



Jason Upgrades



- Additional LED lights
- Another Mini Zeus, making 3 total
- Additional pan & tilt, making 3 total
- New strobes, 2 circuits simultaneous down and fwd imaging cameras on one dive
- New CTD with O₂, additional sensor ports
- New LARS crane and docking head (DH) fully integrated
 - Greater *Jason* air weight
 - 25% increase in *Jason* payload (syntactic foam added)
 - Greater flexibility of staffing
 - DH arrests swing & sway and rotates
 - Less tether handling



Jason Lighting and Imaging



LED lighting

3X Insite Mini Zeus HD cameras on P&T

Lasers

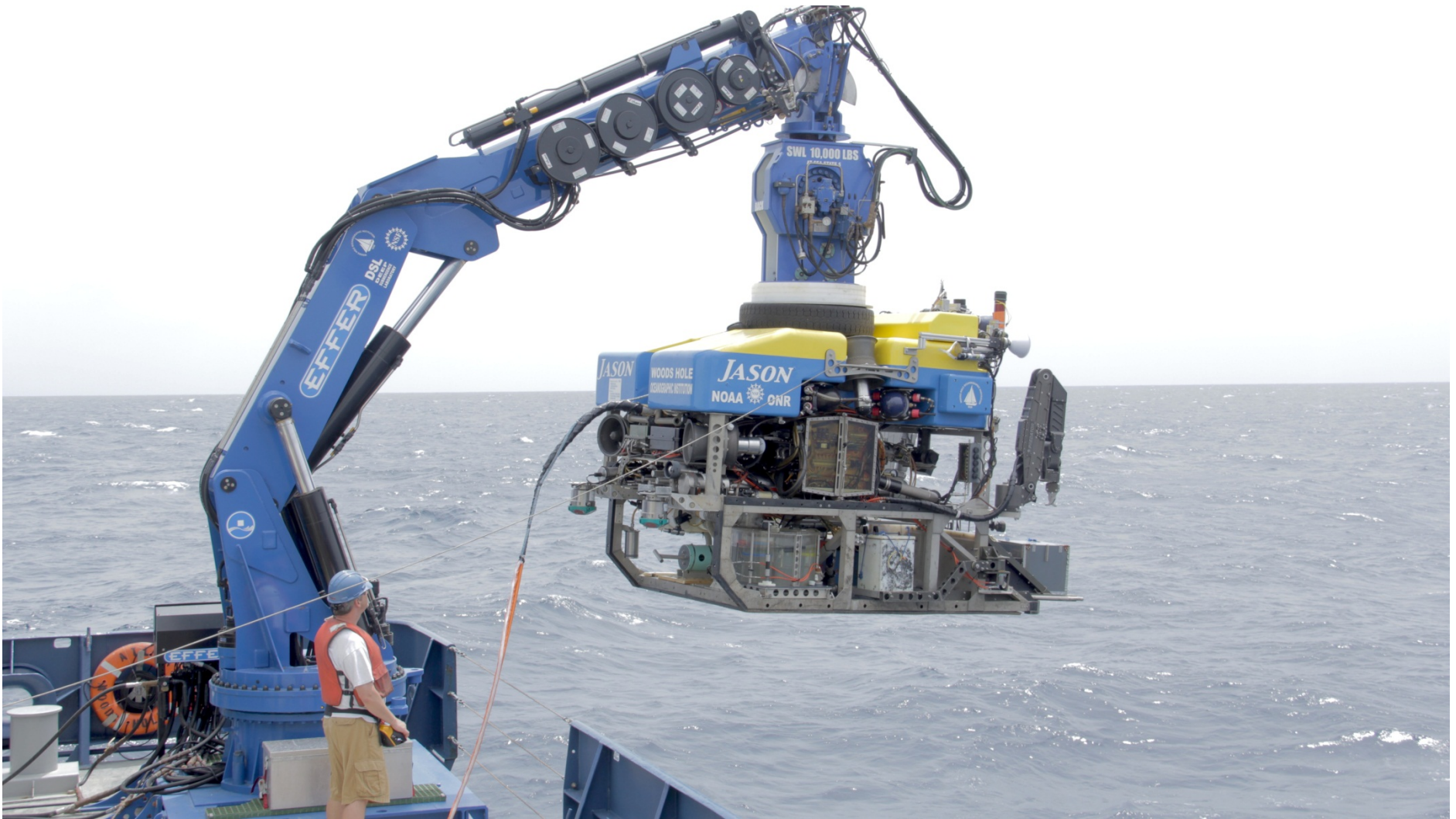
Insite DSC

Insite pencil
Cams X3



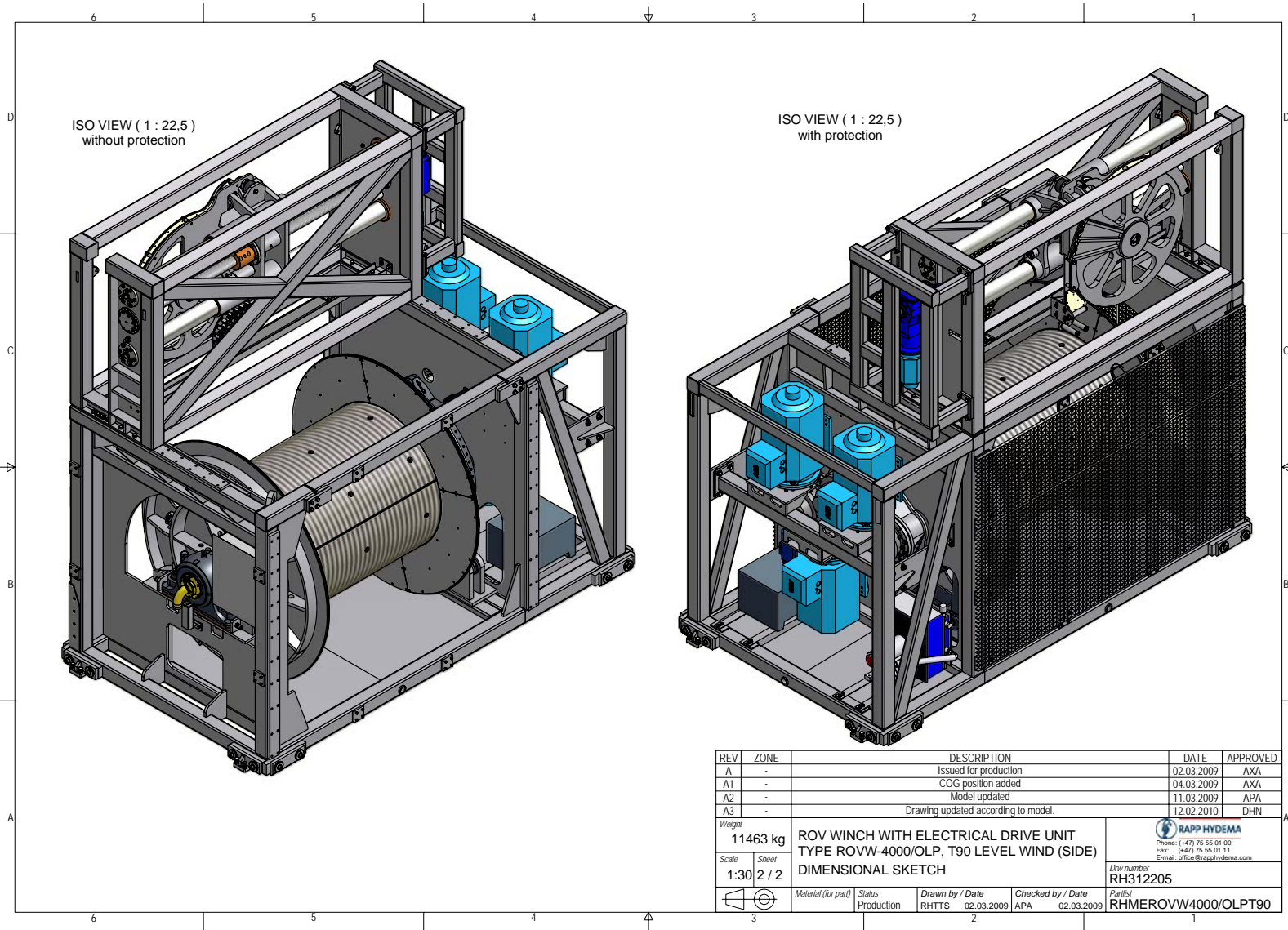


LARS Crane on Atlantis





Active Heave Comp Winch



REV	ZONE	DESCRIPTION	DATE	APPROVED
A	-	Issued for production	02.03.2009	AXA
A1	-	COG position added	04.03.2009	AXA
A2	-	Model updated	11.03.2009	APA
A3	-	Drawing updated according to model.	12.02.2010	DHN

Weight	11463 kg	ROV WINCH WITH ELECTRICAL DRIVE UNIT TYPE ROVW-4000/OLP, T90 LEVEL WIND (SIDE) DIMENSIONAL SKETCH	 Phone: (+47) 75 55 01 00 Fax: (+47) 75 55 01 11 E-mail: office@rapphydema.com
Scale	Sheet		
1:30	2 / 2	RH312205	Partlist
	Material (for part)	Status	Production
	Drawn by / Date	Checked by / Date	RHTTS / 02.03.2009 APA / 02.03.2009
	Partlist	RHMEROVW4000/OLPT90	



Active Heave Comp for LARS



- Selected a manufacturer for the new winch for *Jason*; delivery January 2013
- Active heave compensation to 6,500m; *Medea* and 1,000 lb. pkg
 - @ 3km, 1.8 m/s, 1.5 m/s^2 = 99% of waves are fully damped SS3
 - @ 7km, 1.7 m/s, 1.2 m/s^2 = 95% of waves are fully damped SS3
 - 20,500 lb. max line pull
 - 300 ft./min max line speed
- 3X AC motor Variable Frequency Drive
- Reduced dynamic cable loads
- Smaller footprint
- Utilizes existing 300A, 480V 3 phase circuit on UNOLS vessels
- Allows for Observatory/IODP package deployments via .681 FO cable, under *Medea* or via stand alone ops (wire-guided elevator)
- Complies with RVSS Appendix A&B



IODP Deployments to 6.5 km



New Active Heave Comp Winch will reduce/eliminate Medea motion allowing precision jason guided instrumentation deployment into IODP bore holes.



Observatory Deployments to 6.5 km



New Active Heave Comp Winch will reduce/eliminate Medea motion allowing precision Jason guided node and instrument deployment at observatories.



Active Heave Comp Video

