Unique Audit Methods:
Peat Marwick International*

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ABSTRACT

CPA firms adopt different audit technologies in order to (1) deliver audits in conformity with generally accepted auditing standards, (2) maximize efficiency, and (3) satisfy clients' demands for service. This paper describes the major ways in which the audit approach of Peat Marwick International differs from that of other firms. One major difference relates to the use of judgment aids. Such aids are used primarily in the area of determining the extent of audit work, including its principal determinants: materiality and the sources of reliance other than the substantive audit tests (internal control and inherent risk).

THIS paper identifies certain features of the audit approach of Peat Marwick International (PMI) that appear to be unique or nearly so. The entire PMI audit approach is not described because it obviously shares many elements with the audit approaches of other large, international firms, all operating within generally accepted auditing standards as established by the American Institute of Certified Public Accountants (AICPA) and the International Auditing Practices Committee (IAPC) of the International Federation of Accountants.

Each firm differs from the others in various minor aspects of its procedures, approaches, terminology, working paper forms, and details of performance. Where PMI's audit approach differs only in these matters of detail, the differences are not described. Rather, this paper is confined to those differences that (1) are most important to the audit process and (2) are relatively new developments based upon PMI's audit research program. Because it would be impossible to fully describe and discuss policies and procedures that occupy many pages in the firm's policy manual, the items reported in this paper appear only in summary form.

Because it is not an easy matter to organize a paper consisting solely of selected aspects of a firm's auditing approach, a standardized description of the audit process developed by Professors James Loebbecke and Barry Cushing of the University

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of Utah is used. Loebbecke and Cushing are engaged in a research project to compare and contrast the audit approaches of twelve large CPA firms, as they relate to generally accepted auditing standards. The project is funded under the Peat Marwick Mitchell Foundation's Research Opportunities in Auditing program. The Loebbecke and Cushing (L-C) model is outlined in Figure 1.

This paper describes the audit approach of PMI rather than that of Peat, Marwick, Mitchell & Co. (PMM) in the U.S. The *PMI Audit Manual* is used on all PMM audits throughout the world. Because PMI operates in many countries, the *PMI Audit Manual* is based upon the auditing standards of IAPC plus any additional requirements of the countries with well developed auditing standards, such as the United States. The use of a worldwide audit manual permits enhanced communications in multinational audits; all offices of the firm are working with common policies, procedures, and terminology.

Several of the unique features of the PMI audit approach described in this paper have this in common: they reflect the use of judgment aids in PMI's practice to the extent feasible. These aids have been developed in response to PMI research projects that have identified auditor judgment variability. Such judgment aids do not replace auditor judgment — rather they focus auditor judgment on those matters that are most relevant and most susceptible to human judgment. It is beyond the scope of this paper to discuss the PMI research projects and the theory underlying the judgment aids. However, the results of one of the research projects is publicly available. "Internal Accounting Control Evaluation and Auditor Judgment" by Theodore J. Mock and Jerry L. Turner was published by the AICPA in 1981 as *Auditing Research Monograph No. 3.*

FIGURE 1
Loebbecke-Cushing Audit Model

1.0 Pre-engagement activities
    1.1 Accept/reject new clients
    1.2 Establish terms of engagement
  * 1.3 Assignment of staff
2.0 Planning activities
    2.0 Planning (general)
    2.1 Obtain knowledge of the business
        2.11 Preliminary analytical review
    * 2.12 Appraisal of risk
  * 2.2 Preliminary determination of materiality
  * 2.3 Review of internal accounting control
        2.31 Preliminary phase
        2.32 Completion phase
    2.4 Develop overall audit plan
    * 2.41 Determine appropriate reliance on internal control
    * 2.42 Design compliance testing procedures
    * 2.43 Design substantive procedures
        2.44 Write audit program
3.0 Compliance testing activities
4.0 Substantive testing activities
    4.1 Conduct substantive tests of transactions
    4.2 Conduct analytical review procedures
    4.3 Conduct tests of details of balances
    4.4 Post-balance-sheet review procedures
    4.5 Evaluate results of substantive procedures
    4.6 Obtain representations
5.0 Opinion formulation and reporting activities
    5.1 Review financial statements
  * 5.2 Review audit results
    5.3 Formulate opinion
    5.4 Draft and issue report
6.0 Continuous activities
    6.1 Supervise conduct of examination
    6.2 Review work of assistants
    6.3 Consider appropriateness of continuing relationship with client
    6.4 Make required special communications
    6.5 Consult with appropriate persons in connection with special problems
    6.6 Document work performed, findings, and conclusions in appropriate working papers

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*Unique PMI features discussed in this paper.

ASSIGNMENT OF STAFF (1.3)[1]

PMI standards require the use of two classes of specialists that are not typically used by other firms: statistical specialists and computer audit specialists. In the following paragraphs, how these specialists are trained and used in the U.S. is described.

Statistical Specialists

PMM has trained a group of Statistical Audit Specialists (SASs). The training consists of approximately 80 hours of self-study and 100 hours of classroom study. The training materials focus on auditing concepts, monetary unit sampling methods, and classical sampling methods. Presently, PMM has about 350 SASs in the U.S.

SASs are required to evaluate the efficiency and validity of all *new* statistical, substantive tests of details before they are executed. SASs are also required to evaluate all executed statistical, substantive tests of detail for validity and fulfillment of the audit objectives.

Statistical sampling methods impose certain formal requirements. Failure to meet these requirements may leave the auditor in an indefensible position. The purpose of the SAS program is (1) to assure that the most efficient sampling methods available are selected and (2) to assure that the methods are validly and defensibly applied.

Computer Audit Specialists

PMM has developed three levels of computer audit specialists to respond to the variety of computer audit needs of its practice. A recent study conducted by PMM showed that about 70 percent of PMM's clients have significant computerized accounting applications.

At the first level is the *Computer Processing Specialist* (CPS). CPS training includes approximately 60 hours of self-study and 52 hours of classroom study. After completing CPS training, auditors are capable of coding and executing generalized computer audit programs using PMM's System 2190 and coding job control statements. Typically, CPSs are staff level accountants. Presently, PMM has about 320 CPSs in the U.S.

The second level of computer specialist is the *Computer Audit Specialist* (CAS). CASs are trained from the ranks of CPSs who have demonstrated an above-average aptitude for computer auditing. CAS training consists of approximately 44 hours of self-study and 80 hours of classroom study. After completing CAS training, auditors are capable of planning computer audits, reviewing and evaluating EDP internal accounting controls, directing the work of CPSs, and advising clients on EDP control matters. The level of CAS training is intended to permit CASs to deal with the majority of computerized accounting applications. Presently, PMM has about 800 CASs in the U.S. They are required to be included in the audit teams for all clients with significant computerized accounting applications.

The highest level of computer specialist is the *Senior Computer Audit Specialist* (Senior CAS), which is intended to be a career position. Each Senior CAS receives training, tailored to his individual needs, of 200 hours the initial year and 80 hours per year thereafter. This training is designed to bring the person up to the level of skills necessary to deal with complex EDP applications, such as distributed processing, integrated data bases, and teleprocessing. Senior CASs are partners or managers with partner potential. Currently, there are approximately 34 Senior CASs in the U.S.

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[1] The reference numbers correspond to sections of the L-C model in Figure 1.

Senior CASs are required to be included in the audit teams for all clients with complex computerized accounting applications.

APPRAISAL OF RISK (2.12)

PMI considers inherent risk, among other factors, in designing an audit. Inherent risk is defined as the risk of a material error occurring in a specific assertion in the financial statements absent the operation of internal control. The consideration of inherent risk is not so much an overall risk assessment for the client as it is a specific risk assessment related to specific assertions in the financial statements.

The auditor considers various factors in evaluating inherent risk. These include, for each assertion, the monetary amount, the susceptibility of related assets to theft or misappropriation, the complexity of determining amounts to be entered in the accounting records, the degree of management judgment required, the degree to which external conditions or events affect the value, the past history of errors, the degree to which client financial conditions may motivate management to misstate the assertion, and the experience level of personnel involved in related accounting functions.

The assessment of inherent risk affects the nature, extent, and timing of substantive audit procedures. Currently, the assessment of inherent risk and the use of the assessment is a matter of auditor judgment. However, PMI is now conducting research to attempt to quantify inherent risk. The objective is to develop statistical relationships between the inherent risk factors and material errors in the financial statements on actual audits. If this research is successful, a judgment model will be developed to permit specific adjustments in the nature, extent, and timing of audit procedures based on the auditor's assessments of inherent risk factors.

PRELIMINARY DETERMINATION OF MATERIALITY (2.2)

PMI determines a specific measure of materiality for planning purposes. This measure is referred to as "gauge" (G). G is based on a statistical study of PMI audits which were used to calibrate the average level of precision achieved on audits performed by the firm. A detailed discussion of G is beyond the scope of this paper, but the relationship is as follows:

$$G = 1.6 \times \text{(the greater of assets or revenues)}^{2/3}$$

For example, a company with $35 million in sales and $20 million in assets would have a G of $170,000.

G is computed at the beginning of the audit (based on estimated sales and assets as of the audit date) and used throughout the audit for the design of substantive audit procedures (see Section 2.43 below). The assets and sales used in computing G are those of the financial statements to which the opinion will apply. For a consolidated group with only one opinion at the consolidated level, G would be used for all substantive audit tests, regardless of where applied. Thus G is an important part of the instructions to participating offices in a multi-office audit engagement. (When part of the engagement is overseas, G is translated into the foreign currency at prevailing exchange rates.)

The gauge computation is sensitive to inflation. That is, inflation alone would drive up audit scopes, everything else being equal. Therefore, the gauge formula is adjusted periodically for inflation.

REVIEW OF INTERNAL ACCOUNTING CONTROL (2.3)

PMI has developed a method of documenting internal control known as *SeaDoc*, for Systems Evaluation Approach: Docu-

mentation of Controls. It was developed specifically for audit purposes. The method includes flowcharting, but it is different from traditional systems flowcharting. It focuses on three types of controls: (1) processing controls, (2) boundary controls, and (3) safeguard controls. Each is briefly discussed below.

Processing Controls

Processing controls are controls over the processing of accounting information from the point at which debit and credit entries can be made to the point the information enters the financial statements. Since information is routed in many directions in an accounting system, and much of it does not affect the financial statements (and is therefore irrelevant to the attest function), SeaDoc is designed to focus exclusively on information flows affecting the financial statements. The fundamental technique is to work backward from the financial statements to the origin of the information.

The auditor preparing a processing control point flowchart starts with a financial statement amount (or footnote disclosure amount) and asks where the information comprising the amount comes from. He documents the answer and then asks where that information comes from. This process continues until the auditor reaches the source of the information, which is either an exchange between the client and an unrelated entity or an internal event called an allocation. Thus the flowchart depicts all the relevant information flows from exchanges and allocations to the financial statements.

The SeaDoc principle is that every time information is either created (for example, in an exchange), changed (for example, by aggregation), or transferred (for example, in a posting operation), there are two types of error that can occur: (1) the information may be inaccurate or (2) an item of infor-

mation may be gained or lost. Thus, every time information is created or transformed, there is a need for (1) an accuracy control and (2) a population control.

After the auditor has completed the control point flowchart, he searches for missing exchange types. It is possible that certain exchange types are not being recorded — for example, scrap sales or executory contracts. The auditor considers exhaustively what exchange types could apply to the entity he is auditing and verifies that each is represented in the complete SeaDoc flowcharts.

Figure 2 shows a SeaDoc control point flowchart. Note that the top of the flowchart represents amounts in the financial statements (the "T account" symbol). The bottom of the flowchart represents exchange types of the client (the pentagonal symbols). Between are represented the processes (rectangular symbols) and information storage media (the "document" symbols, which can include machine-readable documents) leading from the exchange to the financial statements. Each process has two required controls (represented by circles): a population (P) and an accuracy (A) control. The auditor searches for population and accuracy controls that would meet the objectives of each circle. If he finds controls that would be effective if properly performed, he notes their presence in the circle and describes them on a separate worksheet. If not, he leaves the inside of the circle blank and notes a missing control (MC). Thus, when the flowchart is complete, each filled-in circle represents a system strength and each empty circle represents a system weakness. (Controls will be compliance tested, of course, before they are relied upon.)

A completed SeaDoc control point flowchart is a parsimonious representation of the specific aspects of a processing system of concern to the auditor. It omits ir-

FIGURE 2
Control Point Flowchart
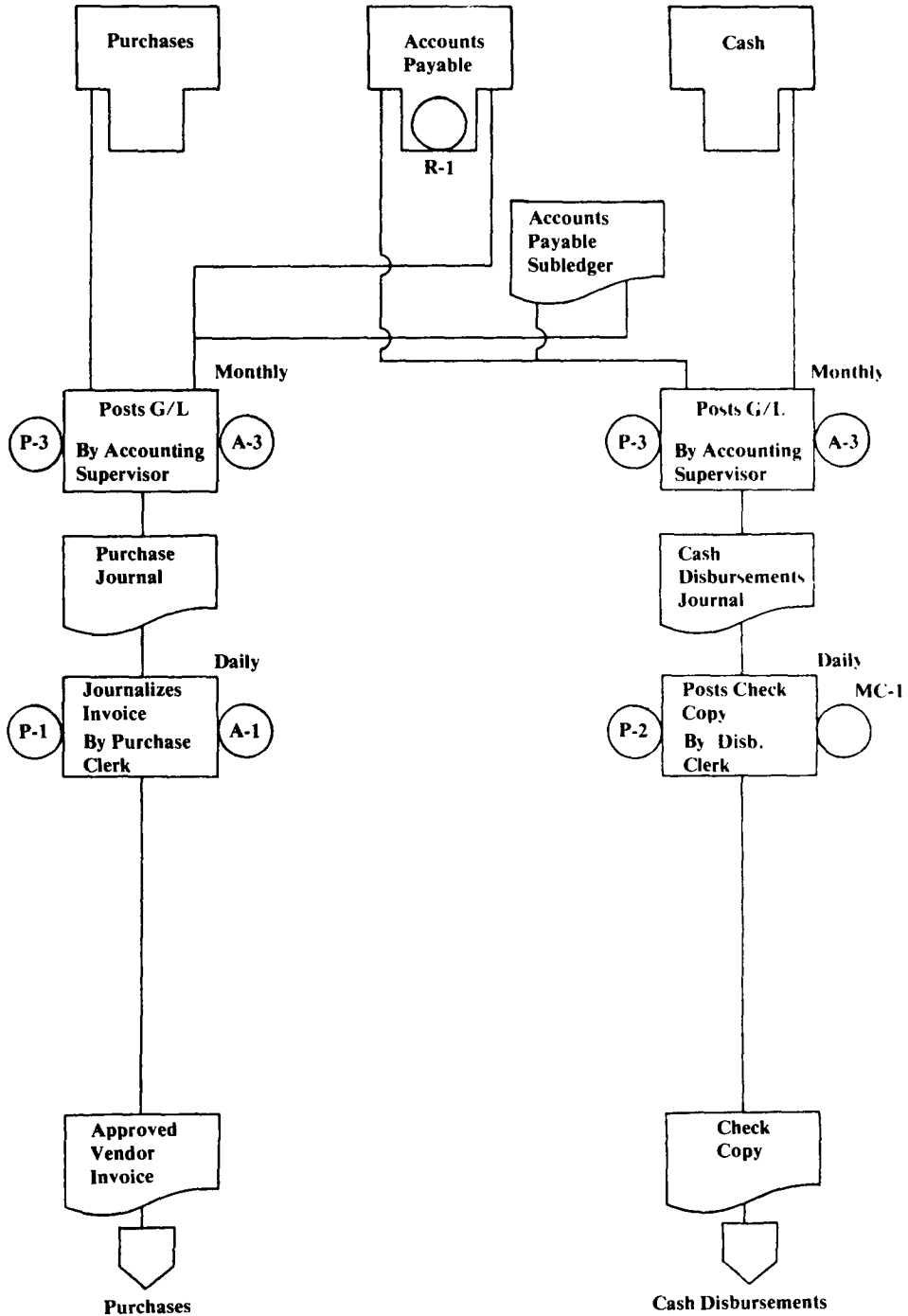
relevant detail. SeaDoc flowcharts are typically much less voluminous than traditional systems flowcharts.

Boundary Controls

Under SeaDoc, boundary controls are documented for each major exchange type. Boundary controls are controls over the collection of information about exchanges. The name "boundary" is derived from the notion that the exchange of goods, services, and so forth takes place at the entity's boundary. Boundary controls include population controls (Is information about all, but no extra, exchanges captured?) and accuracy controls (Are the names, descriptions, amounts, and dates accurate?). Authorization controls are treated as a type of population control.

Segregation of duties is also analyzed at the boundary. The reason is that conflicting duties can be exploited by an employee for his own benefit. But for an employee to benefit, he must be able to separate something of value from the entity. This, by definition, must happen at the boundary.

A basic concept in SeaDoc is that the information captured at the boundary must be reasonably accurate and complete or the entity is unauditable. Thus every audit must rely on the integrity of the information-gathering activities at the boundary. The reason is as follows: if the information to be processed is not reasonably accurate and complete, the effectiveness of many substantive audit procedures will be diminished. Verifying the accuracy with which erroneous information is processed, for example, has limited value.

Safeguard Controls

Safeguard controls are controls over valuable, movable assets — specifically, custodial and accountability controls. Custodial controls for each locus of asset accountability include procedures to restrict access, to ensure that assets enter or exit only on the basis of an authorization, and to ensure that incoming and outgoing assets are counted, inspected, and assigned to the responsibility of a particular person or department. Accountability controls consist of periodic comparisons of physical assets with recorded accountabilities and verification of condition or marketability.

SeaDoc documents safeguard controls for all valuable, movable assets. These may include inventory, movable equipment (for example, automobiles), and intangible assets (for example, cash and securities).

DETERMINATION OF APPROPRIATE RELIANCE ON INTERNAL CONTROL (2.41)

The PMI audit approach does not call for an evaluation of "the system" of internal controls or any other aggregation of controls that does not relate to a specific financial statement assertion. The SeaDoc flowcharts and other documentation are used only in the design of substantive audit procedures under step 2.43 below. As audit procedures are designed for each assertion, the SeaDoc documentation is reviewed to determine whether relevant controls are in effect to prevent errors in that specific assertion.

DESIGN OF COMPLIANCE TESTING PROCEDURES (2.42)

When compliance tests of details are to be performed, PMI policy requires, in effect, statistical, sequential sampling for attributes. The sample is required to be "representative," which can be achieved either informally or by use of random selection. In either case, the sample size and evaluation are based on sequential attribute sampling methods. Figure 3 is the PMI worksheet for compliance tests of details.

FIGURE 3

COMPLIANCE TEST OF DETAILS WORKSHEET

Compliance test is related to the following substantive test(s). (no entry necessary for test of boundary control not relied upon to modify substantive testing)

_____

If the substantive test is a test of details, enter reference for Substantive Test of Details Worksheet _____

Control(s) being compliance tested with this test

Control feature(s)	Documented feature(s)	Definition of deviation(s)

Evaluate Extent of Internal Control Reliance
- Planned restriction of substantive test based on internal control:

If planned restriction is

	Enter	Planned	Actual
Maximum	3		
Moderate	2		
Little	1		
None	0	____	____

- Timing of planned substantive test. (A)

If planned substantive test is

	Enter
At or near balance sheet date (or includes virtually the entire period under audit)	0
Within 2 months of balance sheet date (or includes 10 months of period under audit)	1
More than 2 months from balance sheet date (or includes less than 10 months of period under audit)	2

Total Reliance Points(B)   ____   ____

Sample Size Table

Total reliance points planned	Sample size
0	0
1	10
2	20
3	30
4	40
5	50

Sample Evaluation Table

Actual deviations in sample(C)	Reliance points warranted for sample size							
	10	20	30	40	50	60	80	100
0	1	2	3	4	5	N/A	N/A	N/A
1	0	1	2	3	4	5	5	5
2	0	0	1	2	3	4	5	5
3	0	0	0	1	2	3	4	5
4	0	0	0	0	1	2	3	4
5	0	0	0	0	0	1	2	3
6-7	0	0	0	0	0	0	1	2
8-9	0	0	0	0	0	0	0	1
10 or more	0	0	0	0	0	0	0	0

(A) If controls are relied upon to modify timing of substantive tests, the additional compliance sample items will often be selected from the roll forward period.

(B) Minimum number of points for reliance on a boundary control is 2.

(C) If deviations are found, consider their nature and cause and consider whether the indicated reliance is appropriate.

If reliance points warranted are less than reliance points planned, describe compensating test or changes in related planned substantive test(s):

_____

_____

Note that "reliance points" (see the block in the center of Figure 3) are based on the planned degree of reliance on internal control. The factors considered in determining reliance points are the planned degree of restriction of the related substantive test and the timing of the substantive test.

Based on the number of reliance points needed, a sample is taken and evaluated. If compliance deviations are discovered, the extent of reliance must be reduced or additional sample items must be taken. Of course, if controls are not being satisfactorily complied with, samples will seldom produce results with few enough errors to justify reliance.

Obviously, the auditor must decide, both before and during the compliance test, whether the potential reduction of substantive tests through reliance on internal control justifies the expense of the compliance test.

DESIGN OF SUBSTANTIVE PROCEDURES (2.43)

There are two unique aspects of designing substantive audit procedures in PMI: the approach to selecting procedures and the method of determining substantive sample size. Each is discussed below.

Selecting Procedures

PMI auditors select audit procedures by use of audit program matrices. These matrices have two axes: the columns represent assertions/audit objectives, and the rows represent audit procedures. One can visualize a large matrix with columns for all financial statement assertions and rows for all possible audit procedures. Each cell in this matrix indicates the effectiveness of the row procedure in providing evidence to assess the column assertion. In practice, such a matrix would be very large. A practical way to organize the matrix is therefore

to break it down by cycles, thus achieving a fairly dense relationship of procedures and assertions. Figure 4 is a sample matrix for cash balances. (This matrix was chosen not because it is the most interesting, but because it is the smallest matrix, thus convenient for reproduction. The revenue matrix, by contrast, has about twelve times the number of cells.)

Several points should be noted. First, the assertions are subdivided into over-statement and under-statement objectives because many audit tests are asymmetric in their detection power. Second, the top rows of each matrix pertain to internal controls: processing, boundary (which does not apply to cash balances), and safeguard. The objective of this is to have the auditor fully consider the strength of internal controls relative to a specific assertion. Auditors consider this information in relation to audit gauge (see 2.2. above), the monetary amount of the assertion, and the inherent risk of error in the assertion (see 2.12 above). This joint consideration enables auditors to determine whether to design strong substantive procedures to provide evidence sufficient to assess the assertion, weak procedures, or perhaps no procedures because the risk of misstatement is already sufficiently assessed. In the matrices, "S" signifies a strong procedure, "W" a weak procedure, "L" a limitation on the procedure, and so forth. A battery of weak procedures may be used in place of a strong procedure.

An "R" beside a procedure indicates that the procedure would also supply evidence to assess assertions on other matrices. The "Related evidence" procedures refer to evidence that may be supplied by procedures specified on other matrices (the inverse of the "R").

The auditors use the matrices as follows. First, they mark off on the matrices all procedures that are required to be followed (for example, confirmation of re-

FIGURE 4

MATRIX FOR CASH BALANCES

ASSERTIONS/OBJECTIVES

AUDIT PROGRAM STEP REFERENCE	CASH BALANCES — Exchange Basis								DISCLOSURE			
	OWNERSHIP		EXISTENCE		ACCURACY				Proper description	Proper classification	Liens	
	OVER	UNDER	OVER	UNDER	OVER, UNDER							

INTERNAL CONTROL CONSIDERATIONS
(If relied upon to modify substantive procedures, paragraph 0912.13)

- Processing — X, X (Ownership OVER/UNDER); X, X (Existence OVER/UNDER)
- Safeguard

SUBSTANTIVE PROCEDURES
General Procedures
AGREE SUPPORTING SCHEDULES TO TRIAL BALANCE AND
  SUBSIDIARY RECORDS (NOTE 1)
VERIFY MATHEMATICAL ACCURACY OF ALL RELEVANT SUPPORTING
  SCHEDULES (NOTE 1)

Other Substantive Procedures
BALANCES TESTING

- Ascertain all bank accounts are included — SL, WL (Ownership); WL, WL (Existence)
- (R) Confirm bank balances — SL, WL (Ownership); SL, WL (Existence)
- Agree bank reconciliations to confirmations — SL, WL (Existence); SL (Accuracy)
- Verify the propriety of reconciling items
- Verify cut-off for payments, receipts and transfers — SL (Accuracy)
- Count or confirm cash on hand and verify reconciliation — WL, WL (Ownership); SL, WL (Existence); SL (Accuracy)

FINANCIAL STATEMENTS REVIEW

- Review classification (e.g., off-set, bank overdrafts)
- Vouch and review disclosure (e.g., pledges, restrictions on use and liens shown
  in bank confirmation)

RELATED EVIDENCE

- Review minutes and management representations — WP-422 — W, W (Ownership); W, W (Existence); W (Accuracy)
- Indebtedness confirmations — WP-425I — W (Existence); SL (Accuracy)

Note 1 agreeing supporting schedules to trial balance and subsidiary records and verifying
their mathematical accuracy are performed in order to ascertain that such schedules
are an appropriate basis for audit testing, not to obtain evidence in order to satisfy
the stated objectives

OTHER CONSIDERATIONS
1 Foreign currency transactions
2 Cash basis transactions
3 Compensating balances (deposits constituting support for borrowing arrangements
  with lending institutions)

CONCLUSIONS
With respect to the set of assertions above the audit procedures applied were in accordance
with Firm and professional requirements, subject to any audit differences documented in the
working papers, the recorded amounts are materially correct and the accounting principles are
proper and consistently applied, the information in the working papers is sufficient to draw a
conclusion as to proper disclosure

FIGURE 5

SUBSTANTIVE TEST OF DETAILS WORKSHEET

Test of account· _____

Test objectives _____

Procedure(s) to be applied to sample: _____

Definition of error(s)· _____

Reference(s) to related compliance test worksheet(s): _____

Related substantive procedures. _____

Select Sample Size Factor, Enter on Line (7) Below

Evidence provided from related substantive procedures	Balances Tests					Transactions Tests			
	Restriction based on internal control reliance·					Restriction based on internal control reliance:			
	Maximum	Moderate	Little	None		Maximum	Moderate	Little	None
None	2.2	3 6	5.2	6.0		0 1	0.4	1 7	2.7
Moderate	1 7	2 5	3 9	4 9		+	0.2	0 8	1.7
Significant	1.5	2.0	2 6	3 6		++	+	0 4	1 4

+audit all items larger than gauge and no others
++sufficient evidence exists to justify not performing this test

Compute Substantive Sample Size

Audit gauge or adjusted gauge from Audit Gauge Worksheet   (1) _____ (A)

Monetary total of population (may be estimated)   (2) _____ (A)

Amount over which items are individually significant (audit manual paragraph 1208.23)   (3) _____

Monetary total of items in population greater than line (3) (enter 0 if unknown)   (4) _____

Number of population items in amount on line (4)   (5) _____

Line (2) — line (4)   (6) _____

Sample size factor (from table above)   (7) _____

If sample is not to be stratified, multiply line (7) x 2; otherwise, enter line (7)   (8) _____

If the aggregate error in the population is expected to exceed gauge ÷ 3, multiply line (8) x 2; otherwise, enter line (8)   **Adjusted Sample Size Factor**   (9) _____

Compute line (6) x line (9) ÷ (1)   (10) _____

Compute line (5) + line (10)   **Sample Size** (11) _____ (B)

(A) For audit samples conducted in such a way that not all of the population is subject to sampling, enter only the amount(s) subject to sampling and complete lines (4) and (5) of the Audit Gauge Worksheet for that sample.

(B) If the actual sample size differs from line (11) by more than 10%, the working papers should document the rationale for the different sample size.

ceivables), noting the assertions for which evidence will thus be supplied. They then search for additional procedures that will efficiently satisfy each of the audit objectives. Obviously, in doing so, the auditors will first consider procedures that tend to provide evidence for a number of assertions. Their job is to specify that set of procedures that provides evidence sufficient to assess all assertions at the lowest cost.

It will be observed that for small clients with weak systems of internal control and similar account structures, the resultant programs will be similar. For these clients, PMI has a completed set of matrices and preliminary programs showing the usual battery of procedures for a small client with weak controls. The auditor can simply adjust these completed matrices for circumstances specific to the client.

Substantive Sample Size

PMI uses a specific model to determine the substantive sample size for test-of-detail procedures selected by use of the matrices. The method uses monetary unit sampling theory and computes the sample size as a function of (1) audit gauge (see 2.2 above), (2) the amount (book value) of the assertion, (3) the strength of related audit evidence, (4) the reliance on internal control, (5) the purpose of the test, (6) the sampling method, and (7) the expected amount of error in the assertion. (Note that the use of a judgment aid in this area does not reduce the need for auditor judgment; rather, it focuses that judgment). Figure 5 reproduces the substantive test of details worksheet, which is used to compute substantive sample sizes.

REVIEW OF AUDIT RESULTS (5.2)

PMI has one unique review requirement: as noted in 1.3 above, a Statistical Audit Specialist must evaluate each executed statistical substantive test for validity and fulfillment of the audit objectives.

CONCLUSION

This paper attempts to describe the more significant ways in which PMI's audit approach differs from that of other firms. Obviously, there is not much published information on the approaches of other firms, so there is some risk that this paper has failed to note certain differences or has described differences that do not exist.

It is hoped that readers will find this paper interesting. Practitioners may find it interesting to compare PMI's methods with their own. Researchers may identify researchable topics related to practice. And teachers may gain insight into the methods being used in practice by at least one firm.