



ABEKING & RASMUSSEN



SWATH@A&R[©]

Reliable platform for
technologies and
sensors

Carsten-S. Wibel
Lemwerder 23-03-2022



Abeking & Rasmussen: today

more than 144 years
of excellence

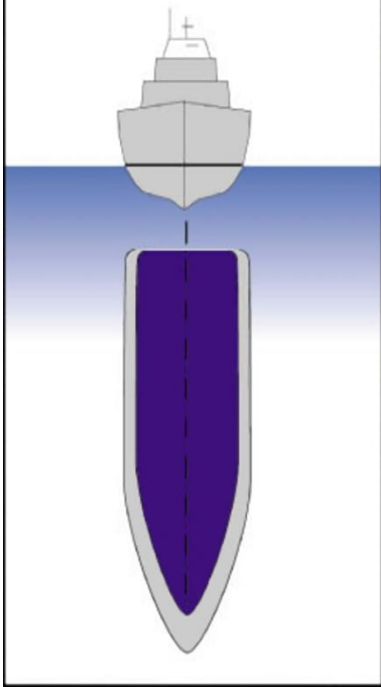
- founded 1907
- family owned
- abt. 490 employees
incl. 40 apprentices &
trainees
- more than 6.500
vessels delivered



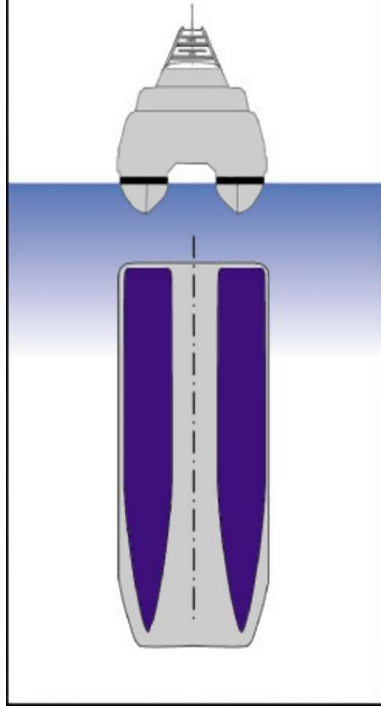


SWATH: ???

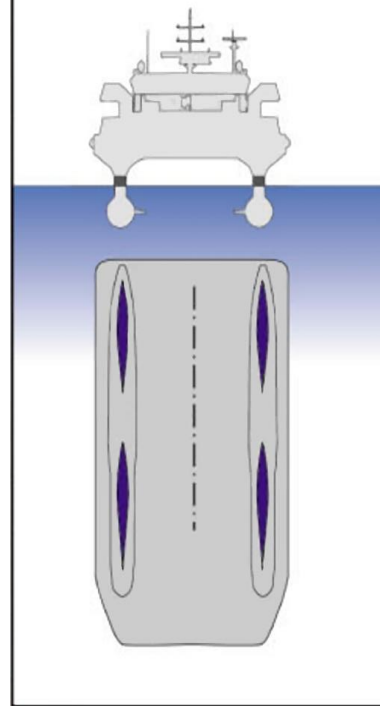
MONOHULL



CATAMARAN



SWATH



S mall
W aterplane
A rea
T win
H ull



SWATH@A&R[©]: advantages

Reducing waterplane areas

= reducing vessel's movements

= improving vessel's capabilities

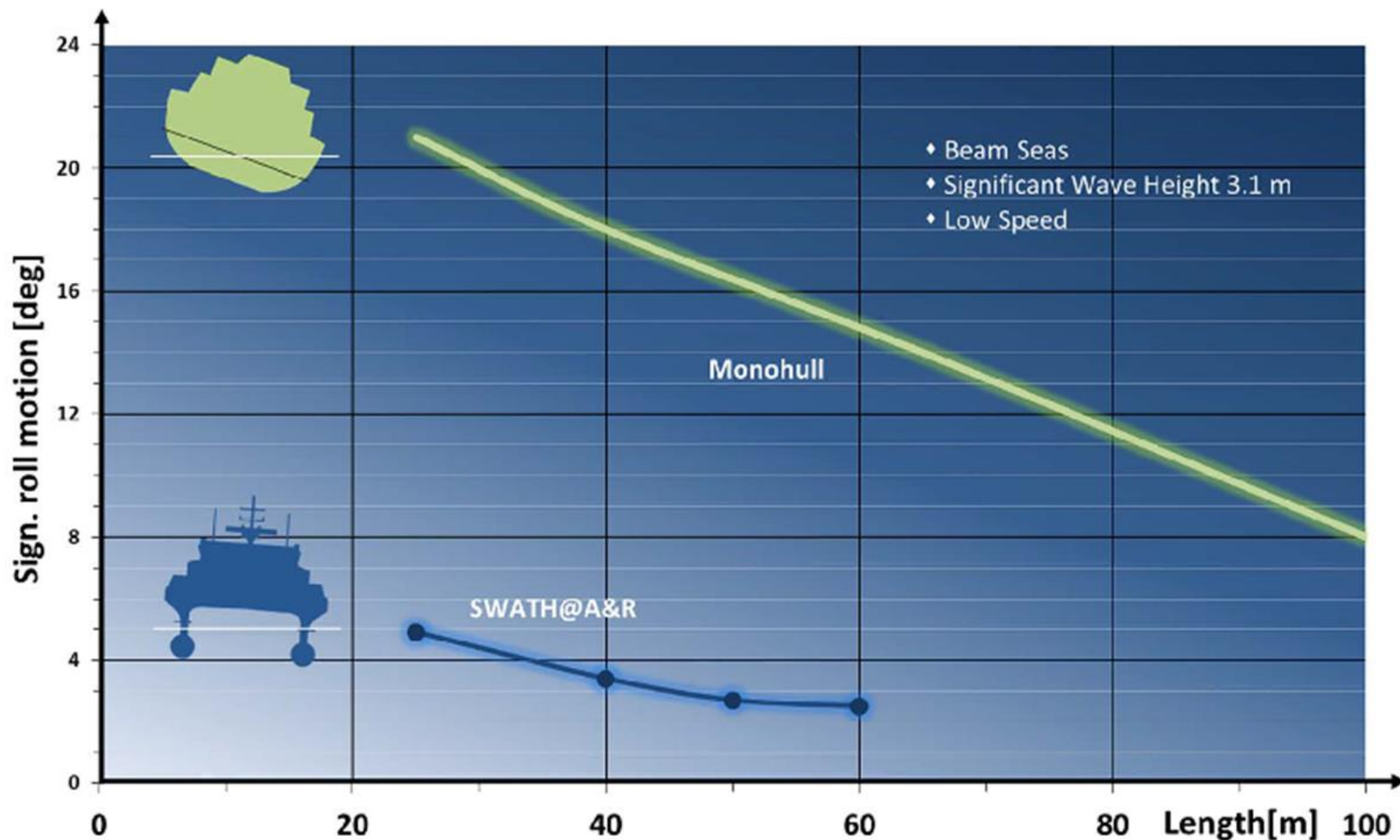
+ comfort for crew, personal and equipment

+ utilisation of technology

+ reliability of sensors & results



SWATH@A&R[©]: comfort





SWATH@A&R[©]: comfort

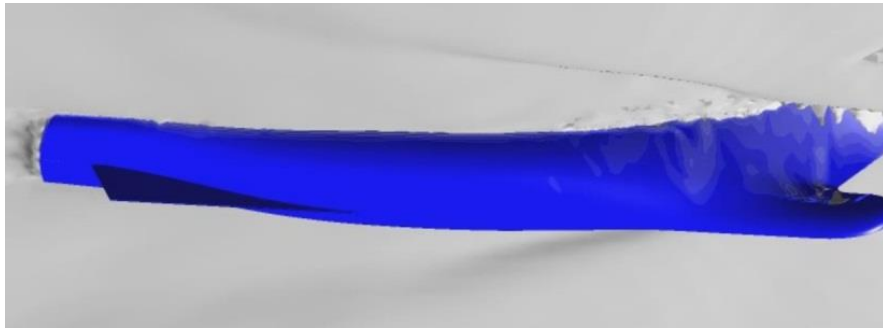


<https://www.youtube.com/watch?v=w2gmOBk7RPU>

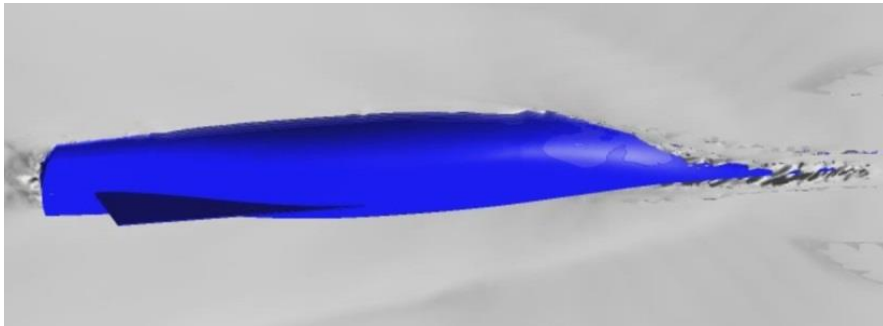


SWATH@A&R[©]: utilisation / reliability

Monohull 34 m
displacement 240 t

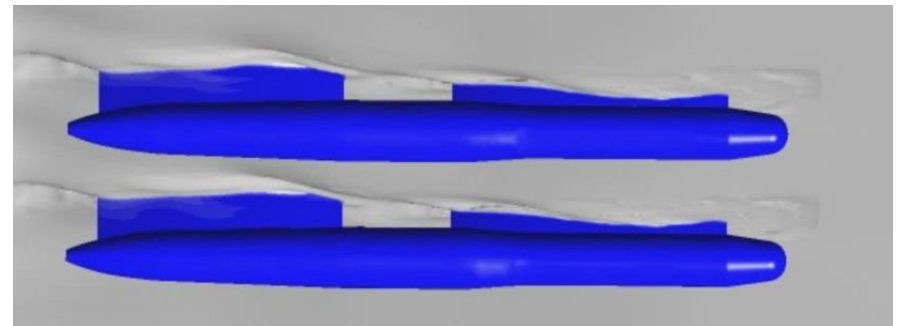
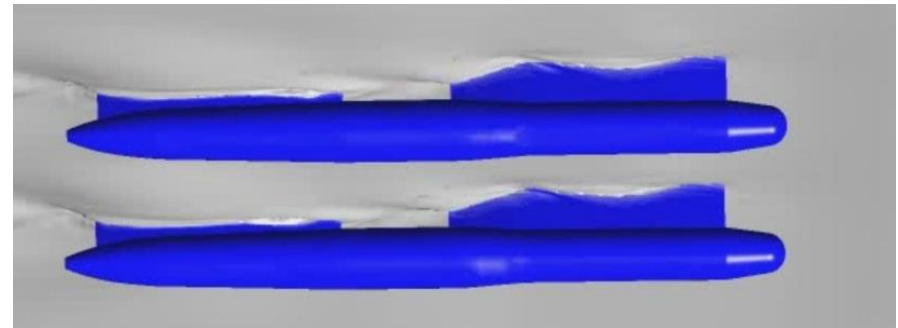


Wave crest at bow



Wave trough at bow

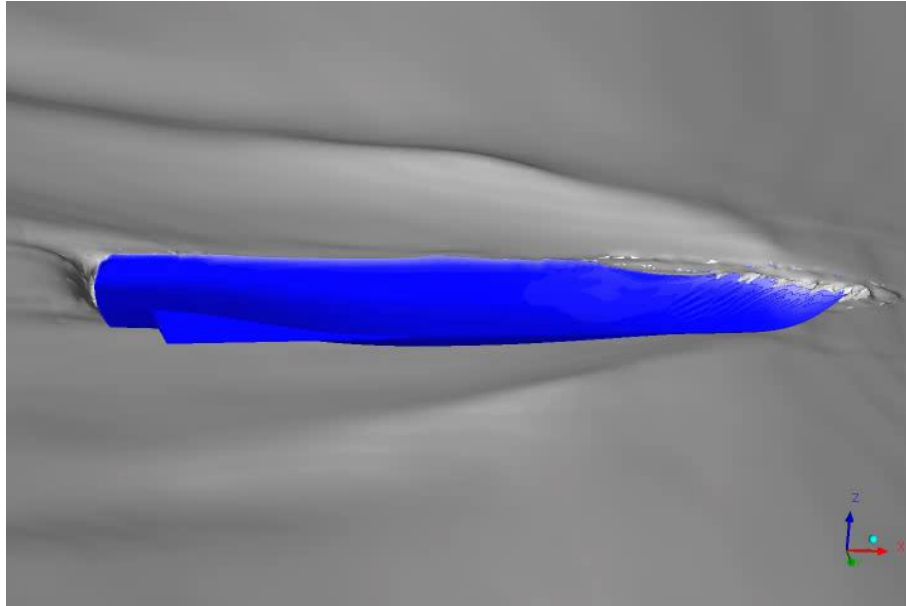
SWATH@A&R 25 m
displacement 132 t



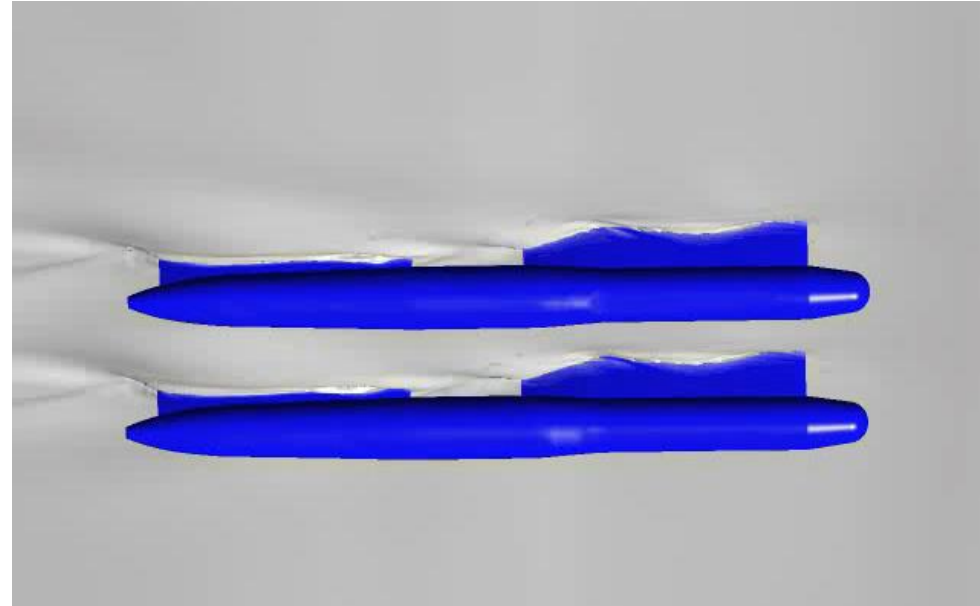
Wave height: 1.5 m | Wave length 39 m | Wave period 5 s



SWATH@A&R[©]: utilisation / reliability



Monohull 34 m
displacement 240 t



SWATH@A&R 25 m
displacement 132 t

Wave height: 1.5 m | Wave length 39 m | Wave period 5 s



SWATH@A&R[©]: M/V **JACOB PREI**

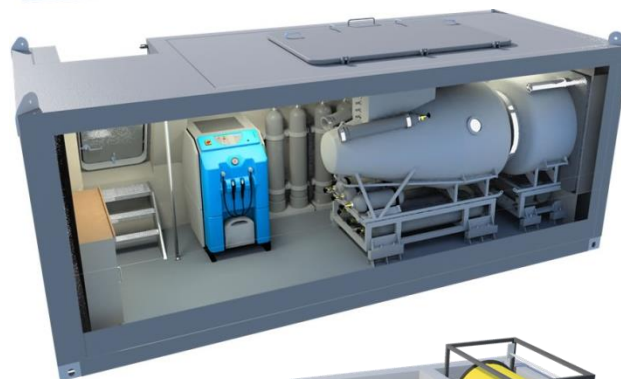


owner:	Estonian Maritime Administration
tasks:	hydrographic survey
length:	28.8 m
beam:	13.0 m
draught:	2.7 m
displ.:	140 t
speed:	abt. 20 kts
range:	1000 nm @ 12 kts
endurance:	1 week
crew:	up to 8
delivered:	2012

<https://www.abeking.com/schiff/jakob-prei/#jakob-prei-gallery-1>



SWATH@A&R[©]: mission modules





SWATH@A&R: message from client

Gesendet: Mittwoch, 15. August 2012 11:48

An: ABEKING & RASMUSSEN

Betreff: RE: Jakob Prei

Dear all

[...] Please find below comments from MV Jakob Prei, they have been working at sea now for several weeks:

Two weeks ago the **waves were constantly 2 m and above**, but it did not interfere with the work of the vessel – **the data collected are excellent** and we actually surveyed 200 square kilometres in one week, which is our record. Obviously, this was to a large extent made possible by the fact that we could use the sonar RESON 7125. If we had had to use MV Sektori or MV EVA-308 [*i.e. old HSV*] , we would have been waiting for the weather to improve the whole week and would not have been able to complete the work.

Earlier we tested the equipment in stormy weather on Tallinn Bay: wave height up to 4 m (at times above), and even that did not interfere with the survey activities. [...]

Conclusion: **regardless of the weather** (except in very bad storms when we do not go out, but waves up to 4 m are no hindrance) **we can carry out survey** activities at speeds of up to 12 knots (in such circumstances only one engine is used and fuel consumption is low) [...]

In no weather have we experienced rolling more than 5-6 degrees (waves up to 4 m), including in beam sea. [...]

Also, there were no problems at very low speeds – the side scan sonar cannot be used when the speed is above 5 knots.

Sincerely yours

Dan Heering, Head of Foreign Relations and Information Department, Estonian Maritime Administration



SWATH@A&R[©]: our family

up to now ...

60 m-SWATH@A&R	3
50 m-SWATH@A&R	1
40 m-SWATH@A&R	1
25 m-SWATH@A&R	19
19 m-SWASH@A&R*	1

25

9 m-SWATH@A&R under construction



*Single Hull



SWATH@A&R[©]: 9 m vessel

length: 8.9 m
beam: 4.3 m
weight: abt. 5,000 kg
payload: abt. 1,000 kg
draught: 0.89 m
scheduled: QIV/2022



designated operation modes:

- manned
- unmanned / remote
- autonomous



Kontakt

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