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THE MARITIME LAW ASSOCIATION OF THE UNITED STATES

STATISTICAL ANALYSIS OF LIMITATION OF LIABILITY CASES

October, 1953 - December, 1981

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Comments on Study and Explanation of Tables

This Statistical Analysis of Limitation of Shipowners' Liability cases includes those cases decided and reported in the first study concerning the 24 year period from 1953 to 1976 (M.L.A. Document No. 600) and the second period of six years from 1976 to 1981. The first study is reprinted at the end of this current combined study as Annex A.

The statistical data, for the inclusive periods of each study are separately recorded and tabulated so that the statistical trend apparent from each period covered by the two studies may be more readily perceived. The total columns have been adjusted to include the current figures.

The commentary in the earlier study is made an integral part of the commentary appearing below.

The Statistical Analysis of Limitation of Liability cases for the period from January 1, 1953 to October 31, 1976 discussed the basis on which limitation could be defeated under the London Convention

^{*} This study was prepared for the Committee on Limitation of Liability of the Maritime Law Association of the United States, Richard W. Palmer, Chairman.

of 1976. Some of the considerations set forth in that Report (Document No. 600, pp. 6610-6612) seem relevant to our consideration of limitation at this time since the London Convention of 1976 may be ratified by several countries in 1982-1983. It remains to be seen what action will be taken by the maritime nations.

As in the earlier study of cases decided from 1953 to October, 1976, the current study includes all cases reported in the American Maritime Cases through the end of 1981, and only cases where the right to limit was actually decided. Cases involving only procedural questions were excluded as were cases solely concerning wreck removal by the Government where limitation has generally been denied.

Where a case was reported at both the trial and appellate levels, both decisions are included unless the appellate decision did not involve the right to limit under the Limitation Act. Also, one arbitration decision is included since the parties stipulated that the arbitrators could pass upon the right of one of the parties to limit. One case that denied limitation to the owner of a helicopter found to be a vessel has been excluded as irrelevant to the analysis.

The current analysis shows that the Limitation Act has been recognized by the Courts as a viable and equitable system. The statistics show a gradually increasing trend allowing the right to limit. The study also confirms that the rights under the Limitation Act have been actively litigated and that a larger fund is necessary. In this period, limitation was allowed in 11 cases and denied in 17. The rate of denial dropped from 79% in the period from 1973 to 1976 to 60.7%.

Part of the reason for this trend toward allowing limitation is the highly useful equitable doctrine of concursus under which all claims may be proved in a single forum and any fund established by the shipowner is equitably apportioned among all claimants in accordance with the applicable priorities.

It appears that the principal reason for denying limitation arises from the failure of shore management to provide proper supervisory procedures for the maintenance of equipment and the training of the crew, as well as failure to provide adequate systems to ensure the enforcement of safety and maintenance procedures which have been established.

Under the current limitation law, a party may limit who can prove that none of his supervisory personnel had or should have had knowledge of the cause of the disaster, so long as adequate procedures were established and properly policed by shore management to ensure performance. The emphasis has been on proper training of personnel and the establishment of instructions followed by proper policing, rather than on the absence of any procedures or instructions.

The prior study commented on the London Convention of 1976 for Limitation of Liability. The Limitation of Liability Committee reported on May 5, 1978² that the U.S. abstained from signing the Convention, principally for the reason that the amounts of the fund were not high enough.

The 1976 Convention³ standard for denial of the shipowner's limitation is set forth in Article 4:

"A person shall not be entitled to limit his liability if it is proved that the loss resulted from his personal act or omission, committed with the intent to cause such loss, or recklessly and with knowledge that such loss would probably result."

Thus, the Convention places the burden on claimant.

The M.L.A. Draft Statute for Limitation,³ places the burden of proof on the person seeking limitation, as does United States Limitation Law.

The proposed statute would provide a fund for distribution to claimants in the event of a total loss, whereas under the present U.S. law there is no fund available to compensate claimants in a total loss, except for the \$60 per ton amount for death and injury claimants.⁴ Also, the proposed statute provides increased amounts for the fund over those enacted in the 1976 Convention. The proposed M.L.A. draft for limitation of liability would furnish a more equitable and advantageous distribution to claimants than any existing regime, proposed or now in effect.

^{1.} The Convention has not yet come into force.

^{2.} Document No. 615

^{3.} See Document No. 619

^{4. 46} U.S.C. 183(b)

Table 1

Table 1 is an overall summary by the indicated year periods of cases where limitation was granted or denied. Generally, the periods correspond to AMC Digest periods. The periods shown parenthetically as (A), (B), (C), (D), and (E) are from the 1976 studies, (M.L.A. Document No. 600) and these designations are used to show time periods in succeeding tables. The column shown as (F) represents the current study.

ALL CASES WHERE LIMITATION ISSUE DECIDED

	Gran	nted
Period	Yes	No
1953-1957 (A)	5	5
1958-1962 (B)	16	18
1963-1967 (C)	7	14
1968-1972 (D)	3	14
1973-1976 (E)	4	15
1976-1981 (F)	11	17
Total	46	83

Table II

Table II shows the results for different types of casualties. They are generally self-explanatory. The categories "oil spill," "cargo damage," and "personal injury" represent cases where only the particular type of claim was made without a casualty of the other types described.

Types of Casualties

· · · · · · · · · · · · · · · · · · ·													Total	for	
	1	4]	В	(2]	D	E	;	I	7	All Pe		
Type of Casualty	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	[7438]
Fire/Explosion	0	1	4	4	1	. 1	0	1	1	6	0	0	6	13	38]
Allision/Collision	3	1	8	5	1	6	3	5	2	4	8	6	25	27	
Stranding/Capsizing	0	0	1	1	1	1	0	3	0	3	2	5	4	13	
Cargo Damage	0	0	1	1	0	0	0	0	0	1	0	0	1	2	
Sinking	0	3	. 2	7	3	4	0	4	1	1	1	4	7	23	
Oil Spill	1	0	. 0	0	0	0	0	0	0	0	0	0	1	0	
Personal Injury	1	0	0	0	1	2	0	1	0	0	0	2	2	5	

Table III

Table III shows the results in cases involving different types of vessels. "Ocean going cargo vessels" includes tankers, and all vessels so described are of fairly substantial tonnage. The reports of the cases are not complete enough to permit a meaningful analysis of the exact tonnages of all vessels. Likewise, the exact amounts of the limitation funds available or the total amounts of claims were not sufficiently described to permit meaningful analysis. Where more than one vessel was involved, as in a collision, the table shows the results for the vessel seeking limitation. If more than one vessel sought limitation in the same case, the result for each is counted.

Types of Vessels

	A		-1	В	(]	D	E	E	F	7	Total All Pe	
Type of Vessel	Yes	No	Yes	No	Yes	No								
Ocean Cargo Vessel	0	2	6	4	2	3	1	5	1	6	4	9	14	29
Tug/Barge	3	1	5	6	3	8	1	5	1	5	5	5	18	30
Fishing Vessel	2	0	1	3	0	1	0	2	0	0	0	1	3	7
Pleasure Craft	0	1	4	3	1	1	0	2	1	2	1	0	7	9
Passenger Vessel-Small	0	1	0	1	0	1	0	0	0	1	0	2	0	6
Passenger Vessel-Large	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U.S. Government Vessel	0	0	0	0	1	0	0	0	1	1	1	0	3	1
Miscellaneous	0	0	0	1	0	0	1	0	0	0	0	0	1	1

Table IV

Table IV shows the results in cases involving different types of claimants. "Property damage" includes damage to other ships, to shore structures or any other property than cargo. In the relatively few cases where limitation was granted to cargo or property damage claims, but denied to personal injury or death claims, the result is shown as a "no" case. In general, cargo and property damage claims represent subrogated insurers proceeding against the shipowner.

Types of Claimants

		A		В		C		D		E		7	Total for All Periods		
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	
Personal Injury & Death (P.I.)	1	1	3	5	2	4	1	3	2	2	1	4	10	19	
Cargo (C.)	0	3	1	3	1	3	0	3	0	4	1	4	3	20	
Property Damage (P.D.)	2	0	5	4	1	4	1	4	1	3	4	3	14	18	
C. and/or P.D. and P.I	2	1	6	5	1	3	0	3 .	1	4	3	4	13	20	
C. and P.D.	0	0	1	1	2	0	1	1	0	2	2	2	6	6	

Table V

Table V shows the results in cases of ocean going cargo vessels of United States and foreign registry. It may be assumed that all other types of cases involved only United States vessels and claimants. United States vessels have fared better than foreign vessels.

NATIONALITY OF VESSELS IN OCEAN VESSEL CASES

	Α			В	(0		D	I	3	1	7		al for Periods	
Type of Ocean Cargo Vessel	Yes	No													
United States	0	2	4	2	1	1	1	3	1	0	1	3	8	11	
Foreign	0	0	2	2	1	2	0	2	0	6	3	6	6	18	

Table VI

Table VI shows the results in cases of ocean going cargo vessels by nationality of claimants. The results show no significant difference in result based on nationality. Some guesswork is involved in the preparation of this table because the nationality of claimants, particularly cargo, is not frequently stated.

NATIONALITY OF CLAIMANTS IN OCEAN VESSEL CASES

	1	4		В	(2		D	H	Ξ	I		Total All Pe		
Type	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	
United States	0	2	4	2	1	1	1	3	1	4	1	4	8	16	
Foreign	0	0	0	1	1	1	0	2	0	0	0	0	1	4	
Combined/Unknown	0	. 0	2	1	0	1	0	0	0	2	3	5	4	9	

Table VII

Table VII is a subjective classification of the reasons for denying limitation in cases where it was denied. Although it was not a part of the analysis undertaken in this study, it appears that in few, if any, cases would limitation have been denied under the standard proposed in the IMCO convention.

REASONS FOR DENYING LIMITATION

	· ·							
	Reason	Α	В	\boldsymbol{C}	D	E	F	Total
(1)	Failure to provide or insure adequate & proper operations, equipment or crew	0	4	4	8	4	6	26
(2)	Failure to detect and/or correct defects	1	7	6	2	5	7	28
(3)	Orders by owner to vessel that proved improper	, 0	1	0	0	0	1	2
(4)	Improper operation of vessel by owner or knowledge of	3	3	4	2	5*	1	18
(5)	Personal contract	1	2	0	0	1*	0	. 4
(6)	Improper stowage or other operational act by sufficiently high person.	0	1	0	1	0	1	3
(7)	Failure of evidence to prove no privity and knowledge	0	0	. 0	1,	1	1	3
	w 1 t							

^{*} dual reasons

CASES GRANTING LIMITATION

- 1. Harbor Star, 1977 AMC 1168 (E.D.Pa.)
- 2. Complaint of Rowley, 1977 AMC 199 (D. Idaho)
- 3. Tug Ocean Prince, Inc. v. United States, 1978 AMC 1806 (2d Cir.) (Note, this case appears also in denied category for opinion in appeal).
- 4. Manners Navigation Co. v. Rigger, II, 1979 AMC 87 (S.D.Ala.)
- 5. Gwynedd Corp. Lim. Procs., 1979 AMC 531 (S.D.N.Y.)
- 6. Agrico Chemical Co. v. Atlantic Forest, 1979 AMC 801 (E.D. La.) (A unique LASH barge case).
- 7. Empresa Lineas v. United States, 1979 AMC 2607 (D. Md.)
- 8. Signal Oil v. Barge W-701, 1980 AMC 1445 (E.D.La.)
- 9. Edgar M. Queeny-Corinthos, 1980 AMC 484 (E.D.Pa.) (Note, this case appears also in denied category for the Edgar M. Queeny vessel; here the Corinthos as allowed limitation.) (Limitation question same as exoneration.)
- 10. Edgar M. Queeny Corinthos, 1981 AMC 1497 (3d Cir.) (Note, the denial of Queeny limitation was reversed. The Corinthos decision was affirmed. This case thus represents two allowances of limitation.)

CASES DENYING LIMITATION WITH REASON FOR DENIAL SHOWN USING TABLE VII REASONS

- 1. Singapore Trader, 1976 AMC 1512 (2d Cir.) (Reason 3).
- 2. Hamilton v. Canal Barge Co., 1977 AMC 2274 (E.D.La.) (Reason 2).
- 3. AT&T v. Stewart, 1978 AMC 1680 (D.Md.) (Reason 1).
- 4. Tug Ocean Prince, Inc. v. United States, 1978 AMC 1786 (2d Cir.) (Reason 1).
- 5. Stewart Transportation Lim. Proc.-STC 101, 1978 AMC 1906 (E.D.Va.) (Reason 2).

- 6. Tittle v. Aldacosta, 1978 AMC 112 (5th Cir.) (Reason 4).
- 7. Allied Chemical-Piermay, 1978 AMC 773 (Arb.) (Reason 7).
- 8. Puerto Rico v. Zoe Colocotroni, 1979 AMC 21 (D.P.R.) (Reason 1).
- 9. Republica de Colombia Limitation Proceedings, 1979 AMC 156 (S.D.N.Y.) (Reason 2).
- 10. Deep Sea Limitation Proceedings, 1979 AMC 1910 (W.D. Wash.) (Reason 1).
- 11. Marine Floridian Limitation Proceedings, 1980 AMC 983 (E.D. Va.) (Reason 2).
- 12. Marine Floridian Limitation Proceedings, 1980 AMC 1002 (4th Cir.) (Reason 2).
- 13. Cargill v. Taylor Towing, 1980 AMC 2796 (E.D.Mo.) (Reason 2).
- 14. Dixie Lee II Limitation Proceedings, 1980 AMC 2383 (E.D. Va.) (Reason 1).
- 15. Edgar M. Queeny-Corinthos, 1980 AMC 484 (E.D.Pa.) (Reason 2).
- 16. Ta Chi Limitation Proceedings (Eurybates), 1981 AMC 2350 (E.D.La.) (Reason 1).
- 17. Delphinus Maritima Limitation Proceedings (Mari Boeing) 1981 AMC 2362 (S.D.N.Y.) (Reason 6).

ANNEX A

[6609]

Docket No. 600 . October 30, 1976

THE MARITIME LAW ASSOCIATION OF THE UNITED STATES

STATISTICAL ANALYSIS OF LIMITATION OF LIABILITY CASES

1953-October, 1976

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Comments on Study and Explanation of Tables

One of the more active admiralty Circuit Courts of Appeal has had occasion to say that "in the vast majority of cases limitation is denied for one reason or another." Olympic Towing Corp. v. Nebel Towing Co., 419 F.2d 230, 235, 1969 AMC 1571, 1578 (5th Cir. 1969), cert. den., 397 U.S. 989 (1970). This offhand statement was made in the context of deciding a major attack made on whether, because limitation of liability might affect insurance premiums, the direct action cases against insurers, without benefit of limitation, should be denied. A divided court held against the insurers.

Most admiralty lawyers would probably agree with the statement of the Fifth Circuit. Perhaps the tide against limitation began with, or was certainly advanced by, Maryland Casualty Co. v. Cushing, 347 U.S. 409, 1954 AMC 837 (1954). There, as part of the 4-1-4 decision (or lack of decision), Mr. Justice Black suggested that, if Congress wished to subsidize shipowners, the subsidy should be done more directly than by limitation of liability at the expense of injured seamen. Despite the apparent current trend, a member of the insurance industry stated in a letter to the President of our Association: "My personal experience is that limitation is regularly granted when it is to the detriment of my interest. No one has any facts to back their opinion."

^{*} This study was prepared for the Committee on Limitation of Liability of The Maritime Law Association of the United States by Mr. Greenman, a member of the Committee. He wishes to acknowledge his debt to John M. Kinsey, a law clerk in his office, for his research assistance.

The subject of limitation of liability is timely. A Diplomatic Conference is to be convened in London on November 1, 1976, to consider a Convention on Limitation of Liability for Maritime Claims. A draft convention has been prepared by IMCO. The CMI draft as submitted to IMCO was approved by the Maritime Law Association of the United States on May 7, 1976, without any limitation amount specified. The draft contains a two tier set of funds, one for personal injury and death claims and the second for all other claims. The amount of each fund would generally be based on vessel tonnage. Questions involved in the convention include whether or not to exclude certain types of vessels (for example, tugs and fishing vessels) and leave coverage to national legislation.

Article 4 of the Convention deals with the basis on which limitation can be defeated. The intent of the drafters seems to make denial of limitation more difficult, but in exchange for higher limits for the benefit of claimants. Limitation is deemed if the loss:

"resulted from his personal act or omission, committed with the intent to cause such loss, or recklessly and with knowledge that such loss would probably result [or from his own gross negligence]."

The foregoing language can be read as providing two methods by which limitation can be defeated:

- (a) " * * * personal act or omission, committed with the intent to cause such loss, * * * ", or
- (b) " * * * recklessly and with knowledge that such loss would probably result * * * ".

The Limitation Act (46 U.S.C. §183) contains the phrase "without the privity or knowledge . . . ".

If the Courts interpret "intent" to require separate and specific proof of "intent" apart from proof of the act or omission, breaking the right to limit will probably be more difficult. However, if the Courts presume the intent from the act or omission, there might be little change in the elements of proof required to break limitation.

The same reasoning applies to "knowledge" under alternative (b) above. Thus, if the vessel owner knows or is constructively held to know of a condition causing a loss, the right to limit is lost even under the convention language and in circumstances not materially different from the present U.S. law.

The Fire Act (46 U.S.C. §182) uses the expression "caused by the design or neglect of such owner."

COGSA (46 U.S.C. §1304 (b)) sets forth the fire defense with the language "caused by the actual fault or privity of the carrier."

The IMCO draft further expressly gives the benefit of limitation to an insurer. It is designed to provide limits that are commercially insurable, yet adequate to safeguard the rights of harmed parties.

The United States is presently not a party to the existing Limitation Convention of 1957. The United States will be represented at the coming London Diplomatic Conference to consider the convention now on the agenda. The limitation statutes of this country would be materially changed by adherence to the draft convention. We can expect that the whole subject of limitation will be debated and considered in the near future. This study was undertaken to assist in the consideration of the Convention.

The following tables represent a statistical summary of reported cases in which the question of limitation of liability was decided on the merits. Each case is one where liability was found and damages exceeded the limitation fund, thus requiring a decision on the right to limit. Cases involving only procedural questions—venue, persons entitled to limit (including insurers), claims subject to limitation, etc.—are not included. However, each case indexed was examined to determine that what may have been indexed for a procedural point did not actually include a decision on the merits. The time period covered was from cases reported in 1953 AMC to the current volumes of AMC (1976, No. 4), 539 F.2d (No. 1) and 416 F. Supp. (No. 3). Of course, the results are no doubt merely the tip of the iceberg because cases that were settled or unreported are not included. A number of appellate cases are not reported at the

lower court level, and the lower court decision is not counted. In four cases, both the lower and appellate opinions are reported; and each opinion is counted in the study. A very few Canadian cases reported in AMC are included.

Table I

Table I is an overall summary by five year periods of cases where limitation was granted or denied. The five year periods correspond to AMC Digest periods. The periods are shown parenthetically as (A), (B), (C), (D) and (E), and these designations are used to show time periods in succeeding tables. The results bear out the conclusion that the chances of obtaining limitation have become increasingly small since the *Maryland Casualty* case in 1954.

TABLE I

ALL CASES WHERE LIMITATION ISSUE DECIDED

		Gran	nted
Period		Yes	No
1953-1957 (A)		5	5
1958-1962 (B)		16	18
1963-1967 (C)		7	14
1968-1972 (D)		3	14
1973-1976 (E)		4	15
Total	·	35	66

Table II shows the results for different types of casualties. They are generally self-explanatory. The categories "oil spill," "cargo damage," and "personal injury" represent cases where only the particular type of claim was made without a casualty of the other types described.

Types of Casualties

		Å	١.	7	3	Per	riod C	. I)	F	ł.	Total All Po	
13]	Type of Casualty	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
[6613]	Fire/Explosion	0	1	4	4	. 1	1	0	1	1	6	6	13
	Allision/Collision	3	1 -	8	5	1	6	3	['] 5	2	4	17 -	21
	Stranding/Capsizing	0	0	1	1	1	1 -	0	3	0	3	2	8
	Cargo Damage	0	0	1	1	0	0	0	0	0	1	1	2
	Sinking	0	3	2	7	3	4	0	4	1	1	6	19
	Oil Spill	1.	0	0	0	0	0	0	0 .	0	0	1	0
	Personal Injury	1	0	0	0	1	2	0	: 1	0	0	2	3

Table III

Table III shows the results in cases involving different types of vessels. "Ocean going cargo vessels" includes tankers, and all vessels so described are of fairly substantial tonnage. The reports of the cases are not complete enough to permit a meaningful analysis of the exact tonnages of all vessels. Likewise, the exact amounts of the limitation funds available or the total amounts of claims were not sufficiently described to permit meaningful analysis. Where more than one vessel was involved, as in a collision, the table shows the results for the vessel seeking limitation. If more than one vessel sought limitation in the same case, the result for each is counted.

Types of Vessels

	A	Period A B s No Yes No			riod C D			F	3	Total for All Periods		
Type of Vessel	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Ocean Cargo Vessel	0	2	6	4	2	3 -	1	5	1	6	10	20
Tug/Barge	3	1	5	6	3	8	. 1	5	1	5	13	25
Fishing Vessel	2	0	1	. 3	0	1	0	2	0	0	- 3	6
Pleasure Craft	0	1	4	3	1	1	0	2	1	2	6	9
Passenger Vessel, Small	0	1	0	1	0	1	0	0	0	1	0	4
Passenger Vessel, Large	0	0	0	0	0	0	0	0	0	0	0	0
U. S. Government Vessel	0	0	0	0	1	0	0	0	1	1	2	1
Miscellaneous	0	0	0	1	0	0	1	0	0	0	1	1

Table IV

Table IV shows the results in cases involving different types of claimants. "Property damage" includes damage to other ships, to shore structures or any otaher property than cargo. In the relatively few cases where limitation was granted to cargo or property damage claims, but denied to personal injury or death claims, the result is shown as a "no" case. In general, cargo and property damage claims represent subrogated insurers proceeding against the shipowner.

TYPES OF CLAIMANTS	Types	OF	CLAIMANTS
--------------------	-------	----	-----------

				Perio	d						Total for		
	1	4	1	В		3]	D	E	Ē	All Pe	riods	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	
Personal Injury & Death (P.I.)	1	1	3	5	2	4	1	3	2	2	9	15	
Cargo (C.)	0	3	1	3	1	3	0	3	0	4	2	16	
Property Damage (P.D.)	2	0	5	4	1	4	1	. 4	1	3	10	15	
C. and/or P.D. and P.I.	2	1.	6	5	1	3	0	3	1	4	10	16	
C. and P.D.	0	0	1	1	2	0	1	1	0	2	4 .	4	

Table V

Table V shows the results in cases of ocean going cargo vessels of United States and foreign registry. It may be assumed that all other types of cases involved only United States vessels and claimants. United States vessels have fared better than foreign vessels.

NATIONALITY OF VESSELS IN OCEAN VESSEL CASES

	Α		Period B		d C		D		E		Total for All Periods	
Type of Ocean Cargo Vessel	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
United States	0	2	4	2	1	1	1	3	1	0	7	8
Foreign	0	0	2	2	1	2	0	2	0	6	3	12

Table VI

Table VI shows the results in cases of ocean going cargo vessels by nationality of claimants. The results show no significant difference in result based on nationality. Some guesswork is involved in the preparation of this table because the nationality of claimants, particularly cargo, is not frequently stated.

NATIONALITY OF CLAIMANTS IN OCEAN VESSEL CASES

	Period C					D E			E	Total for All Periods		
Туре	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
United States	0	2	4	2	1	1 .	1	3	1	4	.7	12
Foreign	0	0	0	1	1	1	0	2	0	0	1	4
Combined/Unknown	0	0	2	1	0	1	0	0	0	2	2	4

Table VII

Table VII is a subjective classification of the reasons for denying limitation in cases where it was denied. Rather than showing anything meaningful about reasons for denial, it probably simply supports the Fifth Circuit's statement that limitation is denied "for one reason or another." Although it was not a part of the analysis undertaken in this study, it apears that in few, if any, cases would limitation have been denied under the standard proposed in the IMCO convention.

REASONS FOR DENYING LIMITATION

	Period							
Reason		В	C	D	E	Total		
Failure to provide or insure adequate & proper operations, equipment or crew	0	4	4	8	4	20		
Failure to detect and/or correct defects	1	7	6	2	5	21		
Orders by owner to vessel that proved improper	0	-1	0	0	0	1		
Improper operation of vessel by owner or knowledge of	3	3	4	2	5*	17		
Personal contract	1	2	0	0	1*	4		
Improper stowage or other operational act by suffi-	0	1	0	1	0	2		
Failure of evidence to prove no privity and knowledge	0	0	0	1	1	2		

^{*} dual reasons