



# Vessel Optimal Usage Definitions

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FIC Meeting  
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# The Task/Problem

- FIC has been requested to define optimal windows of usage for ships individually rather than using single fixed numbers of days by class. These limits will depend on where the ship operates and what is needed to maintain the crew.
- A secondary consideration is how operational days are defined across the fleet.

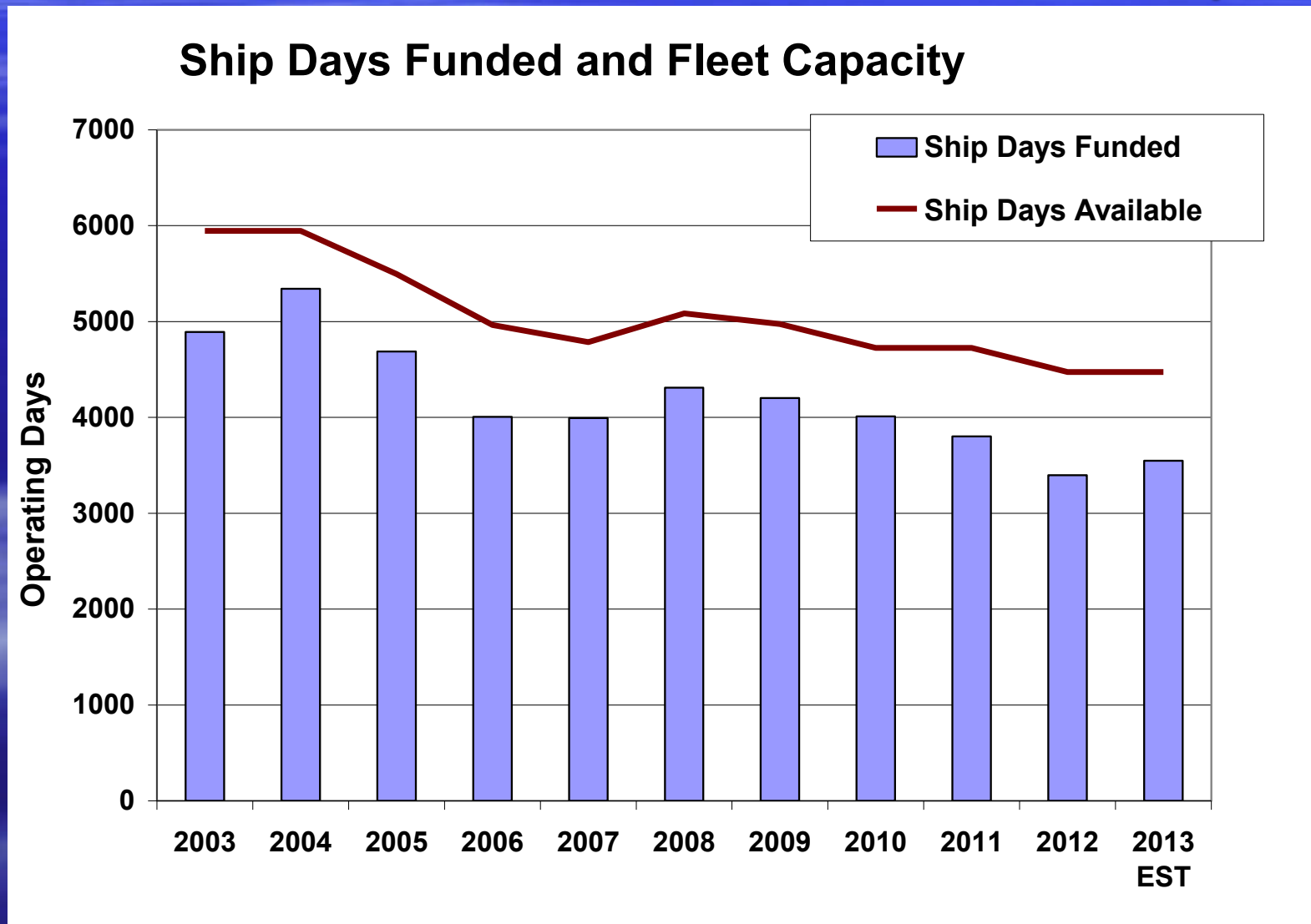
# Old Definitions

■ <u>Vessel Class</u>	<u>(FOY operating days)</u>
Global	300
Ocean	275
Intermediate	250
Regional	200
Regional/Coastal	180
Local	110

Operating Day = science sea days, transit days, plus mob, demob, and port days away from home port. It does not include days when a ship is out of service and away from home port (i.e. Shipyard periods, lay ups, maintenance, inspections).

# Impact on perception of utilization

- By old definitions- consistent excess capacity





# 2013 Operators Survey

- Sample question:

**For the vessel named above how many days a year on average are required for regular maintenance and upkeep while in port or in the shipyard?**

**Similar for inspections. MOB/DEMOB, At Sea min and max.**

# 2013 Survey Results & Analysis

Vessel	Days Given by Operator					Operators Op Range #	Old FOY	2013 Op days*	Proposed Window	2013 Status
	maintenance	inspections	MOB/DEMOB	At Sea Min	At Sea Max					
Melville	65	12	38	263		301	300	307	270-300	
Knorr	60	28	50	240	250	290-300	300	253	270-300	
Marcus G.										
Langseth	65	10	27	230	260	257-287	300	186	260-290	
Atlantis	60	35	50	240	250	290-300	300	229	270-300	
Thomas G										
Thompson	36	8	54	270	330	270-330	300	260	270-300	
Revelle	65	12	38	263		301	300	266	270-300	
Kilo Moana	35	10	50	250	275	250-275	275	241	250-280	
Atlantic										
Explorer	85	8	80	102	180	182-260	250	152	200-230	
R/V										
Endeavor	90	15	25	200	225	200-225	250	214	200-230	
Oceanus	100	10	60	200	230	200-230	250	162	200-230	
New										
Horizon	45	6	46	174		220	250	163	200-230	
Hugh R.										
Sharp	60	5	40	180	210	180-210	200	210	200-230	
POINT SUR	110	8	35	160	180	160-180	200	196	190-220	
F.G. Walton										
Smith	90	15	20	180	200	180-200	180	115	180-210	
Pelican	30	5	30	200	220	200-220	180	194	180-210	
R.G. Sproul	30	6	86	114		114	180	31	180-210	
Blue Heron	20	4	50	65	85	65-85	110	62	80-110	
Clifford										
Barnes	60	1	30	90	120	90-120	110	95	90-120	
Savannah	45	5	50	145	165	145-165	180	111	90-120	

# Interpreted from at sea and MOB/DEMOB days, \* from posted schedules

# Effect on Utilization Estimates

2013 % Utilization	
old FOY def	78.1
new FOR min	89.8
new FOR max	78.2

*Does this change your perception of Utilization?*

# Next Steps

- Develop FORs for new vessels coming on line (*Sikuliaq, Armstrong, Ride, RCRVs*)
- Confirm FORs with ship operators
- FIC agree on all FORs and send proposal to Council to adopt new definitions
- Apply new definitions from a fixed point in time moving forward in UNOLS reports