

AETHER SYSTEMS INC  
Form 8-K  
June 10, 2004

---

---

**SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, DC 20549**

---

**FORM 8-K**

**CURRENT REPORT  
Pursuant to Section 13 or 15(d)  
of the Securities Exchange Act of 1934**

---

Date of report (Date of earliest event reported): June 8, 2004

**Aether Systems, Inc.**

---

(EXACT NAME OF REGISTRANT AS SPECIFIED IN ITS CHARTER)

| <b>Delaware</b>                                      | <b>000-27707</b>            | <b>52-2186634</b>                    |
|--|-----------------------------|--------------------------------------|
| (State or other jurisdiction<br>of<br>incorporation) | (Commission File<br>Number) | (IRS Employer<br>Identification No.) |

---

**11500 Cronridge Drive  
Suite 110  
Owings Mills, MD 21117**

---

(Address of Principal Executive Offices, including Zip Code)  
**(410) 654-6400**

---

(Registrant's Telephone Number, Including Area Code)

---

---

---

## Item 5. Other Events.

On June 8, 2004, we issued a press release, which is furnished as Exhibit 99.1 to this Current Report, announcing that we had engaged FBR Investment Management, Inc., an affiliate of Friedman, Billings, Ramsey Group, Inc. ( FBR ), to assist us in assembling and managing a leveraged portfolio of mortgage-backed securities. This is part of an evolving business strategy that, in the near-term, we view primarily as representing an opportunity to increase the yield on our excess cash balances without incurring undue risk. Over time, however, this could become a more significant business activity for us, depending upon our experience in managing the initial leveraged portfolio and the outcome of our ongoing strategic review process.

### Overview

We intend to begin implementing this mortgage-backed securities strategy over the next several weeks. Initially, we plan to invest up to \$75 million of our current cash (depending on market conditions) in primarily residential adjustable rate mortgage-backed securities issued by the Federal Home Loan Mortgage Corporation ( FHLMC ), the Federal National Mortgage Association ( FNMA ) or the Government National Mortgage Association ( GNMA ).

As part of this new strategy, in order to generate higher returns, we plan to leverage our cash investment by entering into short-term reverse repurchase agreements with financial institutions that have received the highest available long-term debt rating from a nationally recognized rating agency. Under the borrowing strategy we plan to follow, we will seek to keep the asset-to-equity ratio of our portfolio of mortgage-backed securities at between 6:1 and 9:1. If we initially invest \$75 million of our cash in mortgage-backed securities and leverage this invested amount five times, we would have a portfolio of mortgage-backed securities with a face value of approximately \$450 million, which would reflect an asset-to-equity ratio of 6:1.

In general, earnings from our leveraged portfolio of mortgage-backed securities would represent the difference between the payments we receive on the mortgage-backed securities we acquire, less the costs of borrowings we incur to purchase the securities and the other expenses of managing the portfolio. Such expenses include the management fee and the incentive fee that we have agreed to pay FBR Investment Management, Inc. (the Manager ) to serve as the manager of the portfolio. These fees are described below under the heading The Investment Management Agreement. We expect the leveraged mortgage-backed securities portfolio, net of the fees and costs of managing the portfolio, will generate returns that are greater than those we currently earn on the government securities, certificates of deposit, and money market funds into which we now invest our excess cash. However, as discussed below under the heading Risk Factors, this strategy involves substantial risks and uncertainties that may cause actual returns to be less than expected returns.

To further assist us, we also have engaged FinPro, Inc., an independent investment banking and consulting management firm specializing in providing financial advisory services to financial institutions ( FinPro ). FinPro will provide us with independent oversight of the performance of the Manager and will assist us in developing, evaluating and monitoring our mortgage-backed securities strategy.

We are filing this Current Report to provide additional information on (1) mortgage-backed securities we intend to acquire, (2) the types of transactions we expect to effect to borrow funds and to manage the interest-rate sensitivities of this mortgage-backed securities strategy, (3) the arrangements we have entered into with the Manager, and (4) various risks that are associated with our planned new mortgage-backed securities strategy. If we decide to expand the leveraged portfolio or if it becomes a more significant part of our business in the future, additional risks and considerations may become applicable, including various tax and regulatory considerations. This Current Report addresses only those risks and considerations relevant to the initial portfolio that we intend to assemble and manage.



## **Description of Mortgage-Backed Securities**

### **General**

All of the mortgage-backed securities that we plan to acquire and trade will be agency mortgage-backed securities which, although not rated, carry an implied AAA rating. Agency mortgage-backed securities are mortgage-backed securities where a government agency or federally chartered corporation, such as FHLMC, FNMA or GNMA, guarantees payments of principal or interest on the securities. Agency mortgage-backed securities consist of agency pass-through certificates and collateralized mortgage obligations issued or guaranteed by an agency.

The mortgage-backed securities that we plan to acquire provide funds for mortgage loans made primarily to residential homeowners. These securities generally represent interests in pools of mortgage loans made by savings and loan institutions, mortgage bankers, commercial banks and other mortgage lenders. These pools of mortgage loans are assembled for sale to investors (like us) by various government, government-related and private organizations. Mortgage-backed securities differ from other forms of traditional debt securities, which normally provide for periodic payments of interest in fixed amounts with principal payments at maturity or on specified call dates. Instead, mortgage-backed securities provide for a monthly payment, which consists of both interest and principal. In effect, these payments are a pass-through of the monthly interest and principal payments made by the individual borrower on the mortgage loans, net of any fees paid to the issuer or guarantor of the securities. Additional payments result from prepayments of principal upon the sale, refinancing or foreclosure of the underlying residential property, net of fees or costs which may be incurred. Some mortgage-backed securities, such as securities issued by GNMA, are described as modified pass-through securities. These securities entitle the holder to receive all interest and principal payments owed on the mortgage pool, net of certain fees, regardless of whether the mortgagors actually make mortgage payments when due.

The investment characteristics of pass-through mortgage-backed securities differ from those of traditional fixed-income securities. The major differences include the payment of interest and principal on the mortgage-backed securities on a more frequent schedule, as described above, and the possibility that principal may be prepaid at any time due to prepayments on the underlying mortgage loans or other assets. These differences can result in significantly greater price and yield volatility than is the case with traditional fixed-income securities.

Various factors affect the rate at which mortgage prepayments occur, including changes in interest rates, general economic conditions, the age of the mortgage loan, the location of the property and other social and demographic conditions. Generally prepayments on mortgage-backed securities increase during periods of falling mortgage interest rates and decrease during periods of rising mortgage interest rates. We may reinvest prepayments at a yield that is higher or lower than the yield on the prepaid investment, thus affecting the weighted average yield of our investments.

To the extent mortgage-backed securities are purchased at a premium, faster than expected prepayments result in accelerated amortization of the premium paid, which can have a negative effect on the earnings from our mortgage-backed securities portfolio. Conversely, if these securities were purchased at a discount, faster than expected prepayments accelerate our recognition of the discount and can have a positive effect on earnings from our mortgage-backed securities portfolio.

### **FHLMC Certificates**

FHLMC is a privately-owned, government-sponsored enterprise created pursuant to an act of Congress on July 24, 1970. The principal activity of FHLMC currently consists of the purchase of mortgage loans or participation interests in mortgage loans and the resale of the loans and participations in the form of guaranteed mortgage-backed securities. FHLMC guarantees to each holder of FHLMC certificates the timely payment of interest at the applicable

pass-through rate and ultimate collection of all principal on the holder's pro rata share of the unpaid principal balance of the related mortgage loans, but does not guarantee the timely payment of scheduled principal of the underlying mortgage loans. The obligations of FHLMC under its guarantees are solely those of FHLMC and are not backed by the full faith and credit of the United States. If FHLMC were unable to satisfy these obligations, distributions to holders of FHLMC certificates would consist solely of payments and other recoveries on

the underlying mortgage loans and, accordingly, defaults and delinquencies on the underlying mortgage loans would adversely affect monthly distributions to holders of FHLMC certificates.

FHLMC certificates may be backed by pools of single-family mortgage loans or multi-family mortgage loans. These underlying mortgage loans may have original terms to maturity of up to 40 years. FHLMC certificates may be issued under cash programs (composed of mortgage loans purchased from a number of sellers) or guarantor programs (composed of mortgage loans acquired from one seller in exchange for certificates representing interests in the mortgage loans purchased).

FHLMC certificates may pay interest at a fixed rate or an adjustable rate. The interest rate paid on adjustable-rate FHLMC certificates ( FHLMC ARMs ) adjusts periodically within 60 days prior to the month in which the interest rates on the underlying mortgage loans adjust. The interest rates paid on certificates issued under FHLMC standard ARM programs adjust in relation to the Treasury index. Other specified indices used in FHLMC ARM programs include the 11th District Cost of Funds Index published by the Federal Home Loan Bank of San Francisco, LIBOR and other indices. Interest rates paid on fully-indexed FHLMC ARM certificates equal the applicable index rate plus a specified number of basis points. The majority of series of FHLMC ARM certificates issued to date have evidenced pools of mortgage loans with monthly, semi-annual or annual interest adjustments. Adjustments in the interest rates paid are generally limited to an annual increase or decrease of either 100 or 200 basis points and to a lifetime cap of 500 or 600 basis points over the initial interest rate. Certain FHLMC programs include mortgage loans which allow the borrower to convert the adjustable mortgage interest rate to a fixed rate. Adjustable-rate mortgages which are converted into fixed-rate mortgage loans are repurchased by FHLMC or by the seller of the loan to FHLMC at the unpaid principal balance of the loan plus accrued interest to the due date of the last adjustable rate interest payment.

### **FNMA Certificates**

FNMA is a privately-owned, federally-chartered corporation organized and existing under the Federal National Mortgage Association Charter Act. FNMA provides funds to the mortgage market primarily by purchasing home mortgage loans from local lenders, thereby replenishing their funds for additional lending. FNMA guarantees to the registered holder of a FNMA certificate that it will distribute amounts representing scheduled principal and interest on the mortgage loans in the pool underlying the FNMA certificate, whether or not received, and the full principal amount of any such mortgage loan foreclosed or otherwise finally liquidated, whether or not the principal amount is actually received. The obligations of FNMA under its guarantees are solely those of FNMA and are not backed by the full faith and credit of the United States. If FNMA were unable to satisfy its obligations, distributions to holders of FNMA certificates would consist solely of payments and other recoveries on the underlying mortgage loans and, accordingly, defaults and delinquencies on the underlying mortgage loans would adversely affect monthly distributions to holders of FNMA.

FNMA certificates may be backed by pools of single-family or multi-family mortgage loans. The original term to maturity of any such mortgage loan generally does not exceed 40 years. FNMA certificates may pay interest at a fixed rate or an adjustable rate. Each series of FNMA ARM certificates bears an initial interest rate and margin tied to an index based on all loans in the related pool, less a fixed percentage representing servicing compensation and FNMA's guarantee fee. The specified index used in different series has included the Treasury Index, the 11th District Cost of Funds Index published by the Federal Home Loan Bank of San Francisco, LIBOR and other indices. Interest rates paid on fully-indexed FNMA ARM certificates equal the applicable index rate plus a specified number of basis points. The majority of series of FNMA ARM certificates issued to date have evidenced pools of mortgage loans with monthly, semi-annual or annual interest rate adjustments. Adjustments in the interest rates paid are generally limited to an annual increase or decrease of either 100 or 200 basis points and to a lifetime cap of 500 or 600 basis points over the initial interest rate. Certain FNMA programs include mortgage loans which allow the borrower to convert the

adjustable mortgage interest rate of the adjustable-rate mortgage to a fixed rate. Adjustable-rate mortgages which are converted into fixed-rate mortgage loans are repurchased by FNMA or by the seller of the loans to FNMA at the unpaid principal of the loan plus accrued interest to the due date of the last adjustable rate interest payment. Adjustments to the interest rates on FNMA ARM certificates are typically subject to lifetime caps and periodic rate or payment caps.



## **GNMA Certificates**

GNMA is a wholly owned corporate instrumentality of the United States within the Department of Housing and Urban Development. The National Housing Act of 1934 authorizes GNMA to guarantee the timely payment of the principal of and interest on certificates which represent an interest in a pool of mortgages insured by the Federal Housing Administration or partially guaranteed by the Department of Veterans Affairs and other loans eligible for inclusion in mortgage pools underlying GNMA certificates. Section 306(g) of the Housing Act provides that the full faith and credit of the United States is pledged to the payment of all amounts which may be required to be paid under any guaranty by GNMA.

At present, most GNMA certificates are backed by single-family mortgage loans. The interest rate paid on GNMA certificates may be a fixed rate or an adjustable rate. The interest rate on GNMA certificates issued under GNMA's standard ARM program adjusts annually in relation to the Treasury index. Adjustments in the interest rate are generally limited to an annual increase or decrease of 100 basis points and to a lifetime cap of 500 basis points over the initial coupon rate.

## **Borrowings; Hedging**

We intend to use reverse repurchase agreements to leverage the portfolio. These agreements will allow us to finance the acquisition of a substantial portion of the mortgage-backed securities included in the portfolio. Reverse repurchase agreements are a low-cost form of financing and create an opportunity to increase returns on the portfolio while minimizing credit risk. In general, these agreements offer a lower-cost form of borrowing than other alternatives that may be available to us. The use of any form of leverage, however, involves risks, which are described in detail below under the heading Risk Factors.

A reverse repurchase agreement, although structured as a sale and repurchase obligation, operates as a borrowing. Under a reverse repurchase agreement, we (as borrower) will sell securities to a buyer (as lender) who agrees to resell the securities back to us on a future date. We will agree to repurchase the securities for a price equal to the initial purchase price plus an amount representing a specified return (interest). We will pledge our investment securities as collateral to secure our repurchase obligation. We will have a contractual obligation under the reverse repurchase agreements to satisfy the deficiency, if any, between the value of the collateral securing our borrowings and our obligations under the reverse repurchase agreements. Based on current market practices of lenders who enter into reverse repurchase agreements involving mortgage-backed securities, we expect to be able to borrow up to 97% of the estimated market value of those securities covered by a reverse repurchase agreement. We will retain beneficial ownership of the pledged collateral while the lender will maintain custody of the securities. At the maturity of a reverse repurchase agreement, we will be required to repay the loan, at which time we will receive back the pledged collateral from the lender or, with the consent of the lender, we can renew the borrowing at the then-current financing rate.

Reverse repurchase agreements may require us to pledge additional assets to the lender in the event the estimated fair value of existing pledged collateral declines below a specified percentage. The pledged collateral may fluctuate in value during the life of the reverse repurchase agreement due to, among other things, principal repayments, market changes in interest rates and credit quality. In such cases, a lender may require us to post additional collateral, or we may choose to sell the pledged security and repay the loan. This type of margin call is one of the risks of a leveraged strategy discussed below under the heading Risk Factors. We expect to use reverse repurchase agreements that will have original maturities ranging from 30 to 90 days. In the event a lender under a reverse repurchase agreement decides not to renew a reverse repurchase agreement at its maturity, we will be required to use our own cash or obtain other financing to close out the reverse repurchase agreement and pay off the loan.

We have targeted an asset-to-equity ratio of between 6:1 and 9:1, and we intend to enter into reverse repurchase agreements only with financial institutions that have received the highest available long-term debt rating from a nationally recognized rating agency. If this credit rating is not met, we will not enter into reverse repurchase agreements with that lender without the consent of our board of directors. In the event one of our lenders is downgraded, the approval of our board of directors will have to be obtained before entering into additional reverse repurchase agreements with that lender. We will seek to diversify our exposure by entering into reverse repurchase agreements with numerous separate lenders so that no one lender constitutes more than 35% of all of our outstanding reverse repurchase agreements. If, during the term of a reverse repurchase agreement, a lender were to file for bankruptcy, we might experience difficulty recovering the pledged security and might have only an unsecured claim against the lender s

assets for the difference between the amount we borrowed and the estimated fair value of the collateral we pledged to such lender (if any).

We may use derivative transactions and other hedging strategies, such as interest rate swaps and caps, options to purchase swaps and caps, financial futures contracts and options on futures, to help mitigate prepayment and interest rate risks if we determine that the cost of these transactions is justified by their potential benefit. We would use hedging to mitigate declines in the market value of our mortgage-backed securities during periods of increasing or decreasing interest rates or to limit or cap the interest rates on our borrowings. We expect that the extent and type of our hedging activity will vary based on the level and volatility of interest rates and mortgage principal prepayments, the type of mortgage-backed securities we acquire and other changing market conditions. We will not enter into hedging transactions for speculative purposes. The use of hedging strategies involves risks, which are described below under the heading Risk Factors.

### **Management and Oversight of the Portfolio**

To implement the leveraged mortgage-backed securities strategy, we have decided to retain the Manager to carry out the day-to-day management of the portfolio. Although our management does not have experience or expertise with this business, the Manager currently manages a leveraged portfolio of mortgage-backed securities of approximately \$11 billion for an affiliate of FBR. That portfolio follows a strategy similar to the one we plan to implement. See the discussion below under the heading Risk Factors for a description of certain potential conflicts of interest that may exist as result of the Manager managing a mortgage-backed securities portfolio of any affiliate of FBR using strategies similar to our mortgage-backed securities strategy.

The Manager will operate under the terms and conditions of the Investment Management Agreement between us and the Manager, subject to the direction and oversight of our senior management and our board of directors. Under the Investment Management Agreement, the Manager will recommend investments, funding criteria and strategies and return and risk management strategies and implement our mortgage-backed securities strategy based upon its analyses of market conditions all in accordance with policies, procedures and guidelines established by us. The Manager will at all times be subject to the direction and oversight of our senior management and our board of directors.

We have also contracted with FinPro, an independent full service investment banking and management consulting firm specializing in providing financial advisory services to financial institutions, to assist us in developing, evaluating and monitoring the mortgage-backed securities strategy and to provide independent oversight of the performance of the Manager. Working with KPMG LLP, our independent auditor, we also are developing new and appropriate disclosure controls and procedures and internal control over financial reporting in connection with the implementation and management of the mortgage-backed securities portfolio.

We are in the process of finalizing and adopting the detailed policies that will govern the management of the portfolio. We have received advice from both FinPro and another independent advisor on both the mortgage-backed securities strategy and the detailed policies we plan to adopt. We will finalize and adopt all of these policies before we begin acquiring securities for the portfolio, and we expect the final policies to be materially consistent with the approach described in this Current Report. However, we may adopt policies that deviate from those described in this Current Report. In addition, our board of directors will have the power to modify or waive these policies without the consent of our stockholders to the extent that the board of directors determines that modification or waiver is in the best interests of our stockholders.

### **The Investment Management Agreement**

Under the Investment Management Agreement, the Manager will recommend investments, funding criteria and strategies and return and risk management strategies and implement our mortgage-backed securities strategy based upon its analyses of market conditions all in accordance with policies, procedures and guidelines established by us and subject to the direction and oversight of our senior management and our board of directors.

Under the Investment Management Agreement, the Manager will receive a management fee paid in an amount equal to 0.15% per year of the aggregate cost basis of the mortgage-backed securities we own, including

securities acquired with borrowed funds. In addition, an incentive fee will be payable to the Manager if the portfolio's annual return on equity (which is the amount of the portfolio's net interest income, as compared to the amount of cash we use to acquire mortgage-backed securities) exceeds 10%. The incentive fee will be computed and paid (if earned) quarterly, based upon the portfolio's performance over the most recent four quarters. If the portfolio's return on equity (calculated after deducting the amount of management fees paid to the Manager during the period) exceeds 10% (the Return Threshold), the Manager will receive an incentive fee equal to 2.5% of the amount by which such return on equity exceeded the Return Threshold (which equates to 10% of the excess over the Return Threshold per year). During the initial three quarters, the portfolio's performance will be annualized to compute the Manager's eligibility to receive the incentive fee.

The Investment Management Agreement has an initial term of one year. After the first year, it will continue in effect until either we or the Manager terminate it, which can be done with 90 days' prior written notice. However, if we seek to terminate the Investment Management Agreement before September 30, 2005, we can do so on 30 days' prior written notice to the Manager, but we will be required to pay the Manager a termination fee. The termination fee is \$500,000 for each calendar quarter (pro-rated for partial quarters) between the termination date and September 30, 2005. Because there are five quarters prior to the September 30, 2005, the maximum termination fee would be \$2.5 million, and it will decline over time to \$0 by September 30, 2005. Both we and the Manager can terminate the Investment Management Agreement at any time if there is a material breach of the agreement by the other. If we terminate because of a material breach by the Manager, no termination fee would be payable. In the event the Manager terminates the Investment Management Agreement, we may request that the Manager continue to provide us services for an additional 90 days following the date of termination or sooner if we engage another manager. In the event the Investment Management Agreement is terminated for any reason, the Manager is obligated to use its reasonable best efforts to assist us in the transition of the management of our mortgage-backed securities portfolio to us or our designee for a reasonable period of time not to exceed 60 days from the date of notice of termination.

The foregoing description of the Investment Management Agreement is qualified in its entirety by reference to the full text of such agreement, a copy of which is filed as Exhibit 10.1 hereto and which is incorporated by reference herein.

Friedman, Billings, Ramsey & Co., Inc., an affiliate of both FBR and the Manager, advised us in connection with the adoption of the new leveraged mortgage-backed securities strategy, and we have agreed to pay them a fee of \$250,000 upon our commencement of this strategy. As noted above, we also received evaluations of the recommended strategy from FinPro and another independent advisor.

## **Risk Factors**

*Our planned new mortgage-backed securities strategy involves a number of risks and uncertainties. You should carefully consider all of the risks described in this Current Report, as well as other risks described in our 2003 Annual Report on Form 10-K. If any of the risks discussed below actually occur, the performance of our leveraged portfolio of mortgage-backed securities could be adversely affected.*

## **Risks of Investing in Leveraged Mortgage-Backed Securities**

**THE MORTGAGE-BACKED SECURITIES STRATEGY INVOLVES THE USE OF LEVERAGE, AND WE DO NOT HAVE EXPERIENCE MANAGING A LEVERAGED BUSINESS.**

In managing our mortgage-backed portfolio, we will seek to maintain a ratio of asset-to-equity of between 6:1 and 9:1, but our ratio may be higher or lower. We will incur this leverage by borrowing against a substantial portion of the market value of securities we acquire. By incurring these borrowings we expect to be able to enhance our returns,

but these borrowings, which are fundamental to our strategy, also create significant risks, as discussed below. We have historically managed a business with relatively modest borrowings, as compared to our available cash resources. Accordingly, we do not have experience managing within the constraints that can be imposed by the use of leverage.

WE DO NOT HAVE EXPERIENCE WITH MORTGAGE-BACKED SECURITIES AND WILL BE DEPENDENT ON THE MANAGER.

We do not have experience in managing a leveraged portfolio of mortgage-backed securities. Accordingly, we will be heavily dependent on the efforts and expertise of the Manager. The loss of the Manager's services could have an adverse effect on our ability to carry out our mortgage-backed securities strategy. Although we have a one year agreement with the Manager to manage our portfolio of mortgage-backed securities, as described above, following the initial one-year term of the agreement, the Manager could terminate the agreement with 90 days' prior written notice and cease providing services to us 90 days later, if we request that the Manager continue to manage our mortgage-backed securities portfolio. During the term of the agreement, unanticipated changes in circumstances to us or the Manager could result in the Manager ceasing to provide services to us. Accordingly, we cannot assure you that the Manager will continue to work with us. In addition, it may be difficult for us, within a reasonable period of time, to replace the Manager with another firm having comparable expertise and offering comparable financial terms.

#### **BORROWINGS MAY NEGATIVELY AFFECT THE PERFORMANCE OF OUR PORTFOLIO OF MORTGAGE-BACKED SECURITIES.**

Because our mortgage-backed securities strategy will involve the use of leverage, our returns on invested capital and trading activities may be negatively affected or our mortgage-backed securities portfolio may incur substantial losses if our borrowing costs increase faster than the returns on our investments. We expect that all of our borrowings will be collateralized borrowings in the form of reverse repurchase agreements. If the interest rates on these reverse repurchase agreements increase, this would adversely affect performance of our portfolio of mortgage-backed securities. Our borrowing costs under reverse repurchase agreements will generally correspond to short-term interest rates such as LIBOR or a short-term Treasury index, plus or minus a margin. Our borrowing costs may increase for any of the following reasons:

short-term interest rates increase;

the market value of our investment securities decreases;

interest rate volatility increases; or

the availability of financing in the market decreases.

If these costs increase faster than the rates paid by the securities in which we invest, the financial results of our new mortgage-backed securities strategy will be negatively affected.

While we may use hedging strategies to manage interest-rate sensitivity of our borrowings, such strategies may not be effective under certain conditions and may have a negative effect on the performance of our portfolio of mortgage-backed securities, as discussed below.

#### **REGISTRATION UNDER THE INVESTMENT COMPANY ACT WOULD SIGNIFICANTLY REDUCE OUR ABILITY TO USE LEVERAGE.**

The use of leverage is a fundamental part of our new mortgage-backed securities strategy. In the event we were required to register as an investment company under the Investment Company Act of 1940, our ability to use leverage and the returns on our equity capital would be substantially reduced. We do not believe that our leveraged mortgage-backed securities strategy will subject us to regulation as an investment company under the Investment Company Act of 1940.

#### **DIFFERENCES IN TIMING OF INTEREST RATE ADJUSTMENTS ON ACQUIRED SECURITIES AND ON OUR BORROWINGS MAY ADVERSELY AFFECT OUR MORTGAGE-BACKED SECURITIES STRATEGY AND THE RETURNS ON THE PORTION OF OUR CASH WE INVEST IN MORTGAGE-BACKED**

SECURITIES.

We will rely primarily on short-term borrowings to acquire mortgage-backed securities with long-term maturities. Accordingly, if short-term interest rates increase, this may adversely affect our new mortgage-backed securities strategy and the returns on our equity capital. We expect all of the securities we will acquire will be adjustable-rate securities. This means that their interest rates may vary over time based upon changes in an objective index, such as:



LIBOR. The interest rate that banks in London offer for deposits in London of U.S. dollars.

Treasury rate. A monthly or weekly average yield of benchmark U.S. Treasury securities, as published by the Federal Reserve Board.

CD Rate. The weekly average of secondary market interest rates on six-month negotiable certificates of deposit, as published by the Federal Reserve Board.

These indices generally reflect short-term interest rates. In a period of rising interest rates, we could experience a decrease in net income or a net loss from our mortgage-backed securities portfolio, because the interest rates on our borrowings likely will adjust upward faster than the interest rates on our adjustable-rate securities.

#### INTEREST RATE CAPS MAY REDUCE THE RETURNS FROM OUR PORTFOLIO OF MORTGAGE-BACKED SECURITIES.

Adjustable-rate mortgage-backed securities are typically subject to periodic and lifetime interest rate caps. Periodic interest rate caps limit the amount an interest rate can increase during any given period. Lifetime interest rate caps limit the amount an interest rate can increase over the life of the security. Our borrowings will not be subject to similar restrictions. Accordingly, in a period of rapidly increasing interest rates, we could experience a decrease in net income or experience a net loss from our mortgage-backed securities portfolio because increases in the interest rates on our borrowings will not be limited, while increases in the interest rates on our adjustable-rate securities would be capped.

#### AN INCREASE IN PREPAYMENT RATES MAY ADVERSELY AFFECT THE PERFORMANCE OF OUR PORTFOLIO OF MORTGAGE-BACKED SECURITIES.

The mortgage-backed securities we will acquire are backed by pools of mortgage loans. We will receive payments, generally, from the payments that will be made on these underlying mortgage loans. When borrowers prepay their mortgage loans at rates that are faster than expected, this results in prepayments that are faster than expected on the mortgage-backed securities. These accelerated prepayments may adversely affect the performance of our portfolio of mortgage-backed securities.

Prepayment rates generally increase when interest rates fall and decrease when interest rates rise, but changes in prepayment rates are difficult to predict. Prepayment rates also may be affected by conditions in the housing and financial markets, general economic conditions and the relative interest rates on fixed-rate and adjustable-rate mortgage loans.

We may purchase mortgage-backed securities that have a higher interest rate than the market interest rate at the time. In exchange for this higher interest rate, we would likely pay a premium over the market value to acquire the security. In accordance with accounting rules, we will amortize this premium ratably over the term of the mortgage-backed security. If the mortgage-backed security is prepaid in whole or in part prior to its maturity date, however, we will be required to expense all (or a corresponding portion, in the case of a partial prepayment) of the remaining unamortized portion of the premium. This accelerated expensing would reduce reported returns on equity capital that we invest in mortgage-backed securities.

We may seek to reduce the potential negative impact of increased prepayments by acquiring mortgage-backed securities at a discount. In accordance with generally accepted accounting principles, we will recognize this discount over the term of the mortgage-backed security. If a discounted security is prepaid in whole or in part prior to its maturity date, we will recognize income equal to the amount of the discount not previously recognized (or a portion of such remaining discount, in the case of a partial prepayment). Consequently, the reported performance of our portfolio

of mortgage-backed securities would be enhanced if discounted securities are prepaid faster than expected.

While we will seek to minimize prepayment risk to the extent practical, in selecting investments we will balance prepayment risk against other risks and the potential returns of each investment. No strategy can completely insulate us from prepayment risk.

**HEDGING AGAINST INTEREST RATE EXPOSURE MAY ADVERSELY AFFECT PERFORMANCE OF OUR PORTFOLIO OF MORTGAGE-BACKED SECURITIES.**

We may enter into derivative transactions and other hedging strategies, such as interest rate swaps and caps, options to purchase swaps and caps, financial futures contracts and options on futures, that are intended to hedge our exposure to rising rates on funds borrowed to finance our investment securities. Interest rate hedging may fail to reduce exposure to interest rate and prepayment risks discussed in this Risk Factors section because, among other things:

interest rate hedging can be expensive, particularly during periods of rising and volatile interest rates;

available interest rate hedging may not correspond directly with the interest rate risk for which protection is sought;

the duration of the hedge may not match the duration of the related liability; and

the credit quality of the party owing money on the hedge may be downgraded to such an extent that it impairs its ability to sell or assign its side of the hedging transaction.

**OUR BORROWINGS MAY RESULT IN MARGIN CALLS AND DEFAULTS AND FORCE US TO SELL ASSETS UNDER ADVERSE MARKET CONDITIONS.**

Because we will make investments using borrowed funds, a decline in the value of our investment securities, caused by rising interest rates or prepayments, may result in our lenders initiating margin calls. A margin call means that the lender requires us to pledge additional collateral to re-establish the ratio of the value of the collateral to the amount of the borrowing. If we are unable to satisfy margin calls, our lenders may foreclose on our collateral. This could force us to sell our mortgage-backed securities under adverse market conditions where the value of the collateral securing our borrowing is less than the amount owed to our lenders. In this case, we would be responsible for any deficiency between the value of the collateral and amounts we borrowed. Additionally, reverse repurchase agreements may qualify for special treatment under the Bankruptcy Code. This special treatment would allow the lenders under these agreements to avoid the automatic stay provisions of the Bankruptcy Code and to liquidate the collateral under these agreements without delay.

**WE MAY EXCEED OUR TARGET LEVERAGE RATIOS, WHICH COULD EXPOSE OUR PORTFOLIO OF MORTGAGE-BACKED SECURITIES TO GREATER RISKS.**

We will seek to maintain a ratio of assets-to-equity of between 6:1 and 9:1 in our mortgage-backed securities portfolio. However, we are not required to stay within this range. From time to time, in the course of managing our mortgage-backed securities portfolio, we may exceed this ratio. We also may decide, with the prior approval of our board of directors, to manage our mortgage-backed securities portfolio using a higher asset-to-equity ratio, based on market conditions and our experience with this mortgage-backed securities strategy. If we exceed the targeted leverage range, the adverse impact on the performance of our portfolio of mortgage-backed securities from the types of risks described in this section could be more severe.

**WE MAY NOT BE ABLE TO BORROW AMOUNTS THAT WE BELIEVE WILL PRODUCE DESIRED RETURNS, WHICH WOULD LIKELY REDUCE THE RETURN ON THE CASH WE INVEST IN THE PORTFOLIO OF MORTGAGE-BACKED SECURITIES.**

We will use borrowings as a strategy to increase returns on our invested capital. We believe that an asset-to-equity ratio of between 6:1 and 9:1 represents a strategy that we expect will generate attractive returns

without exposing our new mortgage-backed securities strategy to undue risks. However, we may not be able to achieve our desired level of borrowings for any of the following reasons:

we determine that the leverage would expose us to excessive risk;

our lenders do not make funding available to us at acceptable rates; or

our lenders require that we provide additional collateral to cover our borrowings.

In general, if we borrow less, the returns on our equity capital are likely to be lower than if we had been able to borrow the desired amount of funds for investment.

**IF WE ARE UNABLE TO RENEW OUR BORROWINGS AT FAVORABLE RATES, THE PERFORMANCE OF OUR PORTFOLIO OF MORTGAGE-BACKED SECURITIES MAY BE ADVERSELY AFFECTED.**

Because we will rely primarily on short-term borrowings, our ability to achieve our investment objectives will depend not only on our ability to borrow money in sufficient amounts and on favorable terms, but also on our ability to renew or replace on a continuous basis our maturing short-term borrowings. If we are not able to renew or replace maturing borrowings, we would have to sell mortgage-backed securities under possibly adverse market conditions.

**BECAUSE OF COMPETITION, WE MAY NOT BE ABLE TO ACQUIRE MORTGAGE-BACKED SECURITIES WITH FAVORABLE YIELDS.**

Our new mortgage-backed securities strategy depends on our ability to acquire mortgage-backed securities at favorable spreads over our borrowing costs. In acquiring mortgage-backed securities, we compete with real estate investment trusts, investment banking firms, savings and loan associations, banks, insurance companies, mutual funds, other lenders and other entities that purchase mortgage-backed securities, many of which have greater financial resources than we do. As a result, we may not be able to acquire sufficient mortgage-backed securities at favorable spreads over our borrowing costs.

**OUR MANAGER MANAGES THE PORTFOLIO OF AN AFFILIATE OF FBR AND MAY MANAGE PORTFOLIOS OF OTHER CLIENTS USING A PHILOSOPHY SIMILAR TO OUR NEW MORTGAGE-BACKED SECURITIES STRATEGY, CREATING THE POTENTIAL FOR CONFLICTS OF INTEREST.**

The Manager manages a portfolio of mortgage-backed securities of approximately \$11 billion for an affiliate of FBR using a strategy very similar to the one we plan to implement. The Manager or one of its affiliates also may manage portfolios using strategies similar to this strategy for other asset management clients. These relationships create potential conflicts of interest, including the allocation of opportunities to acquire mortgage-backed securities at favorable prices. As noted above, our strategy depends in part upon our ability to acquire such securities at favorable spreads over our borrowing costs. The Manager has no obligation to resolve in our favor conflicts of interest that may arise in connection with competing portfolios. Employees of the Manager will only devote the time and attention to our new mortgage-backed securities strategy that they deem necessary in their discretion, and there may be conflicts in allocating time, services and functions between portfolios managed by our Manager and our portfolio of mortgage-backed securities. The failure of employees of the Manager to devote adequate time and attention to our mortgage-backed securities strategy could adversely affect the performance of this strategy.

**PAST PERFORMANCE OF THE MANAGER AND THE RESULTS OF OTHER COMPANIES THAT FOLLOW SIMILAR LEVERAGED INVESTMENT STRATEGIES ARE NOT PREDICTIVE OF HOW OUR LEVERAGED PORTFOLIO WILL PERFORM.**

The operations and results of any business with which the Manager or its related companies have been or are associated or of any other company that follows a strategy similar to the one we are implementing are not intended to be, and should not be considered as, any indication of the likely future performance of our leveraged portfolio of

mortgage-backed securities. The performance of our portfolio of mortgage-backed securities will be affected by changes in market conditions, prepayment rates, availability of financing and interest rates, which are outside of our control or the control of the Manager. In addition, other companies employing a strategy similar to the one we are implementing may have different investment policies or greater financial resources than we have. Therefore, the past performance of the Manager or other companies that use a strategy similar to ours is no guarantee, and may not be indicative, of the future performance of our portfolio of mortgage-backed securities.

**Item 7. Financial Statements and Exhibits**

(c) Exhibits

| <b>Exhibit</b> | <b>Description</b>   |
|----------------|--|
| 10.1           | Investment Management Agreement, dated June 8, 2004, by and between Aether Systems, Inc. and FBR Investment Management, Inc. |
| 99.1           | Press Release of Aether Systems, Inc., dated June 8, 2004.   |

**SIGNATURES**

According to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized on June 10, 2004.

**AETHER SYSTEMS, INC.**

Date: June 10, 2004

By: /s/ David C. Reymann  
Its: Chief Financial Officer

**EXHIBIT INDEX**

| <b>Exhibit</b> | <b>Description</b>   |
|----------------|--|
| 10.1           | Investment Management Agreement, dated June 8, 2004, by and between Aether Systems, Inc. and FBR Investment Management, Inc. |
| 99.1           | Press Release of Aether Systems, Inc., dated June 8, 2004.   |