THRIFT
SAVINGS
PLAN

GARY A. AMELIO
Executive Director

January 31, 2007

Mr. Ian Dingwall
Chief Accountant
Employee Benefits
  Security Administration
United States Department of Labor
Suite 400
122 C Street, N.W.
Washington, D.C. 20001-2109

Dear Ian:

This is in response to your letter dated January 22, transmitting the KPMG LLP report entitled Employee Benefits Security Administration Review of the Thrift Savings Plan Call Center at SI International (Clintwood, VA), dated September 30, 2006. My comments with respect to this report are enclosed.

We are pleased to note that the auditors concluded that the TSP Clintwood call center has demonstrated consistent operational practices in delivering service to TSP participants that meet contractual performance standards.

Thank you once again for the constructive approach that the Department of Labor and its contractors are taking in conducting the various audits of the TSP. The information and recommendations that are developed as a result of your reviews are useful to the continued improvement of the Thrift Savings Plan. I also want to thank you for your continuing efforts to close prior year recommendations.

Very truly yours,

Gary A. Amelio

enclosure

Executive Director's Comments on the
Employee Benefits Security Administration's
Review of the Thrift Savings Plan Call Center
At SI International (Clintwood, VA),
dated September 30, 2006

**Recommendations to Enhance Efficiency and Effectiveness
Controls:**

<u>**2006 Recommendation No.1**</u>:

The Agency should ensure that logical access controls are
strengthened. Specifically, the Agency should ensure that:

- Media protection, sanitization, and disposal
  procedures for hardware media containing sensitive
  TSP data are completed, promulgated, and enforced.

- Cost-effective options for disabling USB ports on all
  workstations without disrupting productivity of
  personnel or call center service are evaluated.

- OmniSecurity password length setting is changed to
  conform to the TSP policy.

Comment: We concur with this recommendation. Regarding
media protection, the Agency has recently completed the
Thrift Savings Plan (TSP) Data Security Policy, the purpose
of which is to establish data security requirements that
apply to all "system components" which are defined as any
network component, server, workstation, laptop, portable
computing/storage device or application included in or
connected to the TSP data environment. This policy covers
the requirements for media sanitization and has been
supported by the purchase and installation of NSA certified
degaussing equipment at the Agency's Washington DC, Fair
Oaks, and Clintwood locations.

The Agency has also implemented **DeviceShield**™, a cost-effective
solution to disable USB ports at Clintwood. This centrally-
managed, software-based solution allows the Clintwood
Network Administrator to control access to PC ports, device
types and specific device models, provide read and write
permissions and even file control for USB Plug and Play
devices, allows multiple removable policies for every level
in the organization, and captures a full history of actions

by users attempting to access blocked ports, media or files.

Omnisecurity password settings were implemented in conjunction with a major security change in late January 2007.

2006 Recommendation No 2:

The Agency should ensure physical controls at the Clintwood call center are strengthened. Specifically, the Agency should:

- Evaluate options for programming or replacing the A-cast badge access software system. The badge access system should contain the capability to separate general work areas from sensitive work areas at the individual access level.

- Repair the exterior and interior unlocked doors and ensure that the selected option restricts access to the controlled areas as necessary and in accordance with the contract requirements for protecting sensitive equipment and participant information.

Comment: We concur with this recommendation. The call center manager is obtaining bids to upgrade or replace the current badge access system. Our target for the completion of this project is March 31, 2007. The repair to the doors has been accomplished; the invoice for this work has been provided to the KPMG audit team.

2006 Recommendation No. 3:

The Agency should closely monitor all call center handling processes, including participant research requests, in order to ensure required customer service levels consistent with documented internal goals.
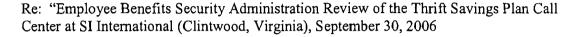
Comment: We concur with this recommendation. Instances where this metric has not been met will be reported on the call center's monthly report. We will continue to review all of the call handling processes on a periodic basis.

January 22, 2007

Mr. Gary A. Amelio
Executive Director
Federal Retirement Thrift Investment Board
1250 H Street, N.W.
Suite 200
Washington, D.C. 20005

Re: "Employee Benefits Security Administration Review of the Thrift Savings Plan Call Center at SI International (Clintwood, Virginia), September 30, 2006

Dear Gary:

Please find enclosed ten copies of the above report that communicates KPMG LLP's first review of Clintwood's operations. This FY06 review complements KPMG LLP's FY04 and FY05 reviews of TSP of call center operations, performed by the U.S. Department of Agriculture National Finance Center and by Spherix Incorporated, respectively. Such reviews not only provide cyclic oversight but also respond affirmatively to the U.S. House of Representatives' Committee on Government Reform's customer service concerns raised during its July 2003 hearing.

Overall we conclude that the Clintwood call center has demonstrated consistent operational practices in delivering service to TSP participants that meet contractual performance standards. Three new recommendations address controls collectively contributing toward further strengthened access and to customer service levels increasingly consistent with documented internal goals.

Of three prior year recommendations, two have been implemented and closed. One has been partially implemented and closed in this report to prevent a reporting redundancy within KPMG LLP's FY05 report, "Post-Implementation Review of TSP Mainframe Operations." That open recommendation communicates further enhancing oversight of compliance with Agency security policies at contractor locations. Section III discusses all recommendations further. The Agency should review and consider these recommendations for timely implementation.

We request your written response to the report's recommendations within 30 days. Your response should provide planned actions with respective target dates or reasons for non-compliance or disagreement. If I can be of assistance, please contact me at 693-8361 or Mr. William Bailey at 693-8372.

Sincerely,

William H Bailey
for

IAN DINGWALL
Chief Accountant

Employee Benefits Security Administration

Review of the
Thrift Savings Plan
Call Center
at
SI International
(Clintwood, VA)

September 30, 2006

TABLE OF CONTENTS

EXECUTIVE SUMMARY

As part of the U.S. Department of Labor Employee Benefits Security Administration (EBSA) Fiduciary Oversight Program, we performed a special project related to the Thrift Savings Plan (TSP) call center operations and processes at SI International in Clintwood, VA, and at the Federal Retirement Thrift Investment Board's Staff (Agency) offices in Washington, DC. We performed this special project from June 15, 2006, through September 30, 2006.

Since TSP's operational inception in 1987, the TSP call center activities had historically operated out of the New Orleans, LA, U.S. Department of Agriculture's National Finance Center (NFC). In March 2004, through a competitive procurement process, the Agency selected Spherix Incorporated, located in Cumberland, MD, to provide additional call center support services to TSP participants. Then, in June 2005, through a competitive procurement process, the Agency awarded a five-year contract to SI International to provide call center and support services out of Clintwood, VA, at a Government Owned Contractor Operated (GOCO) facility, ending TSP call center services at the NFC[1]. The term of the contract is one base year, with four one-year options renewable at the Agency's discretion.

Each call center provides disaster recovery relief for the other. This arrangement enables callers to continue receiving service in the event of a natural disaster or other emergency at either site. The Clintwood call center handles 100% of calls between 7:00am and 9:30am EST and 50% of TSP phone traffic between 9:30am to 5:00pm. The call center function is a central point of contact that participants have with their TSP account and is core to business operations.

Participants with questions or requests concerning their TSP accounts (e.g., account status, loan request status, interfund transfers, and contribution allocation changes) can access the automated ThriftLine or the TSP web site, or mail correspondence to the TSP. The written correspondence group in Clintwood responds to these inquiries. By dialing the ThriftLine's toll-free number 1-877-968-3778 (1-877-YOU-FRST), a participant can opt out to talk to a call center Participant Service Representative (PSR). The call is routed to one of the two call centers based on an Agency pre-determined call-volume load setting through a telecommunication provider. The

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[1] Source: www.govexec.com - In June 2006, the NFC resigned its remaining duties for the TSP because Hurricane Katrina left the facility understaffed and in poor physical shape.

Agency has defined its service level to be 90% of calls are answered within 20 seconds. It also monitors daily performance of both call centers.

We designed our procedures in accordance with the EBSA TSP Fiduciary Oversight Program, which is designed to comply with performance audits within the *Government Auditing Standards,* issued by the Government Accountability Office (GAO). Specific objectives for this special project are enumerated within Section I.A.

In 2004, we performed a special project to assess the NFC call center activities along with a full scope performance audit of the NFC's other participant support processes in, "Review of the Thrift Savings Plan Participant Support Process at the United States Department of Agriculture National Finance Center." In 2005, we performed a related call center special project, "Review of the Thrift Savings Plan Parallel Call Center at Spherix Inc.," that reviewed the Spherix call center activities in Cumberland, MD. Our 2006 special project was performed based on our updated understanding of TSP call center processes learned from current and prior engagements.

We accomplished this special project's objectives by (1) obtaining an understanding of the Clintwood Call Center environment and contract requirements, (2) performing a walk-through of the call center operation and technology infrastructure that supports service delivery, (3) testing select call center procedures and assessing the call center's performance, (4) reviewing activities undertaken by the Agency to manage the oversight functions of the call center, including access controls, and (5) reviewing the status of call center recommendations from the 2005 Spherix report above.

Overall, based on interviews conducted (Appendix A), documents inspected (Appendix B), and test procedures performed within the FY 2006 Call Center Assessment audit program guide, we conclude that the Clintwood call center has demonstrated consistent operational practices in delivering service to TSP participants that meet contractual performance standards. The Agency has demonstrated that a competitive process was followed in selecting a vendor to manage the parallel call center operations at Clintwood and has also demonstrated that consistent contractor oversight processes have been used to evaluate the vendor's (i.e., SI International) performance. The Agency has also provided for information security and Privacy Act implementation. See Section III.C. for detailed discussion.

We currently report, for the Agency's consideration, three new recommendations from this 2006 special project that address effectiveness and efficiency controls[2]. These recommendations include:

- Evaluate and further strengthen logical access controls over the Clintwood call center.
- Evaluate and further strengthen physical access controls over the Clintwood call center.
- Periodically review compliance with internal metrics governing participant research requests.

Ensuring continuously safeguarded participant data through effective access controls is a critically important responsibility of the TSP fiduciaries' call center operations and ensuring prompt and completed participant research requests will contribute positively to further customer service satisfaction.

We also assessed the status of three prior year recommendations reported in "Review of the Thrift Savings Parallel Call Center at Spherix Inc., May 27, 2005 (updated with additional information received through August 17, 2005)." These three recommendations addressed security governance, participant feedback and quality monitoring, and call handling and call volume management processes. As discussed in subsection III.B, two recommendations have been implemented and closed; one is partially implemented and closed here to prevent a reporting redundancy. This finding is reported as 2005 recommendation number one in our report, "Review of TSP Mainframe Operations". Section III discusses all recommendations further.

Our recommendations collectively contribute to implementation of further strengthened access controls and to customer service levels increasingly consistent with documented internal goals. The Agency should review and consider these recommendations for timely implementation.

Section I of this report discusses the EBSA's objective, scope and methodology, and report organization. Section II is an overview of the TSP and the Clintwood call center. Section III discusses all findings and recommendations in detail. Exhibit III-1 summarizes each recommendation.

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[2] Recommendations that address effectiveness and efficiency are presented as opportunities to provide more cost-effective and/or timely service to TSP participants.

I. INTRODUCTION

A. Objective

KPMG LLP (KPMG) was contracted by the U.S. Department of Labor, Employee Benefits Security Administration (EBSA), to perform services under Section 8477(g) of the Federal Employees' Retirement System Act (FERSA) of 1986, as amended. These services included a special project related to the Thrift Savings Plan (TSP) call center operations and processes at SI International in Clintwood, VA, and a review of the status of prior applicable recommendations.

The specific objectives of this engagement were to:

- Obtain an understanding of the Clintwood call center environment and contract requirements (business operations, technology infrastructure, key personnel and workforce management);
- Assess the call center's performance (customer feedback and surveys, service delivery, performance metrics, training and professional development programs, and technology support tools);
- Assess the Federal Retirement Thrift Investment Board Staff's (Agency) call center oversight functions (call volume/load management, service level benchmarking/management, contract management and vendor selection, communications management, information security and Privacy Act requirements, and management reporting);
- Assess the call center security and data management practices (physical access to the call center site, sensitive equipment, and work locations; logical access to TSP systems and supporting technology; information security and Privacy Act implementation; and background investigations and non-disclosure agreements); and
- Follow-up on the status of prior year findings from the participant support call center assessment performed at Spherix in FY2005, specifically recommendation numbers 2005-1, 2005-2, and 2005-3.

B. Scope and Methodology

We performed our engagement in accordance with the EBSA TSP Fiduciary Oversight Program, which is designed to comply with performance audits within the *Government Auditing Standards* issued by the Government Accountability Office. Our engagement consisted of four phases: (1) Planning, (2) Arranging for the special project with the Agency, (3) Testing and interviews, and (4) Reporting.

The planning phase was designed to ensure that team members developed an understanding of Clintwood call center daily operations in servicing TSP participants, with the assistance of the Agency. Arranging the engagement included contacting the Agency and agreeing on the timing of detailed testing procedures. During the testing and interviews phase, we conducted all interviews, collected and inspected documentation and evidence, and performed observation and walk-through activities. We conducted these test procedures at the call center in Clintwood, VA, and at the Agency's headquarters in Washington D.C. The report-writing phase entailed drafting a preliminary report, conducting our exit conference (Appendix C), providing a formal draft report to the Agency for review, and preparing and issuing the final report.

C.   Organization of Report

Section II includes an overview of SI International call center operations and processes. Section III presents a detailed discussion of all findings and recommendations.

II.   OVERVIEW OF THE CALL CENTER

A.   The Thrift Savings Plan

Public Law 99-335, the Federal Employees' Retirement System Act (FERSA) of June 6, 1986, as amended, established the Thrift Savings Plan (TSP). The TSP is a key component of the Federal Employees' Retirement System (FERS). The TSP provides a Federal and, in most cases, state income tax deferral on employee contributions and related earnings. The TSP is available to Federal and Postal employees, uniformed service personnel, and members of Congress and Congressional employees. For FERS participants, the TSP also provides agency automatic (1 percent) and matching contributions. The TSP began accepting contributions April 1, 1987, and as of September 30, 2006, had approximately $194 billion in assets and approximately 3.6 million participants.

The FERSA also established the Federal Retirement Thrift Investment Board (Board) and the position of Executive Director. The Executive Director and the Board members are TSP fiduciaries. The Executive Director manages the TSP for its participants and beneficiaries. The Board's Staff (Agency) is responsible for administering TSP operations.

B.   SI International (SI)

Since TSP's operational inception in 1987, the TSP call center activities had historically operated out of the New Orleans, LA, U.S. Department of Agriculture's National Finance Center (NFC). In March 2004, through a competitive procurement process, the Agency selected Spherix Incorporated in Cumberland, MD, to provide additional call center support services to TSP participants. Then in June 2005, through a competitive procurement process, the Agency announced a five-year contract with SI International to provide call center and support services out of Clintwood, VA, ending TSP call center services at the NFC[3]. The term of the contract is one base year, with four one-year options renewable at the Agency's discretion.

Each of the two centers provides disaster recovery relief for the other. This arrangement will enable callers to continue to receive service in the event of a natural disaster or other emergency at either site. The Clintwood call center handles 100% of calls between 7:00am and 9:30am EST

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[3] www.govexec.com - In June of 2006, the NFC resigned its remaining duties for the TSP because Hurricane Katrina left the facility understaffed and in poor physical shape.

and 50% of TSP phone traffic between 9:30am to 5:00pm. SI International's[4] principal business is providing information technology and network solutions primarily to the Federal government. Section II.C.3.c of this report, Contract Management/Vendor Selection, describes the Agency's method of proposal evaluation related to this contract.

C. Description of the Call Center Processes and Related Assessments

The following depicts our understanding of the SI International call center processes, including a high-level overview of the call center's operations and a more detailed description of customer service delivery key process areas.

1. Overview of the Call Center Operations

This section contains a high-level understanding of the: a) Business operations, b) Technology infrastructure, and c) Key personnel and workforce management.

a. Business Operations

The call center function is the central point of contact that participants have with their TSP accounts and is core to business operations. Participants with questions or requests concerning their TSP accounts (e.g., account status, loan request status, interfund transfers, and contribution allocation changes) can access the automated ThriftLine or the TSP web site, or mail correspondence to the TSP. These inquiries are handled by the written correspondence group in Clintwood. By dialing the ThriftLine's toll-free number 1-877-968-3778 (1-877-YOU-FRST), a participant can opt to talk to a call center Participant Service Representative (PSR). The call is routed to one of the two call centers based on an Agency pre-determined call-volume load setting through a telecommunication provider.

The Clintwood call center that supports the Agency contract is comprised of approximately 83 full-time PSRs (i.e., 72 call handling and 11 written correspondence), 5 supervisors (i.e., 4 for PSRs and 1 for written correspondence), the 4 Operations personnel, and 2 quality monitoring and training personnel.

The PSRs primary task is to answer inquiries from the TSP participants. Before a PSR can take live phone calls, he or she must pass a training course consisting of TSP program specific

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[4] NASDAQ ticker: SINT

information, use of the TSP applications (e.g., PSR, PowerImage, eForms), and additional customer service skills training. A 'helpdesk' function, consisting of 4 senior PSRs, assists first line PSRs with difficult inquiries before the calls are escalated to supervisors for resolution. The primary responsibilities of supervisors are to oversee floor operations, to monitor performance metrics through the Symposium Automated Call Distribution (ACD) software, and to perform the personnel management of the PSRs. In addition, supervisors monitor live and recorded phone calls, take escalated calls, supervise research, and coach PSRs. The Operations group is responsible for workforce scheduling, scheduling adherence monitoring, real-time service level monitoring, and reviewing the short call report (i.e., calls lasting less than 30 seconds). The quality monitoring and training personnel are responsible for performing the quality monitoring of the PSR phone calls in accordance with the Agency's quality assurance program and providing introductory TSP program, PSR and PowerImage application, and customer service skills training. The training group also provides refresher training to the PSRs.

b. Technology Infrastructure

The technology infrastructure is critical to providing participants with access to their accounts and in protecting the confidentiality, integrity, and availability of participant information. The Clintwood data center hosts the application servers for the workforce forecasting, call volume and performance monitoring, and call recording and archiving software. Technology components and descriptions are included below:

- Symposium Call Center Server – The ACD environment must have the Symposium server to function. The Symposium server provides the ability to route calls to the next available PSR, enables PSR phone logins, and allows for all reporting and statistics on PSRs as well as trunk usage. Symposium integrates with the Nortel 81c post branch exchange (PBX) that is responsible for handling calls within the call center.
- Envision Quality Monitoring – Envision is used for quality monitoring. This server provides computer telephony integration (CTI) with the PBX to capture audio from the phones and uses a workstation side smart client to allow video screen captures as the PSRs perform their work.
- VersaDial Call Recording – VersaDial captures all inbound calls ACD calls from participants.
- Blue Pumpkin Workforce Management – Blue Pumpkin is used to manage the daily schedules of the call center. This includes PSR schedules, breaks, lunches, holidays or any other events.

- Microsoft Domain Controller Network Infrastructure – Multiple domain controllers used for redundancy with approximately 10 servers on the domain and over 120 workstations. Servers and workstations are updated nightly from a Microsoft Update server as well as the workstations. Symantec Corporate Antivirus protects the network from virus threats and is updated daily. Group Policy Object (GPO) is used to provide the domain with additional security.

- Network Systems –Internet traffic comes in on one router, wide area network (WAN) traffic on another, and campus traffic on the last. The Cisco Catalyst layer 2/3 switches provide 100 megabytes/sec (mpbs) network access to our campus router. Traffic from and to that router must pass through a Cisco PIX Firewall in order to proceed to either the WAN or the Internet. Internet traffic is all protected using network address translation (NAT), and WAN access is hardware encrypted, using Cisco AIM encryption methods to the data center over frame relays to Reston, VA.

The Clintwood data center has established procedures for performing backups, PBX, domain administration, file servers/shared drives, and VersaDial backups, which include:

- Backups – TSP backups of the network and file servers are performed automatically without user intervention. An offsite storage area network (SAN) for data storage is provided by EVAULT, which provides for automated nightly backups without the need to change tapes, disks or any other media. Upon completion of the EVAULT backups, an e-mail notification communicates that the target machine has completed its backup cycle. Servers that do not use EVAULT and require storage media include the VersaDial server, which is backed up to digital video disc (DVD), and the Symposium server, which is backed up to digital data storage (DDS). A local backup tape stays loaded and cycles weekly for redundancy.

- PBX – The TSP telecommunications infrastructure is built on a Nortel network. The PBX is a Nortel Option 81c and can be accessed from the Optivity Telephony Manager (OTM) server for administration of telecommunications devices.

- Domain Administration – The Windows' domain controller allows passwords to be reset, pushes out group policy objects, change permissions, etc. The primary domain controller is VASRVDNS and the next domain controller is VASRVDNS2. These replicate between each other via active directory automatically.

- File Servers/Shared Drives – Two servers handle all file server storage. They are VASRVISA and VASRVSTOR. VASRVISA carries many of the shared drives among groups as Admin, Written, and the Public drive. VASRVSTOR carries individual shares for admin users and supervisors.

- VersaDial Backups – VersaDial uses DVD backup media from 2 DVD players. The disc capacity can be checked from the VersaDial monitoring program. The server sends alerts once capacity is reached. Discs are labeled and archived by date.

The technology infrastructure operates under the information security requirements of the Agency and other Federal guidance. See section II.C.3.e, Information Security and Privacy Act Requirements, for additional information.

c.   Key Personnel and Workforce Management

Key personnel consist of the core positions and individuals proposed by SI International that are involved in the management of the call center contract. These positions include the Call Center Manager, Human Resources Manager, Facilities Supervisor, Information Technology Manager, Operations Manager, Training and Quality Assurance and the PSR Supervisors. Workforce management processes consist of the training methods, performance management procedures, retention and turnover trends, and performance programs used by the call center.

Key personnel and PSRs receive four weeks of in-class training focusing on the technology tools and the TSP program. Customer service training is included in quality assurance (QA) training program, which is used to instruct PSRs about the TSP QA program. PSRs must pass a test and undergo additional ride-along sessions with senior PSRs after the training prior to taking live phone calls.

Mentoring and coaching consists of the quality monitoring evaluations and customer satisfaction surveys. These are instrumental tools in monitoring PSR performance. PSRs who score lower than the minimum required scores on the quality monitoring forms receive additional coaching from their supervisors in order to improve the scoring results. Experienced PSRs, such as floor walkers and the help desk, assist in mentoring new PSRs in order to help alleviate the burden of the learning curve associated with the job.

In the event of a large turnover in staff, the impact on operations would be minimal due to skilled labor in the area along with a parallel call center running in Cumberland, MD (i.e., Spherix) able to handle 100% of incoming calls. According to Clintwood management, since the call center opened its operations in August 31, 2005, 39 individuals have left, 14 during 2005 and 25 during 2006. Call center management attributes this manageable turnover to new professional opportunities within the area. To compete for and to retain a call center workforce, SI International offers a competitive compensation and benefits package, that includes market

wages, 15 vacation days, all observed Federal government holidays, flexible work hours, and onsite child care. In addition, personnel work in a state of the art facility in a collegial atmosphere, and receive incentives through the employee/team of the month and team competitions. These programs are designed to build and reinforce teamwork through camaraderie, to improve performance, and to alleviate workplace stress.

2. Call Center Processes

The call center is the primary option for participant interaction with the TSP. Each interaction directly influences the participant's perception of customer service. For example, the length of time it takes to talk with a PSR, the ability of a PSR to answer participant questions, and the quality of communication during the interaction can influence the participant's perceptions towards the quality of service. As such, the success of a call center operation depends on the proper blend of people, implemented processes, and enabled technologies, employed together towards consistent customer service. To evaluate and measure the Clintwood call center's service delivery and customer service capabilities and performance, we assessed the following areas: a) Customer feedback and surveys, b) Service delivery, c) Performance metrics, d) Training and professional development programs, and e) Technology support tools.

a. Customer Feedback and Surveys

The Agency has a formal customer satisfaction survey and a quality assurance program which are collectively used to analyze customer feedback and PSR performance. The Clintwood call center began administering the surveys in November 2005. Customer satisfaction surveys are only administered for calls that have been evaluated through the quality monitoring process. The customer satisfaction survey is used to evaluate a PSRs performance from the perspective of the participant and the quality monitoring forms are used to evaluate the PSRs performance from the perspective of the quality monitoring evaluators.

The VersaDial technology records all audio of phone calls that come into the call center. For each PSR, the Click2Coach technology records the video for every 5th call (see Section II.C.2.e, Technology Support Tools, for information on the VersaDial and Click2Coach software). For quality monitoring purposes, PSR calls are randomly selected from all recorded calls. Guidelines have been established as to the number of calls to be evaluated for PSRs who are new, experienced, or require additional monitoring for performance. For the new hires' monitoring program, five calls are monitored per month with the intention to eventually lower the number of calls to three per month for each PSR as he/she becomes more experienced. The

quality monitoring evaluator selects and evaluates calls using her experience with the program and customer service training, and scores attributes of the call under the categories of foundation and finesse skills. The attributes measured include:

Foundation Skills	Finesse Skills
Opening • Thanks customer for calling • States first and last name; asks caller to identify self • Offers assistance • Gathers and verifies account number if not provided through ThriftLine; verifies daytime telephone number and customer's identity *Data Quality* • Provides accurate information *Professional Etiquette* • Uses appropriate hold and transfer steps • Uses please, thank you, and caller's name when appropriate • Does not interrupt caller *Conclusion* • Summarizes the next steps and agreements • Asks to be of further assistance • Brands the call	*Call Management/Listening* • Checks for understanding and restates for understanding in complex situations • Manages silence well • Captures information the first time • Attempts to build relationship *Program Knowledge* • Educates customer; demonstrates industry and product expertise • Asks appropriate questions and attempts call objectives • Promotes TSP web site/ThriftLine *Communication Skills/Customer Responsiveness* • Uses polite manner, effective pace, volume, tone • Acknowledges customer's issue/problem; handles objections/gains customer's commitment • Provides accurate and pertinent inquiry/response codes and comments when necessary

Calls are scored using a rating scale of 0 = unsatisfactory; 1 = needs improvement; 2 = satisfactory; 3 = outstanding; and N/A = not applicable for this call. In addition, quality assurance coordinators and supervisors conduct calibration sessions where all personnel who perform quality monitoring duties listen to and score a call, compare the results, and discuss the differences in monitoring approach. The calibration sessions are intended to create a common baseline for evaluating and scoring the calls regardless of the individual who performs the monitoring. Once the calls have been monitored and scored, the evaluation form is given to the PSRs supervisor for follow-up coaching. The Clintwood call center, the Cumberland, MD, call

center, and Agency staff perform monthly calibration sessions together to calibrate quality monitoring approaches across both call centers.

The Human Resources Manager conducts the customer satisfaction survey by telephone for the evaluated calls. The objective is to perform the survey call within 48 hours of the participant's call. If the participant cannot be reached within 72 hours of the initial contact, then the call will not be included in the survey. A total of seven questions are used to capture participant feedback about his/her contact with the call center. Questions include:

The first two questions require quantitative responses:
1   How many times did you have to telephone the Thrift Savings Plan Customer Service Center in order to complete your business or obtain the information you needed?
2   How many times were you placed on hold?

The next five questions require a score on a scale of 1 to 5, 1 equaling very dissatisfied and 5 equaling completely satisfied:
3   How satisfied were you with the length of time it took to complete your inquiry?
4   How satisfied were you with the professionalism and responsiveness of the representative?
5   How satisfied were you with the knowledge level of the representative?
6   How satisfied were you with the call overall?
7   How satisfied are you with our Customer Service Center hours of operation?

A minimum of 130 quality monitoring forms and surveys are to be completed semi-annually in order to obtain a statistically relevant sample to achieve a 90% confidence level from which to compare the customer satisfaction survey results with quality monitoring results. The goal of the analysis is to evaluate the correlation between participant scores and the corresponding foundation and finesse attribute scores of the quality monitoring forms. From this comparison, the Agency may be able to identify areas of opportunity for improvement in the quality monitoring process, closing any gap between the participant's scores and the quality monitoring score. Comparative analyses for the Agency were prepared for the periods of December 2005 to February 2006 and March 2006 to May 2006 by Incoming Calls Management Institute (ICMI). Thus far, the Agency has not instituted changes to the quality monitoring program or satisfaction survey as a result of these analyses.

When a PSR encounters a participant who requests escalation, the PSR attempts to diffuse the issue on his/her own, with the assistance of a floor assistant, or with the PSR helpdesk. If a floor

assistant is unavailable and the helpdesk is unable to assist, the call is escalated to a supervisor. Escalated calls are coded in the PSR application for follow-up by the supervisor and a PSR note is added to record the call activity. Calls are only referred to the Agency upon the participant's request. If necessary, a researcher or supervisory PSR may contact the Agency on the participant's behalf.

b. Service Delivery

Service delivery includes how calls and internal and external communications are managed as part of providing participants service that meets or exceeds service level standards. The Clintwood call center derives communication instructions from the Agency. Major TSP program changes (e.g., the introduction of the lifecycle funds) generally involve large communications campaigns, such as distributing information brochures or other special mailings, creating questions and answers (Qs & As) and training materials for the call centers, and developing TSP web site announcements and other postings. Minor changes may involve updating existing materials and briefing the call center personnel. TSP record keeping system (TSP system) maintenance activities (e.g., system downtime) generally involve posting a message to the TSP web site and placing a recording on the ThriftLine. PSRs send daily e-mails to supervisors about common inquiries throughout the day and meet on a weekly basis to discuss issues that are impacting, or could impact, the volume of calls and repeat inquiries that the call center has experienced. The outcome of these e-mails and meetings is included in refresher training, as needed.

PSR call handling procedures consist of a comprehensive set of instructions for handling all scenarios and calls from participants. Examples of these procedures include logging issues in a consistent manner for accuracy and completeness, escalating issues through the proper channels when a participant requests escalation or when a difficult inquiry can not be resolved, properly placing the participant on hold or transferring the call, setting the expectations for service delivery from the beginning of the call through the call's completion, finding resolutions from a knowledge management tool, and demonstrating phone etiquette skills.

PSRs try to resolve all calls on the first attempt. However, if the PSRs do not have the resolution, they will ask a floor walker or call the helpdesk PSRs for assistance. If an inquiry requires additional research, a PSR call note is added to the PSR application, and the information is provided to a research analyst (i.e., an experienced PSR) for follow-up. Research analysts attempt to resolve issues within 72 hours of receipt; however they will call the participant within

48 hours if they do not have a resolution. A PSR call note is to be added for each interaction with the participant.

Call handling processes are communicated to PSRs through formal training. Prior to the PSRs handling live calls, PSRs conduct "link-up" sessions with an experienced PSR by listening to the call and sitting next to the experienced PSR. This technique is used to improve the PSRs call handling capabilities before taking live calls on his/her own. Call handling processes are also available to PSRs in hard copy that can be included in a station binder (i.e., a compilation of useful training materials that the PSRs use as reference material). In addition, as reported earlier, quality assurance monitoring and coaching provide PSRs with information on their performance related to program requirements, proper phone etiquette, and call handling techniques.

c. Performance Metrics

Performance metrics are established service level targets used to measure and monitor the effectiveness and efficiency of the call center in areas such as time to answer, time on hold, abandoned rate, first contact resolution, and staff productivity. They are used to initiate change in service delivery processes and to optimize resource allocation as needed. The following section includes our understanding of the performance standards used to manage call handling performance, and the reporting used by Clintwood call center management to monitor and manage service level achievement.

The performance standards are the service levels set by the Agency, as contractual requirements, for which the call centers establish operational goals. The current performance standards used to measure the Clintwood call center's performance include:

Performance Metric	Standard
Abandonment Rate	Less than 2% daily
Adherence	Internal standards set by each call center
After Call Work	60-120 seconds (less than 2 minutes)
Average Talk Time	180-210 seconds
Blocked Calls	Less than or equal to 2% daily
Occupancy	Internal standards set by each call center
Telephone Service Factor (TSF)	90% in 20 seconds

Clintwood call center management uses multiple reports throughout the year to discern the call center's achievement of performance. In the event that the call center's performance is inconsistent with the performance standard, the Clintwood call center manager will discuss the issue with the Agency, determine the cause of the problem, and devise a resolution. For example, the day the Clintwood call center began accepting phone calls, Hurricane Katrina closed the NFC call center. Consequently, the anticipated month long transition period was eliminated and Clintwood began accepting approximately 50 percent of the calls – the volume of which was significantly higher than forecasted volumes because of the disruptions caused by the hurricane. This unanticipated disaster coupled with extremely heavy forms processing in the first quarter of 2006 resulted in an extended period of higher than expected call volume and reduced the TSF for approximately 10 months. Clintwood call center management and the Agency worked closely during this time to minimize the performance impact to participants through proper call volume allocation, quality monitoring, and service level monitoring. The TSF subsequently improved to achieve the performance standard as of June 2006.

Clintwood call center management uses the following performance reports to monitor service level performance:

Daily
- Daily Interval Report measuring performance standards in 30-minute intervals (both call centers)

Weekly
- Week to Date ThriftLine and PSR calls comparison of call centers

Monthly
- Monthly totals and comparisons of ThriftLine and PSR calls (both call centers)
- Monthly performance summary of selected performance standards
- Monthly summary of ThriftLine and PSR calls
- Staffing monthly report
- Research request report

The Operations group and PSR supervisors perform real-time monitoring of performance standards via the Symposium software display. Any disparity from the standards may lead to the review of the staff schedule. The groups work closely with the Cumberland, MD call center and the Agency to determine whether the impact on service levels requires a call volume load change

II.11

at the telecommunication provider switch level. In the event of scheduling changes, Clintwood call center management may consider changing workforce variables through the workforce scheduling and forecasting software, Blue Pumpkin, to forecast the scheduling needs to meet expected service levels.

d. Training and Professional Development Programs

PSRs are subject to 4 week in-class training consisting of the PSR and PowerImage applications (i.e., weeks one and two) and the TSP program specifics (i.e., weeks three and four). Weeks one and two stress role playing, application functionality and additional computer based training (CBT), while weeks three and four stress aspects of the TSP program such as eligibility and contributions, investments, spousal rights, loans, in-service withdrawals, post-service withdrawals, annuities, transfers/rollovers, court orders, death benefits, beneficiaries, and account access. Supplemental training during weeks one through four includes customer service skills training. Week five includes "link up" sessions with a senior PSR to begin the process of the PSRs taking calls alone. A final exam is administered after week 4; it tests all program specific areas and the TSP system. In order to pass the exam, PSRs must obtain a score of 80% or better.

PSRs who exhibit skills above their job requirements may be considered for a floor walker, helpdesk, or even a supervisor position. SI International prefers internal promotion in lieu of outside hiring. PSRs who exhibit coaching and mentoring skills, and higher than average quality monitoring scores and customer satisfaction scores, are regarded as performing above their standard duties and are considered for promotion during the annual review process. All current helpdesk and supervisor personnel have been promoted from within the call center staff.

e. Technology Support Tools

The Clintwood call center uses a variety of technological tools to distribute, log, monitor, and resolve participant inquiries. PSR workstations in the Clintwood call center are equipped with the following software: Microsoft Windows 2000/2003/XP, Microsoft Internet Explorer, Microsoft Access, Microsoft Excel, Microsoft Outlook (i.e., Outlook Webmail), Microsoft PowerPoint, Microsoft Publisher, Microsoft Word, Microsoft Work, Adobe Acrobat Reader, Instant Messaging, KnowledgeBase, Nortel graphical real-time display (GRTD), Click2Coach Screen Capture Client, PSR, PowerImage, Unanet (i.e., payroll accounting system), and

Symantec Antivirus. PSR workstations do not have the ability to access the Internet and do not have e-mail. PSR workstations are limited to the following Internet proxy configurations:

External Internet addresses
- cigna.com – SI International employee benefits company (i.e., healthcare, life, accident and disability).
- frtib.gov – the official web site of the Federal Retirement Thrift Investment Board.
- inspiredlms.com – online, e-learning system (i.e., security awareness training).
- irs.gov – the official web site of the Internal Revenue Service (IRS).
- knowledgenet.com and monsoon5.com – login screens for the Thomson learning web site.
- mycigna.com – login for www.cigna.com.
- si-intl.com – the official web site of SI International.
- sint.knowledgenet.com – login for SI International internal web site.
- teldrug.com – Cigna home delivery pharmacy web site.
- tsp.gov – the official web site for the Thrift Savings Plan (TSP).
- ucci.com – SI International employee dental benefits web site.
- vsp.com – SI International employee vision benefits web site.

Internal Internet addresses
- 10.200.13.74 - Knowledge Base application (local installation)
- 10.200.14.55 - Blue Pumpkin Work Force Management application (local installation)
- 10.200.7.46 - PI Statement Server (Reston data center)
- 10.200.7.64 - psrprod-db02 Production DB For PSR (Reston data center)
- 10.200.7.81 - tsp-codisapps.sandd.tsp.gov TSP APPS Server (Reston data center)
- 10.200.7.82 - tsp-codisapps-backup.sandd.tsp.gov Backup Apps Server (Reston data center)
- 10.200.7.86 - PSR Web Application Server (local installation)

Supervisor workstations include the PSR application in addition to the Click2Coach monitoring software and full Internet access for purposes of performing research.

The core applications used by the PSR to support participants include the PSR application, PowerImage, and the knowledge management database (i.e., KnowledgeBase). The PSR application is the customer account history and inquiry logging software used to provide participants with information related to their accounts (such as account balance, loan, contribution, and withdrawal information) and to perform some transactions for the participant (e.g., contribution allocation changes, interfund transfers, loan reamoritizations, fulfillment services). The PSR server resides in Reston, VA, and the Agency, via contractor SI International, performs user administration of the application[5].

The PowerImage application is used by PSRs for functions including identification of work-in-process loan and withdrawal requests and transmittal of fax-back materials to participants at their request. PowerImage is also programmed to enable PSRs to log research requests through the use of e-Forms. E-forms are templates used to log multiple types of research requests, ranging from difficult participant inquiries to requesting mailings. The PowerImage server resides in Reston, VA, and the Agency, via contractor SI International, performs user administration of the application.

The KnowledgeBase application provides PSRs the ability to keyword search a database of common inquiries and resolutions. The KnowledgeBase is a commercial off the shelf (COTS) application and the server resides in the Clintwood data center. In addition, SI International administers access to the knowledge management database.

The core applications used by supervisors include the Symposium workbench, Blue Pumpkin, and Click2Coach. The Click2Coach software records the audio and video from every fifth call and is used for the quality monitoring of PSR phone calls. These calls are stored on hard disk on the Click2Coach server. The Click2Coach server is located in the Clintwood data center, and SI International administers application access.

The Symposium software is used to monitor performance standards achievement in real-time and to provide historical reporting. The Symposium real-time display provides service level achievement as it occurs, providing the supervisor with information such as calls on hold, calls abandoned, and TSF. The Symposium server is located in the Clintwood data center, and SI International administers application access.

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[5] SI International purchased MATCOM, who performed TSP user administration prior to joining SI International.

The Blue Pumpkin software is used to schedule workforce requirements corresponding to pre-established service levels and an estimated call volume forecast, which is provided by ICMI through its proprietary "Bullseye" forecasting software. The "Bullseye" software provides a call volume forecast for each call center based on historical call volume trends (i.e., approximately 12 months of prior data). It also provides the schedule required, by 30 minute increments, to fulfill the forecast in order to meet defined service level expectations. Each week, the Operations group creates a work schedule based on the following service levels:

- Service level = **90% of calls answered in 20 seconds**
- Maximum abandons = **2%**
- Average Talk Time = **245 seconds/call**
- Average wrap-up time = **90 seconds/call**
- Shrinkage (absenteeism and other) = **10%**

The software uses these figures to create a weekly work schedule by 15 minute increments for the designated hours of operation, the number of seats (i.e., PSRs) needed to achieve the service level goals, and the times scheduled for activity on the phone, breaks, and lunches. Any changes to the schedule must be communicated to a supervisor to recast the schedule. The Blue Pumpkin server is located in Clintwood, VA, and SI International administers application access.

3. Agency Oversight Functions

The Agency oversight functions include the requirements and processes performed by the Agency in an oversight role. The following section includes the requirements and process descriptions for the following sub-sections: a) Call volume/load management, b) Service level management/benchmarking, c) Contract management and vendor selection, d) Communications management, e) Information security and Privacy Act requirements, and f) Management reporting.

a. Call Volume/Load Management

The Clintwood call center handles 100% of phone calls between 7 am to 9:30 am eastern time and 50% of phone calls from 9:30 am to 5 pm eastern time. The call center is technologically equipped to handle 116 concurrent calls. Currently, this is excess capacity. Most calls last less than 4 minutes and there are 72 PSRs to take phone calls at any given time.

Currently, 50% of all participant calls are routed to the Clintwood call center. Telecommunications and subsequent load balance changes are managed through a telecommunication provider. All load change requests are performed by the Agency with one authorized backup at each call center. All standard call volumes for normal operations have been programmed and do not require manual intervention. Manual change requests occur during changes in normal operations where the Agency and call center management have determined that load changes must occur (e.g., technology issues at one call center). All changes made are logged by a telecommunication provider so that the Agency can track the number of requests and reason that the requests were made.

b.   Service Level Management/Benchmarking

The Agency reviews the impact that the current performance standards have on participant satisfaction by comparing customer satisfaction scores with the corresponding quality monitoring scores for the call. By comparing customer satisfaction scores with quality monitoring scores, the Agency seeks to draw a correlation between the participants' level of service and the attributes being measures through quality monitoring, both of which evaluate interactive aspects from the introduction to the closing of the call. Thus far, the Agency has not found it necessary to change service levels in order to improve customer satisfaction scores or quality monitoring scores.

The Agency contracted services from ICMI in 2004 to assess and to recommend improvements in service delivery processes across the TSP call centers. ICMI conducts monthly call volume forecasting studies, performs customer satisfaction and quality monitoring correlation analysis, and conducts periodic reviews of the operations of both call centers for the Agency. ICMI and the Agency do not perform benchmarking with other call centers as a standard practice although ICMI does evaluate the call centers procedures and practices against industry best practices in performing its reviews. The Agency does compare the performance of the Clintwood call center with the Cumberland call center on a monthly basis. The Agency represents that the performance standards used to monitor call center performance are similar to and consistent with those used in other financial call centers.

c.   Contract Management and Vendor Selection

The Agency's technical evaluation panel (TEP) evaluated the 13 technical proposals submitted in response to the call center request for proposal (RFP). Several proposals were eliminated for failing to respond to the RFP's instructions or for meeting the minimum technical requirements.

The remaining proposals were given an initial technical evaluation. Proposals that failed to demonstrate the required technical experience (i.e., financial services industry experience or cited call volumes below the minimum level required) were eliminated. A combined technical and cost evaluation of the remaining proposals was performed. SI International was awarded the contract. The decision by the Agency to select SI International was based on the most advantageous combination of technical quality, cost, and reliable financial stability.

d. Communications Management

The Agency is the central point of all communications for each call center, and TSP participants' primary access to their account information is via the TSP web site, ThriftLine, and the call centers. Changes to the TSP program or maintenance activities to the TSP system are communicated to participants as these events may prompt related questions or even disrupt normal service. As described above, TSP program changes are communicated to participants using a variety of techniques. Almost all include new or updated publications or materials, mailings as appropriate, announcements and updates on the TSP web site, the ThriftLine and to the agencies and uniformed services, and information for the call centers (e.g., training materials, Qs and As, briefings, etc) .

e. Information Security and Privacy Act Requirements

The Agency requires that all contractors follow the information security and Privacy Act requirements promulgated through several Agency policies and procedures. These documents include the most recent (draft or final) TSP System Security Plan, TSP Data Security Standard, TSP Security Policies and Procedures, and TSP Security Awareness Training Plan. In addition, all work must be protected in accordance with the Privacy Act. All contractors must be U.S. citizens or resident aliens with current, valid green cards. All documents containing a social security number or other Privacy Act information must be shredded. The Clintwood call center must make shredding receptacles available.

During our engagement, the Agency was administering information security awareness training to all Clintwood call center personnel. The training was to be completed by 100% of the employees by September 30, 2006. Privacy Act training was also scheduled to be administered in September 2006. In addition, the Clintwood call center employs a clear desk policy to remove all participant-sensitive information from desks and shred any information containing participant sensitive information in the shredding bins which are located at the end of several PSR aisles.

f.   Management Reporting

The Agency receives a variety of reports for evaluating call center performance. These include real-time updates, daily reports, and an end of month reports. The latter which is contractually required, that includes the following:

- Performance standard performance (i.e., ThriftLine Answered, Opt Out, PSR Answered, Calls Abandoned, Average Talk Time, After Call Work Time, Average Handle Time, Percent Abandoned and Service Level)
- Call volume split
- Monthly allocation changes
- Technical issues
- Research issues
- Quality monitoring scores per PSR

The Agency works closely with Clintwood call center management to address any performance related issues across these areas.

4.   Call Center Security and Data Management Practices

Call center security and data management practices include the processes that the Clintwood call center, in its role as a TSP call center, has enacted to comply with the requirements set by the Agency. The following section includes the process descriptions for the following sub-sections: a) Physical access, b) Logical access, c) Information security and Privacy Act implementation, and d) Background investigations and non-disclosure agreements.

a.   Physical Access

By contract, the Clintwood call center must provide adequate physical security (i.e., restricted access) for the work area(s) and computer room(s). The perimeter of the call center does not have a video surveillance system; however, the facility does have an alarm system monitored by a security company. Proximity card readers are installed on all but three external doors. The three doors without a card reader include the main entrance, the outside door leading to the server room, and the outside door leading to the backup power generator. These three doors have key locks. The main entrance is open during business hours and locked by the last supervisor each night. The main entrance also leads to a lobby that requires a proximity card to gain access to the rest of the facility. Additionally, some of the areas have two consecutive doors

with proximity card readers to mitigate the risk that someone could gain unauthorized entry if the outermost door was not completely closed.

The interior of the call center operations, which includes the data center and other sensitive areas, is protected by proximity card readers. The proximity card readers are programmed to provide 'General' or 'Total' access to the call center's resources. 'General' access provides access to all proximity reader controlled doors except the sensitive areas (i.e., the training room, server room, electrical room, and printer room) and restricts access during the hours of 6 am to 6 pm. 'Total' access provides full access to all proximity reader controlled areas and can be used without any hourly restrictions. According to the Clintwood facilities manager, 'Total' access is used for personnel who require access to the sensitive areas or for people who need to be in the call center during non-business hours. Therefore, there are instances where individuals with 'Total' access do not require access to sensitive areas. The facilities manager communicated that the system is not capable of being changed to accommodate different levels of physical access control.

b. Logical Access

Logical access controls consist of the measures and safeguards in place to grant and remove access to the TSP system; protect and encrypt TSP data; restrict peer-to-peer, personal software and unnecessary Internet access; protect, sanitize, and destroy TSP media and data; restrict remote access; and monitor firewalls. The Clintwood call center adheres to the TSP System Security Plan and other TSP requirements (e.g., TSP data security policies and procedures) for logical access control requirements for assigning user IDs to the TSP system and applications.

Access to the TSP system and Clintwood call center's local area network (LAN) is contingent on review and approval of a successful background investigation. The Agency notifies the SI International Security Officer when a background investigation has been reviewed and approved so that system access can be granted. The SI International Security Officer then notifies the Clintwood Network Administrator (and other appropriate personnel) when access has been established. The Clintwood Human Resources Manager tracks separated employees and will notify the Clintwood Network Administrator of the separations in order to remove access from the LAN. The Human Resources Manager concurrently notifies the SI-International Security Officer in order to remove access to the PSR and PowerImage applications. Access to the PSR and PowerImage applications is centrally managed through the OmniSecurity software, a COTS tool that centrally manages logical access parameters, such as password length and composition and concurrent logins.

All TSP-related data that travels from Clintwood, VA, to Reston, VA, production operations is encrypted using the triple data encryption standard (3DES) encryption algorithm[6]. 3DES uses three 64-bit keys instead of one 64-bit key. This method is used to encrypt all TSP WAN connections using CISCO VPN-EP encryption modules in each connected remote WAN router.

PSRs do not have Internet access at their workstations and are restricted from installing or downloading personal or peer-to-peer software on their workstations. As indicated earlier in this report, only supervisors have the ability to access the Internet for research. PSR workstations are limited to assigned proxy server addresses, described in section II.C.2.e, Technology Support Tools. In addition, PSRs do not have local administrative access on their workstations.

The Clintwood call center must destroy all media containing sensitive TSP participant information (e.g., social security numbers). The Clintwood call center has a clear desk policy and uses shredding machines to destroy any reports containing participant-sensitive information. Hardware media is to be disposed at the discretion and direction of the Agency. (The Clintwood Network Administrator noted that no hardware has been retired or destroyed since the start of the contract.) The Agency noted that a degaussing unit has been procured and will be sent to the Clintwood call center to sanitize all hardware media in the next few months. Once the degaussing unit is being used, a corresponding policy and procedure for sanitizing and destroying media will be created.

Universal serial bus (USB) ports have not been disabled at PSR workstations as peripheral devices such as the keyboard and mice rely on the USB to function. Disabling the USB drivers will disable all USB-dependent devices. The Agency is reviewing software that will allow the call center to disable select USB devices so that USB ports can be disabled without disrupting the functionality of the keyboard and mice.

Remote access to the Clintwood technological resources is restricted to internal remote access from the Network Administrator's office to the inside of the data center. The purpose of this access is to perform maintenance, as needed, on the systems. The products "pcAnywhere" and virtual network computing (VNC) are used for this purpose.

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[6] The 3DES encryption algorithm uses three 64-bit keys to encrypt data. The first key creates encrypted cipher text of the message, the second key encrypts the cipher text created by the first key, and the third key encrypts the text again.

The TSP Data Security Policy sets standards for establishing secure connections, through the use of firewalls, to TSP resources, and monitoring activity, through an intrusion detection system (IDS), of the network. The Clintwood LAN is protected by a Cisco PIX firewall. Firewall monitoring is performed daily, and firewall rule set changes are only to be made by the firewall administrator. The IDS is currently in a learning mode and being calibrated by the Network Administrator in order to move the system into an active monitoring state.

c. Information Security and Privacy Act Implementation

Information security and Privacy Act implementation refers to the active steps that the Clintwood call center has taken to implement Agency and federal requirements related to information security and the Privacy Act. The TSP training manual contains information related to:

- Handling participant information in accordance with the Privacy Act and procedures to be performed to authenticate a participant's account information.
- Providing information that can be shared with financial institutions, third parties, and approved power of attorney.
- Handling callers that make allegations of potential fraud or forgery.

The Clintwood call center also follows the Agency's procedures for handling information security incidents and data breaches. The draft TSP System Security Plan identifies reportable incidents as:

- Any changes to system hardware, firmware, or software without prior notice or approval.
- Successful or unsuccessful attempts to gain unauthorized access to the TSP system or system data.
- Unauthorized disclosure of sensitive information.
- Denial of service (DoS).
- Unauthorized use of the system to process or store data.

In the event of an incident at the Clintwood call center, the PSRs immediate supervisor should be notified, who in turn notifies the call center manager. The call center manager will notify the Agency's Director of Participant Services, who in turn will notify the Agency's Security Officer and/or Chief Information Officer. If the incident involves personally identifiable data, law enforcement will be notified within 24 hours of the breach.

d. Background Investigations and Non-disclosure Agreements

All Clintwood personnel that require access to the TSP system and data must undergo a criminal and financial background check and must sign and acknowledge a non-disclosure agreement (NDA) prior to beginning work for the Agency. Background investigation procedures follow the Agency's background investigation review guidelines and TSP background investigation policy (TSP-PR005). A successful background investigation must be reviewed and approved by the Agency prior to being granted TSP system access. The NDA incorporates coverage of "proprietary information", which includes sensitive business, technical, financial, and procurement information related to the TSP, the TSP system, the governing contract between the Agency and the vendor, and "confidential and sensitive information", which includes any information about a TSP participant or beneficiary that is not already public or available without authorization.

III.   FINDINGS AND RECOMMENDATIONS

A.   Introduction

We conducted procedures related to the Thrift Savings Plan (TSP) call center operations and processes at SI International (SI) in Clintwood, VA. This special project consisted of testing manual processes, interviewing key personnel (Appendix A), reviewing key reports and documentation (Appendix B), and observing selected management procedures.

We also reviewed certain prior Employee Benefits Security Administration (EBSA) TSP recommendations related to participant support processes to determine their current status. These prior recommendations were reported in the "Review of the Thrift Savings Plan Parallel Call Center at Spherix Inc., May 27, 2005 (Updated with additional information received through August 17, 2005)." Specifically, we reviewed recommendations numbered 2005-1, 2005-2, and 2005-3. As discussed in subsection III.B, these recommendations have been implemented or, where partially implemented, closed in this report but left open in our 2005 report, "Review of TSP Mainframe Operations", to prevent reporting redundancy.

Our 2006 special project communicates three new recommendations relating to the call center's effectiveness and efficiency. Recommendations that address effectiveness and efficiency are presented as opportunities to provide more cost-effective and/or timely service to TSP participants.

Our recommendations collectively contribute to further strengthened access controls over TSP data and to increased customer service at the call center operations. The Federal Retirement Thrift Investment Board's Staff (Agency) should review and consider these recommendations for timely implementation.

Section III.B documents the status of prior EBSA recommendations. Section III.C presents the current findings and recommendations. Exhibit III-1 (following page) summarizes each 2006 recommendation.

EXHIBIT III-1

SUMMARY OF RECOMMENDATIONS

RECOMMENDATIONS TO ENHANCE EFFICIENCY AND EFFECTIVENESS CONTROLS

1. The Agency should ensure that logical access controls are strengthened. Specifically, the Agency should ensure that:

   - Media protection, sanitization, and disposal procedures for media containing sensitive TSP data are completed, promulgated, and enforced.
   - Cost-effective options for disabling USB ports on all workstations without disrupting productivity of personnel or call center service levels are evaluated.
   - OmniSecurity password length setting is changed to conform to the TSP policy.

2. The Agency should ensure physical controls at the Clintwood call center are strengthened. Specifically, the Agency should:

   - Evaluate options for programming or replacing the A-cast badge access software system. The badge access system should contain the capability to separate general work areas from sensitive work areas at the individual access level.
   - Repair the exterior and interior unlocked doors and ensure that the selected option restricts access to the controlled areas as necessary and in accordance with the contract requirements for protecting sensitive equipment and participant information.

3. The Agency should closely monitor all call center handling processes, including participant research requests, in order to ensure required customer service levels consistent with documented internal goals.

B. Findings and Recommendations from Prior Reports

Findings and recommendations from the EBSA's prior reports that required follow-up are presented in this section. The discussion below includes the current status of each recommendation.

2005 Parallel Call Center Recommendation No. 1:

Original Recommendation:	The Agency should:

The Agency should:

- Document, implement, and enforce Agency security policies for overseeing security at Spherix and other contractor locations. The policy should include the evaluation of the security controls in place and oversight responsibilities for identifying, monitoring and addressing security risks.
- Assess Spherix compliance with Agency security policies and recommend and monitor the implementation of improvements for identified gaps, including the weaknesses identified in this report.

Reason for Recommendation: If Spherix employees working on other contracts, former Spherix employees, or Participant Service Representatives (PSRs) without a need for access can capture sensitive participant information without the knowledge of the Agency or Spherix management; this information may contribute to identity theft or other fraudulent uses.

September 2006 Status: **Partially Implemented.**

The TSP Security Plan remains in draft status and does not contain a comprehensive list of management, technical and operational controls that are planned or in place, consistent with Office of Management and Budget (OMB) Circular No. A-130 requirements and National Institute of Standards and Technology (NIST) Special Publication (SP) 800-18 guidance. Specifically, the plan does not contain controls related to Rules of the System, Authorize Processing, Environmental Controls, and Data Integrity/Validation. In addition, the TSP system's data classification risk rankings for confidentiality and integrity have not been

updated from moderate to high based on the results of the most recent risk assessment performed in May 2005. *Note*: This condition of the finding is also documented as 2005 Recommendation No.1 in our 2005 report, "Review of the Thrift Savings Plan Mainframe Operations." We are closing the finding within this report but it will remain open in the report above.

With regard to assessing and monitoring improvements in contractor compliance with security policies, the Agency communicated that it has procured an IT security awareness training program in 2006, and all personnel accessing TSP systems are required to take, and pass (it is graded) the training. As of August 30, 2006, 81.01% (of 474 required) had taken and passed the training.

Disposition: **Recommendation Closed.**

2005 Parallel Call Center Recommendation No. 2:

Original
Recommendation:

The Agency should:

- Establish performance standards for the Spherix call center to measure and monitor progress of the foundation and finesse skill performance metric attributes of the quality-monitoring program.
- Enforce the logging of all calls taken by PSRs at Spherix into the PSR system (e.g., compliment calls and all non-routine calls). In addition, ensure that all call logs captured by the TDD are maintained by PowerImage or kept in hard copy.

Reason for
Recommendation:

Completing the initial assessment of the quality monitoring process and customer satisfaction survey process will provide the Agency with information on areas of performance improvement of the processes from a participant's perspective. Without completing the assessment, the Agency will not realize full utilization of these processes.

September 2006 **Implemented.**

Status: The Quality Assurance program for both call centers was updated on July 21, 2006, and includes standards for measuring and monitoring PSR performance. The agency monitors performance against these standards on a routine basis by selecting calls and scoring the calls against the defined standards. See section II.C.2.a for a description of the process that accompanies the monitoring of PSR performance.) Progress of performance is tracked for each PSR to determine whether additional monitoring is required. Additional monitoring will occur when a PSR scores below 80% for a monthly review period, or when the PSR has three consecutive months scoring under 88%. The Agency, in conjunction with the call centers, has established a total score of 88% or above as the acceptable performance standard.

With regards to logging all calls at Spherix into the PSR application, we interviewed an Agency official who represented that the PSR application now has the capability to generate filtered call logs (e.g. routine and non-routine) by PSR codes at both call centers. These call log reports are monitored by the Agency on a periodic basis as part of its Quality Assurance program to ensure all calls are being properly logged and annotated. An example of a non-routine call log report for Spherix was inspected.

Disposition: **Recommendation Closed.**

2005 Parallel Call Center Recommendation No. 3:

Original   The Agency should:
Recommendation: • Implement consistent service level monitoring and reporting on a real-time basis across both call centers.
      • Ensure that all call load-balancing changes are logged.

Reason for   Periodically reviewing call handling processes can highlight areas for
Recommendation: improvement in operations. By incorporating improvements to call handling processes, the call center has the potential to have a greater influence over the level of participant satisfaction. Also, the Agency's

real-time performance monitoring capabilities, when extended across all call center operations, will allow Agency management to proactively address call volume issues or issues with performance standards.

September 2006
Status:

Implemented.

We observed real time monitoring consoles set up at the Agency that monitor the performance of both call centers simultaneously. In addition, all call load-balancing changes are now logged on the telecommunication provider web site by the provider.

Disposition:

Recommendation Closed.

C.   2006 Findings and Recommendations

While performing our 2006 special project, we identified three new findings and developed related recommendations. The EBSA requests appropriate action to address these findings.

RECOMMENDATIONS TO ENHANCE EFFICIENCY AND EFFECTIVENESS CONTROLS

Logical Access Controls at the Clintwood Call Center Should Be Further Strengthened

The Agency has created and promulgates the TSP System Security plan documentation and TSP Data Security Standard to establish management, technical, and operational controls over the TSP recordkeeping system (TSP system). TSP participant records, while not stored on hardware at the Clintwood call center, may contain personally identifiable information as part of routine, daily operations. Thus, while the Clintwood call center has implemented many of the TSP security practices, certain improvements can be made. Specifically, we noted that:

- Thirty-five (35) separated Clintwood call center personnel retained access to the Clintwood local area network (LAN) after their separation date. Upon notification of the access, Clintwood call center management provided an updated LAN access listing showing removal of the separated personnel.
- One (1) of eight (8) background investigations selected did not contain the Agency's review and approval. A comparison of the selected background investigation results to the Agency's background investigation procedures produced favorable investigation results.
- A media protection, sanitization and destruction policy has not been implemented and documented. The Agency has procured a degaussing unit for use at the Clintwood call center for fiscal year 2007 to sanitize and destroy media with sensitive participant information. The Agency's Security Officer is working on producing a policy and procedure to correspond to the degaussing unit usage. In addition, the Agency has represented that a plan to evaluate and dispose of hardware in a scheduled manner (e.g., every 3-5 years) will be put in place to correlate with the media destruction policy.
- Universal serial bus (USB) ports were not disabled at any workstation in the Clintwood call center. Disabling the USB drivers will also disable USB driver dependent devices such as the keyboard and mice. The Agency is looking into procuring software that will allow them to disable USB drivers for selected devices in the upcoming fiscal year.

- Password setting for the OmniSecurity access control software, which controls access to the PSR and PowerImage applications, is set to 6 characters. According to the TSP System Security Plan, passwords are to be 8 characters in length.

This unanticipated disaster of Hurricane Katrina coupled with extremely heavy forms processing in the first quarter of 2006 resulted in an extended period of higher than expected call volume and reduced the Telephone Service Factor (TSF) for approximately 10 months. The Agency and the Clintwood call center faced competing priorities in addressing the conditions cited above and focused resources on minimizing the performance impact to participants through proper call volume allocation, quality monitoring, and service level monitoring. The Agency and call center management have represented that corrective action is being taken on these conditions.

1. **The Agency should ensure that logical access controls are strengthened. Specifically, the Agency should ensure that:**

   - **Media protection, sanitization, and disposal procedures for hardware media containing sensitive TSP data are completed, promulgated, and enforced.**
   - **Cost-effective options for disabling USB ports on all workstations without disrupting productivity of personnel or call center service levels are evaluated.**
   - **OmniSecurity password length setting is changed to conform to the TSP policy.**

Protecting participant sensitive data is a critically important requirement for the Clintwood call center's operation. The Agency should ensure that all necessary controls to safeguard participant information affected by logical access procedures have been taken to reduce the potential for TSP data compromise.

Physical Access Controls for the Clintwood Call Center Should Be Further Strengthened

The Agency conducted an evaluation of the physical and environmental controls over the Clintwood call center in order to gain comfort with the selection of the second call center's operation location. The call center's remote location reduces the exposure to external, physical threats that a call center in a busier, commercial location might encounter. However, we noted several physical access controls points that should be strengthened. Specifically, we noted the following exceptions:

- The A-Cast badge access system is not programmed, or cannot be programmed, to separate "Total" access from "General" access needs. Consequently, individuals who have "Total" access can access any badge controlled areas of the call center at any time, including sensitive areas, such as the data center, for which they may not require access.
- Several doors (i.e., two exterior doors and one interior door) that are to be badge controlled were unlocked. Clintwood call center management recognizes this access weakness and is actively seeking to correct it.
- The proxy server, which controls access to designated Internet addresses and internal applications such as PSR and Blue Pumpkin, resides in the Network Administrator's office without encased protection. Upon notification, Clintwood call center management has moved the Internet proxy server to the badge controlled data center.

Clintwood call center management acknowledged that the card key system had limitations and was evaluating alternative options. In addition, management also acknowledged that the locking mechanisms for certain perimeter doors were malfunctioning and that it was working to have them repaired.

2. **The Agency should ensure physical controls at the Clintwood call center are strengthened. Specifically, the Agency should:**

- **Evaluate options for programming or replacing the A-cast badge access software system. The badge access system should contain the capability to separate general work areas from sensitive work areas at the individual access level.**
- **Repair the exterior and interior unlocked doors and ensure that the selected option restricts access to the controlled areas as necessary and in accordance with the contract requirements for protecting sensitive equipment and participant information.**

Effective physical access controls are essential to protecting the TSP's assets and participant information. Without adequate physical access controls, TSP participant information is potentially exposed to risks related to identify theft and to financial loss.

Participant Research Requests at the Clintwood Call Center Can Be Further Improved
The research request process is designed to perform research for participants with difficult inquires. All participants are required to receive a call back related to their research request within 48 hours. During our testing of the call handling and call center processes, we noted that

for one of the seven haphazardly selected research requests, the participant did not receive a call back within this required timeframe.

Recognizing the magnitude of daily interactions between the call center and participants, competing priorities may well have prevented operations from following through on this research requested in a timely manner.

3.   **The Agency should closely monitor all call center handling processes, including participant research requests, in order to ensure required customer service levels consistent with documented internal goals.**

Periodically reviewing call handling processes can identify areas for improvement in operations. For example, by routinely monitoring call handling processes, the call center may further strengthen its customer service satisfaction levels.

KEY PERSONNEL INTERVIEWED

While performing fieldwork, we inquired of the following personnel regarding parallel call center operations and processes:

A.   <u>SI International</u>

Lynn Brewer	Call Center Manager
Ezra Powers	Human Resources Manager
Andy Miranda	Operations Manager
George Ison	Network Operations Manager and Administrator
Hollie Sergent	Quality Assurance and Training
Amber Chester	Quality Assurance and Training
Michelle Younce	Facilities Manager
Linda Dean	Call Center Supervisor
Kathy Rose	Participant Service Representative
Anthony Owens	Participant Service Representative
Mandy Yates	Participant Service Representative

B.   <u>Federal Retirement Thrift Investment Board's Staff (Agency)</u>

Pamela-Jeanne Moran	Director, Office of Participant Services

KEY DOCUMENTATION AND REPORTS REVIEWED

Documentation Reviewed

Review of the Thrift Savings Plan Participant Support Processes at the United States Department of Agriculture's National Finance Center, Employee Benefits Security Administration, June 11, 2004

Review of the Thrift Savings Parallel Call Center at Spherix Inc., Employee Benefits Security Administration, May 27, 2005

Call center environment documentation

- SI International Organizational Chart
- SI International key personnel
- Clintwood call center network diagram

Customer feedback and surveys

- Customer Satisfaction Survey Procedures
- Quality Assurance Program
- TSP customer survey satisfaction results 12/2005 to 2/2006
- TSP customer survey satisfaction results 3/2006 to 5/2006
- Customer satisfaction survey/QA completion spreadsheet
- Escalation procedures and Escalation spreadsheet
- Haphazard selection of (10) supervisor call notes, PSR escalated calls report to Agency

Service delivery

- Knowledge Management database procedures
- E-Form research request procedures
- E-Form Research and Call back procedures
- Research report (June 2006)
- Research request selection
- Communication examples to participants
- Communication example to participants (Qs & As))

Performance metrics documentation

- End of Month report - 2/06, 3/06, 4/06, 5/06, 6/06
- ThriftLine/Call center rollup report – both call centers (6/06)
- Daily Interval Report example (July 17 to July 21, 2006)

Training and professional development documentation

- TSP program training manual
- PSR Application Training Manual
- PowerImage Training Manual

KEY DOCUMENTATION AND REPORTS REVIEWED, CONTINUED

- List of PSRs who have completed training

Technology support documentation

- List of technology tools used by the Clintwood call center
- Blue Pumpkin workflow screenshots
- Workflow diagram of technology tools used in call center

Call center volume management

- Clintwood Capacity Description
- BellSouth Configuration and Operations Presentation
- BellSouth Call Routing Slides
- ICMI July Forecast
- Call Center Procedures for Adjusting Call Distributions
- Screen Shot of BellSouth Website
- Log of Call Distribution Changes for the month of April
- Disaster Recovery Test Results for FRTIB

Contract management and vendor selection

- FRTIB Request for Proposal (RFP)
- SI International Best and Final Bid Offer
- RFP Minimum Technical Requirements Analysis
- RFP Technical Evaluation
- RFP Cost Evaluation
- SI International Award Contract

Physical access

- Floor Diagram of the Clintwood facility
- Fire Extinguisher Invoice
- Proximity Card Reader Listing

Logical access

- Degaussing procurement
- List of PSRs
- Proxy Server Log
- List of Separated Employees
- List of Active Network Accounts
- Safety Deposit Box Contract
- Email Explaining the Rehire of an Employee
- Log of Invalid PSR Password Attempts

KEY DOCUMENTATION AND REPORTS REVIEWED, CONTINUED

- List of Internet Sites PSRs can Access
- List of PSR and PowerImage Administrators
- Thrift Savings Plan System Security Plan
- PSR Password Configuration
- Emails Documenting Employee Separations
- PSR concurrent login attempt to ACD

Information security and Privacy Act implementation

- Privacy Act training
- Procedures for Processing Privacy Act requests
- TSP Privacy Act Disclosures Matrix
- E-mails identifying new security awareness training procedures
- Security Awareness eNewsletters
- Security Awareness Training Log sheet

Background investigations and non-disclosure agreements

- FRTIB Background Investigation Review Guidelines
- Clintwood Employee Listing
- Background Investigation and Non-Disclosure Agreements
- Emails documenting background check approvals

ENTRANCE AND EXIT CONFERENCE ATTENDEES

An overall entrance conference was held at the Agency on January 12, 2006, to discuss the nature, scope, and timing of the fiscal year 2006 EBSA engagement of the Thrift Savings Plan, including the special project on Clintwood, VA, call center operations.

Attendees were:

A. Federal Retirement Thrift Investment Board' Staff (Agency)

Mark Hagerty	Chief Information Officer
James Petrick	Chief Financial Officer
Pamela-Jeanne Moran	Director, Office of Participant Services

B. Department of Labor, Employee Benefits Security Administration

William Bailey	Senior Auditor, FERSA Compliance

C. KPMG LLP

Heather Flanagan	Partner
Felipe Alonso	Partner
Derek Thomas	Manager
Gregory Ruck	Computer Systems Analyst

ENTRANCE AND EXIT CONFERENCE ATTENDEES, CONTINUED

An entrance conference was held at the Agency headquarters on July 14, 2006, to discuss the nature, scope, and timing of the fiscal year 2006 EBSA Clintwood, VA call center special project.

Attendees were:

A.   <u>Federal Retirement Thrift Investment Board - Agency</u>

Pamela-Jeanne Moran	Director, Office of Participant Services
James Petrick	Chief Financial Officer
Anne Beemer	Controller, Office of Finance
Mark Allen	Information Technology (IT) Security and Continuity of Operations Planning (COOP) Specialist

C. <u>KPMG LLP</u>

Don Farineau	Computer Systems Analyst
Mark Munster	Computer Systems Analyst
Gregory Ruck	Computer Systems Analyst
Evans Bannor	Junior Computer Systems Analyst

ENTRANCE AND EXIT CONFERENCE ATTENDEES, CONTINUED

An exit conference was held on November 17, 2006, with the Agency. Attendees were as follows:

A.   <u>Federal Retirement Thrift Investment Board's Staff (Agency)</u>

       James Petrick   Chief Financial Officer
       Penny Moran   Director, Office of Participant Services
       Anne Beemer   Controller, Office of Finance

B.   <u>Department of Labor, Employee Benefits Security Administration</u>

       William H. Bailey, Jr.   Senior Auditor, Division of FERSA
                                           Compliance

C.   <u>KPMG LLP</u>

       Don Farineau   Partner
       Derek Thomas   Manager
       Mark Munster   Computer System Analyst