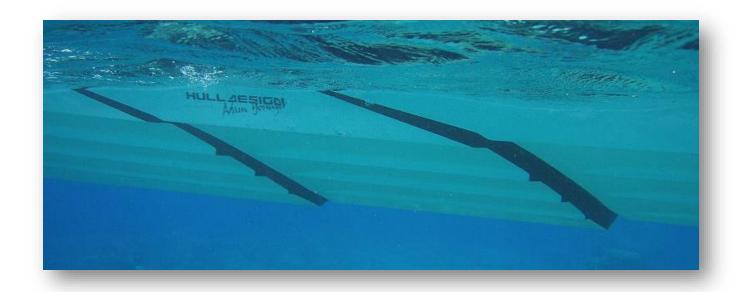


1989, since then:

- over 100 stepped designs
- Over 1000 boats launched



# "Lessons learnt with Stepped hulls"



A Journey:
Race to leisure to commercial
Savitsky to CFD
Numbers and figures
Data
Constant development



## Adventures – in stepped hulls

an unusual and exciting or daring experience

By definition: -----

a risky undertaking of unknown outcome. an exciting or unexpected event or course of events.







C18 – a race and test boat







### **Design variables:**

the design process

#### "AIMS & OBJECTIVES"

#### Level 1

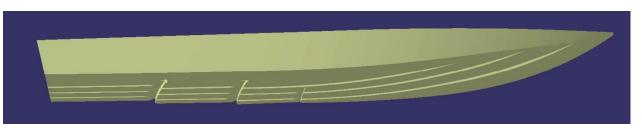
- Step numbers
- Step lengths
- Heights
- Levels / Angles of attack
- Tapers
- USES!!

#### Level 2

- Deadrises
- Spray rails
- Chines
- Spray rails
- Vents
- Bow profile
- WEIGHTS!!

#### Level 3

- Speeds
- Power
- Tankage
- Range
- Load
- VALIDATION



#### **DESIGN FOR PURPOSE**

Always compromises – be it sea conditions, uses, loads or many other variables

Stepped hulls- not just the obvious —also allow you to change other aspects of a design





#### **VALIDATION**

Need to be proven-based on more than theory:

- Proven prior boats
- Testing
- Development boats
- CFD



#### THE FUTURE:

- Always to keep moving forwards
- Change for reason –not because we can
- Developments of uses and requirements
- New Engines
- New Build processes
- New fittings
- Finishes
- More development, testing, validation
- Multihulls or advanced monohulls
- Foils or foil assistance
- Greater control of systems & operation
- Variable geometry
- INTEGRATION

Takes us back to

'ADVENTURES IN STEPPED HULLS'





