MAY 3 1974

District Manager
Western District
U.S. Army Audit Agency
390 Convention Way
Redwood City, California 94063

Dear Sir.

Enclosed is a report to the Commander in Chief, U.S. Army, Pacific, on our review of the U.S. Army, Japan, Civilian Payroll System--a part of the USARPAC Standard Civilian Payroll System. Our review was made in accordance with the Comptroller General's letter of September 1, 1972 to the Secretary of Defense in which he advised the Secretary that the General Accounting Office would discontinue centralized audits of civilian payroll systems overseas and begin making onsite reviews.

Our objective was to evaluate the payroll system's internal controls, including internal audit. In addition to the manual controls, we gave attention to those built into the computer programs.

In our report we note a need for better internal audit coverage (page 29). We also note the following:

--serious weaknesses in the internal controls over time-keeping (page 4) and processing of entitlement documents at the payroll office (page 7).

--a need to improve security over the computer files (page 18).

--areas for improvements in the computerized portion of the system (page 20).

--opportunities to increase efficiency (page 26).

We drew a sample of 50 employees on the rolls as of January 19, 1974 and attempted to substantiate all payments, deductions, and leave transactions for one pay period, and verify other information on the master record. We then projected

the results to the entire payroll of about 2,100 employees. As shown on page 15, a significant number of errors was found in the records resulting from the lack of internal controls.

In our opinion, the basic cause for the conditions described in the report was an inadequate conversion effort when the system was computerized in 1973. Timekeeping and payroll personnel received little training in the operation of the new system, standard operating procedures were not developed, computer programs were not carefully tested, and the system was not monitored after computerization. We believe that action should be taken in the following general areas. (1) training, (2) correction of internal control weakness; (3) validating computerized payroll data; and (4) increasing internal audit coverage.

Specifically, we are recommending that.

--an intensive training program be started for payroll clerks in internal controls, forms usage, payroll regulations, and proper handling of computerized output (page 16).

--standard operating procedures be developed for timekeepers and payroll clerks (pages 6 and 16).

--computer files be duplicated periodically and stored in a remote location (page 19); and the Continuity of Operations Plan be updated to provide for recovery in a disaster (page 19).

--current computer files be stored in the tape library and checked out when authorized (page 19).

--computer program documentation be kept up to date (page 21).

--computer programs be thoroughly tested before use (page 23), and updated in a timely manner to reflect changed legislation and regulations (page 23).

--additional computerized controls be installed (page 25).

--duplicate manual pay, bond, and leave records be eliminated (page 28).

In view of the numerous internal control weaknesses and resultant errors in the payroll records, we recommend that the Army Audit Agency schedule a comprehensive review of the system.

Sincerely,

C. Roman
Director

Enclosure

NEED FOR IMPROVEMENTS IN

U.S. ARMY, JAPAN CIVILIAN

PAYROLL SYSTEM

FAR EAST BRANCH

U.S. GENERAL ACCOUNTING OFFICE

HONOLULU, HAWAII

Contents

CHAPTER 1

INTRODUCTION

On September 1, 1972, the Comptroller General informed the Secretary of Defense that, effective January 7, 1973, the General Accounting Office (GAO) would discontinue centralized civilian payroll audits and institute onsite reviews. The Secretary was advised that GAO's work would include (1) reviewing the payroll system at the activity having design and control responsibility, (2) testing the internal controls within the system, and (3) reviewing internal controls at operating activities over the preparation, flow, and processing of pay actions. This approach recognizes the provisions of Section 113 of the Accounting and Auditing Act of 1950 (31 U.S.C. 66a) which gives each agency the basic responsibility for proper accounting and internal control, including internal audit.

We have reviewed the U.S. Army, Pacific (USARPAC) Standard Civilian Payroll System. Our review was conducted at the USARPAC Computer Service Center and the U.S. Army Support Command, Hawaii which have systems design and maintenance responsibilities. We reviewed the operation of the system at U.S. Army, Japan (USARJ) organizations located at Camp Zama and the U.S. Army Base Command, Okinawa. We also visited selected timekeeping sites in the Camp Zama and Okinawa areas.

Our review was directed primarily at evaluating the system design and internal controls over the preparation and flow of entitlement documents and pay data to and from the computer. We also evaluated the computerized internal controls by preparing a test deck of simulated transactions which were passed through the system using duplicated payroll files and the actual computer programs. In addition, we selected a statistical sample of 50 employees and reviewed all transactions affecting their pay and leave accounts for the pay period ending January 19, 1974.

BACKGROUND

The USARPAC Standard Civilian Payroll System is a computerized, integrated pay and leave system. It was originally designed in 1968 in a joint effort by USARPAC and the U.S. Army, Hawaii--now U.S. Army Support Command, Hawaii (USASCH)--and was implemented in 1969 at USASCH.

In April 1973, a joint USARPAC/USASCH team began converting the USASCH system to handle also the then manual USARJ payroll system. In May 1973, conversion of the USARJ records began and in June 1973 the USASCH system was redesignated the USARPAC Standard Civilian Payroll System. Conversion was substantially completed by November 1973.

At the time of our review, there were about 2,100 civilian employees on the USARJ payroll. Of these, about 1,400 were in

Okinawa and the remainder were in mainland Japan. About 300 were Wage Board and about 1,800 were General Schedule or part time employees.

The Civilian Pay Section of the Finance and Accounting Office, Headquarters, USARJ, is responsible for coding entitlement documents, controlling the flow to the Consolidated Data Processing Center, developing control figures on permanent and temporary changes to the payroll, reviewing time and attendance reports, and other payroll office functions. Entitlement documents are forwarded to the Civilian Pay Section from Civilian Personnel Offices at Camp Zama and Okinawa and from timekeeping sites throughout Japan.

CHAPTER 2

NEED TO ESTABLISH OR IMPROVE INTERNAL CONTROLS

TO REDUCE OPPORTUNITIES FOR FRAUDULENT AND OTHER

IRREGULAR ACTS

NEED TO ESTABLISH INTERNAL
CONTROLS OVER TIMEKEEPING

We found numerous weaknesses in the procedures for preparing

time and attendance reports and in transmitting these reports to

the payroll office. Many of the reports did not provide sufficient

evidence of employee pay entitlements, and there was no assurance

that entitlement information in the reports had been properly

transmitted to the payroll office.

The purpose of a time and attendance report is to document

the amount of pay due an employee. As such, the following criteria

contained in the GAO Policy and Procedures Manual for Guidance of

Federal Agencies (6 GAO 16.2)--hereafter referred to as the GAO

Manual--and Army Regulation 37-105 must be met:

--time in pay or non-pay status should be recorded daily in

ink or indelible pencil by a designated person who takes no

part in preparing the payroll or distributing pay.

--the designated timekeeper should have positive knowledge

as to the employee's presence or absence before marking

the report.

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--the time and place at which the work was performed should
be recorded.

--the exact time of day of all absences should be recorded,
except if the employee was absent for a full workday.
Indicated absences should be initialed by the employee or
supported by a signed application for leave.

--all reported overtime should be supported by written
authorization.

--timekeepers should certify the reports. The timekeeper's
supervisor should countersign reports on which the
timekeeper's time and attendance appears.

--maintenance of subsidiary reports from which to transcribe
data biweekly to the approved report is not authorized
except under special circumstances.

--corrections should be made by lining out the incorrect
figure, posting the correct figure, and initialing the
correction.

We visited nine timekeeping stations. Two were in Camp Zama
and seven in Okinawa. Following are the weaknesses we found:

	No. of time-stations
Timekeeper did not certify the reports	9
Reports were not posted on a daily basis	8
Corrections were made improperly	7
Tour of duty not recorded on the report	5
Unauthorized subsidiary records maintained	4
Timekeepers did not have positive knowledge of employee's presence or absence	3
Timekeeper also distributed pay checks	1

In addition, a statistical sample of 50 employees revealed
that three had worked overtime during the pay period ending January
19, 1974. However, no overtime authorizations were on file at the
payroll office. Similarly, there was improper support for nine
people who took sick or annual leave during the period.

The GAO Manual (6 GAO 15.1 and 15.2) also states that systematic
control procedures should be applied to all source documents and
that these procedures should be designed to fit the specific payroll
system. One of the features incorporated into the design of the
system is the use of control totals.

We found that, although space is provided on the time and
attendance reports for control totals of employees and hours worked
by category, many of the timekeeping sites do not total the reports.
In addition, none of the sites transmit control totals to the
payroll office. As a result, the payroll office does not have
effective control over the flow of data through the various
processing stages.

Recommendations

To assure that time and attendance reports provide a proper
basis for determining the amount of pay due each employee and to
assure that all of the data on the reports is accounted for, we
recommend that standard operating procedures be developed for
timekeepers.

These should include a clear and complete description of the duties and requirements of the timekeeper as prescribed in the GAO Manual and Army Regulation 37-105. Included should be procedures to determine employee's presence or absence, record time and attendance on the report, correct errors, and certify the report. It should also include procedures for transmitting the completed reports to the payroll office.

NEED TO IMPROVE INTERNAL CONTROLS
OVER PROCESSING OF ENTITLEMENT DATA

We found a lack of internal control over the processing of payroll data at the payroll office. As a result, the payroll files contained incorrect data, manual records to support payments could not be located, erroneous payments were made, and leave balances were incorrect. In our opinion, the errors we found were of significant proportions and require immediate corrective action.

Following are the details of our review.

Entitlement documents inadequately reviewed

Independent review of transactions is an important element of internal control. To achieve this, chapter 8 of Army Regulation 37-105 makes payroll clerks responsible for reviewing time and attendance reports.

We found that payroll clerks did not review time and attendance reports to determine whether: (1) overtime reported was properly authorized; (2) leave taken was properly supported; (3) shift

differential hours were supported by tour of duty information, and
(4) reports were properly certified. The results of these weaknesses
are discussed on page 14.

Similarly, permanent change transaction documents were not
adequately reviewed. We found several instances where the entered-
on-duty date was substituted for the service computation date when
new employees were placed on the payroll. In some of these instances,
the actual service computation date differed from the entered-on-
duty date. As a result, all computer calculations, based on the
service computation date, would be incorrect.

For example, we reviewed the accounts of 24 employees who had
sick leave balances equal to or in excess of the maximum possible
amount based on their computerized service computation dates. Of
these, 19 or 79 percent of the service computation dates appeared
to be in error.

Changes improperly made to time and attendance reports

Chapter 8 of Army Regulation 37-105 prescribes the procedures
for making corrections to time and attendance reports. Changes
which affect pay should be supported by a corrected report. Other
changes should be initialed by the payroll clerk.

We found that payroll clerks regularly made changes to the
time and attendance reports which affected pay without requiring

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corrected reports to be submitted. For example, changes were made
to the number of overtime hours and night differential hours
reported. Basic pay hours of separated employees were similarly
changed.

Changes were also made to reports which did not affect pay.
For example, reported leave hours were corrected without initialing
or explanation.

Lack of separation of duties

Separation of duties provides a check on the accuracy of work
and reduces the opportunity for irregular acts. The GAO Manual
(6 GAO 9) states, among other things, that different individuals
should be assigned the tasks of computing payrolls and maintaining
control records. Army Regulation 37-105 carries the separation of
duties concept further by stating that permanent changes in pay
will be verified by a second payroll clerk.

Although control records were not maintained (discussed in
the following section), had they been maintained the same payroll
clerk would have been responsible. Additionally, permanent changes
in pay were not verified by a second payroll clerk before posting
to the computerized records.

Predetermined control totals not used

Predetermined control totals are arithmetic totals of numbers--
e.g., pay rates, hours worked, employee count, social security
numbers--which are manually computed and compared with totals developed

by the computer system at succeeding points in the processing operation. Their purpose is to ensure that all data entered into the computer system are processed correctly.

The payroll system is designed to accumulate control totals on the data inputted to the computer and forms are provided to reconcile the predetermined control totals with those generated by the computer. We found, however, that the payroll clerks did not prepare predetermined control totals and, further, did not know how to use the control forms provided. In discussing this matter with USARJ officials we learned that payroll clerks had not been adequately trained when the payroll system was computerized. This is discussed further on page 12.

Computerized controls bypassed for separated employees

The payroll system is designed to reject all time and attendance transactions for separated employees. This control prevents separated employees from being paid. The control is triggered by a separation code entered on the employee's final time and attendance report.

We found that payroll clerks were bypassing this control by crossing out the separation code. When questioned as to the reasons for this, we were told that, by crossing out the code, the employee's account could be held open to process any subsequent pay adjustments prior to closing the account.

We believe that this is a dangerous practice because a separated employee could, by a number of reasons such as keypunch error, be paid after separation. This is particularly true in view of the lack of predetermined control totals previously discussed.

Disposition of computer-generated exceptions

The computer system generates exceptions for any one of three reasons: (1) an incorrect transaction requiring correction, (2) an unusual transaction requiring human verification, or (3) when conditions are met that require human action. Each exception has an associated code or explanation.

We found that transactions which the computer rejected as incorrect were being corrected and a record of the corrected transactions, in the form of a new computer printout, was maintained. However, transactions identified by the computer as incorrect were occasionally "forced" into the system without documentation or a supervisor's approval. Similarly, unusual transactions were allowed to enter the computer system without documentation of manual verification.

Also, exceptions requiring human action had not been properly handled. For example, the payroll computation program generates a list of employees who are due for a leave category change in the subsequent pay period. Because the payroll clerks were not reviewing this list, a substantial number of employees did not have their leave categories updated in a timely manner. As a result, the

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computer could not properly calculate annual leave accruals. We found 75 employees with questionable leave categories as of January 5, 1974. Although action was initiated around the middle of February 1974 to update leave categories, 19 of the 75 employees identified above still had incorrect codes on their records as of March 16, 1974.

Lack of training for payroll clerks

Competent and adequately trained personnel are an integral part of internal management control. Pay, leave, and allowances are highly specialized areas requiring a high degree of knowledge of related legislation and regulations. Additional knowledge is required to use a computerized payroll system.

We found that the payroll clerks had little or no knowledge of how to properly operate the computerized payroll system. As discussed on page 10, control forms were not being used because of lack of training. Also, in some cases, the payroll clerks were unable to explain the reason for certain computer-generated exception codes. Similarly, clerks did not understand the effect on payroll computations of the shift-code in time and attendance reports.

We observed from discussions with the payroll clerks that they did not have a thorough understanding of pertinent payroll regulations. For example, two clerks did not know that leave and overtime authorizations are to be submitted with time and attendance reports. They thought these documents were to be filed at the

timekeeping site. Similarly, the chief clerk was not familiar with the regulations governing promotions of Wage Board employees.

Employees of the Civilian Pay Section told us that the training received by payroll clerks before conversion of the payroll to the computer was inadequate, because (1) none of the clerks were able to attend all of the classes; (2) the Chief of the Civilian Pay Section did not attend all of the classes, (3) there were no handouts available to explain and remind attendees of the procedures being taught, and (4) some of the clerks did not attend any of these classes. We were also advised that the procedures for preparing the permanent and temporary change control forms were explained only to a military person who was transferred shortly before the conversion took place.

Required records not properly maintained

The GAO Manual (6 GAO 16.3) requires that a current file of all deduction authorizations shall be maintained as justification for each deduction. Army Regulation 37-105 specifies in more detail the requirement to maintain files on deduction authorizations for Federal withholding tax and bonds and allotments. In addition, Army Regulation 37-105 requires the payroll office to maintain a file of designated timekeepers for internal control purposes.

We found numerous instances where required records were not maintained. For example, many Employee Withholding Exemption

Certificates and bond and allotment authorizations could not be found. Records of designated timekeepers were missing or out of date. Those that were maintained were kept in a folder in a haphazard manner. Also, time and attendance reports were not always filed in sequence, and documents in payroll control folders were loose and in no particular order.

Results of lack of internal controls

To obtain some indication of the areas affected by the above-described weaknesses in internal controls, we drew a random sample of 50 employees out of 2,115 in the payroll master file as of January 19, 1974. We attempted to substantiate all payments, deductions, and leave transactions for the pay period ending January 19, 1974. We also verified other information on the master record.

Following are the results of our sample and projection of errors found in it to the total universe of 2,115 employees. In our opinion, the large number of projected errors in the accounts indicates a need for immediate management attention.

Condition	No. of errors in sample of 50	Estimated no. and range of errors in the payroll (note 1)
Pay and allowances		
Bond and/or allotment authorizations not on file at the payroll office	14	592 ± 169
Employee Exemption Certificates not on file at the payroll office	11	465 ± 156
Erroneous living quarters allowances paid	4	169 ± 103
Overtime worked for which no authorizations on file at the payroll office	3	127 ± 89
Incorrect Federal withholding tax deductions	2	85 ± 74
Leave		
Leave not properly supported on time and attendance report	9	381 ± 146
Incorrect annual leave balance	7	296 ± 131
Incorrect sick leave balance	3	127 ± 89
Incorrect annual leave accrued due to incorrect leave category codes	3	127 ± 89
Annual leave taken but not posted to computer record	1	42 ± (note 2)
Other		
Incorrect service computation date	5	212 ± 113
Incorrect social security number	1	42 ± (note 2)
Manual home leave records incorrect	7	296 ± 131

[1] Based on a confidence level of 80 percent.

[2] Insufficient data to estimate a range.

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Recommendations

To improve internal controls, we recommend that USARJ, in conjunction with the USARPAC, initiate an intensive training program for Civilian Pay Section payroll clerks. This training should include:

--Principles of internal controls as it relates to predetermined control totals.

--The use of the forms to control permanent and temporary changes through the computer system.

--Army regulations governing Civilian Pay.

--Preparation of the manual forms used to effect permanent changes and adjustments to temporary changes.

--Review of the exception codes generated by the computer in validating permanent and temporary changes.

--Review of the exception codes generated by the payroll computation program.

We also recommend that Standard Operating Procedures be established for the payroll clerks to include the following:

--Checklist to review time and attendance reports.

--Procedures to correct time and attendance reports.

--A requirement that all changes to time and attendance forms be initialed by the payroll clerk and the clerk's supervisor. A revised report should be submitted for those changes affecting pay.

--A requirement that all permanent changes be reviewed and

initialed by a second payroll clerk before submission to

the computer center.

--A requirement that all exceptions generated by the computer

system be initialed by the payroll clerk and the clerk's

supervisor or evidence of correction.

--Procedures for preparation of the control forms for

controlling permanent and temporary changes through the

computer system.

--A requirement that the Chief, Civilian Pay Section reconcile

the predetermined control totals for permanent and temporary

changes to computer-generated totals before the payroll is

computed.

--A requirement that all required files and records be

maintained at the Civilian Pay Section and be arranged in

an orderly manner so as to facilitate audits and references

thereto by the payroll clerks.

We recommend that the Civilian Personnel Offices be provided

with a listing of all permanent changes entered each pay cycle. The

listing should be reconciled to the documents submitted to the

Civilian Pay Section. All required data, such as service computation

dates, should be included on the documents submitted for processing.

In view of the high error rate found in the computerized records

of the 50 employees selected at random, we recommend that, after

internal controls as described above have been established, that

all computerized records be validated to assure their accuracy.

NEED TO IMPROVE SECURITY
OVER COMPUTER FILES

We found that security over computerized payroll files was

insufficient either to assure their survival in the event of a

disaster or to prevent unauthorized usage.

Details on our observations follow.

Critical files not properly protected

Payroll files are an integral part of a computerized payroll

system. Protection must be provided to prevent their loss or

damage. A method to achieve this is to periodically duplicate

the files and store the duplicates in a location remote from

the computer area.

At the Consolidated Data Processing Center, payroll files were

not duplicated periodically and stored in a remote location. As a

result, all payroll records in machinable form would be destroyed

should a disaster strike the computer room and adjoining tape

library.

Although the Center had prepared a Continuity of Operations Plan,

the Plan had not been updated when the payroll system was automated.

Control of access to computer
room and payroll files

We found that payroll files for the current pay cycle were

stored in the computer room. Their use was not controlled by the

tape librarian. Files for past cycles were stored in the tape

library, but our review of the library records showed that the librarian did not appear to be controlling their use by recording to whom and when issued.

The computer room, while equipped with a locking door and a buzzer access system, was not kept locked. During the course of our audit, we visited the computer room several times and observed that access could be gained by simply opening the door and walking in.

Recommendations

To improve internal control over the payroll files, we recommend that:

--payroll master and transaction files be duplicated periodically and stored in a remote location.

--all files should be stored in the tape library when not in use and checked out when needed.

--the computer room door should be kept locked and the presently installed buzzer access system should be used.

--the Continuity of Operations Plan should be updated to provide for recovery of the payroll system in the event of a disaster.

CHAPTER 3

NEED FOR IMPROVEMENTS IN PAYROLL SYSTEM

There were deficiencies in the payroll system in the areas

of documentation, computer program logic, timeliness of changes to

programs, and computerized edits which weakened internal controls

over the processing of payroll data. As a result, we found

instances where the computer incorrectly posted employees' leave

accounts, underpaid employees, and attempted to overpay employees.

Details on our observations follow.

NEED TO UPDATE PROGRAM DOCUMENTATION

Program documentation consists of a description of the

required input, the procedures for setting up the computer to run,

conditions which will halt the computer, the expected output data

and its format, file disposition at the program's completion, a

list of computer instructions, and a record of all approved changes.

Thorough documentation gives a historical record of what the

program is supposed to do and how it is done. It simplifies

program revisions and inquiries and helps in evaluating internal

controls. At the Consolidated Data Processing Center, computer

program documentation was assembled in program folders.

We found that the payroll documentation was relatively complete,

except that the narrative descriptions of what the programs do had

not been updated to reflect the procedures for handling transactions

peculiar to USARJ employees. For example, the narrative description of the permanent change validation program describes certain tests for Wage Board promotions, quality step increases, and within-grade increases based on the wage scales in Hawaii. As a result, the narrative cannot be used as a basis for inquiring into what the computer does with Japan Wage Board transactions.

Recommendation

The computer program narrative descriptions should be brought up-to-date to reflect what the computer is actually doing.

NEED TO TEST COMPUTER PROGRAMS FOR OVERSEAS EMPLOYEES

Some of the computer programs incorrectly handled transactions for overseas employees, apparently because they were not thoroughly tested before use. We found that correct promotion transactions for Wage Board employees were rejected by the computer and certain incorrect transactions were accepted. Also, the program which analyzes employees' year end annual leave balances incorrectly reduced the amount of annual leave that employees were entitled to carry over from one leave year to the next. As a result, the computerized internal control over the validity of Wage Board promotion was lost and numerous adjustments were required to correct employees' annual leave records.

The Federal Personnel Manual Supplement 532-1, Installment 8, dated January 16, 1973 states that upon promotion, a Wage Board employee is entitled to be paid at the lowest scheduled rate of

the grade which exceeds his existing rate of pay by no less than one step rate increment of the grade from which he is promoted. There is an edit built into the permanent change validation program which is supposed to test whether a Wage Board employee's promotion is valid. The edit, however, does not work as intended. Using copies of the payroll file, we ran dummy promotion transactions through the system and found that the program accepted incorrect transactions. As a result, an important element of internal control is lost.

Certain overseas employees are entitled to carry over 360 hours (45 days) of annual leave from one leave year to the next. Employees in this category have a special code in their computerized records. A special computer program is used annually to analyze the leave records of all employees. This program, among other things, is supposed to determine whether leave balances are in excess of the amounts that employees are entitled to carry over.

We found that, at the close of the 1973 leave year, the program changed all the codes on those employees entitled to 360 hours carry over to a code associated with a 240-hour maximum. As a result, numerous adjustments to the payroll master file were required. We estimate, based on our random sample of 50 employees, that at least 1,300 employees' records were thus affected.

Recommendation

We recommend that the above computer programs be revised
to handle USARJ employee accounts properly and that future programs
supplied by USARPAC be thoroughly tested to assure that they work
properly.

NEED FOR TIMELY UPDATE OF COMPUTER PROGRAMS

Public Law 93-181, which was signed December 14, 1973, allows
new employees to immediately accrue and use annual leave.
Previously, employees had to wait 90 days. Federal Personnel
Manual Letter No. 630-22 of January 11, 1974 implements the
legislation.

We found that, as of April 5, 1974, the payroll computer
programs had not yet been updated to allow new employees to accrue
and use annual leave. As a result, the leave accounts for about
100 new employees were in error. Also, upon the expiration of
their first 90 days employment, manual adjustments to the leave
records will be necessary.

Recommendation

Payroll computer programs implement legislation and associated
regulations. They are standard operating procedures for machines
and should be kept up to date in the same manner and for the same
reasons as manual procedures. Accordingly, we recommend that
action be taken to insure that sufficient planning is done so that

the programs can be updated within a minimum amount of time
after changes in legislation or regulations become effective.

NEED TO ESTABLISH ADDITIONAL
COMPUTERIZED EDITS

A general principle in the design of computerized systems
is that the computer should exercise as many internal controls as
feasible. The computer programs which validate permanent and
temporary transactions have many edits to detect erroneous or
questionable transactions.

We found, however, several instances where incorrect payments
to employees had been made or narrowly averted because the payroll
system had not been designed to reject the erroneous transactions
which gave rise to them. For example, we found 12 underpayments
during the period October 28, 1973 to February 2, 1974 because
shift codes were missing from time and attendance transactions.
All were Wage Board employees who had worked second or third
shift overtime. There was no edit in the computer system to test
for the presence of a shift code when second or third shift
overtime was reported on the time and attendance report.

We also found instances where checks had been printed for
amounts far in excess of the correct amounts because of an apparent
keypunch error which caused the amount of overtime hours to be
shifted one decimal place to the left. For example, one such
employee was credited with working 380 hours of overtime instead
of 38. There are only 336 hours in a pay period (24 x 14 days).

We understand that the errors were spotted by an alert computer operator while the checks were being printed.

Recommendation

To improve the accuracy of data introduced into the payroll system, we recommend that a review be made to identify those additional internal controls which could be performed by the computer.

CHAPTER 4

OPPORTUNITIES FOR MORE EFFICIENT OPERATION

OF THE PAYROLL SYSTEM

More efficient operation of the payroll system could be attained by eliminating duplicate records, and by using the computer for some current manual operations.

DUPLICATE PAY AND LEAVE RECORDS

The GAO Manual (6 GAO 27) states that special records should not be maintained to meet infrequent and unpredictable requests for information on pay, leave, and allowances. These requests should be met by analysis of existing records. Army Regulation 37-105 states that duplicate pay and leave records will not be established or maintained.

Individual pay and leave records are currently maintained both manually and through computer operations. USARPAC and USARJ officials told us the frequent requests for information make it necessary to retain manual records which contain a historical pay and leave information. In our opinion, questions on pay and leave matters could be satisfied through periodic computer listings of historical data.

BOND ACCOUNTING BY COMPUTER

At present the accounting for bond purchases is done manually by the payroll clerks even though computer programs to accomplish the same tasks are part of the payroll system and available for use by USARJ.

We were told by USARJ payroll officials that the use of these programs had been considered but was ruled out because (1) the programs were not flexible enough for USARJ's needs since the programs could only handle people who buy up to three different bonds with the same beneficiary, and (2) Army regulations do not allow Disbursing Officers in overseas areas to issue bonds and require that military banking facilities issue them.

In examining the Bond Issuance Schedule for U.S. Savings Bonds Series E (DD Form 1084) for the pay period ending 2 February 1974, we discovered that, of the 874 employees who had authorized the purchase of bonds through allotments from their salary, only 19 or 2 percent were purchasing more than three bonds or bonds with more than one beneficiary. As for the issuance of bonds by the Disbursing Officer, this problem could be avoided by having the bond schedule printed on the computer and sent to the military banking facility for issuance. This procedure, however, is already being followed, except that the schedule is being prepared manually. Further, we believe that arrangements could be made to have the bonds printed by the computer for the banking facility.

We believe the use of the computer programs for handling bond purchases is feasible and would further relieve the payroll clerks from performing an unnecessary manual operation. Bonds for the small number of employees who do not conform to the system could be processed manually.

RECOMMENDATIONS

We recommend that duplicate records be eliminated, and that USARJ use the available computer programs in accounting for bond purchases in the civilian payroll.

CHAPTER 5

INCREASED INTERNAL AUDIT COVERAGE NEEDED

Effective internal auditing helps to discharge each agency's responsibility to establish and maintain systems of accounting and internal control. The U.S. Army Audit Agency is principally responsible for auditing Army civilian payroll systems. In addition, internal review groups have limited responsibilities to their commanders for special analyses, surveys, studies, and "troubleshooting."

We found that neither the Army Audit Agency nor the Internal Review Division, USARJ, participated in the installation of the payroll system. Further, since its automation in 1973, the payroll system had not been audited. The Internal Review Division, however, had scheduled an audit in February 1974 which was deferred pending the results of our review.

It also appeared that, prior to automation, the payroll system received little audit attention. We understand that the Army Audit Agency had not audited the U.S. Army, Japan, payroll system for at least the last 5 years. Two internal reviews were made the last few years, as follows:

--In February 1971, the Internal Review Division of the
U.S. Army, Japan, issued a report on the then-manual
payroll system administered by the U.S. Army, Japan.
No adverse findings were reported.

--In February 1973, the Internal Review Division, U.S.
Army, Base Command, issued a report on the adequacy of
internal controls over manual leave records. Numerous
errors were found due to a lack of operation procedures,
training and other reasons.

We believe that the lack of audit attention given the
payroll system before and after automation has contributed to
the internal control deficiencies discussed in this report. It
also appears that many of these deficiencies could have been
averted had the internal auditors taken an active role in the
implementation of the system.

RECOMMENDATIONS

We recommend that the Internal Review Division monitor the
carrying out of our recommendations to assure that a proper system
of internal control is established over the payroll system.

We also intend to recommend to the Army Audit Agency that a
comprehensive review of the payroll system be planned.