

Aan: Bond Corp - Australië:

16 96+
45143a nsmb nl
61+? 7120759+
bondcor aa20759
45143a nsmb nl

AS^v
2RD

1981-07-06

attn.: mr. ben lexcen

subject: results of tests of configuration five relative to the
base configuration
our ref.: p 44559

further to our telephone conversation on saturday july 4, 1981,
i herewith confirm the following, based on a quick preliminary
analysis.

1. the upright resistance is about 4 percent higher in the low
speed range (up to about 5 knots), then decreases until at
about 9 knots. the resistance is the same. at higher boat speeds
the resistance is 1 to 2 percent less. this implies that the
running and reaching performance has decreased about 0.1 knot
at hull speeds below 3 knots.
2. the vmg performance is about the same at about vtw=7knots.
at vtw=14 knots the vmg is 0.2 knots higher, while at vtw=
20knots the vmg is about 0.3 knots higher.
3. the turning force is about 25 o/o less over entire speed range
(at trimtab angle of 15 degrees and rudder angles of 30 degrees).
4. the centre of the side force has moved further aft about
0.75m (not 2m as indicated on the phone).

in my view the above performance, with respect to running and
reaching and with respect to manoeuvring, is not yet sufficient. i
suggest the following modifications to final design

- a reduction in wetted surface of about 5 percent is still re-
quired. since the keel configuration should now remain unaltered,
i suggest to attempt to move rudder stock forward about 0.30m,
thereby achieving a reduction in displacement of 1.5m³ and a
reduction in wetted surface of about 3 percent.
- attempt to remove (or significantly decrease) the bustle, thereby
an improvement in side force as well as a reduction in wetted
surface of about 3 percent. also the turning ability will then
improve. we have prepared a drawing for such a modification which
we will send to you as soon as possible. in my view it is
imperative, however, to test this modification first. the costs of
a further series of tests with the bustle removed amounts to
about nfl. 35,000.-- and can be carried out in 3 weeks. calculation
at nlr will cost about nfl. 25,000.-- and will take more than 4
weeks because jooop slooff has gone on holidays.

best regards,
peter van oossanen

45143a nsmb nl
bondcor aa20759