



13th Annual ASA EQUIPMENT VALUATION CONFERENCE

Maritime Asset Appraisal

Harry Ward

DLS Marine

(aka Dufour, Laskay & Strouse)

13th Annual ASA EQUIPMENT VALUATION CONFERENCE

Defining the maritime industry

Commercial Vessels and Facilities

- Primarily US-focused marine transport companies
 - River transportation of goods
 - Coastal and international transport
 - Offshore energy support
 - Passenger vessels

- US-based marine service facilities
 - Coastal and river repair yards
 - Non-military shipbuilding yards
 - Commercial Terminals

- Key concepts
 - US vs. foreign flag vessels
 - The “Jones Act”
 - “Blue Water” vs “Brown Water” vessels
 - Commercial vs pleasure craft



MARINE APPRAISAL SERVICES

LARGEST CONCENTRATION OF ASA MARINE APPRAISERS IN THE INDUSTRY

With over 50 years of experience, DLS leads the industry in the appraisal of marine vessels and equipment and has the largest concentration of NAMS-CMS surveyors and American Society of Appraisers (ASA) Senior Commercial Marine Appraisers.

Valuations follow the rigorous guidelines of both the ASA and the Uniform Standards of Professional Appraisal Practice (USPAP). Clients include small vessel operators and large financial institutions.

TOP FINANCIAL CLIENTS







FAIR MARKET VALUE

- Detailed description
- General condition
- Estimated value of a vessel and/or other marine equipment
- Estimation in today's market or prospective / retrospective appraisals covering future or past values

CONDITION & VALUATION

- Provided for insurance purposes
- Detailed description
- General condition
- Recommendations for safe operation
- Navigation limits
- Estimated Fair Market Value and Replacement Cost of a vessel and/or equipment in today's market

LIQUIDATION

- Includes estimation for Orderly Liquidation (OLV) and Forced Liquidation (FLV)
- Routine monitoring of marine asset liquidations



ASA
Providing Value Worldwide



NAMS Global
An International Association of Marine Surveyors



ABS
Remote Inspection

WWW.DLSMARINE.COM | 504-835-8505 | INFO@DLSMARINE.COM

13th Annual ASA EQUIPMENT VALUATION CONFERENCE

River and coastal marine transport

More than 25,000 navigable miles in the US

- **Mississippi River and tributaries**
 - 60% of U.S. grain shipments, 22% of oil and gas shipments, and 20% of coal
 - More than 10,000 navigable miles
 - US Army Corps of Engineers provides maintenance
- **Intracoastal Waterways**
 - Along the Gulf and East Coast
 - Protected coastal transport
 - “Brown water” rules
- **Primarily Jones Act trade**
 - Trade between US “points”
 - US built, owned and crewed
 - MUCH more expensive than foreign vessels and crews



Inland River vessels

Boats and barges suited to US brown waters

- **Towboat/barge system**
 - Powerful boat pushes barge “tows”
 - Can operate on shallow routes
 - Built for lock system
- **Products carried**
 - Dry bulk grain
 - Refined petroleum, chemicals, fertilizer
 - Aggregates and other building supplies
 - Coal



Boat and barges in river lock



Towboat with dry “hopper” barges



Towboat with tank barges

13th Annual ASA EQUIPMENT VALUATION CONFERENCE

Coastal transport and offshore service vessels

Ocean-going, close to home

- **Articulated Tug and Barge (ATB)**
 - Two units, similar to a ship
 - “Pin” system connects tug and barge
 - Adaptation to US vessel rules
 - Can go anywhere, but mostly US
 - Carry liquid and dry bulk cargo between remote coastal ports

- **Offshore Service Vessel (OSV)**
 - 200’ – 400’ workboats
 - Utility boats of offshore oil industry
 - Carry equipment, supplies, people and specialized drilling chemicals to/from rigs
 - Similar vessel serving offshore wind



ATB with liquid tank barge



OSV servicing an offshore oil rig

Other Vessel Types

Other markets/customers of DLS

- **US Blue water ships**
 - About 100 Jones Act ships
 - Another 80+ US-flag ships
 - Quasi-military vessels, MSC and MARAD
- **Harbor and Escort Tugs**
 - Push and pull big vessels in confined ports
 - From small tugs to 6000 HP “escort” tugs
 - Can tow and move barges
- **Passenger and Cruise Vessels**
 - Jones Act river and coastal cruise industry
 - Ferries – passenger and car
- **Dredging Vessels**
 - Keep navigation channels open
 - Restore beaches and other features
 - Deepen harbors for larger ships



Drill Rigs

Coastal and Offshore

- Coastal Drill Barges
 - Operate in Shallow Waters
 - Fewer regulations
 - Submersible
 - Drill depths up to 35,000 ft

- Offshore Oil Rigs
 - Multiple Types
 - Jackup
 - Semi-submersible
 - Spar
 - Fixed
 - Wide Range of Water and Drill Depths



Offshore Wind Support

Slowly-Developing Segment

- **Offshore Wind in US**
 - Tax credits
 - Dozens of planned farms
 - Still just 8 OSW turbines in USA!
 - CVOW and Vineyard Wind getting started
- **Support Vessels**
 - WTIV – installation vessel
 - SOV – Service Operations Vessel
 - CTV – Crew Transfer Vessel
 - Many other small, niche vessels





13th Annual ASA EQUIPMENT VALUATION CONFERENCE

Approaches to Value

Cost Approach

- **Basic Method**
 - Replacement costs - shipyards
 - Scrap or residual
 - Normal Economic Life (NEL)
 - Obsolescence
- **Challenges**
 - New build prices not public
 - Non-standard vessels
 - Vessels beyond NEL
 - Calculating EO/FO

Sales Comparison Approach

- **Basic Method**
 - Identify similar sales
 - Research sales offerings
 - Adjust for features/condition
 - Regression if possible
- **Challenges**
 - Little public information
 - Adjusting for non-standard features
 - Condition varies widely

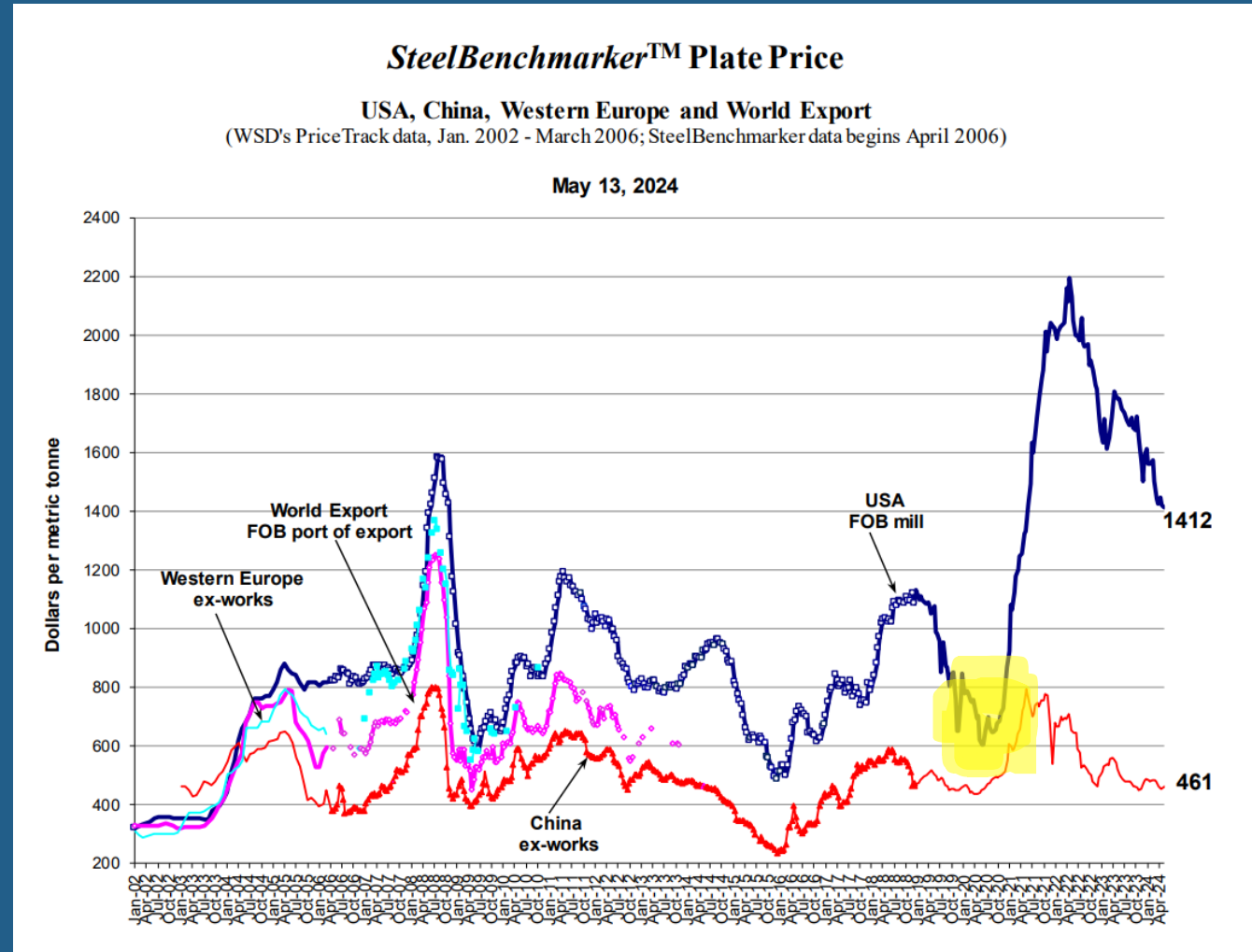
Income Approach

- **Basic Method**
 - Vessel-specific revenue
 - Vessel-specific costs
 - Appropriate discount rate
 - NPV
- **Challenges**
 - Most operators don't allocate to each vessel
 - Allocating indirect costs
 - Developing discount rate
 - Integrating scrap/residual

Cost Approach

Inputs, NEL's and EO


- **Replacement Costs**
 - Steel prices a very important factor
 - Labor and energy
- **Scrap/Residual Values**
 - Information from scrappers
 - Overseas vs. US scrap
 - Residual based on alternative uses
- **Normal Economic Life**
 - Table developed over many years
 - Salt water vs. fresh
 - Research by industry publishers, large operators
- **Obsolescence**
 - Economic – downturns, eg COVID
 - Functional – new tech, designs



Sales Comparison Approach

Very Little Public Information

- Few Individual Vessel Sales
 - Tend to be in fleets/subsets
 - Between private companies
 - Older vessels often outside US
- Adjustments By Features
 - Utility
 - Tugs – Horsepower
 - Cargo – Capacity (TEU's, cubic yards, etc)
 - Cruise – Number of passengers, amenities
- Adjustments by Condition
 - Need “survey” reports
 - Steel gauging reports



Marine Survey & Appraisal

SURVEY AND APPRAISAL REPORT SUMMARY

NAME OF VESSEL: _____

FILE NO: _____

REQUESTED BY: _____

ACCOUNT OF: _____

LOCATION OF INSPECTION: _____

DATE OF INSPECTION: _____

OWNER: _____

TYPE OF VESSEL: _____

SERVICE: _____

NUMBER OF CREW: _____

OPINION OF FAIR MARKET VALUE: _____

OPINION OF ORDERLEY LIQUIDATION VALUE: _____



atb = aft the forward bulkhead

	BOW		#1 W/I		#2 W/I		#3 W/I		#4 W/I		#5 W/I		STERN							
	5' aft	Mid	5' fab	5' aft	Mid	5' fab	5' aft	Mid	5' fab	5' aft	Mid	5' fab	Mid	5' fab						
41																				
42																				
43																				
44	STBD																			
45																				
46	Stbd 7" up	0.306	0.235	0.241	0.229	0.211	0.219	0.227	0.213	0.212	0.221	0.205	0.217	0.229	0.263	0.313	Avg.	0.2361	0.3125	24%
47	Stbd 15" up	0.287	0.207	0.205	0.193	0.169	0.205	0.216	0.202	0.203	0.199	0.206	0.197	0.219	0.246	0.311	Orig.	0.2177	0.3125	30%
48																				
49	Stbd Outboard Btm		0.329			0.260			0.316			0.314		0.336				0.3110	0.4375	29%
50																				
51	Centerline		0.283			0.320			0.242			0.301		0.322				0.2936	0.4375	33%
52																				
53	Port Outboard Btm		0.318			0.311			0.283			0.289		0.323				0.3048	0.4375	30%
54																				
55	Port 15" up	0.298	0.225	0.236	0.204	0.230	0.205	0.222	0.214	0.209	0.203	0.203	0.207	0.190	0.211	0.166		0.2149	0.3125	31%
56	Port 7" up	0.316	0.271	0.235	0.221	0.221	0.235	0.227	0.224	0.209	0.211	0.208	0.237	0.212	0.232	0.311		0.2380	0.3125	24%
57																				
58	PORT																			
59																				
60																				
61	7" draft	P	.305		S	.299							P	.306		S	.299			
62																				
63	15" draft		.302			.297														
64																				



13th Annual ASA EQUIPMENT VALUATION CONFERENCE

Income Approach

Thank You!



Questions?

Harry Ward, President

hward@dlsmarine.com