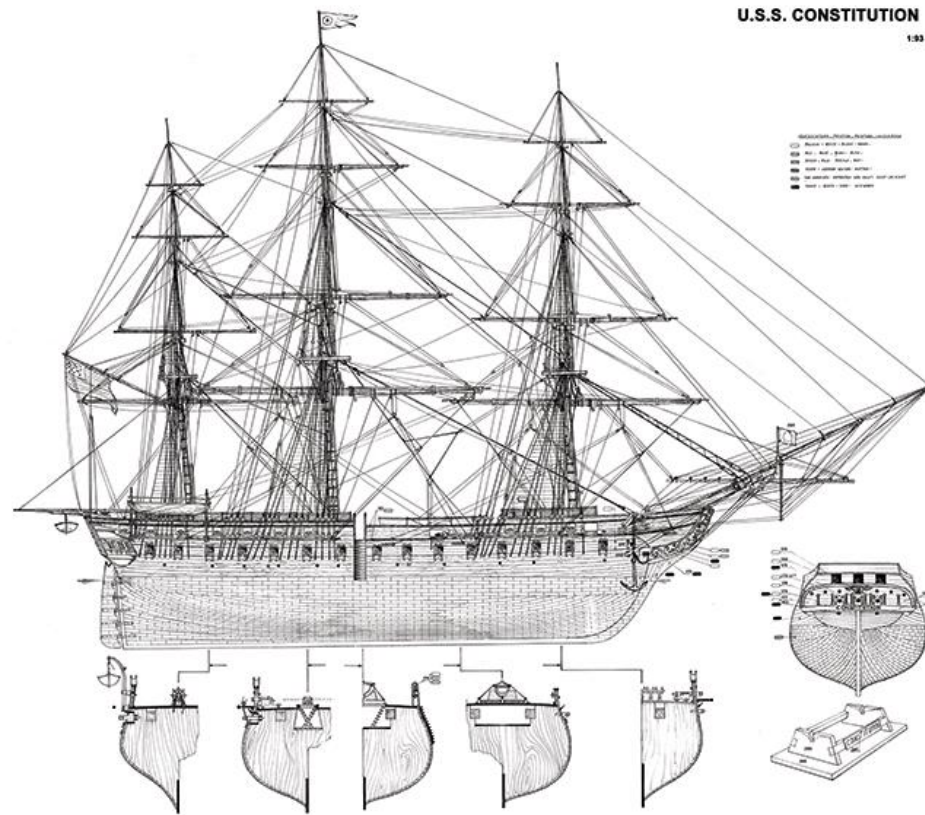


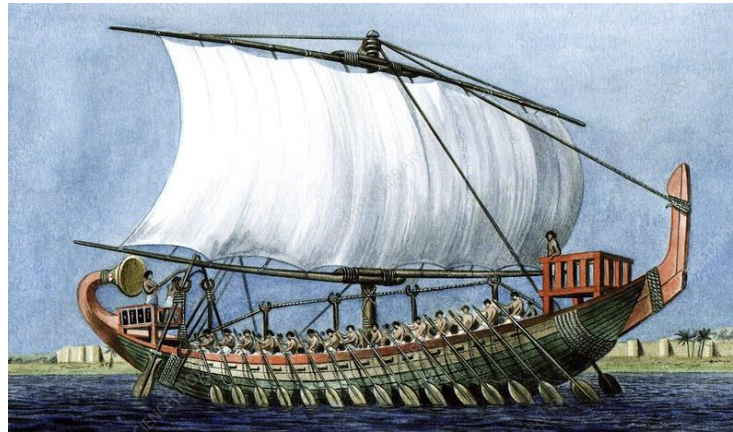
FROM CONCEPT TO CREATION; THE ROLE OF SOFTWARE IN STREAMLINING SHIP DESIGN PROCESS

SECTIONAL COMMITTEE “MARINE, HULL,
CHEMICAL AND PROCESS ENGINEERING,
MATERIAL SCIENCE & NAVAL ARCHITECTURE” -
CMETSL

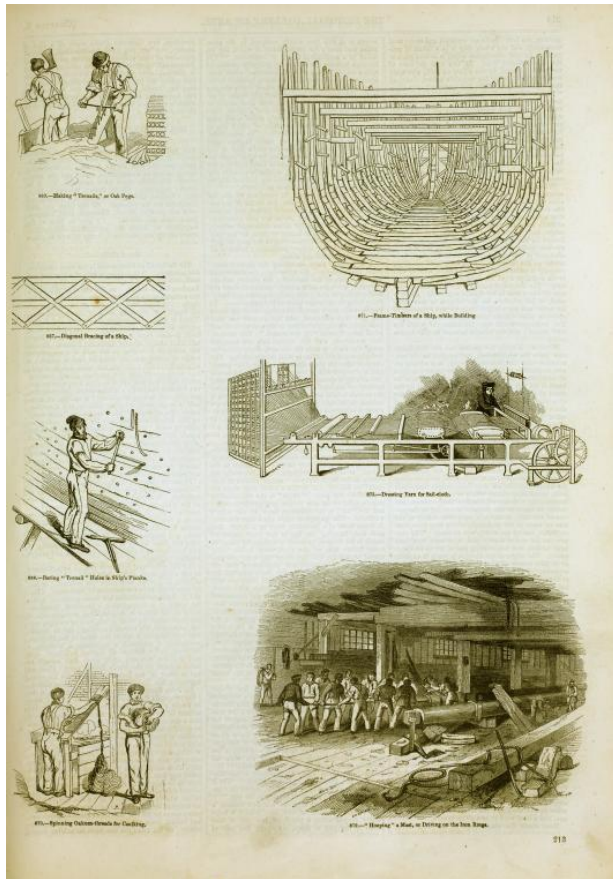
HISTORY OF SHIP DESIGN



HISTORY OF SHIP DESIGN



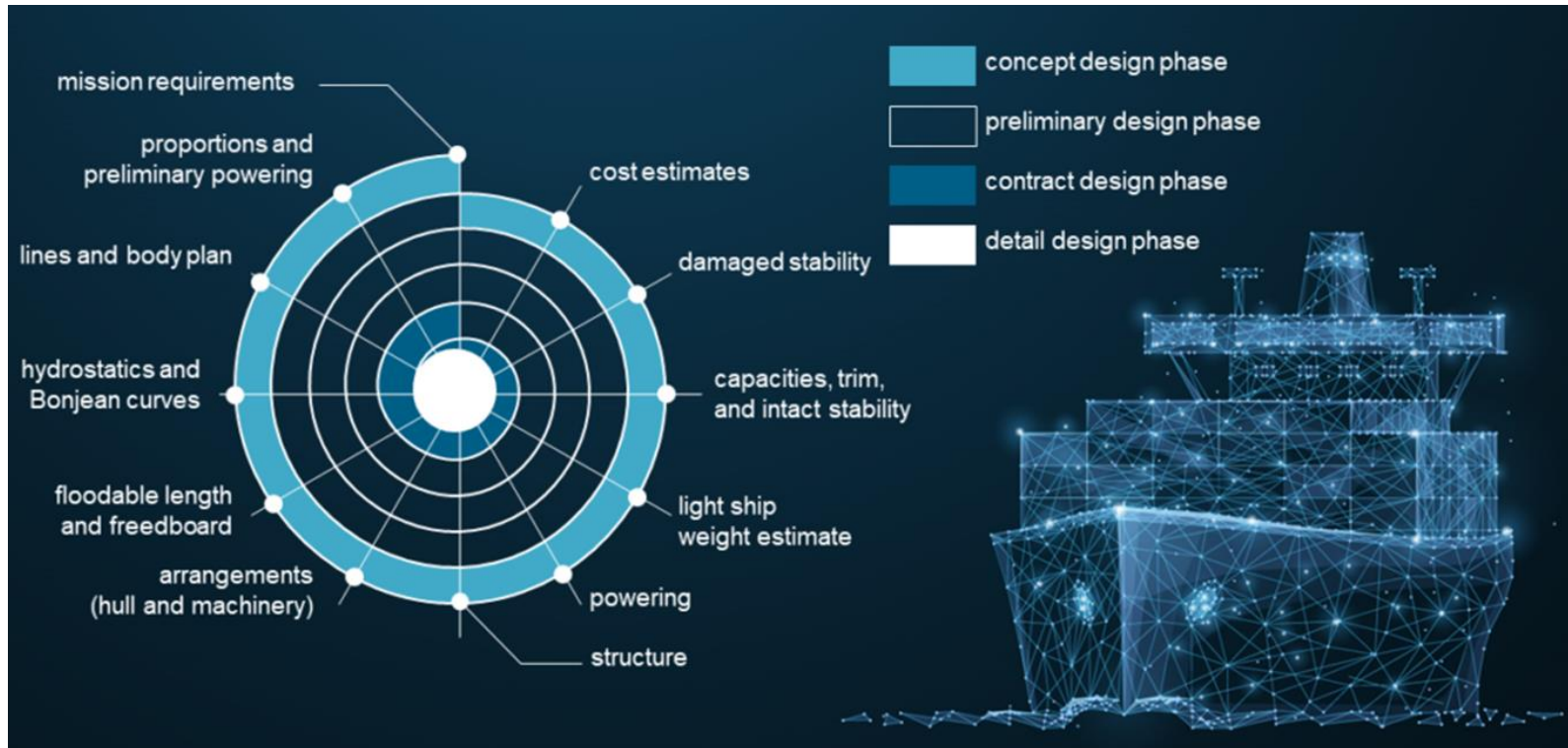
ART OR SCIENCE?



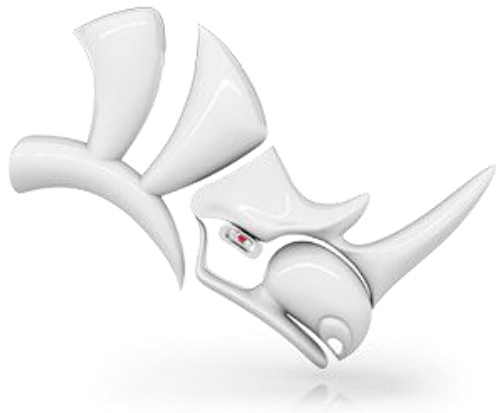
ART OR SCIENCE?



SHIP DESIGN SPIRAL



SHIP DESIGN SOFTWARE



NavCad_n


Orca3D
Marine Design for
Rhinoceors®


General HydroStatics



MAESTRO
GLOBAL STRUCTURAL ANALYSIS 

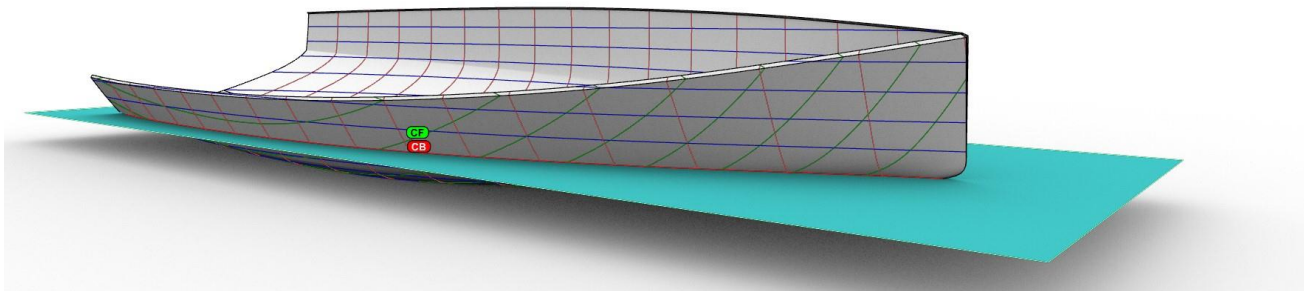
COLLABORATION AND COMMUNICATION



VISUALIZATION AND VIRTUAL REALITY



REAL TIME SIMULATIONS



Information **GHS by Creative Systems Load Monitor** www.gsh.com

Condition Files: Forward: 6.248 @104.85f
Report Files: Midship: 6.690 @52.425f
Verify Drafts: Aft Draft: 7.132 @ origin METERS

Change Sea Density: Tanks Weights CG Auto Solve
Define Substances: Ground Points Zero Heel
Add Fixed Weights: METRIC TONS, METERS

Tank Description	Name	Contents	Load Wt MT	Load%	Sounding
SW FOREPEAK TANK CL	SWFP.C	SW_BLST	103.75	98.0	
SW DEEP TK NO.1 PORT	SWDEEP1.P	SW_BLST	125.96	98.0	
SW DEEP TK NO.1 STBD	SWDEEP1.S	SW_BLST	125.96	98.0	
SW WING TK NO.1A PORT	SWWING1A.P	SW_BLST	94.85	98.0	
SW WING TK NO.1A STBD	SWWING1A.S	SW_BLST	94.85	98.0	
SW WING TK NO.1B PORT	SWWING1B.P	SW_BLST	112.92	98.0	
SW WING TK NO.1B STBD	SWWING1B.S	SW_BLST	112.92	98.0	
SW WING TK NO.2 PORT	SWWING2.P	SW_BLST	147.87	80.0	
SW WING TK NO.2 STBD	SWWING2.S	SW_BLST	160.81	87.0	
DRN WL NO.3 OUT PORT	DRAINWELL30.P	BILGE_WTR	0.00	0.0	
DRN WL NO.3 OUT STBD	DRAINWELL30.S	BILGE_WTR	0.00	0.0	
SW DB BTM NO.3 PORT	SWDB3.P	SW_BLST	63.83	98.0	
SW DB BTM NO.3 STBD	SWDB3.S	SW_BLST	63.83	98.0	
FW WING TK NO.3 PORT	FWWING3.P	FRESH WATER	125.55	98.0	
FW WING TK NO.3 STBD	FWWING3.S	FRESH WATER	125.55	98.0	
FW WING TK NO.4 PORT	FWWING4.P	POTABLE_WTR	0.00	0.0	
FW WING TK NO.4 STBD	FWWING4.S	POTABLE_WTR	60.00	49.0	
FW AFT PEAK TK PORT	FWAFT.P	FRESH WATER	0.00	0.0	

Weight: 10259.57 Origin Depth: 7.132
 LCG: 50.934 TCG: 0.001 VCG: 6.783
 Trim: 0.48a Heel: 0.00g FSA: 0.178
 Effective VCG: 6.956
 USCg ENERGY Criterion Maximum VCG: 7.708
 GMT: 1.105 VCG Margin: 0.752

Load percentage (right-click field to select) Total SW_BLST: 1207.55 MT METERS

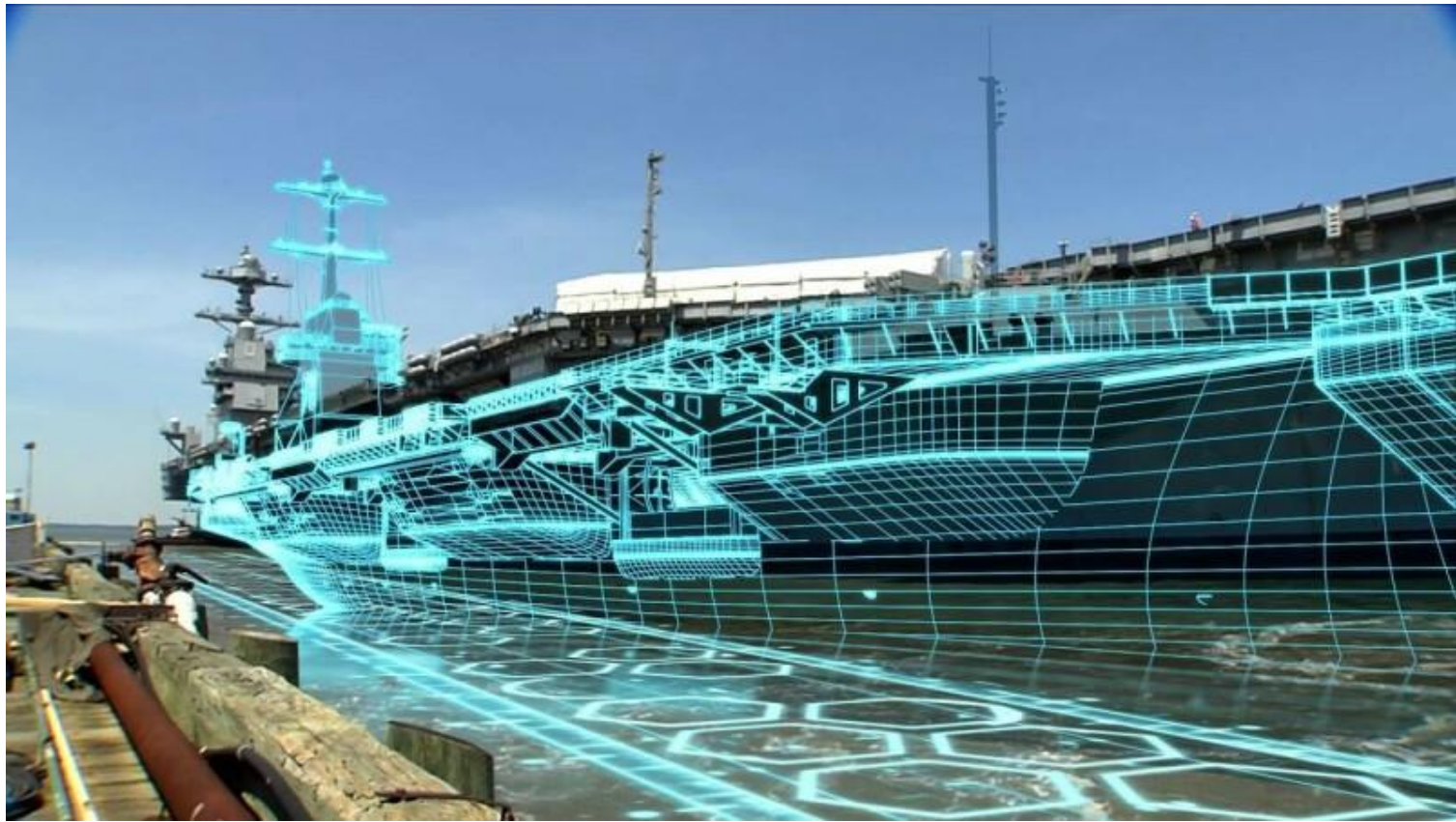
Condition Graphic -- Draft: 6.248 @ 104.85f, 7.132 @ 0.000 Heel: port 0.00 deg

Outboard Profile View

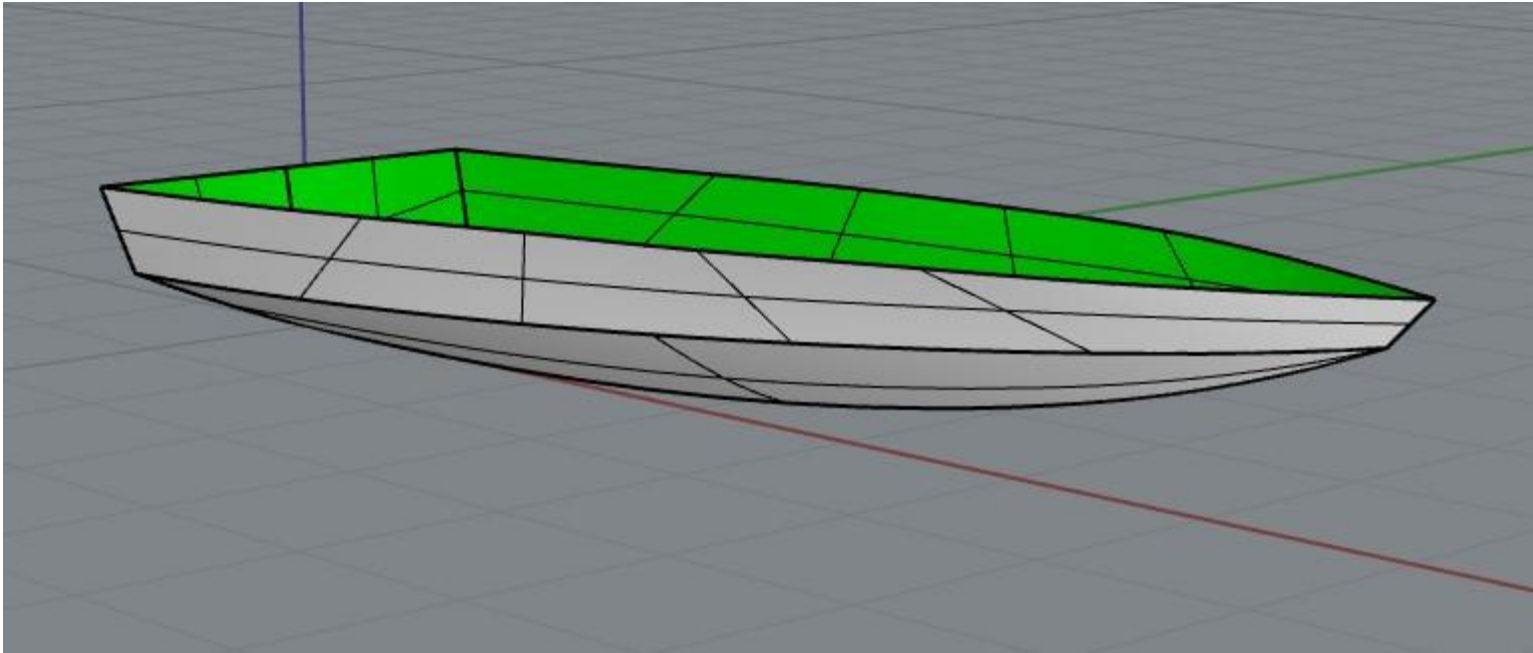
Profile View

Plan View

FUTURE EVOLUTION OF SHIP DESIGN SOFTWARE



SOFTWARE DEMONSTRATION



CONCLUSION



A large ship's bow is shown from a low-angle perspective, centered in a dry dock. The ship's hull is dark grey with a white stripe and a red and white cross emblem. The bow is suspended by chains. The dry dock walls are light-colored and feature various structures and equipment. The sky is overcast with grey clouds. The text "Q&A SESSION" is overlaid in the center in a large, black, sans-serif font.

Q&A SESSION

A large ship is being lifted by a crane in a dry dock. The ship is dark grey with a white hull and a red and white logo on the bow. The crane is yellow and is positioned to the right of the ship. The dry dock is a large, open structure with concrete walls and a flat floor. The sky is overcast with grey clouds. The text "THANK YOU" is overlaid in the center of the image.

THANK YOU