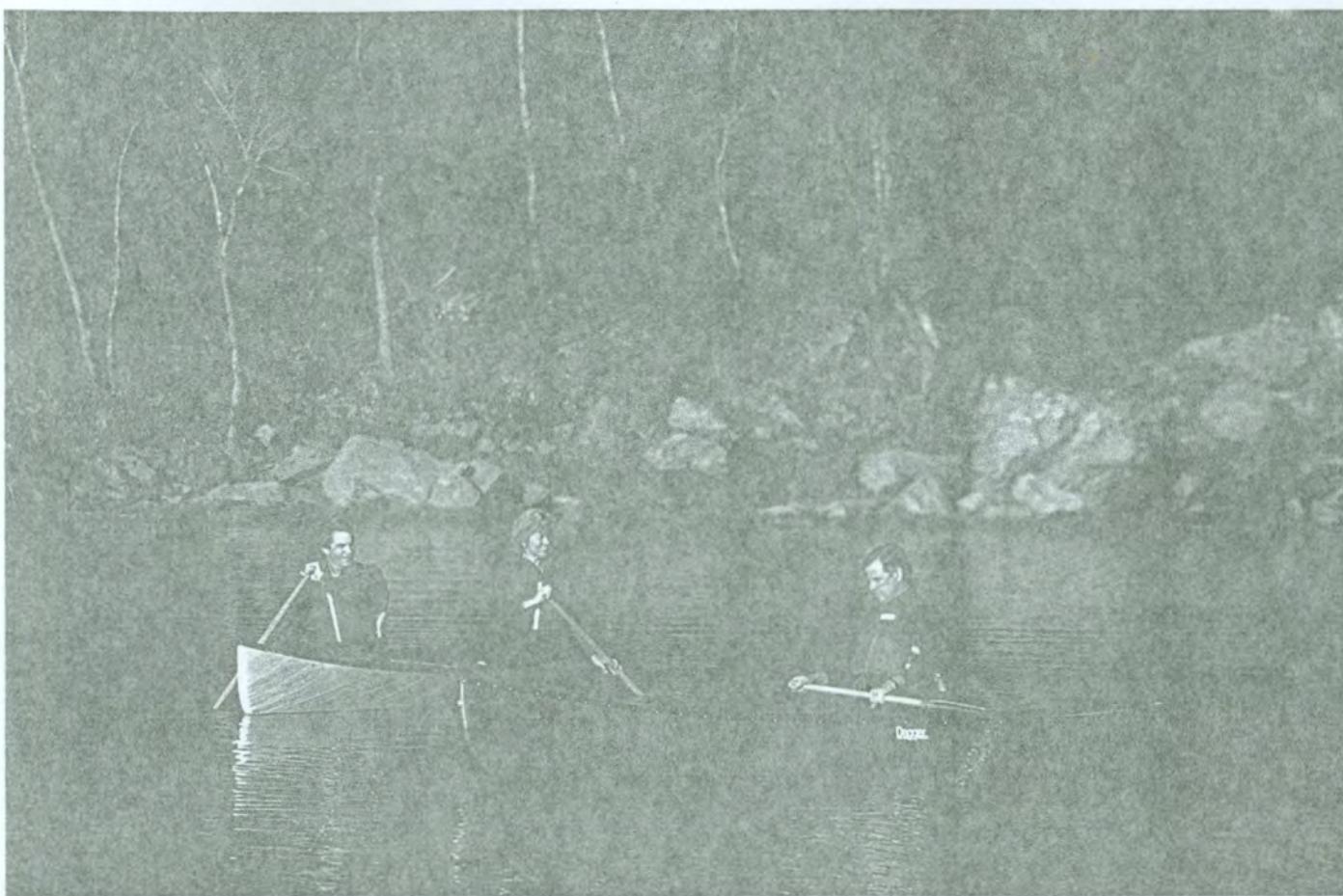
# THE PLAYBOAT FOR THE 90'S!



## SPECIFICATIONS

Length.....	11'3"
Width .....	23.5"
Weight .....	36 lbs.
Volume .....	73 gallons
Cockpit: Length.....	30.25"
Width .....	19.25"
Recommended paddler weight range...	100 - 210 lbs.

# REFLECTION



Our newest canoe! The Reflection is a mid-sized family and sport canoe for tandem or solo cruising. Novice paddlers appreciate the Reflection's excellent stability and tracking. Advanced canoeists like its ability to carve quick turns. The Reflection is designed not for top speed, but to maintain cruising speed with minimal effort. The Reflection is made from a specially formulated Royalex sheet that keeps weight low.

Cane seats are standard.

Center cane seat optional.

*"The classic look of the Reflection belies the efficient, asymmetrical lines under the water. We've designed in stability and tracking, without destroying its turning ability. And for times when you want to be a solo adventurer, even in some easy whitewater, we've given the Reflection tumblehome amidship for easy paddling. And the waterlines are plotted right up to the tumblehome, so even if the canoe is reasonably loaded with gear and provisions, it remains a fine paddling and seaworthy craft."* —Steve Scarborough

## SPECIFICATIONS

Length.....	15'4"
Maximum beam.....	34"
Beam @ 4" w/l.....	33"
Beam at gunwales.....	32"
Depth midsection.....	13.5"
Depth ends.....	16.5"
Rocker.....	1"
Approx. weight.....	56-60 lbs.
Shape/ends.....	slight flare
Shape/midsection.....	tumblehome
Hull symmetry.....	asymmetrical
6" freeboard cap.....	800 lbs.**

# RESPONSE

Never before has such a high-level of performance and such a forgiving nature been offered in one kayak design. Rather than start with one of the currently "hot" playboats and simply trying to improve it, Steve Scarborough designed the Response from a "clean slate"—and the results are most impressive!

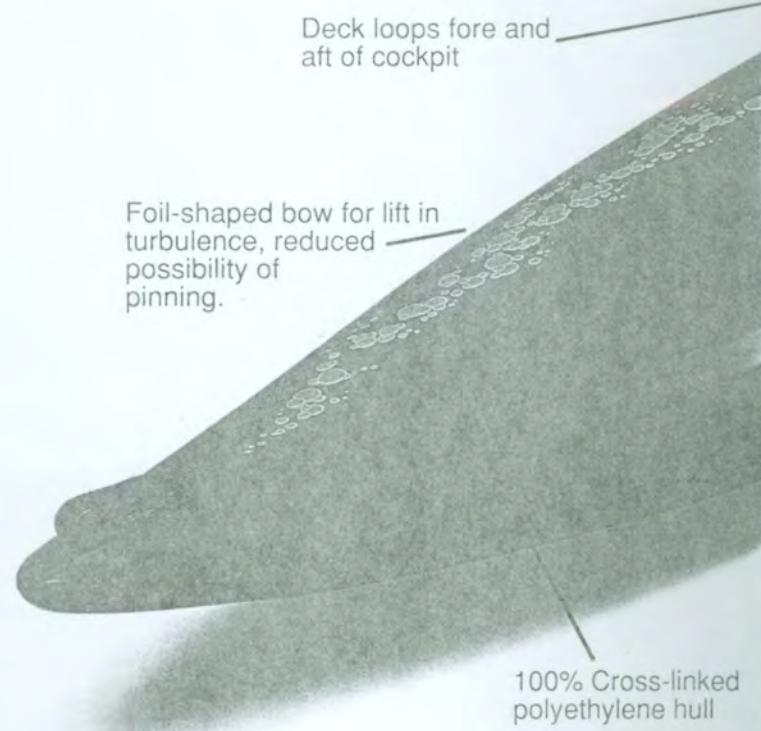
Our goals for the Response were quite lofty. We wanted both a crisp turning, swift paddling river runner, and a wave and hole shredding playboat. A boat with a high level of performance for advanced paddlers bored with their existing kayak, yet controllable and forgiving for novices. A challenging set of parameters to be sure! But one time out in the Response is convincing evidence that we've achieved, even exceeded, these goals.

Though almost futuristic in design, the construction of the Response recalls a level of quality becoming all too rare in today's kayak market. For example, the Response hull is made from pure cross-linked polyethylene, far superior in strength and abrasion resistance than the more common linear polyethylenes. We've chosen only the best materials, which we carefully process and test as we go. To the best of our knowledge, we're the only major kayak manufacturer who tests every kayak we build for impact strength. And we back up our boats with a two-year, non-prorated limited warranty.



Olympian, kayak instructor, and rodeo champion Chris Spelius in Response prototype.

Deep-cut thighbraces  
for ultimate control



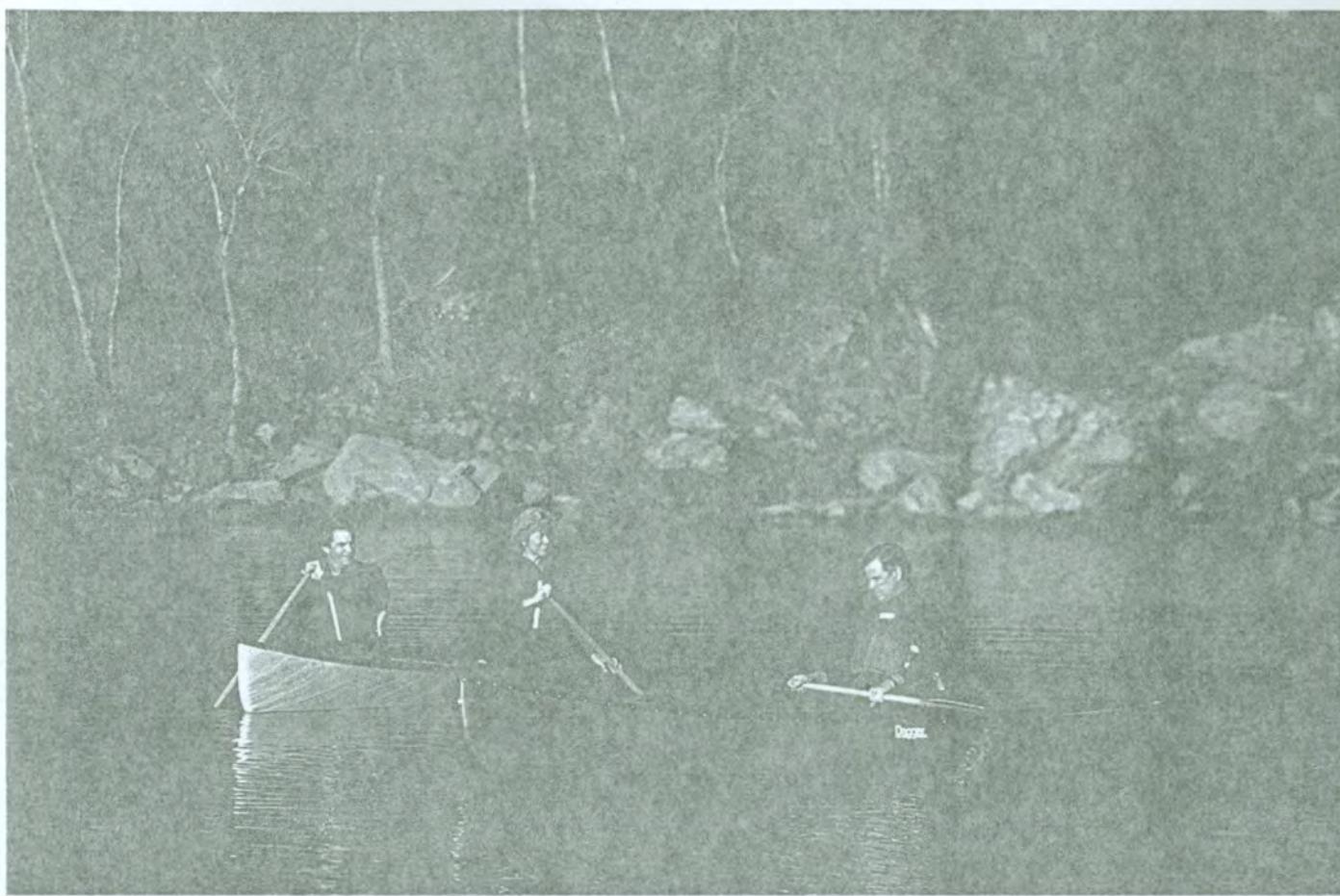
Foil-shaped bow for lift in turbulence, reduced possibility of pinning.

100% Cross-linked polyethylene hull

*"The Response is crisp and dynamic yet comfortable and forgiving. It's quick spinning and nimble in holes, yet has great speed—no sluggishness. This is a boat that I can put beginning students in, or take to a rodeo. You could have a new classic."*

—Chris Spelius

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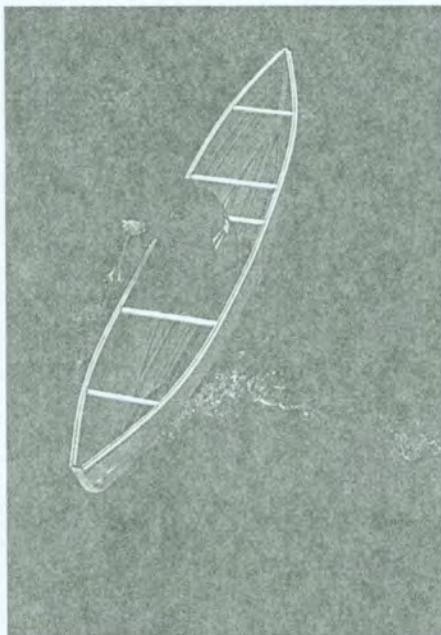
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Hull symmetry.....	asymmetrical
6" freeboard cap.....	800 lbs.**

The heart of any boat is its hull, and we're committed to using only the finest, most durable hull materials available. All Dagger canoes are made from Royalex, a multi-layer synthetic that is quite simply the strongest material currently available for the manufacture of canoes. Our Royalex is custom designed and manufactured to extremely stringent specifications, with extra reinforcement added to critical wear areas. Our kayak hulls are made from the finest 100% cross-linked polyethylene—a custom blend with strength unmatched by other kayaks. It's no wonder that our canoe and kayak hulls are the new industry standard!

Each Dagger is hand-built by skilled craftsmen. All component parts are carefully selected for function and fit. For example, wood-trimmed Dagger canoes feature gunwales of straight-grained northern white ash with matched inlaid black walnut deckplates, thoroughly treated with at least three coats of Dek Olje, a Scandinavian penetrating oil. Note the graphics on our kayaks, actually molded into the hull. A more difficult process, but worth it for beauty and durability unattainable with stick-on decals.

**WE ARE SO CONFIDENT IN OUR CANOES AND KAYAKS THAT ALL DAGGERS ARE COVERED BY OUR UNIQUE TWO-YEAR WARRANTY!**

You see, the staff at Dagger have many decades of experience in the manufacture of canoes and kayaks. In fact, before bringing you Dagger, we were the force behind some of the other top names in the industry. We know what we're doing, and we're so confident that our product is superior that we're offering the best warranty in the business. Paddle our boats. Compare. We're confident that you'll be impressed.



*"One theme is constant in our designs... putting as much performance capability into the boat as its intended purpose allows. For a boat to be truly enjoyable, it must not only perform well, but must be stable and forgiving. The modified shallow-arch hull cross section used in all Dagger canoes and kayaks is unmatched in primary and secondary stability, plus it achieves maximum performance. Other hull shapes are simply outdated for most applications."*

—Steve Scarborough

*"Many Daggers look a little unusual. Canoes with straight gunwale lines, lots of flare in the ends, and tumblehome midsections. Kayaks that carry their width well towards the ends. These features each have a function. Some even make the boat safer. And they encourage efficient paddling technique... not make it impossible"*

—Steve Scarborough