



Better days for r/v Aranda

Int'l and Nat Co-operation; major refit

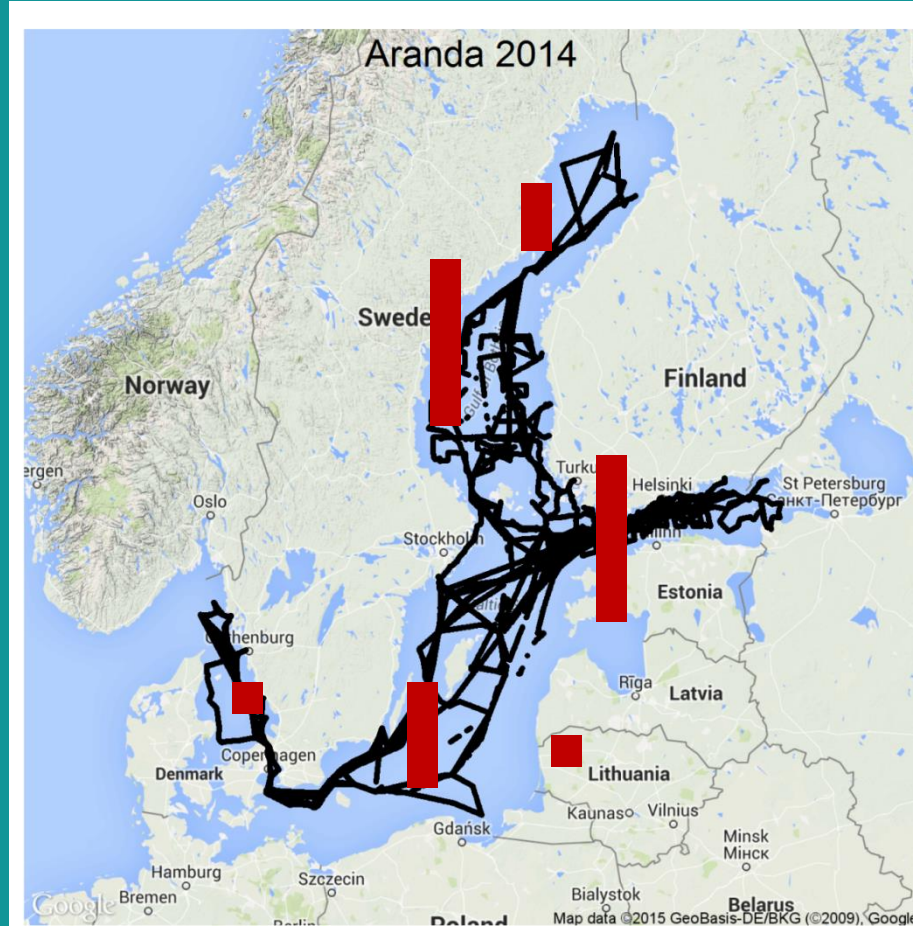


*ERVO 9 - 11 May 2015 Galway, Ireland
Juha Flinkman, SYKE Marine Research Center*

Aranda's new life as multi-disciplinary, multi-national r/v

- ARANDA's sea days declined until 2013, 100-120 d/a - existence & continuation became questionable...
- Since 2013 national co-operation with Nature Resources Institute Finland LUKE, acoustic/trawling pelagic fish surveys; Aranda refitted with fishing gear. 14d/a
- Since 2014, International co-operation with Swedish Hydrological and Meteorological Institute SMHI, Swedish contribution to HELCOM Monitoring of the Baltic Sea. 75-90d/a
- Today Aranda sails ca. 200d/a. Users SYKE, FMI, LUKE, SMHI.
- Capacity for more users in Baltic and eastern Arctic

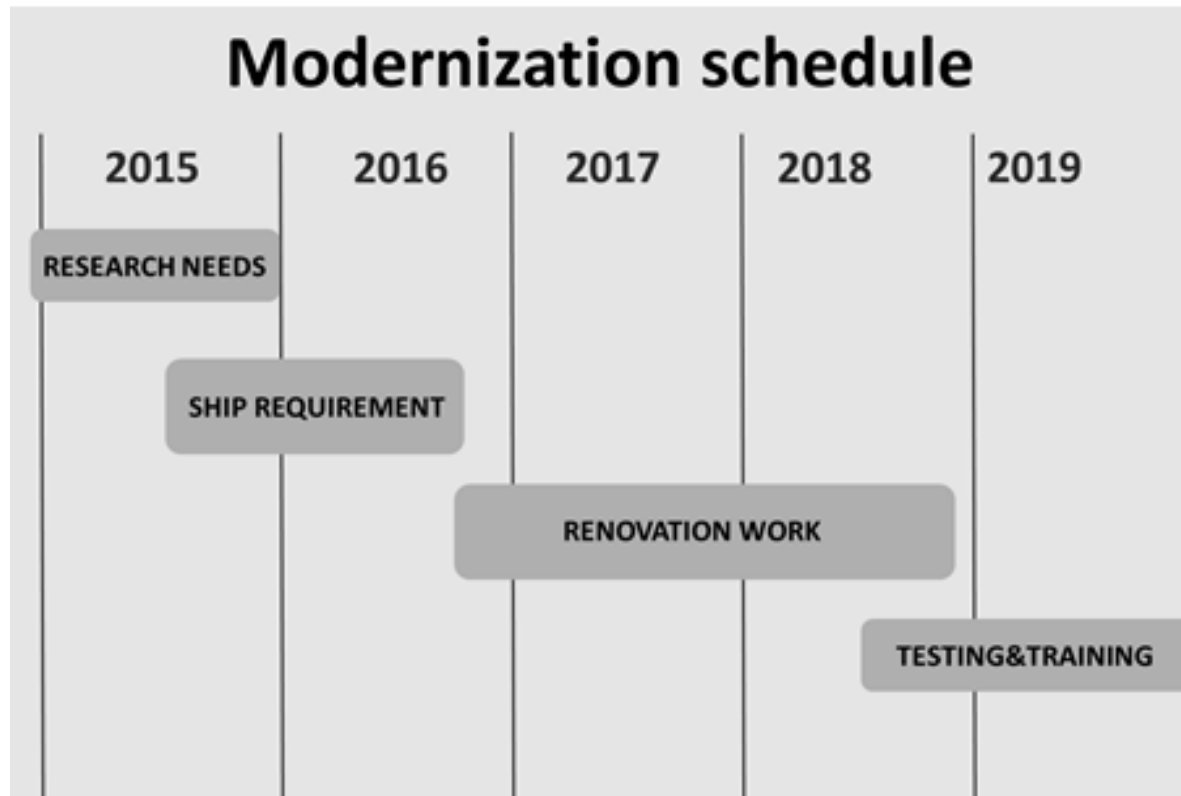
Aranda cruises in 2014, annual & by quarter



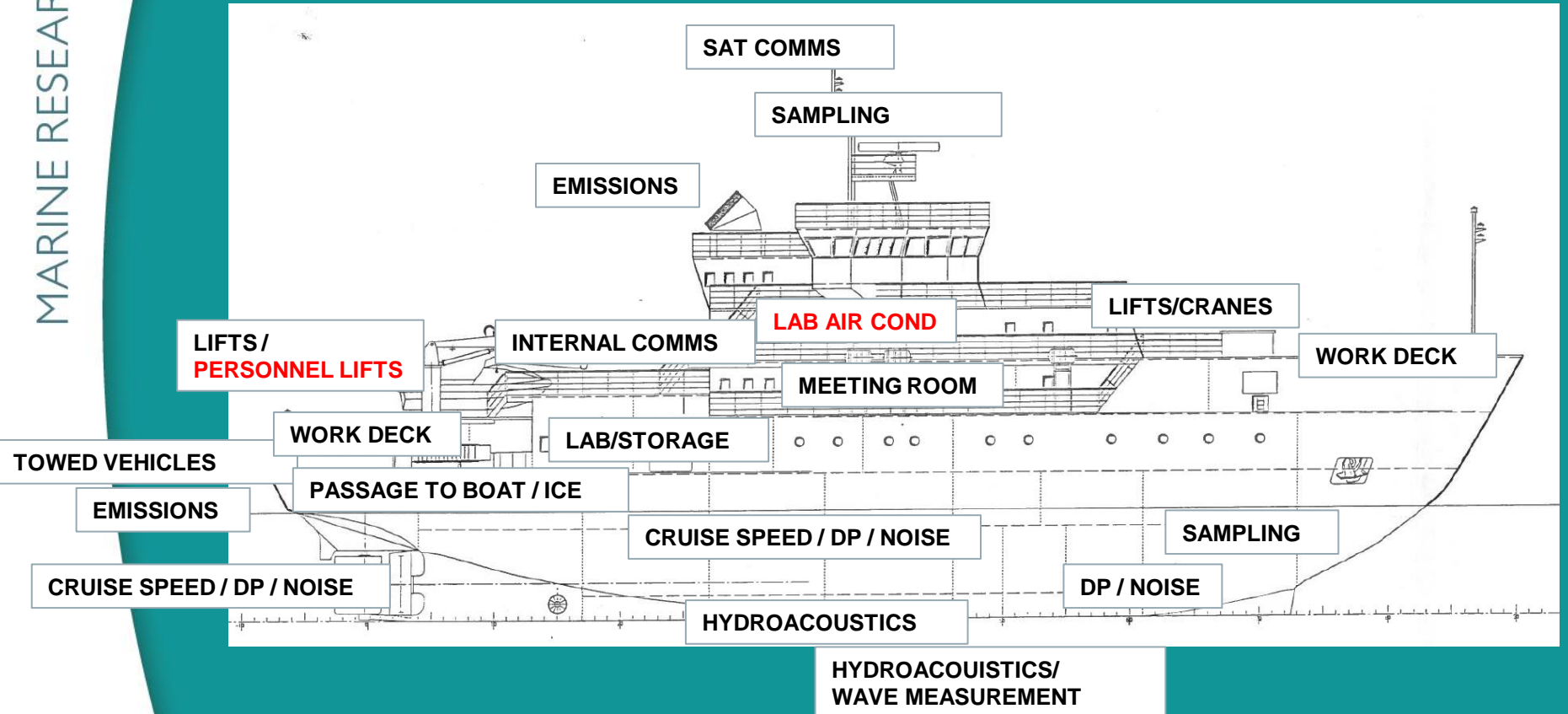
Aranda's present status

- Full serviceability r/v, instrumentation status good
- Long term national and international co-operation such as LUKE and SMHI
- New contract for crewing and maintenance for 5 years
- Ship in need of a “remaining life span refit”, which would extend its’ useful life span for 15 years.
- This refit resource, 11.5M€, now available!
- Planning in 2015, actual refit 2016-2019
- Mapping of future needs now in process, all present and possible users to be involved
- Actual work carried out in phases: 2016-2019
- Replacement vessel & equipment for periods when Aranda is u/s

Aranda's modernization/refit general schedule

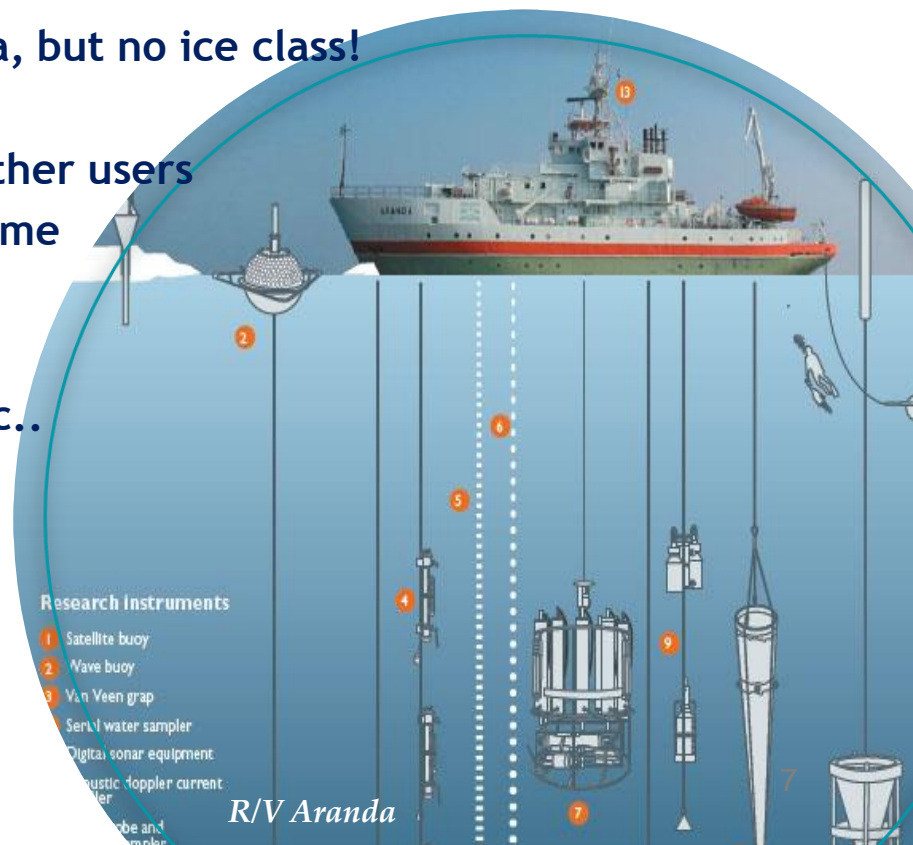


REFIT, "BARREL OF WISHES"



Aranda in future?

- She is still the only "resident" r/v capable of all-year operations in the entire Baltic
- Refit adds 15v useful life span, and additional capacity
- Estonia planning a new ship by 2020, probably smaller than Aranda
- Sweden planning for a new r/v for 2018-2020?
- Size class relevant/bigger than Aranda, but no ice class!
- Planned users SMHI, SLU, DTU,
- No additional capacity available for other users
- Northern Baltic and GoF need wintertime monitoring and research..
- Continuing co-operation with SMHI in winter monitoring in northern Baltic..



Aranda, summary

- **Plenty life span, usage and capacity left**
 - Refit now underway
 - Common use by SYKE, FMI, SMHI, LUKE rises usage level, enhances cost-effectiveness and covers cost adequately
 - Only r/v capable of winter ops in Northern Baltic!
 - GoF, Bothnian Gulf system especially
 - Available for Arctic operations, capacity will be maintained in refit
 - Equipment & instrumentation after refit hopefully appealing to additional users
 - Refit ensures operational capacity to 2030^{es} - and by that time my watch is over...

Thank You!

