

Modeling Schedules on Future Fleet

2006 Cruises on 2017 Fleet

Assumptions

- All scheduled cruises from a previous year will be available for scheduling.
- Pick a fleet composition for a specific time in the future such as 2017 using FIC projections.
- Cruises should be scheduled on type of vessel requested except where a compromise was accepted in the original schedule.
- Additional cruises for OOI will be based on the most recent conservative estimates.

Process

- Use the 2006 Spreadsheet of final schedules as starting point.
- Import to Fasttrack to graphically show schedules.
- Save a copy of the 2006 Fasttrack file.
- Start by keeping cruises on the same ship and time frame as much as possible.
- Un-assign cruises originally scheduled on ships that are “retired.”
- Make changes to fit in cruises left orphaned on remaining ships, using STR as a guide when moving dates or ships.
- Save and duplicate the file.
- Create OOI cruises and fit them in as possible.
- Make notes on Spreadsheet about cruises that can or cannot be scheduled to quantify the impact.
- Export from Fasttrack to Excel with “modeled” schedules to create graphics about utilization and number of cruises/days left unscheduled (if any).

Outcomes

- Revised schedule with as many of original cruises scheduled as possible on fewer ships.
- Identify cruises that cannot be scheduled with reduced fleet.
- Identify to what extent additional work for OOI can be accommodated.
- Identify where the shortfalls are geographically or seasonally.
- Show Cost differential.

2006 Fleet

23 Active Ships

- Atlantis
- Revelle
- Thompson
- Melville
- Knorr
- Kilo Moana
- Wecoma
- New Horizon
- Endeavor
- Oceanus
- Seward Johnson
- Atlantic Explorer
- R.G. Sproul
- Point Sur
- Cape Hatteras
- H.R. Sharp
- Walton Smith
- Pelican
- Longhorn
- Blue Heron
- Clifford Barnes
- Savannah
- Urraca
- M.G. Langseth (not scheduled)

2017 Fleet

19 Active Ships (4)

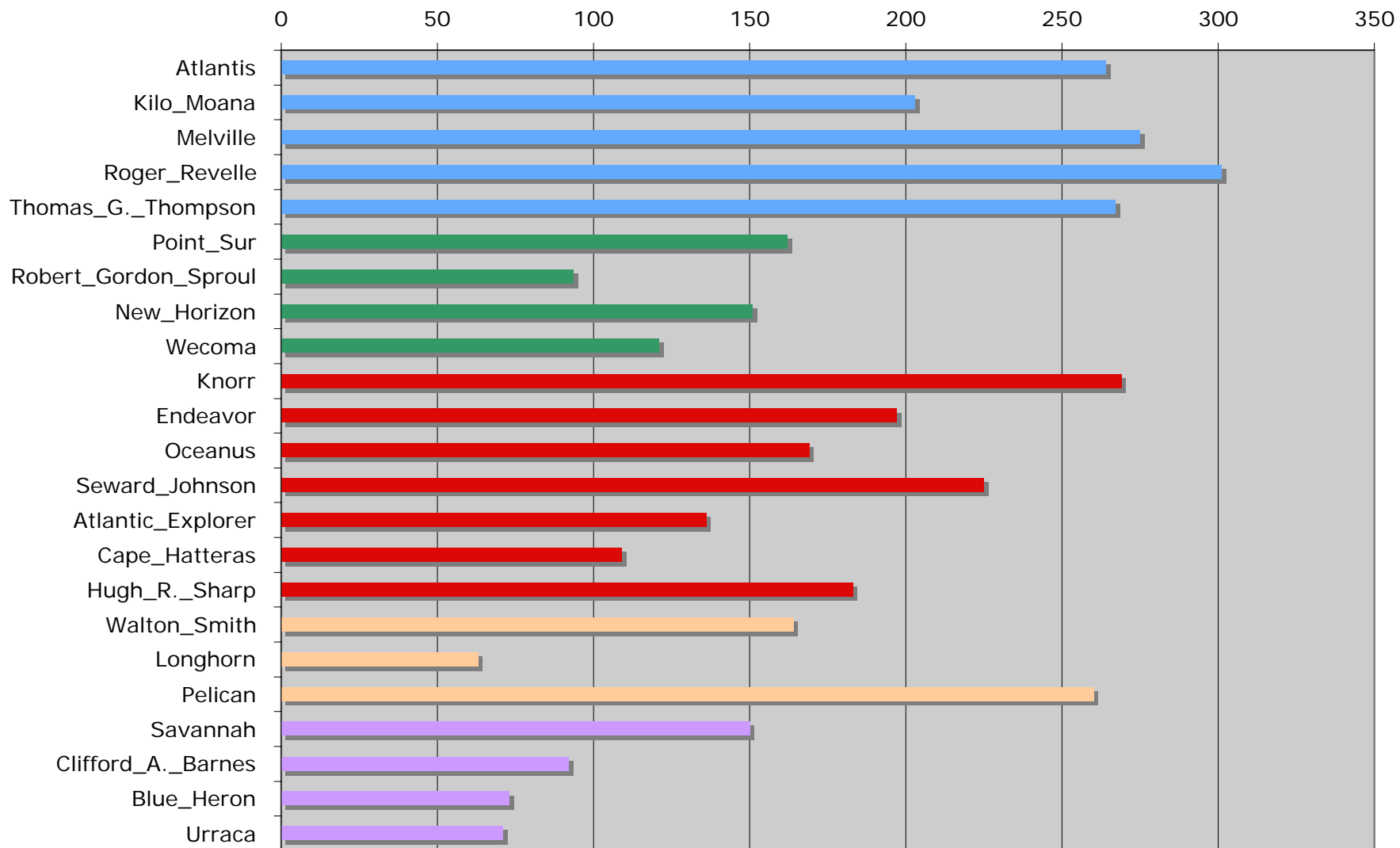
- Atlantis
- Revelle
- Thompson
- Kilo Moana
- ARRV
- Ocean Class Pacific
- Ocean Class Atlantic
- Regional Class Pacific
- Regional Class Atlantic
- Regional Class Gulf
- Atlantic Explorer
- R.G. Sproul (1)
- H.R. Sharp
- Walton Smith
- Pelican (2)
- Blue Heron
- Clifford Barnes
- Savannah
- Urraca
- M.G. Langseth (3)

- (1) Retired 2015 - assumed a replacement or extension.
- (2) Retired 2013 - assumed a replacement or extension.
- (3) Not scheduled to maintain comparison with 2006.
- (4) Actual number including Langseth and not including Sproul or Pelican would be 17, Need to create version with Langseth schedule/costs added and perhaps without Sproul and Pelican.

2006 Totals

Ship	Total
Atlantis	264
Kilo_Moana	203
Melville	275
Roger_Revelle	301
Thomas_G._Thompson	267
Point_Sur	162
Robert_Gordon_Sproul	93.5
New_Horizon	151
Wecoma	121
Knorr	269
Endeavor	197
Oceanus	169
Seward_Johnson	225
Atlantic_Explorer	136
Cape_Hatteras	109
Hugh_R._Sharp	183
Walton_Smith	164
Longhorn	63
Pelican	260
Savannah	150
Clifford_A._Barnes	92
Blue_Heron	73
Urraca	71
Grand Total	3998.5

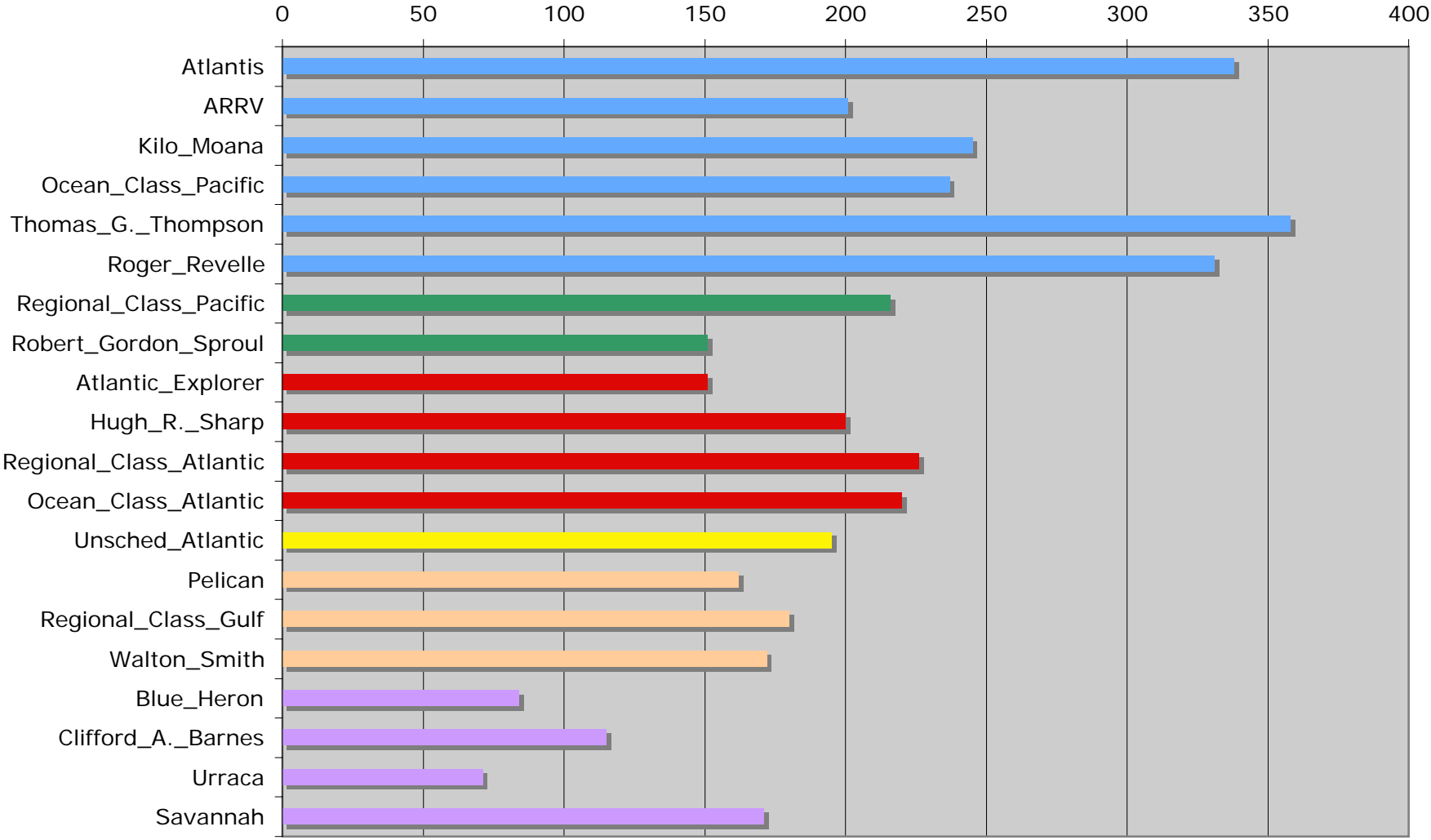
2006 Final Schedules



2006 on 2017 Totals

Ship	Total
Atlantis	338
ARRV	201
Kilo_Moana	245
Ocean_Class_Pacific	237
Thomas_G._Thompson	358
Roger_Revelle	331
Regional_Class_Pacific	216
Robert_Gordon_Sproul	151
Atlantic_Explorer	151
Hugh_R._Sharp	200
Regional_Class_Atlantic	226
Ocean_Class_Atlantic	220
Unsched_Atlantic	195
Pelican	162
Regional_Class_Gulf	180
Walton_Smith	172
Blue_Heron	84
Clifford_A._Barnes	115
Urraca	71
Savannah	171
Grand Total	4024

**2017 FLeet with 2006 Cruises
Version One**



Next Steps

- Refine first cut model to more accurately match project fleet composition for 2017.
- Add in Langseth cruises, OOI cruises and Alaska Region cruises to see how they could be scheduled.
- Create cost models for each variant.
- Duplicate for a year in the middle of the fleet renewal period such as 2012 or 2013 (need feedback on this).
- Do cost models and analysis for this additional period.