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A History of VBA's Year 2000 Project

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includes new \* material

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The Veterans Benefits Administration (VBA) is dedicated to providing veterans and their families with the benefits they deserve. To do this, VBA depends on a number of computerized systems that process claims and generate payments and other benefits. These VBA programs are administered through 58 regional offices and are supported by three data processing centers. When faced with the Y2K issue, VBA's main concern was that this system challenge not interfere with the delivery of payments and benefits to veterans and their beneficiaries. From the first C&P misprocessing due to Y2K in 1982, through the establishment of the Year 2000 Project Team in 1996, to the current countdown to the change of the century, VBA's mission has remained constant: to provide uninterrupted benefits delivery to veterans and their families into the year 2000 and beyond.

## Background

### Y2K

Although the term 'Y2K' was not coined until the 1990's, the Year 2000 issue has been around since some of the earliest computer languages were written. In early computer systems, space was limited and expensive. To save memory, programmers entered dates by using only the last two digits of the year. In date-intensive programs, including benefit payment and other VBA systems, this practice saved a great deal of space and was cost effective. Programmers realized that omitting the prefix to the year might cause problems when dates past the 20<sup>th</sup> century were entered, but they were not worried. They assumed that by the 21<sup>st</sup> century their programs would be obsolete and be replaced with new programs.

VBA has been aware of the Year 2000 issue from the beginning. In the 1980's, programing modifications were made to correct year 2000 failures, or to prevent them. Eventually, many of the computer specialists within the VBA understood that the year 2000 issue could be a major problem. VBA had to begin to investigate the Year 2000 issue and its impact on the agency and our nation's veterans.

### VBA BEGINS INVESTIGATION INTO CHANGE OF CENTURY ISSUE

In July 1990, there was an initiative within the VBA to investigate what efforts would be necessary to accommodate the change of the century. Initially, the investigation was expected to be completed by December 1990, but due to the extent of the program, it took nearly a year.

David Lo, a computer specialist, was assigned to the VBA investigation. In the beginning, many people did not take the Y2K issue seriously. The term Y2K was not yet in use, and for the most part, the government, private sector and the general public were not even aware that there was a problem. The year 2000 seemed far away.

The investigation took time, but the information gathered showed that the Year 2000 issue would be a major undertaking for the VBA. Estimates for the amount of staff and time that would be required were slowly gathered from each of the data processing centers. Because no automated tools were available at that time, all of the analysis efforts and subsequent changes would have to be made manually. The investigation ultimately determined, the project would be labor-intensive and time-consuming. For instance, it was estimated that one application with 84 modules would take 12 people working 18 months and one additional person working three months on the hard-code century changes. Considering the VBA's application load totalled three thousand modules and counting, manual renovations would have been an enormous undertaking. As it was, the renovations for the Year 2000 were deemed non-critical because of a major software redesign program (VETSNET) planned by the VBA.

#### Y2K PROJECT TEAM ESTABLISHED (1996)

It was at the time of David Lo's investigation that Sally Wallace became aware of the impact that the Year 2000 issue could have on the VBA. When many others at Veteran's Affairs Central Office (VACO) believed the investigation to be a waste of time, she realized the challenges and risks to the VBA applications and systems presented by the onset of the year 2000.

In 1995, Newell Quinton, VBA's Chief Information Officer (CIO), received a letter from the VA asking for a report on VBA's Y2K status. He subsequently asked Sally Wallace about the problem and she briefed the CIO, detailing the ramifications. Impressed by her knowledge of the issue, Mr. Quinton made her Project Manager of the Year 2000 Project Team and asked her to come up with a plan. By May '96, the Team, including Sally Wallace, and two dedicated full time members, developed a charter.

At first the Team was divided between the Year 2000 Project and other duties, but it soon became apparent that the Year 2000 issue would require their full attention. By September of 1996, the Team was fully dedicated to the Y2K issue. Their task was to oversee the conversion of the VBA's infrastructure, beginning with mission critical systems.

#### MISSION CRITICAL SYSTEMS

VBA has six mission critical systems: Compensation and Pension, Education, Loan Guaranty, Insurance, Vocational Rehabilitation and Counseling, and the VBA administrative business lines. Five of these mission critical systems deal with benefit payments, and one with the administration of benefit payments. The financial impact of misprocessing of one or more of these critical systems could be potentially devastating to millions of veterans and their families. An example of the potential financial loss can be seen by looking at Fiscal Year 1998 benefits payments. Assuming that Fiscal Year 2000 amounts will be similar, the amounts are as follows.

Compensation and Pension (C&P), the VBA's largest benefit program, pays approximately 5.2 million veterans. The total amount of C&P benefits paid, during Fiscal year 1998, was \$19.5 billion. Education benefits totaled \$1 Billion, most of which was paid under the conditions of the Montgomery GI Bill. Established as part of the GI Bill, but now its own business line, Loan Guaranty had, during Fiscal Year 1998, 3.2 million guaranteed loans outstanding. Also during that year, \$825 million in Insurance dividends and \$500 million in Vocational Rehabilitation Services were paid.

The failure of benefit payments to reach veterans would not only devastate them and their families, but it could have a potentially serious impact on the economy. Many veterans and their dependents depend upon these benefits for their very livelihood. With such possible consequences in mind, the VBA's Year 2000 Project Team set about assuring the VBA would be Y2K ready before the new millennium.

### GETTING ORGANIZED

With 151 applications containing over 12 million lines of code, much time and substantial resources were required to complete the Project. Year 2000 Program Coordinators were assigned at each of the Benefits Delivery Centers (BDC's) and Systems Development Centers (SDC's), because VBA realized that, although it was necessary to have a Team at VACO, personnel from each of the data centers would be better able to handle their site's applications regarding Year 2000 compliancy.

The VBA Year 2000 Project Team was responsible for coordinating, renovation and validation efforts at the data centers, and for coordinating all milestone activities within the Project Plan. By the time the Team was established, the VBA had less than 27 months to assess, renovate, validate, and implement these applications.

One of the first tasks of the Team was to increase awareness of the Y2K issue within VBA. Toward this end, Jannis Butler-Tolliver, a computer systems specialist, took on the responsibility of generating two publications to keep VBA personnel aware of the Project. *Dialogue*, a CIO publication, and *Horizons*, intended for field personnel, captured in a few short paragraphs the Project's operations and what they meant for the veteran population. She also held training classes for analysts and program sponsors. The classes gave an overview of the Y2K issue and its potential impact on the VBA. Status reports were also provided to the classes, and questions were invited from the participants.

Awareness of the Year 2000 issue, for both people inside and outside the VBA, is a continuing task for the Team. Although the formal phase of awareness has been completed, the Team still looks for ways to continually update others on the VBA's progress.

## ASSESSMENT AND OVERSIGHT

Also due to the seriousness of the consequences of benefits misprocessing, oversight was established at many levels to keep the VBA, indeed all of the VA, on track.

In 1996, the Office of Information Resources Management (OIRM) contracted out DSTI (Decision Systems Technologies Incorporated) to assess the VA's Year 2000 readiness. This was a one-time review based on interviews with VBA staff at VA Central Office (VACO), Hines Benefits Delivery Center (BDC), Philadelphia BDC, and Austin System Development Center (SDC).

Also in 1996, VA oversight was assigned to the Project through the Office of Information and Regulatory Affairs (OIRA). The VBA turned in quarterly reports to OIRA which were consolidated with reports from other VA agencies into a single report and submitted to the Office of Management and Budget (OMB). This report reflected the Year 2000 status of the entire VA. The oversight provided by OMB was intended to validate the quality of completed Year 2000 tasks. It is ongoing oversight.

In 1997, SRA was contracted out by the VBA to assess its Y2K project and determine what level of effort was required. Upon submission of this assessment, SRA was re-hired as oversight to evaluate the progress of the Project's efforts. SRA submitted progress reports to the VBA Y2K Oversight Task Order Project Manager. This oversight continued until 1998.

Due to the possibly far-reaching impact of the Y2K issue, Congressional oversight was assigned. The General Accounting Office (GAO), on behalf of the House of Representatives, investigated the Year 2000 readiness of the entire VA. The VBA was one of the first government agencies to be called before Congress to report on Year 2000 activities.

The Year 2000 Project received an unprecedented amount of oversight, both at VACO and in the field. In 1998, it is estimated that the VBA Year 2000 Project had been the focus of 13 oversight projects at various levels. Most of the oversight agencies questioned the Team at VACO to make sure the Year 2000 activities were on track, but the actual work of renovating the mission critical systems was being handled at the respective data processing centers.

## Systems Renovation

The BDC's manage the systems that most directly impact the payments of veterans' benefits. Renovation of applications at the BDC's began early with minor changes made to correct mis-sorting of year 2000 data. Although these changes corrected some Y2K problems, major renovations were still necessary to make all systems compliant.

### RENOVATIONS AT THE PHILADELPHIA BDC

The Philadelphia BDC, which processes all insurance claims, began making minor corrections to their programs in 1995 due to the entry of the year '2000' as the future renewal date for five-year term policies. Even though these early modifications were made, the systems were not compliant in all cases. In 1997, the BDC analyzed the Year 2000 issue and its impact on their programs. They found that 77% of their applications were compliant, and, in 1998, they began to renovate the remaining 23%.

The applications were changed in a way that would allow the systems to recognize the century without increasing clerical entry keystrokes. Codes in the program allow year data to be entered as two digits but read as four. Century indicators are important in the date-intensive Insurance software, not only because of the year 2000, but also because the Philadelphia BDC still covers policyholders from the nineteenth century, as well. The Philadelphia BDC has completed testing, including participation in the VBA Business Process Simulation (BPS), and all applications are Y2K compliant.

### HINES SYSTEMS MISPROCESS

In 1982, C&P noticed malfunctions in their programs due to year 2000 dates being entered. Children born in 1982 would turn 18 in 2000, and 18 is the cutoff age for dependants. '2000' had to be entered as the year when the child would no longer be eligible to receive benefits. When this twenty-first-century date was entered, however, the computer, in sorting, placed the '00' before twentieth-century dates (i.e. 19'00'), such as '85' or '91'. At this time, some changes were made to the applications to accommodate the year 2000 in certain cases.

In 1990, Education encountered similar problems because of the cut-off date for Education benefits. This delimiting date is calculated by adding ten years to the date of the veteran's release from active duty. Thus, in 1990, delimiting dates in the year 2000 were being entered and missorted by the programs (i.e. 19'00'). Changes were made to the Education programs shortly after the error was detected. Although these changes solved the problem of missorting, it did not make the programs Y2K compliant. There were still lines of code containing dates that could cause problems during the year 2000 rollover. All lines of code in every application would have to be reviewed and renovated.

In early 1990, Hines conducted independent research to evaluate the Y2K situation. If program renovation was necessary, they wanted to know how long it would take and how much of their resources would have to be expended. At that time, however, making the current programs Y2K compliant was deemed non-critical due to the VBA's "VETSNET" plan to modernize the "C&P" system. Modification would mean that many of the applications would no longer be in use by the year 2000. Subsequently, instead of addressing the Y2K issue, time and resources were expended in maintaining existing systems and in developing VETSNET.

### MAJOR RENOVATIONS BEGIN

It soon became apparent to VBA staff that the planned system redesign (VETSNET) would not be complete by the year 2000. They decided to begin modifying their current programs for compliance. Eight million lines of code would need to be reviewed, and the year 2000 was only getting closer. C&P's Y2K effort was primarily concerned with the Legacy and BDN systems. Education had to address each of their seven benefit applications except SMOCTA, which would be handled out of system by 2000.

In 1996, the VBA, still anticipating modernization of the system (VETSNET), saw the Hines renovations as the contingency plan for the Year 2000. However, by 1997, with the new century only three years away and no new systems in sight, the Hines project was upgraded from "contingency plan" to "master plan".

Modifications had begun at Hines even before VACO directives. From the time the changes were deemed necessary, the Hines staff made Y2K compliance their number one priority. They dealt with the Y2K issue as they would have handled any other maintenance project. They sent a request to Washington to make modifications to the system, but began the work before receiving a reply.

During renovation, each module was assigned to a subject matter specialist, who performed the manual analysis, looking at each line of code for any dates. The analyst then developed technical specifications for the affected programs. The specifications were then assigned to a programmer, who modified the code in the programs. After these modifications were complete, the programs were tested and then turned over to Quality Assurance (QA) for certification. In this way, the Y2K modifications were handled in the same way as any other maintenance project. The development of new methods was not necessary.

### ANALYSIS PHASE

The Hines staff scanned source libraries to determine the scope of the Y2K problems. To identify where they needed to make changes, they looked for the actual source code where the year was being used in a computation. This type of manual renovation was slow, and VACO wanted to hire contractors who would speed up the process by using a "Peritus" tool.

Wang contractors were hired by VACO to help the Hines staff renovate programs. Hines insisted that contractors be on-site to work directly with the Hines analysts. Initially, the contractors were used to review the programs that the Hines staff had already manually renovated. In this way, the Hines staff could evaluate the accuracy of the Peritus, the tool Wang contractors used to analyze the programs, and received a valuable second code review. The outcome of this trial gave the Hines staff confidence in both their own work and the accuracy of the contractors' tool. Most of the remaining programs were reviewed using the tool, but the final changes were left to the Hines staff. It was decided that the Hines staff should make the changes to the programs, since they would be the ones responsible for any future updates that would need to be made for maintenance purposes. The contractors' suggestions regarding modifications were relayed to the Hines staff, who made the final decisions about what changes needed to be made.

The Peritus tool could not be used for one C&P module: because its size overwhelmed Peritus, and because its three-century date logic confused the automated tool. That module (CEX010 - Main Processing for Off Station Input) had to be analyzed manually.

“Five Levels of Review +” : The Hines systems received five levels of review. First was the analysis by contractors, followed by a re-analysis by Hines analysts. Then the applications were tested by Hines analysts during an internal dry run and, later, were tested by audit at the Dry Run for the Business Process Simulation (BPS). Finally, the systems were tested by field personnel during the BPS.

In addition, some programs were independently analyzed by Hines staff prior to contractor analysis, giving them “six levels of review”. With more than 3 million veterans expecting to receive their January 2000 benefit payments, the Hines staff was not willing to leave anything to chance.

## Testing

The applications had already undergone more than one test by the Hines staff, but the major test was the Business Process Simulation (BPS). The BPS was an end-to-end demonstration of Y2K processing which tested the ability of the VBA’s mission critical systems to operate in a Year 2000 environment. It was such a large undertaking that the VBA hired contractors from KPMG to help plan and manage the test.

In preparation for the BPS, KPMG contractors, working with VACO’s Hines Liaison Bernadette Pessagno and Hines Year 2000 Project Manager Diane Jelonek, held a Test Planning Conference at the Hines BDC, developed a test project schedule, implemented a risk management program to handle any threats to the BPS, and developed test scripts for the adjudicators. They also compiled the Business Simulation Master Plan (BSMP), which served as a guide for implementing the BPS. It detailed requirements for roles and responsibilities, test environment, test scripts, and test execution. Prior to the BPS, the KPMG contractors worked with the VBA and Hines staff and coordinated the Dry Run.

### DRY RUN (MAY 17-24, 1999)

A Dry Run in preparation for the Business Process Simulation (BPS) was conducted on May 17-24, 1999 at the Hines SDC. During the Dry Run, adjudicators entered test scenarios into the system which generated transactions that allowed the Hines staff to judge the success of their Y2K modifications. The Dry Run was identical to the approaching BPS, even to the test scripts used by the adjudicators, except in two areas. During the BPS, a regional office would link in to the Hines systems, but that portion of the test was omitted in the Dry Run.

However, the Dry Run served to test an important area of the VBA’s benefits delivery: its communication with the Treasury.

## TREASURY TESTING

When the VBA issues payments to Veterans the data is transmitted to the Department of the Treasury which either issues physical checks or sends the data to the Federal Reserve Bank, which handles Electronic Fund Transfers (EFT's) to the veteran's home bank. Because of this cooperation among agencies, the VBA's goal of uninterrupted service to veterans depends not only on its own Y2K readiness, but also on the readiness of the Department of the Treasury, the Federal Reserve Bank, and each veteran's home bank. Jayshri Rai of the Payment Systems Division, and a member of the Y2K Project Team, was assigned to oversee this important part of the project. She attended the Dry Run at Hines in order to oversee the Treasury testing.

The testing of the VBA's communication with the Treasury was approached on three Tracks. Track 1 involved the creation and transmission of payment files to the Treasury. This was accomplished during the Dry Run held at the Hines Benefits Delivery Center (BDC) from May 17-24, 1999. During the Dry Run, 33 payment files were created and transmitted from Compensation and Pension and Education (CP&E) Benefit systems. The more than three million financial transactions resulting from these transmissions totaled over \$1.5 billion. At the same time, Philadelphia created and transmitted two payment files from Insurance for a total of 7,114 financial transactions with a combined value of over \$2.4 million.

Track 2 of the Treasury testing involved the creation of holds, stops, or other financial transactions that could occur after a payment file is sent to Treasury. This includes problems such as checks returned due to an address change or the death of the veteran. This test, conducted June 15-21, 1999, involved selecting claim numbers from the Treasury's list of processed claims from Track I payment files. These claims were input into the system in two sessions. For the first session, the system date was set at February 3, 2000, and 67 transactions were executed. For the second session, the system date was set at February 15, 2000, and 70 transactions were executed.

Track 2, part 2, of the Treasury testing took place on November 22, 1999. Files returned to the Treasury were processed against the files and databases from the Dry Run, using system dates of February 3, 2000 and February 29, 2000 (leap year).

In the case of malfunction due to a Y2K-related problem, the VBA and the Treasury have worked out a contingency plan which provided for the mailing of physical checks to the veterans. Such contingency was not expected to be necessary. Currently, the VBA has planned and sent January benefit payments in late December 1999 to allow one full month before the next payment is due to correct any problems that may arise.

Some Dry Run Problems - The Dry Run was an overall success, but some problems did arise. Problem Resolution Forms (PRF's), provided by the KPMG contractors, were given to test participants at each site. Forty-five (45) of the forms were submitted. Three of the RPF's - all from Philadelphia - were Y2K related. In each case, however, the issue was quickly resolved or an acceptable workaround was found. None of the problems was severe and the test was completed successfully and effectively paved the way for the BPS.

#### **BUSINESS PROCESS SIMULATION (BPS)**

On July 3-8, 1999 at the Hines BDC, the VBA conducted its BPS. Through the BPS, VBA was able to operate in a Year 2000 environment to test the functionality of its mission critical systems. The VBA successfully operated in this environment for over 633 hours, and was able to process transactions and to share information from one site to another, testing more than 7.5 million lines (total VBA) of code.

Responsibilities were divided among various VBA staff members. Sally Wallace acted as Test Director, taking on the responsibilities of the overall BPS effort. In addition, one Site Coordinator was assigned at each of the six five participating sites: Diane Jelonek at the Hines BDC, Deanna Scott at the Austin SDC, Tom Buffington at the Philadelphia BDC, John Byrne at the St. Louis Regional Processing Office (RPO), Dan Osendorf at the St. Paul Debt Management Center, and Steve Ward at the VHA Bay Pines facility. The Site Coordinators were responsible for making all test equipment available for use and for controlling and keeping all test data.

The test spanned six days because the Hines BDC and the Austin SDC required that length of time to complete their designated activities. The Philadelphia BDC, however, completed their portion of the test in the first day, VHA was also done the first day and the St. Louis RPO completed their tasks in the first three days.

The Hines BDC was not only a test participant, but it served as the "command center" for the BPS. A Y2K Test Room was set up in the Hines benefits delivery facility for the adjudicators, and a "Y2K War Room" was set up in which the Test Director, her staff, the KPMG contractors from VACO, and the Hines Site Coordinator and her staff could gather to monitor the test. It is from the Hines BDC that the bulk of the veterans' benefits are distributed. Combined, Compensation and Pension and Education (CP&E) pay out over \$21 billion in benefits to veterans and beneficiaries across the globe. During the six-day test, over 1,000 transactions were successfully processed at the Hines BDC, testing approximately 5.5 million (CP&E) lines of code.

The Philadelphia BDC, which handles all of the Insurance systems processing for VBA, handles approximately \$800 million worth of claims each year. It was one of the VA's first automated systems and the first to complete systems renovation. During the BPS, they successfully processed 35 transactions, testing approximately 850,000 (Insurance) lines of code.

The Austin SDC provides general information about veterans to the VBA's 58 regional offices. In its 3 days in the test environment, the Austin SDC processed over 1200 such queries. This processing tested more than 600,000 (BIRLS) lines of code. Austin participated all six days of the test.

The BPS demonstrated that the VBA can successfully carry on its mission critical operations beyond the change of the century. It was a significant milestone for the Hines staff, the VACO Team, and the entire VBA.

### **BPS - PLATFORMS \***

The BPS included our IBM mainframes at Hines and Austin, the NUMA-Q at Hines and Austin, the Honeywell Bull mainframes at Hines and Philadelphia, as well as the Stage I and Stage II platforms which includes the RO's. Transactions generated from a cross-section of application platforms were passed between systems to test critical telecommunications linkage among the business functions.

### **AFTER THE BPS**

Although the BPS was the capstone to the work the VBA Y2K Project Team had performed, it was not the end of their work. Although a test on the same scale as the BPS is no longer necessary, the VBA continues to perform smaller tests. The Project Team, with KPMG contractor support, developed plans for the 2000 rollover, detailing how the VBA's systems would be brought down on Dec 31st, what backups were needed and how they would be stored, and how the systems would be brought up again on Jan 1<sup>st</sup>, 2000.

## Scope of the Y2K Issue

Some people still consider the Y2K issue an IT problem which will hit the first day of the 21st century. In reality, it is a more extensive issue than some people realize.

### FAIL DATES

Although most of the media attention surrounding Y2K was focused on the January 1, 2000 rollover, there are other dates that could cause errors to occur in applications and platforms. The first, which already passed without incident, was July 1, 1999. The date marks the beginning of fiscal year 2000 in 46 states. The next date of concern was September 9, 1999. Entered as 9/9/99, this date has been used by some programmers as a dummy code. After the beginning of the new century, there will still be three date milestones to test programs: February 29, 2000, indicates a leap year; October 10, 2000, will be the first time that many programs will have to fill in eight-digit date fields; and December 31, 2000, will be the 366th day of the year. The Y2K issue will not completely be laid to rest after the first day of the new millennium.

### NOT JUST APPLICATIONS - PLATFORMS \*

The Y2K problem not only affected applications, but the hardware platforms on which they reside.

The Honeywell (Bull) equipment at Hines, IL and Philadelphia, PA were upgraded and made operational in August and September, 1998 (as scheduled), and are Y2K compliant.

At Hines and Austin, the entire IBM production system was made compliant in November, 1998. In Philadelphia, the implementation of the Y2K compliant IBM platform occurred in February, 1999.

### NOT JUST APPLICATIONS - INTERFACES - RESEARCH

In order to successfully conduct cross-site testing, information regarding each DPC's (Austin, Hines, Philly) mission critical hardware, software, applications and interfaces was documented and shared among the DPC's. Prior to Y2K activities, the mission critical system information resided in employee's heads, and a large portion of the Data Centers information was not documented, especially interfaces. Through the efforts of a VBA computer specialist, Paul Wojdyla, and KPMG, interface letters and surveys were developed and sent to gather information and request further compliancy guidance regarding VBA interfaces. In addition, several trips were necessitated to the DPC's to interview, research and gather the pertinent data on interfaces at the respective sites.

Of primary importance was the "assessment tracking" regarding the "corrective action" to be taken (i.e. "field expansion", "bridging", "windowing", etc), for each respective interface.

### **INTERFACE "TRADING PARTNERS"**

But it didn't stop there. The VBA also relies on sharing information with other government agencies, banks, credit unions, and mortgage companies, regarding veterans and their payments. This made the task even more extensive. There are more than 550 interfaces involved with VBA's top 10 external trading partners alone. Not only would VBA have to check on its own interfaces, but it would have to monitor the Y2K compliance of all external trading partners. With extensive testing at the respective SDC's, all VBA interfaces have been certified Y2K compliant.

### **INTERFACE MOA'S (Memorandum of Agreements) \***

Interface surveys and letters (MOA's) were prepared and released to all of VBA's external trading partners requesting information and guidance on interface Y2K compliancy for each partner. In addition, final confirmation of the "corrective action" agreement was obtained, as well as detailed testing coordination and procedures required. KPMG contractors, with some assistance from VBA personnel, fulfilled this difficult, tedious task quite admirably. These "data exchange agreements" were well documented, and key trading partner contacts and related critical information is stored on our interface access data base.

### **APPLICATION/INTERFACE - Access Data Bases \***

As a result of this effort, access data bases were developed containing detailed information regarding the VBA's 151 Applications and 728 Interfaces. This is the first time in the history of the VBA, that such critical information on all of its applications and interfaces resides on a data base that is: available, accessible, manageable & "living & breathing"! This data base has been shared with our VBA sponsors and development sites, and constitutes a critical tool to document and monitor our application development to service our veterans.

### NOT JUST AN "IT" PROBLEM - FACILITIES

The scope of the Y2K issue was not fully known when the VBA made their preliminary investigations. Even when the Year 2000 Project Team was established in 1996, many thought of Y2K to be exclusively an IT problem. As seen in VA's OMB reports, it was not until early 1998 that VA began to monitor contingency planning, recognizing that the change of the century could bring more than merely data processing errors.

Al Bissett, from the Office of Resource Management (ORM), was charged with handling facilities issues resulting from the change of century. Although the equipment involved is non-IT, it contains embedded computer processors with date control logic that could cause the equipment to fail upon the Year 2000 rollover. ORM worked toward identifying such pieces of equipment and making adjustments to accommodate the change of century. This issue is an important one, since verification of computer application compliancy is very dependent upon staff members gaining access to their building and work stations, and preventing facility failures. Realizing that issues such as possible facility failures needed to be addressed, the Year 2000 Project Team developed a plan that can serve as a guide in a variety of Y2K scenarios.

### NOT JUST AN "IT" PROBLEM - TELECOMMUNICATIONS\*

On June 1, 1998 the VBA awarded a contract to PROSOFT for Year 2000 Assessment of VBA Voice Communications Systems. Specifically, this project included assessment of existing VBA video systems and mission critical voice communications systems for Y2K compliance, and resulting renovation, testing, and implementation of compliant solutions. An inventory was initially conducted to determine compliance and noncompliance.

The scope of this project included systems at and supporting all the VBA locations including Central Office, Regional Offices, Regional Processing Offices (RPO's), Regional Loan Centers, Outbased sites, etc. The project was conducted in two phases.

Phase I included identifying voice communications systems that did not comply with Y2K requirements, establishing a list of corrective actions, determining the cost of implementing the corrective actions, and developing a Renovation Plan and a Contingency Plan.

Phase II consisted of coordinating and monitoring the implementation of all renovation, validation and fielding tasks.

Telecommunications Conclusions: The Year 2000 Assessment of Voice Communications Systems was an undertaking of extensive magnitude, which resulted in an overall upgrade of the VBA voice communications. Outdated, non-Y2K-compliant systems were upgraded or replaced with state-of-the-art telephone systems, and the VBA obtained a database of all systems and components. There were no failures of voice communications during the rollover to January 1, 2000. The success of this project was achieved as a result of the technical and management partnership developed between PROSOFT and Rebecca Carswell (Team Leader, 20S4, Telecommunications Staff).

#### **Facilities & Telecommunications links - VBA Y2K INTRANET webpage \***

URL links to both "Facilities" and "Telecommunications" websites were provided on our VBA Y2K Intranet site ("152.124.238.193/projects/y2k/y2kindex.htm") to monitor and communicate status and progress to all of our VBA/VHA sponsors and field sites.

#### **VBA'S BUSINESS CONTINUITY AND CONTINGENCY PLANNING (BCCP)**

In accordance with a directive from the OMB, the VBA developed a Business Continuity and Contingency Plan (BCCP). A Y2K Project Team member, Rhonda Wilson, was given the responsibility of contracting with SRA to develop a reliable BCCP for VBA. The BCCP addresses how the VBA will continue to perform critical business functions in the event of a Y2K-related disruption. It includes contingency plans for many types of Y2K-related challenges that may arise, and provides for a chain of command that lists who will assume certain roles. It covers issues such as what employees should do if they can't get to work or if, once at the building, they can't get inside. The plan also provides alternate sites of operation and alternate—manual—ways to continue operations in case of IT failures.

SRA and the VBA staff developed the VBA Headquarters BCCP and the BCCP template which was distributed to the RO's. Because the plan covers so many possible situations, many of which are site-specific, there is no "one master" contingency plan for all of VBA. There are separate plans for each VBA location: one for the CO; one for each BDC; and one for each RO. VACO and each BDC built their own plans from the ground up, but the RO's each filled out a BCCP template provided by VACO which was designed to help them develop their own unique plan.

The BCCP identified workarounds for possible Y2K challenges, focusing heavily on manual methods of getting work done. Some of these workarounds require additional supplies, such as paper checks in case EFT's do not go through. The BCCP provides for the availability of these supplies.

By February 1999, the VBA had disseminated templates to all Regional Offices, and the RO's had completed their BCCP's by April 1999. After completion of the VACO, BDC, and RO BCCP's, the only step left was testing.

### BCCP TESTING

BCCP testing at VACO and field sites was conducted in September 1999. To facilitate the individual testing that will occur throughout the VBA, an Exercise Training Video was produced in August 1999, and a VBA Exercise Planning Guide was provided to the participants. The testing consisted of tabletop exercises in which a group of VBA employees was given a scenario involving a possible Y2K problem. The group members were expected to work through the problem verbally. Changes were made to the scenario as the exercise progressed, and the participants were expected to modify their plans or to develop new plans to deal with the changes.

## Schedule

### DEADLINES

The Year 2000 Project Team is facing an immovable deadline. The turn of the century will not wait for the VBA. However, December 31, 1999 was not the date to which the Team was working. Their goal date was one year earlier.

OMB set for VA a Y2K readiness deadline of March 1999, but Hershell Gober, Deputy Secretary of Veterans Affairs, instructed the VBA that he wanted all mission critical systems Y2K compliant by December 1998. By the December deadline, the VBA's systems were 99% Y2K compliant. Insurance finished renovations July 6, 1998 and implementation December 23, 1998; Education finished renovation September 30, 1998 and implementation March 28, 1999; Compensation and Pension finished renovation October 27, 1998 and implementation February 12, 1999; Loan Guaranty finished renovation January 15, 1999 and implementation March 29, 1999; Vocational Rehabilitation finished renovation February 1, 1997 and implementation June 15, 1997; and Administrative systems completed renovation April 30, 1998 and implementation September 30, 1998. Although, due to one minor application error in the Loan Guaranty system, the VBA missed the deadline set by Hershel Gober, but they were 100% Y2K compliant well before OMB's deadline.

## Outreach Activities

The VBA is involved in numerous outreach activities regarding Year 2000 awareness. The agency seeks to reach people within VA and also people outside the VA, especially the Veteran population. With the turn of the century approaching, the VBA Year 2000 Team is increasing its outreach to both the VA and the community with the goal of informing and reassuring the Veterans that the VBA is Y2K ready and benefits payments will be accurate and on time.

### HOME PAGES: INTRANET AND INTERNET

Jannis Butler-Tolliver designed the VBA Year 2000 intranet and internet sites in 1997 in order to increase awareness of the Y2K issue. On the intranet site, she posted the VBA Year 2000 Project Charter and Project Plan. The VBA intranet is a resource accessible to everyone in the VA, and the data provided supports outreach within the agency. It is designed to inform VBA personnel on Y2K issues and to provide updates on the progress of the VBA's Y2K activities. The site includes status reports, which are updated on a monthly basis and links to sites at which users can get more information on specific Y2K challenges, such as telecommunications and facilities issues. The site also provides links to new items and press releases relevant to the Project. The Year 2000 Project Home Page is accessible directly or by links from the VBA's main intranet home page.

The "internet" Y2K site excludes technical information on the Project, and the data provided supports outreach outside of the VBA (to veterans and their beneficiaries). The purpose of this home page is to give people, who may or may not be familiar with Y2K, a general overview of the Project and the VBA's progress. The site includes the VBA Year 2000 Project Plan, press releases, and a page called "Especially for Veterans," which answers questions and concerns directly related to the payment of benefits. The site also provides links which take users to sites where they can get more information about the Y2K issue in general, as well as links to other government agencies, including the President's Council on Year 2000 Conversion.

Currently maintained by a computer specialist, the VBA intranet and internet sites now serve as main sources of Y2K information for users both inside and outside the VA. The sites' effectiveness as sources of outreach and awareness is measured by a feature which keeps track of how many people have accessed the sites. Currently the internet site receives more than 100 hits per day.

## CORRESPONDENCE

Jannis Butler-Tolliver receives letters, e-mails, and phone calls from banks and financial institutions around the country. She ensures that each bank or credit union who contacts the Project office receives a formal VA letter reply. The inquiries range from financial institutions writing to ask about the availability of new systems, to individual veterans with questions regarding the impact Y2K will have on their benefits (received via the internet). In all cases, VBA's goal is to inform and to reassure that VBA is Y2K compliant.

## CAMPAIGN 2000: THE MARCH TO THE NEXT MILLENNIUM

In early 1999, The Undersecretary for Benefits announced the beginning of a campaign to promote awareness of Year 2000 among VBA regional offices (RO) and sponsors. Called *Campaign 2000: The March to the Next Millennium*, the goal of the project is to keep VBA employees and the veteran population informed of VBA's Year 2000 preparations.

In the Year 2000 Project Office, Lee Pritchard is in charge of carrying out the initiatives of the Undersecretary's campaign, serving as liaison between the Central Office and the RO's. In this capacity, he distributed information from the corporate mailbox to the 58 regional offices across the country. He also assists the Project by distributing ITAA reports to field offices and bringing all of VBA's outreach efforts together by organizing VBA's nation-wide Y2K workshop.

## GETTING READY: VBA Y2K WORKSHOP

The week of July 26-30, 1999, a nation-wide VBA Y2K workshop was held in Pittsburgh, Pennsylvania. The theme of the workshop was *Campaign 2000: March to the Next Millennium*. Designed to provide attendees with VBA's and VHA's Y2K status, the workshop brought together speakers from a range of VBA divisions to talk about the Y2K issue.

Presentations at the conference included status reports from VA, VBA, and VHA. However, the focus of the conference was primarily contingency planning and disaster recovery. The workshop provided Regional Office Directors and their disaster recovery managers a forum in which they could share information about VBA's capability of handling unforeseen events.

### **VBA ICC (Information Coordination Center) \***

The VBA ICC, located in room 434 at 1800 "G" Street NW, was created to monitor, track and report on Y2K "rollover" status as they occurred throughout the VBA. The VBA ICC was operational and staffed from December 28, 1999 through January 3, 2000 for the Y2K "rollover".

Significant Y2K information was posted onto our VBA Y2K INTRANET webpage to assist with the rollover, including: ICC Status Report, ICC POC Information, VBA/ICC Operations Procedures Manual, the "Millenium Health Check Plan", Hours of Operations, as well as "ICC Rollover Links" to other significant Y2K sites. Our intranet webpage was updated every 4 hours during the rollover period, with "status green", meaning "normal service".

The CO Y2K Project Team, together with KPMG contractor support, worked very hard to create, operate, and support the VBA/ICC, to help to guarantee a successful Y2K rollover to the new millennium. No Y2K problems were encountered during the production rollover.

### **"LEAP YEAR" (FEB 29<sup>TH</sup>) - VBA/ICC \***

A remnant of the VBA/ICC was also operational and staffed from February 28 through March 1, 2000 for the Y2K "leap year" transition. The same operational guidelines and procedures applied (as in the Y2K rollover), to guarantee a successful "leap year" transition. No Y2K problems were encountered during the "leap year" transition.

### **ICC (Information Coordination Center) National \***

The President's Council on Year 2000 (Y2K) conversion operated an Information Coordination Center (ICC), which was the Federal Government's central point for gathering, analyzing, and summarizing information on the Y2K date rollover. Located on the 10<sup>th</sup> floor of our 1800 "G" Street building, the ICC was established to provide the Federal Government with an ability to collect and coordinate information from across the government and all sectors of society.

The ICC (National) tracked the date rollover status of all Federal (including VA), State and Local Governments, and critical public and private sector systems that support the infrastructures.

The Department of Veterans Affairs (VA/ICC) & the Y2K Project (20SC) Team (VBA/ICC) operated their own ICC's, but supported and reported to the President's Council ICC during the "rollover" and "leap year" transition.

## Y2K Compliant!

The VBA Y2K Project Team, consisting of approximately 65 full time employees at CO, Austin, Hines and Philly, through an intensive, prolonged effort, lasting 36+ months, achieved quite an accomplishment.

Through the cooperation of our 3 development sites, 58 RO's, multiple program sponsors, intensive data exchanges (58 trading partners), VBA was able to certify, implement and run in production 151 applications and 728 interfaces!

**WE BE Y2K COMPLIANT! WE SUCCESSFULLY TRANSITION THE "Leap Year".  
WE "DID IT" !**