

Bering Defender Global Seas

Captain Kevin Doyle



Current technologies in use

Globe

- Great for fishing
- Very user friendly
- Common among fleet

Olex

- Not user friendly
- Bottom mapping
- AIS tracking
- Bottom hardness
- Font too small to name boats

Nav Net – (Pleasure boats)

- Not ergonomic – controller base, not mouse
- Used as backup only

Wish List: Obtain Time Zero in shipyard March 2023

- Weather overlay feature
- Very user friendly

Nav Tech hurt/help operator experience

Hurts

- Overwhelmed with data
- Too reliant on computer
 - Forget basic charting

Helps

- Single source of information
- More information at my finger tips
- Enhanced decision making process

Future advantages & challenges in an automated bridge

Advantages

- Single data source
- Overlays (weather/current tide)
- Easy to find bottom, hardness, Doppler

Challenges

- Getting high quality, reliable internet @ sea
- Not build for Bering Sea marine environment
 - No rack set up
- Inefficient hands-on support
- Menu navigation

Desired
improvements
to Nav
technology –
Communication
is
Key!

High Speed Internet

- A must

Simplify navigation screens

- Click down menu options

Bering Sea marine environment computer friendly systems

- Handle power surges/vibration

Duplicity

- Wired & wireless

App based trawl wheelhouse

- Single based solution

Voice typing ability

- Cannery/ Weather etc.

Online compliance training

- Where possible

Sea state closures tab

- Updates

Pac Trax

- On nav chart

Best systems for highspeed applications

- ?

Hinders of
poorly set
up bridge
with use of
navigational
equipment

No dedicated computer area

No one stop shop diming dials

Inappropriate size monitors

Most bridges not customized for
modern technology

Electronic chart usage challenges

Font too small

Bad color contrast

Not user friendly

Look out the window!



Top 5 Nav equipment features I utilize

Doppler

Door sensors

Sonar

Bottom/Net sonar

Globe computer

What maritime industry technologies can transfer to another segment to maximize efficiencies

- ?

Ergonomics key learnings from video games

Chair backrest angle

Chair height

Arm rest & seat cushion

Lighting

Monitor height & tilt

Monitor distance

Mouse placement

Foot rest

Good Posture!

My Wheelhouse



Conclusion

- Safely First
- Bycatch avoidance
- Operate efficiently & get my crew & federal observer back to their families
- Feed the world with sustainable wild Alaskan pollack
- Keep my boss happy!



