PIONEER HIGH INCOME TRUST Form N-Q August 29, 2006

OMB APPROVAL

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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM N-Q

CERTIFIED SHAREHOLDER REPORT OF REGISTERED MANAGEMENT INVESTMENT COMPANIES

Investment Company Act file number 811-21043

Pioneer High Income Trust (Exact name of registrant as specified in charter)

60 State Street, Boston, MA 02109 (Address of principal executive offices) (ZIP code)

Dorothy E. Bourassa, Pioneer Investment Management, Inc., 60 State Street, Boston, MA 02109

(Name and address of agent for service)

Registrant's telephone number, including area code: (617) 742-7825

Date of fiscal year end: March 31

Date of reporting period: June 30, 2006

Form N-Q is to be used by management investment companies, other than small business investment companies registered on Form N-5 (239.24 and 274.5 of this chapter), to file reports with the Commission, not later than 60 days after close of the first and third fiscal quarters, pursuant to Rule 30b1-5under the Investment Company Act of 1940 (17 CFR 270.30b-5). The Commission may use the information provided on Form N-Q in its regulatory, disclosure review, inspection, and policymaking roles.

A registrant is required to disclose the information specified by Form N-Q, and the Commission will make this information public. A registrant is not required to respond to the collection of information contained in Form N-Q unless the Form displays a currently valid Office of Management and Budget ("OMB") control number. Please direct comments concerning the accuracy of the information collection burden estimate and any suggestions for reducing the burden to Secretary, Securities and Exchange Commission, 450 Fifth Street, NW, Washington, DC 20549-0609. The OMB has reviewed this collection of information under the clearance requirements of 44 U.S.C. ss. 3507.

ITEM 1. Schedule of Investments.

Pioneer High Income Trust

SCHEDULE OF INVESTMENTS 6/30/06 (unaudited)

Principal Amount USD (\$) 425,000 4,860,000	S&P/Mood Ratings (unaudit BB/Ba3 NR/Ba2	•	
4,400,000	NR/NR	CORPORATE BONDS & NOTES - 117.4% of Net Asse Energy - 11.0% Oil & Gas Drilling - 1.1% DDI Holding AS, 9.3%, 1/19/12 (144A)	\$4,521,000
2,100,000 2,380,000 2,000,000	(a) CCC+/B3 NR/B1 NR/NR	Oil & Gas Equipment & Services - 1.5% Pipe Acquisition Finance Plc, 11.67%, 12/15 SemGroup L.P., 8.75%, 11/15/15 (144A) Sevan Marine ASA, 9.75%, 1/31/11 (144A)	\$2,068,500 2,368,100 2,010,000 \$6,446,600
9,534,000 4,080,000 5,000,000 1,250,000 4,500,000 5,300,000 3,135,000		Oil & Gas Exploration & Production - 7.7% Baytex Energy, Ltd., 9.625%, 7/15/10 Clayton William Energy, 7.75%, 8/1/13 Energy Partners, Ltd., 8.75%, 8/1/10 Hilcorp Energy I, LP/Hilcorp Finance Co., 9 Methanex Corp., 8.75%, 8/15/12 1PetroQuest Energy, Inc., 10.375%, 5/15/12 Stone Energy Corp., 6.75%, 12/15/14	\$9,843,855 3,753,600 4,812,500
820,000 2,188,000	B-/B2 B-/B3	Oil & Gas Storage & Transportation - 0.7% Targa Resources, Inc., 8.5%, 11/1/13 (144A) Transmontaigne, Inc., 9.125%, 6/1/10 Total Energy	\$791,300 2,330,220 \$3,121,520 \$47,222,581
4,635,000 2,920,000 5,000,000 3,300,000 4,280,000	(a)B-/B3	Materials - 26.1% Commodity Chemicals - 5.1% ARCO Chemical Co., 9.8%, 2/1/20 Aventine Renewable Energy, 11.329%, 12/15/1 Invista, 9.25%, 5/1/12 (144A) Tronox Worldwide LLC/Tronox Finance Corp., VeraSun Energy Corp., 9.875%, 12/15/12 (144	5,250,000 3,399,000
3,200,000 810,000 2,200,000 6,060,000 7,870,000 2,000,000 1,190,000	B-/B2 BB/NR BB/NR (b) B/Caa2 B/B3 B-/B2 B-/B2	Diversified Chemicals - 7.0% Basell Finance Co., 8.1%, 3/15/27 (144A) Braskem SA, 9.375%, 6/1/15 (144A) Braskem SA, 11.75%, 1/22/14 Crystal US Holdings, 10.5%, 10/1/14 Huntsman International LLC, 10.125%, 7/1/09 Ineos Group Holdings Plc., 8.5%, 2/15/16 (1) Nell AF S.a.r.l., 8.375%, 8/15/15 (144A)	\$2,896,000 814,050 2,453,000 4,741,950 10,213,983

500,000 3,904,000	B-/B2 B-/Caa1	Nell AF S.a.r.l., 8.375%, 8/15/15 (144A) Rhodia SA, 9.25%, 6/1/11	480,625 5,191,556 \$30,200,483
1,000,000 5,970,000		Specialty Chemicals - 1.6% Ferro Corp., 7.625%, 5/1/13 PolyOne Corp., 8.875%, 5/1/12	\$982,500 5,992,388 \$6,974,888
2,225,000 4,185,000	CCC+/Caa B-/B3	Construction Materials - 1.5% 1RMCC Acquisition Co., 9.5%, 11/1/12 (144A) U.S. Concrete, Inc., 8.375%, 4/1/14	\$2,314,000 4,226,850 \$6,540,850
4,020,000 3,985,000	BB-/B1 B-/B2	Metal & Glass Containers - 1.9% Greif Bros. Corp., 8.875%, 8/1/12 Vitro Envases, 10.75%, 7/23/11 (144A)	\$4,231,050 4,104,550 \$8,335,600
	(i)CCC+/Caa (i)B-/B3 B-/B3	Paper Packaging - 2.3% 2Graham Packaging Co., L.P., 9.875%, 10/15/1 Graphic Packaging International, Inc., 9.5% MDP Acquisitions Plc, 10.125%, 10/1/12	
1,440,000 1,200,000 2,180,000	B/B3 BB/Ba3 B-/B3	Aluminum - 1.1% Aleris International, Inc., 9.0%, 11/15/14 Asia Aluminum Holdings, Ltd., 8.0%, 12/23/1 Indalex Holding Corp., 11.5%, 2/1/14 (144A)	\$1,465,200
3,300,000 4,600,000 2,599,000	B-/B3 B+/B1 B-/Caa1	Diversified Metals & Mining - 2.5% American Rock Salt Co., LLC, 9.5%, 3/15/14 Freeport-McMoRan Copper & Gold, Inc., 10.12 OM Group, Inc., 9.25%, 12/15/11	\$3,341,250 4,881,750 2,676,970 \$10,899,970
2,900,000 630,000 2,485,000	BB/Ba2 BB/Ba2 B-/B3	Steel - 1.5% CSN Islands VIII Corp., 9.75%, 12/16/13 (14 CSN Islands IX Corp., 10.5%, 1/15/15 (144A) Edgen Acquisition Corp., 9.875%, 2/1/11	
1,645,000	B-/B3	Forest Products - 0.3% Mandra Forestry Holdings, Ltd., 12.0%, 5/15	\$1,266,650

Pioneer High Income Trust

SCHEDULE OF INVESTMENTS 6/30/06 (unaudited) (continued)

Principal	S&P/Mood	ly's	
Amount	Ratings		
USD (\$)	(unaudit	ed)	Value
		Paper Products - 1.3%	
5,450,000	B-/B2	Exopack Holding Corp., 11.25%, 2/1/14 (144A	\$5,504,500
		Total Materials	\$112,370,529
		Capital Goods - 10.9%	
		Building Products - 0.7%	
2,885,000 (a)B/B3	Builders FirstSource, Inc., 9.42%, 2/15/12	\$2,957,125
		Construction & Engineering - 3.3%	
1,250,000	B+/Ba3	Dycom Industries, Inc., 8.125%, 10/15/15	\$1,253,125
27,300,000(b) NR/NR	Kvaerner ASA, 0.0%, 10/30/11	4,332,393
8,897,000 (b) NR/NR	Kvaerner ASA, 0.0%, 10/30/11	8,563,362
			\$14,148,880
		Heavy Electrical Equipment - 2.0%	

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4,790,000 3,975,000	CCC+/B3 B/B2	Altra Industrial Motion, 9.0%, 12/1/11 Hawk Corp., 8.75%, 11/1/14	\$4,813,950 3,994,875 \$8,808,825
2,000,000 5,000,000 1,800,000 5,475,000	B-/B3 B+/Ba3 B+/B1 CCC+/Caa	Construction & Farm Machinery & Heavy Truck Accuride Corp., 8.5%, 2/1/15 Commercial Vehicle Group, Inc., 8.0%, 7/1/1 Greenbrier Companies, Inc., 8.375%, 5/15/15 1Stanadyne Corp., 10.0%, 8/15/14	- 3.2% \$1,920,000 4,787,500
1,217,000	B+/B2	<pre>Industrial Machinery - 0.3% Manitowac Co., Inc., 10.5%, 8/1/12</pre>	\$1,320,445
2,845,000 2,500,000	B/B3 CCC+/Caa	Trading Companies & Distributors - 1.4% Interline Brands, Inc., 8.125%, 6/15/14 1Ray Acquisition SCA, 9.375%, 3/16/15 (144A) Total Capital Goods	\$2,837,888 3,340,494 \$6,178,382 \$47,078,532
3,500,000 1,850,000 4,455,000 2,980,000 1,500,000 2,970,000 2,745,000	B/B2 B-/Caa1 CCC+/B3 (a)B-/Caa1	Cornell Companies, Inc., 10.75%, 7/1/12 FS Funding AS, 9.489%, 5/15/16 (144A) 1Park-Ohio Industries, Inc., 8.375%, 11/15/1 United Rentals North America, Inc., 7.75%,	\$3,395,000 1,988,750 4,388,175 3,169,975 1,870,037 2,613,600 2,607,750 \$20,033,287
2,700,000	B-/B3	Human Resource & Employment Services - 0.6% Knowledge Learning Corp., Inc., 7.75%, 2/1/	
4,088,000 5,020,000 5,800,000		Environmental & Facilities Services - 3.5% Clean Harbors, Inc., 11.25%, 7/15/12 1Hydrochem Industrial Services, Inc., 9.25%, Waste Services, Inc., 9.5%, 4/15/14 Total Commercial Services & Supplies	\$4,599,000 4,844,300 5,858,000 \$15,301,300 \$37,805,087
1,063,394 2,065,000 2,440,000 3,200,000 1,127,990 5,000,000	CCC+/Caa	Transportation - 9.4% Airlines - 3.3% American Airlines, Inc., 7.379%, 11/23/17 2AMR Corp., 9.0%, 8/1/12 2AMR Corp., 9.8%, 10/1/21 2AMR Corp., 10.2%, 3/15/20 Continental Airlines, Inc., Series B, 8.499 Continental Airlines, Inc., Series D, 7.568	2,039,188 2,275,300 3,000,000 1,107,336
860,000 3,899,000 8,000,000 6,470,000 1,060,000 2,900,000		Marine - 5.4% CMA CGM SA, 7.25%, 2/1/13 (144A) 2H-Lines Finance Holding, 0.0%, 4/1/13 Seabulk International, Inc., 9.5%, 8/15/13 Ship Finance International, Ltd., 8.5%, 12/ Stena AB, 7.0%, 12/1/16 Trailer Bridge, Inc., 9.25%, 11/15/11	\$786,900 3,343,392 8,840,000
2,250,000	B-/B3	Railroads - 0.7% Grupo Transportacion Ferroviaria Mexicana, 9.375%, 5/1/12	SA de CV, \$2,396,250
400,000	B-/B3	Grupo Transportacion Ferroviaria Mexicana, 10.25%, 6/15/07	

Automobiles & Components - 2.6% Auto Parts & Equipment - 1.2% B-/Caal Cooper-Standard Automotive, Inc., 8.375%, 1 \$2,831,612 3,590,000 2,000,000 B-/B3 UGS Corp., 10.0%, 6/1/12 2,150,000 \$4,981,612 Pioneer High Income Trust SCHEDULE OF INVESTMENTS 6/30/06 (unaudited) (continued) S&P/Moody's Principal Ratings Amount USD (\$) Value (unaudited) Tires & Rubber - 1.4% 6,510,000 (i)B-/B3 Goodyear Tire & Rubber Co., 9.0%, 7/1/15 \$6,217,050 Total Automobiles & Components \$11,198,662 Consumer Durable & Apparel - 1.0% Homebuilding - 1.0% 1,100,000 (i)B+/Ba3 WCI Communities, Inc., 6.625%, 3/15/15 \$913,000 William Lyon Homes, Inc., 7.5%, 2/15/14 3,200,000 B/B2 2,656,000 700,000 B/B2 William Lyon Homes, Inc., 7.625%, 12/15/12 581,000 Total Consumer Durable & Apparel \$4,150,000 Consumer Services - 3.2% Casinos & Gaming - 2.1% 4,500,000 В/В2 Little Traverse Bay Bands of Odawa Indians, \$4,443,750 1,700,000 B/B3 Pokagon Gaming Authority, 10.375%, 6/15/14 1,757,375 3,050,000 (i)B-/Caal Trump Entertainment Resorts, Inc., 8.5%, 6/ 2,931,813 \$9,132,938 Hotels, Resorts & Cruise Lines - 1.1% 2,435,000 B+/B1 Galaxy Entertainment Finance Co., Ltd., 9.8 \$2,532,400 1,980,000 (a)B/B3 HRP Myrtle Beach Operations LLC, 9.818%, 4/ 1,960,200

		Total Consumer Services	\$4,492,600 \$13,625,538
2,170,000 3,750,000	BB-/B1 B-/B2	Media - 4.3% Broadcasting & Cable TV - 1.8% Cablemas SA de CV, 9.375%, 11/15/15 (144A) Kabel Deutschland GMBH, 10.75%, 7/1/14 (144	
3,000,000	B-/B3	Movies & Entertainment - 0.7% LodgeNet Entertainment Corp., 9.5%, 6/15/13	
	B/B1 (b)B-/Caa2	Publishing - 1.8% Sheridan Acquisition Corp., 10.25%, 8/15/11 Visant Holding Corp., 0.0%, 12/1/13 Total Media	\$4,913,569 2,904,500 \$7,818,069 \$18,546,608
4,735,000	B-/Caa1	Retailing - 3.6% Distributors - 1.1% Intcomex, Inc., 11.75%, 1/15/11 (144A)	\$4,699,487
3,800,000	BBB-/Baa	Department Stores - 0.9% 3J.C. Penney Co., Inc., 8.125%, 4/1/27	\$3,926,772
1,545,000	(c)CCC+/Caa	Specialty Stores - 1.6% 2AAC Group Holding Corp., 12.75%, 10/1/12 (1	\$1,545,000

1,980,000 3,180,000		Hines Nurseries, Inc., 10.25%, 10/1/11 Nutro Products, Inc., 10.75%, 4/15/14 (144A Total Retailing	1,900,800 3,271,425 \$6,717,225 \$15,343,484
3,350,000 550,000		Food & Staples Retailing - 1.5% Drug Retail - 0.7% Duane Reade, Inc., 9.75%, 8/1/11 Duane Reade, Inc., 9.829% 12/15/10	\$2,696,750 533,500 \$3,230,250
3,380,000	B+/B2	Food Distributors - 0.8% Wornick Co., 10.875%, 7/15/11 Total Food & Staples Retailing	\$3,405,350 \$6,635,600
5,885,000	BBB/Baa3	Food, Beverage & Tobacco - 2.0% Brewers - 1.6% Cia Brasileira de Bebida, 10.5%, 12/15/11	\$6,841,312
2,000,000	BB/Ba2	Agricultural Products - 0.4% Cosan SA Industria e Comercio, 8.25%, 2/28/ Total Food, Beverage & Tobacco	\$1,800,000 \$8,641,312
1,800,000 3,800,000	B-/Caa1 CCC+/B3	Health Care Equipment & Services - 4.4% Health Care Equipment & Services - 1.3% Accellent, Inc., 10.5%, 12/1/13 Hanger Orthopedic Group, Inc., 10.25%, 6/1/	\$1,840,500 3,762,000 \$5,602,500
2,160,000 2,900,000 4,055,000	B-/Caal (a) CCC+/NR CCC+/B3	Health Care Services - 2.1% AMR HoldCo/Emcare HoldCo, 10.0%, 2/15/15 Medical Services Co., 12.568%, 10/15/11 Rural/Metro Corp., 9.875%, 3/15/15	\$2,262,600 2,537,500 4,191,856 \$8,991,956

Pioneer High Income Trust

SCHEDULE OF INVESTMENTS 6/30/06 (unaudited) (continued)

Principal Amount	S&P/Mood Ratings	y's	
USD (\$)	(unaudit	ed)	Value
		Managed Health Care - 1.0%	
4,400,000	B-/Caa1		\$4,455,000
		Total Health Care Equipment & Services	\$19,049,456
		Dharmanatianla (Diatarbaniana 1 (0	
		Pharmaceuticals & Biotechnology - 1.6% Pharmaceuticals - 1.6%	
6,650,000	CCC+/Caa	1Warner Chilcott Corp., 8.75%, 2/1/15	\$6,849,500
0,030,000	ccc+/ caa	Total Pharmaceuticals & Biotechnology	\$6,849,500
			10,000,000
		Diversified Financials - 4.2%	
		Specialized Finance - 3.5%	
6,135,000	B+/B3	Dollar Financial Group, 9.75%, 11/15/11	\$6,595,125
7,950,000	BBB/Baa3	GATX Financial Corp., 8.875%, 6/1/09	8,485,933
			\$15,081,058
		Consumer Finance - 0.7%	
3,000,000	B+/Ba2	Ford Motor Credit Co., 7.875%, 6/15/10	\$2,767,476
		Total Diversified Financials	\$17,848,534

5,725,000	B-/B2	<pre>Insurance - 2.5% Life & Health Insurance - 1.3% Presidential Life Corp., 7.875%, 2/15/09</pre>	\$5,696, 375
5,300,000	BB+/Ba1	Multi-Line Insurance - 1.2% Allmerica Financial Corp., 7.625%, 10/15/25 Total Insurance	\$5,312,895 \$11,009,270
640,000	CCC+/Caa	Software & Services - 0.3% Data Processing & Outsourced Services - 0.2 liPayment, Inc., 9.75%, 5/15/14 (144A)	% \$636 , 800
500,000	CCC+/Caa	Application Software - 0.1% 1Serena Software, Inc., 10.375%, 3/15/16 (14 Total Software & Services	\$502,500 \$1,139,300
2,900,000	B/B1	Technology Hardware & Equipment - 3.5% Communications Equipment - 0.7% Lucent Technologies, Inc., 7.25%, 7/15/06	\$2,910,875
215,000	B/B2	Electronic Equipment Manufacturers - 0.0% General Cable Corp., 9.5%, 11/15/10	\$227,900
11,830,000	B+/Ba3	Office Electronics - 2.8% Xerox Capital Trust I, 8.0%, 2/1/27 Total Technology Hardware & Equipment	\$11,874,363 \$15,013,138
1,500,000 3,900,000 3,950,000 2,200,000 (b 5,150,000 1,975,000 (b 3,230,000	CCC+/Caa) CCC+/Caa NR/B3 B-/B3 B-/B1) B+/B1 B+/B1) NR/NR BB-/Ba3) CCC/Caa2 B-/B2 B-/Caa1	Telecommunication Services - 13.7% Integrated Telecommunication Services - 2.79 Eschelon Operating Co., 8.375%, 3/15/10 GCI, Inc., 7.25%, 2/15/14 Tele Norte Leste Participacoes SA, 8.0%, 12 Wireless Telecommunication Services - 11.0% Alamosa Delaware, Inc., 12.0%, 7/31/09 1Cell C Property, Ltd., 11.0%, 7/1/15 (144A) 1Cleveland Unlimited, Inc., 13.579%, 12/15/1 Digicel, Ltd., 9.25%, 9/1/12 (144A) Horizon PCS, Inc., 11.375%, 7/15/12 Hughes Network Systems, LLC/HNS Finance Cor Inmarsat Finance II Plc, 0.0%, 11/15/12 Mobifon Holdings BV, 12.5%, 7/31/10 Mobile Satellite Venture, 0.0%, 4/1/13 (144 Mobile Telesystems, 9.75%, 1/30/08 (144A) Rural Cellular Corp., 10.899%, 11/1/12 (144 Stratos Global Corp., 9.875%, 2/15/13 (144A) UbiquiTel Operating Co., 9.875%, 3/1/11 Zeus Special Subsidiary, Ltd., 0.0%, 2/1/15 Total Telecommunication Services	\$6,791,550 3,884,125 718,640 \$11,394,315 \$5,936,187 1,356,875 3,004,887 1,567,500 4,382,625 3,871,000 1,872,750 5,832,375 1,086,250 3,330,938 3,078,750 3,948,000 6,008,438
2,000,000 1,777,500 1,000,000 6,207,183	B+/Ba3 BBB-/Baa NR/NR NR/NR	Utilities - 2.8% Electric Utilities - 2.7% Aes Chivor SA ESP, 9.75%, 12/30/14 (144A) 3Empresa Electrica Guacolda SA, 8.625%, 4/30 Mirant JPSCo. Finance, Ltd., 11.0%, 7/6/16 Ormat Funding Corp., 8.25%, 12/30/20	\$2,150,000 1,918,806 1,000,000 6,362,363 \$11,431,169
700,000	B/B2	Multi-Utilities - 0.1% Reliant Energy, Inc., 6.75%, 12/15/14 Total Utilities	\$644,000 \$12,075,169

TOTAL CORPORATE BONDS & NOTES (Cost \$478,478,867)

\$504,725,433

Pioneer High Income Trust

SCHEDULE OF INVESTMENTS 6/30/06 (unaudited) (continued)

Principal Amount USD (\$)	S&P/Mood Ratings (unaudit		Value
4,000,000	B/B1	CONVERTIBLE BONDS & NOTES - 0.9% of Net Associated Goods - 0.9% Electrical Components & Equipment - 0.9% SCI Systems, Inc., 3.0%, 3/15/07 Total Capital Goods TOTAL CONVERTIBLE BONDS & NOTES	\$3,870,000 \$3,870,000
		(Cost \$3,823,015)	\$3,870,000
1,650,000 3,000,000 3,665,000 4,250,000	BBB-/Ba1 BBB-/Ba1	MUNICIPAL BONDS - 9.3% of Net Assets Indiana - 3.0% East Chicago Industrial Pollution Ctl. Rev. East Chicago Industrial Pollution Ctl. Rev. Indiana Dev. Fin. Auth. Pollution Ctl. Rev. Indiana Dev. Fin. Auth. Rev., 5.75%, 10/1/1	3,052,650 3,746,400
1,000,000 (e) AAA/NR	Massachusetts - 0.2% Massachusetts Health & Edl. Facs. Rev., RIB	\$1,044,620
3,000,000 (d)NR/NR	Michigan - 0.4% Wayne Charter County, Spl. Arpt. Facs. Rev.	\$1,669,890
4,525,000 4,000,000	B/Caa2 BBB/Baa3	New Jersey - 2.2% New Jersey Economic Dev. Auth. Rev., 7.0%, Tobacco Settlement Financing Corp., 7.0%, 6	
3,475,000	BB-/Ba2	New York - 0.9% New York City Ind. Dev. Agcy., British Airw	\$3,905,170
4,800,000 2,000,000	NR/NR NR/NR	North Carolina - 1.6% Charlotte, Spl. Facs. Rev., Charlotte/Dougl Charlotte, Spl. Facs. Rev., Charlotte/Dougl	
3,200,000 (e)AAA/Aa1	San Antonio, TX, Elec. & Gas, RIB, 7.608%,	\$4,119,552
		TOTAL MUNICIPAL BONDS (Cost \$31,861,942)	\$39,772,165
		SOVEREIGN DEBT OBLIGATIONS - 2.2% of Net As Brazil - 0.8%	sets
4,800,000,(b)BB/Ba1	Banco Nacional de Desenvolimento Bndes, 8.0 Ecuador - 0.8%	\$3,407,497
3,515,000 (b)CCC+/Caa	1Federal Republic of Ecuador, 9.0%, 8/15/30	\$3,400,763
2,320,000 (b)BBB/Baa2	Russia - 0.6% Russian Federation, 5.0%, 3/31/30 TOTAL SOVEREIGN DEBT OBLIGATIONS	\$2,469,176
		(Cost \$6,055,162)	\$9,277,436

COMMON STOCKS - 0.1% of Net Assets Shares Pharmaceuticals & Biotechnology - 0.1% Pharmaceuticals - 0.1% 17,818 (i) Teva Pharmaceutical Industries Ltd. \$562,871 Total Pharmaceuticals & Biotechnology \$562,871 TOTAL COMMON STOCKS (Cost \$752,276) \$562,871 WARRANTS - 0.0% of Net Assets (f) Materials - 0.0% Forest Products - 0.0% 1,645 Mandra Forestry Holdings, Ltd. - CW13, Expi \$-Total Materials \$-Transportation - 0.0% Trucking - 0.0% 4,525 Atlantic Express Transportation Corp., Expi \$-Total Transportation TOTAL WARRANTS (Cost \$0) \$-

Pioneer High Income Trust

SCHEDULE OF INVESTMENTS 6/30/06 (unaudited) (continued)

Principal Amount

USD (\$) TEMPORARY CASH INVESTMENTS - 7.5% of Net Assets

Repurchase Agreement - 0.8%

3,300,000 Lehman Brothers, Inc., 4.55%, dated 6/30/06, repurchase

price of \$3,300,000 plus accrued

interest on 7/3/06 collateralized by \$3,471 \$3,300,000

Shares Security Lending Collateral - 6.7%

28,836,932 Securities Lending Investment Fund, 5.161% \$28,836,932

TOTAL TEMPORARY CASH INVESTMENTS

(Cost \$32,136,932) \$32,136,932

TOTAL INVESTMENTS IN SECURITIES - 138.6%

(Cost \$558,393,185) (g) (h) \$595,545,063 OTHER ASSETS AND LIABILITIES - (3.4)% \$(14,556,701)

PREFERRED SHARES AT REDEMPTION VALUE,

INCLUDING DIVIDENDS PAYABLE - (35.2)% \$(151,147,723)
NET ASSETS APPLICABLE TO COMMON SHAREOWNERS \$429,840,639

Pioneer High Income Trust

SCHEDULE OF INVESTMENTS 6/30/06 (unaudited) (continued)

NR Security not rated by S&P or Moody's.

(144A) Security is exempt from registration under Rule 144A of the Securities Act of 1933. Such

securities may be resold normally to qualified institutional buyers in a transaction exempt

 $\,$ from registration. At June 30, 2006, the value of these securities amounted to

\$156,079,968 or 36.3% of total net assets applicable to common shareowners.

- (a) Floating rate note. The rate shown is the rate at June 30, 2006.
- (b) Debt obligation initially issued at one coupon which converts to a higher coupon at a specific date.

The rate shown is the rate at June 30, 2006.

- (c) Represents a pay-in-kind security which may pay interest in additional principal.
 - (d) Security is in default and is non-income producing.
- (e) The interest rate is subject to change periodically and inversely based upon prevailing market rates. The $\,$

rate shown is the rate at June 30, 2006.

- (f) Non-income producing.
- $\,$ (g) $\,$ At June 30, 2006, the net unrealized gain on investments based on cost for federal income tax purposes

of \$558,905,758 was as follows:

Aggregate gross unrealized gain for all investments in which there is an excess of value over tax cost \$

43,354,244

Aggregate gross unrealized loss for all investments in which there is an excess of tax cost over value

(6,714,939)

Net unrealized gain

\$

응

36,639,305

For financial reporting purposes net unrealized gain was \$37,151,878 and cost of

investments aggregated \$558,393,185.

(h) Distribution of investments by country of issue, as a percentage of total holdings,

is as follows:

United States

Norway

4.3

Canada

3.1

Brazil

2.7

France

1.6

Mexico

1.5

1.0

Romania

Great Britain

1.0

Russia

1.0

Germany

0.9

Cayman Islands

0.6

Ecuador

0.6

Netherlands

0.5

```
Ireland
0.5
             Bermuda
0.4
             India
0.4
             Colombia
0.4
             Luxembourg
0.3
             Chile
0.3
             Denmark
0.3
             South Africa
0.2
             China
0.2
             Jamaica
0.2
             Sweden
0.2
             Israel
0.1
      (i)
             At June 30, 2006, the following securities were out on loan:
             Principal Amount/
              Shares Description
                    75AAC Group Holding Corp., 12.75%, 10/1/12 (1 $
755,000
                2,044,AMR Corp., 9.0%, 8/1/12
2,018,746
                  1,45Baytex Energy, Ltd., 9.625%, 7/15/10
1,497,125
                6,444,Goodyear Tire & Rubber Co., 9.0%, 7/1/15
6,154,879
                   1,6Graham Packaging Co., L.P., 9.875%, 10/15/1
1,651,469
                 5,484Graphic Packaging International, Inc., 9.5%
5,429,160
                     1Mobile Satellite Venture, 0.0%, 4/1/13 (144
55,000
                  1,74PolyOne Corp., 8.875%, 5/1/12
1,750,038
                      Teva Pharmaceutical Industries Ltd.
557,248
              $ 3,019Trump Entertainment Resorts, Inc., 8.5%, 6/
2,902,494
                   2,7United Rentals North America, Inc., 7.75%,
2,581,673
                 1,000WCI Communities, Inc., 6.625%, 3/15/15
830,000
                 2,249Zeus Special Subsidiary, Ltd., 0.0%, 2/1/15
1,551,982
                                                                   $
27,734,814
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RIB Residual Interest Bonds

ITEM 2. CONTROLS AND PROCEDURES.

(a) Disclose the conclusions of the registrant's principal executive officer or officers and principal financial officer or officers, or persons performing similar functions, about the effectiveness of the registrant's disclosure controls and procedures (as defined in Rule 30a-3(c) under the Act (17 CFR 270.30a-3(c))) as of a date within 90 days of the filing date of the report that includes the disclosure required by this paragraph, based on their evaluation of these controls and procedures required by Rule 30a-3(b) under the Act (17 CFR270.30a-3(b))) and Rule 13a-15(b) or 15d-15(b) under the Exchange Act (17 CFR240.13a-15(b) or 240.15d-15(b)).

The registrant's principal executive officer and principal financial officer have concluded that the registrant's disclosure controls and procedures are effective based on their evaluation of these controls and procedures as of a date within 90 days of the filing date of this report.

(b) Disclose any change in the registrant's internal controls over financial reporting (as defined in Rule 30a-3(d) under the Act (17 CFR270.30a-3(d)) that occurred during the registrant's last fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting.

There were no significant changes in the registrant's internal control over financial reporting that occurred during the second fiscal quarter of the period covered by this report that have materially affected, or are reasonably likely to materially affect, the registrant's internal control over financial reporting.

The registrant's principal executive officer and principal financial officer, however, voluntarily are reporting the following information:

In August of 2006 the registrant's investment adviser enhanced its internal procedures for reporting performance information required to be included in prospectuses. Those enhancements involved additional internal controls over the appropriateness of performance data generated for this purpose. Such enhancements were made following an internal review which identified prospectuses relating to certain classes of shares of a limited number of registrants where, inadvertently, performance information not reflecting the deduction of applicable sales charges was included. Those prospectuses were revised, and the revised prospectuses were distributed to shareholders.

ITEM 3. EXHIBITS.

(a) A separate certification for each principal executive officer and principal financial officer of the registrant as required by Rule 30a-2 under the Act (17 CFR 270.30a-2).

Filed herewith.

SIGNATURES

[See General Instruction F]

Pursuant to the requirements of the Securities Exchange Act of 1934 and the Investment Company Act of 1940, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

(Registrant) Pioneer High Income Trust

By (Signature and Title)* /s/ John F. Cogan, Jr. John F. Cogan, Jr, President

Date August 30, 2006

Pursuant to the requirements of the Securities Exchange Act of 1934 and the Investment Company Act of 1940, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

By (Signature and Title)* /s/ John F. Cogan, Jr. John F. Cogan, Jr., President

Date August 30, 2006

By (Signature and Title)* /s/ Vincent Nave Vincent Nave, Treasurer

Date August 30, 2006

* Print the name and title of each signing officer under his or her signature.