SKATE WITH BOTH ENDS

Ross Telfer talks with 1968 Australian Skate champions, Doug Jeffkins and Denis McEnearney, and runners-up Ben Piefke and Frank McBeath. In brief, how to design, build, rig and sail a successful Skate. Other classes could benefit.

DOUG JEFFKINS is in his 26th year of sailing. In that time he has sailed VJs, 16-foot Skiffs and Skates. At one stage he was racing a VJ on Saturday and a Skiff on Sunday. In 1946 he was NSW VJ Champion. He was club champion at Port Hunter (eight times in a VJ, twice in Skiffs), Marmong Point (VJ) and Speer's Point (Skate, three times).

Unpretentious, Doug is the essence of practicality. At the same time, he is probably the most influential innovator in Skate design at the present time. He designed and built the first four placegetters in the recent Australian championships. The interesting point is that his designs ranged from the bluff nosed *Fury* and *Bitta* (first and second) to the more conventional *Zot* (Kev Phillips, Gosford — third) and the more veed *Echo* (Warwick Wood, Concord-Ryde — fourth).

Denis McEnearney and Frank McBeath were outstanding for'ard hands in the championship series, so they supplied information on spinnaker handling and crewing for this article.

Ben Piefke used to sail with Doug, and on many of the aspects of design or construction made no comment other than to acknowledge Doug's

Piefke and McBeath agreed that crew-work is of utmost importance in the quest for success. An idea of the "three-way brace and all-round tack" spinnaker system can be gauged from this photograph. When it blows hard, jib is left to flap while crew keeps boat driving under main and spinnaker. These big-bottomed boats really get up and go. More vee for rough courses.

authority in this area. Ben took all before him in NSW prior to the Australian title series, so I asked him to comment, as a highly successful Skate sailor, with Doug.

Long planky allow smaller crews the power to counterbalance the heavier. Jeffkins and McEnearney swing wide, using head and tail to best advantage. Like the man says, "Use Both Ends When Skating". And that advice stands you in any class, in any company. Brute force without brains never won a race.

THE SKATE HULL

Design?

"The plan hull is too fine. (Doug.) The boat is far too narrow and too sharp in the for'ard sections. The Skate is a planing hull; it is meant to sit on top of the water. Fine entry belongs with the heavier classes or keelbouts."

But what about slop and heavy waves as you work to windward?

"Sure, the Skate will bounce a bit if it's flat bottomed but if you run the boat off somewhat you can usually overcome it. There will be conditions in which my big, flat bottomed design should be modified. But when this is done the vee has to go under the mast, not up the front of the hull where it does no work. The big stem area really boosts downwind speed. The boat planes sooner, faster and easier. It is much more buoyant for'ard."

Ben came in here with the comment that Skates must be designed for the prevailing conditions. For the relatively flat waters of Lake Macquarie the big Skate is best. But Doug's snub-nosed *Totem* took a pounding last year in Melbourne. He pointed to Wood's *Echo* as probably being the best all-round hull Doug has designed and built.

Does this mean a new hull every season, with the design based on the probable conditions in which the Australian titles will be sailed?

"Yes, if you really want to win."

Spring of hull?

"Minimum allowable — there's still plenty of lift in the boat. The most successful boats are all built with minimum spring."

Will you retain the long cockpit (extended to give a spinnaker bin in front of the mast)?

"Yes. It may be slightly heavier, but it is effective for fast and secure spinnaker stowage."

Is the weight of the hull important?

"Yes, but I feel the present minimum of 100 lb should be increased to 110 lb. I've seen a few boats falling to bits because builders have attempted to keep them right to the minimum. Greater longevity is needed to benefit the class. When you consider that 70-75 lb of the boat's weight is in the plywood, there's not much going into framework. Light gear is most important, especially swinging planks. During the championship series I changed back from the nine-foot planks where I could. By using my shorter backed hand planks I saved 14-lb weight in the lighter breezes. It all helps."

How do you support the mast?

"The mast is stepped on the deck (or, in *Fury's* case, on the floor of the cockpit). I use stainless steel rod from the chainplates and stem to a floating support from which a vertical rod runs to the base of the step. The three-point suspension enables adjustment to be made as the boat ages. The rods are threaded where they emerge from the hull."

Any other comments on the plan design?

"The centreboard case is far too narrow at ¾ in. I use 1½ in. cases in my boats. This allows me to use a 1¼ in. board."

Ben agreed on this. He considered that the stiffness of the fin was vital to windward success.

RIGGING THE SKATE

Do you get the mast step position from the plan?

"No. The plans were drawn up for the small jib and spinnaker. Shift the mast step back about 1¼ in. from the plan position. I find around 4 ft 9½ in. from the stem is a good starting point for mast position."

Do you adjust the mast position according to weather?

"No. Once I have the mast step position for a balanced rig I do not change it. The same applies to rake. I use about 6 in. aft rake at the head of the mast, but as the mast also flexes this increases considerably at times. But that rake is used all the time."

How is the mast stayed?

"I use single shrouds on each side with a fixed spreader."

How is the jib set?

"I raise the tack 4 in. off the deck at the stem to enable the jib to work more effectively with the mainsail. It also cuts out a lot of turbulence and interference. As the leech of the jib is much longer than the foot I sheet the jib so that the angle of the lead is above the mitre line. From the deck my jib halyard block on the mast is around 13 ft 2 in. up — but I feel a trial and error system must be used."

Spinnaker halyard block height?

"Depends on the cut of the spinnaker. I recently had to alter mine by seven inches when I bought a new kite. The pole, however, should be no longer than 10 feet. If the pole is longer, the spinnaker creates too much lee helm on a shy run. There is also difficulty with the outhaul tension as the angle from the stem to the end of the pole becomes more acute."

Cut of headsails?

"Both jib and spinnaker have to be flat." Ben added that he did not know of any Lake Skater who specified cuts of sails when ordering. All the top boats had sails designed by sailmakers who know their job. Just order your sails, detailing weight of crew and spar design.

The mainsail?

"I like a semi-full main with the drive uniformly curved. My boom flexes to a maximum of six inches. Ben and I are still experimenting with mast flex."

Battens?

"I use hard white pine in preference to cane because I prefer the pine's rigidity and consistency."

Do you vary the height of the mainsail on the mast?

"No."

Why no lateral adjustment for your centralboard?

"Simplicity. We've enough to do without having to fiddle with the sheet. There would be extra weight there, too."

Centreboard and rudder?

"I use a dagger fin and rudder with a fixed stock and tiller. Ben uses a case stock with an adjustable fin-type rudder blade. They are simply rectangular in shape."

(I boggled at this. What with Curry's experiments plus the recent SEACRAFT article on profiles I felt I had to probe deeper.) "But why don't you shape the profile?" Doug fixed me with his steady gaze — "What use are all those curves?" I licked my pencil, turned over the page, and pressed on.

SAILING THE SKATE

One trait of top crews which emerged from this discussion was the readiness of both skipper and crew the course. Doug and Denis, Ben and Frank, said that they talked from start to finish. As Denis is in his first season with Doug, the decisions came from the stern but Ben and Frank each made decisions within their own span of control.

Doug said that his philosophy is to sail the breeze — rather than his rivals, even when he is well in the lead. Only sail a knock if it is tactically critical.

Doug's sailing technique is characterised by two methods:

1. Sail a straight line on the runs. He has often picked up places by keeping clear breeze to leeward.

2. Sail close to the breeze. Ben sails his boat more freely as a general rule but added that both techniques have to be modified to suit conditions.

What's your championship starting technique?

"If necessary I'll start late to obtain clear breeze. Or else I'll take a quick leg to windward. In general, I think the middle of the line offers most opportunities."

Windward techniques?

"In light to medium I work the breeze, taking lifts and tacking on knocks. As the breeze freshens I think it is more important to keep the boat moving, even to the extent of sailing through minor knocks."

Any angle of heel?

"Hold it as flat as possible, this gives the best underwater shape and most effective sailing. In very light weather we heel it slightly."

Going about procedure?

"We move simultaneously, pushing our planks through as we go."

With a grin Doug added that a Skate sailor requires three hands at the best of times. To date Doug has used only a nine-foot for'ard plank with a short one for himself (to enable him to maintain contact with the gunwale). On *Bizzo*, Frank and Ben use two nine-footers occasionally. Doug and Denis weigh 10 stone six, 9 stone respectively. Frank weighs 8½ stone and Ben 10½.

Ideal crew weight?

"For'ard hands of around nine stone seem best for a skipper of my weight (10 stone). A lighter crew would have difficulties. For Lake Macquarie or Sydney I'd advocate a crew of 19 to 21 stone total weight.

"For next year's Australian Championship series at Nedlands we'll need another stone in weight plus better condition. I may build a 10-foot plank for Denis."

A new hull for next year?

"Yes — very similar to the present one but with a little more vee under the mast."

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Techniques off the breeze?

"On the shy, keep the pole as square as possible, and move crew weight aft. In heavy gusts ease both the spinnaker and the mainsail. If it's really blowing we leave the jib right off."

Why not roller reefing?

"I don't like the effect on jib shape. I prefer horizontal jib battens, too."

On the square run?

"As soon as we round the mark I sit on the leeward side. This gives Denis a stable hull on which to operate, it also enables me to adjust the brace as the pole is set."

At this stage it seemed appropriate to let the for'ard hands have their say. In essence, their techniques in raising, lowering and jibing the spinnaker were similar. This is mainly because both used similar rigs. The pole is fitted with double wire braces with rope leads through blocks on the gunwale to cam cleats. *Bliss* has the brace through another block on the cockpit floor to facilitate adjustment. Jeffkits has his cam cleats with welded stainless handles to enable quick adjustment.

There is a wire halyard, and a rope kicker or outhaul. There are double tailropes permanently through blocks on the gunwale.

Both woolled up the spinnakers before the start.

RAISING THE SPINNAKER

The spinnaker is rigged on shore: tack to end of pole (clipped or swivel shackled); head to halyard; pole to outhaul. The pole is pulled down to the stem by the outhaul and the spinnaker tacked in a narrow line around the outhaul back to the mast. The pole lies across the deck with the end either in the water or held up by a loop of cord to the chainplate or a piece of vertical hose on the gunwale.

To raise the spinnaker, haul the windward uphaul which raises the spinnaker in the lee of the jib. Partially release the outhaul, place the pole on the mast, adjust the brace, tighten outhaul and pull on tailrope.

Frank McBeath pre-sets *Bliss's* outhaul and brace (they are both marked for various settings). The spinnaker is raised, then Frank angles the pole until he gets the jaws on the mast (usually up near the crosstrees!) then he forces it down into place. No job for a weakling, but it saves seconds.

LOWERING THE SPINNAKER

Brace off, outhaul in, pole off, spinnaker down. Typical of the efficiency of top crews, Denis told me he saved time by adjusting his method to his movement. He pulls the outhaul in and takes the pole off the mast. As he moves past the mast to do so he grabs the halyard. Keeping this in one hand he throws the pole over to the other side ready for the next shy, then moves back to his place on deck, pulling the spinnaker back with him and lowering it simultaneously.

THE JIBE

Release brace (and in *Bliss's* case, pre-set outhaul and opposite brace) and pass over pole, keeping the end above the stem line so that the lee brace is not swept under the boat. Place pole on mast, set opposite brace.

To conclude, what is your estimate of the Skate as a sailing class?

"The class has been fortunate to have a man of the calibre of Fred Walpole as national president. Secondly, the tone of competitors makes it a good racing class.

"So far as the Skate plan is concerned, I feel that the sail plan is adequate. The hull design, however, lacks imagination.

Doug felt that classes with wide tolerance for innovation, such as the 16-foot Skiff, were showing permanent appeal. He pointed to the strength of Skiff fleets at the moment and the cyclic development of hull design. ●