FEDERAL RETIREMENT THRIFT INVESTMENT BOARD
1250 H Street, NW Washington, DC 20005

THRIFT SAVINGS PLAN

MINUTES OF THE MEETING OF THE BOARD MEMBERS

September 17, 2007

Andrew M. Saul, Chairman of the Federal Retirement Thrift Investment Board, convened a meeting of the Board members on September 17, 2007, at 9:04 a.m., Eastern Time. The meeting was open to the public at the Board's offices at 1250 H Street, N.W., Washington, D.C. In attendance were, Thomas A. Fink of Alaska, member; Alejandro M. Sanchez of Florida, member; by telephone, Gordon J. Whiting of New York, member; Gregory T. Long, Executive Director; Thomas K. Emswiler, Secretary and General Counsel; Mark A. Hagerty, Chief Information Officer; Pamela-Jeanne Moran, Director, Participant Services; James B. Petrick, Chief Financial Officer; Tracey A. Ray, Chief Investment Officer; and Thomas J. Trabucco, Director, External Affairs.

1. Approval of the minutes of the August 20, 2007 Board member meeting.

Chairman Saul entertained a motion for approval of the minutes of the August 20, 2007 Board member meeting. The following motion was made, seconded, and adopted without objection:

> MOTION: That the minutes of the Board member meeting held on August 20, 2007 be approved.

2. Thrift Savings Plan activity report by the Executive Director.

a. Participant Activity Report.

Mr. Long reviewed the report on TSP statistics. See "Thrift Savings Fund Statistics" (attached). He noted that the TSP fund balances had increased to $224 billion, a $2 billion increase from the previous month. Returns for all funds are positive for the year. The total number of participants increased to 3,791,000 (an increase of 6,000 since last month). The year-to-date expense ratio is one basis point, but this will increase before year's end. The report sets-out statistics on uniformed service participation in a new manner by separately showing the active and reserve components (previously active and reserve components were grouped by service). The participation rate for the active components is 34.2 percent—which is unchanged for the year. The participation rate for the reserve components is 11.8—which is a slight increase for the year. Mr. Sanchez noted the two percent increase in participation by members of the Air Force reserve and quipped that Mr. Long's sister (an Air Force Lieutenant Colonel) must have helped with that.

b. Monthly Investment Performance Report.

Ms. Ray reviewed the September 7, 2007 memorandum (attached), on the performance of the G, F, C, S, I, and L Funds during August 2007.

She noted that the Small-Mid cap fund outperformed the index by 37 basis points for the month and by 21 basis points for the year due to the optimization process used by Barclays. The international fund outperformed the index by 88 basis points for the month and by 21 basis points for the year due to fair value adjustments.

In August, $3.2 billion was traded in the I Fund which is second only to March, when $3.4 billion was traded. For the year, $14 billion has been traded in the I Fund, which is a 50 percent increase over the amount traded in the same period last year. The trading costs associated with the I Fund in August were 33 basis points, which resulted in $10.5 million being charged to plan participants.

TSP Fund performance tracked closely with Barclays fund performance, with the I Fund being the only negative performer. The G Fund rate decreased to 4.5 percent in September as a result of the flight to quality caused by the sub-prime mortgage crisis.

August was the first month of interfund transfer activity out of the L Funds: $36 million was transferred out of the 2040 Fund, and $17 was transferred out of the 2020 Fund. On the other hand, $5 million was transferred into the 2020 Fund, and $22 was transferred into the income fund. This reflects a pattern similar to the other funds. That is, when the markets are turbulent, participants switch from equity funds to income funds. With the L funds, participants switch from the most aggressive L Funds to the most conservative L Funds. Chairman Saul remarked that this was important because it shows that this is a plan of individual choice. Our role is to educate the participants but not to advise them. The participants must make the decisions they are comfortable with. Chairman Saul then asked about fund performance during the month of September. Ms. Ray explained that most funds were up a little, but the I Fund was down a little for the month.

C. Legislative Report.

Mr. Trabucco reported that Congress had returned from its recess. There has been no movement yet on the auto-enrollment/L Fund default legislation that the Agency had forwarded to Congress. Tomorrow, the House subcommittee is expected to take-up four previously pending employee benefit bills. We hope that the subcommittee will take-up the TSP legislation after it completes this work. Congress is considering raising the debt ceiling, but, even if it does not, it won't affect the TSP. Legislation guarantees that the G Fund will be made whole regardless of any debt limits.

D. October Highlights.

Ms. Moran reported on the draft October Thrift Savings Plan "Highlights." It will introduce three new services to TSP participants.

The first is the TSP account number project. In August, we mailed a letter to participants informing them that we were switching from using social security numbers to identify TSP accounts to using account numbers. We are mailing the account numbers this month. Mr. Long stated that even though we are switching to account numbers as a security enhancement, we know some participants will complain about the switch. Chairman Saul asked whether the call centers had been trained to deal with participants on this matter. Ms. Moran replied that they will explain that this was added as a security feature. She added that just as when we switched to a stronger, more secure password for web access, some participants will like it and some will not. Mr. Long added that we are doing the best we can to communicate the pending switch to participants. Mr. Sanchez commented that this is consistent with industry practice and that it will help protect participants against identity theft.

The second new service is GovDelivery. Participants may now sign up to receive e—mail notification every time significant new information is posted on the TSP website. So far, about one thousand participants per day have signed up for GovDelivery.

The third new service announced in the "Highlights" is the annual participant statement. The first of these will be issued in February 2008.

E. Board Calendar.

The Executive Director and Board members then discussed changes to the Agenda for the remaining 2007 Board meetings as well as the tentative 2008 meeting schedule (attached).

3. Increasing Decimal Places in Fund Prices.

Ms. Ray reviewed the pricing of TSP investments. She explained that the Agency truncates the prices of TSP funds to two decimal places. Truncating to two decimal places causes the price of the G Fund to increase only every five to six days. Consequently, a participant could buy shares in the G Fund, hold them for five days, and realize a zero percent return. Truncating to two decimal places also causes tracking error. TSP returns can be affected by four to nine basis points, depending on the share price, solely because of the price truncation. To correct these problems, Ms. Ray recommended the Agency expand the share price calculation to four decimal places. Mr. Long stated that he intended to adopt this recommendation and that a Board vote was not required to adopt Ms. Ray's recommendation. Mr. Fink asked whether there were any negatives associated with adopting this recommendation other than the $150,000 cost and was told that there were not.

4. TSP System Modernization.

Mr. Long stated that he was recommending a significant increase to the annual budget in order to modernize the TSP computer systems. Chairman Saul said that he was not surprised by this because the Board had directed Mr. Long to ensure the system had the capacity to handle a mega-event and to ensure that it had state of the art security. Mr. Long replied, that, as the Board had directed in March, the Agency had conducted a tooth-to-tail review of its computer systems. Chairman Saul stated that with almost a quarter trillion dollars under management, the Agency must ensure that its computer systems are accurate, safe, and as up to date as possible—without wasting participant money. Mr. Long stated that he believed the TSP modernization plan and budget strike such an appropriate balance.

Messrs. Hagerty and Friend gave a power point presentation on TSP system modernization (attached). Mr. Hagerty explained that, since he took over as CIO approximately two years ago, his focus has primarily been on tactical events. These included Hurricane Katrina (the Agency's record keeper had been the National Finance Center in New Orleans), the opening of a new call center, responding quickly and decisively to security threats, and the relocation of TSP operations from New Orleans, but during this same period, his office has also been building a strategy and way ahead.

Mr. Hagerty then discussed the findings of the tooth-to-tail review. The current computer system is sufficient. It is not an emergency. However, many computer platforms are near end-of-life. This led him to propose a technology refreshment approach. The review found they still have some single points of failure. To address this, they need to build in redundancy at all critical points. They can also use computer resources more efficiently. As new applications have been added recently, they have typically added new servers. New technology will allow them to consolidate these applications and result in more efficient computer use. He is recommending a $15.2 million investment. The investment will provide greater efficiency, increased redundancy, adequate capacity in the event of a catastrophic event, and will also allow greater end-to-end testing. The goal is to have a TSP system that will deliver critical services no matter what. To achieve this, the Agency must take TSP technology to the next level.

Mr. Sanchez asked whether there is a time frame in which to buy a mainframe that is both the best product and that we can upgrade several times. Mr. Hagerty responded that we want to purchase leading edge technology (technology that has been on the market long enough to prove it is a stable platform) but not bleeding edge technology (brand new technology that typically costs much more). Mr. Fink asked, if the Board approves Mr. Hagerty's request, when would you anticipate needing the next major overhaul? Mr. Hagerty explained that server based technology would need to be replaced in three to four years. The mainframe would be a five to seven year investment. Mr. Fink asked whether the review of the TSP computer systems had been conducted in-house or by outside consultants. Mr. Hagerty and Mr. Friend replied that the Agency had IBM and others examine the systems and that Agency personnel validated their findings. The reviews established that the current system has adequate capacity, but does have some constraints with memory.

Mr. Friend then discussed the technical aspects of the modernization proposal. The back-up mainframe was purchased in 2004, but it has 2000 technology. Mr. Sanchez reiterated his point that we want tested, but not dated technology. Mr. Hagerty stated that we purchased the back-up mainframe with older technology because it needed to mirror the technology at the principle mainframe site. Mr. Friend added that now is a good time to buy. Current technology is about one and one-half years old. It will probably be at least one and one-half years before new, bleeding edge technology is introduced. Mr. Long pointed out that the current system has enough capacity to handle the current workload, even in an emergency. Mr. Friend agreed and explained that the window for completing critical daily processes is shrinking. In order to cope with this, we don't need greater processing capacity, but we do need greater memory.

Chairman Saul asked if the Agency didn't buy anything now, when would we expect to run into problems and was told 18 to 24 months. Mr. Friend added that we do need more storage now. If we upgraded only storage now, the upgrades would be obsolete in 18 to 24 months. Mr. Hagerty added that while the current system could be used for 18 to 24 months, it does not allow for end-to-end testing. Also, with the shrinking time frame for accomplishing critical daily tasks, continuing to use the old technology might mean the Agency would occasionally miss trade deadlines. This could subject the Agency to $10-15 million dollars in liability for lost earnings. Mr. Saul asked whether Mr. Hagerty was proposing a two-year plan. Mr. Hagerty explained that, if approved, they would acquire new mainframes by the end of the calendar year and that the bulk of the initiative would be implemented in fiscal year 2008. Some of the proposal would not be implemented until 2009.

Mr. Friend then noted that the back-up mainframe is smaller and has less capacity than the primary mainframe. This could create delays if we ever had to rely on the back-up mainframe to handle the daily processes. Neither mainframe is upgradeable. Seventy-eight percent of the servers at the back-up site will be end-of-lifecycle by fiscal year 2008; Eighty-two percent of the servers at the primary site will be end-of-lifecycle by fiscal year 2008. If one of them was to break, we would likely be unable to have it repaired. Chairman Saul asked who was doing the consulting work and stated that he assumed we found them to be reliable. He was told that a company called Jeskell did the work and that it had a good reputation, having done similar studies for other government agencies as well as for the private sector.

Storage subsystems are also running out of capacity and are slow by today's standards. We need a fifty percent increase in disc capacity. Our current system does not support encrypting data at rest. Mr. Sanchez asked whether we would encrypt all data in the system and was told that we would.

Mr. Hagerty stated that they could focus on spot solutions, such as the mainframe. But a faster mainframe would need to wait on data. Consequently, his approach to TSP modernization is holistic. Chairman Saul asked if the primary site failed, would the backup site takeover instantaneously. Mr. Friend explained that it would take about eight hours to get the backup site operational and its data would be about an hour old. The goal is for the backup site to be operational in fifty-nine minutes.

Federal agencies are expected to become Internet Protocol Version 6-compliant by June of 2008. Our current hardware is not Internet Protocol Version 6-compliant. It is in the Agency's best interest to move at the same rate as the rest of the Federal government. Mr. Sanchez asked what happens to the replaced computer equipment. He was told that after we erase the memory, most of the smaller hardware is distributed through a government program that often donates it to schools. The manufacturer will often give credits for the larger hardware.

Mr. Friend then addressed security. We adopted longer, more secure passwords in May. In October we will replace social security numbers as the account identifier with account numbers. We have firewalls, intrusion detection, and anti-virus software in place. We had two independent penetration tests in 2007 (and more are planned). They found no external vulnerabilities. We have procurements underway for fraud detection, brand monitoring, anti-phishing, and for someone to perform some social engineering to identify any gaps in combating that. All data in motion is currently encrypted, we plan to encrypt all data at rest. Mr. Sanchez remarked that security is critical, especially since the TSP has become more visible. Mr. Fink asked whether social engineering meant people trying to trick others to disclose confidential information. He was told that it did mean this. For example, someone might call after hours and, by listening to voice mail, build an organizational chart. They would then call during the day and say for example, that Mark Hagerty and Roy Friend asked me to call you because I forgot my password and they said you could give it to me.

Mr. Friend then addressed people. The parallel call centers are excellent backups. The contract with SI allows for reasonable dispersal. Agency employees are still centrally located, but we're looking at addressing this through greater use of the disaster recovery site and through telecommuting.

Mr. Friend then made the following recommendations: replace both mainframes; replace the storage subsystems; consolidate and replace the servers; and eliminate all critical single points of failure.

Mr. Long said that we will discuss the budget shortly, but stated that he had wanted the Board members to hear the details behind what was being requested. He added that they would also address where they held back. Mr. Friend stated that they had decided not to relocate the backup site within 100 kilometers of the primary site. Although this would allow for instantaneous recovery, it would lose geographic dispersal and would cost ten to fifteen million dollars more annually. Chairman Saul said that a one hour delay won't hurt participants. Eight hours is not great, but except for markets opening and closing, it is functional. He added that it is important that the primary and back-up sites be on separate electric and telecommunication grids.

4. Budget.

Mr. Long reviewed his September 7, 2007 memorandum on "Fiscal Year 2007 Budgeted and Projected Expenditures, Fiscal Year 2008 Budget, and Fiscal Year 2009 Budget Estimate." Next year we will implement a mid-year review of the budget at the March Board meeting.

We had budgeted $86.7 million for fiscal year 2007 and expect to be $3.7 million under budget. Chairman Saul asked for the budget numbers since fiscal year 2003 and was provided with the following:

	Budgeted	Expended
FY 2003	106.6 mil	92.6 mil
FY 2004	106.9 mil	100.9 mil
FY 2005	94.9 mil	94.9 mil
FY 2006	89.4 mil	83.4 mil
FY 2007	87.6 mil	83.9 mil

The large gap between the amount budgeted and the amount expended in FY 2003 was due to delaying fielding certain software until we converted to the new record keeping system. This led to an increase in the FY 2004 budget. Mr. Fink noted that any year we upgrade the system is expensive. Mr. Long stated that last year's budget was unusually low; we need to spend more this year to modernize TSP systems. He added that the plan was much smaller in 2003. Chairman Saul stated that we now have two and one-half times the assets and a greater participant base. It is natural that we would need to spend more. Chairman Saul then asked for the annual expense ratios and was provided the following:

FY 2003	10 basis points
FY 2004	6 basis points
FY 2005	4 basis points
FY 2006	3 basis points
FY 2007	2 basis points (projected)

Chairman Saul then asked what was estimated for fiscal years 2008 and 2009. Mr. Long stated that he couldn't make a firm estimate because if the assets continue to increase, the expense ratio will fall. The mainframes will be capitalized and expensed over a period of years. The budget also does not account for loan fees and forfeitures and these can vary from year to year. If we assume everything stayed the same from 2007 to 2008, the increase in the budget would increase the expense ratio by nine-tenths of one basis point. If TSP assets remained constant at $208 billion, the increase in the expense ratio would be one basis point.

Mr. Long then reviewed the 2007 budget. Record keeping costs are projected to be $4.7 million above budget due to acquisition of new mainframe computers. Mr. Fink asked whether the $4.7 million was part of the $15.2 million requested for TSP system modernization and was told that it was. The costs for participant communications are projected to be $5.6 million under budget because we had to redirect some efforts and lacked the personnel to do everything. Personnel costs and other operating costs are also below budget. Chairman Saul asked whether website enhancements were included in the budget. Mr. Long stated that it was. Ms. Moran has already hired someone to look at the TSP website, to compare it to those throughout the pension plan industry, and to make recommendations regarding a plan to move forward. That work will be done before the end of this calendar year. Mr. Sanchez asked whether anything had been budgeted to increase participation by members of the uniformed services. Mr. Long replied that Ms. Moran had several targeted communications planned and that Ms. Moran and her staff will reach out to the uniformed services. He noted that Ms. Goethe, a member of Ms. Moran's staff, had just returned from a tour on active duty with the U.S. Army in Iraq. Chairman Saul welcomed Ms. Goethe back and thanked her for her service. He added that no one could better represent the TSP with the uniformed services than Ms. Goethe.

Mr. Fink asked what the Agency was doing with its excess office space. Mr. Long said we are considering moving the personnel on the second floor to the third and fourth floors but that we haven't reached a conclusion. We also have concerns about what we would do if the Agency increases its personnel. Mr. Whiting asked if we could sub-let the extra space. Mr. Long said that we are considering that. The current lease ends in 2012 which is a relatively short period. We also need to preserve the second floor training room. We expect to reach conclusions and report on this in two to three months.

Mr. Sanchez asked if we had adequate resources to support the uniformed services in fiscal year 2008. Mr. Long said that we did and that his earlier answer referred to fiscal year 2008.

Mr. Long then addressed the fiscal year 2008 budget. It is substantially higher than the fiscal year 2007 budget. The proposed budget is $108.4 million which represents a 24 percent increase over the 2007 budget. The budget includes TSP system modernization, the new annual statement, enhancing the website, and many other improvements. The budget for record keeping activities is $81.7 million. This includes $27.5 million for system support and software and $29.0 million for call center, data center, and recovery center operations. The latter is a $10.4 million increase mainly due to hardware and software upgrades but also because TSP transactions are increasing as the baby boomers retire. The new account numbers and the new annual statement will increase call volumes also. Chairman Saul noted that we are making work for ourselves as we improve the TSP. Mr. Long replied that we are and that this is a prudent expenditure. He noted that the $81.7 million budget for record keeping activities also includes $25.3 million for other record keeping activity. Chairman Saul stated that a lot of that must be just the cost of mailing the annual participant statement. Ms. Moran said that the cost of postage alone would be $1.6 million. Mr. Long said that the annual participant statement will help us to track lost participants. Each mailer will be bar-coded. We can scan the retuned mail and immediately know who the participant is and then take steps to find the participant.

Mr. Long noted that the 2008 budget includes $7 million for communications, $1.2 million less than the 2007 budget. This includes a DVD. Ms. Moran added that, in view of the success of the L Fund DVD, we had planned to do a DVD for new participants in 2007 but delayed it until 2008. We will mail it to new participants approximately three months after they join the TSP—a time when they shouldn't be overwhelmed with understanding all their new benefits. The DVD will be modular so that we can expand it in the future. We also hope to make its contents available on the website. Ms. Moran added that we hope to do some targeted mailings in 2008, for example, to participants who are younger than 25 but who are invested 100 percent in the G Fund and to members of the uniformed services.

Mr. Long noted that the 2008 budget includes $10.7 million for personnel, an increase of $1.8 million from 2007. This represents 80 full-time and part-time employees (the latter group includes the Board members). The 2008 budget includes $9.0 million for other agency operations. This amount includes rent, website redesign, a new participant survey, travel, training for Agency employees, office supplies, and office equipment. Mr. Petrick noted that it also include office consolidation if deemed prudent. Chairman Saul stated that the website redesign project is a priority because so much business is done there. Ms. Moran noted that we are already improving the website. We added GovDelivery as well as a search engine. The website review will be completed this calendar year and the review will enable us to plan additional enhancements. Mr. Long stated that he is very aware that the website is the primary means of communicating with participants and that we will complete the enhancements in 2008.

Mr. Long then turned to the fiscal year 2009 budget estimate. It forecasts a budget of $107 million, a slight decrease from 2008. Chairman Saul asked why it was not significantly smaller since the 2008 budget included such a large increase. Mr. Hagerty replied software costs are billed based on capacity. When we increase the capacity of the mainframe, software costs increase proportionately. This is why you do not see a large decrease in future years. Chairman Saul asked why system support costs would also go up when we add faster, more efficient computers. He noted that the budget showed a significant decrease for hardware and software in 2009, but that the budget for contractor support was up. Ms. Beemer explained that the increase is for system enhancements, TSP accounting system and accounting support, change management, and other software enhancements (and the people necessary to support the new software).

Mr. Fink asked why the budget for the Executive Director's office increased by 50 percent in 2008. Mr. Long stated that bonuses for office directors used to be in each office director's budget. Funds for these bonuses are now in the Executive Director's budget because the Executive Director makes the decisions regarding awarding bonuses to the office directors. The amount also includes some increases for employee training. Mr. Fink then asked why the budget for the Director of Product Development's office increased by 40 percent in 2008. Mr. Long replied because we plan to conduct a participant survey in 2008. The budget did not include any amount for survey activity in 2007.

Mr. Sanchez noted that the amount budgeted for "external vendors - recordkeeping services" increases from $35 million in 2007 to $45 million in 2009. He asked whether this was largely attributable to software. Mr. Hagerty explained that it was. He also increased the budget by 3.5 percent each year to account for inflation. Mr. Sanchez stated that he had no problem with the 2008 budget but noted that he wants to ensure that we are as efficient as possible. He continued that he will push for decreases in future budgets.

Mr. Long stated that he expects that and added that he will push the Chief Information Officer and Director of Participant Services to reduce their budgets once these improvements are in place. He added that the 2008 budget is prudent and will lead to enhancements that are in the best interest of TSP participants and beneficiaries. He concluded that if we can reduce the 2009 budget, we will do so.

Chairman Saul agreed with Mr. Sanchez and noted that when the current Board was appointed it wanted to reduce the budget. While doing so it introduced a number of efficiencies as well as a back-up call and data center. The $106 million budget in fiscal year 2003 did not include either a back-up call center or a back-up data center. He noted that had they not directed the creation of these back-up centers, the plan would have faced a real disaster when Hurricane Katrina struck New Orleans (where the TSP data and call center had been located). Participants are now getting better information, more timely through the website and through other TSP communication materials. TSP participants have a much better plan now and it is run by a much more efficient Agency. Mr. Sanchez stated the Agency also had a much deeper management bench than when the Board was appointed.

Chairman Saul stated that the proposed budget increase was hard to swallow but that the improvements were necessary. He cautioned the Executive Director to insure that future budgets do not continue to increase. He concluded by stating that the 2008 budget represents a capital investment for the future. It is a building block to create a better, safer TSP.

Chairman Saul entertained a motion for approval of the fiscal year 2008 budget. The following motion was made, seconded, and adopted without objection:

> MOTION: That the Agency's proposed fiscal year 2008 budget, as set out in the September 7, 2007 memorandum, be approved.

5. Closed session.

On a vote taken by the Secretary before the meeting, the members closed the meeting for a discussion of internal personnel matters.

Whereupon, there being no further business, the following motion was made, seconded, and adopted without objection and Chairman Saul adjourned the meeting at 12:30 p.m.

> MOTION: That this meeting be adjourned.

Thomas K. Emswiler
Secretary

NOTE: Ace-Federal Reporters, Inc. made a verbatim transcript of this meeting.

Attachments

1. Thrift Savings Fund Statistics

2. August 2007 Performance Review - G, F, C, S, I, and L Funds
3. Draft 2008 Board Member Meeting Calendar
4. Pricing of TSP Investment Funds Memorandum
5. TSP Systems Modernization Powerpoint presentation
6. Fiscal Year 2007 Budgeted and Projected Expenditures, Fiscal Year 2008 Budget, and Fiscal Year 2009 Budget Estimate Memorandum.