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OPERATIONAL AUDITING AND AUDITING STANDARDS

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Presented at American Management Association
Seminar on Operational Auditing Applications
New York City, September 24, 1973

DLE 2715

The term "operational auditing" is one of the terms used to identify a kind of auditing that goes beyond examination of accounting and related records for the purpose of expressing professional opinions on financial statements or checking accountability for funds. The extended auditing involves examining into the operating, managerial, or administrative performance of selected aspects of an activity or organization beyond that required for the audit of the accounts and financial transactions.

The primary purpose of such extended auditing is to evaluate the quality of management or operational performance and to identify opportunities for greater efficiency and economy, or for increased effectiveness in carrying out procedures or operations. The basic objective is improvement in relation to the goals of the organization.

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One good brief but simple and down-to-earth statement of the essence of operational auditing comes from William H. Allen, who used to head the Institute for Public Service in New York. He put it this way:

That each man on a payroll actually received the pay charged for him doesn't prove that he worked the hours for which he was paid; that his work was worth his pay; that he did any work but collect his pay; or that there was any work for him to do.

SOME GENERAL PRINCIPLES

The approach to be followed in making an operational audit is not really much different, in concept at least, than that followed in an audit of financial operations. These three broad steps would be performed for almost any type of audit:

1. A preliminary survey of the activity being examined should be made to obtain necessary background and other working information for use in making the audit. This step should also include a careful study of the basic charter or assignment of responsibility for the activity being examined to find out just what it has been authorized to do and the nature and extent of the authority given it to carry out its purposes.

2. Pertinent parts of the management system should be examined by studying the policies established to govern the activities under examination, testing the effectiveness of specific operating and administrative procedures and practices followed, and fully exploring the significant problem areas or weaknesses encountered.
3. Reports on results of the audit work performed should then be prepared and submitted to those responsible for receiving or acting on the auditor's findings and recommendations. This phase may also include oral presentations of the results of the auditor's work.

IDENTIFICATION OF PROBLEM AREAS

Numerous techniques are available to the auditor to help him identify problem areas that call for more penetrating examination. Here are some examples:

Survey Work

During the preliminary survey work through which practical working information is obtained on how an activity is supposed to function and on how control procedures are supposed to work, key features or aspects can usually be identified which appear to be difficult to control effectively or to be susceptible to abuse.

In a purchasing operation, for example, the following three steps are usually vital to efficiency:

1. The process of determining the quantities and the quality of materials to be purchased;
2. the procedures followed in obtaining the most reasonable prices; and
3. the methods followed to determine whether the quantities and quality ordered are actually received.

If the auditor judges that the performance of any of these processes is not only critical but may be deficient, he would be justified in concentrating his testing work on them.

The value of the survey method can be illustrated with a specific GAO example. In getting information on the workload of a Veterans Administration out-patient clinic, the auditors noted that the clinic had more dental patients than it could handle and therefore had to send a large number of patients to private dentists at extra cost. At the same time, they noted that there was a VA hospital not far away which did not have enough work for its dental staff. The agency had a good policy of requiring its stations to get current information about dental resources at adjacent stations but this policy was not being carried out in this

case. The auditors took the matter up with the two stations with the result that the clinic began referring dental cases to the hospital at a rate which involved an annual saving of \$90,000.

Review of Management Reports

Internal reports which the management itself regularly uses to obtain information on progress, status, or accomplishment of work can be valuable sources of information on possible problem areas suggesting audit attention.

Review of Internal Audit or Inspection Reports

These reports can also be a very valuable source of information on problems. Of interest particularly to the independent auditor are those reports which bring to light important findings on which the management has not acted. In such cases, the auditor should inquire into the reasons and justification for inaction since these factors may shed light on weaknesses in the management system that have not previously been brought to the attention of the top management for resolution.

Physical Inspections

Physical inspections of an organization's activities and facilities can be a most useful way of identifying possible inefficiencies or problems that warrant the auditor's attention.

Examples are accumulations of equipment or material that appear to be excess to reasonable needs; idle or little-used equipment; idleness of employees; quantities of product rejected by inspectors (or customers); performance of extensive rework operations; disposal of apparently usable materials or equipment; and the like.

Test Examinations of Transactions

A very useful way to obtain a practical working insight into the efficiency of procedures is to trace a number of transactions pertaining to the organizations' operations completely from beginning to end. This kind of testing will usually provide the auditor with valuable information on the way the organization's business is actually transacted. It will also give him valuable insights on the usefulness of prescribed procedures, on the capabilities of the employees involved in the various steps, and on possible weaknesses in procedures or practices that should be corrected.

Discussions with Officials and Employees

The auditor can obtain valuable information on problems he should be concerned with through discussions with responsible officials in the organization and other employees engaged in the operations being examined. The degree of success in obtaining useful information in this way is in large part dependent on the auditor's reputation for independent and

constructive inquiry. If he is regarded with fear because of overly critical reporting in the past, this source of information may not be productive.

TESTING EFFECTIVENESS OF PROCEDURES AND PRACTICES

In his preliminary review work on management controls, the auditor should consider such factors as these:

1. Whether the policies of the organization seem to fit in with its basic charter or grant of authority.
2. Whether the system of procedures and management controls are designed to carry out those policies and result in activities being conducted as desired by the top management, and in an efficient and economical manner.
3. Whether the system of management controls provides adequate control over the organization's resources, revenues, costs, and expenditures.

Good judgments on these broad factors require considerable work on the part of the auditor but such work is necessary as a foundation for effective operational auditing.

Some of the specific factors which the alert auditor should consider in assessing a management control system and identifying problems which should be examined more thoroughly include the following:

- The use by the management of standards or goals for judging accomplishment, productivity, efficiency, or use of goods or services.
- Lack of clarity in written instructions which may result in misunderstandings, inconsistent applications, unacceptable deviations in what was wanted, and the like.
- Capabilities of employees to perform their duties.
- Failures to accept responsibility.
- Apathy.
- Duplication of effort.
- Improper or wasteful use of funds or other assets.
- Cumbersome or extravagant organizational patterns.
- Ineffective or wasteful use of employees and physical resources.
- Work backlogs.

There are many other possible weaknesses to probe. This list is merely suggestive.

DEVELOPMENT OF AUDIT FINDINGS

When the auditor finds what seem to him to be faulty conditions or results of practices, he has to decide how much further examination work will be necessary. First, however, the auditor should take up his preliminary observations with the responsible managers. If they are inclined to pursue the matters, the auditor may not need to go into them any further, at least at that time. This is a desirable result because the auditor has made a contribution and he can go on to something else.

On the other hand, if the managers are not convinced that they should do anything, the auditor should penetrate further. He should then examine specific cases, transactions, or other units of operation in sufficient depth to reach valid conclusions, to report fairly on the results of the work, and to support satisfactorily any recommendations he feels called upon to report to the management.

Developing specific findings is the heart of operational auditing. Essentially, this process involves obtaining as much pertinent, significant information about each problem as is practicable and evaluating it in terms of cause, effect, and possible courses of corrective action.

In developing his specific findings and conclusions, the auditor must do an adequate amount of analytical work and he must accumulate enough supporting evidential material to enable him to present a convincing case. He will need to systematically perform these steps:

1. Identify specifically what the problem is-- that is, what is deficient, what is defective, what is in error, and the like.
2. Determine whether the condition is an isolated one or is widespread.
3. Determine the significance of the deficiency in terms of unnecessary costs, poor performance, or other effects.
4. Find the cause or causes for the condition.
5. Identify the persons in the organization responsible for the deficiency.
6. Determine possible lines of corrective or preventive action and formulate constructive recommendations.

A very necessary step to take before reaching conclusions and preparing the report is to review the findings with management officials responsible for the area being examined. This step is very important to the audit process since it gives

the auditor the opportunity to obtain full information and related explanation about the problems from officials who should know most about the operation. This process not only gives the responsible officials the opportunity to provide such explanations on matters of direct concern to them but it enables the auditor to draw his conclusions and to formulate his recommendations more realistically and more objectively.

RELATIONSHIP OF AUDITOR TO MANAGEMENT

The auditor should adopt the viewpoint that the conduct of operations efficiently, economically, and effectively is a basic management responsibility. That responsibility must be discharged in the light of each organization's duties, responsibilities, and authorities. The entire structure of the management system of organization, operation, and control should be designed to achieve this general objective. The auditor's job is to test the working of this control system, probe apparent weaknesses, and report on conditions found, together with objective conclusions and constructive recommendations.

In reviewing the management system, the auditor's first concern is to find out how management officials satisfy themselves as to whether their prescribed policies are being followed, whether authorized and prescribed procedures are effective, and whether they are being applied in an efficient and economical manner. This gives the auditor a good starting point--and a perspective from the manager's viewpoint that is so essential to acceptable audit results.

In addition, if the management has developed, as part of its control system, techniques for measuring or evaluating performance against specified objectives or criteria, the auditor should inquire into them to see whether he can use them in his evaluation work. He should not use them blindly, however. He must be satisfied that they are logical and valid as a basis for judging performance.

If no such procedures have been developed, the auditor's job usually resolves itself into ascertaining whether some waste or uneconomical operation is occurring or whether there is some less costly or more effective alternative to the way in which the operations being examined are conducted.

NAVY INVENTORIES ON SHIPS

The Navy goes to the Congress each year with budget requests to buy large amounts of repair parts and supplies to meet the operational requirements of its 700 active ships and 600 inactive ships.

GAO audited the Navy's system for managing shipboard inventories to see whether it was making good use of the parts and supplies it already owned.

Audit findings:

- About \$6 million of excess inventories were loaded on 57 new ships because of delays in putting into effect revised policies as to quantities, numbers, and types of items to be carried on ships.
- Over \$2 million of repair parts were accumulated at 2 private shipyards because the inventories for 14 ships were bought before firm requirements had been established.
- Millions of dollars of excess inventories were held at private shipyards for periods up to 5 years and thus were not being made available to fill other needs.

--At one Navy shipyard over 1000 useable items were removed from ships being modernized. They were unnecessarily disposed of and then replaced with new items.

--Nearly \$60 million worth of excess inventories are accumulated on Navy ships during the 3-year period between supply overhauls. Much of this could be used on other ships. The Navy's record system is simply inadequate to enable prompt identification of excesses on some ships and redistributing them to others where needed.

--About \$100 million worth of idle inventories is located on inactive ships and at inactive ship maintenance facilities. About \$20 million of this could be used without impairing the mobilization readiness of inactive ships.

The Navy generally agreed with the intent of GAO's recommendations for improving its system but not always with the specific methods suggested. It did acknowledge that it was taking some actions.

(Economies Available Through Improved Management of Navy Shipboard Inventories--B-125057--April 9, 1973)

AIRMAIL SERVICE

The volume of airmail handled by the U. S. Postal Service fell from about 2 billion pieces in 1967 to about 1.5 billion pieces in 1971. The Postal Service instituted a program to reverse this decline and to increase the volume by about 20 percent of the 1967-71 decline so as to increase postal revenues. This objective was to be achieved by improving airmail service and by publicizing the merits of the service.

The GAO audit of this program brought out that:

1. Airmail volume continued to decline.
2. The Postal Service had not made a study of the potential demand for improved service to determine whether the results would be worth the increased costs to be incurred.
3. Test procedures adopted for finding out whether deliveries were on schedule were inadequate and produced misleading results.

The GAO evaluation included direct contact with enough large users of airmail service to raise the question as to whether the objectives of the program would be achieved.

The report recommended reevaluation of the program to determine whether it could be modified to better meet consumer needs and thereby increase participation or whether it should be curtailed. The Postal Service agreed.

The report also recommended that in the future adequate studies be made before undertaking service improvement programs to better insure that enough additional revenues would be produced to cover the additional costs. The Postal Service also agreed with this recommendation.

(Airmail Improvement Program Objectives Unrealized--
United States Postal Service--B-114874--Aug. 6, 1973)

FLOOD INSURANCE

The National Flood Insurance Act of 1968 provided for the first time a national program to provide insurance against property losses from floods. Previously, such insurance was obtainable, if at all, only at prohibitive cost.

That such insurance is needed is shown by the fact that during the past five years, floods in the United States have caused property losses of almost \$5 billion and hundreds of deaths.

The insurance program has two basic objectives:

1. Provide property owners with flood insurance.
2. Encourage flood-prone communities to adopt land use and control measures to reduce flood damage to property.

A GAO audit of this program highlighted these problems:

1. Of the 5200 communities in this country subject to flooding, only 1700 or one-third were in the program at the time of the audit (March 1973).
2. Many communities that did not participate were not even aware of the program. The main reason for this was that the Federal agency administering the program did not communicate with them and explain the program and its benefits.

3. Maximum insurance coverage was not available to over two-thirds of the participating communities because of the Federal agency's inability to make the required flood plan studies that were necessary to establish flood risk and insurance rates.
4. The Federal agency was slow in reviewing and approving the proposals of those communities that had submitted plans to improve land use and related control measures to reduce flood losses. Some of the plans did not meet required standards but the communities had not been so advised and the Federal agency had no program to monitor how communities carried out their plans.

In part, the weaknesses in administering the program were due to lack of adequate staffing in the Federal agency and its budget request included additional positions to enable it to operate more successfully. The audit report included several specific recommendations for improving program operations so that it would come closer to achieving the objectives for which it was established.

(Actions Needed to Provide Greater Insurance Protection to Flood-Prone Communities--Federal Insurance Administration, Department of Housing and Urban Development--B-178737--July 19, 1973)

PREVENTIVE MAINTENANCE

The Naval Air Rework Facility at Alameda, California, is one of seven such installations operated by the Navy for overhaul work on aircraft, engines, and missiles. Costs at Alameda run over \$125 million a year. There are over 6000 employees.

A GAO industrial management review at this facility was completed recently. Such reviews are aimed at determining efficiency of performance. Among the operations reviewed was preventive maintenance. We found numerous failings in the way this function was being carried out including:

1. Inadequate maintenance records.
2. Disregard of manufacturers' recommendations.
3. Inadequate preventive maintenance checks.
4. Incomplete instructions for such checks.
5. Poor work scheduling.
6. General lack of supervision of maintenance crew.
7. Poor use of assigned maintenance employees.

In the light of weaknesses such as these, the report noted that the management had no assurance that the \$2 million spent each year on maintenance provided any of the advantages

of a well-run program. After discussion of these observations, the installation management took action to strengthen its maintenance program.

This particular review was at a Government installation. We have made similar reviews in contractor plants and have found some of the same failings there with respect to equipment maintenance activities.

(Industrial Management Review of the Naval Air Rework Facility, Alameda, California--Department of the Navy--B-133014--July 3, 1973)

PACKAGING OF DEFENSE MATERIALS

A recent GAO audit of packaging policies and practices of the Department of Defense produced these findings:

1. The Department spends millions of dollars every year for packaging that is beyond what is necessary for adequate protection of the materials purchased or by requiring contractors to meet military packaging requirements when their own commercial packaging is fully adequate.
2. Department managers do not know and rarely determine the suitability of commercial packaging and packing and rely on military specifications which have become voluminous, repetitious, redundant, or not applicable.
3. Adherence to department packaging specifications when commercial packaging would be adequate results in higher costs to the Government.

We found that the Defense Supply Agency and the Army had made progress in reducing packaging requirements (at estimated savings of over \$12 million a year) but that the Navy and the Air Force continued to require a very high level of protection. We expressed the view that an analysis of storage, transportation, and usage information by inventory managers and packaging

technicians, together with an evaluation by buying activities of commercial packaging and packing offered by bidders and contractors would provide the basis for making more realistic judgments as to packaging that was necessary for adequate protection at minimum cost.

The basic point made was that better management of this aspect of procurement could produce substantial savings of public funds--perhaps as much as 10 percent of the value of procurements.

(Savings Attainable by Revising Packaging in the
Department of Defense--B-157476--May 21, 1973)

USE OF FLIGHT SIMULATORS IN TRAINING MILITARY PILOTS

The Government spends many millions of dollars each year to train military pilots. A GAO review of pilot training activities in the Air Force and Navy brought out that these services were not using flight simulators nearly to the extent that commercial airlines do. Significant advances have been made in simulators which can duplicate the operating characteristics of flying and flight environment. Excellent training that is reasonably realistic can thus be provided at considerably less cost and with greater safety. Pilot proficiency can be greatly improved because of opportunity to practice more frequently and longer and to devote more of the available actual flying time to complex maneuvers that can't be fully simulated.

While absolute measures of financial savings were impossible to make, GAO estimated that annual savings from greater use of simulators could range anywhere from \$450 million to nearly \$1 billion. These estimates relate to economy in public expenditures which is important. Equally important is that good training can be provided with less risks to pilots' lives due to actual training flight accidents.

Another benefit of particular current importance is the lessened use of airplane fuel made possible by greater use of simulators.

The GAO report made it clear that the military services were taking steps to increase their use of simulators. Several recommendations were advanced to focus continued attention on the importance of this subject.

(Greater Use of Flight Simulators in Military Pilot Training Can Lower Costs and Increase Pilot Proficiency-- Department of Defense--B-157905--Aug. 9, 1973)

SHELLFISH

The Food and Drug Administration has as one of its many responsibilities for protecting American consumers the job of insuring that food shipped in interstate commerce is safe, pure, wholesome, and processed under sanitary conditions. Shellfish such as oysters, clams, and mussels are covered by the law assigning this responsibility.

Several months ago, GAO completed its study of how effective the system is for making sure that potentially harmful shellfish do not reach American consumers. There are 20 shellfish producing States. GAO made its study in 4 States which accounted for over half the total production.

The study included having water samples from approved growing areas analyzed, going with FDA inspectors on their inspections of shellfish plants, and having shellfish meat samples analyzed for bacteria counts and presence of toxic metals and pesticides.

Among the weaknesses found in the system as it operates were the following:

1. Shellfish which do not meet prescribed bacteriological standards do reach consumers in disturbing quantities. (31% of GAO's samples exceeded the allowable limits)
2. FDA does not adequately monitor the States to make sure that shellfish marketed are pure, safe, and wholesome. It does not act promptly to close areas of poor water quality and some are not closed at all.
3. The States do not make sure that shellfish are harvested from only safe waters and processed under sanitary conditions. GAO participated in inspecting 30 shellfish plants and over $\frac{1}{4}$ of these were judged to be very unsanitary.

GAO made a series of specific recommendations for actions considered desirable to improve the system.

From an audit standpoint, it is important to understand in this case that GAO auditors are not bacteriologists. They do not need to be. But this expertise was needed and we arranged with the agency to have their experts help us in our audit.

(Protecting the Consumer from Potentially Harmful Shellfish (Clams, Mussels, and Oysters)--Food and Drug Administration, Department of Health, Education, and Welfare--B-164031(2)--March 29, 1973)

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PEANUT PRICE SUPPORT PROGRAM

As part of the national farm program, the Federal Government conducts programs to support the prices received by farmers who grow peanuts. This is an important farm commodity in 10 producing States.

In 1968, the GAO completed a report on this program pointing out that the Government had lost about \$270 million on this program during the 12 years from 1955 through 1966 and that losses over the next 5 years would probably amount to nearly \$250 million. The reason for the losses was the fact that the price-support law set a minimum of 1,610,000 acres for growing peanuts but improvements in production technology resulted in much higher production than anticipated. The quantity produced outstripped the demand and the Department of Agriculture was left to dispose of the surplus it acquired through its price support program.

The GAO report recommended remedial legislation. Bills were considered but because of lack of agreement between growers, manufacturers of peanut products, and the Department of Agriculture, no changes were made in the law.

In the meantime, production continued to increase. GAO completed a follow-up study a few months ago and pointed out that the Government's losses for the 5 years through 1971 were nearly \$280 million. For 1972 alone the loss was over \$100 million.

The new report again cited the minimum acreage provision of the basic price support law as the culprit and again recommended changing the law to remove that provision and give the Secretary of Agriculture flexibility to support peanut prices to growers without encouraging the production of unneeded surpluses.

At this point we do not know what will happen. The Department of Agriculture, more familiar than we with the problem, has some reservations about such a change. The industry said it was trying to expand markets and suggested no change in the program.

But in the meantime, the subsidizing of unnecessary production at a loss goes on.

This case illustrates that the main problem with the program is financial in nature--heavy losses for the taxpayer to assume. The report did not question the effectiveness of the program in supporting peanut prices and assuring an adequate supply.

(Need Intensifies to Amend Legislation to Reduce Government Losses on Peanut Price-Support Program--Agricultural Stabilization and Conservation Service--Commodity Credit Corporation--Department of Agriculture--B-163484--April 13, 1973)