

24th International Research Ship Operators (IRSO) Meeting

- Hosted by the School of Oceanography and the Applied Physics Laboratory at the University of Washington
- Wednesday to Friday, May 25-27, 2010
- Workshop on “Evolving Changes in Seagoing Oceanography: Implications for Research Vessel Operations” will be held on Tuesday, May 24.
- As of yesterday 37 participants from 17 countries registered
- <http://depts.washington.edu/uwconf/irso/>



Discovery Replacement

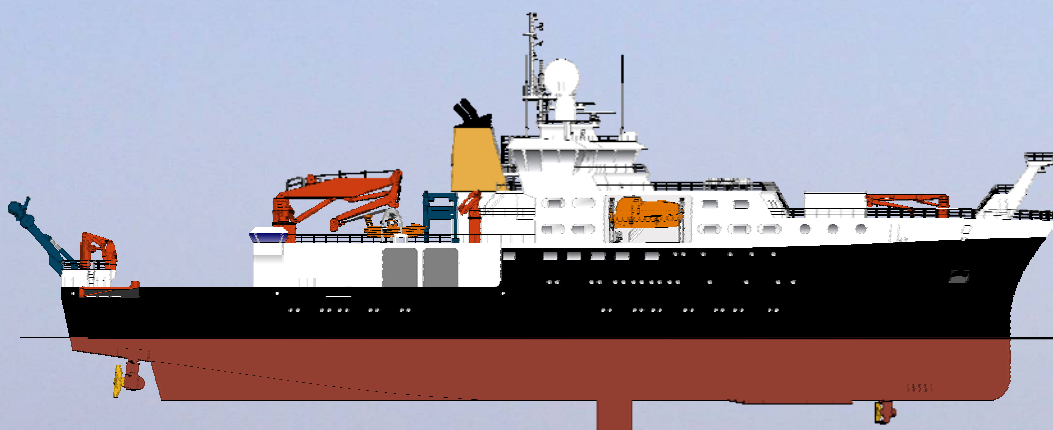
Shipbuilder: Construcciones Navales P. Freire, S.A., Vigo, Spain

Designer: Skipsteknisk AS, Norway



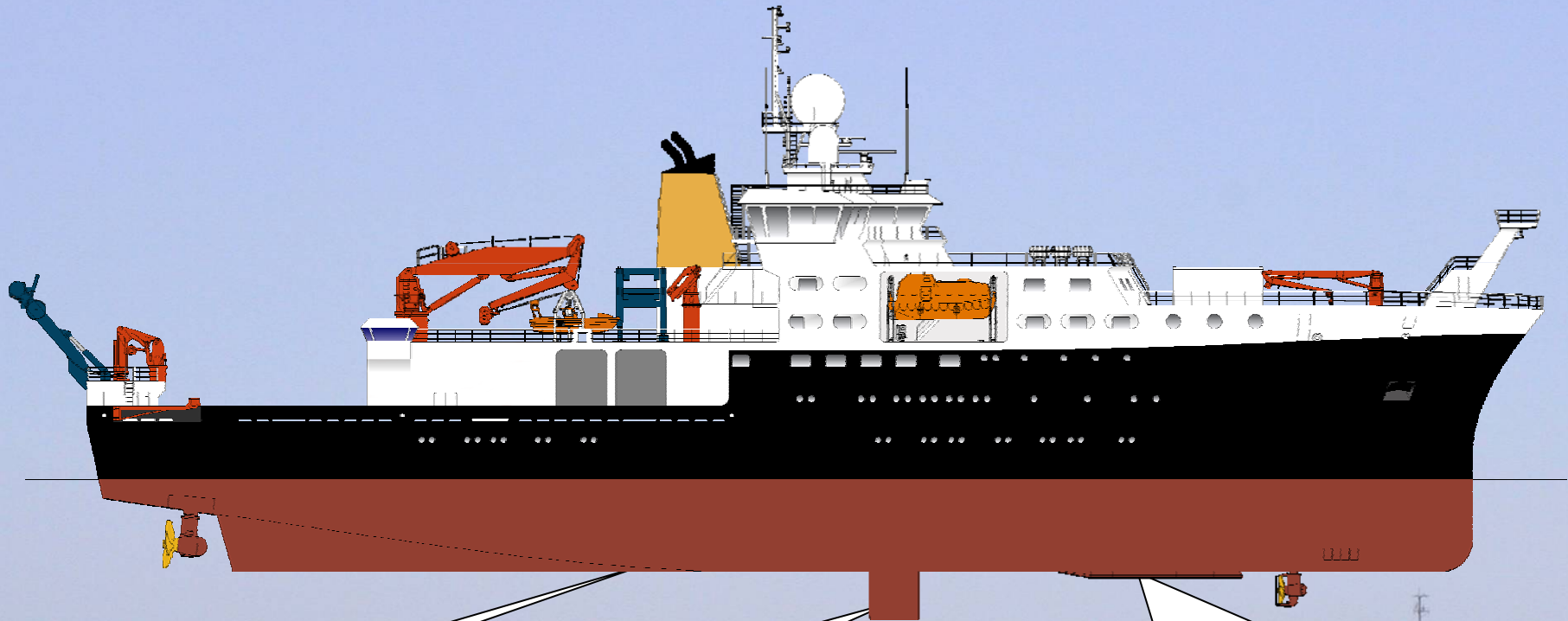


James Cook & new Discovery Compared



	Cook	Discovery
Length Overall:	89.50 m	99.70m
Breadth:	18.60 m	18.0m
Draft:	5.50-5.70 m	6.50m
Displacement:	5368t GRT	6075T GRT
Class:	Lloyds +100A1, Ice 1C, FS, +LMC, UMS, DP(AM) Research Vessel	Lloyds +100A1, Ice 1D, +LMC, UMS, IWS, EP, DP(AM), NAV1, IBS, Research Vessel
Maximum Speed:	15 kts SS4	15kts SS2
Cruising Speed:	12 kts SS4	12kts SS4
Maximum Endurance:	50 days	50 days
Science & Stores DW:	385T	380T
Scientific Berths:	32 singles	28 singles
Officers:	9 singles	12 singles
Crew & Technicians:	13 singles	12 singles
Open Deck Spaces (Afterdeck & Stbd Amidships) :	446 m ²	432 m ²
Total Lab Areas:	277.5 m ²	388.8 m ²

Transducers



2 x USBL Spar:
Sonardyne USBL

2 x Drop Keels:
Multifrequency (18, 38, 70,
120, 200, 333 kHz) E/S

Hull blister:
12kHz MBES ($1^\circ \times 1^\circ$)
2-7kHz Sub-bottom profiler
75kHz ADCP
150kHz ADCP
70-100kHz MBES ($2^\circ \times 2^\circ$)

Handling

Midship/aft Crane
20t@17m

Stern 'A' Frame
20t

Aft Cranes
5t@2m

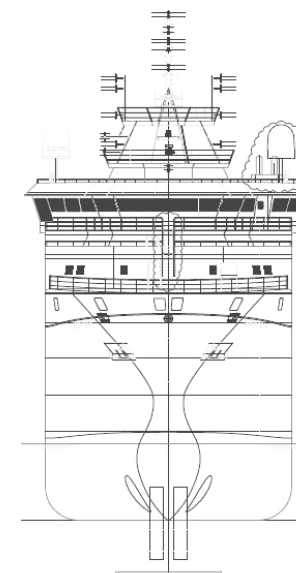
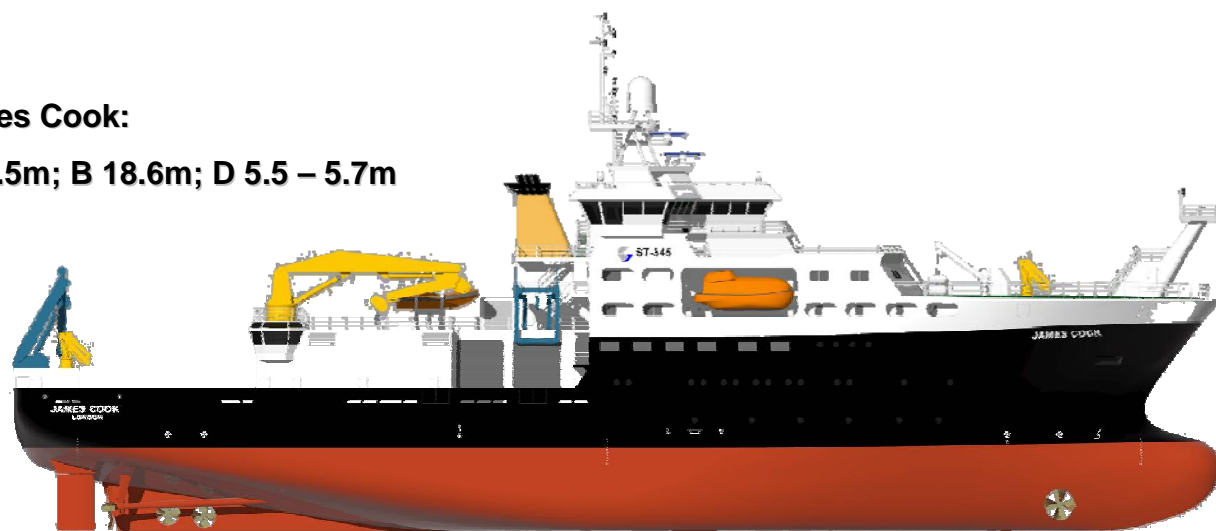
Bullhorn Boom
20t

Stb 'A' Frame
20t

Stbd Knuckleboom
2t@5m

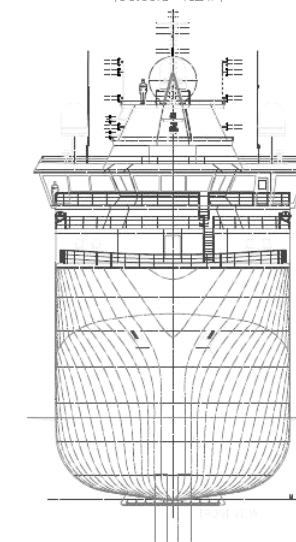
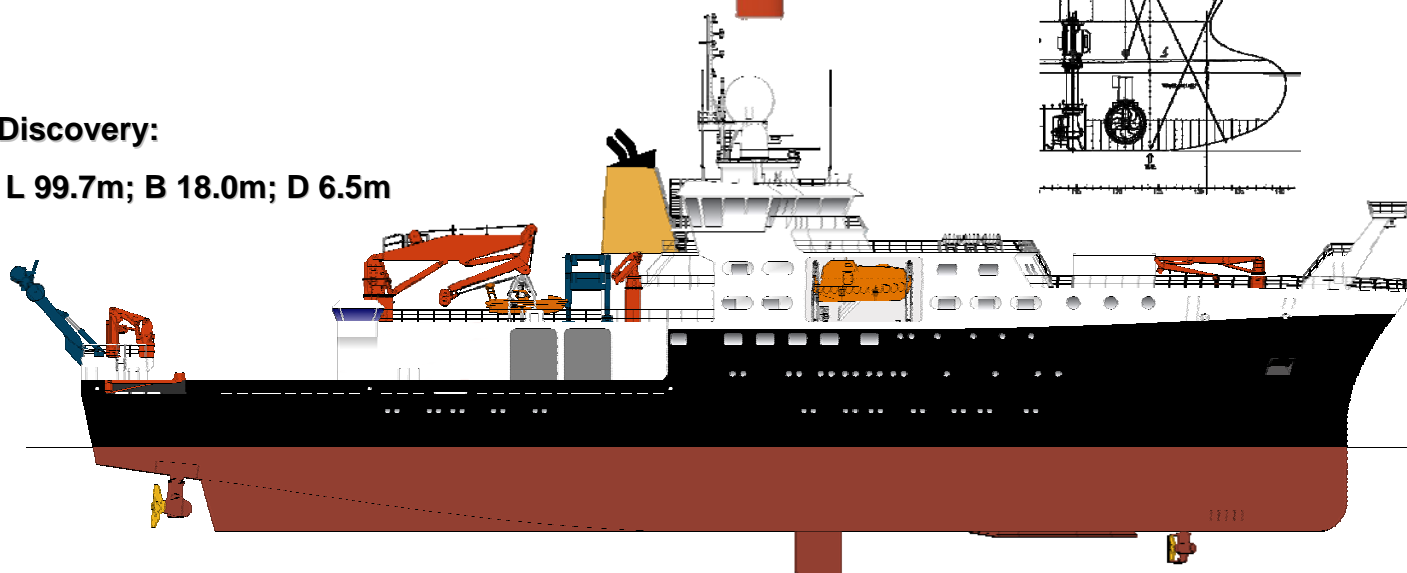
James Cook:

L 89.5m; B 18.6m; D 5.5 – 5.7m

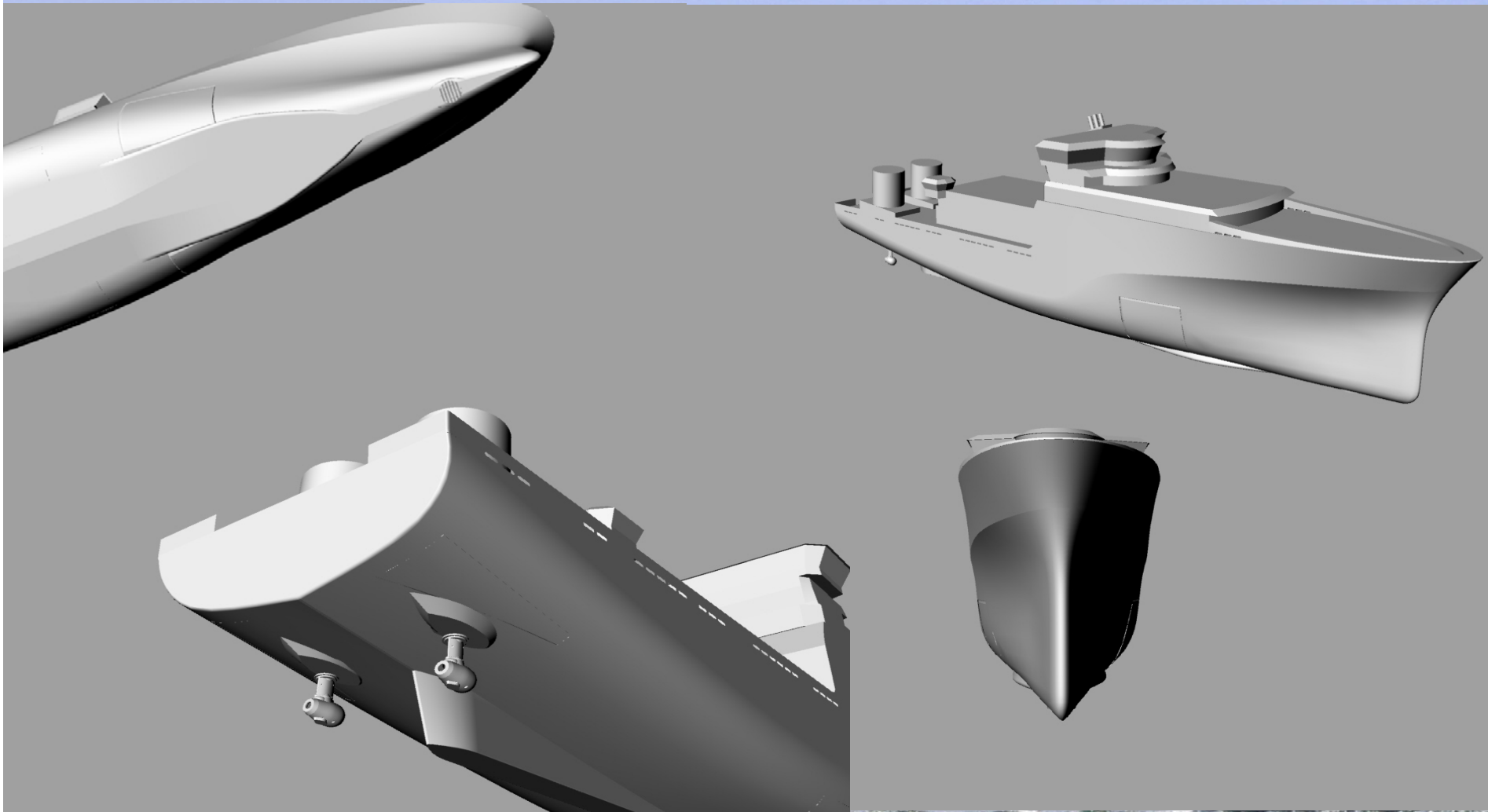


Discovery:

L 99.7m; B 18.0m; D 6.5m



Hullform



Milestones

Contract Award

Start Steel Cutting



Thruster Units Delivered

Keel Lay

1200T Steel pre-fabricated

Main Generators Delivered



Ready to Launch

Winch Suite Delivered

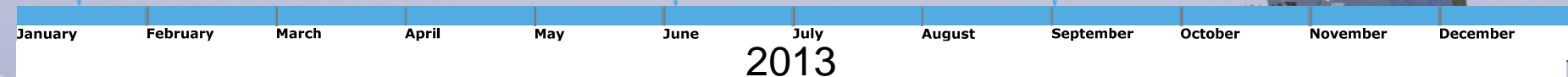
Start Main Generators



First Sea Trials

Interim Delivery

Deep Sea Trials Complete



KEEL LAYING – 15/2/2011



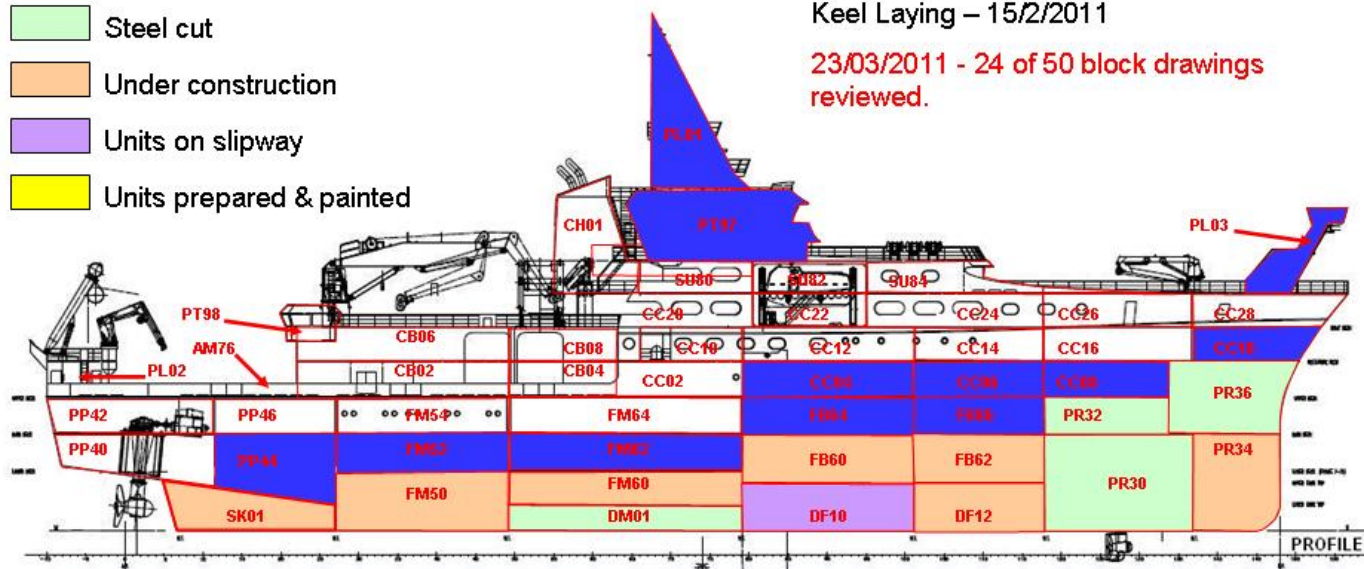
D4RP Progress (7/4/11)

- Drawings received for review
- Steel cut
- Under construction
- Units on slipway
- Units prepared & painted

First steel cut – 11/11/2010

Keel Laying – 15/2/2011

23/03/2011 - 24 of 50 block drawings reviewed.



1	2	3	4	5	6	7	8	9	10	11
DF10	DF12	DM01	FM50	FB60	FB62	PR30	PR34	FM60	FM52	FM54
12	13	14	15	16	17	18	19	20	21	22
SK01	PP44	PR36	PP40	PR32	FB66	FB64	CC08	CC06	CC04	CC18
23	24	25	26	27	28	29	30	31	32	33
CC16	CC14	CC28	CC26	FM64	FM54	PP46	PP42	CC02	AM76	CC12
34	34	36	37	38	39	40	41	42	43	44
CC10	CC24	CC22	CC20	SU84	SU82	SU80	CB04	CB02	CB08	CB06
45	46	47	48	49	50					
CH01	PT98	PT97	PL01	PL02	PL03					

BUILDING SEQUENCE – CNP FREIRE

Recent Photos



DF10 in two parts 9/3/2011



The two parts of DF10 being joined 24/3/2011



Later stages of fabrication of PR34 9/3/2011



Assembly of FM60 and FB60 9/3/2011

ROVs & Props Don't Mix



- Failure of supply chain to provide spare valve block for azimuth thruster
- Failures in decision-making
- Failures in communication
- Staff fatigue and training



Sailors Do Unpredictable Things

- 21 Dec 2006
- Officer jumps from ship while berthed alongside at NOC
- Rescue boat called away and no major injuries
- Drugs and alcohol involved



Sailors Do Unpredictable Things

- 8 Apr 2011
- AB fires 6 rounds from a semi-automatic weapon
- 1 Officer killed and another with life-threatening wound
- Charged with 1 murder and 3 attempted murders

