

As filed with the Securities and Exchange Commission on June 29, 1998

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 11-K

/X/ ANNUAL REPORT PURSUANT TO SECTION 15 (d)
OF THE SECURITIES EXCHANGE ACT OF 1934 (NO FEE REQUIRED)

For the year ended December 31, 1997

OR

/ / TRANSITION REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE
ACT OF 1934
[NO FEE REQUIRED]

For the transition period from _____ to _____

Commission File No: 1-7615

A. Full title of the plan and the address of the plan, if different from
that of the issuer named below:

KIRBY 401(K) PLAN

B. Name of issuer of the securities held pursuant to the plan and the
address of its principal executive officer:

Kirby Corporation
1775 St. James Place, Suite 200
Houston, Texas 77056-3453

KIRBY 401(k) PLAN

INDEX TO FINANCIAL STATEMENTS AND SCHEDULES

	Page

Independent Auditors' Report.....	1
Financial Statements:	
Statement of Net Assets Available for Benefits (Modified Cash Basis) December 31, 1997 and 1996.....	2
Statements of Changes in Net Assets Available for Benefits (Modified Cash Basis), for the years ended December 31, 1997 and 1996.....	3
Notes to Financial Statements.....	4 - 9
Supplemental Schedules:	
Item 27a - Schedule of Assets Held for Investment Purposes (Modified Cash Basis).....	10
Item 27d - Schedule of Reportable Transactions.....	11

Schedules, other than those listed above, are omitted because of the absence of the conditions under which they are required.

3

[KPMG PEAT MARWICK LLP LETTERHEAD]

Independent Auditors' Report

Plan Administrator
Kirby 401(k) Plan:

We have audited the accompanying statements of net assets available for benefits (modified cash basis) of the Kirby 401(k) Plan (the Plan) as of December 31, 1997 and 1996, and the related statements of changes in net assets available for benefits (modified cash basis) for the years ended December 31, 1997 and 1996. These financial statements and supplemental schedules are the responsibility of the Plan's management. Our responsibility is to express an opinion on these financial statements and supplemental schedules based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

As described in note 2, these financial statements and supplemental schedules were prepared on a modified cash basis of accounting, which is a comprehensive basis of accounting other than generally accepted accounting principles.

In our opinion, the financial statements referred to above present fairly, in all material respects, the net assets available for benefits of the Plan as of December 31, 1997 and 1996, and the changes in net assets available for benefits for the years ended December 31, 1997 and 1996 on the basis of accounting described in note 2.

Our audits were made for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplemental schedules of assets held for investment purposes and reportable transactions are presented for the purpose of additional analysis and are not a required part of the basic financial statements but are supplementary information required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974, as amended. The supplemental schedules have been subjected to the auditing procedures applied in the audits of the basic financial statements and, in our opinion, are fairly stated in all material respects in relation to the basic financial statements taken as a whole.

KPMG Peat Marwick LLP

Houston, Texas
June 19, 1998

KIRBY 401(k) PLAN

STATEMENTS OF NET ASSETS AVAILABLE FOR BENEFITS
(MODIFIED CASH BASIS)

December 31, 1997 and 1996

	1997	1996
	-----	-----
Investments at fair value:		
Cash	\$ --	105,260
Common trust fund	4,850,393	5,281,873
Mutual funds	20,152,154	13,852,858
Kirby Corporation common stock	612,631	464,955
Participant loans	2,161,754	1,832,432
	-----	-----
Total assets	27,776,932	21,537,378
Liabilities - accrued expenses	14,093	--
	-----	-----
Net assets available for benefits	\$27,762,839	21,537,378
	=====	=====

See accompanying notes to financial statements.

KIRBY 401(k) PLAN

STATEMENTS OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS
(MODIFIED CASH BASIS)

For the years ended December 31, 1997 and 1996

	1997	1996
	-----	-----
Net assets available for benefits, beginning of year	\$21,537,378	16,832,263
	-----	-----
Additions to net assets attributed to:		
Contributions from participants	3,410,831	3,158,631
Contributions from employers	1,233,245	1,149,231
Rollover contributions	274,785	259,161
Interest and dividend income	1,135,807	767,350
Net unrealized gain in fair value of investments	1,263,035	625,386
Net realized gain from disposition of investments	399,326	164,243
Other income	924,905	652,541

	-----	-----
Total additions	8,641,934	6,776,543
	-----	-----
Deductions from net assets attributed to:		
Benefits paid to participants	2,331,780	2,026,378
Administration fees	84,693	45,050
	-----	-----
Total deductions	2,416,473	2,071,428
	-----	-----
Net increase	6,225,461	4,705,115
	-----	-----
Net assets available for benefits, end of year	\$27,762,839	21,537,378
	=====	=====

See accompanying notes to financial statements.

KIRBY 401(k) PLAN

NOTES TO FINANCIAL STATEMENTS
(MODIFIED CASH BASIS)

December 31, 1997 and 1996

(1) DESCRIPTION OF THE PLAN

(a) GENERAL

The Kirby 401(k) Plan (the Plan) is a defined contribution 401(k) plan for the benefit of employees of Kirby Marine Transportation Corporation (the Company), Kirby Corporation (the Parent), and certain subsidiaries. Each employee is eligible to join the Plan as of the first pay period beginning in any quarter following completion of one year of service. Employees covered by collective bargaining agreements, the terms of which do not provide for participation in the Plan, are not eligible. The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974 (ERISA). Further information relating to the Plan's provisions is available in the Summary Plan Description provided to all eligible employees.

(b) CONTRIBUTIONS

The Plan provides for basic employee pretax contributions to the Plan of 3% of covered compensation as defined, and for additional employee pretax contributions to the Plan of up to 14% of covered compensation subject to the provisions of the Internal Revenue Code. The Company contributes matching employer contributions equal to 100% of basic employee pretax contributions. The Company does not match the additional employee pretax contributions.

(c) BENEFITS PAYMENTS

Benefit payments are typically made in a lump-sum distribution to the participant upon termination of employment (or to the beneficiary in the event of death). However, a participant may request a loan for up to 50% of the participant's vested interest up to a maximum of \$50,000. Loans are typically repaid over a five-year period and have interest rates ranging from 7% to 10%.

Loans outstanding upon termination of a participant are written off as benefits paid to participants. These amounts are taxed to the participant in the year of the participant's termination.

(d) VESTING

A participant has an immediate and fully vested nonforfeitable interest in the portion of the account relating to both participant and employer contributions and may, upon resignation from or discharge by the employer, withdraw their entire account balance.

(e) PLAN AMENDMENTS

Occasionally amendments have been made to provide more clarity to certain definitions in the Plan Document. During 1997, the Plan eliminated the Fidelity Advisor Growth and Income Fund Option. The fund balance in the Fidelity Advisor Growth and Income Fund was transferred to the Janus Balanced Fund.

(Continued)

KIRBY 401(k) PLAN

NOTES TO FINANCIAL STATEMENTS
(MODIFIED CASH BASIS)

(f) PLAN ADMINISTRATION

The general administration of the Plan is vested in the Vice President of Human Resources of the Company (the Plan Administrator). The Plan Administrator has broad powers regarding the operation and administration of the Plan and receives no compensation for service to the Plan. All administrative expenses, unless paid by the Company at its discretion, are paid by the Plan.

(g) PLAN TERMINATION

Although it has not expressed any intent to do so, the Company has the right under the Plan to terminate the Plan subject to the provisions of ERISA. In the event of termination, the amounts credited to the accounts of participants shall be distributed to the participants after payment of expenses of distribution and liquidation.

(h) RECLASSIFICATIONS

Certain reclassifications have been made to reflect current presentation of financial information.

(i) USE OF ESTIMATES

The preparation of financial statements requires Plan management to make estimates and assumptions that affect the reported amounts of net assets and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of additions and deductions to net assets during the reporting period. Actual results could differ from those estimates. However, in the opinion of Plan management, such differences would be immaterial.

(2) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

(a) BASIS OF PRESENTATION

The accompanying financial statements have been prepared on the modified cash basis which utilizes the cash basis of accounting while adjusting debt and equity securities to their corresponding market value for financial reporting purposes.

(b) INVESTMENT VALUATION

Investments in the common trust fund, mutual funds and Kirby Corporation common stock are stated at fair value as determined by Chase Bank of Texas N.A., the trustee of the Plan, based on quoted market prices. Purchases and sales of investments are recorded on a trade date basis. Net realized gains and losses on disposition of investments are reported on the revalued cost method. Revalued cost is the fair value of the assets at the beginning of the plan year or historical cost if the investment was acquired since the beginning of the year. Any unrealized appreciation or depreciation is recognized currently in the Statement of Changes in Net Assets Available for Benefits. Participant loans are stated at cost which approximates their fair value.

(Continued)

KIRBY 401(k) PLAN

NOTES TO FINANCIAL STATEMENTS
(MODIFIED CASH BASIS)

(3) INVESTMENTS

Each participant has the right to direct his contributions and the Company's matching contributions between the investment funds selected by the Plan. The investment funds options are described below:

Chase Money Market Fund - Seeks to provide stability of principal by investing in short-term U.S. Government and Federal Agency securities with an average maturity of less than 90 days.

Fidelity Advisor Growth Opportunities Fund - Seeks long-term growth by investing through a core investment in growth, value and cyclical stocks.

Templeton Foreign Fund - Seeks long-term capital growth through a flexible policy of investing in stocks and debt obligations of companies and governments outside the U.S.

Franklin Balance Sheet Investment Fund - Seeks high total return, of which capital appreciation and income are components. The fund is a non-diversified fund and may invest an unlimited amount of its total assets in the securities of any companies which, in the opinion of the fund's investment manager, represent an opportunity for significant capital appreciation and/or high income. The securities of such companies will include common and preferred stocks, secured and unsecured bonds, and commercial paper or notes.

Franklin Custodian Funds - U.S. Government Securities Series Fund -

Seeks income by investing in U.S. Government securities which include, but are not limited to, U.S. Treasury bonds, notes and bills, Treasury Certificates or Indebtedness and securities issued by instrumentalities of the U.S. government.

Kirby Corporation Common Stock Fund - Invests in Kirby Corporation common stock.

Janus Balanced Fund - Seeks long-term growth of capital balanced by current income. The fund will normally invest 40 - 60% of its assets in securities selected primarily for their growth potential and 40 - 60% of its assets in securities selected primarily for their income potential. The fund invests in common and preferred stock, U.S. Treasury issues, corporate bonds, and foreign investments.

(Continued)

6

9

KIRBY 401(k) PLAN

NOTES TO FINANCIAL STATEMENTS
(MODIFIED CASH BASIS)

The fair value of individual investments that represent 5% or more of the Plan's net assets available for plan benefits at December 31, 1997 and 1996 are as follows:

	December 31,	
	1997	1996
	-----	-----
Fidelity Advisor Growth Opportunities Fund	\$6,409,261	4,139,220
Franklin Balance Sheet Investment Fund	4,997,058	3,527,963
Chase Money Market Fund	4,850,393	5,281,873
Janus Balanced Fund	4,008,464	597,558
Franklin Custodian Funds - U.S. Government Securities Series Fund	2,444,203	2,010,264
Templeton Foreign Fund	2,293,168	1,782,810
Loan Fund	2,161,754	1,832,432
Fidelity Advisor Growth & Income Fund	--	1,795,043

(Continued)

7

10

KIRBY 401(k) PLAN

NOTES TO FINANCIAL STATEMENTS
(MODIFIED CASH BASIS)

(3) INVESTMENTS

As of December 31, 1997, employees can direct the investment of their contributions and the employer's contributions on their behalf into any or all of the following investment funds: Fidelity Advisor Growth Opportunities Fund, Kirby Corporation-Common Stock Fund, Templeton Foreign Fund, Franklin Balance Sheet Investment Fund, Franklin U.S. Government Securities Fund, Chase Bank Money Market Fund and Janus Balanced Fund, all of which are managed by the trustee. Changes in net assets available for benefits related to the individual funds for the year ended December 31, 1997 are as follows:

	Cash	Fidelity Advisor Growth & Income Fund(a)	Fidelity Advisor Growth Opportunities Fund	Kirby Corporation Common Stock Fund	Templeton Foreign Fund
Net assets available for benefits at December 31, 1996	\$ 105,260	1,795,043	4,139,220	464,955	1,782,810
Contributions from participants	--	18,473	789,972	104,818	321,652
Contributions from employers	--	6,961	267,847	42,209	116,734
Rollover contributions	--	--	95,165	24,002	12,788
Interest and dividend income	--	17	91,694	--	73,808
Net unrealized gain (loss) in fair value of investments	--	--	764,476	(7,522)	(148,512)
Net realized gain (loss) from disposition of investments	--	54,850	121,813	(4,551)	26,218
Other income	6	--	332,608	6,289	180,490
Total additions	6	80,301	2,463,575	165,245	583,178
Deductions from net assets attributed to:					
Benefits paid to participants	188	19,029	348,150	8,727	64,963
Administration fees	--	1,978	23,278	2,386	10,031
Total deductions	188	21,007	371,428	11,113	74,994
Net increase (decrease) before interfund transfers	(182)	59,294	2,092,147	154,132	508,184
Interfund transfers, net	(105,078)	(1,854,337)	172,978	(6,456)	232
Net increase (decrease) after interfund transfers	(105,260)	(1,795,043)	2,265,125	147,676	508,416
Net assets available for benefits at December 31, 1997	\$ --	--	6,404,345	612,631	2,291,226

	Franklin Balance Sheet Investment Fund	Franklin U.S. Government Securities Fund	Chase Bank Money Market Fund	Janus Balanced Fund	Loan Fund	Total
Net assets available for benefits at December 31, 1996	3,527,963	2,010,264	5,281,873	597,558	1,832,432	21,537,378
Contributions from participants	602,624	302,458	758,317	512,517	--	3,410,831
Contributions from employers	206,069	109,044	304,236	180,145	--	1,233,245
Rollover contributions	17,696	--	92,309	32,825	--	274,785
Interest and dividend income	90,696	162,038	259,531	290,891	167,132	1,135,807
Net unrealized gain (loss) in fair value of investments	520,512	44,333	--	89,748	--	1,263,035
Net realized gain (loss) from disposition of investments	128,137	2,584	--	70,275	--	399,326
Other income	250,229	31	6,695	148,557	--	924,905
Total additions	1,815,963	620,488	1,421,088	1,324,958	167,132	8,641,934
Deductions from net assets attributed to:						
Benefits paid to participants	289,685	144,769	1,057,534	206,482	192,253	2,331,780
Administration fees	19,617	9,387	5,705	12,311	--	84,693
Total deductions	309,302	154,156	1,063,239	218,793	192,253	2,416,473
Net increase (decrease) before interfund transfers	1,506,661	466,332	357,849	1,106,165	(25,121)	6,225,461
Interfund transfers, net	(41,118)	(33,680)	(789,816)	2,302,832	354,443	--
Net increase (decrease) after interfund transfers	1,465,543	432,652	(431,967)	3,408,997	329,322	6,225,461
Net assets available for benefits at December 31, 1997	4,993,506	2,442,916	4,849,906	4,006,555	2,161,754	27,762,839

(a) This investment fund option was eliminated during 1997. All funds were

transferred to the Janus Balanced Fund.

8

11

KIRBY 401(k) PLAN
NOTES TO FINANCIAL STATEMENTS
(MODIFIED CASH BASIS)

(4) RELATED PARTY TRANSACTIONS

Certain plan investments are shares of mutual funds managed by Chase Bank of Texas. Chase Bank of Texas is the trustee as defined by the Plan, and therefore, these transactions qualify as party-in-interest.

(5) FEDERAL INCOME TAXES

The Plan obtained its latest determination letter on December 30, 1996 in which the Internal Revenue Service stated that the Plan, as then designed, was in compliance with the applicable requirements of the Internal Revenue Code. The Plan has been amended since receiving this determination letter. However, the Plan Administrator believes the Plan is currently designed and operated in compliance with the applicable requirements of the Code. Therefore, the Plan Administrator believes the Plan was qualified and the related trust was tax-exempt as of December 31, 1997. The Company intends that the Plan and its related trust continue to so qualify.

A participant is not taxed on employer contributions when made; instead, taxation is deferred until the amount credited to the participant's account is distributed or made available to him or, in the event of the participant's death, to a beneficiary or an estate. Amounts distributed or made available to employees or their beneficiaries, in excess of their contributions, are taxable according to the provisions of the Internal Revenue Code.

(Continued)

9

12

Schedule 1

KIRBY 401(k) PLAN
ITEM 27A - SCHEDULE OF ASSETS HELD FOR INVESTMENT PURPOSES
(MODIFIED CASH BASIS)

December 31, 1997

Identity of issue, borrower, lessor or similar party	Description of asset	Cost	Current value
Common Trust Fund:			
Chase Bank N.A.	Chase Money Market Fund	\$ 4,850,393	4,850,393
Mutual Funds:			
Fidelity	Fidelity Advisor Growth Opportunities Fund	\$ 5,219,092	6,409,261
Templeton	Templeton Foreign Fund	2,321,647	2,293,168
Franklin	Franklin Balance Sheet Investment Fund	4,283,299	4,997,058
Franklin	Franklin Custodian Funds - U.S. Government Securities Series	2,409,221	2,444,203
Janus	Janus Balanced Fund	3,931,111	4,008,464
Total mutual funds		\$ 18,164,370	20,152,154
Common stock:			
Kirby Corporation	Common stock	\$ 593,114	612,631
Participant loans - with interest rates ranging from 7% to 10% and having maturities of one to five years		\$ 2,161,754	2,161,754

Chase Bank N.A. represents a party in interest to the Plan.

See accompanying independent auditors' report.

KIRBY 401(k) PLAN

ITEM 27 (d) - SCHEDULE OF REPORTABLE TRANSACTIONS

For the year ended December 31, 1997

Identity of issuer	Description of assets	Number of transactions	Purchase price
SINGLE TRANSACTIONS:			
Chase Bank of Texas, N.A.	Janus Balanced Fund	1	\$ 1,358,352
Chase Bank of Texas, N.A.	Fidelity Advisor Balanced Fund	1	--
SERIES TRANSACTIONS:			
Chase Bank of Texas, N.A.	Fidelity Advisor Growth Opportunities Fund	152	2,536,473
Chase Bank of Texas, N.A.	Franklin Balance Sheet Investment Fund	145	1,959,211
Chase Bank of Texas, N.A.	Janus Balanced Fund	147	2,583,073
Chase Bank of Texas, N.A.	Templeton Foreign Fund	118	1,121,330
Chase Bank of Texas, N.A.	Loan Fund	75	1,273,466
Chase Bank of Texas, N.A.	Chase Money Market Funds	132	3,707,400

Identity of issuer -----	Selling Price -----	Cost of asset -----	Value of asset on transaction date -----	Net gain -----
SINGLE TRANSACTIONS:				
Chase Bank of Texas, N.A.	--	1,358,352	--	--
Chase Bank of Texas, N.A.	1,358,352	1,234,705	1,234,705	123,647
SERIES TRANSACTIONS:				
Chase Bank of Texas, N.A.	--	2,536,473	--	--
Chase Bank of Texas, N.A.	--	1,959,211	--	--
Chase Bank of Texas, N.A.	--	2,583,073	--	--
Chase Bank of Texas, N.A.	--	1,121,330	--	--
Chase Bank of Texas, N.A.	--	1,273,466	--	--
Chase Bank of Texas, N.A.	--	3,707,400	--	--
Chase Bank of Texas, N.A.	4,138,705	4,138,705	4,138,705	--

Note: The above transactions represent "reportable transactions" as defined in Section 2520.103-6 of ERISA. Chase Bank of Texas, N.A. represents a party in interest to the Plan.

See accompanying independent auditors' report.

EXHIBIT INDEX

[KPMG PEAT MARWICK LLP LETTERHEAD]

Independent Auditors Consent

Plan Administrator
Kirby 401(k) Plan:

We consent to the incorporation by reference in the registration statement No. 33-57625 on Form S-8 of Kirby Corporation of our report dated June 19, 1998 related to the statements of net assets available for benefits of the Kirby 401(k) Plan as of December 31, 1997 and 1996, and the related statements of changes in net assets available for plan benefits for the years then ended and the related supplemental schedules, which report appears in the December 31, 1997 annual report on Form 11-K of the Kirby 401(k) Plan.

KPMG Peat Marwick LLP

Houston, Texas
June 29, 1998