SECURITIES AND EXCHANGE COMMISSION

Washington, D. C. 20549

FORM 11-K

ANNUAL REPORT

Pursuant to Section 15 (d) of the

Securities Exchange Act of 1934

For the fiscal year ended December 31, 2006

Commission File No. 1-442

BAO VOLUNTARY SAVINGS PLAN

THE BOEING COMPANY

100 N. Riverside Plaza

Chicago, Illinois 60606-1596

BAO VOLUNTARY SAVINGS PLAN

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SIGNATURE

EXHIBITS: Exhibit 23.1 Consent of Independent Registered Public Accounting Firm

BAO Voluntary Savings Plan

Financial Statements as of and for the Years Ended December 31, 2006 and 2005, Supplemental Schedule as of December 31, 2006, and Report of Independent Registered Public Accounting Firm

BAO VOLUNTARY SAVINGS PLAN

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NOTE: All other schedules required by Section 2520.103-10 of the Department of Labor s Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974 have been omitted because they are not applicable.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Employee Benefit Plans Committee and Members of

The Boeing Company

Chicago, IL

We have audited the accompanying statements of net assets available for benefits of the BAO Voluntary Savings Plan (the Plan) as of December 31, 2006 and 2005, and the related statements of changes in net assets available for benefits for the years then ended. These financial statements are the responsibility of the Plan s management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Plan is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan s internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, 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.

In our opinion, such financial statements present fairly, in all material respects, the net assets available for benefits of the Plan as of December 31, 2006 and 2005, and the changes in net assets available for benefits for the years then ended in conformity with accounting principles generally accepted in the United States of America.

Our audits were conducted for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplemental schedule listed in the table of contents is presented for the purpose of additional analysis and is not a required part of the basic financial statements, but is 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. This schedule is the responsibility of the Plan s management. The supplemental schedule has been subjected to the auditing procedures applied in the audit of the basic 2006 financial statements and, in our opinion, is fairly stated in all material respects when considered in relation to the basic financial statements taken as a whole.

As discussed in Note 2 to the financial statements, the Plan adopted Financial Accounting Standards Board Staff Position AAG INV-1 and SOP 94-4-1, *Reporting of Fully Benefit-Responsive Investment Contracts Held by Certain Investment Companies Subject to the AICPA Investment Company Guide and Defined-Contribution Health and Welfare and Pension Plans*, in the year ended December 31, 2006.

/s/ DELOITTE & TOUCHE LLP

June 21, 2007

BAO VOLUNTARY SAVINGS PLAN

STATEMENTS OF NET ASSETS AVAILABLE FOR BENEFITS

AS OF DECEMBER 31, 2006 AND 2005

2006	2005
\$91,747,784	\$ 78,466,293
3,463,049	3,465,334
95,210,833	81,931,627
146,094	118,847
95,356,927	82,050,474
114,970	219,404
\$ 95,471,897	\$ 82,269,878
	\$ 91,747,784 3,463,049 95,210,833 146,094 95,356,927 114,970

See notes to financial statements.

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BAO VOLUNTARY SAVINGS PLAN

STATEMENTS OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS

FOR THE YEARS ENDED DECEMBER 31, 2006 AND 2005

	2006	2005
ADDITIONS:		
Investment income:		
Income from Master Trust	\$11,063,313	\$ 5,868,490
Income from loans	161,823	175,968
Total investment income	11,225,136	6,044,458
Contributions:		
Employer	3,918,074	4,352,552
Member	6,954,150	7,427,260
Total contributions	10,872,224	11,779,812
Total additions	22,097,360	17,824,270
DEDUCTIONS:		
Benefits	8,895,341	4,896,825
NET ADDITIONS	13,202,019	12,927,445
NET ASSETS AVAILABLE FOR BENEFITS:		
Beginning of year	82,269,878	69,342,433
End of year	\$ 95,471,897	\$ 82,269,878

See notes to financial statements.

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BAO VOLUNTARY SAVINGS PLAN

NOTES TO FINANCIAL STATEMENTS

AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2006 AND 2005

1. DESCRIPTION OF THE PLAN

The following description of the BAO Voluntary Savings Plan (the Plan), formerly the Voluntary Savings Plan for BAO Aircraft and Trainer Operations Employees, provides only general information. Eligible employees, as defined by the Plan (Members), should refer to the Plan document for a more complete description of the Plan s provisions.

General The Plan is a defined contribution savings plan designed to encourage and assist eligible employees of Boeing Aerospace Operations, Inc. (the Company), a wholly owned subsidiary of The Boeing Company (Boeing), to adopt a program of investment. An employee becomes eligible to participate on the first day of employment.

The assets of the Plan, excluding loans and receivables, are held in The Boeing Company Employee Savings Plans Master Trust (the Master Trust). State Street Bank and Trust Company (SSBT) serves as trustee for the Master Trust.

Contributions Members may elect to contribute, subject to statutory limitations, between 1% and 20%, depending upon their labor contract of their base compensation. Certain eligible employees are allowed to make catch-up contributions. This provision is available to eligible employees age 50 or older during the plan year and who contribute either 8% in pretax contributions or have reached a specified limit for the plan year. Members may elect to change contribution percentages to be effective the next pay period after the request is received or as soon as administratively possible. The allocation of both their contributions and employer contributions to the funds may be changed at any time and become effective on the day of the change or the next business day according to when the change is made in relation to the stock market close of business. The Plan allows eligible Members to contribute to the Plan from pretax compensation, after-tax compensation, or a combination of both. The Plan also accepts certain rollover contributions.

Under the terms of the Plan, the Company may make a matching contribution for certain eligible Members based on their union or government contract. In addition, the Company may also contribute a defined percentage of base compensation to a fully vested retirement account for eligible Members, based on their contract.

For descriptions of each contract/group, refer to the Plan document.

Members Accounts Individual accounts are maintained for each Plan Member. Each Member s account is credited with the Member s contribution and Company s contribution, allocations of Plan earnings (losses), and charged with an allocation of certain administrative expenses and investment-related expenses, and Member specific charges, if applicable. Allocations are based on Member earnings or account balances, as defined by the Plan document. The benefit to which a Member is entitled is the benefit that can be provided from the Member s vested account.

Vesting Member contributions, both pretax and after-tax, employer matching contributions, retirement contributions, and earnings on those contributions are immediately vested.

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Withdrawals Members may elect to withdraw all or a portion of their own pretax contribution accounts, after-tax contribution accounts, employer matching accounts, catch-up contribution accounts, retirement accounts, and rollover accounts at any time on or after the date the Member attains age 59-1/2. If a Member is under age 59-1/2, withdrawals from pretax contribution accounts are subject to certain hardship rules as provided by the Plan. If a Member takes a hardship withdrawal, the Member may continue contributions to the Plan; however, employer matching contributions will be suspended for six months following the withdrawal.

In addition, a Member may elect to withdraw all or part of his or her employer matching account before the Member attains age 59-1/2, but only if the Member has attained his or her fifth anniversary of employment. If such a withdrawal is made, employer matching contributions will be suspended for six months following the withdrawal. Company contributions may be fully withdrawn upon termination of employment. Withdrawals of after-tax contributions and rollover contributions can be made at any time.

Loans Members are permitted to borrow a minimum of \$1,000 up to a maximum of the lesser of \$50,000 or 50% of the total value of their total vested account balance and may have two loans within the Company s savings Plans outstanding at any time. Loans may be additionally limited in accordance with Plan provisions. The interest rate on new loans is set every month and is equal to the prime rate published in the *Wall Street Journal* as of the last business day of the calendar month immediately preceding the date of the loan. Interest rates on outstanding loans ranged from 4.00% to 8.25% at December 31, 2006.

Loan repayment is made through regular payroll deductions over a period of up to 60 months for general loans and over a longer period for loans used to finance the purchase of a principal residence. If a Member s employment terminates for any reason and the loan balances are not paid in full within 90 days of termination, the loan balances will be canceled and become taxable income to the Member. Certain Members may continue to make loan repayments after termination of employment under procedures established by the Plan administrator.

Member loans are valued at cost, which approximates fair value.

Benefit Payments On termination of service, a Member may elect to receive a lump-sum amount equal to the value of the Member s vested interest in his or her account; a partial payment amount; or monthly, quarterly, semiannual, or annual installments of a fixed dollar amount, or for a specific number of years up to 10 years. Generally, a Member may elect to have all or a portion of his or her Boeing Stock Fund balance paid in shares and/or cash.

Investment Funds Upon enrollment in the Plan, Members may direct their contributions and any employer matching contributions and retirement contributions to 19 of the investment funds in the Master Trust. These 19 investment funds consist of common/collective trusts, separately managed U.S. equity accounts, a separately managed non-U.S. equity account, and the Boeing Company common stock (Boeing common stock). Investment funds are valued daily, and Members may elect to change their investment allocations on a daily basis.

Termination In the event of termination of the Plan, both Member and Company contributions, including any income earned, will be distributed to the Members upon request.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting The financial statements of the Plan have been prepared on the accrual basis of accounting.

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Use of Estimates The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and changes therein and disclosure of contingent assets and liabilities. Actual results could differ from those estimates.

Risks and Uncertainties The Plan utilizes various investment instruments. Investment securities, in general, are exposed to various risks, such as interest rate risk, credit risk, and overall market volatility. Due to the level of risk associated with certain investment securities, it is reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect the amounts reported in the financial statements.

Valuation of Investments Investments in the Master Trust are valued as follows:

Common and preferred stocks, mutual funds, bonds, notes, debentures, futures, and currency forwards are valued using quoted market prices, which represent the net asset value as of the last trading day of the year.

Investments in common/collective trust funds are valued based on the year-end unit value; unit values are determined by the issuer by dividing the quoted fair values of the total net assets at year-end by the outstanding units. Common/collective trust funds with underlying investments in investment contracts are valued at fair market value of the underlying investments and then adjusted by the issuer to contract value.

Synthetic Guaranteed Investment Contracts (GICs) are stated at fair value and then adjusted to contract value. Fair value of the contract is calculated by discounting the related cash flows based on current yields of similar instruments with comparable durations.

Boeing common stock is valued at the market closing price as of the last trading day of the year.

Investments in limited partnerships are recorded based upon the latest available valuations (generally, lagged by one quarter) provided by the partnerships, adjusted for cash flows. The underlying holdings are valued by the partnerships at quoted market price if the security is actively traded. If no quoted market price is available, valuations reflect estimated fair value or the lower of historical cost or net realizable value.

The short-term investment fund is a common/collective trust fund and assets in the fund are stated at amortized cost, which approximates fair value.

Purchases and sales of securities are recorded on a trade-date basis. Dividends are recorded on the ex-dividend date. The net appreciation/depreciation in fair value of investments includes both realized and unrealized gains or losses and is calculated as the difference between the fair value of the assets as of the beginning of the plan year or the purchase date in the current year, and either the sales price or the end-of-year fair value.

Benefits Benefits are recorded when paid.

Adoption of New Accounting Guidance The financial statements reflect the retroactive adoption of Financial Accounting Standards Board Staff Position AAG INV-1 and SOP 94-4-1, Reporting of Fully Benefit-Responsive Investment Contracts Held by Certain Investment Companies Subject to the AICPA Investment Company Guide and Defined-Contribution Health and Welfare and Pension Plans (the

FSP), which was effective for financial statements with an annual period ending after December 15, 2006. As required by the FSP, the statements of net assets available for benefits present investment contracts at fair value as well as an additional line item showing an adjustment of fully benefit responsive contracts from fair value to contract value. The statement of changes in net assets available for benefits is presented on a contract value basis and was not affected by the adoption of the FSP. The adoption of the FSP did not impact the amount of net assets available for benefits at December 31, 2005.

Derivative Financial Instruments The Master Trust utilizes various derivative financial instruments for hedging-related strategies, to adjust its asset allocation amongst the asset classes, and for investment purposes. The Company has authorized the use of certain derivative instruments in certain investment manager accounts. These derivatives include Standard & Poor s 500 Index futures and various foreign currency-related instruments, such as forward contracts.

Expenses Necessary and proper expenses of the Plan are paid from the Plan assets at the Master Trust level, except for those expenses the Company is required by law or chooses to pay.

3. STABLE VALUE FUNDS

For the plan years ended December 31, 2006 and 2005, the Master Trust included a BAO Stable Value Fund, the Principal Accumulation Return Fund (the PAR Fund). The fund is managed by State Street Global Advisors. The Par Fund constitutes the stable value investment option of the Plan. The fund represents a commingled pooled fund holding of the Master Trust. The fund may invest in fixed interest insurance investment contracts, money market funds, corporate and government bonds, mortgage-backed securities, bond funds, and other fixed income securities. Participants ordinarily direct the withdrawal or transfer of all or a portion of their investments at contract value. Contract value represents contributions made to the fund, plus earnings, less participant withdrawals.

4. MASTER TRUST

The Master Trust is composed of 24 investment funds, some of which are specific to individual Plans. The assets are invested and records are maintained by each investment fund option. Funds are allocated to the six participating Plans in accordance with Plan provisions and participant allocation elections. The allocation of net assets available for benefits is based on the respective number of units held by the Plans Members as of plan year-end. The allocation of the changes in net assets available for benefits is calculated daily based on the units held by the Plans Members as of that day s end.

At December 31, 2006 and 2005, the assets of the following Plans were combined in the Master Trust:

The Boeing Company Voluntary Investment Plan

The Boeing Company Employee Financial Security Plan

BAO Voluntary Savings Plan

Employee Payroll Stock Ownership Plan of McDonnell Douglas Corporation

Employee Retirement Income Plan of McDonnell Douglas Corporation Defined Contribution Plan

Employee Retirement Income Plan of McDonnell Douglas Corporation Hourly Defined Contribution Plan

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The Plan s interest in the Master Trust was \$91,747,784 and \$78,466,293, representing 0.3% of the Master Trust s net assets at December 31, 2006 and 2005, respectively.

The fair values of investments for the Master Trust at December 31 are as follows:

	2006	2005
Investments at fair value:		
Bonds, notes, and debentures	\$ 12,285	
Common/collective trusts	11,806,752,543	\$ 9,839,945,862
Common and preferred stock	3,799,395,702	
Mutual funds	19,384,240	3,460,701,582
Boeing common stock	5,116,301,997	4,406,872,883
Synthetic GICs	8,090,573,585	7,771,697,356
	\$ 28,832,420,352	\$ 25,479,217,683
Investments at estimated fair value:		
Partnerships	6,745,649	
Total Master Trust investments	\$ 28,839,166,001	\$ 25,479,217,683

Investment income for the Master Trust for the years ended December 31 is as follows:

	2006	2005
Appreciation of investments:		
Common/collective trusts	\$ 1,409,420,463	\$ 428,982,905
Bonds, notes, and debentures	2,207	
Common and preferred stock	339,284,722	
Mutual funds		20,031,275
Partnerships	(9,404)	
Boeing common stock	1,105,132,301	1,163,139,971
Net appreciation of investments	2,853,830,289	1,612,154,151
Interest income	408,038,989	388,577,245
Dividend income	117,782,259	180,524,042
Total Master Trust investment income	\$ 3,379,651,537	\$ 2,181,255,438

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5. PLAN AMENDMENTS

Effective January 3, 2006, the Master Trust added nine new investment funds; one of the existing investment funds, the Small Companies Fund, was terminated and mapped into two of the new funds, the Small/Mid Companies Growth Fund and the Small/Mid Companies Value Fund. Additionally, existing funds which invested in mutual funds were modified to provide similar investment strategies through separate accounts.

Effective January 3, 2006, each investment fund, except the Boeing Stock Fund and the Stable Value Fund, imposes a 1.5% redemption fee on all transfers out of the fund which are executed during the 30 calendar days following the Member s transfer into such fund. Redemption fee proceeds are reinvested in the respective investment funds.

Effective January 1, 2006, the Boeing Aerospace Operations, Inc. (BAO) (a subsidiary of McDonnell Douglas Corporation) reorganized its benefit programs. Pursuant to this reorganization, BAO employees in certain benefit programs (Aerospace Training, Oklahoma City Engineers, Aerospace Training, Oklahoma City Professionals and Nonexempt, and Aerospace Training Management Critical Skills) became eligible to participate in The Boeing Company Voluntary Investment Plan (the VIP) in lieu of this Plan. No accounts were transferred to the VIP.

6. SIGNIFICANT INVESTMENTS

At December 31, 2006 and 2005, the Plan s investment in the Master Trust represents 5% or more of the net assets available for benefits.

7. RECONCILIATION OF FINANCIAL STATEMENTS TO FORM 5500

The following is a reconciliation of net assets available for benefits per the financial statements as of December 31 to Form 5500:

	2006	2005
Net assets available for benefits per the financial statements	\$ 95,471,897	\$ 82,269,878
Amounts allocated to withdrawing Members	(93,943)	(5,581)
Adjustment from contract value to fair value for fully benefit-responsive investment		
contracts	(114,970)	(219,404)
Net assets available for benefits per Form 5500	\$ 95,262,984	\$ 82,044,893

The following is a reconciliation of total additions per the financial statements for the year ended December 31, 2006, to total income per Form 5500:

Statement of changes in net assets available for benefits:	
Total additions per the financial statements	\$ 22,097,360
Adjustment from contract value to fair value for fully benefit-responsive investment contracts -	
December 31, 2006	(114,970)
Adjustment from contract value to fair value for fully benefit-responsive investment contracts - December 31, 2005	219,404
Total income per Form 5500	\$ 22,201,794

The following is a reconciliation of benefits paid to Members per the financial statements for the year ended December 31, 2006 to Form 5500:

Benefits paid to Members per the financial statements	\$ 8,895,341
Amounts allocated to withdrawing Members at December 31, 2006	93,943
Amounts allocated to withdrawing Members at December 31, 2005	(5,581)
Amounts deemed distributions of Member loans as reflected in the Form 5500	(830)
Benefits paid to Members per Form 5500	\$ 8,982,873

Amounts allocated to withdrawing Members are recorded on the Form 5500 for benefit claims that have been processed and approved for payment prior to December 31, but not yet paid as of that date.

Amounts deemed distributions of Member loans as reflected in the Form 5500 are for loans that Members failed to make a payment within 90 days of receipt of the last loan payment made or Members who failed to repay the loan in full within 30 days after the end of the repayment period for the year ended December 31, 2006.

8. RELATED-PARTY TRANSACTIONS

Certain Master Trust investments are managed by SSBT. SSBT is the trustee as defined by the Plan and therefore, these transactions qualify as party-in-interest transactions. The investment management fees for the Plan are paid at the Master Trust level.

9. TAX STATUS

The Internal Revenue Service has determined and informed Boeing by a letter, dated December 10, 2003, that the Plan is designed in accordance with applicable sections of the Internal Revenue Code (IRC). The Plan has been amended since receiving the determination letter; however, the Plan administrator believes that the Plan is designed and currently being operated in compliance with the applicable requirements of the IRC. Therefore, the Plan administrator believes the Plan s tax-exempt status has not been affected, and no provision for income taxes has been included in the Plan s financial statements.

10. PLAN TERMINATION

Although it has not expressed any intention to do so, the Company has the right under the Plan to discontinue its contributions at any time and to terminate the Plan subject to the provisions set forth in the Employee Retirement Income Security Act of 1974.

11. SUBSEQUENT EVENTS

Effective March 31, 2007, each investment fund imposes a 1.5% redemption fee on all transfers out of the fund, which are executed within 15 calendar days following the Member s transfer into the fund. Previously, the redemption fee was imposed on transfers out within 30 calendar days following the Member s transfer into the fund, except the Boeing Stock Fund and the Stable Value Fund.

BAO VOLUNTARY SAVINGS PLAN

SCHEDULE OF ASSETS HELD FOR INVESTMENT PURPOSES

AS OF DECEMBER 31, 2006

Security Name Interest in Master Trust	Description	Fair Value \$ 91,747,784
*Loans to Members	Interest 4.00% to 8.25%	3,463,049
Total		\$ 95,210,833

* Party-in-interest

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SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the Plan Administrator has duly caused this annual report to be signed on its behalf by the undersigned hereunto duly authorized.

BAO VOLUNTARY SAVINGS PLAN

June 26, 2007 Date /s/ Curt C. Nohavec Curt C. Nohavec Vice President Finance and Business and Chief Financial Officer Shared Services Group