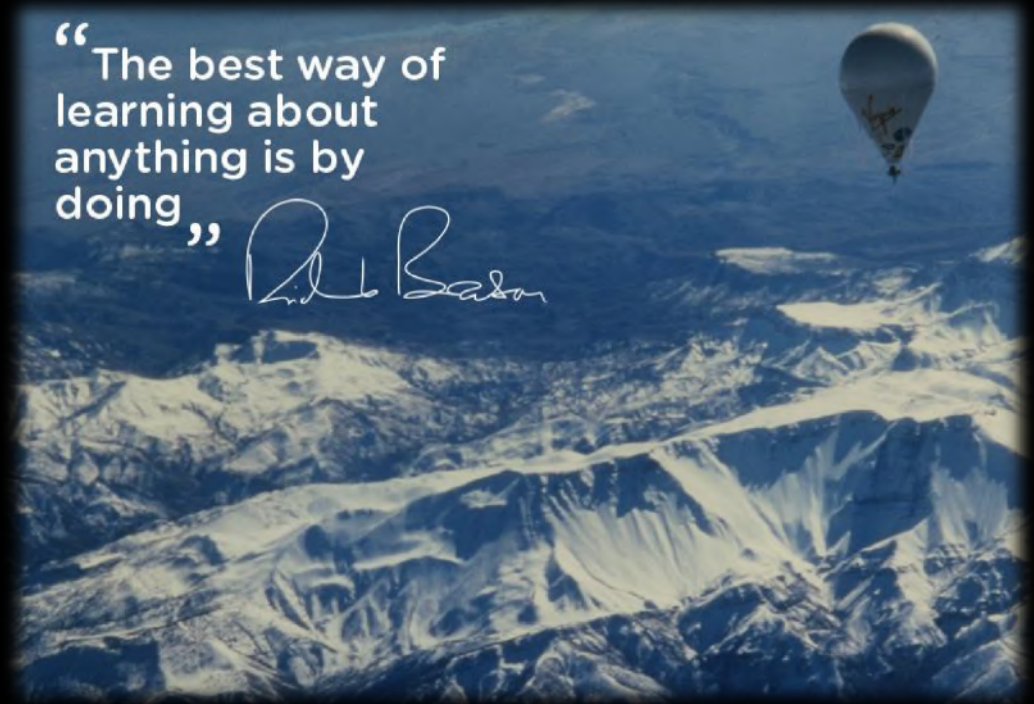


Crew Training for Survivability and Operational Success

Andreas Isaksson
Colour Sergeant (Retd)
Swedish Amphibious Forces



SPECTRE
MARINE

Training

The right training - what is that?

How close to reality should we train?



SPECTRE
MARINE

How close to reality should we train?

What and how should we then practice?

Dead reckoning vs. using the full system?

When reality is the navigator is doing nothing and the driver is mostly looking at the GPS?



SPECTRE
MARINE

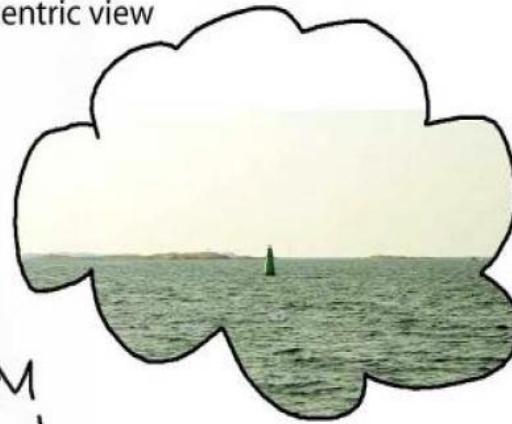
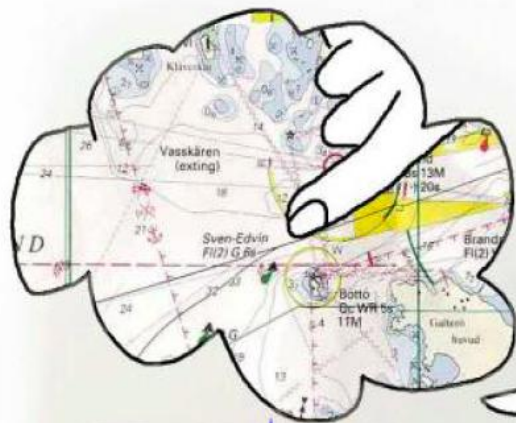
Structure of practice?

Accidents on the way home from training exercises

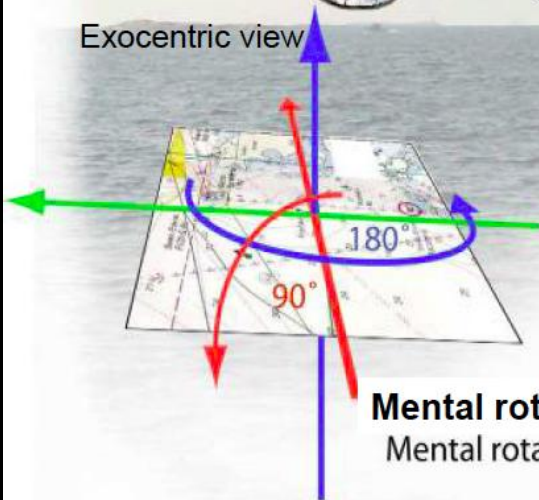


Exocentric view

Egocentric view



Exocentric view

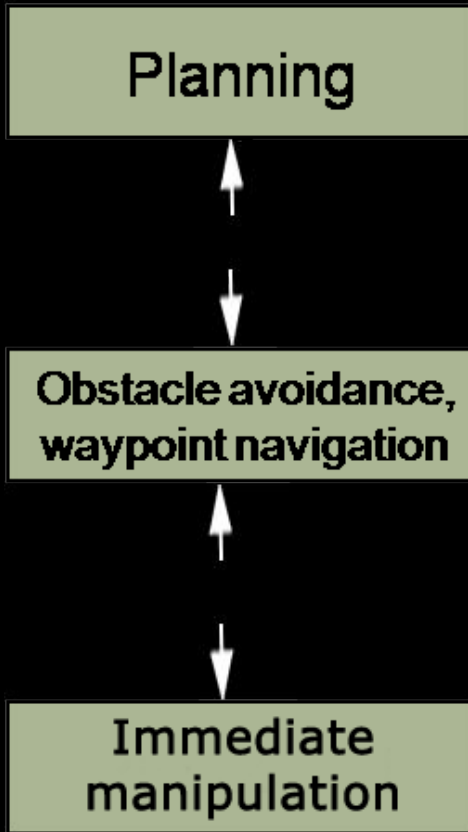


Mental rotations
Mental rotations



SPECTRE
MARINE

Slow speed



Low speed
=
vast amount
of time



SPECTRE
MARINE

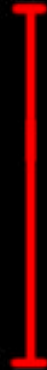
Planning



Obstacle avoidance,
waypoint navigation



Immediate
manipulation



High speed

=

low amount of time



Reactive



high speed
methodology

Obstacle avoidance,
waypoint navigation

Immediate
manipulation



Increases the safety margins



Proactive



SPECTRE
MARINE

But reality also matters

high speed
methodology

Obstacle avoidance,
waypoint navigation

Immediate
manipulation

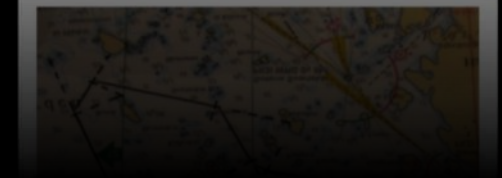
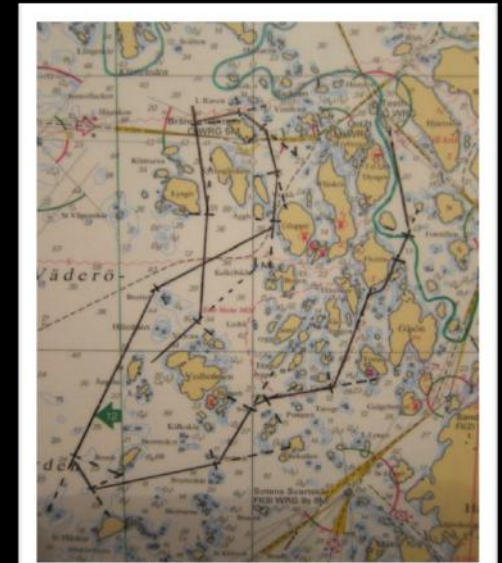
- With structure comes safety
- In professional vessel handling, the trip is only a means to reach a goal
- That way, you will get there in time and you will get there safely!



SPECTRE
MARINE

Risks (among many)

- ❑ The navigator becomes a driver who only reacts on instinct (reverts to what he is good at or comfortable with)
- ❑ Driving too fast
- ❑ Not choosing the best route
- ❑ Losing focus after some time
- ❑ Passengers cant do there job



SPECTRE
MARINE

Conclusion

- ❑ With increased speed comes increased responsibility
- ❑ The drivers role and workload changes with speed (exponential increase)
- ❑ With increased speed a disciplined work method is necessary
- ❑ An established method is the only way to achieve forward planning in navigation



Today's Attitudes

The arguments we face when talking about training:

- "We have the most challenging waters"
- "We've done this our whole lives"
- "We are the best at this"

Our response:

- The training must be so real that the students feel connected with the course and its relevance to their role
- Always more practice than theory – real life experience – “feel” for the boat
- How often do your instructors upgrade their skills by taking courses?



SPECTRE
MARINE

The most professional operators

How often do they train together?



Return of investment

- Longer life on the boats
- Longer life on the passengers/ better jobs
- More effective jobs for the crews
- Higher knowledge to do more jobs



SPECTRE
MARINE

Our Courses

Discuss your requirements with us

For example:

- Black OPS / Silhouette navigation
- Advanced radar navigation
- Search And Rescue
- Train the trainer
- Boarding
- Tactical navigation /dynamic navigation
- Etc. Etc.



SPECTRE
MARINE

References

Swedish Sea Rescue Society (346 crew members)	Swedish Amphibious Forces
Norway special police	Swedish Navy Forces
Greenpeace	Swedish Coast Guard
Netherlands Marines	Swedish boarding team
Netherlands Coast Guard	Swedish Fire department
Netherlands Army special forces	Swedish Rescue Services Agency
Faroe Islands Sea Rescue Society	Indonesian Special Police
Securitas Body Guards	Indonesian Navy Seal
British Virgin Islands SAR	Malaysian Special Police
Singapore Army & Navy	Venezuela Navy
Aland Islands SAR	Brunei RPK
Rumanien SF	Indonesian SAR
Norway police	Denmark SAR
China Navy	Malta Coast Guard
Mocambique Navy	Denmark Navy
Russian Navy	E.t.c



SPECTRE
MARINE

Please contact me at:
Andreas@spectre.se

Thank You



SPECTRE
MARINE