

Library

PART V

REPORT RELATIVE TO  
VESSEL TRAFFIC IN NEW YORK HARBOR

by

THE WATER POLLUTION SURVEY

Prepared under Supervision of  
U. S. WORKS PROGRESS ADMINISTRATION  
For the City of New York  
Brehon Somervell, Administrator

D. Standley, Field Director, Man. Field Office

New York, N. Y.  
January - 1939.

Sponsored by

**INTERSTATE SANITATION COMMISSION**  
60 HUDSON STREET  
NEW YORK CITY

PART V

REPORT RELATIVE TO  
VESSEL TRAFFIC IN NEW YORK HARBOR

by

THE WATER POLLUTION SURVEY

Prepared under Supervision of  
U. S. WORKS PROGRESS ADMINISTRATION  
For the City of New York  
Brehon Somervell, Administrator

D. Standley, Field Director, Man. Field Office

Sponsored by  
SPONSOR - INTERSTATE SANITATION COMMISSION  
60 Hudson Street  
Seth G. Hess, Chief Engineer - Executive Secretary

CO-SPONSOR - U. S. PUBLIC HEALTH SERVICE  
Washington, D. C.  
H.R. Crohurst - Senior Sanitary Engineer

Prepared by  
WATER POLLUTION SURVEY  
WPA Project 465-97-3-131  
C.G. Wigley, Engr. Supv.

New York, N. Y.  
January, 1939.

U. S. WORKS PROGRESS ADMINISTRATION  
Project 465-97-3-131  
C. G. Wigley, Engr. Supervisor

\* \* \* \*

PART V - JOB 2-D<sup>3</sup> - SECTION 1

\* \* \* \*

VESSEL TRAFFIC SURVEY

INTRODUCTION.- It was not possible under the program prepared for this project to make a complete sanitary survey of the waters of the Interstate Sanitation District. There are, however, several phases of such a survey that at this time are of particular interest to the Interstate Sanitation Commission.

As has been indicated in a previous section of this report, the Commission is obliged to classify various parts of the waterways of the district as either Class A or B. This classification to a considerable extent depends upon the predominant use of the waterway either for commercial or recreational purposes, as well as upon the nature and use of the shore front. For this reason, it was considered desirable to obtain some data as to the movement of vessels in various sections of the harbor in order to have some measure of the commercial vessel traffic.

In certain areas, these vessels discharge daily considerable quantities of sewage and other wastes which at the present time cannot be readily controlled or eliminated.

Plans were made for the purpose of making a count of the number of vessels passing certain points in the harbor. As the amount of polluting material discharged depends to a considerable extent upon the number of passengers carried, estimates were made as to the number of passengers on each vessel. This information even though somewhat inaccurate, would in certain cases aid considerably in the classification of the waters. In addition to the above information, the vessels were classified as commercial, including vessels engaged in international or coastal transportation, tugs, ferries, etc.; recreational, including excursion boats, yachts, private motor boats, etc.; or as miscellaneous, which included naval vessels, dredges, etc.

It was learned that the United States Coast Guard Service kept a record of vessels coming into the harbor at The Narrows, Throgs Neck and Perth Amboy. The Coast Guard officials very kindly permitted our representatives access to these records. From them, Section 2 of this report has been tabulated. Section 1 of this report includes the vessels counted at various points about the river harbor waters by men employed by this project.

The vessel traffic count was carried on from July 5th to September 25th, 1938. The time period included most of the summer recreational season, a study of which was of particular interest. Obviously, in winter the recreational use of the waterways about the city has practically ceased, and only boats used primarily for commercial purposes are operating.

#### VESSEL TRAFFIC COUNT - INNER HARBOR WATERS

Observation posts were established along the inner harbor waters at the points listed below:

<u>WATERWAY</u>	<u>OBSERVATION POINT</u>	<u>LOCATION</u>
East River	Park	90th Street
East River	Pier #6	Coenties Slip
Hudson River	Pier #43	Christopher & West
Hudson and Harlem Rivers	Railroad Yard	Spuyten Duyvil
Kill van Kull	Ferry Street Dock	Port Richmond, S.I.
Arthur Kill	Victory Blvd.	Travis, S.I.

With the funds available, it was not feasible for the project to conduct the survey seven days each week for the entire twelve week period. However, an actual seven day survey was made during the week of August 22nd to 28th, inclusive, and the information obtained was used for the purpose of converting the actual five day figures for the entire twelve weeks into an adjusted seven day count.

Personnel selected to make the observations were of a good type, being chosen primarily on the basis of work experience and past records. To insure adequate supervision and control, the person in charge of the work visited each observation post at least once a day in order to instruct the observer and satisfy himself that the count was made in a proper manner. These daily visits were also sup-

plemented by other check visits from supervisory personnel.

90th STREET AND EAST RIVER.- Observers were placed at this location for a ten week period, from July 18th to September 25th, 1938. For the first week or so, due to inexperience, the men did not always properly classify Government-owned boats as "Miscellaneous" with the results that the figures do not fairly reflect the volume of river traffic for this class of vessels. However, beginning with August, observers were much more experienced and better able to recognize vessels of this type. The figures for miscellaneous vessels were generally in advance of those indicated for the Lower East River (Pier #6) and were well ahead of the negligible number of miscellaneous vessels traversing the waters of the Lower Hudson. Figures for the eight weeks beginning August 1st are as follows: 386 vessels at 90th Street, or an average of 48 each week; 294 vessels at Pier #6, or an average of 36 a week; 129 vessels at Pier #43, or an average of 16 per week.

COMMERCIAL VESSELS.- For commercial vessels the weekly count ranged from a low of 268 to a high of 597, or an average of 445 commercial vessels each week plying the East River traffic lanes. The ten week total of 4,456 was only half the number of commercial vessels observed at Pier #6 (Lower East River) and Pier #43 (Lower Hudson).

RECREATIONAL VESSELS.- It was again noted that during the month of August, the number of this kind of craft observed was double the total counted for either July or September. These figures also reflect the inclement weather experienced in New York during the week of September 19th to the 25th, as during this week a sharp reduction to 47 vessels was noted in contrast with 112 for the week previous.

The following table indicates the number of vessels (commercial, recreational and miscellaneous) and passengers counted during actual five day weeks, together with corresponding figures adjusted to a seven day week:

TABLE NUMBER V-1  
EAST RIVER AT 90th ST., NEW YORK CITY

RECAPITULATION

COMMERCIAL VESSELS

<u>VESSELS</u>		<u>PASSENGERS</u>	
<u>5-day Actual Count</u>	<u>7-day Adjusted Count</u>	<u>5-day Actual Count</u>	<u>7-day Adjusted Count</u>
4,456	6,347	38,497	51,701

RECREATIONAL VESSELS

<u>VESSELS</u>		<u>PASSENGERS</u>	
<u>5-day Actual Count</u>	<u>7-day Adjusted Count</u>	<u>5-day Actual Count</u>	<u>7-day Adjusted Count</u>
1,773	2,705	165,533	258,804

MISCELLANEOUS VESSELS

<u>VESSELS</u>		<u>PASSENGERS</u>	
<u>5-day Actual Count</u>	<u>7-day Adjusted Count</u>	<u>5-day Actual Count</u>	<u>7-day Adjusted Count</u>
391	489	4,369	4,433

GRAND TOTALS

<u>VESSELS</u>		<u>PASSENGERS</u>	
<u>5-day Actual Count</u>	<u>7-day Adjusted Count</u>	<u>5-day Actual Count</u>	<u>7-day Adjusted Count</u>
6,620	9,541	208,399	316,938

PIER #6.- From this point, located at the foot of Coenties Slip, near South Street, Manhattan, it was possible to count all Lower East River vessel traffic. There was, of course, a preponderance of commercial vessels noted at this location and this was also the case at Pier #43 observation post, which covers Lower Hudson River traffic. A comparison of the commercial and recreational vessel count for Lower East River and Lower Hudson River shows a marked similarity. The figures are presented here as being of interest:

<u>TYPE OF VESSEL</u>	<u>EAST RIVER PIER #6</u>	<u>HUDSON RIVER PIER #43</u>
Commercial	9,686	9,362
Recreational	991	980
Miscellaneous	434	171
Ferries	0	13,041

It will be noted that whereas no ferries were sighted on the East River, some 13,041 of these vessels were counted on the Lower Hudson. This is accounted for by the fact that ferries are not necessary on the East River at this point, as the Manhattan Bridge and Brooklyn Bridge take care of trans-river vehicular and pedestrian traffic.

TABLES SHOWING 5-DAY ACTUAL AND 7-DAY ADJUSTED COUNTS.- The tables that follow for commercial, recreational and miscellaneous vessels counted from Pier #6 observation post, indicate actual times of observation, actual day by day count for five day period and count when adjusted to seven day total. As previously mentioned, an actual seven day count was made for the week of August 22nd to 28th; the figures thus obtained being used as a basis for obtaining seven day adjusted counts for the other weeks when only a five day count was made.

From a study of the tables, it will be noted that for the two weeks, July 18th to 31st, the total for recreational vessels was very much below the average for the twelve weeks. This is accounted for by the fact that during these two weeks there was fog on the East River, together with incessant rains, which was not the best of weather for recreational vessels to be plying the waters with passengers bent on having a good time. A similar reduction in the number of recreational vessels was noted during the week of September 19th to 23rd, when for practically a whole week a hurricane ravaged New York City and its environs, with the result that only nine recreational vessels were

venturesome enough to make their trips. In contrast with this figure, some 60 recreational vessels were counted from this observation post for the previous week and 131 for the week preceding this. Although the movement of commercial vessels was restricted and delayed by the hurricane, this is not reflected in the totals for the period.

"Miscellaneous" vessels was the classification applied to government-owned and municipal craft and, of course, there was no noticeable interruption in movement of this type of vessel during the stormy weeks under consideration.

For some reason that is not at once apparent, movement of commercial vessels during the month of July was well below other months under review, the average being 646 vessels for July as contrasted with an average per week for the entire twelve week period of 807 vessels. However, the figures for other weeks were fairly constant, averaging around the 800 level, with an occasional spurt to the 1,000 mark.

Movement of miscellaneous vessels is spotty, weekly totals jumping from a minimum of twelve to a maximum of 74. For five weeks the totals ran from 38 to 40, although these five weeks were not consecutive.

Although it was hardly possible to obtain an actual count of crew and passengers of the various ships, certain yardsticks were employed in obtaining an approximate total. For instance, the majority of vessels bracketed "Commercial" were tug boats, - a small boat of this calibre, say 30 feet, carrying a pilot, engineer and possibly two deck hands, so that four would be the indicated number of persons aboard. A larger tug of, say 50 feet in length, would carry six or seven. Observers were instructed in differentiating between freight and passenger-carrying commercial vessels. A freighter of, say 8,000 tons, would be indicated as carrying possibly 15 persons. To evaluate the number of passengers and crew on an ocean-going passenger liner was, however, a much more difficult task. Observers could obtain an approximation by counting or observing the number of passengers on deck, the number of decks, and the carry-in capacity of the ship. However, it should be stated that in such cases it was largely a matter of guesswork at best and, of course, the personal equation entered into the picture.

The tables showing five day actual and seven day adjusted counts for commercial, recreational and miscellaneous vessels observed from Pier #6 observation post follows:



TABLE NUMBER V-2  
EAST RIVER AT SOUTH ST. & COENTIES SLIP (PIER NUMBER SIX)

RECAPITULATION

COMMERCIAL VESSELS

<u>VESSELS</u>		<u>PASSENGERS</u>	
5-day Actual Count	7-day Adjusted Count	5-day Actual Count	7-day Adjusted Count
9,686	13,075	90,840	131,833

RECREATIONAL VESSELS

<u>VESSELS</u>		<u>PASSENGERS</u>	
5-day Actual Count	7-day Adjusted Count	5-day Actual Count	7-day Adjusted Count
991	1,431	196,552	298,609

MISCELLANEOUS VESSELS

<u>VESSELS</u>		<u>PASSENGERS</u>	
5-day Actual Count	7-day Adjusted Count	5-day Actual Count	7-day Adjusted Count
434	651	10,885	13,292

GRAND TOTALS

<u>VESSELS</u>		<u>PASSENGERS</u>	
5-day Actual Count	7-day Adjusted Count	5-day Actual Count	7-day Adjusted Count
11,111	15,157	298,277	443,734

12-week figures for commercial vessels of 9,686 for Pier #6 and 9,846 for Pier #43 were practically identical; although in the case of the weekly figures, some sharp contrasts were evident.

FERRIES.- Table No. V-3 gives some idea of daily passenger traffic on one line (Barclay Street) operated by one railroad in the Metropolitan Area. Additional information referring to ferry passenger volume is outlined on pages 23, 24 and 25 herein.

MISCELLANEOUS VESSELS.- During each of the twelve weekly periods the totals for miscellaneous vessels plying the Hudson were sharply under those shown for observation post at Pier #6 (Lower East River). The higher figures for the East River are no doubt due to the fact that there is a Federal Government boat base located near 22nd St.

The following information was received from one of the ferry operating companies.

"We estimate that the average number of passengers carried on a Barclay Street boat during a week day would be as follows:

TABLE NUMBER V-3

12:01	to	1:00	A.M.	-	150
1:00	to	2:00	A.M.	-	100
2:00	to	3:00	A.M.	-	100
3:00	to	4:00	A.M.	-	95
4:00	to	5:00	A.M.	-	150
5:00	to	6:00	A.M.	-	200
6:00	to	7:00	A.M.	-	400
7:00	to	8:00	A.M.	-	1,000
8:00	to	9:00	A.M.	-	1,500
9:00	to	10:00	A.M.	-	1,000
10:00	to	11:00	A.M.	-	1,000
11:00	to	12:00	Noon	-	500
12:00	to	1:00	P.M.	-	300
1:00	to	2:00	P.M.	-	300
2:00	to	3:00	P.M.	-	250
3:00	to	4:00	P.M.	-	400
4:00	to	5:00	P.M.	-	1,000
5:00	to	6:00	P.M.	-	1,500
6:00	to	7:00	P.M.	-	1,000
7:00	to	8:00	P.M.	-	750
8:00	to	9:00	P.M.	-	500
9:00	to	10:00	P.M.	-	400
10:00	to	11:00	P.M.	-	300
11:00	to	12:00	P.M.	-	150 "

TABLE NUMBER V-4  
HUDSON RIVER AT CHRISTOPHER & WEST STS. (PIER #43)

RECAPITULATION

COMMERCIAL VESSELS

<u>VESSELS</u>		<u>PASSENGERS</u>	
<u>5-day Actual Count</u>	<u>7-day Adjusted Count</u>	<u>5-day Actual Count</u>	<u>7-day Adjusted Count</u>
9,362	14,347	161,313	261,301

RECREATIONAL VESSELS

<u>VESSELS</u>		<u>PASSENGERS</u>	
<u>5-day Actual Count</u>	<u>7-day Adjusted Count</u>	<u>5-day Actual Count</u>	<u>7-day Adjusted Count</u>
980	1,912	154,529	344,638

FERRIES

<u>VESSELS</u>		<u>PASSENGERS</u>	
<u>5-day Actual Count</u>	<u>7-day Adjusted Count</u>	<u>5-day Actual Count</u>	<u>7-day Adjusted Count</u>
17,381	24,598	00	

MISCELLANEOUS VESSELS

<u>VESSELS</u>		<u>PASSENGERS</u>	
<u>5-day Actual Count</u>	<u>7-day Adjusted Count</u>	<u>5-day Actual Count</u>	<u>7-day Adjusted Count</u>
171	213	7,200	11,137

GRAND TOTALS

<u>VESSELS</u>		<u>PASSENGERS</u>	
<u>5-day Actual Count</u>	<u>7-day Adjusted Count</u>	<u>5-day Actual Count</u>	<u>7-day Adjusted Count</u>
27,894	41,070	323,042	617,076

SPUYTEN DUYVIL (HUDSON AND HARLEM RIVERS).- An observation post was established at the railroad station below the Hendrik Hudson Bridge, it being possible to obtain counts on both the Hudson and Harlem Rivers from this advantageous location.

COMMERCIAL VESSELS.- 594 commercial vessels were counted on the Hudson for the 12-week period from July 4th to September 25th, so that the weekly average is 594. The high week was August 22nd - 28th with 68 vessels observed, and the low week, September 5th - 11th, when only 27 commercial vessels were counted.

There were even fewer commercial vessels on the Harlem River than on the Hudson, only 257 of this class of craft being observed in the twelve weeks, or an average of 20 vessels per week. Each week, somewhat less than 20 vessels of this type passed the observation point, with an increase to some 40 vessels in the week August 1st - 7th. During this particular week, it might be of interest to point out, there was one day, August 2nd, when 24 commercial vessels were counted. The day previous, August 1st, although the observation post was only maintained for a matter of  $2\frac{1}{2}$  hours (2:00 to 4:30 P.M.), no less than eight vessels were counted.

RECREATIONAL VESSELS.- Spuyten Duyvil is a short cut from the Hudson River to the Sound. As evidence of the popularity of this waterway for various kinds of pleasure craft, the statistics of the 12-week period are significant. In one week alone, August 22nd to 28th, no fewer than 152 recreational vessels were counted. Of course, as pointed out previously, August is the month during which the greatest number of vessels of this type are seen. The economic loss due to the storm was evidenced here, as during the week of September 19th to 25th, but six pleasure craft were counted. In the entire 12 weeks no less than 744 recreational vessels were seen plying the waters of the Hudson River at this point, or a weekly average of 62.

A total of 629 recreational vessels were noted during the 12-week period on the Harlem River, the weekly average being 52. On this waterway, too, the high was registered during the month of August, the week of August 22nd to 28th showing 142 pleasure craft, as contrasted with the week of September 19th to 25th, when but four

were counted. During the entire month of August at this location some 332 vessels were observed, indicating a weekly average of 83. These figures are very significant when it is pointed out that but 109 vessels were counted during the entire month of September, or a weekly average of 27. Of further interest is the fact that at Spuyten Duyvil, on both the Hudson and Harlem Rivers, the totals for recreational were greater than those for commercial vessels, the ratio being about two to one. This contrasts with conditions noted at both Pier #6 and #43 where recreational vessels constituted but 10 per cent of the total observed.

The totals for miscellaneous vessels were insignificant. Figures follow:

TABLE NUMBER V-5  
SPUYTEN DUYVIL, HUDSON RIVER, NEW YORK CITY

R E C A P I T U L A T I O N

COMMERCIAL VESSELS

<u>VESSELS</u>		<u>PASSENGERS</u>	
<u>5-day Actual Count</u>	<u>7-day Adjusted Count</u>	<u>5-day Actual Count</u>	<u>7-day Adjusted Count</u>
594	944	7,409	12,215

RECREATIONAL VESSELS

<u>VESSELS</u>		<u>PASSENGERS</u>	
<u>5-day Actual Count</u>	<u>7-day Adjusted Count</u>	<u>5-day Actual Count</u>	<u>7-day Adjusted Count</u>
744	1,682	486,543	977,318

MISCELLANEOUS VESSELS

<u>VESSELS</u>		<u>PASSENGERS</u>	
<u>5-day Actual Count</u>	<u>7-day Adjusted Count</u>	<u>5-day Actual Count</u>	<u>7-day Adjusted Count</u>
16	20	1,669	2,884

GRAND TOTALS

<u>VESSELS</u>		<u>PASSENGERS</u>	
<u>5-day Actual Count</u>	<u>7-day Adjusted Count</u>	<u>5-day Actual Count</u>	<u>7-day Adjusted Count</u>
1,354	2,646	495,621	992,417

TABLE NUMBER V-6  
SPUYTEN DUYVIL, HARLEM RIVER, NEW YORK CITY

RECAPITULATION

COMMERCIAL VESSELS

	<u>VESSELS</u>		<u>PASSENGERS</u>	
	<u>5-day Actual Count</u>	<u>7-day Adjusted Count</u>	<u>5-day Actual Count</u>	<u>7-day Adjusted Count</u>
Total for 10-wk. Period	257	496	2,357	4,429

RECREATIONAL VESSELS

	<u>VESSELS</u>		<u>PASSENGERS</u>	
	<u>5-day Actual Count</u>	<u>7-day Adjusted Count</u>	<u>5-day Actual Count</u>	<u>7-day Adjusted Count</u>
Total for 10-wk. Period	629	1,556	21,699	47,577

MISCELLANEOUS VESSELS

	<u>VESSELS</u>		<u>PASSENGERS</u>	
	<u>5-day Actual Count</u>	<u>7-day Adjusted Count</u>	<u>5-day Actual Count</u>	<u>7-day Adjusted Count</u>
Total for 10-wk. Period	13	18	111	166

GRAND TOTALS

	<u>VESSELS</u>		<u>PASSENGERS</u>	
	<u>5-day Actual Count</u>	<u>7-day Adjusted Count</u>	<u>5-day Actual Count</u>	<u>7-day Adjusted Count</u>
For 10-wk. Period	899	2,070	24,167	52,172

KILL VAN KULL.- On July 19th an observation post was established at Ferry Street Dock, S.I., on the Kill van Kull, and maintained for a 10-week period to September 25th.

COMMERCIAL VESSELS.- Figures averaged fairly close to the 400-vessel per week mark, rising to 506 for the week of July 25th to 31st, and dropping to 280 vessels in the week of September 5th to 11th. For the most part, commercial vessels seen here were either freighters or tugs, with a consequent low average for passengers.

RECREATIONAL VESSELS.- The weekly totals for this kind of vessel were somewhat lower than those for other observation points, with the exception of Arthur Kill. However, the vessel-movement trend was quite in keeping with that noted on other New York City waterways. Here again the trend was towards a sharp increase in totals during the latter half of August, figures being:- week ended August 19th, seventy-four (74) vessels, and fifty-five (55) recreational vessels for week ended August 28th. It is not possible to indicate what effect the stormy weather of early July had on vessel movement of this type, due to the fact that observers were not placed at this post until July 19th. However, the effect of the rainstorms during the week ended September 25th is clearly shown in the total for that week, when only two recreational vessels were sighted, carrying 200 passengers. This passenger total contrasts sharply with the 18,000 or more passengers carried by this class of vessel during the week ended August 28th.

FERRIES.- A ferry service is in operation between Ferry Street, S.I., and Bayonne, N.J. No less than 3,242 of this type of vessel were observed during the 10-week period under review, or a weekly average of 324. However, interest lies in the fact that from July 19th to August 7th weekly totals were around the 225 mark, with a marked increase for the week of August 8th - 14th to 540 vessels. A uniform figure of about 450 per week was maintained until the end of August, the totals declining sharply to around the 200-vessel mark where they continued through September.

MISCELLANEOUS.- Miscellaneous (Government, etc.) vessel movement was spotty, only two vessels being observed during two separate weeks. This compares with 23 miscellaneous vessels noted during week ended July 28th, and a one-day count of 13 recorded July 26th.

TABLES.- Commercial, recreational, miscellaneous and ferry vessel counts follow:



TABLE NUMBER V-7  
KILL VAN KULL, FERRY ST. DOCK, S.I.

R E C A P I T U L A T I O N

COMMERCIAL VESSELS

	<u>VESSELS</u>		<u>PASSENGERS</u>	
	5-day Actual Count	7-day Adjusted Count	5-day Actual Count	7-day Adjusted Count
Total for 10-wk. Period	3,874	5,628	78,371	114,594

RECREATIONAL VESSELS

	<u>VESSELS</u>		<u>PASSENGERS</u>	
	5-day Actual Count	7-day Adjusted Count	5-day Actual Count	7-day Adjusted Count
Total for 10-wk. Period	391	579	70,486	112,970

FERRIES

	<u>VESSELS</u>	
	5-day Actual Count	7-day Adjusted Count
Total for 10-wk. Period	3,242	4,317

MISCELLANEOUS VESSELS

	<u>VESSELS</u>		<u>PASSENGERS</u>	
	5-day Actual Count	7-day Adjusted Count	5-day Actual Count	7-day Adjusted Count
Total for 10-wk. Period	90	132	1,155	1,443

GRAND TOTALS

	<u>VESSELS</u>		<u>PASSENGERS</u>	
	5-day Actual Count	7-day Adjusted Count	5-day Actual Count	7-day Adjusted Count
For 10-wk. Period	7,597	10,656	150,012	229,007

ARTHUR KILL.- A post was maintained at the foot of Victory Boulevard, S.I., for a 6-week period from August 15th to September 25th, for the purpose of observing vessel movement on the Arthur Kill.

COMMERCIAL VESSELS.- The volume of traffic was between 125 to 180 vessels per week. Only half as many commercial vessels were observed here as in Kill van Kull, figures being: Kill van Kull, 2,174 for 6-week period, August 15th to September 25th, or 362 per week; Arthur Kill, 903 in the same period, or a weekly average of 150.

RECREATIONAL VESSELS.- About the same comment can be made here with respect to movement of this type of vessel as was made in regard to other observation posts. The last weeks of August saw the greatest activity in recreational vessel movement, and the week September 19th to 25th registered the low point for the entire period; the count was 61 vessels for the August week and 13 for the stormy week September 19th - 25th.

MISCELLANEOUS VESSELS.- In four of the six weeks during which the observation post was maintained on the Arthur Kill, a total of seven or eight vessels of this type per week were counted.

Tables of vessel movement,- commercial, recreational and miscellaneous follow:

TABLE NUMBER V-8  
 ARTHUR KILL, FOOT OF VICTORY BLVD., S. I.  
 AUGUST 15 to SEPTEMBER 25, 1938

RECAPITULATION

COMMERCIAL VESSELS

	<u>VESSELS</u>		<u>PASSENGERS</u>	
	<u>5-day Actual Count</u>	<u>7-day Adjusted Count</u>	<u>5-day Actual Count</u>	<u>7-day Adjusted Count</u>
Total for 6-wk. Period	903	1,410	12,612	18,125

RECREATIONAL VESSELS

	<u>VESSELS</u>		<u>PASSENGERS</u>	
	<u>5-day Actual Count</u>	<u>7-day Adjusted Count</u>	<u>5-day Actual Count</u>	<u>7-day Adjusted Count</u>
Total for 6-wk. Period	236	376	2,877	4,900

MISCELLANEOUS VESSELS

	<u>VESSELS</u>		<u>PASSENGERS</u>	
	<u>5-day Actual Count</u>	<u>7-day Adjusted Count</u>	<u>5-day Actual Count</u>	<u>7-day Adjusted Count</u>
Total for 6-wk. Period	47	79	562	326

GRAND TOTALS

	<u>VESSELS</u>		<u>PASSENGERS</u>	
	<u>5-day Actual Count</u>	<u>7-day Adjusted Count</u>	<u>5-day Actual Count</u>	<u>7-day Adjusted Count</u>
For 6-wk. Period	1,186	1,865	16,051	23,351

### FERRY ST. DOCK AND VICTORY BLVD.

Since no Saturday or Sunday counts were taken at either Ferry Street Dock or Victory Blvd. in Staten Island, conversion factors were derived from the full month of July, 1938, count made by the U.S. Coast Guard at Perth Amboy.

The factors are as follows:

Ac = 1.27	AR = 1.05	AM = 1.0	AT = 1.24
Ac = 0.63	AR = 1.07	AM = 1.30	AT = 0.70

### TRANSIT COMMISSION DATA

There is given below information relative to ferry traffic which has been taken from reports and newspaper releases of the New York City Transit Commission. This information adds considerable data to that which it was possible for the project workers to collect.

### RAILROAD AND FERRY TRAFFIC IN AND OUT OF NEW YORK CITY - 1937 NEW YORK CITY TRANSIT COMMISSION

An increase of 2,807,280 or .98 per cent in passengers carried by the trunk line railroads, ferries and the Hudson and Manhattan Railroad above the number carried in 1936, was shown in a report made yesterday by the Transit Commission in its annual compilation of total railroad, ferry and vehicular traffic entering and leaving New York City during 1937.

A loss in commuter travel for 1937, of 5,664,627, over 1936 is also shown.

During 1937, 289,783,026 passengers were carried into and out of New York City on railroads and ferries, an increase of 2,807,280 over 1936, when the count showed a total of 286,975,746. Trunk line railroads showed an increase from 198,151,642 passengers in 1936 to 200,481,900 in 1937, a gain of 2,329,565. On privately owned ferries the traffic increased from 28,457,433 in 1936 to 29,112,659 in 1937. Passengers carried on the Hudson and Manhattan lines showed

a loss from 76,477,943 in 1936 to 76,116,972 last year, or 310,971.

Vehicular traffic on privately owned ferries showed an increase of 499,431; the figure being 13,108,681 in 1936, and 13,608,112 in 1937.

Of the 289,783,026 passengers entering and leaving the city last year, 212,311,743 were commuters as against 217,976,370 in the previous year. These represent two-way traffic, so that the actual number of persons entering the city by railroad and ferry routes was 144,891,513, of whom 106,155,872 were commuters.

Estimating on the basis of 300 full traffic days, 482,972 passengers used the railroads and ferries into New York City daily, of whom 353,853 were commuters. This gives an estimated number of daily visitors to the city of 129,119. In 1936, the estimated total number of daily passengers was 478,293, of whom 363,294 were commuters and 114,999 daily visitors.

Total of steam railroad passengers in and out of New York City for 1937-1936:

<u>1937</u>	<u>1936</u>	<u>INCREASE</u>
200,481,900	198,151,642	1.2 per cent

TABLE NUMBER V-9  
COMPARISON OF LOCAL PASSENGERS USING FERRIES  
1936 - 1937

	1936		1937	
	ANNUAL COUNT	DAILY AVERAGE	ANNUAL COUNT	DAILY AVERAGE
CENTRAL R.R. OF N.J.				
Liberty Street	559,324	1,532	602,849	1,652
West 23rd Street	74,557	204	80,890	221
TOTAL	633,881	1,736	* 683,739	1,873
* B. & O. R.R. passengers using ferries <u>not</u> included.				
D. L. & W. R.R.				
Barclay Street	2,357,025	6,458	2,342,323	6,417
Christopher Street	1,093,255	2,995	1,090,106	2,986
23rd Street	833,975	2,285	861,233	2,359
14th St. - Hoboken	3,268,986	8,956	3,407,736	9,336
TOTAL	7,553,241	20,694	7,701,398	21,098
Dyckman Street	381,472	1,045	** 387,463	1,061
** Ferry opened March 25th and closed November 11, 1937.				
Elizabethport Ferry	900,699	2,468	813,877	2,230
ERIE R.R.				
Chambers Street	148,792	408	161,959	444
West 23rd Street	59,391	162	56,094	153
TOTAL	208,183	570	218,053	597
Fort Lee Ferry	3,805,110	10,425	3,944,427	10,807
PENNSYLVANIA R.R.				
Cortlandt Street	541,777	1,484	541,532	1,484
Pt. Richmond-Bayonne	575,710	1,577	547,914	1,501
STATEN IS. RAPID TRAN. RY.				
Tottenville-PerthAmboy	499,572	1,369	512,233	1,403
WEST SHORE-N.Y. CENTRAL				
42nd Street	11,854,057	32,477	12,380,430	33,919
Cortlandt Street	1,503,731	4,119	1,381,593	3,785
TOTAL	13,357,788	36,596	13,762,023	37,704
GRAND TOTAL - ALL LINES				
	28,457,433	77,964	29,112,659	79,758

TABLE NUMBER V-10  
COMPARISON OF R.R. PASSENGERS USING FERRIES  
1936 - 1937

	1936		1937	
	ANNUAL COUNT	DAILY AVERAGE	ANNUAL COUNT	DAILY AVERAGE
CENTRAL R.R. OF N.J.				
Liberty Street	12,123,197	33,214	12,452,677	34,117
23rd Street	1,127,523	3,089	1,227,750	3,363
TOTAL	13,250,720	36,303	*13,680,427	37,480
* B. & O. R.R. passengers using ferries <u>not</u> included.				
D. L. & W. R.R.				
Barclay Street	7,834,300	21,464	7,784,742	21,328
Christopher Street	1,322,676	3,624	1,314,307	3,601
23rd Street	1,017,443	2,787	1,011,006	2,771
TOTAL	10,174,419	27,875	10,110,055	27,700
ERIE R.R.				
Chambers Street	11,639,250	31,889	11,157,350	30,568
West 23rd Street	1,112,818	3,048	1,089,136	2,984
TOTAL	12,752,068	34,937	12,246,486	33,552
PENNSYLVANIA R.R.				
Cortlandt Street	64,984	178	62,177	170
STATEN IS. RAPID TRAN. RY.				
Tottenville - Perth Amboy	262,119	718	277,274	759
WEST SHORE - NEW YORK				
CENTRAL				
42nd Street	3,907,994	10,706	3,866,724	10,593
Cortlandt Street	2,477,829	6,789	2,440,081	6,685
TOTAL	6,385,823	17,495	6,306,805	17,278
GRAND TOTAL - ALL LINES				
	42,890,143	117,506	42,683,224	116,939

TABLE NUMBER V-11  
1937 MUNICIPAL FERRY PASSENGER TRAFFIC

FROM	TO	ANNUAL VOLUME	DAILY AVERAGE	DISTANCE ONE-WAY
St. George, S. I.	Whitehall St., Man.	24,059,166	65,915	5 Miles
St. George, S. I.	39th St., Brooklyn	1,060,840	2,906	3 "
39th St., Brooklyn	South St., Manhattan	126,312	346	3 "
Hamilton Ave., Brooklyn	South St., Manhattan	387,051	1,060	1 "
Classon Pt., Bronx	College Pt., Queens	692,236	1,898	1.53 "
Flatbush Ave., Brooklyn	Rockaway Beach, Queens*	311,846	854	.71 "
	TOTAL	26,637,451	72,979	
* Ceased Operation July 3, 1937 (New Marine Parkway Bridge)				
Brooklyn-Richmond Ferry Co.		1,411,803	3,867	
	GRAND TOTAL	28,049,254	76,847	

TABLE NUMBER V-12  
1936 OPERATING STATISTICS MUNICIPAL FERRY LINES

FROM	TO	PASSENGERS		VEHICLES		ROUND TRIPS
		ANNUAL VOLUME	DAILY AVERAGE	ANNUAL VOLUME	DAILY AVERAGE	
St. George, S. I.	Whitehall St., Man.	23,874,711	65,411	890,547	2,440	31,261 $\frac{1}{2}$
St. George, S. I.	39th St., Brooklyn	---	---	---	---	---
39th St., Brooklyn	South St., Manhattan	990,118	2,712	261,627	716	14,870 $\frac{1}{2}$
Hamilton Ave., Brooklyn	South St., Manhattan	456,052	1,250	26,060	71	9,084
Clason Point, Bronx	College Point, Queens	1,261,966	3,457	850,283	2,329	39,564 $\frac{1}{2}$
Flatbush Ave., Brooklyn	Rockaway Beach, Queens	893,294	2,447	156,578	429	16,514 $\frac{1}{2}$
	TOTAL	27,476,141	75,277	2,185,095	5,985	111,295



TABLE NUMBER V-13  
 INSTITUTIONAL LINES  
 (OPERATION BEGAN JANUARY 1st, 1923)

<u>ROUTE</u>	<u>MILES</u>
East River Freight Service - Penitentiary and Workhouse Docks, Welfare Island and Rikers Island to Harts Island	16.
East 29th Street Morgue to Harts Island	23.
City Island to Harts Island	.37
East 134th Street, Bronx, to North Brother Island	.4
East 134th Street, Bronx, to Rikers Island	1.0
East 92nd Street, Manhattan, to Randalls Island**	1.12
East 78th Street, Manhattan, to Metropolitan Hospital Dock	.13

\*\* Discontinued - This ferry which furnished daily service, except Saturdays and Sundays, to the Park Department for transportation of W.P.A. employees between Manhattan and Randalls Island, ceased operation July 12th, 1936.

PART V - JOB 2-D<sup>3</sup> - SECTION II

\* \* \* \* \*

VESSEL TRAFFIC SURVEY  
ANALYSES OF U.S. COAST GUARD DATA  
FOR THE YEARS 1937 & 1938

\* \* \* \* \*

In the preceding Section I, data has been given as to the number of vessels passing various points situated on the inner harbor waters as counted by WPA workers of this project.

In this section of the report, the information which has been collected by the U. S. Coast Guard during the years 1937 and 1938 only are given. The records of the U. S. Coast Guard are taken at the main harbor entrances at The Narrows, Throgs Neck and Perth Amboy, reporting all vessels passing in or out of New York Harbor.

Upon request being made by the Interstate Sanitation Commission to have access to the Coast Guard records, the Commanding Officer of the New York District, after obtaining approval of the authorities in Washington, placed this information at the disposal of the project.

In the following two tables, the count of vessels moving through The Narrows and from the East River into Long Island Sound at Throgs Neck is given for the year 1937. The data for Perth Amboy for the same year was found to be incomplete, and the data was not tabulated:

TABLE NUMBER V-14

SUMMARYU. S. COAST GUARD, VESSEL TRAFFIC DATATHE NARROWS - 1937

	<u>COMMERCIAL VESSELS</u>	<u>RECREATIONAL VESSELS</u>	<u>*MISCELLANEOUS VESSELS</u>	<u>TOTAL NO. OF VESSELS</u>
January	2,805	69	10	2,884
February	2,224	97	56	2,377
March	2,648	130	107	2,885
April	2,667	210	109	2,986
May	3,676	1,083	407	5,166
June	5,619	656	-	6,275
July	7,094	844	-	7,938
August	6,615	602	-	7,217
September	2,995	1,703	386	5,084
October	3,256	474	441	4,171
November	3,513	184	-	3,697
December	3,870	145	-	4,015
TOTAL	46,982	6,197	1,516	54,695

TABLE NUMBER V-15

THROGS NECK - 1937

	<u>COMMERCIAL VESSELS</u>	<u>RECREATIONAL VESSELS</u>	<u>*MISCELLANEOUS VESSELS</u>	<u>TOTAL NO. OF VESSELS</u>
January (22 days)	596	6	2	604
February	1,377	63	25	1,465
March	1,566	134	15	1,715
April	1,736	392	31	59
May	1,873	757	46	2,676
June	1,977	792	57	2,826
July	1,800	1,372	51	3,223
August	1,478	671	25	2,174
September	1,712	610	6	2,428
October	1,746	553	137	2,436
November	1,514	218	140	1,872
December	1,928	31	73	2,032
TOTAL	19,303	5,599	708	25,610

\*Miscellaneous Vessels are Government, City, State and other boats not included in the recreational or commercial counts.

As compared with the data given in the preceding Section 1, it should be kept in mind that the Coast Guard data is a complete 24 hour record. These records did not particularly disclose the classification of the vessel as commercial, recreational and miscellaneous, but the type of vessel was indicated so that in general, they could be properly classified. The tables further showed that practically all the commercial Trans-Atlantic vessels entered the harbor through The Narrows, while many of the smaller commercial vessels engaged in coastal traffic entered the harbor at Throgs Neck of Perth Amboy.

In 1937, the low count at Throgs Neck occurs in January, only 604 vessels being tabulated. This count was for 22 days only and the daily count was approximately 27 vessels per day. If the same rate had continued during the 31 days of this month, the total count would have been 837 vessels. This, then, would still have been the month having the lowest count during the year. In the same year at The Narrows, the lowest month was February with a count of 2,224 vessels or an average of 80 vessels per day. During the rest of the year, there was a small monthly increase in practically all classes of vessels in both The Narrows and Throgs Neck until the month of July at The Narrows and the month of June at Throgs Neck, after which the counts decreased. The greatest number of vessels in the months of 1937 were 1,977 in June at Throgs Neck and 7,094 vessels in July at The Narrows.

It will be noticed from the total figures in the tables above, that approximately twice as many boats passed through The Narrows as passed Throgs Neck.

The data in the two preceding tables are shown in the charts, numbers 102 and 103.

The following tables give similar Coast Guard data for the year 1938 at The Narrows, Throgs Neck and Perth Amboy:

## TABLE NUMBER V-16

SUMMARYU. S. COAST GUARD, VESSEL TRAFFIC DATATHE NARROWS

	<u>COMMERCIAL VESSELS</u>	<u>RECREATIONAL VESSELS</u>	<u>MISCELLANEOUS VESSELS</u>	<u>TOTAL NUMBER OF VESSELS</u>
January	3,184	134	359	3,677
February	3,015	47	366	3,428
March	3,457	55	448	3,960
April	3,732	369	343	4,444
May	3,681	1,168	436	5,285
June	3,203	2,000	507	5,710
July	3,317	3,690	608	7,615
August	3,766	3,193	587	7,546
September	3,695	2,205	507	6,407
October	3,310	833	579	4,722
November	3,268	477	588	4,333
December	3,639	378	530	4,547
TOTAL	41,267	14,549	5,858	61,674

THROGS NECK

	<u>COMMERCIAL VESSELS</u>	<u>RECREATIONAL VESSELS</u>	<u>MISCELLANEOUS VESSELS</u>	<u>TOTAL NUMBER OF VESSELS</u>
January	1,803	15	38	1,856
February	1,485	11	29	1,525
March	2,008	132	45	2,185
April	2,389	649	71	3,109
May	2,123	1,207	75	3,405
June	2,012	2,332	96	4,440
July	1,905	2,193	131	4,229
August	1,986	2,037	62	4,085
September	1,552	1,415	133	3,100
October	1,933	895	47	2,875
November	1,882	231	55	2,168
December	2,108	68	42	2,218
TOTAL	23,186	11,185	824	35,195

## TABLE NUMBER V-16 (Cont'd)

SUMMARYU. S. COAST GUARD, VESSEL TRAFFIC DATAPERTH AMBOY

	<u>COMMERCIAL VESSELS</u>	<u>RECREATIONAL VESSELS</u>	<u>MISCELLANEOUS VESSELS</u>	<u>TOTAL NUMBER OF VESSELS</u>
January (Started February 1938)				
February	1,343	2	107	1,452
March	1,821	14	194	2,029
April	2,020	8	158	2,186
May	1,683	33	184	1,900
June	1,421	88	179	1,688
July	1,558	166	141	1,865
August	1,596	137	162	1,895
September	92	59	9	160
October	1,835	23	67	1,925
November	1,771	1	116	1,888
December	1,867	3	86	1,956
TOTAL	17,007	534	1,403	18,944

The above data are shown graphically in charts #107, 106 and 105.

The chart for The Narrows in 1937 shows that the vessels passing this point are mostly of a commercial character. The least vessel traffic was found in the month of February and the greatest in July. After August, there seems to be a very considerable drop in the number of commercial vessels, while the number of recreational boats has reached a maximum. The proportion of the vessels that are classed as miscellaneous, form a very small portion of the total count.

The pattern of the chart for Throgs Neck is entirely different. In this case, the number of vessels that are of a recreational kind is of a much larger proportion of the total number of vessels tabulated. There also appears to be a greater number of miscellaneous vessels which use this entrance to the harbor. The number of commercial vessels appears to be lowest in January and highest in June. The number of recreational vessels is also at a minimum in January and rises to a maximum in July.

In The Narrows' chart for 1938, the number of commercial vessels appear to follow a more uniform rate than in the previous year. The total number of vessels passing The Narrows in 1938 was 61,674 as compared with 54,695 in 1937.

At Throgs Neck, the total number of vessels counted in 1937 was 25,610 as compared with 35,195 in 1938. The charts for these two years did not vary greatly, but again the number of commercial vessels appears to be more uniform in 1938 than in 1937.

The movement of vessels at Perth Amboy seems to be much more uniform than at the other two points mentioned above.

U.S. WORKS PROGRESS ADMINISTRATION  
 Project 465-97-3-131  
 C. G. Wigley, Engr. Supervisor

## VESSEL MOVEMENT SURVEY

WATERWAY: EAST RIVER, 90th ST. AND EAST END AVE., NEW YORK CITY

COMMERCIAL VESSELS

Date 1938	OBSERVATION		VESSELS		PASSENGERS	
	From AM	To PM	Actual Count	Count Adj. to Seven 8-hr. days	Actual Count	Count Adj. to Seven 8-hr. days
July						
18	8:30	4:30	121	129	3,122	3,348
19	8:30	4:30	118	126	1,803	1,926
20	8:30	4:30	91	97	2,537	2,706
21	8:30	2:30	75	109	476	692
22			--	115	--	1,984
23			--	87	--	862
24			--	73	--	930
WEEKLY TOTAL			405	736	7,938	12,448
25	11:00	5:00	58	84	393	572
26			--	85	--	520
27	11:00	5:00	61	89	639	930
28	8:30	5:00	77	77	1,262	1,262
29	8:30	3:30	72	88	1,605	1,974
30			--	63	--	465
31			--	53	--	503
WEEKLY TOTAL			268	539	3,899	6,226
August						
1	8:00	4:30	88	88	719	719
2	8:00	4:30	78	78	360	360
3	8:00	4:30	78	78	313	313
4	8:00	4:30	95	95	454	454
5	8:00	1:00	56	100	279	495
6			--	65	--	177
7			--	55	--	191
WEEKLY TOTAL			395	559	2,125	2,709
8	11:00	5:00	66	96	712	1,032
9	8:30	5:00	84	84	569	569
10	8:30	5:00	86	86	684	684
11	8:30	5:00	107	107	779	779
12	8:30	3:00	90	120	714	950
13			--	73	--	296
14			--	62	--	310
WEEKLY TOTAL			433	628	3,458	4,620
15	8:30	5:00	89	89	874	874
16	8:30	5:00	72	72	461	461
17	8:30	5:00	103	103	888	888
18	8:30	5:00	98	98	845	845
19	8:30	3:00	68	84	614	754
20			--	67	--	290
21			--	56	--	312
WEEKLY TOTAL			430	569	3,682	4,424



EAST RIVER - COMMERCIAL VESSELS (Cont'd)

Date 1938	OBSERVATION		VESSELS		PASSENGERS	
	From AM	To PM	Actual Count	Count Adj. to Seven 8-hr. days	Actual Count	Count Adj. to Seven 8-hr. days
August (Cont'd)						
22	8:30	5:00	90	90	700	700
23	11:00	4:30	70	112	449	720
24	8:30	4:30	100	106	680	726
25	8:30	5:00	105	105	2,725	2,725
26	8:30	5:00	95	95	627	627
27	8:30	5:00	76	76	430	430
28	8:30	5:00	61	61	465	465
WEEKLY TOTAL			597	645	6,076	6,393
29	11:30	5:30	103	149	384	588
30	8:30	4:30	115	122	632	673
31	8:30	5:00	111	111	200	200
September						
1	8:30	5:00	119	119	402	402
2	8:30	5:00	132	132	308	308
3			--	94	--	159
4			--	79	--	171
WEEKLY TOTAL			580	806	1,926	2,501
5				89		1,035
6	9:00	4:30	72	82	970	1,108
7	8:00	4:30	90	90	1,640	1,640
8	8:00	4:30	98	98	737	737
9	8:00	3:00	95	108	794	907
10			--	71	--	418
11			--	60	--	454
WEEKLY TOTAL			355	598	4,141	6,299
12	8:30	5:00	112	112	761	761
13	8:30	5:00	155	155	700	700
14	8:30	5:00	165	165	251	251
15	8:30	5:00	86	86	533	533
16	8:30	5:00	60	60	455	455
17			--	87	--	205
18			--	73	--	221
WEEKLY TOTAL			578	738	2,700	3,126
19	8:30	5:00	58	58	833	833
20	8:30	5:00	86	86	424	424
21	8:30	4:30	49	49	246	246
22	8:30	5:00	115	115	544	544
23	8:30	5:00	107	107	505	505
24			--	62	--	194
25			--	52	--	209
WEEKLY TOTAL			415	529	2,552	2,955
GRAND TOTAL			4,456	6,347	38,497	51,701

WATERWAY: EAST RIVER, 90th ST. AND EAST END AVE., NEW YORK CITY

RECREATIONAL VESSELS

Date 1938	<u>OBSERVATION</u>		<u>VESSELS</u>		<u>PASSENGERS</u>	
	From AM	To PM	Actual Count	Count Adj. to Seven 8-hr. days	Actual Count	Count Adj. to Seven 8-hr. days
July						
18	8:30	4:30	49	52	3,952	4,226
19	8:30	4:30	36	38	4,626	4,940
20	8:30	4:30	26	28	2,240	2,384
21	8:30	2:30	27	39	768	1,118
22			--	32	--	2,896
23			--	30	--	4,818
24			--	43	--	2,950
WEEKLY TOTAL			138	262	11,586	23,332
25	11:00	5:00	48	70	1,499	2,180
26			--	47	--	3,615
27	11:00	5:00	23	33	5,494	8,000
28	8:30	5:00	36	36	4,532	4,532
29	8:30	3:30	41	50	2,936	3,616
30			--	36	--	6,612
31			--	51	--	4,052
WEEKLY TOTAL			148	323	14,461	32,607
August						
1	8:00	4:30	29	29	8,429	8,429
2	8:00	4:30	33	33	10,396	10,396
3	8:00	4:30	34	34	11,577	11,577
4	8:00	4:30	40	40	12,083	12,083
5	8:00	1:00	16	28	2,251	3,990
6			--	26	--	14,330
7			--	37	--	8,746
WEEKLY TOTAL			152	227	44,736	69,551
8	11:00	5:00	28	40	1,184	1,724
9	8:30	5:00	56	56	2,995	2,995
10	8:30	5:00	63	63	6,088	6,088
11	8:30	5:00	55	55	4,234	4,234
12	8:30	3:00	44	58	3,040	4,052
13			--	43	--	5,760
14			--	61	--	3,530
WEEKLY TOTAL			246	376	17,541	28,383
15	8:30	5:00	71	71	6,376	6,376
16	8:30	5:00	43	43	5,043	5,043
17	8:30	5:00	61	61	11,149	11,149
18	8:30	5:00	64	64	7,130	7,130
19	8:30	3:30	51	68	5,173	6,900
20			--	46	--	10,590
21			--	66	--	6,460
WEEKLY TOTAL			290	419	34,871	53,648

EAST RIVER - RECREATIONAL VESSELS (Cont'd)

Date 1938	OBSERVATION		VESSELS		PASSENGERS	
	From AM	To PM	Actual Count	Count Adj. to Seven 8-hr.days	Actual count	Count Adj. to Seven 8-hr.days
August (Cont'd)						
22	8:30	5:00	52	52	7,925	7,925
23	11:00	4:30	35	56	1,295	2,065
24	8:30	4:30	52	55	1,865	1,988
25	8:30	5:00	40	40	5,085	5,085
26	8:30	5:00	40	40	4,162	4,162
27	8:30	5:00	37	37	6,500	6,500
28	8:30	5:00	51	51	3,975	3,925
WEEKLY TOTAL			307	331	30,807	31,650
29	11:30	5:30	29	42	988	1,440
30	8:30	4:30	38	40	1,571	1,678
31	8:30	5:00	29	29	800	800
September						
1	8:30	5:00	41	41	1,100	1,100
2	8:30	5:00	33	33	600	600
3			--	28	--	1,592
4			--	40	--	981
WEEKLY TOTAL			170	253	5,059	8,191
5			--	41	--	1,000
6	9:00	4:30	49	56	1,747	1,992
7	8:00	4:30	45	45	1,291	1,291
8	8:00	4:30	47	47	612	612
9	8:00	3:00	22	25	350	400
10			--	33	--	1,556
11			--	48	--	956
WEEKLY TOTAL			163	295	4,000	7,807
12	8:30	5:00	30	30	566	566
13	8:30	5:00	14	14	235	235
14	8:30	5:00	23	23	497	497
15	8:30	5:00	26	26	398	398
16	8:30	5:00	19	19	330	330
17			--	19	--	590
18			--	24	--	363
WEEKLY TOTAL			112	155	2,026	2,979
19	8:30	5:00	3	3	22	22
20	8:30	5:00	9	9	49	49
21	8:30	4:30	0	0	0	0
22	8:30	5:00	23	23	231	231
23	8:30	5:00	12	12	144	144
24			--	7	--	130
25			--	10	--	80
WEEKLY TOTAL			47	64	446	656
GRAND TOTAL			1,773	2,705	165,533	258,804

WATERWAY: EAST RIVER, 90th ST. AND EAST END AVE., NEW YORK CITY

MISCELLANEOUS VESSELS

Date 1938	<u>OBSERVATION</u>		<u>VESSELS</u>		<u>PASSENGERS</u>	
	From AM	To PM	Actual Count	Count Adj. to Seven 8-hr. days	Actual Count	Count Adj. to Seven 8-hr. days
July 18	8:30	4:30	--	2	--	32
19	8:30	4:30	2	2	30	32
20	8:30	4:30	--	2	--	32
21	8:30	2:30	--	2	--	32
22			--	2	--	32
23			--	2	--	32
24			--	2	--	32
<b>WEEKLY TOTAL</b>			<u>2</u>	<u>14</u>	<u>30</u>	<u>224</u>
25	11:00	5:00	3	4	125	182
26			--	4	--	182
27	11:00	5:00	--	4	--	182
28	8:30	5:00	--	4	--	182
29	8:30	3:30	--	4	--	182
30			--	4	--	182
31			--	4	--	182
<b>WEEKLY TOTAL</b>			<u>3</u>	<u>28</u>	<u>125</u>	<u>1,274</u>
August						
1	8:00	4:30	4	4	53	53
2	8:00	4:30	12	12	51	51
3	8:00	4:30	11	11	72	72
4	8:00	4:30	14	14	135	135
5	8:00	1:00	3	5	34	60
6			--	3	--	25
7			--	2	--	11
<b>WEEKLY TOTAL</b>			<u>44</u>	<u>51</u>	<u>345</u>	<u>407</u>
8	11:00	5:00	14	20	276	402
9	8:30	5:00	24	24	285	285
10	8:30	5:00	14	14	100	100
11	8:30	5:00	16	16	150	150
12	8:30	3:00	11	15	92	122
13			--	5	--	67
14			--	3	--	30
<b>WEEKLY TOTAL</b>			<u>79</u>	<u>97</u>	<u>903</u>	<u>1,156</u>
15	8:30	5:00	19	19	136	136
16	8:30	5:00	8	8	76	76
17	8:30	5:00	12	12	115	115
18	8:30	5:00	16	16	157	157
19	8:30	3:30	11	14	112	138
20			--	4	--	41
21			--	2	--	18
<b>WEEKLY TOTAL</b>			<u>66</u>	<u>75</u>	<u>596</u>	<u>681</u>

EAST RIVER - MISCELLANEOUS VESSELS (Cont'd)

Date 1938	OBSERVATION		VESSELS		PASSENGERS	
	From AM	To PM	Actual Count	Count Adj. to Seven 8-hr.days	Actual Count	Count Adj. to Seven 8-hr.days
August (Cont'd)						
22	8:30	5:00	16	16	150	150
23	11:00	4:30	7	11	65	104
24	8:30	4:30	18	19	115	123
25	8:30	5:00	21	21	170	170
26	8:30	5:00	9	9	120	120
27	8:30	5:00	4	4	45	45
28	8:30	5:00	2	2	20	20
WEEKLY TOTAL			77	82	685	732
29	11:30	5:30	8	12	65	95
30	8:30	4:30	9	10	181	193
31	8:30	5:00	7	7	70	70
September						
1	8:30	5:00	9	9	90	90
2	8:30	5:00	6	6	52	52
3			--	2	--	33
4			--	1	--	15
WEEKLY TOTAL			39	47	458	548
5				5		34
6	9:00	4:30	4	5	30	34
7	8:00	4:30	2	2	25	25
8	8:00	4:30	7	7	630	630
9	8:00	3:00	5	6	44	50
10			--	1	--	64
11			--	1	--	29
WEEKLY TOTAL			18	27	729	866
12	8:30	5:00	13	13	110	110
13	8:30	5:00	4	4	39	39
14	8:30	5:00	6	6	48	48
15	8:30	5:00	11	11	127	127
16	8:30	5:00	7	7	25	25
17			--	2	--	23
18			--	1	--	10
WEEKLY TOTAL			41	44	349	382
19	8:30	5:00	0	0	0	0
20	8:30	5:00	2	2	12	12
21	8:30	4:30	2	2	12	12
22	8:30	5:00	12	12	85	85
23	8:30	5:00	6	6	40	40
24			--	1	--	10
25			--	1	--	4
WEEKLY TOTAL			22	24	149	163
GRAND TOTAL			391	489	4,369	6,433

The actual 7-day count at 90th Street on the East River indicated the following:

DAY & DATE	COMMERCIAL	RECREATIONAL	MISCELLANEOUS	TOTAL	HOURS OBS.
Monday, Aug. 22	90	52	16	158	8
Tuesday, Aug. 23	70	35	7	112	5
Wednesday, Aug. 24	100	52	18	170	7 $\frac{1}{2}$
Thursday, Aug. 25	105	40	21	166	8
Friday, Aug. 26	95	40	9	144	8
Saturday, Aug. 27	76	37	4	117	8
Sunday, Aug. 28	61	51	2	114	8
WEEK'S TOTAL	597	307	77	981	

NOTE: Usually the count is taken only for five days in the week but if we assume the above count to represent a typical week, then we may arrive at conversion factors which will allow us to estimate the Saturday and Sunday counts in any week. Daily counts could be used if all days included the same number of hours of count. Since they do not, we must base our calculations on an average hourly count. In the discussion we will let:

Ac	Represent hourly average of	Mon-Fri.	Commercial	Count
AR	"	"	Recreational	"
AM	"	"	Miscellaneous	"
AT	"	"	Total	"

Now the total Monday-Friday count taken from table above is as follows:

COMMERCIAL	RECREATIONAL	MISCELLANEOUS	TOTAL
460	219	71	750

Since count on these five days was taken for a total of 36.5 hours, the average hourly counts were:

COMMERCIAL	RECREATIONAL	MISCELLANEOUS	TOTAL
12.6	6.0	1.9	20.5

Counts were made for 8 hours on Saturday and 7.7 hours on Sunday. Then the average hourly week end counts were:

DAY	COMMERCIAL	RECREATIONAL	MISCELLANEOUS	TOTAL
Saturday	9.5	4.6	0.5	14.6
Sunday	7.9	6.6	0.3	14.8

The Saturday and Sunday counts may now be shown in relation to the weekday counts as follows:

DAY	COMMERCIAL	RECREATIONAL	MISCELLANEOUS	TOTAL
Saturday	0.75 Ac	0.77 AR	0.26 AM	0.71 AT
Sunday	0.63 Ac	1.10 AR	0.16 AM	0.72 AT

METHOD OF DETERMINING COEFFICIENTS IN ORDER TO EVALUATE ADJUSTED COUNTS FOR SATURDAY AND SUNDAY.- Use the week of September 22nd to 28th, 1938.

- (1) To obtain average hourly rate for Monday-Tuesday-Wednesday-Thursday-Friday (September 22nd - 26th), divide sum of counts (actual) for above days by total actual hours for above day.
- (2) To obtain average hourly rate for Saturday, September 27th, divide actual count for this day by actual hours for this day.
- (3) Coefficient for Saturday is found by dividing (2) by (1).
- (4) To obtain average hourly rate for Sunday (September 28th), divide actual count for day by actual hours for this day.
- (5) Coefficient for Sunday is obtained by dividing (4) by (1).

USE OF COEFFICIENTS.- To determine Saturday's adjusted 8-hour count for any week multiply the average hourly rate (Monday-Tuesday-Wednesday-Thursday-Friday) by the coefficient for Saturday and multiply this by eight hours.

To determine Sunday's adjusted 8-hour count for any week multiply the average hourly rate (Monday-Tuesday-Wednesday-Thursday-Friday) by the coefficient for Sunday and multiply this by eight hours.

Method used to Adjust Count where actual line of observation was not eight hours.

Observed hours is to eight hours as Actual Count is to Adjusted Count.

$$\text{Formula: Adjusted Count} = \frac{8 (\text{Actual Count})}{\text{Observed Hours}}$$

WATERWAY: EAST RIVER, PIER #6, SOUTH STREET AND COENTIES SLIP,  
NEW YORK CITY

COMMERCIAL VESSELS

Date 1938	OBSERVATION		VESSELS		PASSENGERS	
	From AM	To PM	Actual Count	Count Adj. to Seven 8-hr.days	Actual Count	Count Adj. to Seven 8-hr.days
July 4						
5	11:00	4:30	103	165	647	1,032
6	8:00	4:30	208	208	886	886
7	8:00	4:30	190	179	1,590	1,092
8	9:00	11:30	58	186	225	720
9			--	162	--	1,500
10			--	72	--	429
WEEKLY TOTAL			559	972	3,348	5,639
11	8:00	5:00	170	160	765	720
12	8:00	4:30	182	182	705	705
13	8:00	4:30	194	194	712	712
14	8:00	2:00	127	185	495	718
15	8:00	4:30	194	194	2,167	2,167
16			--	161	--	1,390
17			--	71	--	395
WEEKLY TOTAL			867	1,147	4,844	6,807
18	8:00	4:30	161	161	1,975	1,975
19	8:00	5:30	214	190	1,917	1,702
20	8:00	4:30	141	141	1,715	1,715
21	8:00	11:30	58	133	705	1,612
22	8:00	4:30	150	150	2,067	2,067
23			--	136	--	2,465
24			--	60	--	700
WEEKLY TOTAL			724	971	8,379	12,236
25	8:00	4:30	132	132	1,630	1,630
26	8:00	4:00	191	204	2,020	2,158
27	8:00	4:30	158	158	1,895	1,895
28	8:00	3:00	112	138	1,155	1,422
29	3:30PM	6:00	41	131	780	2,495
30			--	134	--	2,466
31			--	60	--	700
WEEKLY TOTAL			634	957	7,480	12,766
August						
1	8:30	5:00	189	189	3,349	3,349
2	8:30	4:30	231	246	2,607	2,782
3	8:30	5:00	205	205	1,346	1,346
4	8:30	5:00	266	266	2,865	2,865
5	8:30	1:00	115	204	2,993	5,330
6			--	195	--	3,913
7			--	87	--	1,110
WEEKLY TOTAL			1,006	1,392	13,160	20,695



EAST RIVER - COMMERCIAL VESSELS (Cont'd)

Date 1938	OBSERVATION		VESSELS		PASSENGERS	
	From AM	To PM	Actual Count	Count Adj. to Seven 8-hr.days	Actual Count	Count Adj. to Seven 8-hr.days
August (Cont'd)						
8	11:00	5:00	174	253	1,539	2,240
9	11:00	5:00	156	226	568	827
10	8:00	4:30	213	213	825	825
11	8:00	4:30	191	191	676	676
12	8:00	3:00	136	167	1,354	1,668
13			--	183	--	1,587
14			--	81	--	450
WEEKLY TOTAL			870	1,314	4,962	8,273
15	8:00	4:30	213	213	719	719
16	8:00	4:30	161	161	491	491
17	8:00	4:30	175	175	653	653
18	8:00	4:30	156	156	1,213	1,213
19	8:00	2:30	126	168	524	698
20			--	154	--	1,020
21			--	68	--	219
WEEKLY TOTAL			831	1,095	3,600	5,013
22	8:00	4:30	147	147	536	536
23	8:00	4:30	150	150	1,351	1,351
24	8:00	4:30	138	138	1,417	1,417
25	8:00	4:30	160	160	545	545
26	10:00	5:00	175	215	2,207	2,207
27	8:00	4:30	142	142	1,684	1,684
28	8:30	5:00	63	63	477	477
WEEKLY TOTAL			975	1,015	8,217	8,217
29	8:00	4:30	174	174	1,500	1,500
30	8:00	3:30	106	121	840	958
31	8:00	4:30	175	175	1,182	1,182
September						
1	8:00	4:30	206	206	1,322	1,322
2	8:00	4:30	219	219	1,840	1,840
3			--	159	--	1,833
4			--	71	--	520
WEEKLY TOTAL			880	1,125	6,684	9,155
5						
6	10:00	5:00	111	137	820	1,010
7	8:30	5:00	137	137	1,096	1,096
8	8:30	5:00	143	143	933	933
9	8:30	2:30	115	167	749	1,194
10	8:30	4:30	--	128	--	1,405
11	8:30	4:30	--	57	--	400
WEEKLY TOTAL			506	769	3,598	6,038

EAST RIVER - COMMERCIAL VESSELS (Cont'd)

Date 1938	OBSERVATION		VESSELS		PASSENGERS	
	From AM	To PM	Actual Count	Count Adj. to Seven 8-hr. days	Actual Count	Count Adj. to Seven 8-hr. days
September (Cont'd)						
12	8:00	4:30	218	218	2,156	2,156
13	8:00	4:30	207	207	3,922	3,922
14	8:00	4:30	239	239	2,410	2,410
15	8:00	4:30	231	231	2,330	2,330
16	8:00	3:00	169	169	1,995	1,995
17	8:00	4:30	--	194	--	3,430
18	8:00	4:30	--	86	--	973
WEEKLY TOTAL			1,064	1,344	12,813	17,216
19	8:00	4:30	115	115	3,130	3,130
20	8:00	4:30	177	177	2,741	2,741
21	8:00	4:30	122	122	4,668	4,668
22	8:00	4:30	183	183	1,663	1,663
23	8:00	3:00	173	230	1,553	2,586
24			--	143	--	3,880
25			--	64	--	1,090
WEEKLY TOTAL			770	974	13,755	19,758
GRAND TOTAL			9,686	13,075	90,840	131,833

WATERWAY: EAST RIVER, PIER #6, SOUTH STREET AND COENTIES SLIP,  
NEW YORK CITY

RECREATIONAL VESSELS

Date 1938	<u>OBSERVATION</u>		<u>VESSELS</u>		<u>PASSENGERS</u>	
	<u>From</u> <u>AM</u>	<u>To</u> <u>PM</u>	<u>Actual</u> <u>Count</u>	<u>Count Adj.</u> <u>to Seven</u> <u>8-hr.days</u>	<u>Actual</u> <u>Count</u>	<u>Count Adj.</u> <u>to Seven</u> <u>8-hr.days</u>
July						
5	11:30	4:50	12	19	727	1,162
6	8:00	4:30	22	22	2,685	2,685
7	8:00	4:50	19	18	3,194	3,005
8	9:00	11:30	11	55	1,893	6,050
9			--	20	--	3,800
10			--	16	--	2,460
WEEKLY TOTAL			<u>64</u>	<u>150</u>	<u>8,499</u>	<u>19,162</u>
11	8:00	5:00	11	10	1,619	1,524
12	8:00	4:30	20	20	2,948	2,948
13	8:00	4:30	20	20	7,970	7,970
14	8:00	2:00	16	23	2,080	2,562
15	8:00	4:30	13	13	2,440	2,440
16			--	15	--	4,160
17			--	12	--	3,125
WEEKLY TOTAL			<u>80</u>	<u>113</u>	<u>17,057</u>	<u>24,729</u>
18	8:00	4:30	11	11	2,580	2,580
19	8:00	5:30	19	17	9,278	8,248
20	8:00	4:30	8	8	1,025	1,025
21	8:00	11:30	2	5	350	802
22	8:00	4:30	4	4	1,775	1,775
23			--	8	--	3,820
24			--	6	--	2,860
WEEKLY TOTAL			<u>44</u>	<u>59</u>	<u>15,008</u>	<u>21,110</u>
25	8:00	4:30	11	11	2,010	2,010
26	8:00	4:00	10	11	1,995	2,130
27	8:00	4:30	14	14	3,555	3,555
28	8:00	3:00	7	9	1,757	2,164
29	3:30PM	6:00	2	6	700	2,238
30			--	9	--	2,857
31			--	7	--	2,140
WEEKLY TOTAL			<u>44</u>	<u>67</u>	<u>10,017</u>	<u>17,094</u>
August						
1	8:30	5:00	27	27	6,363	6,363
2	8:30	4:30	38	41	7,366	7,848
3	8:30	5:00	38	38	13,110	13,110
4	8:30	5:00	27	27	6,321	6,321
5	8:30	1:00	11	19	4,172	7,425
6			--	26	--	12,850
7			--	21	--	9,600
WEEKLY TOTAL			<u>141</u>	<u>199</u>	<u>37,332</u>	<u>63,517</u>

## EAST RIVER - RECREATIONAL VESSELS (Cont'd)

Date 1938	OBSERVATION		VESSELS		PASSENGERS	
	From AM	To PM	Actual Count	Count Adj. to Seven 8-hr. days	Actual Count	Count Adj. to Seven 8-hr. days
August (Cont'd)						
8	11:00	5:00	19	28	1,426	2,072
9	11:00	5:00	15	22	2,265	3,298
10	8:00	4:30	19	19	4,338	4,338
11	8:00	4:30	24	24	4,824	4,824
12	8:00	3:00	15	19	2,774	3,410
13			--	19	--	4,335
14			--	16	--	3,240
WEEKLY TOTAL			92	147	15,627	25,517
15	8:00	4:30	29	29	5,054	5,054
16	8:00	4:30	24	24	3,756	3,756
17	8:00	4:30	25	25	4,986	4,986
18	8:00	4:30	18	18	2,594	2,594
19	8:00	2:30	15	20	2,654	3,536
20			--	20	--	4,652
21			--	16	--	3,496
WEEKLY TOTAL			111	152	19,044	28,074
22	8:00	4:30	19	19	4,939	4,939
23	8:00	4:30	18	18	4,560	4,560
24	8:00	4:30	17	17	3,870	3,870
25	8:00	4:30	16	16	4,173	4,173
26	10:00	5:00	18	22	2,876	2,876
27	8:00	4:30	16	16	4,964	4,964
28	8:30	5:00	13	13	3,676	3,676
WEEKLY TOTAL			117	121	29,058	29,058
29	8:00	4:30	19	19	3,355	3,355
30	8:00	3:30	26	30	6,471	7,400
31	8:00	4:30	20	20	5,200	5,200
September						
1	8:00	4:30	18	18	3,620	3,620
2	8:00	4:30	15	15	3,500	3,500
3			--	18	--	5,250
4			--	8	--	3,942
WEEKLY TOTAL			98	128	22,146	32,267
5						
6	10:00	5:00	36	44	6,073	7,460
7	8:30	5:00	39	39	6,831	6,831
8	8:30	5:00	36	36	5,218	5,218
9	8:30	2:30	20	29	1,714	2,742
10			--	32	--	6,700
11			--	26	--	5,000
WEEKLY TOTAL			131	206	19,836	33,951

EAST RIVER - RECREATIONAL VESSELS (Cont'd)

Date 1938	OBSERVATION		VESSELS		PASSENGERS	
	From AM	To PM	Actual Count	Count Adj. to Seven 8-hr. days	Actual Count	Count Adj. to Seven 8-hr. days
September (Cont'd)						
12	8:00	4:30	15	15	1,370	1,370
13	8:00	4:30	12	12	200	200
14	8:00	4:30	16	10	555	555
15	8:00	4:30	7	7	490	490
16	8:00	3:00	10	12	165	165
17			---	11	---	645
18			---	9	---	483
WEEKLY TOTAL			60	76	2,780	3,908
19	8:00	4:30	3	3	30	30
20	8:00	4:30	2	2	10	10
21	8:00	4:30	0	0	0	0
22	8:00	4:30	2	2	53	53
23	8:00	3:00	2	3	55	66
24			---	2	---	36
25			---	1	---	27
WEEKLY TOTAL			9	13	148	222
GRAND TOTAL			991	1,431	196,552	298,609

WATERWAY: EAST RIVER, PIER #6, SOUTH STREET AND COENTIES SLIP,  
NEW YORK CITY

MISCELLANEOUS VESSELS

Date 1938	<u>OBSERVATION</u>		<u>VESSELS</u>		<u>PASSENGERS</u>	
	<u>From</u> <u>AM</u>	<u>To</u> <u>PM</u>	<u>Actual</u> <u>Count</u>	<u>Count Adj.</u> <u>to Seven</u> <u>8-hr.days</u>	<u>Actual</u> <u>Count</u>	<u>Count Adj.</u> <u>to Seven</u> <u>8-hr.days</u>
July						
4						
5	11:30	5:00	--	--	--	--
6	8:00	4:30	3	3	14	14
7	8:00	5:00	5	5	33	31
8	9:00-11:30		4	13	27	86
9			--	7	--	8
10			--	3	--	7
WEEKLY TOTAL			12	31	74	146
11	8:00	5:00	5	5	50	47
12	8:00	4:30	2	2	1,006	1,006
13	8:00	4:30	7	7	41	41
14	8:00	2:00	5	7	34	50
15	8:00	4:30	7	7	44	44
16			--	7	--	84
17			--	3	--	8
WEEKLY TOTAL			26	38	1,175	1,280
18	8:00	4:30	7	7	340	340
19	8:00	5:30	6	5	280	249
20	8:00	4:30	8	8	130	130
21	8:00	11:30	5	11	90	206
22	8:00	4:30	14	14	230	230
23			--	12	--	82
24			--	5	--	60
WEEKLY TOTAL			40	62	1,070	1,297
25	8:00	4:30	16	16	822	822
26	8:00	4:00	15	16	795	848
27	8:00	4:30	17	17	520	520
28	8:00	3:00	9	11	426	524
29	3:30PM	6:00	5	16	80	256
30			--	20	--	222
31			--	9	--	164
WEEKLY TOTAL			62	105	2,643	3,356
August						
1	8:30	5:00	9	9	25	25
2	8:30	4:30	2	2	10	13
3	8:30	5:00	3	3	55	55
4	8:30	5:00	3	3	2,000	2,000
5	8:30	1:00	4	7	159	283
6			--	6	--	170
7			--	3	--	125
WEEKLY TOTAL			21	33	2,249	2,671

EAST RIVER - MISCELLANEOUS VESSELS (Cont'd)

Date 1938	OBSERVATION		VESSELS		PASSENGERS	
	From AM	To PM	Actual Count	Count Adj. to Seven 8-hr. days	Actual Count	Count Adj. to Seven 8-hr. days
August (Cont'd)						
8	11:00	5:00	8	12	44	64
9	11:00	5:00	5	7	29	42
10	8:00	4:30	3	3	18	18
11	8:00	4:30	8	8	49	49
12	8:00	3:00	5	6	30	37
13			--	9	--	14
14			--	4	--	10
WEEKLY TOTAL			29	49	170	234
15	8:00	4:30	7	7	46	46
16	8:00	4:30	8	8	41	41
17	8:00	4:30	10	10	65	65
18	8:00	4:30	7	7	63	63
19	8:00	2:30	4	5	26	35
20			--	10	--	17
21			--	4	--	13
WEEKLY TOTAL			36	51	241	280
22	8:00	4:30	4	4	24	24
23	8:00	4:30	6	6	334	334
24	8:00	4:30	10	10	139	139
25	8:00	4:30	8	8	48	48
26	10:00	5:00	1	1	20	20
27	8:00	4:30	7	7	41	41
28	8:30	5:00	3	3	29	29
WEEKLY TOTAL			39	39	635	635
29	8:00	4:30	8	8	105	105
30	8:00	3:30	7	8	105	347
31	8:00	4:30	8	8	125	125
September						
1	8:00	4:30	8	8	425	425
2	8:00	4:30	7	7	111	111
3			--	10	--	75
4			--	4	--	55
WEEKLY TOTAL			38	53	871	1,243
5						
6	10:00	5:00	5	6	58	71
7	8:30	5:00	6	6	69	69
8	8:30	5:00	3	3	40	40
9	8:30	2:30	5	7	55	88
10			--	7	--	22
11			--	3	--	16
WEEKLY TOTAL			19	32	222	306

EAST RIVER - MISCELLANEOUS VESSELS (Cont'd)

Date 1938	OBSERVATION		VESSELS		PASSENGERS	
	From AM	To PM	Actual Count	Count Adj. to Seven 8-hr. days	Actual Count	Count Adj. to Seven 8-hr. days
<u>September (Cont'd)</u>						
12	8:00	4:30	16	16	102	102
13	8:00	4:30	20	20	330	330
14	8:00	4:30	18	18	360	360
15	8:00	4:30	14	14	210	210
16	8:00	3:00	6	7	170	170
17			--	19	--	80
18			--	9	--	59
WEEKLY TOTAL			<u>74</u>	<u>103</u>	<u>1,172</u>	<u>1,311</u>
19	8:00	4:30	7	7	45	45
20	8:00	4:30	9	9	90	90
21	8:00	4:30	4	4	50	50
22	8:00	4:30	11	11	103	103
23	8:00	3:00	7	9	75	100
24			--	10	--	26
25			--	5	--	19
WEEKLY TOTAL			<u>38</u>	<u>55</u>	<u>363</u>	<u>433</u>
GRAND TOTAL			434	651	10,885	13,192



The actual 7-day count at Pier #6, on the East River, was as follows:

<u>DAY &amp; DATE</u>	<u>COMMERCIAL</u>	<u>RECREATIONAL</u>	<u>MISCELLANEOUS</u>	<u>TOTAL</u>
Monday, Aug. 22	147	19	4	170
Tuesday, Aug. 23	150	18	6	174
Wednesday, Aug. 24	138	17	10	165
Thursday, Aug. 25	160	16	8	184
Friday, Aug. 26	175	18	1	194
Saturday, Aug. 27	142	16	7	165
Sunday, Aug. 28	<u>63</u>	<u>13</u>	<u>3</u>	<u>79</u>
WEEK'S TOTAL	975	117	39	1,131

FIVE-DAY COUNT (MONDAY TO FRIDAY) TOTALS

<u>COMMERCIAL</u>	<u>RECREATIONAL</u>	<u>MISCELLANEOUS</u>	<u>TOTAL</u>
770	88	29	887

NOTE: This Monday-Friday count was taken for a total of 38.5 hours. Thus the average hourly counts were:

<u>COMMERCIAL</u>	<u>RECREATIONAL</u>	<u>MISCELLANEOUS</u>	<u>TOTAL</u>
20.0	2.3	0.7	23.0

The average hourly week-end counts were:

<u>DAY</u>	<u>COMMERCIAL</u>	<u>RECREATIONAL</u>	<u>MISCELLANEOUS</u>	<u>TOTAL</u>
Saturday	17.7	2.0	0.9	20.6
Sunday	7.9	1.6	0.4	9.9

Then using symbols previously defined:

AVERAGE COUNTS

<u>DAY</u>	<u>COMMERCIAL</u>	<u>RECREATIONAL</u>	<u>MISCELLANEOUS</u>	<u>TOTAL</u>
Saturday	0.88 AC	0.87 AR	1.29 AM	0.90 AT
Sunday	0.39 AC	0.70 AR	0.57 AM	0.43 AT

Following the method previously used and substituting P. for passengers, the following formulas were derived:

PASSENGERS

<u>DAY</u>	<u>COMMERCIAL</u>	<u>RECREATIONAL</u>	<u>MISCELLANEOUS</u>	<u>TOTAL</u>
Saturday	1.34 Pc	1.16 PR	.34 PM	1.2 PT
Sunday	.38 Pc	.87 PR	.25 PM	.75PT

## WATERWAY: HUDSON RIVER, PIER #43, CHRISTOPHER &amp; WEST STS., NYC

## COMMERCIAL VESSELS

Date 1938	OBSERVATION		VESSELS		PASSENGERS	
	From AM	To PM	Actual Count	Count Adj. to Seven 8-hr. days	Actual Count	Count Adj. to Seven 8-hr. days
July						
4			---	160	-----	2,010
5	1:05 (PM)	4:30	65	116	1,361	2,425
6	8:00	4:00	158	169	8,470	9,040
7	8:00	4:00	163	174	4,620	4,946
8	8:00	2:00	104	151	1,580	2,290
9			---	226	-----	1,390
10			---	50	-----	3,140
WEEKLY TOTAL			490	1,046	16,031	25,241
11	8:00	4:20	188	188	3,071	3,071
12	8:00	4:30	159	159	2,015	2,015
13	8:00	4:30	188	188	6,562	6,562
14	8:00	1:00	108	192	2,385	4,210
15	8:00	4:30	132	132	1,225	1,225
16			---	276	-----	7,260
17			---	61	-----	3,445
WEEKLY TOTAL			775	1,196	15,258	27,788
18	10:40	4:30	129	188	4,223	6,148
19	8:00	4:30	191	191	644	644
20	8:00	4:00	204	218	2,952	3,142
21	8:00	1:00	116	206	453	807
22	8:00	4:30	200	200	1,858	1,858
23			---	264	-----	4,590
24			---	64	-----	1,353
WEEKLY TOTAL			840	1,331	10,130	18,542
25				175		1,960
26	8:00	4:30	183	183	1,860	1,860
27	8:00	4:30	187	187	2,092	2,092
28	8:00	3:15	145	179	2,417	2,976
29	8:00	4:30	191	191	3,462	3,462
30			---	263	-----	4,246
31			---	59	-----	1,604
WEEKLY TOTAL			706	1,237	9,831	18,200
August						
1	8:00	5:00	184	173	1,821	1,719
2	8:00	5:00	185	174	626	590
3	8:00	4:30	161	161	5,681	5,681
4	8:00	4:30	204	204	1,828	1,828
5	10:30	2:30	86	196	928	2,110
6			---	259	-----	5,200
7			---	57	-----	2,380
WEEKLY TOTAL			820	1,224	10,884	19,508

## HUDSON RIVER - COMMERCIAL VESSELS (Cont'd)

Date 1938	OBSERVATION		VESSELS		PASSENGERS	
	From AM	To PM	Actual Count	Count Adj. to Seven 8-hr.days	Actual Count	Count Adj. to Seven 8-hr.days
August (Cont'd)						
8	8:30	5:00	228	228	3,044	3,044
9	8:30	5:00	229	229	1,346	1,346
10	8:30	5:00	283	283	3,949	3,949
11	8:30	5:00	237	237	4,574	4,574
12	8:30	3:00	137	182	3,502	4,650
13			---	338	-----	7,532
14			---	75	-----	1,940
WEEKLY TOTAL			1,114	1,572	16,415	27,035
15	8:30	5:00	169	169	816	816
16	8:30	5:00	195	195	2,319	2,319
17	8:30	5:00	174	174	5,812	5,812
18	8:30	5:00	128	128	2,681	2,681
19	8:30	2:00	88	140	771	1,232
20			---	206	-----	5,840
21			---	45	-----	1,500
WEEKLY TOTAL			754	1,057	12,399	20,200
22	8:30	5:00	213	213	3,070	2,070
23	8:30	5:00	205	205	1,287	1,287
24	8:30	3:00	180	180	767	767
25	8:30	5:00	153	153	986	986
26	8:30	4:00	143	164	760	867
27	8:30	5:00	250	250	1,336	1,336
28	8:30	5:00	56	56	1,611	1,611
WEEKLY TOTAL			1,200	1,221	9,817	8,924
29	10:30	5:00	115	154	4,502	6,000
30	8:00	4:30	170	170	5,151	5,151
31	8:00	4:30	139	139	6,588	6,588
Sept.						
1	8:00	4:30	156	156	2,633	2,633
2	8:00	4:30	---	142	-----	1,910
3			---	153	-----	2,180
4			---	163	-----	4,210
WEEKLY TOTAL			580	1,077	18,874	28,672
5			---	160	-----	2,100
6	10:30	5:00	138	184	2,173	2,900
7	8:00	4:30	174	174	3,792	3,792
8	8:00	4:30	172	172	3,227	3,227
9	8:00	3:00	145	178	1,710	2,100
10			---	198	-----	5,212
11			---	44	-----	1,302
WEEKLY TOTAL			629	1,110	10,902	20,635

## HUDSON RIVER - COMMERCIAL VESSELS (Cont'd)

Date 1938	OBSERVATION		VESSELS		PASSENGERS	
	From AM	To PM	Actual Count	Count Adj. to Seven 8-hr. days	Actual Count	Count Adj. to Seven 8-hr. days
September (Cont'd)						
12	8:00	4:30	162	162	3,748	3,748
13	8:00	4:30	161	161	3,142	3,142
14	8:00	4:30	172	172	4,236	4,236
15	8:00	4:30	171	171	4,302	4,302
16	8:00	3:00	141	174	1,910	2,340
17			--	241	--	7,852
18			--	54	--	2,022
WEEKLY TOTAL			807	1,135	17,338	27,642
19	8:00	4:30	116	147	2,492	1,802
20	8:00	4:30	139	158	2,193	1,922
21	8:00	4:30	135	169	3,168	3,010
22	8:00	4:30	133	166	3,592	2,022
23	8:00	3:00	124	174	1,989	3,000
24			--	151	--	1,860
25			--	176	--	4,300
WEEKLY TOTAL			647	1,141	13,434	17,916
GRAND TOTALS			9,362	14,347	161,313	260,301

WATERWAY: HUDSON RIVER, PIER #43, CHRISTOPHER AND WEST STREETS,  
NEW YORK CITY

RECREATIONAL VESSELS

Date 1938	<u>OBSERVATION</u>		<u>VESSELS</u>		<u>PASSENGERS</u>	
	From AM	To PM	Actual Count	Count Adj. to Seven 8-hr. days	Actual Count	Count Adj. to Seven 8-hr. days
July						
4			0	26	0	2,300
5	1:05PM	4:30	11	20	1,585	2,822
6	8:00	4:00	19	20	1,795	1,914
7	8:00	4:00	15	16	1,490	1,588
8	8:00	2:00	8	12	1,225	1,782
9			--	39	--	4,670
10			--	33	--	5,448
WEEKLY TOTAL			53	166	6,095	20,524
11	8:00	4:30	10	10	846	846
12	8:00	4:30	15	15	1,311	1,311
13	8:00	4:30	13	13	4,217	4,217
14	8:00	1:00	4	7	800	1,422
15	8:00	4:30	13	13	3,450	3,450
16			--	28	--	5,590
17			--	24	--	6,500
WEEKLY TOTAL			55	110	10,624	23,336
18	10:40	4:30	23	33	9,174	13,340
19	8:00	4:30	10	10	2,820	2,820
20	8:00	4:00	13	14	4,213	4,480
21	8:00	1:00	14	25	2,762	4,920
22	8:00	4:30	20	20	6,852	6,852
23			--	44	--	14,800
24			--	27	--	17,200
WEEKLY TOTAL			80	173	25,821	64,412
25			--	19	--	3,221
26	8:00	4:30	18	18	3,022	3,022
27	8:00	4:30	20	20	4,543	4,543
28	8:00	3:15	18	22	2,771	3,408
29	8:00	4:30	21	21	3,493	3,493
30			--	38	--	8,670
31			--	32	--	10,190
WEEKLY TOTAL			77	170	13,829	36,547
August						
1	8:00	5:00	38	36	4,453	4,190
2	8:00	5:00	17	16	2,263	2,130
3	8:00	4:30	19	19	2,756	2,756
4	8:00	4:30	27	27	5,066	5,066
5	10:30	2:30	8	18	590	1,348
6			--	56	--	7,970
7			--	47	--	9,300
WEEKLY TOTAL			109	219	15,128	32,760

## HUDSON RIVER - RECREATIONAL VESSELS (Cont'd)

Date 1938	OBSERVATION		VESSELS		PASSENGERS	
	From AM	To PM	Actual Count	Count Adj. to Seven 8-hr. days	Actual Count	Count Adj. to Seven 8-hr. days
August (Cont'd)						
8	8:30	5:00	28	28	2,354	2,354
9	8:30	5:00	29	29	2,493	2,493
10	8:30	5:00	26	26	2,345	2,345
11	8:30	5:00	24	24	3,534	3,534
12	8:30	3:00	17	23	1,158	1,543
13			--	61	--	5,990
14			--	51	--	6,998
WEEKLY TOTAL			124	242	11,884	25,257
15	8:30	5:00	18	18	1,903	1,903
16	8:30	5:00	25	25	2,933	2,933
17	8:30	5:00	19	19	3,692	3,692
18	8:30	5:00	19	19	3,531	3,531
19	8:30	2:00	22	35	4,891	7,826
20			--	43	--	7,246
21			--	36	--	8,412
WEEKLY TOTALS			103	195	16,950	35,543
22	8:30	5:00	19	19	1,907	1,907
23	8:30	5:00	16	16	1,253	1,253
24	8:30	5:00	15	15	2,013	2,013
25	8:30	5:00	20	20	2,103	2,103
26	8:30	4:00	11	13	1,100	1,257
27	8:30	5:00	39	39	4,143	4,143
28	8:30	5:00	33	33	4,830	4,830
WEEKLY TOTAL			153	155	17,349	17,506
29	10:30	5:00	13	17	1,576	2,100
30	8:00	4:30	14	14	2,905	2,905
31	8:00	4:30	13	13	2,390	2,390
September						
1	8:00	4:30	11	11	2,560	2,560
2			--	12	--	2,630
3			--	31	--	6,110
4			--	26	--	7,108
WEEKLY TOTAL			51	124	9,431	25,803
5			--	10	--	1,580
6	10:30	5:00	10	13	1,437	1,914
7	8:00	4:30	14	14	2,297	2,297
8	8:00	4:30	15	8	2,670	2,670
9	8:00	3:00	11	14	1,148	1,412
10			--	33	--	5,100
11			--	26	--	5,940
WEEKLY TOTAL			50	118	7,552	20,913

HUDSON RIVER - RECREATIONAL VESSELS (Cont'd)

Date 1938	OBSERVATION		VESSELS		PASSENGERS	
	From AM	To PM	Actual Count	Count Adj. to Seven 8-hr.days	Actual Count	Count Adj. to Seven 8-hr.days.
September (Cont'd)						
12	8:00	4:30	16	16	2,548	2,548
13	8:00	4:30	15	15	1,975	1,975
14	8:00	4:30	16	16	2,233	2,233
15	8:00	4:30	15	15	1,756	1,756
16	8:00	3:00	9	11	1,312	1,610
17			--	34	--	4,900
18			--	29	--	5,718
WEEKLY TOTAL			<u>71</u>	<u>136</u>	<u>9,824</u>	<u>20,740</u>
19	8:00	4:30	8	8	1,461	1,461
20	8:00	4:30	11	11	2,086	2,086
21	8:00	4:30	12	12	2,090	2,090
22	8:00	4:30	13	13	2,634	2,634
23	8:00	3:00	10	12	1,771	2,178
24			--	26	--	5,000
25			--	22	--	5,848
WEEKLY TOTAL			<u>54</u>	<u>104</u>	<u>10,042</u>	<u>21,297</u>
GRAND TOTAL			980	1,912	154,529	344,638

WATERWAY: HUDSON RIVER, PIER #43, CHRISTOPHER AND WEST STREETS,  
NEW YORK CITY

FERRIES

Date	<u>OBSERVATION</u>		<u>VESSELS</u>		<u>PASSENGERS</u>	
	<u>From</u> <u>AM</u>	<u>To</u> <u>PM</u>	<u>Actual</u> <u>Count</u>	<u>Count Adj.</u> <u>to Seven</u> <u>8-hr.days</u>	<u>Actual</u> <u>Count</u>	<u>Count Adj.</u> <u>to Seven</u> <u>8-hr.days</u>
1938						
July						
4			---	320	---	
5	1:05PM	4:30	140	252	---	
6	8:00	4:00	320	342	---	
7	8:00	4:00	320	342	---	
8	8:00	2:00	240	349	---	
9			--	326	---	
10			--	65	---	
WEEKLY TOTAL			1,020	1,996	00	
11	8:00	4:30	333	333	---	
12	8:00	4:30	340	340	---	
13	8:00	4:30	340	340	---	
14	8:00	1:00	200	356	---	
15	8:00	4:30	340	340	---	
16			--	340	---	
17			--	68	---	
WEEKLY TOTAL			1,553	2,117	00	
18	10:40	4:30	234	340	---	
19	8:00	4:30	340	340	---	
20	8:00	4:00	320	341	---	
21	8:00	1:00	200	356	---	
22	8:00	4:30	340	340	---	
23			--	342	---	
24			--	69	---	
WEEKLY TOTAL			1,434	2,128	00	
25			--	340	---	
26	8:00	4:30	340	340	---	
27	8:00	4:30	340	340	---	
28	8:00	3:15	290	356	---	
29	8:00	4:30	340	340	---	
30			--	352	---	
31			--	70	---	
WEEKLY TOTAL			1,310	2,138	00	
August						
1	8:00	5:00	360	340	---	
2	8:00	5:00	360	340	---	
3	8:00	4:30	340	340	---	
4	8:00	4:30	340	340	---	
5	10:00	2:30	160	356	---	
6			--	342	---	
7			--	68	---	
WEEKLY TOTAL			1,560	2,126	00	



## HUDSON RIVER - FERRIES (CONT'D)

Date 1938	OBSERVATION		VESSELS		PASSENGERS	
	From AM	To PM	Actual Count	Count Adj. to Seven 8-hr. days	Actual Count	Count Adj. to Seven 8-hr. days
August (Cont'd)						
8	8:30	5:00	340	340	--	
9	8:30	5:00	340	340	--	
10	8:30	5:00	340	340	--	
11	8:30	5:00	340	340	--	
12	8:30	3:00	260	346	--	
13			--	340	--	
14			--	68	--	
WEEKLY TOTAL			1,620	2,114	00	
15	8:30	5:00	320	320	--	
16	8:30	5:00	320	320	--	
17	8:30	5:00	320	320	--	
18	8:30	5:00	320	320	--	
19	8:30	2:00	220	348	--	
20			--	324	--	
21			--	65	--	
WEEKLY TOTAL			1,500	2,017	00	
22	8:30	5:00	320	320	--	
23	8:30	5:00	320	320	--	
24	8:30	5:00	320	320	--	
25	8:30	5:00	320	320	--	
26	8:30	4:00	280	320	--	
27	8:30	5:00	320	320	--	
28	8:30	5:00	64	64	--	
WEEKLY TOTAL			1,944	1,984	00	
29	10:30	5:00	240	320	--	
30	8:00	4:30	320	320	--	
31	8:00	4:30	320	320	--	
September						
1	8:00	4:30	320	320	--	
2			--	320	--	
3			--	320	--	
4			--	67	--	
WEEKLY TOTAL			1,200	1,987	00	
5			--	320	--	
6	10:30	5:00	240	320	--	
7	8:00	4:30	320	320	--	
8	8:00	4:30	320	320	--	
9	8:00	3:00	260	320	--	
10			--	320	--	
11			--	67	--	
WEEKLY TOTAL			1,140	1,987	00	

HUDSON RIVER - FERRIES (Cont'd)

Date	<u>OBSERVATION</u>		<u>V E S S E L S</u>		<u>P A S S E N G E R S</u>	
	From	To	Actual	Count Adj.	Actual	Count Adj.
<u>1938</u>	<u>AM</u>	<u>PM</u>	<u>Count</u>	<u>to Seven</u>	<u>Count</u>	<u>to Seven</u>
				<u>8-hr.days</u>		<u>8-hr.days</u>
September (Cont'd)						
12	8:00	4:30	320	320	---	
13	8:00	4:30	340	340	---	
14	8:00	4:30	320	320	---	
15	8:00	4:30	320	320	---	
16	8:00	3:00	260	320	---	
17			--	320	---	
18			--	69	---	
<u>WEEKLY TOTAL</u>			<u>1,560</u>	<u>2,009</u>	<u>00</u>	
19	8:00	4:30	320	320	---	
20	8:00	4:30	320	320	---	
21	8:00	4:30	320	320	---	
22	8:00	4:30	320	320	---	
23	8:00	3:00	260	320	---	
24			--	329	---	
25			--	66	---	
<u>WEEKLY TOTAL</u>			<u>1,540</u>	<u>1,995</u>	<u>00</u>	
<u>GRAND TOTAL</u>			<u>17,381</u>	<u>24,598</u>	<u>00</u>	

WATERWAY: HUDSON RIVER, PIER #43, CHRISTOPHER AND WEST STREETS  
NEW YORK CITY

MISCELLANEOUS VESSELS

Date 1938	OBSERVATION		VESSELS		PASSENGERS	
	From AM	To PM	Actual Count	Count Adj. to Seven 8-hr.days	Actual Count	Count Adj. to Seven 8-hr.days
July						
4						
5	1:05PM	4:30	1	1	10	18
6	8:00	4:00	3	3	45	48
7	8:00	4:00	1	1	15	16
8	8:00	2:00	1	1	700	1,018
9			--	1	--	4
10			--	2	--	640
WEEKLY TOTAL			<u>6</u>	<u>9</u>	<u>770</u>	<u>1,744</u>
11	8:00	4:30	1	1	4	4
12	8:00	4:30	2	2	14	14
13	8:00	4:30	1	1	7	7
14	8:00	1:00	4	6	12	21
15	8:00	4:30	1	1	8	8
16			--	1	--	0
17			--	2	--	26
WEEKLY TOTAL			<u>9</u>	<u>14</u>	<u>45</u>	<u>80</u>
18	10:40	4:30	4	5	20	29
19	8:00	4:30	6	6	30	30
20	8:00	4:00	3	3	23	24
21	8:00	1:08	2	3	12	21
22	8:00	4:30	3	3	18	18
23			--	1	--	4
24			--	4	--	64
WEEKLY TOTAL			<u>18</u>	<u>25</u>	<u>103</u>	<u>190</u>
25			--	3	--	18
26	8:00	4:30	2	2	12	12
27	8:00	4:30	2	2	12	12
28	8:00	3:15	2	2	12	15
29	8:00	4:30	2	4	12	22
30			--	1	--	0
31			--	3	--	41
WEEKLY TOTAL			<u>8</u>	<u>17</u>	<u>48</u>	<u>120</u>
August						
1	8:00	5:00	2	2	12	11
2	8:00	5:00	1	1	5	5
3	8:00	4:30	--	--	--	--
4	8:00	4:30	2	2	12	12
5	10:30	2:30	1	2	6	14
6			--	0	--	0
7			--	1	--	20
WEEKLY TOTAL			<u>6</u>	<u>8</u>	<u>35</u>	<u>62</u>

HUDSON RIVER - MISCELLANEOUS VESSELS (Cont'd)

Date 1938	OBSERVATION		VESSELS		PASSENGERS	
	From AM	To PM	Actual Count	Count Adj. to Seven 8-hr.days	Actual Count	Count Adj. to Seven 8-hr.days
August (Cont'd)						
8	8:30	5:00	1	1	10	10
9	8:30	5:00	0	0	0	0
10	8:30	5:00	0	0	0	0
11	8:30	5:00	4	4	26	26
12	8:30	3:00	1	1	8	11
13			--	0	--	1
14			--	1	--	24
WEEKLY TOTAL			<u>6</u>	<u>7</u>	<u>44</u>	<u>72</u>
15	8:30	5:00	3	3	12	12
16	8:30	5:00	3	3	17	17
17	8:30	5:00	5	5	2,412	2,412
18	8:30	5:00	5	5	37	37
19	8:30	2:00	4	5	34	34
20			--	1	--	870
21			--	4	--	1,410
WEEKLY TOTAL			<u>20</u>	<u>26</u>	<u>2,512</u>	<u>4,812</u>
22	8:30	5:00	10	10	1,528	1,528
23	8:30	5:00	2	2	10	10
24	8:30	5:00	1	1	8	8
25	8:30	5:00	1	1	6	6
26	8:30	4:00	3	3	28	32
27	8:30	5:00	1	1	5	5
28	8:30	5:00	3	3	850	850
WEEKLY TOTAL			<u>21</u>	<u>21</u>	<u>2,435</u>	<u>2,439</u>
29	10:30	5:00	2	2	30	40
30	8:00	4:30	4	4	45	45
31	8:00	4:30	3	3	70	70
September						
1	8:00	4:30	3	3	35	35
2			--	2	--	10
3			--	4	--	22
4			--	0	--	82
WEEKLY TOTAL			<u>12</u>	<u>18</u>	<u>180</u>	<u>304</u>
5			--	1	--	30
6	10:30	5:00	4	4	319	425
7	8:00	4:30	4	4	26	26
8	8:00	4:30	4	4	26	26
9	8:00	3:00	6	6	335	412
10			--	0	--	0
11			--	0	--	0
WEEKLY TOTAL			<u>18</u>	<u>19</u>	<u>706</u>	<u>919</u>

## HUDSON RIVER - MISCELLANEOUS VESSELS (Cont'd)

Date 1938	OBSERVATION		VESSELS		PASSENGERS	
	From AM	To PM	Actual Count	Count Adj. to Seven 8-hr. days	Actual Count	Count Adj. to Seven 8-hr. days
September (Cont'd)						
12	8:00	4:30	4	4	27	27
13	8:00	4:30	5	5	34	34
14	8:00	4:30	6	6	41	41
15	8:00	4:30	5	5	35	35
16	8:00	3:00	4	4	27	33
17			--	0	--	0
18			--	0	--	0
WEEKLY TOTAL			24	24	164	170
19	8:00	4:30	3	3	21	21
20	8:00	4:30	4	4	28	28
21	8:00	4:30	4	4	28	28
22	8:00	4:30	5	5	35	35
23	8:00	3:00	4	4	28	34
24			--	1	--	3
25			--	4	--	76
WEEKLY TOTAL			20	25	140	225
GRAND TOTAL			171	213	7,200	11,137

The actual 7-day count at Pier #43, on the Hudson River, was as follows:

<u>DAY &amp; DATE</u>	<u>COMMERCIAL</u>	<u>RECREATIONAL</u>	<u>MISCELLANEOUS</u>	<u>FERRIES</u>	<u>TOTAL</u>
Monday, Aug. 22	213	19	10	320	562
Tuesday, Aug. 23	205	16	2	320	543
Wednesday, Aug. 24	180	15	1	320	516
Thursday, Aug. 25	153	20	1	320	494
Friday, Aug. 26	143	11	3	280	437
Saturday, Aug. 27	250	39	1	320	610
Sunday, Aug. 28	<u>56</u>	<u>33</u>	<u>3</u>	<u>64</u>	<u>156</u>
WEEK'S TOTAL	1,200	153	21	1,944	3,318

FIVE-DAY COUNT (MONDAY TO FRIDAY) TOTALS

<u>COMMERCIAL</u>	<u>RECREATIONAL</u>	<u>MISCELLANEOUS</u>	<u>FERRIES</u>	<u>TOTAL</u>
894	81	17	1,560	2,552

NOTE: This Monday-Friday count was taken for a total of 39 hours. Thus the average hourly counts were:

<u>COMMERCIAL</u>	<u>RECREATIONAL</u>	<u>MISCELLANEOUS</u>	<u>FERRIES</u>	<u>TOTAL</u>
22.9	2.1	0.4	40	65.4

The average hourly week-end counts were:

<u>DAY</u>	<u>COMMERCIAL</u>	<u>RECREATIONAL</u>	<u>MISCELLANEOUS</u>	<u>FERRIES</u>	<u>TOTAL</u>
Saturday	31.2	4.9	0.1	40.0	76.2
Sunday	7.0	4.1	0.4	8.0	19.5

Then using symbols previously defined:

<u>DAY</u>	<u>COMMERCIAL</u>	<u>RECREATIONAL</u>	<u>MISCELLANEOUS</u>	<u>FERRIES</u>	<u>TOTAL</u>
Saturday	1.36 Ac	2.33 AR	0.3 AM	1.0 AF	1.17AT
Sunday	0.31 Ac	1.95 AR	1.0 AM	0.2 AF	0.30AT

## WATERWAY: SPUYTEN DUYVIL, HUDSON RIVER, NEW YORK CITY

COMMERCIAL VESSELS

Date 1938	OBSERVATION		VESSELS		PASSENGERS	
	From AM	To PM	Actual Count	Count Adj. to Seven 8-hr. days	Actual Count	Count Adj. to Seven 8-hr. days
July						
4			---	--	---	---
5	1:30PM	3:00	3	22	78	228
6	10:00	3:30	9	16	315	416
7	9:00	5:00	18	14	365	503
8	1:00PM	3:00	10	19	156	390
9			---	40	---	625
10			---	0	---	0
WEEKLY TOTAL			40	111	914	2,162
11	12:00	4:30	6	11	210	374
12	8:00	3:30	5	6	122	139
13	9:30	3:30	10	15	200	291
14	8:00	1:00	15	24	195	312
15	8:30	3:30	9	10	90	103
16			---	7	---	119
17			---	0	---	0
WEEKLY TOTAL			45	73	817	1,338
18	8:00	3:00	6	7	80	99
19	8:30	3:00	13	17	175	233
20	10:00	3:00	12	19	155	248
21	8:30	2:00	8	12	105	152
22	8:00	3:20	9	16	110	195
23			---	7	---	96
24			---	0	---	0
WEEKLY TOTAL			48	78	625	1,023
25	8:00	3:00	7	9	80	99
26	8:00	3:00	6	7	190	234
27	8:00	3:00	7	9	70	86
28	8:00	2:30	12	17	180	262
29	8:00	12:30	4	7	70	124
30			---	5	---	85
31			---	0	---	0
WEEKLY TOTAL			36	54	590	890
August						
1	2:00PM	4:30	15	48	90	288
2	8:30	1:30	24	38	130	208
3	8:30	5:00	5	5	54	54
4	8:30	5:00	9	9	72	72
5			---	0	---	0
6			---	10	---	62
7			---	0	---	0
WEEKLY TOTAL			53	110	346	684

SPUYTEN DUYVIL, HUDSON RIVER - COMMERCIAL VESSELS (Cont'd)

Date 1938	OBSERVATION		VESSELS		PASSENGERS	
	From AM	To PM	Actual Count	Count Adj. to Seven 8-hr. days	Actual Count	Count Adj. to Seven 8-hr. days
August	(Cont'd)					
8	8:30	4:30	16	17	180	192
9	10:30	3:30	14	22	125	200
10	8:00	3:00	10	12	220	171
11	8:30	3:30	11	13	180	206
12	8:30	3:00	13	17	180	240
13			--	9	--	117
14			--	0	--	0
WEEKLY TOTAL			64	90	885	1,126
15	8:00	3:30	10	11	85	97
16	8:00	3:30	11	13	120	137
17	8:00	3:30	12	14	115	131
18	8:30	3:30	13	16	170	209
19	8:00	2:30	8	12	90	131
20			--	7	--	75
21			--	0	--	0
WEEKLY TOTAL			54	73	580	780
22	8:15	3:30	11	13	100	114
23	8:30	3:30	17	21	200	246
24	8:30	3:30	10	12	100	123
25	8:00	2:00	9	13	90	131
26	8:30	4:00	14	16	120	137
27	8:00	3:30	7	8	70	80
28	8:00	4:30	--	0	--	0
WEEKLY TOTAL			68	83	680	831
29	8:30	4:30	8	9	90	96
30	8:30	4:30	6	6	60	64
31	8:30	4:30	11	12	100	107
September						
1	8:30	4:30	15	16	250	267
2	8:30	4:30	13	14	160	171
3			--	6	--	75
4			--	0	--	0
WEEKLY TOTAL			53	63	660	780
5			--	9	--	214
6	11:00	5:00	6	9	205	298
7	9:00	5:00	10	11	104	111
8	12:00	4:00	2	4	15	30
9	9:00	2:30	9	14	263	420
10			--	5	--	113
11			--	0	--	0
WEEKLY TOTAL			27	52	587	1,186



SPUTEN DUYVIL, HUDSON RIVER - COMMERCIAL VESSELS (Cont'd)

Date 1938	OBSERVATION		VESSELS		PASSENGERS	
	From AM	To PM	Actual Count	Count Adj. to Seven 8-hr.days	Actual Count	Count Adj. to Seven 8-hr.days
September (Cont'd)						
12	8:30	3:30	19	23	129	159
13	11:00	4:30	15	24	93	143
14	8:30	2:30	9	14	58	93
15	8:30	4:00	11	13	71	81
16	8:30	2:00	12	19	93	148
17			--	10	--	60
18			--	0	--	0
WEEKLY TOTAL			<u>66</u>	<u>103</u>	<u>444</u>	<u>684</u>
19	11:00	5:00	12	17	74	107
20	8:00	4:30	10	10	69	69
21	8:30	4:00	9	10	68	78
22	8:30	4:00	4	5	34	39
23	8:30	3:00	5	7	36	48
24			--	5	--	35
25			--	0	--	0
WEEKLY TOTAL			<u>40</u>	<u>54</u>	<u>281</u>	<u>376</u>
GRAND TOTAL			594	944	7,409	11,860

## WATERWAY: SPUYTEN DUYVIL, HUDSON RIVER, NEW YORK CITY

RECREATIONAL VESSELS

Date 1938	<u>OBSERVATION</u>		<u>VESSELS</u>		<u>PASSENGERS</u>	
	<u>From</u> <u>AM</u>	<u>To</u> <u>PM</u>	<u>Actual</u> <u>Count</u>	<u>Count Adj.</u> <u>to Seven</u> <u>8-hr.days</u>	<u>Actual</u> <u>Count</u>	<u>Count Adj.</u> <u>to Seven</u> <u>8-hr.days</u>
July						
4			--	18	--	4,260
5	1:30PM	3:00	4	21	508	2,718
6	10:00	3:30	9	14	3,660	5,850
7	9:00	5:00	18	19	12,350	13,180
8	1:00PM	3:00	5	20	529	2,116
9			--	32	--	15,320
10			--	40	--	14,222
<b>WEEKLY TOTAL</b>			<b>36</b>	<b>164</b>	<b>17,047</b>	<b>57,666</b>
11	12:00	4:30	3	5	352	626
12	8:00	3:30	23	26	8,731	9,990
13	9:30	3:30	15	22	13,716	20,000
14	8:00	1:00	14	22	9,630	15,380
15	8:30	3:30	13	15	7,433	8,490
16			--	34	--	19,800
17			--	41	--	18,396
<b>WEEKLY TOTAL</b>			<b>68</b>	<b>165</b>	<b>39,862</b>	<b>92,682</b>
18	8:00	3:00	15	18	9,870	12,120
19	8:30	3:00	12	16	14,020	18,700
20	10:00	3:00	9	14	2,536	4,032
21	8:30	2:00	10	15	4,323	6,292
22	8:00	12:30	10	18	2,726	4,848
23			--	29	--	17,500
24			--	36	--	16,300
<b>WEEKLY TOTAL</b>			<b>56</b>	<b>146</b>	<b>33,475</b>	<b>79,812</b>
25	8:00	3:00	17	21	10,746	13,212
26	8:00	3:00	14	17	9,080	11,170
27	8:00	3:00	15	18	11,662	14,324
28	8:00	2:30	17	25	20,536	29,818
29	8:00	12:30	14	25	9,045	16,060
30			--	38	--	29,790
31			--	46	--	27,620
<b>WEEKLY TOTAL</b>			<b>77</b>	<b>190</b>	<b>61,069</b>	<b>141,994</b>
August						
1	2:00PM	4:30	8	26	590	1,886
2	8:30	1:30	14	22	1,615	2,582
3	8:30	5:00	6	6	1,250	1,250
4	8:30	5:00	13	13	2,008	2,008
5			--	--	--	--
6			--	25	--	3,342
7			--	31	--	3,110
<b>WEEKLY TOTAL</b>			<b>41</b>	<b>123</b>	<b>5,463</b>	<b>14,178</b>

## SPUYTEN DUYVIL, HUDSON RIVER - RECREATIONAL VESSELS (Cont'd)

Date 1938	OBSERVATION		VESSELS		PASSENGERS	
	From AM	To PM	Actual Count	Count Adj. to Seven 8-hr. days	Actual Count	Count Adj. to Seven 8-hr. days
August (Cont'd)						
8	8:30	4:30	10	11	5,955	6,356
9	10:30	3:30	14	22	13,044	20,090
10	8:00	3:00	34	42	14,552	17,920
11	8:30	3:30	21	24	20,058	22,900
12	8:30	3:00	14	19	15,521	20,650
13			--	42	--	31,112
14			--	51	--	28,800
WEEKLY TOTAL			93	211	69,130	147,828
15	8:00	3:30	16	18	16,554	18,910
16	8:00	3:30	12	14	20,016	22,848
17	8:00	3:30	14	16	18,043	20,670
18	8:30	3:30	20	25	21,046	25,890
19	8:00	2:30	16	23	13,546	19,700
20			--	34	--	38,940
21			--	42	--	36,120
WEEKLY TOTAL			78	172	89,205	183,078
22	8:00	3:30	18	21	8,000	9,158
23	8:30	3:30	18	22	9,000	11,098
24	8:30	3:30	15	18	9,000	11,098
25	8:00	2:00	15	22	10,000	14,536
26	8:30	4:00	16	18	10,200	11,646
27	8:00	3:30	32	37	18,000	20,594
28	8:00	4:30	38	38	19,000	19,000
WEEKLY TOTAL			152	176	83,200	97,130
29	8:30	4:30	12	13	14,000	14,915
30	8:30	4:30	19	20	20,000	21,368
31	8:30	4:30	17	18	13,000	13,880
September						
1	8:30	4:30	15	16	16,000	17,090
2	8:30	4:30	19	20	21,000	22,400
3			--	31	--	32,274
4			--	38	--	29,990
WEEKLY TOTAL			82	156	84,000	151,917
5			--	11	--	630
6	11:00	5:00	4	6	153	222
7	9:00	5:00	5	5	30	32
8	12:00	4:00	12	24	455	910
9	9:00	2:30	5	8	852	1,360
10			--	17	--	975
11			--	21	--	906
WEEKLY TOTAL			26	92	1,490	5,035

SPUYTEN DUYVIL, HUDSON RIVER - RECREATIONAL VESSELS (Cont'd)

Date 1938	OBSERVATION		VESSELS		PASSENGERS	
	From AM	To PM	Actual Count	Count Adj. to Seven 8-hr.days	Actual Count	Count Adj. to Seven 8-hr.days
September (Cont'd)						
12	8:30	3:30	9	11	800	986
13	11:00	4:30	5	8	345	552
14	8:30	2:30	5	8	327	522
15	8:30	4:00	5	6	330	377
16	8:30	2:00	5	8	330	527
17			--	15	--	1,080
18			--	18	--	1,000
WEEKLY TOTAL			<u>29</u>	<u>74</u>	<u>2,132</u>	<u>5,044</u>
19	11:00	5:00	4	6	20	29
20	8:00	4:30	1	1	200	200
21	8:30	4:00	0	0	0	0
22	8:30	4:00	0	0	0	0
23	8:30	3:00	1	1	250	334
24			--	2	--	204
25			--	3	--	187
WEEKLY TOTAL			<u>6</u>	<u>13</u>	<u>470</u>	<u>954</u>
GRAND TOTAL			744	1,682	486,543	977,318

## WATERWAY: SPUYTEN DUYVIL, HUDSON RIVER, NEW YORK CITY

MISCELLANEOUS VESSELS

Date 1938	OBSERVATION		VESSELS		PASSENGERS	
	From AM	To PM	Actual Count	Count Adj. to Seven 8-hr.days	Actual Count	Count Adj. to Seven 8-hr.days
July						
4			--	0	--	0
5	1:30PM	3:00	--	0	--	0
6	10:00	3:30	--	0	--	0
7	9:00	5:00	--	0	--	0
8	1:00PM	3:00	1	4	400	1,600
9			--	0	--	0
10			--	0	--	0
WEEKLY TOTAL			<u>1</u>	<u>4</u>	<u>400</u>	<u>1,600</u>
11	12:00	4:30	--	0	--	0
12	8:00	3:30	--	0	--	0
13	9:30	3:30	--	0	--	0
14	8:00	1:00	--	0	--	0
15	8:30	3:30	--	0	--	0
16			--	0	--	0
17			--	0	--	0
WEEKLY TOTAL			<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
18	8:00	3:00	--	0	--	0
19	8:30	3:00	--	0	--	0
20	10:00	3:00	--	0	--	0
21	8:30	2:00	--	0	--	0
22	8:00	3:20	--	0	--	0
23			--	0	--	0
24			--	0	--	0
WEEKLY TOTAL			<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
25	8:00	3:00	--	0	--	0
26	8:00	3:00	--	0	--	0
27	8:00	3:00	--	0	--	0
28	8:00	2:30	--	0	--	0
29	8:00	12:30	--	0	--	0
30			--	0	--	0
31			--	0	--	0
WEEKLY TOTAL			<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
August						
1	2:00PM	4:30	--	0	--	0
2	8:30	1:30	--	0	--	0
3	8:30	5:00	2	2	600	600
4	8:30	5:00	2	2	600	600
5			--	0	--	0
6			--	0	--	0
7			--	0	--	0
WEEKLY TOTAL			<u>4</u>	<u>4</u>	<u>1,200</u>	<u>1,200</u>

SPUYTEN DUYVIL, HUDSON RIVER - MISCELLANEOUS VESSELS (Cont'd)

Date	OBSERVATION		VESSELS		PASSENGERS	
	From AM	To PM	Actual Count	Count Adj. to Seven 8-hr.days	Actual Count	Count Adj. to Seven 8-hr.days.
1938						
August	(Cont'd)					
8	8:30	4:30	--	0	--	0
9	10:30	3:30	--	0	--	0
10	8:00	3:00	--	0	--	0
11	8:30	3:30	--	0	--	0
12	8:30	3:00	--	0	--	0
13			--	0	--	0
14			--	0	--	0
	WEEKLY TOTAL		<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
15	8:00	3:30	--	0	--	0
16	8:00	3:30	--	0	--	0
17	8:00	3:30	--	0	--	0
18	8:30	3:30	--	0	--	0
19	8:00	2:30	--	0	--	0
20			--	0	--	0
21			--	0	--	0
	WEEKLY TOTAL		<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
22	8:00	3:30	--	0	--	0
23	8:30	3:30	--	0	--	0
24	8:30	3:30	--	0	--	0
25	8:00	2:00	--	0	--	0
26	8:30	4:00	1	1	5	6
27	8:00	3:30	--	0	--	0
28	8:00	4:30	--	0	--	0
	WEEKLY TOTAL		<u>1</u>	<u>1</u>	<u>5</u>	<u>6</u>
29	8:30	4:30	--	0	--	0
30	8:30	4:30	--	0	--	0
31	8:30	4:30	2	2	10	11
September						
1	8:30	4:30	--	0	--	0
2	8:30	4:30	3	3	15	16
3			--	0	--	0
4			--	0	--	0
	WEEKLY TOTAL		<u>5</u>	<u>5</u>	<u>25</u>	<u>27</u>
5			--	0	--	0
6	11:00	5:00	2	3	9	13
7	9:00	5:00	--	0	--	0
8	12:00	4:00	--	0	--	0
9	9:00	2:30	--	0	--	0
10			--	0	--	0
11			--	0	--	0
	WEEKLY TOTAL		<u>2</u>	<u>3</u>	<u>9</u>	<u>13</u>

SPUYTEN DUYVIL, HUDSON RIVER - MISCELLANEOUS VESSELS (Cont'd)

<u>OBSERVATION</u>			<u>VESSELS</u>		<u>PASSENGERS</u>	
Date 1938	From AM	To PM	Actual Count	Count Adj. to Seven 8-hr.days	Actual Count	Count Adj. to Seven 8-hr.days
September (cont'd)						
12	8:30	3:30	--	0	--	0
13	11:00	4:30	--	0	--	0
14	8:30	2:30	--	0	--	0
15	8:30	4:00	--	0	--	0
16	8:30	2:00	--	0	--	0
17			--	0	--	0
18			--	0	--	0
WEEKLY TOTAL			0	0	0	0
19	11:00	5:00	1	1	10	14
20	8:00	4:30	--	0	--	0
21	8:30	4:00	--	0	--	0
22	8:30	4:00	1	1	10	11
23	8:30	3:00	1	1	10	13
24			--	0	--	0
25			--	0	--	0
WEEKLY TOTAL			3	3	30	38
GRAND TOTAL			16	20	1,669	2,884

The actual 7-day count on Spuyten Duyvil, Hudson River, was as follows:

<u>DAY &amp; DATE</u>	<u>HOURS</u>	<u>COMMERCIAL</u>	<u>RECREATIONAL</u>	<u>MISCELLANEOUS</u>	<u>TOTAL</u>
Mon. 8/22	6 hr. 40 min.	11	18	0	29
Tues. 8/23	6 " 25 "	17	18	0	35
Wed. 8/24	6 " 30 "	10	15	0	25
Thu. 8/25	5 " 10 "	9	15	0	24
Fri. 8/26	7 " 10 "	14	16	1	31
Sat. 8/27	6 " 50 "	7	32	0	39
Sun. 8/28	8 " 0 "	0	38	0	38
<b>WEEK'S TOTAL</b>		68	152	1	221

The Monday-Friday totals were:

<u>COMMERCIAL</u>	<u>RECREATIONAL</u>	<u>MISCELLANEOUS</u>	<u>TOTAL</u>
61	82	1	144

Counts were taken for a total of 31.9 hours. Thus the average hourly counts were:

<u>COMMERCIAL</u>	<u>RECREATIONAL</u>	<u>MISCELLANEOUS</u>	<u>TOTAL</u>
1.9	2.6	.03	4.5

The average hourly week-end counts were:

<u>DAY</u>	<u>COMMERCIAL</u>	<u>RECREATIONAL</u>	<u>MISCELLANEOUS</u>	<u>TOTAL</u>
Saturday	1.0	4.7	0	5.7
Sunday	0	5.6	0	5.6

Then, using symbols previously defined:

<u>DAY</u>	<u>COMMERCIAL</u>	<u>RECREATIONAL</u>	<u>MISCELLANEOUS</u>	<u>TOTAL</u>
Saturday	0.53 Ac	1.8 AR	0 AM	1.3 AT
Sunday	0 Ac	2.2 AR	0 AM	1.2 AT



## WATERWAY: SPUYTEN DUYVIL, HARLEM RIVER, NEW YORK CITY

COMMERCIAL VESSELS

Date 1938	OBSERVATION		VESSELS		PASSENGERS	
	From AM	To PM	Actual Count	Count Adj. to Seven 8-hr. days	Actual Count	Count Adj. to Seven 8-hr. days
July						
4			--	3	--	28
5	1:00PM	3:30	3	10	24	77
6	10:00	3:00	4	7	40	71
7	10:00	5:00	3	4	21	26
8	1:00PM	3:00	4	16	28	112
9			--	5	--	44
10			--	0	--	0
WEEKLY TOTAL			14	45	113	358
11	11:30	4:00	2	4	11	22
12	8:30	3:00	2	2	18	22
13	9:00	3:30	5	7	39	51
14	9:30	12:30	3	8	25	67
15	9:00	3:00	3	4	35	51
16			--	4	--	31
17			--	0	--	0
WEEKLY TOTAL			15	29	128	244
18	9:30	3:30	6	11	60	107
19	10:00	3:00	6	11	125	222
20	9:00	2:00	3	5	15	27
21	9:00	11:00AM	3	12	40	160
22	9:30	1:00	4	9	25	57
23			--	7	--	84
24			--	0	--	0
WEEKLY TOTAL			22	55	265	657
25	9:00	2:30	3	5	30	48
26	9:00	3:30	6	8	60	80
27	9:00	3:00	3	4	30	44
28	9:00	2:00	2	4	20	36
29	10:00	12:30	1	3	10	32
30			--	3	--	38
31			--	0	--	0
WEEKLY TOTAL			15	27	150	278
August						
1	2:00PM	4:30	8	26	40	130
2	8:30	1:30	24	38	125	190
3	10:30	5:00	4	6	22	30
4	8:30	4:30	4	4	15	16
5			--	18	--	51
6			--	11	--	58
7			--	0	--	0
WEEKLY TOTAL			40	103	202	475

SPUYTEN DUYVIL, HARLEM RIVER - COMMERCIAL VESSELS (Cont'd)

Date 1938	OBSERVATION		VESSELS		PASSENGERS	
	From AM	To PM	Actual Count	Count Adj. to Seven 8-hr. days	Actual Count	Count Adj. to Seven 8-hr. days
August (Cont'd)						
8	8:30	4:30	11	12	370	395
9	11:00	3:30	2	4	15	27
10	8:30	3:00	2	4	18	32
11	9:00	3:00	--	6	--	108
12	9:00	3:00	3	4	30	44
13			--	4	--	95
14			--	0	--	0
WEEKLY TOTAL			<u>18</u>	<u>34</u>	<u>433</u>	<u>701</u>
15	8:30	3:30	2	3	20	27
16	9:30	3:30	4	6	35	56
17	8:30	3:00	4	6	35	51
18	8:30	3:30	6	8	53	71
19	9:30	2:00	2	4	20	40
20			--	4	--	37
21			--	0	--	0
WEEKLY TOTAL			<u>18</u>	<u>31</u>	<u>163</u>	<u>282</u>
22	8:00	3:30	4	5	40	46
23	8:30	3:30	7	9	50	62
24	8:30	3:30	6	7	60	74
25	8:30	1:30	0	0	0	0
26	8:00	4:00	2	2	20	21
27	8:30	3:30	3	4	30	37
28	8:00	4:30	0	0	0	0
WEEKLY TOTAL			<u>22</u>	<u>27</u>	<u>200</u>	<u>240</u>
29	8:00	4:30	3	3	30	30
30	8:00	4:30	2	2	15	15
31	8:00	4:30	7	7	50	50
September						
1	8:00	4:30	1	1	4	4
2	8:00	4:30	6	6	40	40
3			--	1	--	21
4			--	0	--	0
WEEKLY TOTAL			<u>19</u>	<u>20</u>	<u>139</u>	<u>160</u>
5			--	9	--	68
6	10:00	5:00	6	7	38	47
7	8:30	4:30	7	7	52	56
8	12:00	4:00	4	8	118	236
9	9:00	2:30	8	13	64	102
10			--	6	--	71
11			--	0	--	0
WEEKLY TOTAL			<u>25</u>	<u>50</u>	<u>272</u>	<u>580</u>

SPUYTEN DUYVIL, HARLEM RIVER - COMMERCIAL VESSELS (Cont'd)

Date	OBSERVATION		VESSELS		PASSENGERS	
	From	To	Actual	Count Adj.	Actual	Count Adj.
1938	AM	PM	Count	to Seven 8-hr. days	Count	to Seven 8-hr. days
September (Cont'd)						
12	2:30	4:30	6	6	34	34
13	11:30	4:30	5	9	30	53
14	8:30	4:30	9	10	50	53
15	8:30	12:30	5	10	30	60
16	8:30	12:30	4	8	26	52
17			--	6	--	37
18			--	0	--	0
WEEKLY TOTAL			29	49	170	289
19	11:00	5:00	5	7	27	37
20	8:30	4:30	4	4	22	23
21	8:30	4:00	5	6	27	31
22	8:30	4:30	3	3	27	29
23	8:30	4:30	3	3	19	20
24			--	3	--	21
25			--	0	--	0
WEEKLY TOTAL			20	26	122	161
GRAND TOTAL			257	496	2,357	4,425

## WATERWAY: SPUYTEN DUYVIL, HARLEM RIVER, NEW YORK CITY

RECREATIONAL VESSELS

Date <u>1938</u>	<u>OBSERVATION</u>		<u>VESSELS</u>		<u>PASSENGERS</u>	
	<u>From</u> <u>AM</u>	<u>To</u> <u>PM</u>	<u>Actual</u> <u>Count</u>	<u>Count Adj.</u> <u>to Seven</u> <u>8-hr.days</u>	<u>Actual</u> <u>Count</u>	<u>Count Adj.</u> <u>to Seven</u> <u>8-hr.days</u>
July						
4			--	8	--	172
5	1:00PM	3:30	2	6	30	96
6	10:00	3:00	12	21	110	195
7	10:00	5:00	14	17	500	616
8	1:00	3:00	5	20	50	200
9			--	43	--	487
10			--	20	--	1,140
WEEKLY TOTAL			<u>33</u>	<u>135</u>	<u>690</u>	<u>2,906</u>
11	11:30	4:00	7	14	139	278
12	8:30	3:00	13	16	458	564
13	9:00	3:30	11	15	447	595
14	9:30	12:30	6	16	385	1,028
15	9:00	3:00	12	17	400	582
16			--	39	--	802
17			--	19	--	1,872
WEEKLY TOTAL			<u>49</u>	<u>136</u>	<u>1,829</u>	<u>5,721</u>
18	9:30	2:30	17	30	333	592
19	10:00	3:00	14	25	124	220
20	9:00	2:00	6	11	47	84
21	9:00	11:00AM	0	0	0	0
22	9:30	1:00	10	23	65	148
23			--	55	--	368
24			--	24	--	858
WEEKLY TOTAL			<u>47</u>	<u>188</u>	<u>569</u>	<u>2,270</u>
25	9:00	2:30	10	16	173	276
26	9:00	3:30	11	15	198	264
27	9:00	3:00	15	22	371	340
28	9:00	2:00	11	19	231	410
29	10:00	12:30	12	38	440	1,408
30			--	50	--	660
31			--	24	--	1,540
WEEKLY TOTAL			<u>59</u>	<u>184</u>	<u>1,413</u>	<u>5,098</u>
August						
1	2:00PM	4:30	9	29	560	1,788
2	8:30	1:30	11	18	455	728
3	10:30	5:00	14	19	344	458
4	8:30	4:30	16	17	542	578
5			0	0	0	0
6			--	48	--	991
7			--	23	--	2,318
WEEKLY TOTAL			<u>50</u>	<u>154</u>	<u>1,901</u>	<u>6,861</u>

SPUYTEN DUYVIL, HARLEM RIVER RECREATIONAL VESSELS (Cont'd)

Date	OBSERVATION		VESSELS		PASSENGERS	
	From	To	Actual	Count Adj.	Actual	Count Adj.
1938	AM	PM	Count	to Seven	Count	to Seven
August	(Cont'd)			8-hr. days		8-hr. days
8	8:30	4:30	7	7	4,615	4,920
9	11:00	3:30	19	34	246	438
10	8:30	3:00	12	21	98	174
11	9:00	3:00	15	22	432	628
12	9:00	3:00	12	19	421	612
13			--	47	--	2,318
14			--	23	--	5,400
WEEKLY TOTAL			<u>65</u>	<u>173</u>	5,812	14,490
15	8:30	3:30	11	15	129	172
16	9:30	3:30	16	25	316	505
17	8:30	3:00	16	23	343	498
18	8:30	3:30	14	19	176	234
19	9:30	2:00	18	36	222	444
20			--	58	--	490
21			--	27	--	1,146
WEEKLY TOTAL			<u>75</u>	<u>203</u>	1,186	3,489
22	8:00	3:30	19	22	165	188
23	8:30	3:30	14	17	200	246
24	8:30	3:30	16	20	200	246
25	8:30	1:30	13	21	155	248
26	8:00	4:00	15	16	550	586
27	8:30	3:30	40	49	350	430
28	8:00	4:30	25	25	5,000	1,000
WEEKLY TOTAL			<u>142</u>	<u>170</u>	6,620	2,944
29	8:00	4:30	11	11	150	150
30	8:00	4:30	13	13	165	165
31	8:00	4:30	9	9	200	200
September						
1	8:00	4:30	16	16	325	325
2	8:00	4:30	15	15	300	300
3			--	32	--	312
4			--	15	--	728
WEEKLY TOTAL			<u>64</u>	<u>111</u>	1,140	2,180
5			--	8	--	95
6	10:00	5:00	15	18	296	364
7	8:30	4:30	2	2	38	41
8	12:00	4:00	3	6	15	30
9	9:00	2:30	3	5	30	48
10			--	20	--	181
11			--	10	--	422
WEEKLY TOTAL			<u>23</u>	<u>69</u>	379	1,181

SPUYTEN DUYVIL, HARLEM RIVER - RECREATIONAL VESSELS (Cont'd)

Date 1938	OBSERVATION		VESSELS		PASSENGERS	
	From AM	To PM	Actual Count	Count to Seven 8-hr.days	Actual Count	Count Adj. to Seven 8-hr.days
September (Cont'd)						
12	2:30	4:30	4	4	30	32
13	11:30	4:30	4	7	40	71
14	8:30	4:30	5	5	35	37
15	8:30	12:30	2	4	15	30
16	8:30	12:30	3	6	15	30
17			--	13	--	54
18			--	6	--	126
WEEKLY TOTAL			<u>18</u>	<u>45</u>	<u>135</u>	<u>380</u>
19	11:00	5:00	2	3	10	15
20	8:30	4:30	1	1	10	10
21	8:30	4:00	0	0	0	0
22	8:30	4:30	1	1	5	5
23	8:30	4:30	0	0	0	0
24			--	2	--	8
25			--	1	--	18
WEEKLY TOTAL			<u>4</u>	<u>8</u>	<u>25</u>	<u>56</u>
GRAND TOTAL			629	1,556	21,699	47,576

## WATERWAY: SPUYTEN DUYPIL, HARLEM RIVER, NEW YORK CITY

MISCELLANEOUS VESSELS

Date	<u>OBSERVATION</u>		<u>VESSELS</u>		<u>PASSENGERS</u>	
	<u>From</u>	<u>To</u>	<u>Actual</u>	<u>Count Adj.</u>	<u>Actual</u>	<u>Count Adj.</u>
1938	<u>AM</u>	<u>PM</u>	<u>Count</u>	<u>to Seven</u>	<u>Count</u>	<u>to Seven</u>
				<u>8-hr.days</u>		<u>8-hr.days</u>
July						
4			--	0	--	0
5	1:00PM	3:30	--	0	--	0
6	10:00	3:00	--	0	--	0
7	10:00	5:00	1	1	5	6
8	1:00PM	3:00	1	4	8	32
9			--	0	--	0
10			--	0	--	0
WEEKLY TOTAL			<u>2</u>	<u>5</u>	<u>13</u>	<u>38</u>
11	11:30	4:00	--	0	--	0
12	8:30	3:00	--	0	--	0
13	9:00	3:30	--	0	--	0
14	9:30	12:30	--	0	--	0
15	9:00	3:00	--	0	--	0
16			--	0	--	0
17			--	0	--	0
WEEKLY TOTAL			<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
18	9:30	2:30	--	0	--	0
19	10:00	3:00	--	0	--	0
20	9:00	2:00	--	0	--	0
21	9:00	11:00AM	--	0	--	0
22	9:30	1:00PM	--	0	--	0
23			--	0	--	0
24			--	0	--	0
WEEKLY TOTAL			<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
25	9:00	2:30	--	0	--	0
26	9:00	3:30	--	0	--	0
27	9:00	3:00	--	0	--	0
28	9:00	2:00	--	0	--	0
29	10:00	12:30	--	0	--	0
30			--	0	--	0
31			--	0	--	0
WEEKLY TOTAL			<u>--</u>	<u>0</u>	<u>--</u>	<u>0</u>
August			--	0	--	0
1	2:00PM	4:30	--	0	--	0
2	8:30	1:30	--	0	--	0
3	10:30	5:00	--	0	--	0
4	8:30	4:30	2	2	7	7
5			--	0	--	0
6			--	0	--	0
7			--	0	--	0
WEEKLY TOTAL			<u>2</u>	<u>2</u>	<u>7</u>	<u>7</u>

SPUYTEN DUYVIL, HARLEM RIVER - MISCELLANEOUS VESSELS (Cont'd)

Date 1938	OBSERVATION		VESSELS		PASSENGERS	
	From AM	To PM	Actual Count	Count Adj. to Seven 8-hr.days	Actual Count	Count Adj. to Seven 8-hr.days
August (Cont'd)						
8	8:30	4:30	--	0	--	0
9	11:00	3:30	--	0	--	0
10	8:30	3:00	--	0	--	0
11	9:00	3:00	--	0	--	0
12	9:00	3:00	--	0	--	0
13			--	0	--	0
14			--	0	--	0
WEEKLY TOTAL			<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
15	8:30	3:30	--	0	--	0
16	9:30	3:30	--	0	--	0
17	8:30	3:00	--	0	--	0
18	8:30	3:30	--	0	--	0
19	9:30	2:00	--	0	--	0
20			--	0	--	0
21			--	0	--	0
WEEKLY TOTAL			<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
22	8:00	3:30	--	0	--	0
23	8:30	3:30	--	0	--	0
24	8:30	3:30	--	0	--	0
25	8:30	1:30	--	0	--	0
26	8:00	4:00	1	1	5	5
27	8:30	3:30	--	0	--	0
28	8:00	4:30	--	0	--	0
WEEKLY TOTAL			<u>1</u>	<u>1</u>	<u>5</u>	<u>5</u>
29	8:00	4:30	--	0	--	0
30	8:00	4:30	--	0	--	0
31	8:00	4:30	1	1	5	5
September						
1	8:00	4:30	--	0	--	0
2	8:00	4:30	--	0	--	0
3			--	0	--	0
4			--	0	--	0
WEEKLY TOTAL			<u>1</u>	<u>1</u>	<u>5</u>	<u>5</u>
5			--	0	--	0
6	10:00	5:00	1	1	6	7
7	8:30	4:30	--	0	--	0
8	12:00	4:00	--	0	--	0
9	9:00	2:30	--	0	--	0
10			--	0	--	0
11			--	0	--	0
WEEKLY TOTAL			<u>1</u>	<u>1</u>	<u>6</u>	<u>7</u>



SPUYTEN DUYVIL, HARLEM RIVER - MISCELLANEOUS VESSELS (Cont'd)

Date 1938	OBSERVATION		VESSELS		PASSENGERS	
	From AM	To PM	Actual Count	Count Adj. to Seven 8-hr.days	Actual Count	Count Adj. to Seven 8-hr.days
September (Cont'd)						
12	2:30PM	4:30	1	1	10	11
13	11:30	4:30	--	0	--	0
14	8:30	4:30	1	1	25	27
15	8:30	12:30	1	2	10	20
16	8:30	12:30	1	2	10	20
17			--	0	--	0
18			--	0	--	0
WEEKLY TOTAL			<u>4</u>	<u>6</u>	<u>55</u>	<u>78</u>
19	11:00	5:00	1	1	10	15
20	8:30	4:30	1	1	10	11
21	8:30	4:00	--	0	--	0
22	8:30	4:30	--	0	--	0
23	8:30	4:30	--	0	--	0
24			--	0	--	0
25			--	0	--	0
WEEKLY TOTAL			<u>2</u>	<u>2</u>	<u>20</u>	<u>26</u>
GRAND TOTAL			13	18	111	166

The actual 7-day count on Spuyten Duyvil, Harlem River, was as follows:

<u>DAY &amp; DATE</u>	<u>HOURS</u>	<u>COMMERCIAL</u>	<u>RECREATIONAL</u>	<u>MISCELLANEOUS</u>	<u>TOTAL</u>
Mon. 8/22	6hr. 35 min.	4	19	0	23
Tues. 8/23	6 " 20 "	7	14	0	21
Wed. 8/24	6 " 25 "	6	16	0	22
Thu. 8/25	4 " 35 "	0	13	0	13
Fri. 8/26	7 " 05 "	2	15	1	18
Sat. 8/27	6 " 30 "	3	40	0	43
Sun. 8/28	8 " 0 "	0	25	0	25
WEEK'S TOTAL		22	142	1	165

The Monday-Friday totals were:

<u>COMMERCIAL</u>	<u>RECREATIONAL</u>	<u>MISCELLANEOUS</u>	<u>TOTAL</u>
19	77	1	97

Counts were taken for a total of 31.2 hours. Thus the average hourly counts were:

<u>COMMERCIAL</u>	<u>RECREATIONAL</u>	<u>MISCELLANEOUS</u>	<u>TOTAL</u>
0.61	2.5	0.03	31

The average hourly week-end counts were:

<u>DAY</u>	<u>COMMERCIAL</u>	<u>RECREATIONAL</u>	<u>MISCELLANEOUS</u>	<u>TOTAL</u>
Saturday	0.46	6.2	0	6.6
Sunday	0	3.1	0	3.1

Then, using symbols previously defined:

<u>DAY</u>	<u>COMMERCIAL</u>	<u>RECREATIONAL</u>	<u>MISCELLANEOUS</u>	<u>TOTAL</u>
Saturday	0.75 Ac	2.5 AR	0 AM	2.1 AT
Sunday	0 Ac	1.2 AR	0 AM	1.0 AT

## WATERWAY: KILL VAN KULL, FERRY STREET DOCK, STATEN ISLAND

COMMERCIAL VESSELS

Date 1938	<u>OBSERVATION</u>		<u>VESSELS</u>		<u>PASSENGERS</u>	
	<u>From</u> <u>AM</u>	<u>To</u> <u>PM</u>	<u>Actual</u> <u>Count</u>	<u>Count Adj.</u> <u>to Seven</u> <u>8-hr.days</u>	<u>Actual</u> <u>Count</u>	<u>Count Adj.</u> <u>to Seven</u> <u>8-hr.days</u>
July						
18	10:00	5:00	46	57	445	548
19	8:00	5:00	57	54	431	406
20	8:00	4:30	53	53	459	459
21	7:30	1:30	48	70	679	988
22	7:30	4:30	97	91	1,277	1,200
23			--	83	--	905
24			--	41	--	447
WEEKLY TOTAL			<u>301</u>	<u>449</u>	<u>3,291</u>	<u>4,953</u>
25	7:30	4:30	109	103	2,799	2,640
26	7:30	4:30	105	99	1,653	1,558
27	7:30	4:30	113	106	9,190	8,650
28	7:30	1:30	74	107	4,149	6,048
29	7:30	4:30	105	99	1,831	1,724
30			--	130	--	5,050
31			--	65	--	2,526
WEEKLY TOTAL			<u>506</u>	<u>709</u>	<u>19,622</u>	<u>28,196</u>
August						
1	7:30	4:30	95	90	1,331	1,252
2	7:30	4:30	97	91	1,428	1,343
3	7:30	4:30	103	97	1,370	1,290
4	7:30	4:30	99	93	1,507	1,415
5			--	92	--	1,325
6			--	118	--	1,682
7			--	58	--	835
WEEKLY TOTAL			<u>394</u>	<u>639</u>	<u>5,636</u>	<u>9,142</u>
8	7:30	4:30	93	88	1,374	1,295
9	7:30	4:30	90	85	2,167	2,038
10	7:30	4:30	104	98	1,697	1,598
11	7:30	4:30	120	113	1,585	1,492
12	7:30	4:30	92	87	1,222	1,148
13			--	119	--	1,920
14			--	59	--	955
WEEKLY TOTAL			<u>499</u>	<u>649</u>	<u>8,045</u>	<u>10,446</u>
15	7:30	4:30	102	96	1,565	1,471
16	7:30	4:30	88	83	1,517	1,425
17	7:30	4:00	70	70	1,171	1,171
18	7:30	4:00	87	87	2,785	2,785
19	7:30	2:30	57	70	938	1,156
20			--	104	--	2,048
21			--	52	--	1,024
WEEKLY TOTAL			<u>404</u>	<u>562</u>	<u>7,976</u>	<u>11,080</u>

KILL VAN KULL - COMMERCIAL VESSELS (Cont'd)

Date 1938	OBSERVATION		VESSELS		PASSENGERS	
	From AM	To PM	Actual Count	Count Adj. to Seven 8-hr. days	Actual Count	Count Adj. to Seven 8-hr. days
August (Cont'd)						
22	7:30	4:00	76	76	1,313	1,313
23	7:30	4:00	112	112	1,929	1,929
24	7:30	4:00	88	88	1,628	1,628
25	7:30	4:00	47	47	938	938
26	7:30	2:30	64	79	1,658	2,040
27			--	102	--	2,030
28			--	51	--	977
WEEKLY TOTAL			387	555	7,466	10,855
29	7:30	4:00	92	92	1,400	1,400
30	7:30	4:00	103	103	1,600	1,600
31	7:30	4:00	89	89	1,600	1,600
September						
1	7:30	4:00	47	47	900	900
2	7:30	4:00	69	69	1,000	1,000
3			--	101	--	1,650
4			--	50	--	820
WEEKLY TOTAL			400	551	6,500	8,970
5			--	75	--	1,765
6	7:30	4:00	59	59	2,432	2,432
7	7:30	4:00	70	70	1,418	1,418
8	7:30	4:00	92	92	1,647	1,647
9	7:30	2:00	59	79	1,172	1,565
10			--	95	--	2,258
11			--	47	--	1,120
WEEKLY TOTAL			280	517	6,669	12,205
12	7:30	4:00	75	75	1,377	1,377
13	7:30	4:00	86	86	1,670	1,670
14	7:30	4:00	66	66	1,183	1,183
15	7:30	4:00	82	82	1,441	1,441
16	7:30	2:00	59	79	1,303	1,737
17			--	98	--	1,864
18			--	49	--	930
WEEKLY TOTAL			368	535	6,974	10,202
19	7:30	4:00	71	71	1,218	1,218
20	7:30	4:00	84	84	1,479	1,479
21	7:30	4:00	79	79	1,391	1,391
22	7:30	4:00	49	49	1,004	1,004
23	7:30	4:00	52	52	1,100	1,100
24			--	85	--	1,573
25			--	42	--	780
WEEKLY TOTAL			335	462	6,192	8,545
GRAND TOTAL			3,874	5,628	78,371	114,594

## WATERWAY: KILL VAN KULL, FERRY STREET DOCK, STATEN ISLAND

RECREATIONAL VESSELS

Date 1938	<u>OBSERVATION</u>		<u>V E S S E L S</u>		<u>P A S S E N G E R S</u>	
	<u>From</u> <u>AM</u>	<u>To</u> <u>PM</u>	<u>Actual</u> <u>Count</u>	<u>Count Adj.</u> <u>to Seven</u> <u>8-hr.days</u>	<u>Actual</u> <u>Count</u>	<u>Count Adj.</u> <u>to Seven</u> <u>8-hr.days</u>
July						
18	10:00	5:00	3	4	135	166
19	8:00	5:00	9	8	3,016	2,820
20	8:00	4:30	4	4	3,800	3,800
21	7:30	1:30	3	4	2,010	2,922
22	7:30	4:30	10	9	5,190	4,890
23			--	7	--	3,678
24			--	7	--	4,446
WEEKLY TOTAL			<u>29</u>	<u>43</u>	<u>14,151</u>	<u>22,722</u>
25	7:30	4:30	11	10	1,306	1,230
26	7:30	4:30	6	6	50	47
27	7:30	4:30	12	11	111	104
28	7:30	1:30	2	3	13	19
29	7:30	4:30	2	2	45	42
30			--	7	--	370
31			--	7	--	448
WEEKLY TOTAL			<u>33</u>	<u>46</u>	<u>1,525</u>	<u>2,260</u>
August						
1	7:30	4:30	8	8	298	280
2	7:30	4:30	12	11	2,414	2,262
3	7:30	4:30	12	11	3,914	3,680
4	7:30	4:30	12	11	1,632	1,536
5			--	10	--	1,939
6			--	11	--	2,338
7			--	11	--	2,820
WEEKLY TOTAL			<u>44</u>	<u>73</u>	<u>8,258</u>	<u>14,855</u>
8	7:30	4:30	9	8	4,652	4,392
9	7:30	4:30	14	13	426	400
10	7:30	4:30	12	11	1,797	1,697
11	7:30	4:30	10	9	369	348
12	7:30	4:30	13	12	451	424
13			--	11	--	1,733
14			--	12	--	2,098
WEEKLY TOTAL			<u>58</u>	<u>76</u>	<u>7,695</u>	<u>11,092</u>
15	7:30	4:30	20	19	11,423	10,780
16	7:30	4:30	17	16	2,048	1,930
17	7:30	4:00	10	10	515	515
18	7:30	4:00	16	16	2,608	2,608
19	7:30	2:30	11	14	1,839	2,265
20			--	16	--	4,480
21			--	16	--	5,420
WEEKLY TOTAL			<u>74</u>	<u>107</u>	<u>18,433</u>	<u>27,998</u>

## KILL VAN KULL - RECREATIONAL VESSELS (Cont'd)

Date 1938	OBSERVATION		VESSELS		PASSENGERS	
	From AM	To PM	Actual Count	Count Adj. to Seven 8-hr. days	Actual Count	Count Adj. to Seven 8-hr. days
August (Cont'd)						
22	7:30	4:00	5	5	1,650	1,650
23	7:30	4:00	20	20	3,457	3,457
24	7:30	4:00	12	12	1,202	1,202
25	7:30	4:00	6	6	351	351
26	7:30	2:30	12	15	87	87
27			--	12	--	1,687
28			--	12	--	2,040
WEEKLY TOTAL			<u>55</u>	<u>82</u>	<u>6,747</u>	<u>10,474</u>
29	7:30	4:00	3	3	1,200	1,200
30	7:30	4:00	12	12	1,400	1,400
31	7:30	4:00	16	16	2,100	2,100
September						
1	7:30	4:00	8	8	900	900
2	7:30	4:00	13	13	100	100
3			--	11	--	1,368
4			--	11	--	1,652
WEEKLY TOTAL			<u>52</u>	<u>74</u>	<u>5,700</u>	<u>8,720</u>
5			--	7	--	1,557
6	7:30	4:00	6	6	2,035	2,035
7	7:30	4:00	7	7	1,186	1,186
8	7:30	4:00	7	7	1,850	1,850
9	7:30	2:00	6	8	342	457
10			--	7	--	1,730
11			--	7	--	2,085
WEEKLY TOTAL			<u>26</u>	<u>49</u>	<u>5,413</u>	<u>10,900</u>
12	7:30	4:00	4	4	1,300	1,300
13	7:30	4:00	4	4	306	306
14	7:30	4:00	5	5	350	350
15	7:30	4:00	3	3	208	208
16	7:30	2:00	2	3	200	267
17			--	4	--	597
18			--	4	--	721
WEEKLY TOTAL			<u>18</u>	<u>27</u>	<u>2,364</u>	<u>3,749</u>
19	7:30	4:00	0	0	0	0
20	7:30	4:00	2	2	200	200
21	7:30	4:00	0	0	0	0
22	7:30	4:00	0	0	0	0
23	7:30	4:00	0	0	0	0
24			--	0	--	0
25			--	0	--	0
WEEKLY TOTAL			<u>2</u>	<u>2</u>	<u>200</u>	<u>200</u>
GRAND TOTAL			391	579	70,486	112,970

## WATERWAY: KILL VAN KULL, FERRY STREET DOCK, STATEN ISLAND

## FERRIES

Date 1938	OBSERVATION		VESSELS		PASSENGERS	
	From AM	To PM	Actual Count	Count Adj. to Seven 8-hr.days	Actual Count	Count Adj. to Seven 8-hr.days
July						
18	10:00	5:00	39	48		
19	8:00	5:00	51	48		
20	8:00	4:30	48	48		
21	7:30	1:30	33	48		
22	7:30	4:30	51	48		
23			--	48		
24			--	24		
WEEKLY TOTAL			222	312		
25	7:30	4:30	52	49		
26	7:30	4:30	52	49		
27	7:30	4:30	55	52		
28	7:30	1:30	34	49		
29	7:30	4:30	49	46		
30			--	49		
31			--	24		
WEEKLY TOTAL			242	318		
August						
1	7:30	4:30	49	46		
2	7:30	4:30	53	50		
3	7:30	4:30	51	48		
4	7:30	4:30	51	48		
5			--	--		
6			--	48		
7			--	24		
WEEKLY TOTAL			204	264		
8	7:30	4:30	108	101		
9	7:30	4:30	108	101		
10	7:30	4:30	108	101		
11	7:30	4:30	108	101		
12	7:30	4:30	108	101		
13			--	101		
14			--	50		
WEEKLY TOTAL			540	656		
15	7:30	4:30	96	90		
16	7:30	4:30	96	90		
17	7:30	4:00	96	96		
18	7:30	4:00	96	96		
19	7:30	2:30	78	96		
20			--	94		
21			--	47		
WEEKLY TOTAL			462	609		

KILL VAN KULL -- FERRIES (Cont'd)

<u>Date</u> 1938	<u>OBSERVATION</u>		<u>V E S S E L S</u>		<u>P A S S E N G E R S</u>	
	<u>From</u> <u>AM</u>	<u>To</u> <u>PM</u>	<u>Actual</u> <u>Count</u>	<u>Count adj.</u> <u>to Seven</u> <u>8-hr.days</u>	<u>Actual</u> <u>Count</u>	<u>Count Adj.</u> <u>to Seven</u> <u>8-hr.days</u>
August (Cont'd)						
22	7:30	4:00	96	96		
23	7:30	4:00	96	96		
24	7:30	4:00	96	96		
25	7:30	4:00	96	96		
26	7:30	2:30	78	96		
27			--	96		
28			--	48		
WEEKLY TOTAL			462	624		
29	7:30	4:00	96	96		
30	7:30	4:00	96	96		
31	7:30	4:00	96	96		
September						
1	7:30	4:00	96	96		
2	7:30	4:00	78	76		
3			--	92		
4			--	46		
WEEKLY TOTAL			462	598		
5			--	48		
6	7:30	4:00	48	48		
7	7:30	4:00	48	48		
8	7:30	4:00	48	48		
9	7:30	2:00	36	48		
10			--	48		
11			--	24		
WEEKLY TOTAL			180	312		
12	7:30	4:00	48	48		
13	7:30	4:00	48	48		
14	7:30	4:00	48	48		
15	7:30	4:00	48	48		
16	7:30	2:00	36	48		
17			--	48		
18			--	24		
WEEKLY TOTAL			228	312		
19	7:30	4:00	48	48		
20	7:30	4:00	48	48		
21	7:30	4:00	48	48		
22	7:30	4:00	48	48		
23	7:30	4:00	48	48		
24			--	48		
25			--	24		
WEEKLY TOTAL			240	312		
GRAND TOTAL			3,242	4,317		



## WATERWAY: KILL VAN KULL, FERRY STREET DOCK, STATEN ISLAND

MISCELLANEOUS VESSELS

Date 1938	<u>OBSERVATION</u>		<u>VESSELS</u>		<u>PASSENGERS</u>	
	<u>From</u> <u>AM</u>	<u>To</u> <u>PM</u>	<u>Actual</u> <u>Count</u>	<u>Count Adj.</u> <u>to Seven</u> <u>8-hr.days</u>	<u>Actual</u> <u>Count</u>	<u>Count Adj.</u> <u>to Seven</u> <u>8-hr.days</u>
July						
18	10:00	5:00	--	4	--	35
19	8:00	5:00	1	1	10	9
20	8:00	4:30	5	5	33	33
21	7:30	1:30	3	4	35	51
22	7:30	4:30	5	5	50	47
23			--	3	--	26
24			--	4	--	12
WEEKLY TOTAL			<u>14</u>	<u>26</u>	<u>128</u>	<u>213</u>
25	7:30	4:30	2	2	32	30
26	7:30	4:30	4	4	89	84
27	7:30	4:30	4	4	55	52
28	7:30	1:30	--	0	--	0
29	7:30	4:30	--	0	--	0
30			--	2	--	34
31			--	3	--	16
WEEKLY TOTAL			<u>10</u>	<u>15</u>	<u>176</u>	<u>216</u>
August						
1	7:30	4:30	--	0	--	0
2	7:30	4:30	1	1	12	11
3	7:30	4:30	1	1	21	20
4	7:30	4:30	2	2	28	26
5			--	0	--	0
6			--	0	--	0
7			--	0	--	0
WEEKLY TOTAL			<u>4</u>	<u>4</u>	<u>61</u>	<u>57</u>
8	7:30	4:30	1	1	8	8
9	7:30	4:30	--	0	--	0
10	7:30	4:30	1	1	2	2
11	7:30	4:30	--	0	--	0
12	7:30	4:30	--	0	--	0
13			--	0	--	0
14			--	0	--	0
WEEKLY TOTAL			<u>2</u>	<u>2</u>	<u>10</u>	<u>10</u>
15	7:30	4:30	3	3	23	22
16	7:30	4:30	1	1	30	28
17	7:30	4:00	--	0	--	0
18	7:30	4:00	2	2	45	45
19	7:30	2:30	--	0	--	0
20			--	0	--	0
21			--	0	--	0
WEEKLY TOTAL			<u>6</u>	<u>6</u>	<u>98</u>	<u>95</u>

KILL VAN KULL - MISCELLANEOUS VESSELS (Cont'd)

Date 1938	OBSERVATION		VESSELS		PASSENGERS	
	From AM	To PM	Actual Count	Count Adj. to Seven 8-hr.days	Actual Count	Count Adj. to Seven 8-hr.days
August (Cont'd)						
22	7:30	4:00	5	5	44	44
23	7:30	4:00	4	4	85	85
24	7:30	4:00	1	1	4	4
25	7:30	4:00	--	0	--	0
26	7:30	2:30	13	16	154	189
27			--	5	--	64
28			--	6	--	30
WEEKLY TOTAL			<u>23</u>	<u>37</u>	<u>287</u>	<u>416</u>
29	7:30	4:00	2	2	10	10
30	7:30	4:00	6	6	20	20
31	7:30	4:00	1	1	11	11
September						
1	7:30	4:00	9	9	90	30
2	7:30	4:00	1	1	10	10
3			--	4	--	27
4			--	5	--	13
WEEKLY TOTAL			<u>19</u>	<u>28</u>	<u>141</u>	<u>121</u>
5			--	0	--	0
6	7:30	4:00	3	3	61	61
7	7:30	4:00	2	2	43	43
8	7:30	4:00	2	2	60	60
9	7:30	2:00	--	0	--	0
10			--	1	--	41
11			--	1	--	20
WEEKLY TOTAL			<u>7</u>	<u>9</u>	<u>164</u>	<u>225</u>
12	7:30	4:00	3	3	80	80
13	7:30	4:00	--	0	--	0
14	7:30	4:00	--	0	--	0
15	7:30	4:00	--	0	--	0
16	7:30	2:00	--	0	--	0
17			--	0	--	0
18			--	0	--	0
WEEKLY TOTAL			<u>3</u>	<u>3</u>	<u>80</u>	<u>80</u>
19	7:30	4:00	--	0	--	0
20	7:30	4:00	--	0	--	0
21	7:30	4:00	--	0	--	0
22	7:30	4:00	--	0	--	0
23	7:30	4:00	2	2	10	10
24			--	0	--	0
25			--	0	--	0
WEEKLY TOTAL			<u>2</u>	<u>2</u>	<u>10</u>	<u>10</u>
GRAND TOTAL			90	132	1,155	1,443

## WATERWAY: ARTHUR KILL, FT. VICTORY BOULEVARD, STATEN ISLAND

COMMERCIAL VESSELS

Date 1938	<u>OBSERVATION</u>		<u>VESSELS</u>		<u>PASSENGERS</u>	
	<u>From</u> AM	<u>To</u> PM	<u>Actual</u> <u>Count</u>	<u>Count Adj.</u> <u>to Seven</u> <u>8-hr. days</u>	<u>Actual</u> <u>Count</u>	<u>Count Adj.</u> <u>to Seven</u> <u>8-hr. days</u>
August						
15			--	33	--	460
16	7:30	4:30	29	27	417	394
17	7:30	4:30	29	27	379	357
18	7:30	4:30	35	35	498	470
19	7:30	1:30	32	46	427	620
20			--	41	--	444
21			--	20	--	151
WEEKLY TOTAL			<u>125</u>	<u>227</u>	<u>1,721</u>	<u>2,896</u>
22	7:30	4:30	30	28	352	332
23	7:30	4:30	34	32	556	523
24	7:30	4:30	29	27	423	398
25	7:30	4:30	34	32	479	452
26	7:30	4:30	32	30	431	406
27			--	38	--	422
28			--	19	--	140
WEEKLY TOTAL			<u>159</u>	<u>208</u>	<u>2,241</u>	<u>2,673</u>
29	7:30	4:00	26	26	236	236
30	7:30	4:00	30	30	400	400
31	7:30	4:00	37	37	700	700
September						
1	7:30	4:00	34	34	500	500
2	7:30	4:00	28	28	228	228
3			--	39	--	412
4			--	19	--	140
WEEKLY TOTAL			<u>155</u>	<u>213</u>	<u>2,064</u>	<u>2,616</u>
5			--	31	--	359
6	7:30	4:30	26	24	377	355
7	7:30	4:30	32	30	155	146
8	7:30	4:30	39	37	593	558
9	7:30	2:00	24	32	285	380
10			--	39	--	358
11			--	19	--	122
WEEKLY TOTAL			<u>121</u>	<u>212</u>	<u>1,410</u>	<u>2,278</u>
12	7:30	4:00	40	40	733	733
13	7:30	4:00	53	53	557	557
14	7:30	4:00	59	59	1,075	1,075
15	7:30	4:00	29	29	390	390
16			--	45	--	689
17			--	57	--	688
18			--	28	--	234
WEEKLY TOTAL			<u>181</u>	<u>311</u>	<u>2,755</u>	<u>4,366</u>

ARTHUR KILL- COMMERCIAL VESSELS (Cont'd)

Date 1938	OBSERVATION		VESSELS		PASSENGERS	
	From AM	To PM	Actual Count	Adj. to Seven 8-hr.days	Actual Count	Adj. to seven 8-hr.days
<u>September (Cont'd)</u>						
19	7:30	4:00	32	32	443	443
20	7:30	4:30	41	39	662	623
21	7:30	3:00	21	24	340	389
22	8:00	4:00	42	45	602	642
23	7:30	2:00	26	35	374	498
24			--	44	--	523
25			--	22	--	178
WEEKLY TOTAL			<u>162</u>	<u>241</u>	<u>2,421</u>	<u>3,296</u>
GRAND TOTAL			903	1,410	12,612	18,125

## WATERWAY: ARTHUR KILL, FT. VICTORY BOULEVARD, STATEN ISLAND

RECREATIONAL VESSELS

Date 1938	<u>OBSERVATION</u>		<u>VESSELS</u>		<u>PASSENGERS</u>	
	<u>From</u> <u>AM</u>	<u>To</u> <u>PM</u>	<u>Actual</u> <u>Count</u>	<u>Count Adj.</u> <u>to Seven</u> <u>8-hr.days</u>	<u>Actual</u> <u>Count</u>	<u>Count Adj.</u> <u>to Seven</u> <u>8-hr.days</u>
<u>August</u>						
15			--	14	--	537
16	7:30	4:30	14	13	54	60
17	7:30	4:30	17	16	2,104	1,978
18	7:30	4:30	9	8	30	28
19	7:30	1:30	13	19	56	82
20			--	14	--	582
21			--	15	--	660
WEEKLY TOTAL			<u>53</u>	<u>99</u>	<u>2,244</u>	<u>3,927</u>
22	7:30	4:30	12	11	45	42
23	7:30	4:30	11	10	31	29
24	7:30	4:30	11	10	41	39
25	7:30	4:30	15	14	47	44
26	7:30	4:30	12	11	43	40
27	7:30	4:30	--	12	--	39
28			--	12	--	45
WEEKLY TOTAL			<u>61</u>	<u>80</u>	<u>207</u>	<u>278</u>
29	7:30	4:00	10	10	40	40
30	7:30	4:00	7	7	23	23
31	7:30	4:00	9	9	20	20
<u>September</u>						
1	7:30	4:00	11	11	41	41
2	7:30	4:00	15	15	47	47
3			--	11	--	34
4			--	11	--	37
WEEKLY TOTAL			<u>52</u>	<u>74</u>	<u>171</u>	<u>242</u>
5			--	8	--	26
6	7:30	4:30	11	10	30	28
7	7:30	4:30	5	5	29	27
8	7:30	4:30	7	7	29	27
9	7:30	2:00	8	11	16	21
10			--	8	--	26
11			--	8	--	30
WEEKLY TOTAL			<u>31</u>	<u>57</u>	<u>104</u>	<u>185</u>
12	7:30	4:00	8	8	61	61
13	7:30	4:00	6	6	19	19
14	7:30	4:00	4	4	7	7
15	7:30	4:00	8	8	27	27
16			--	6	--	28
17			--	7	--	28
18			--	7	--	23
WEEKLY TOTAL			<u>26</u>	<u>46</u>	<u>114</u>	<u>203</u>

## ARTHUR KILL RECREATIONAL VESSELS (Cont'd)

Date 1939	OBSERVATION		VESSELS		PASSENGERS	
	From AM	To PM	Actual Count	Count Adj. to Seven 8-hr.days	Actual Count	Count Adj. to Seven 8-hr.days
September (Cont'd)						
19	7:30	4:00	5	5	13	13
20	7:30	4:30	3	3	13	12
21	7:30	3:00	--	0	--	0
22	8:00	4:00	2	2	4	4
23	7:30	2:00	3	4	7	9
24			--	3	--	8
25			--	3	--	9
WEEKLY TOTAL			<u>13</u>	<u>20</u>	<u>37</u>	<u>55</u>
GRAND TOTAL			236	376	2,877	4,890

## WATERWAY: ARTHUR KILL, FT. VICTORY BOULEVARD, STATEN ISLAND

MISCELLANEOUS VESSELS

Date 1938	<u>OBSERVATION</u>		<u>V E S S E L S</u>		<u>P A S S E N G E R S</u>	
	From AM	To PM	Actual Count	Count Adj. to Seven 8-hr.days	Actual Count	Count Adj. to Seven 8-hr.days
August						
15			--	2	--	23
16	7:30	4:30	--	0	--	0
17	7:30	4:30	2	2	40	38
18	7:30	4:30	4	4	46	43
19	7:30	1:30	1	1	9	13
20			--	2	--	24
21			--	2	--	11
WEEKLY TOTAL			<u>7</u>	<u>13</u>	<u>95</u>	<u>152</u>
22	7:30	4:30	1	1	20	20
23	7:30	4:30	4	4	39	37
24	7:30	4:30	1	1	2	2
25	7:30	4:30	1	1	24	23
26	7:30	4:30	1	1	18	17
27			--	2	--	20
28			--	2	--	9
WEEKLY TOTAL			<u>8</u>	<u>12</u>	<u>103</u>	<u>128</u>
29	7:30	4:00	1	1	20	20
30	7:30	4:00	2	2	27	27
31	7:30	4:00	2	2	6	6
September						
1	7:30	4:00	1	1	15	15
2	7:30	4:00	1	1	9	9
3			--	1	--	15
4			--	2	--	7
WEEKLY TOTAL			<u>7</u>	<u>10</u>	<u>77</u>	<u>99</u>
5			--	1	--	6
6	7:30	4:30	1	1	8	8
7	7:30	4:30	1	1	3	3
8	7:30	4:30	--	0	--	0
9	7:30	2:00	1	1	10	13
10			--	1	--	5
11			--	1	--	2
WEEKLY TOTAL			<u>3</u>	<u>6</u>	<u>21</u>	<u>37</u>
12	7:30	4:00	4	4	30	30
13	7:30	4:00	4	4	96	96
14	7:30	4:00	2	2	10	10
15	7:30	4:00	5	5	65	65
16			--	4	--	50
17			--	4	--	50
18			--	5	--	22
WEEKLY TOTAL			<u>15</u>	<u>28</u>	<u>201</u>	<u>323</u>

ARTHUR KILL - MISCELLANEOUS VESSELS (Cont'd)

<u>Date</u>	<u>OBSERVATION</u>		<u>VESSELS</u>		<u>PASSENGERS</u>	
	<u>From</u>	<u>To</u>	<u>Actual</u>	<u>Count Adj.</u>	<u>Actual</u>	<u>Count Adj.</u>
<u>1938</u>	<u>AM</u>	<u>PM</u>	<u>Count</u>	<u>to Seven</u>	<u>Count</u>	<u>to Seven</u>
<u>September (Cont'd)</u>						
<u>19</u>	<u>7:30</u>	<u>4:00</u>	<u>2</u>	<u>2</u>	<u>10</u>	<u>10</u>
<u>20</u>	<u>7:30</u>	<u>4:30</u>	<u>2</u>	<u>2</u>	<u>15</u>	<u>14</u>
<u>21</u>	<u>7:30</u>	<u>3:00</u>	<u>1</u>	<u>1</u>	<u>4</u>	<u>5</u>
<u>22</u>	<u>8:00</u>	<u>4:00</u>	<u>2</u>	<u>2</u>	<u>36</u>	<u>38</u>
<u>23</u>	<u>7:30</u>	<u>2:00</u>	<u>--</u>	<u>0</u>	<u>--</u>	<u>0</u>
<u>24</u>			<u>--</u>	<u>1</u>	<u>--</u>	<u>14</u>
<u>25</u>			<u>--</u>	<u>2</u>	<u>--</u>	<u>6</u>
<u>WEEKLY TOTAL</u>			<u>7</u>	<u>10</u>	<u>65</u>	<u>87</u>
<u>GRAND TOTAL</u>			<u>47</u>	<u>79</u>	<u>562</u>	<u>826</u>



U.S. WORKS PROGRESS ADMINISTRATION  
 Project 465-97-3-131  
 C. G. Wigley, Engr. Supervisor

VESSEL MOVEMENT SURVEY  
 U.S. COAST GUARD RECORDS

THROGS NECK

Month of January 1937

	<u>COMMERCIAL</u> <u>VESSELS</u>	<u>RECREATIONAL</u> <u>VESSELS</u>	<u>MISCELLANEOUS</u> <u>VESSELS</u>	<u>TOT. NO. OF</u> <u>VESSELS</u>
January 1	4	0	0	4
2	M I S S I N G	-	-	-
3	"	-	-	-
4	"	-	-	-
5	"	-	-	-
6	1	0	0	1
7	M I S S I N G	-	-	-
8	"	-	-	-
9	"	-	-	-
10	2	0	0	2
11	7	0	0	7
12	11	0	0	11
13	18	2	0	20
14	9	0	0	9
15	4	0	0	4
16	1	0	0	1
17	3	0	0	3
18	M I S S I N G	-	-	-
19	"	-	-	-
20	9	0	0	9
21	38	1	0	39
22	22	0	0	22
23	21	0	0	21
24	56	1	0	57
25	56	0	2	58
26	92	0	0	92
27	50	1	0	51
28	44	0	0	44
29	64	0	0	64
30	38	1	0	39
31	<u>46</u>	<u>0</u>	<u>0</u>	<u>46</u>
TOTAL	596	6	2	604

THROGS NECKMonth of February 1937

	<u>COMMERCIAL</u> <u>VESSELS</u>	<u>RECREATIONAL</u> <u>VESSELS</u>	<u>MISCELLANEOUS</u> <u>VESSELS</u>	<u>TOT. NO. OF</u> <u>VESSELS</u>
February 1	17	2	0	19
2	44	0	0	44
3	39	1	0	40
4	64	1	1	66
5	56	6	2	64
6	75	4	1	80
7	51	1	2	54
8	55	3	3	61
9	26	2	1	29
10	101	2	0	103
11	63	2	3	68
12	40	0	0	40
13	M I S S I N G	-	-	-
14	"	-	-	-
15	"	-	-	-
16	70	5	1	76
17	72	0	0	72
18	64	4	0	68
19	65	2	2	69
20	58	4	2	64
21	33	0	0	33
22	44	3	1	48
23	57	1	1	59
24	71	4	1	76
25	48	4	0	52
26	63	6	2	71
27	56	3	1	60
28	45	3	1	49
TOTAL	1,377	63	25	1,465

THROGS NECKMonth of March 1937

	<u>COMMERCIAL</u> <u>VESSELS</u>	<u>RECREATIONAL</u> <u>VESSELS</u>	<u>MISCELLANEOUS</u> <u>VESSELS</u>	<u>TOT.NO.OF</u> <u>VESSELS</u>
March 1	82	5	0	87
2	84	10	3	97
3	57	2	0	59
4	56	2	0	58
5	39	2	0	41
6	28	1	0	29
7	23	6	0	29
8	27	4	1	32
9	55	1	0	56
10	66	2	0	68
11	45	2	0	47
12	42	3	0	45
13	77	0	1	78
14	17	3	1	21
15	38	2	0	40
16	57	1	1	59
17	59	4	0	63
18	81	7	0	88
19	103	4	0	107
20	69	9	0	78
21	36	4	0	40
22	31	6	0	37
23	31	4	1	36
24	37	5	0	42
25	33	1	0	34
26	66	11	5	82
27	M I S S I N G	-	-	-
28	22	4	1	27
29	53	5	0	58
30	56	13	0	69
31	96	11	1	108
TOTAL	1,566	134	15	1,715

THROGS NECKMonth of April 1937

	<u>COMMERCIAL VESSELS</u>	<u>RECREATIONAL VESSELS</u>	<u>MISCELLANEOUS VESSELS</u>	<u>TOT. NO. OF VESSELS</u>
April 1	72	10	4	86
2	74	7	6	87
3	79	28	0	107
4	58	18	1	77
5	71	7	0	78
6	57	1	0	58
7	72	4	2	78
8	82	15	2	99
9	42	5	0	47
10	80	22	1	103
11	22	14	0	36
12	44	14	1	59
13	69	6	6	81
14	88	9	0	97
15	22	9	0	31
16	58	9	2	69
17	39	24	0	63
18	27	15	0	42
19	34	22	0	56
20	59	7	0	66
21	67	13	2	82
22	44	2	0	46
23	81	4	1	86
24	88	21	2	111
25	48	61	1	110
26	75	12	0	87
27	21	0	0	21
28	60	5	0	65
29	50	22	0	72
30	<u>53</u>	<u>6</u>	<u>0</u>	<u>59</u>
TOTAL	1,736	392	31	2,159

THROGS NECKMonth of May 1937

	<u>COMMERCIAL VESSELS</u>	<u>RECREATIONAL VESSELS</u>	<u>MISCELLANEOUS VESSELS</u>	<u>TOT.NO.OF VESSELS</u>
May 1	49	31	1	81
2	34	24	0	58
3	39	13	0	52
4	80	16	0	96
5	53	4	0	57
6	33	7	1	41
7	84	12	3	99
8	51	8	0	59
9	46	44	0	90
10	52	17	3	72
11	69	23	3	95
12	91	25	1	117
13	89	26	2	117
14	73	10	1	84
15	60	15	1	76
16	31	36	1	68
17	48	17	3	68
18	64	14	4	82
19	91	30	2	123
20	68	30	3	101
21	94	53	4	151
22	90	80	3	173
23	41	82	3	126
24	59	36	0	95
25	33	1	1	35
26	67	12	2	81
27	59	18	2	79
28	59	13	1	73
29	66	21	0	87
30	47	19	0	66
31	53	20	1	74
TOTAL	1,873	757	46	2,676

THROGS NECKMonth of June 1937

	<u>COMMERCIAL VESSELS</u>	<u>RECREATIONAL VESSELS</u>	<u>MISCELLANEOUS VESSELS</u>	<u>TOT. NO. OF VESSELS</u>
June 1	90	16	1	107
2	95	20	1	116
3	77	18	1	96
4	64	33	1	98
5	80	37	0	117
6	22	19	0	41
7	61	9	0	70
8	74	15	2	91
9	73	36	1	110
10	31	14	1	46
11	70	14	4	88
12	52	25	3	80
13	42	34	0	76
14	76	34	7	117
15	104	44	2	150
16	55	48	6	109
17	115	48	3	166
18	73	25	5	101
19	72	51	3	126
20	30	28	1	59
21	53	32	0	85
22	51	17	2	70
23	91	30	2	123
24	91	30	2	123
25	62	11	1	74
26	70	27	3	100
27	58	43	1	102
28	60	9	2	71
29	53	19	2	74
30	32	8	0	40
TOTAL	1,977	792	57	2,826

THROGS NECKMonth of July 1937

	<u>COMMERCIAL VESSELS</u>	<u>RECREATIONAL VESSELS</u>	<u>MISCELLANEOUS VESSELS</u>	<u>TOT. NO. OF VESSELS</u>
July 1	67	19	1	87
2	65	13	2	80
3	38	14	2	54
4	28	28	0	56
5	19	44	2	65
6	68	22	0	90
7	59	19	1	79
8	46	23	1	70
9	76	22	2	100
10	51	28	3	82
11	40	31	3	74
12	84	18	5	107
13	91	33	0	124
14	93	51	2	146
15	70	29	0	99
16	65	57	0	122
17	93	38	4	135
18	11	18	1	30
19	55	24	1	80
20	62	22	0	84
21	58	16	1	75
22	57	12	0	69
23	53	43	0	96
24	80	80	4	164
25	28	388	3	419
26	71	61	5	137
27	48	54	0	102
28	71	68	5	144
29	27	7	1	35
30	71	55	2	128
31	<u>55</u>	<u>35</u>	<u>0</u>	<u>90</u>
TOTAL	1,800	1,372	51	3,223

THROGS NECKMonth of August 1937

	<u>COMMERCIAL</u> <u>VESSELS</u>	<u>RECREATIONAL</u> <u>VESSELS</u>	<u>MISCELLANEOUS</u> <u>VESSELS</u>	<u>TOT.NO.OF</u> <u>VESSELS</u>
August 1	24	64	0	88
2	74	35	0	109
3	53	37	0	90
4	22	23	0	45
5	65	20	2	87
6	57	19	3	79
7	37	11	0	48
8	41	37	0	78
9	33	23	3	59
10	64	6	0	70
11	63	5	0	68
12	42	3	0	45
13	68	16	2	86
14	60	13	0	73
15	27	32	0	59
16	55	18	1	74
17	51	12	1	64
18	38	2	0	40
19	48	1	0	49
20	32	8	0	40
21	45	5	0	50
22	3	REST OF SHEET MISSING		3
23	19	6	0	25
24	89	25	1	115
25	59	19	2	80
26	56	32	1	89
27	73	24	0	97
28	43	44	3	90
29	18	63	2	83
30	38	38	0	76
31	<u>81</u>	<u>30</u>	<u>4</u>	<u>115</u>
TOTAL	1,478	671	25	2,174



THROGS NECKMonth of September 1937

	<u>COMMERCIAL</u> <u>VESSELS</u>	<u>RECREATIONAL</u> <u>VESSELS</u>	<u>MISCELLANEOUS</u> <u>VESSELS</u>	<u>TOT. NO. OF</u> <u>VESSELS</u>
September 1	66	29	0	95
2	55	36	5	96
3	71	44	6	121
4	52	33	13	98
5	31	52	3	86
6	6	37	0	43
7	29	26	1	56
8	89	6	5	100
9	58	3	0	61
10	63	4	4	71
11	67	8	5	80
12	48	77	4	129
13	32	1	0	33
14	42	0	2	44
15	49	1	2	52
16	50	6	3	59
17	44	13	2	59
18	46	13	2	61
19	73	28	4	105
20	92	21	2	115
21	90	25	4	119
22	114	30	10	154
23	48	9	2	59
24	40	6	4	50
25	39	13	4	56
26	46	30	6	82
27	38	4	1	43
28	78	14	2	94
29	91	23	6	120
30	<u>65</u>	<u>18</u>	<u>4</u>	<u>87</u>
TOTAL	1,712	610	106	2,428

THROGS NECKMonth of October 1937

	<u>COMMERCIAL</u> <u>VESSELS</u>	<u>RECREATIONAL</u> <u>VESSELS</u>	<u>MISCELLANEOUS</u> <u>VESSELS</u>	<u>TOT. NO. OF</u> <u>VESSELS</u>
October 1	54	16	4	74
2	59	27	8	94
3	40	44	4	88
4	61	15	4	80
5	95	3	10	108
6	37	3	2	42
7	65	11	4	80
8	72	20	4	96
9	79	41	0	120
10	60	74	3	137
11	91	35	3	129
12	68	31	2	101
13	56	2	4	62
14	48	4	2	54
15	42	2	3	47
16	73	3	6	82
17	30	3	5	38
18	71	8	5	84
19	48	8	3	59
20	18	0	0	18
21	66	12	7	85
22	70	10	10	90
23	26	3	0	29
24	36	15	5	56
25	56	5	5	66
26	53	5	7	65
27	M I S S I N G	-	-	-
28	83	15	8	106
29	87	11	7	105
30	72	35	7	114
31	<u>30</u>	<u>92</u>	<u>5</u>	<u>127</u>
TOTAL	1,746	553	137	2,436

THROGS NECKMonth of November 1937

	<u>COMMERCIAL</u> <u>VESSELS</u>	<u>RECREATIONAL</u> <u>VESSELS</u>	<u>MISCELLANEOUS</u> <u>VESSELS</u>	<u>TOT. NO. OF</u> <u>VESSELS</u>
November 1	57	14	6	77
2	60	9	3	72
3	55	4	6	65
4	73	10	5	88
5	54	7	3	64
6	26	7	2	35
7	65	43	2	110
8	50	11	1	62
9	75	10	2	87
10	77	7	7	91
11	41	14	4	59
12	67	8	18	93
13	38	6	0	44
14	23	9	3	35
15	80	3	7	90
16	68	2	10	80
17	45	0	6	51
18	38	3	5	46
19	53	2	6	61
20	48	4	4	56
21	24	7	4	35
22	29	0	5	34
23	45	0	3	48
24	43	0	2	45
25	16	4	1	21
26	43	7	3	53
27	54	11	5	70
28	32	3	3	38
29	60	9	5	74
30	75	4	9	88
TOTAL	1,514	218	140	1,872

THROGS NECKMonth of December 1937

	<u>COMMERCIAL VESSELS</u>	<u>RECREATIONAL VESSELS</u>	<u>MISCELLANEOUS VESSELS</u>	<u>TOT. NO. OF VESSELS</u>
December 1	91	2	9	102
2	56	1	4	61
3	52	1	3	56
4	47	1	3	51
5	43	4	4	51
6	77	0	6	83
7	73	3	1	77
8	86	1	1	88
9	102	0	0	102
10	68	0	3	71
11	45	0	4	49
12	39	1	3	43
13	46	3	4	53
14	52	1	6	59
15	65	2	4	71
16	83	0	4	87
17	86	1	6	93
18	51	0	0	51
19	54	2	4	60
20	98	6	0	104
21	88	1	1	90
22	56	1	0	57
23	52	0	0	52
24	58	0	0	58
25	NO REPORT - CHRISTMAS DAY			
26	13	0	1	14
27	56	0	1	57
28	57	0	0	57
29	78	0	0	78
30	80	0	0	80
31	76	0	1	77
TOTAL	1,928	31	73	2,032

THE NARROWSMonth of January 1937

	<u>COMMERCIAL VESSELS</u>	<u>RECREATIONAL VESSELS</u>	<u>MISCELLANEOUS VESSELS</u>	<u>TOT. NO. OF VESSELS</u>
January 1	21	0	0	21
2	62	4	0	66
3	55	3	1	59
4	84	2	1	87
5	108	3	1	112
6	104	4	1	109
7	62	0	0	62
8	82	3	0	85
9	96	5	0	101
10	73	4	0	77
11	91	4	0	95
12	128	1	0	129
13	135	5	0	140
14	112	1	2	115
15	91	2	0	93
16	142	5	0	147
17	47	7	0	54
18	77	0	0	77
19	106	1	0	107
20	71	0	0	71
21	84	0	0	84
22	101	0	0	101
23	137	2	1	140
24	79	0	0	79
25	79	1	0	80
26	131	0	1	132
27	102	1	0	103
28	111	1	0	112
29	89	4	1	94
30	100	2	0	102
31	45	4	1	50
TOTAL	2,805	69	10	2,884

THE NARROWSMonth of February 1937

	<u>COMMERCIAL</u> <u>VESSELS</u>	<u>RECREATIONAL</u> <u>VESSELS</u>	<u>MISCELLANEOUS</u> <u>VESSELS</u>	<u>TOT. NO. OF</u> <u>VESSELS</u>
February 1	102	10	0	112
2	88	1	0	89
3	122	2	2	126
4	102	1	2	105
5	99	2	0	101
6	99	5	3	107
7	77	4	3	84
8	67	3	2	72
9	32	0	0	32
10	110	2	2	114
11	117	3	0	120
12	93	3	1	97
13	M I S S I N G	-	-	-
14	"	-	-	-
15	"	-	-	-
16	92	4	2	98
17	89	3	1	93
18	115	4	4	123
19	83	3	1	87
20	111	4	2	117
21	44	1	1	46
22	66	14	1	81
23	92	9	5	106
24	71	2	2	75
25	83	5	2	90
26	112	2	9	123
27	96	5	8	109
28	62	5	3	70
TOTAL	2,224	97	56	2,377

THE NARROWSMonth of March 1937

	<u>COMMERCIAL VESSELS</u>	<u>RECREATIONAL VESSELS</u>	<u>MISCELLANEOUS VESSELS</u>	<u>TOT. NO. OF VESSELS</u>
March 1	78	4	11	93
2	134	1	13	148
3	107	0	2	109
4	83	2	3	88
5	86	3	5	94
6	74	3	0	77
7	56	10	1	67
8	57	8	6	71
9	95	6	10	111
10	86	3	2	91
11	78	6	1	85
12	98	5	6	109
13	113	2	5	120
14	70	1	2	73
15	55	6	1	62
16	59	6	4	69
17	65	6	1	72
18	92	4	2	98
19	110	2	4	116
20	113	8	0	121
21	62	9	1	72
22	102	3	4	109
23	91	4	5	100
24	81	2	3	86
25	71	1	0	72
26	57	3	2	62
27	127	3	3	133
28	43	1	1	45
29	49	5	1	55
30	143	8	8	159
31	<u>113</u>	<u>5</u>	<u>0</u>	<u>118</u>
TOTAL	2,648	130	107	2,885

THE NARROWSMonth of April 1937

	<u>COMMERCIAL</u> <u>VESSELS</u>	<u>RECREATIONAL</u> <u>VESSELS</u>	<u>MISCELLANEOUS</u> <u>VESSELS</u>	<u>TOT. NO. OF</u> <u>VESSELS</u>
April 1	108	6	0	114
2	95	8	6	109
3	95	15	3	113
4	60	11	0	71
5	58	8	1	67
6	51	9	1	61
7	88	11	2	101
8	100	8	1	109
9	89	1	6	96
10	138	5	13	156
11	64	8	0	72
12	100	3	12	115
13	129	9	11	149
14	104	6	2	112
15	101	10	5	116
16	132	6	5	143
17	61	5	4	70
18	69	12	0	81
19	86	5	3	94
20	105	8	8	121
21	83	4	0	87
22	62	11	2	75
23	87	4	4	95
24	105	2	3	110
25	54	12	1	67
26	39	8	2	49
27	41	0	3	44
28	115	5	2	122
29	113	9	7	129
30	135	1	2	138
TOTAL	2,667	210	109	2,986



## THE NARROWS

Month of May 1937

	<u>COMMERCIAL</u> <u>VESSELS</u>	<u>RECREATIONAL</u> <u>VESSELS</u>	<u>MISCELLANEOUS</u> <u>VESSELS</u>	<u>TOT. NO. OF</u> <u>VESSELS</u>
May 1	117	16	2	135
2	67	19	4	90
3	95	0	7	100
4	130	9	9	148
5	113	9	8	130
6	36	13	0	49
7	118	1	1	120
8	141	17	6	164
9	60	13	3	76
10	134	20	7	161
11	101	12	7	120
12	144	19	5	168
13	133	27	15	175
14	112	13	20	145
15	162	26	5	193
16	97	59	7	163
17	110	12	29	151
18	121	12	17	150
19	152	26	21	199
20	136	27	17	180
21	143	18	26	187
22	156	66	13	235
23	78	93	17	188
24	124	31	21	176
25	171	39	18	228
26	140	44	34	218
27	173	53	31	257
28	120	42	21	183
29	155	95	16	266
30	66	80	5	151
31	73	172	15	260
TOTAL	3,676	1,083	407	5,166

THE NARROWSMonths of June, July and August 1937

	<u>COMMERCIAL</u> <u>VESSELS</u>	<u>RECREATIONAL</u> <u>VESSELS</u>	<u>MISCELLANEOUS</u> <u>VESSELS</u>	<u>TOT. NO. OF</u> <u>VESSELS</u>
*June - Total	5,619	656	0	6,275
July - "	7,094	844	0	7,938
Aug. - "	6,615	602	0	7,217

\*NOTE: The above information on the months listed was furnished by the Interstate Sanitation Commission, in lieu of the detailed records of the U. S. Coast Guard.

THE NARROWSMonth of September 1937

	<u>COMMERCIAL</u> <u>VESSELS</u>	<u>RECREATIONAL</u> <u>VESSELS</u>	<u>MISCELLANEOUS</u> <u>VESSELS</u>	<u>TOT. NO. OF</u> <u>VESSELS</u>
September 1	117	118	11	246
2	100	92	17	209
3	102	93	13	208
4	115	156	17	288
5	47	116	8	171
6	48	106	11	165
7	79	67	15	161
8	106	63	15	184
9	97	74	17	188
10	119	77	18	214
11	122	51	13	186
12	50	71	4	125
13	73	17	7	97
14	109	25	12	146
15	104	35	8	147
16	123	48	29	200
17	88	26	8	122
18	85	71	17	183
19	81	123	9	213
20	191	77	22	290
21	118	17	9	144
22	152	18	14	184
23	86	4	9	99
24	91	33	12	136
25	150	55	18	223
26	30	9	4	43
27	99	11	12	122
28	50	8	4	62
29	98	15	13	126
30	155	27	20	202
TOTAL	2,995	1,703	386	5,084

THE NARROWSMonth of October 1937

	<u>COMMERCIAL VESSELS</u>	<u>RECREATIONAL VESSELS</u>	<u>MISCELLANEOUS VESSELS</u>	<u>TOT. NO. OF VESSELS</u>
October 1	156	12	18	186
2	98	28	17	143
3	75	35	7	117
4	75	15	12	102
5	125	23	19	167
6	133	10	20	163
7	130	23	17	170
8	116	10	12	138
9	149	17	11	177
10	87	24	10	121
11	135	9	17	161
12	90	27	15	132
13	127	7	14	148
14	150	17	19	186
15	123	7	13	143
16	116	18	12	146
17	70	59	18	147
18	123	6	17	146
19	101	12	14	127
20	73	5	20	98
21	111	7	27	145
22	121	10	16	147
23	85	3	6	94
24	93	17	8	118
25	99	7	20	126
26	93	10	20	123
27	M I S S I N G		-	-
28	98	3	9	110
29	110	12	17	139
30	109	15	8	132
31	85	26	8	119
TOTAL	3,256	474	441	4,171
*Nov. - Total	3,513	184	0	3,697
Dec. - " "	3,870	145	0	4,015

\*NOTE: The above information on the months listed was furnished by the Interstate Sanitation Commission, in lieu of the detailed records of the U. S. Coast Guard.

VESSEL MOVEMENT SURVEY  
U.S. COAST GUARD RECORDSPERTH AMBOY

NOTE: No record of Perth Amboy was kept during 1937.

Month of January 1938

January figures not available.

Month of February 1938

	<u>COMMERCIAL</u> <u>VESSELS</u>	<u>RECREATIONAL</u> <u>VESSELS</u>	<u>MISCELLANEOUS</u> <u>VESSELS</u>	<u>TOT.NO.OF</u> <u>VESSELS</u>
February 1	U.S. Coast Guard Records not available			
2	"	"	"	
3	"	"	"	
4	"	"	"	
5	"	"	"	
6	"	"	"	
7	41	1	0	42
8	72	0	2	74
9	94	0	8	102
10	63	0	0	63
11	60	0	4	64
12	67	0	4	71
13	54	0	4	58
14	38	0	2	40
15	76	0	2	78
16	80	1	3	84
17	70	0	3	73
18	79	0	5	84
19	43	0	6	49
20	34	0	2	36
21	62	0	13	75
22	62	0	8	70
23	3	0	5	8
24	72	0	10	82
25	74	0	10	84
26	105	0	10	115
27	56	0	0	56
28	38	0	6	44
TOTAL	1,343	2	107	1,452

PERTH ANCOYMonth of March 1938

	<u>COMMERCIAL VESSELS</u>	<u>RECREATIONAL VESSELS</u>	<u>MISCELLANEOUS VESSELS</u>	<u>TOT. NO. OF VESSELS</u>
March 1	54	1	14	69
2	75	0	9	84
3	66	0	4	70
4	69	2	9	80
5	76	0	3	79
6	44	0	5	49
7	65	0	2	67
8	71	0	2	73
9	69	1	5	75
10	60	1	15	76
11	52	0	5	57
12	72	0	4	76
13	37	0	5	42
14	39	2	12	53
15	61	0	10	71
16	38	2	5	45
17	39	0	7	46
18	58	1	9	68
19	87	0	8	95
20	48	0	0	48
21	51	0	5	56
22	59	0	2	61
23	87	0	11	98
24	82	0	2	84
25	85	4	5	94
26	79	0	4	83
27	34	0	4	38
28	56	0	9	65
29	74	0	5	79
30	26	0	12	38
31	8	0	2	10
TOTAL	<u>1,821</u>	<u>14</u>	<u>194</u>	<u>2,029</u>

PERTH ANCHOYMonth of April 1938

	<u>COMMERCIAL VESSELS</u>	<u>RECREATIONAL VESSELS</u>	<u>MISCELLANEOUS VESSELS</u>	<u>TOT. NO. OF VESSELS</u>
April 1	125	0	5	130
2	88	0	11	99
3	51	0	3	54
4	59	0	6	65
5	76	4	4	84
6	64	1	3	68
7	46	0	2	48
8	43	0	3	46
9	28	0	6	34
10	55	0	4	59
11	72	0	7	79
12	81	0	2	83
13	64	0	6	70
14	89	3	6	98
15	72	0	4	76
16	78	0	8	86
17	37	0	4	41
18	27	0	6	33
19	85	0	6	89
20	82	0	3	85
21	82	0	7	89
22	74	0	12	86
23	80	0	5	85
24	52	0	3	55
25	54	0	4	58
26	63	0	3	66
27	81	0	4	85
28	85	0	7	92
29	66	0	4	70
30	63	0	10	73
TOTAL	2,020	8	158	2,186

PERTH AMBOYMonth of May 1938

	<u>COMMERCIAL VESSELS</u>	<u>RECREATIONAL VESSELS</u>	<u>MISCELLANEOUS VESSELS</u>	<u>TOT. NO. OF VESSELS</u>
May 1	42	0	3	45
2	54	0	5	59
3	36	0	8	44
4	72	1	8	81
5	35	0	5	40
6	57	1	5	63
7	46	0	5	51
8	49	0	4	53
9	64	0	11	75
10	69	0	2	71
11	64	0	5	69
12	64	0	4	68
13	59	2	3	64
14	73	1	10	84
15	50	2	8	60
16	56	0	9	65
17	54	2	10	66
18	63	4	4	71
19	64	0	6	70
20	63	0	3	66
21	72	0	10	82
22	36	0	7	43
23	33	0	3	36
24	63	0	5	68
25	74	0	4	78
26	77	0	9	86
27	22	0	3	25
28	24	3	7	34
29	49	4	7	60
30	40	8	8	56
31	59	5	3	67
TOTAL	1,683	33	184	1,900

PERTH AMBOYMonth of June 1938

	<u>COMMERCIAL VESSELS</u>	<u>RECREATIONAL VESSELS</u>	<u>MISCELLANEOUS VESSELS</u>	<u>TOT. NO. OF VESSELS</u>
June 1	70	5	3	78
2	45	2	5	52
3	65	5	6	76
4	62	6	8	76
5	32	4	4	40
6	48	3	9	60
7	50	4	11	65
8	52	4	10	66
9	55	5	8	68
10	57	4	8	69
11	71	5	9	85
12	38	2	6	46
13	40	4	10	54
14	62	2	6	70
15	MISSING	-	-	-
16	62	5	6	73
17	69	2	6	77
18	82	5	10	97
19	40	3	5	48
20	42	2	6	50
21	49	2	7	58
22	33	1	2	36
23	MISSING	-	-	-
24	42	2	6	50
25	MISSING	-	-	-
26	40	3	5	48
27	40	2	5	47
28	40	0	2	42
29	56	4	10	70
30	79	2	6	87
TOTAL	1,421	88	179	1,688



PERTH AMBOYMonth of July 1938

	<u>COMMERCIAL VESSELS</u>	<u>RECREATIONAL VESSELS</u>	<u>MISCELLANEOUS VESSELS</u>	<u>TOT. NO. OF VESSELS</u>
July 1	40	2	4	46
2	79	15	6	100
3	31	5	4	40
4	24	6	6	36
5	46	5	8	59
6	50	3	4	57
7	57	5	7	69
8	48	6	0	54
9	88	4	5	97
10	32	2	8	42
11	27	3	2	32
12	59	4	3	66
13	51	3	5	59
14	66	6	5	77
15	54	5	6	65
16	62	4	2	68
17	37	3	8	48
18	60	5	4	69
19	55	8	11	74
20	58	7	5	70
21	67	6	0	73
22	59	7	4	70
23	71	9	2	82
24	38	8	6	52
25	38	4	0	42
26	60	8	10	78
27	34	3	0	37
28	36	4	0	40
29	70	7	5	82
30	40	5	8	53
31	21	4	3	28
TOTAL	1,558	166	141	1,865

PERTH AMBOYMonth of August 1938

	<u>COMMERCIAL VESSELS</u>	<u>RECREATIONAL VESSELS</u>	<u>MISCELLANEOUS VESSELS</u>	<u>TOT. NO. OF VESSELS</u>
August 1	48	2	6	56
2	50	3	6	59
3	45	3	3	51
4	70	3	5	78
5	60	3	3	66
6	72	8	4	84
7	45	6	4	55
8	51	3	4	58
9	20	5	3	28
10	39	2	1	42
11	58	2	21	81
12	70	4	7	81
13	70	2	7	79
14	40	5	2	47
15	35	2	5	42
16	55	2	3	60
17	48	4	4	56
18	55	5	4	64
19	70	6	7	83
20	50	7	3	60
21	MISsing	-	-	-
22	50	12	10	72
23	60	8	6	74
24	65	6	10	81
25	66	6	2	74
26	45	3	2	50
27	69	4	9	82
28	40	6	10	56
29	45	5	1	51
30	55	6	2	63
31	50	4	8	62
TOTAL	1,596	137	162	1,895

PERTH AMBOYMonth of September 1938

	<u>COMMERCIAL</u> <u>VESSELS</u>	<u>RECREATIONAL</u> <u>VESSELS</u>	<u>MISCELLANEOUS</u> <u>VESSELS</u>	<u>TOT. NO. OF</u> <u>VESSELS</u>
September 1	11	2	0	13
2	3	0	0	3
3	2	0	0	2
4	U. S. Coast Guard Reports no vessels all day.			
5	8	0	0	8
6	12	0	0	12
7	U. S. Coast Guard Reports no vessels all day.			
8	6	1	2	9
9	5	0	0	5
10	2	0	0	2
11	2	1	1	4
12	5	0	0	5
13	6	0	0	6
14	5	1	0	6
15	2	0	1	3
16	4	1	0	5
17	4	0	0	4
18	7	0	0	7
19	6	1	2	9
20	2	0	1	3
21	U. S. Coast Guard did not make survey because of storm.			
22	"	"	"	"
23	"	"	"	"
24	"	"	"	"
25	0	52	2	54
26	U.S. Coast Guard did not make survey because of storm.			
27	"	"	"	"
28	U.S. Coast Guard Reports no traffic all day.			
29	"	"	"	"
30	"	"	"	"
	<hr/>	<hr/>	<hr/>	<hr/>
TOTAL	92	59	9	160

FIFTH ANNUALMonth of October 1938

	<u>COMMERCIAL VESSELS</u>	<u>RECREATIONAL VESSELS</u>	<u>MISCELLANEOUS VESSELS</u>	<u>TOT. NO. OF VESSELS</u>
October 1	71	0	1	72
2	49	0	5	54
3	50	2	3	55
4	54	1	3	58
5	74	0	0	74
6	49	0	2	51
7	68	0	1	69
8	77	0	2	79
9	63	0	1	64
10	66	1	5	72
11	64	0	4	68
12	58	0	0	58
13	45	0	0	45
14	21	0	2	23
15	68	0	2	70
16	27	0	0	27
17	43	0	2	45
18	57	4	3	64
19	58	0	4	62
20	67	0	0	67
21	73	1	7	86
22	78	0	1	79
23	47	2	5	54
24	48	0	1	49
25	59	2	1	62
26	72	0	2	74
27	78	0	0	78
28	60	2	0	62
29	76	3	6	85
30	44	2	1	47
31	66	3	3	72
	<u>1,835</u>	<u>23</u>	<u>67</u>	<u>1,925</u>

PERTH ANCHOYMonth of November 1938

	<u>COMMERCIAL</u> <u>VESSELS</u>	<u>RECREATIONAL</u> <u>VESSELS</u>	<u>MISCELLANEOUS</u> <u>VESSELS</u>	<u>TOP. NO. OF</u> <u>VESSELS</u>
November 1	45	-	4	49
2	62	-	1	63
3	67	-	2	69
4	82	-	1	83
5	74	-	7	81
6	47	-	2	49
7	83	-	8	91
8	62	-	7	69
9	61	-	6	67
10	68	-	5	73
11	55	-	3	58
12	66	-	2	68
13	49	-	6	55
14	59	-	5	64
15	70	-	5	75
16	76	-	3	79
17	80	-	5	85
18	57	-	1	58
19	68	1	-	69
20	48	-	6	54
21	56	-	11	67
22	48	-	2	50
23	66	-	6	72
24	44	-	2	46
25	23	-	2	30
26	68	-	1	69
27	49	-	2	51
28	56	-	5	61
29	71	-	6	77
30	6	-	-	6
TOTAL	1,771	1	116	1,888

PERTH ANCOYMonth of December 1938

	<u>COMMERCIAL VESSELS</u>	<u>RECREATIONAL VESSELS</u>	<u>MISCELLANEOUS VESSELS</u>	<u>TOT. NO. OF VESSELS</u>
December 1	83	-	4	92
2	76	-	3	79
3	72	-	3	75
4	66	-	2	68
5	8	-	1	9
6	99	-	2	101
7	80	-	2	82
8	71	-	5	76
9	26	-	1	27
10	75	-	10	85
11	69	-	1	70
12	7	-	-	7
13	81	-	1	82
14	98	-	4	102
15	79	-	1	80
16	79	1	2	82
17	68	-	7	75
18	4	-	-	4
19	49	-	2	51
20	73	-	1	74
21	40	2	-	42
22	5	-	2	7
23	55	-	3	58
24	65	-	2	67
25	49	-	3	52
26	46	-	3	49
27	58	-	5	63
28	70	-	6	76
29	80	-	2	82
30	85	-	6	91
31	46	-	2	48
TOTAL	1,867	3	86	1,956

THROGS NECKMonth of January 1938

	<u>COMMERCIAL</u> <u>VESSELS</u>	<u>RECREATIONAL</u> <u>VESSELS</u>	<u>MISCELLANEOUS</u> <u>VESSELS</u>	<u>TOT. NO. OF</u> <u>VESSELS</u>
January 1	12	1	0	13
2	29	0	0	29
3	76	1	2	79
4	64	0	1	65
5	95	1	3	99
6	98	1	0	99
7	74	1	0	75
8	77	0	2	79
9	33	0	0	33
10	71	0	0	71
11	50	1	0	51
12	66	0	0	66
13	60	0	0	60
14	60	0	4	64
15	66	0	1	67
16	30	1	1	32
17	58	0	0	58
18	72	0	0	72
19	69	2	2	73
20	59	0	1	60
21	67	0	0	67
22	71	0	2	73
23	41	1	0	42
24	49	4	3	56
25	37	1	4	42
26	35	0	0	35
27	68	0	5	73
28	46	0	0	46
29	94	0	0	94
30	20	0	5	25
31	56	0	2	58
TOTAL	1,803	15	38	1,856

THROGS NECKMonth of February 1938

	<u>COMMERCIAL</u> <u>VESSELS</u>	<u>RECREATIONAL</u> <u>VESSELS</u>	<u>MISCELLANEOUS</u> <u>VESSELS</u>	<u>TOT. NO. OF</u> <u>VESSELS</u>
February 1	64	2	2	68
2	58	0	0	58
3	83	0	0	83
4	84	2	6	92
5	64	3	3	70
6	12	1	0	13
7	66	0	0	66
8	89	0	1	90
9	56	2	2	60
10	62	0	0	62
11	58	0	0	58
12	44	0	0	44
13	26	1	0	27
14	56	0	3	59
15	78	0	0	78
16	54	0	0	54
17	69	0	2	71
18	66	0	0	66
19	45	0	1	46
20	17	0	0	17
21	56	0	0	56
22	33	0	0	33
23	34	0	2	36
24	44	0	2	46
25	50	0	3	53
26	47	0	2	49
27	30	0	0	30
28	40	0	0	40
	<u>1,485</u>	<u>11</u>	<u>29</u>	<u>1,525</u>



THROGS NAVALMonth of March 1938

	<u>COMMERCIAL</u> <u>VESSELS</u>	<u>RECREATIONAL</u> <u>VESSELS</u>	<u>MISCELLANEOUS</u> <u>VESSELS</u>	<u>TOT. NO. OF</u> <u>VESSELS</u>
March 1	17	0	0	17
2	48	0	0	48
3	49	0	4	53
4	78	0	1	79
5	66	0	0	66
6	57	0	2	59
7	87	0	0	87
8	78	1	3	82
9	96	0	0	96
10	68	0	3	71
11	81	0	3	84
12	72	0	0	72
13	48	0	2	50
14	67	0	0	67
15	77	1	3	81
16	85	0	2	87
17	77	0	0	77
18	73	0	1	74
19	74	4	0	78
20	59	25	3	85
21	38	7	0	45
22	55	2	2	59
23	84	4	2	90
24	41	6	4	51
25	55	4	3	62
26	81	20	2	103
27	37	27	3	67
28	59	11	1	71
29	73	12	1	86
30	77	8	0	85
31	51	2	0	53
	<u>2,008</u>	<u>132</u>	<u>45</u>	<u>2,185</u>

THROGS NECKMonth of April 1938

	<u>COMMERCIAL VESSELS</u>	<u>RECREATIONAL VESSELS</u>	<u>MISCELLANEOUS VESSELS</u>	<u>TOT. NO. OF VESSELS</u>
April 1	82	4	2	88
2	74	33	1	108
3	52	30	2	84
4	95	3	9	107
5	85	10	3	98
6	80	15	2	97
7	76	1	10	87
8	82	7	2	91
9	53	9	0	62
10	53	32	3	88
11	113	12	5	130
12	121	23	2	146
13	85	19	3	107
14	102	21	4	127
15	104	26	2	132
16	101	31	0	132
17	45	42	0	87
18	75	16	2	93
19	103	14	0	117
20	85	19	1	105
21	83	21	0	104
22	83	9	0	92
23	62	33	0	95
24	32	50	1	83
25	80	12	0	92
26	76	31	2	109
27	97	31	0	128
28	77	24	6	107
29	34	12	4	50
30	99	59	5	163
TOTAL	2,389	649	71	3,109

THROGS NECKMonth of May 1938

	<u>COMMERCIAL VESSELS</u>	<u>RECREATIONAL VESSELS</u>	<u>MISCELLANEOUS VESSELS</u>	<u>TOT. NO. OF VESSELS</u>
May 1	29	84	1	114
2	74	22	0	96
3	105	25	2	132
4	117	34	0	151
5	77	44	6	127
6	118	62	6	186
7	89	89	1	179
8	73	82	0	155
9	82	36	2	120
10	99	29	2	130
11	107	39	2	148
12	111	36	4	151
13	98	42	6	146
14	54	79	1	134
15	MISSING	-	-	-
16	7	1	0	8
17	72	29	2	103
18	116	36	3	155
19	94	29	4	127
20	65	19	11	95
21	47	20	2	69
22	30	46	3	79
23	38	17	0	55
24	56	12	1	69
25	61	26	4	91
26	46	28	1	75
27	70	11	4	85
28	100	107	0	207
29	MISSING	-	-	-
30	15	87	5	107
31	73	36	2	111
TOTAL	2,123	1,207	75	3,405

THROGS NECKMonth of June 1938

	<u>COMMERCIAL</u> <u>VESSELS</u>	<u>RECREATIONAL</u> <u>VESSELS</u>	<u>MISCELLANEOUS</u> <u>VESSELS</u>	<u>TOT. NO. OF</u> <u>VESSELS</u>
June 1	92	25	0	117
2	52	23	1	76
3	78	32	1	111
4	72	82	1	155
5	32	318	0	350
6	90	61	5	156
7	85	55	0	140
8	85	42	2	129
9	79	77	3	159
10	90	65	2	157
11	64	153	5	222
12	30	405	7	442
13	68	43	4	115
14	69	20	1	90
15	88	24	2	114
16	80	59	3	122
17	62	20	3	85
18	59	113	7	179
19	41	83	11	135
20	82	6	2	90
21	57	10	5	72
22	55	6	4	65
23	61	8	1	70
24	70	37	0	107
25	88	115	3	206
26	20	298	5	323
27	57	35	4	96
28	56	18	4	78
29	94	48	6	148
30	56	71	4	131
TOTAL	2,012	2,332	96	4,440

THROGS NECKMonth of July 1938

	<u>COMMERCIAL</u> <u>VESSELS</u>	<u>RECREATIONAL</u> <u>VESSELS</u>	<u>MISCELLANEOUS</u> <u>VESSELS</u>	<u>TOT. NO. OF</u> <u>VESSELS</u>
July 1	88	57	0	145
2	73	137	6	216
3	39	159	5	203
4	25	270	5	300
5	48	83	6	137
6	74	75	13	162
7	101	73	7	181
8	73	104	12	189
9	76	73	4	153
10	29	103	4	136
11	60	58	8	126
12	86	76	8	170
13	76	42	8	121
14	40	12	3	55
15	55	17	3	75
16	63	21	3	90
17	18	26	6	48
18	61	23	4	88
19	71	22	4	97
20	57	22	4	82
21	46	22	3	70
22	55	22	2	78
23	54	21	2	71
24	35	16	1	174
25	79	136	3	134
26	79	52	3	182
27	89	102	1	208
28	77	117	2	211
29	86	131	3	158
30	71	50	2	117
31	21	45	1	72
	21	48	5	72
TOTAL	1,905	2,193	131	4,229

TIROGS BECKMonth of August 1938

	<u>COMMERCIAL</u> <u>VESSELS</u>	<u>RECREATIONAL</u> <u>VESSELS</u>	<u>MISCELLANEOUS</u> <u>VESSELS</u>	<u>TOT. NO. OF</u> <u>VESSELS</u>
August 1	56	22	2	80
2	67	32	0	99
3	73	63	1	137
4	84	51	1	136
5	59	69	1	129
6	51	109	0	160
7	27	233	2	262
8	67	39	4	110
9	73	67	4	144
10	93	62	4	159
11	80	52	4	136
12	55	48	2	105
13	67	87	2	156
14	27	277	1	305
15	50	13	1	64
16	104	46	2	152
17	100	32	0	132
18	96	33	1	130
19	90	33	8	131
20	57	54	1	112
21	31	39	0	70
22	57	17	5	79
23	69	31	0	100
24	79	34	3	116
25	94	48	4	146
26	38	19	0	57
27	15	20	0	35
28	41	241	4	286
29	54	67	1	122
30	84	69	2	155
31	48	30	2	80
	<u>1,986</u>	<u>2,037</u>	<u>62</u>	<u>4,085</u>

THROGS NECKMonth of September 1938

	<u>COMMERCIAL</u> <u>VESSELS</u>	<u>RECREATIONAL</u> <u>VESSELS</u>	<u>MISCELLANEOUS</u> <u>VESSELS</u>	<u>TOT. NO. OF</u> <u>VESSELS</u>
September 1	70	65	5	140
2	43	19	3	65
3	106	59	1	166
4	41	222	1	264
5	55	186	12	253
6	63	56	8	127
7	91	80	6	177
8	94	79	9	182
9	82	84	7	173
10	106	60	4	170
11	68	33	7	108
12	39	34	5	78
13	41	29	6	76
14	50	27	4	81
15	44	28	7	79
16	41	39	4	84
17	30	19	3	52
18	19	24	0	43
19	42	18	2	62
20	56	37	6	99
21	NO RECORDS AVAILABLE BECAUSE OF STORM			
22	"	"	"	
23	"	"	"	
24	"	"	"	
25	"	"	"	
26	70	42	6	118
27	68	43	4	115
28	73	39	3	115
29	78	47	9	134
30	82	46	11	139
TOTAL	1,552	1,415	133	3,100

TROGS NECKMonth of October 1938

	<u>COMMERCIAL</u> <u>VESSELS</u>	<u>RECREATIONAL</u> <u>VESSELS</u>	<u>MISCELLANEOUS</u> <u>VESSELS</u>	<u>TOT.NO.OF</u> <u>VESSELS</u>
October 1	64	112	2	178
2	36	107	0	143
3	75	47	4	126
4	81	38	2	121
5	67	24	2	93
6	105	38	3	146
7	79	32	0	111
8	77	93	3	173
9	37	53	1	91
10	77	15	2	94
11	88	10	0	98
12	60	17	5	82
13	72	3	2	77
14	68	10	2	80
15	58	26	1	85
16	32	13	0	45
17	50	25	6	81
18	48	17	2	67
19	54	21	0	75
20	63	30	0	93
21	83	21	0	104
22	45	16	0	61
23	51	33	0	84
24	63	17	2	82
25	72	21	3	96
26	74	21	1	96
27	92	7	4	103
28	21	0	0	21
29	43	11	0	54
30	31	9	0	40
31	67	8	0	75
TOTAL	1,933	895	47	2,875



THROGS NECKMonth of November 1938

	<u>COMMERCIAL</u> <u>VESSELS</u>	<u>RECREATIONAL</u> <u>VESSELS</u>	<u>MISCELLANEOUS</u> <u>VESSELS</u>	<u>TOT. NO. OF</u> <u>VESSELS</u>
November 1	80	2	1	83
2	49	4	4	57
3	76	12	2	90
4	100	8	-	108
5	65	18	-	83
6	40	19	2	61
7	84	10	1	95
8	74	15	3	92
9	82	6	-	88
10	80	7	-	87
11	60	10	2	72
12	53	18	2	73
13	34	21	2	57
14	73	4	3	80
15	57	4	2	63
16	66	2	4	72
17	62	1	1	64
18	37	6	7	50
19	67	17	2	86
20	37	15	-	52
21	86	8	2	96
22	79	5	2	86
23	84	2	2	88
24	20	1	-	21
25	31	-	1	32
26	49	7	3	59
27	49	1	-	50
28	45	6	4	55
29	81	-	1	82
30	82	2	2	86
TOTAL	1,882	231	55	2,168

THROGS NECKMonth of December 1938

	<u>COMMERCIAL</u> <u>VESSELS</u>	<u>RECREATIONAL</u> <u>VESSELS</u>	<u>MISCELLANEOUS</u> <u>VESSELS</u>	<u>TOT.NO.OF</u> <u>VESSELS</u>
December 1	67	1	1	69
2	97	-	-	97
3	88	5	-	93
4	69	6	-	75
5	42	-	2	44
6	62	-	2	64
7	81	-	1	82
8	81	-	2	83
9	60	1	1	62
10	65	3	-	68
11	44	6	2	52
12	60	2	1	63
13	79	-	3	82
14	84	-	-	84
15	75	1	-	76
16	98	4	4	106
17	70	-	-	70
18	46	3	-	49
19	65	5	3	73
20	88	3	5	96
21	84	4	-	88
22	80	11	3	94
23	90	3	4	97
24	83	4	1	88
25	16	-	-	16
26	10	1	2	13
27	40	5	5	50
28	56	-	-	56
29	101	-	-	101
30	81	-	-	81
31	46	-	-	46
TOTAL	2,108	68	42	2,218

THE NARROWSMonth of January 1938

	<u>COMMERCIAL</u> <u>VESSELS</u>	<u>RECREATIONAL</u> <u>VESSELS</u>	<u>MISCELLANEOUS</u> <u>VESSELS</u>	<u>TOT. NO. OF</u> <u>VESSELS</u>
January 1	57	0	5	62
2	62	15	4	81
3	113	4	13	130
4	139	7	15	161
5	131	5	12	148
6	135	5	16	154
7	91	2	8	101
8	111	8	9	128
9	76	14	8	98
10	95	2	13	110
11	99	2	10	111
12	134	5	13	152
13	104	2	10	116
14	93	3	16	112
15	119	10	12	141
16	60	5	1	66
17	100	3	12	115
18	131	0	18	149
19	135	2	18	155
20	105	1	15	121
21	94	2	8	104
22	110	7	8	125
23	73	7	10	90
24	96	2	13	111
25	76	4	7	87
26	122	6	13	141
27	136	2	16	154
28	107	1	16	124
29	122	2	22	146
30	51	4	7	62
31	109	2	11	122
TOTAL	3,184	134	359	3,677

THE NARROWSMonth of February 1938

	<u>COMMERCIAL</u> <u>VESSELS</u>	<u>RECREATIONAL</u> <u>VESSELS</u>	<u>MISCELLANEOUS</u> <u>VESSELS</u>	<u>TOT. NO. OF</u> <u>VESSELS</u>
February 1	105	1	15	121
2	145	2	19	166
3	72	3	9	84
4	91	2	15	108
5	132	0	10	142
6	35	0	2	37
7	112	5	13	130
8	175	4	25	204
9	100	4	10	114
10	125	0	22	147
11	101	1	20	122
12	115	1	12	128
13	56	2	7	65
14	142	1	15	158
15	103	1	13	117
16	132	0	14	146
17	123	2	17	142
18	107	3	15	125
19	125	0	15	140
20	53	1	1	55
21	140	1	22	163
22	109	1	14	124
23	65	2	10	77
24	152	2	15	169
25	94	4	10	108
26	174	2	15	191
27	72	0	4	76
28	60	2	7	69
TOTAL	<u>3,015</u>	<u>47</u>	<u>366</u>	<u>3,428</u>

THE NARROWSMonth of March 1938

	<u>COMMERCIAL</u> <u>VESSELS</u>	<u>RECREATIONAL</u> <u>VESSELS</u>	<u>MISCELLANEOUS</u> <u>VESSELS</u>	<u>TOT. NO. OF</u> <u>VESSELS</u>
March 1	155	0	15	170
2	171	4	30	205
3	103	0	7	110
4	116	1	12	129
5	138	1	11	150
6	77	0	8	85
7	108	0	16	124
8	117	0	19	136
9	133	0	19	152
10	132	0	27	159
11	140	3	19	162
12	150	0	18	168
13	44	0	8	52
14	101	2	12	115
15	69	1	18	88
16	109	1	17	127
17	117	0	11	128
18	128	4	17	149
19	147	5	12	164
20	73	2	4	79
21	100	4	19	123
22	120	2	20	142
23	118	2	13	133
24	131	1	15	147
25	126	4	16	146
26	124	2	15	141
27	102	2	6	110
28	132	11	20	163
29	111	1	16	128
30	35	0	4	39
31	30	2	4	36
TOTAL	<u>3,457</u>	<u>55</u>	<u>448</u>	<u>3,960</u>

THE NARROWSMonth of April 1938

	<u>COMMERCIAL VESSELS</u>	<u>RECREATIONAL VESSELS</u>	<u>MISCELLANEOUS VESSELS</u>	<u>TOT. NO. OF VESSELS</u>
April 1	161	10	15	186
2	155	9	10	174
3	53	7	5	65
4	112	7	22	141
5	153	13	17	183
6	98	4	10	112
7	118	2	13	133
8	101	2	13	116
9	91	7	8	106
10	91	10	3	104
11	137	8	20	165
12	165	8	21	194
13	168	17	20	205
14	153	9	11	173
15	146	10	20	176
16	126	12	5	143
17	68	7	4	79
18	101	6	5	112
19	153	6	12	171
20	126	18	14	158
21	139	14	15	168
22	148	21	12	181
23	154	22	5	181
24	87	53	4	144
25	126	9	12	147
26	122	16	4	142
27	149	16	10	175
28	121	18	12	151
29	104	6	15	125
30	126	22	6	154
TOTAL	3,752	369	343	4,464

THE NARROWSMonth of May 1938

	<u>COMMERCIAL</u> <u>VESSELS</u>	<u>RECREATIONAL</u> <u>VESSELS</u>	<u>MISCELLANEOUS</u> <u>VESSELS</u>	<u>TOT. NO. OF</u> <u>VESSELS</u>
May 1	86	61	0	147
2	128	16	19	163
3	185	17	24	226
4	152	14	11	177
5	77	20	14	111
6	157	26	16	199
7	150	57	8	215
8	90	68	4	162
9	132	11	13	156
10	141	34	14	189
11	138	25	17	180
12	161	24	17	202
13	125	19	18	162
14	201	50	19	270
15	71	29	10	110
16	102	21	18	141
17	107	21	18	146
18	124	24	20	168
19	111	30	24	165
20	129	21	13	163
21	125	66	10	201
22	77	127	6	210
23	96	23	17	136
24	125	12	18	155
25	154	34	22	210
26	139	41	12	192
27	98	27	7	132
28	116	91	8	215
29	MISSING			
30	74	130	14	218
31	110	29	25	164
	<u>3,681</u>	<u>1,168</u>	<u>436</u>	<u>5,285</u>

THE NARROWSMonth of June 1938

	<u>COMMERCIAL VESSELS</u>	<u>RECREATIONAL VESSELS</u>	<u>MISCELLANEOUS VESSELS</u>	<u>TOT. NO. OF VESSELS</u>
June 1	90	37	26	153
2	101	44	23	168
3	82	42	18	142
4	99	63	12	174
5	70	167	2	239
6	108	33	13	154
7	109	38	14	161
8	141	29	18	188
9	97	38	19	154
10	124	57	12	193
11	133	88	18	239
12	56	231	3	290
13	122	32	18	172
14	146	67	15	228
15	159	58	18	235
16	125	50	21	196
17	118	62	21	201
18	138	124	10	272
19	76	114	9	199
20	121	53	36	210
21	123	64	17	204
22	86	37	18	141
23	100	47	7	154
24	62	35	23	120
25	137	91	22	250
26	64	150	12	226
27	114	28	16	158
28	70	24	20	114
29	107	43	23	173
30	125	54	23	202
TOTAL	3,203	2,000	507	5,710



THE NARROWSMonth of July 1938

	<u>COMMERCIAL VESSELS</u>	<u>RECREATIONAL VESSELS</u>	<u>MISCELLANEOUS VESSELS</u>	<u>TOT. NO. OF VESSELS</u>
July 1	147	51	18	216
2	140	181	21	342
3	58	178	13	249
4	35	180	7	222
5	99	93	38	230
6	118	81	27	226
7	114	87	24	225
8	157	89	34	280
9	129	113	23	265
10	67	211	11	289
11	115	65	20	200
12	99	79	19	197
13	118	63	27	208
14	141	98	28	267
15	131	79	27	237
16	133	112	17	262
17	58	303	8	369
18	124	88	25	237
19	104	65	32	201
20	112	73	20	205
21	127	75	26	228
22	97	77	17	191
23	107	97	12	216
24	61	172	4	237
25	83	53	18	154
26	116	103	16	235
27	96	101	16	213
28	106	100	12	218
29	142	107	20	269
30	125	202	16	343
31	58	314	12	384
TOTAL	<u>3,317</u>	<u>3,690</u>	<u>608</u>	<u>7,615</u>

THE NARROWSMonth of August 1938

	<u>COMMERCIAL VESSELS</u>	<u>RECREATIONAL VESSELS</u>	<u>MISCELLANEOUS VESSELS</u>	<u>TOT. NO. OF VESSELS</u>
August 1	137	87	18	242
2	121	85	21	227
3	131	76	21	228
4	129	96	24	249
5	83	61	17	161
6	131	156	15	302
7	71	228	12	311
8	111	81	17	209
9	113	81	22	216
10	133	69	15	217
11	125	86	15	226
12	136	80	29	245
13	125	168	15	308
14	54	203	5	262
15	108	77	25	210
16	129	93	22	244
17	152	88	30	270
18	144	60	13	217
19	130	80	26	236
20	149	175	13	337
21	44	126	5	175
22	143	78	29	250
23	143	96	19	258
24	137	81	20	238
25	175	80	23	278
26	124	88	23	235
27	127	105	21	253
28	73	187	8	268
29	95	69	20	184
30	157	76	18	251
31	136	77	26	239
TOTAL	3,766	3,193	587	7,546

THE NARROWSMonth of September 1938

	<u>COMMERCIAL VESSELS</u>	<u>RECREATIONAL VESSELS</u>	<u>MISCELLANEOUS VESSELS</u>	<u>TOT. NO. OF VESSELS</u>
September 1	145	59	17	221
2	164	58	22	244
3	184	107	16	307
4	136	138	10	284
5	47	115	8	170
6	65	58	19	142
7	162	61	11	234
8	181	71	20	272
9	149	83	17	249
10	225	112	26	363
11	228	104	31	363
12	179	87	13	279
13	157	60	25	242
14	122	74	12	208
15	126	72	16	214
16	122	59	21	202
17	127	78	13	218
18	86	106	0	192
19	134	62	17	213
20	118	73	22	213
21	24	20	11	55
22	40	38	24	102
23	32	5	3	40
24	85	15	12	112
25	43	92	15	150
26	98	79	17	194
27	76	72	19	167
28	154	81	20	255
29	194	95	31	320
30	92	71	19	182
TOTAL	3,695	2,205	507	6,407

THE NARROWSMonth of October 1938

	<u>COMMERCIAL VESSELS</u>	<u>RECREATIONAL VESSELS</u>	<u>MISCELLANEOUS VESSELS</u>	<u>TOT.NO.OF VESSELS</u>
October 1	107	31	15	153
2	65	55	12	132
3	99	16	24	139
4	126	27	29	182
5	133	21	17	171
6	110	18	20	148
7	104	13	14	131
8	146	41	15	202
9	76	60	17	153
10	134	20	27	181
11	120	23	26	169
12	110	37	17	164
13	114	16	26	156
14	94	19	15	128
15	102	14	7	123
16	51	70	14	135
17	87	13	25	125
18	82	28	21	131
19	88	23	28	139
20	122	29	20	171
21	102	17	24	143
22	125	38	20	183
23	63	62	12	137
24	106	11	16	133
25	120	11	17	148
26	128	19	21	168
27	158	22	26	206
28	121	8	11	140
29	123	15	11	149
30	86	35	9	130
31	<u>108</u>	<u>21</u>	<u>23</u>	<u>152</u>
TOTAL	3,310	833	579	4,722

THE NARROWSMonth of November 1938

	<u>COMMERCIAL VESSELS</u>	<u>RECREATIONAL VESSELS</u>	<u>MISCELLANEOUS VESSELS</u>	<u>TOT. NO. OF VESSELS</u>
November 1	88	24	15	127
2	103	14	14	131
3	110	11	16	137
4	128	26	11	165
5	140	16	21	177
6	56	61	5	122
7	136	4	22	162
8	104	27	22	153
9	128	10	37	175
10	129	25	22	176
11	97	18	21	136
12	144	14	36	194
13	74	57	7	138
14	84	1	19	104
15	122	14	25	161
16	123	11	23	157
17	127	10	22	159
18	127	7	11	145
19	136	18	9	163
20	66	13	33	112
21	124	9	21	154
22	125	8	16	149
23	109	13	26	148
24	57	7	5	69
25	80	3	14	97
26	134	13	23	170
27	78	6	3	87
28	95	18	29	142
29	107	11	33	151
30	137	8	27	172
TOTAL	3,268	477	588	4,333

THE NARROWSMonth of December 1938

	<u>COMMERCIAL</u> <u>VESSELS</u>	<u>RECREATIONAL</u> <u>VESSELS</u>	<u>MISCELLANEOUS</u> <u>VESSELS</u>	<u>TOT. NO. OF</u> <u>VESSELS</u>
December 1	137	6	24	167
2	119	12	18	149
3	124	14	17	155
4	84	27	8	119
5	60	5	10	75
6	161	21	6	188
7	161	8	26	195
8	86	8	31	125
9	82	6	11	99
10	142	6	18	166
11	127	24	6	157
12	122	1	23	146
13	158	12	28	198
14	122	11	22	155
15	144	6	24	174
16	113	17	23	153
17	128	12	20	160
18	84	33	8	125
19	122	15	16	153
20	125	13	30	171
21	136	18	21	175
22	117	23	14	154
23	133	13	20	166
24	150	9	5	164
25	52	3	10	65
26	48	21	6	75
27	102	10	20	132
28	116	2	17	135
29	135	10	17	162
30	131	5	16	152
31	<u>118</u>	<u>4</u>	<u>15</u>	<u>137</u>
TOTAL	3,639	378	530	4,547