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REPORT BY THE

Comptroller General

OF THE UNITED STATES

Grain Inspection And Weighing Systems In The Interior Of The United States--An Evaluation

The Grain Standards Act of 1976 made a number of substantive changes to improve the interior (nonexport) grain inspection and weighing systems. It also required GAO and the Department of Agriculture to study the systems.

Based on its study, GAO believes that the overall structures of the systems should be retained. The Department has made considerable progress toward improving the interior grain inspection system. It has also established an interior grain weight supervision system.

However, the Department needs to take a number of actions to strengthen the services available under the act and its controls over such services. It also needs to promulgate regulations specifying the criteria or conditions that must be met before it would implement mandatory weighing services, authorized by the act, at certain interior locations. The act gives the Department sufficient authority to make these needed improvements.

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COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20548

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The Honorable Thomas S. Foley
Chairman, Committee on Agriculture
House of Representatives

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The Honorable Herman E. Talmadge
Chairman, Committee on Agriculture,
Nutrition, and Forestry
United States Senate

This is our report, required by the Grain Standards Act of 1976, on our study and evaluation of the grain inspection and weighing systems in the interior of the United States. On November 30, 1979, we issued a report (CED-80-15) on our evaluation of the official grain inspection and weighing systems implemented at U.S. export locations.

The 1976 act strengthened certain aspects of the interior grain inspection system and authorized the Department of Agriculture's Federal Grain Inspection Service to establish a grain weight supervision system at interior locations. The act directed the Service, the Department's Office of Inspector General, and our Office to study the systems to provide information for the Congress' use in evaluating the needs of the grain inspection and weighing systems in the interior of the United States. It also directed us to submit a report setting forth the findings of our study and evaluation and our recommendations for changes to the act.

Based on our study and evaluation, including an evaluation of the Department's study reports, we believe that the overall structures of the existing systems should be retained. As the report discusses, however, the Service Administrator needs to take certain actions to further improve the interior grain inspection and weighing systems and Federal controls over the systems. We believe that the act provides the Administrator sufficient authority to make or require these improvements.

We are sending copies of this report to the Director, Office of Management and Budget, and to the Secretary of Agriculture.

Comptroller General
of the United States.

COMPTROLLER GENERAL'S REPORT TO THE HOUSE COMMITTEE ON AGRICULTURE AND THE SENATE COMMITTEE ON AGRICULTURE, NUTRITION, AND FORESTRY

GRAIN INSPECTION AND WEIGHING SYSTEMS IN THE INTERIOR OF THE UNITED STATES--AN EVALUATION

D I G E S T

In enacting the Grain Standards Act of 1976, the Congress decided not to impose a Federal system of grain inspection and weighing at interior locations as it had for export port locations. Instead, it (1) strengthened the interior grain inspection system, (2) authorized the Department of Agriculture's Federal Grain Inspection Service to establish an interior grain weight supervision system, (3) directed the Service, the Department's Office of Inspector General, and GAO to study the systems to provide information to the Congress for evaluating the systems, and (4) required GAO to submit a report recommending any changes to the act.

Under the existing systems, the Service Administrator (1) designates agencies to provide inspection and weight supervision services, (2) licenses the agencies' inspection and weight supervision personnel, and (3) supervises the agencies' operations.

NO NEED FOR INCREASED FEDERAL CONTROL OVER INTERIOR GRAIN INSPECTION AND WEIGHING

After evaluating the interior grain inspection and weighing systems, the Service's and Inspector General's study reports, and recent improvements made or initiated by the Service, GAO believes that the overall structures of the existing systems should be retained.

Some additional improvements are needed, however, to strengthen the grain inspection and weighing services available under the act and the Service's controls over such services. The act gives the Service Administrator sufficient authority to make or require these additional improvements. Therefore, the

Congress does not need to increase the Administrator's authority over the systems.

Further, most of the grain trade officials GAO interviewed were generally satisfied with the existing systems and were opposed to further changes or increased Federal involvement. The Service and Inspector General reported similar responses from officials they interviewed during their studies of the systems.

Moreover, grain company officials told GAO that the interior grain marketing system is, to a large extent, self-policing. Traders dissatisfied with grain grades or weights assigned in a marketing area are free to deal with another company the next time they do business, or they can refuse to base future purchases or sales on grades or weights assigned in that market. Therefore, to stay competitive, grain companies must maintain a good reputation. (See pp. 7 to 19.)

IMPROVEMENTS MADE BUT MORE NEEDED IN THE INTERIOR GRAIN INSPECTION SYSTEM

The Service has taken several actions to improve the grain inspection system and its controls over it. For example:

--The Service has initiated action to correct improper rounding of grading results and "grade shaving," 1/ which have been identified by GAO and the Service as fairly widespread problems. (See pp. 34 to 42 and charts (pp. 38 and 39.)

--In its initial designations of inspection agencies under the 1976 act, the Service insisted on legal arrangements to avoid or lessen the effects of conflicts of interest

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1/An illegal practice whereby inspectors adjust grading results which are on or near grade or known discount lines, generally in favor of the elevator company requesting and paying for the inspection.

and thus protect inspection agencies from grain company influence. Such conflicts of interest were a major problem cited in GAO's earlier report entitled "Assessment of the National Grain Inspection System" (Feb. 12, 1976, RED-76-71). (See pp. 45 to 49.)

These actions were needed, but other problems make further improvements necessary. The principal areas needing improvement are as follows.

--The Service had either not established clear and definitive standards or not enforced such standards for certain quality controls that grain inspection agencies should maintain, such as equipment testing and training and supervising employees. The agencies had not maintained adequate quality controls on their own. Consequently, the agencies often used equipment that had not been properly tested or had not been approved by the Service for official inspection use. Also, the agencies' staffs were often too small, poorly trained, and inadequately supervised. (See pp. 21 to 34.)

--Improper grain sampling, especially by contract samplers, was a serious and widespread problem. For example, samplers skipped required procedures such as checking samples for odor, insects, condition, and uniformity. Moreover, some inspection agencies used contract samplers--rather than employees under the agencies' direct supervision and control--to obtain official samples. This practice is not authorized by the act. (See pp. 25 to 32.)

--The Service's supervision or monitoring of inspection agencies' operations generally has not provided a reliable control over grain sampling and grading accuracy. For example, grain samples selected for regrading have not been representative of inspectors' work, Service field offices have not had enough staff to maintain a minimum level of supervision, and the Service has given higher priority to appeal inspections

and other projects than to supervision. (See pp. 56 to 59.)

--The Service generally has not effectively used its sample regrading results and appeal inspection results to identify grading problems, investigate their causes, and take action to correct them. (See pp. 60 to 67.)

GAO is recommending a number of actions the Secretary of Agriculture should have the Service Administrator take to further improve the existing interior grain inspection system and the Service's controls over the system. (See recommendations on pp. 41, 42, 53, 69, 70, and 76.)

GRAIN WEIGHING SYSTEM COULD BE IMPROVED

Grain weight supervision is currently available in the U.S. interior under two separate and distinct systems. One is operated under the general direction of the Association of American Railroads. The other is under the Service's direction, pursuant to the Grain Standards Act. To date, nearly all weight supervision on domestic rail shipments in the interior has been provided under the Association's system. Many of the agencies providing weight supervision on rail shipments also provide weight supervision on barge and/or truck shipments. The Service's system only recently became available to the grain industry and has been implemented on domestic shipments at only a few locations. (See p. 77.)

Most of the elevator and domestic processor officials GAO interviewed, as well as those interviewed by the Service and the Office of Inspector General, were satisfied with the existing interior grain weighing system and were opposed to changes or increased Federal involvement. GAO's comparisons of origin and destination weights on 5,677 grain shipments generally confirmed that their satisfaction was justified.

Although origin and destination weights on some shipments differed widely, for the majority they were identical or within accepted tolerances. Where there were wide differences, they were often attributable to factors unrelated to weighing accuracy, such as leaks in railcars, grain spills, or grain left in the conveyance at destination. GAO excluded such shipments from its comparisons. On other shipments where weight differences exceeded accepted tolerances, however, available records did not indicate reasons for the differences. (See pp. 10 to 19.)

GAO concluded that, although the Association's weight supervision system has some limitations and service by the Association's weight supervision agencies is not always available on all modes of transportation, it serves the interests of the railroads and the grain industry reasonably well. Therefore, GAO sees no need to expand the Service's weight supervision system to other interior locations or to institute other major structural changes. (See pp. 89 and 90.)

To make the interior grain weighing system more effective, however, GAO is recommending that the Secretary of Agriculture direct the Service Administrator to revise the program instructions for partial (Class Y) weight supervision to require that the weighing of at least 25 percent of the conveyances or grain lots covered by Class Y weight supervision certificates be observed each shift of each day that such certificates are to be issued. (See pp. 86 and 87 and recommendation on p. 91.)

see p. 90

GRAIN STANDARDS ACT PROVIDES THE SERVICE BROAD GRAIN WEIGHING AUTHORITY

Currently, the Grain Standards Act provides the Service (1) broader weighing than inspection authority at interior locations and (2) greater weighing authority at some interior locations than at others.

The act provides that at interior locations where official inspection is provided, the Service can implement mandatory weighing

Tear Sheet

services on its own initiative, while at other interior locations the services can be provided only upon request. However, neither the act nor its legislative history provide any guidance as to the conditions or criteria that must be met before such services can be required. Moreover, the Service Administrator had not established regulations specifying the conditions or criteria that must be met.

While the Service can implement weighing services at certain interior locations, official inspection can only be provided at interior locations upon request. Moreover, the Service's own personnel can provide grain weighing services at interior locations for an indefinite period, while they can provide inspection services at such locations only until an official agency can provide the services. (See pp. 84 and 85.)

GAO is recommending that the Secretary of Agriculture direct the Service Administrator to issue regulations specifying the criteria or conditions that must be met before the Administrator would implement mandatory weighing services at interior locations where official inspection is provided. Because neither the law nor its legislative history provide any guidance on this matter, the Administrator should consult with the House and Senate Agriculture Committees to ensure that the regulations meet their expectations. (See p. 90.)

AGENCY COMMENTS

The Service agreed with all but one of GAO's recommendations and outlined the actions it has taken or plans to take. (See app. II.) It did not agree with the recommendation that program instructions be revised for partial (Class Y) weight supervision. It said among other things that it did not believe that the recommendation was practical or cost effective. It added that use of the Class Y weight supervision system was minimal, involving less than half a dozen locations.

The arguments raised by the Service may have some merit, but GAO questions the validity and propriety of the Service's allowing designated weight supervision agencies to issue Class Y weight certificates on unit trains or other lots of grain on the basis of weight tickets or scale tickets furnished by the weighing elevator, rather than requiring that the weighing of at least 25 percent of all conveyances or grain lots covered by the certificates be observed each shift of each day that such certificates are to be issued. The fact that use of the Class Y system is currently limited to five locations should have no bearing on the credibility of the service provided.

The Service's comments and GAO's evaluation of them are discussed at the ends of chapters 3, 4, 5, 6, and 7.

Contents

ABBREVIATIONS

AAR	Association of American Railroads
FGIS	Federal Grain Inspection Service
GAO	General Accounting Office
ICC	Interstate Commerce Commission
OIG	Office of Inspector General
USDA	Department of Agriculture

CHAPTER 1

INTRODUCTION

Following widespread disclosures of misgrading and "shortweighing" of grain and issuance of two GAO reports assessing the national grain inspection system, 1/ the Congress amended the United States Grain Standards Act by enacting the United States Grain Standards Act of 1976 (7 U.S.C. 71 et seq.) to reform the system. The 1976 act established the Federal Grain Inspection Service (FGIS) within the U.S. Department of Agriculture (USDA) and made the FGIS Administrator responsible for the national grain inspection and weighing systems provided for in the law.

The 1976 act required the Comptroller General to conduct an investigation into and study the grain inspection and weighing systems in the interior of the United States. 2/ The study was to address, but not be limited to, (1) determining the reliability and effectiveness of present official inspection and weighing procedures in the interior and (2) evaluating the operating procedures and management practices of agencies providing grain inspection and weighing services in the interior for integrity and accuracy. This report contains the results of our study.

The 1976 act also required FGIS and USDA's Office of Inspector General (OIG) to independently conduct similar investigations and submit their reports to the House and Senate

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1/"Assessment of the National Grain Inspection System," RED-76-71, Feb. 12, 1976, and "Supplemental Information on Assessment of the National Grain Inspection System," CED-76-132, July 16, 1976.

2/As used in this report, interior refers to all locations within the United States, other than export port locations, where grain may be inspected or weighed.

Agriculture Committees and the Comptroller General. The conclusions and recommendations included in this report consider the information presented in those reports. 1/

MAJOR PROVISIONS OF 1976 ACT AFFECTING INTERIOR LOCATIONS

The 1976 act made a number of substantive changes to improve grain inspection and weighing in the interior of the United States. It provided for significant improvements to the existing inspection system and provided authority for FGIS to establish a Federal weight supervision system. Following are the principal changes authorized or required by the act.

--Before any State or local governmental agency or any person can be designated by FGIS as an agency to provide official inspection or official weighing services, 2/ the agency must meet certain criteria and conflict-of-interest provisions set forth in the act.

--FGIS' Administrator is authorized to suspend or revoke an official agency's designation whenever he determines that it has (1) failed to meet required designation criteria, (2) not complied with any provision of the act or regulations and instructions issued under the act, or (3) been convicted of any violation of other Federal law involving the handling or official inspection or weighing of grain.

--Only one agency may provide official inspection and/or official weighing services within a specified geographical area. Also, except as authorized by the Administrator, official inspection agencies may not

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1/CIG's report, dated May 21, 1979, is entitled "Study of Grain Inspection and Weighing at the Interior of the United States." FGIS issued two reports, "Grain Inspection and Weighing Procedures and Management Practices at Interior Locations in the United States," May 1979, and "Grain Inspection and Weighing Procedures and Management Practices at Interior Locations in the United States (Phase II)," Sept. 1979.

2/Official inspection and official weighing refer only to services provided under the U.S. Grain Standards Act, as amended, by employees either of FGIS or of agencies delegated or designated by FGIS.

inspect a sample of grain unless it is drawn and submitted while the entire lot of grain is physically within the geographical area assigned to the agency performing the inspection.

--The Administrator is authorized, for the first time, to require official weighing services at (1) those locations where official inspection services are provided and (2) at any other grain elevator, warehouse, or other storage or handling facility upon the facility operator's request.

--Under certain circumstances, including violations of the act or other Federal laws, the Administrator is authorized to refuse to provide official inspection and weighing services to individuals or corporations. In addition to or in lieu of such refusal, the Administrator may assess a civil penalty not to exceed $75,000 for each violation.

The act required the designation of inspection agencies at interior locations to be completed by November 20, 1978.

While the act generally requires official inspection and weighing of all export grain, 1/ such services are provided only upon request on domestic shipments at interior locations. At export locations, official inspection and weighing functions are performed by FGIS or by certain States to which FGIS has delegated this authority. At interior locations, official inspection is performed by designated private, trade-related, or State organizations under FGIS' general supervision. Also, official weighing functions may be performed at interior locations by similar organizations under FGIS' general supervision or by FGIS personnel under certain circumstances.

INTERIOR SYSTEM DESCRIPTION

U.S. grain generally moves from the farms to domestic users and to export ports for shipment to foreign users

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1/On November 30, 1979, we issued a report entitled "Federal Export Grain Inspection and Weighing Programs: Improvements Can Make Them More Effective and Less Costly" (CED-80-15), in which we discussed the improvements in export grain inspection and weighing resulting from FGIS' implementation of the act and additional problems that should be addressed.

through a system of grain elevators (warehouses) by three modes of transportation--truck, rail, and barge. The elevators are owned by individuals, farmer cooperatives, or grain companies, and are located in rural farming communities (country elevators), at principal grain marketing centers (inland terminals), and at export locations (export elevators). In recent years, the proportion of grain that passes through traditional grain marketing centers has decreased. More grain is now being shipped directly from production areas to domestic processors and the ports, particularly by unit trains 1/ (loaded at country elevators).

According to a USDA official, good statistics are not available on the total number of country and terminal elevators in the United States although there are generally considered to be about 10,000. Better statistics are available on the number of elevators operating under the Uniform Grain Storage Agreement--a contract with commercial warehouses for storage of Government-owned grain. The USDA statistics indicate that there are (1) 639 terminal elevators, which includes 85 export terminal elevators and 263 terminal elevators that primarily handle rice, and (2) 6,132 country elevators.

Use of the inspection services, which include drawing grain samples and grading them on the basis of certain quality factors, generally depends on one's position in the marketing chain. Parties involved in local or intrastate merchandising often do not request official inspection services or they request only certain of the services available. For example, producers (farmers) and country elevators generally do not use the system, while processors often request official sampling but perform their own quality determination tests.

Official inspection services are used at interior locations most often when transactions involve distant markets and/or an absent party. Generally, such transactions involve a contract which states the basis to be used for determining grain quality (official inspection at either origin or destination) and the discounts or premiums which will be assessed for lots of grain which fail to meet or which exceed contracted quality factors (such as moisture, protein, and damage).

1/Trains, usually consisting of 65 to 125 cars, devoted exclusively to carrying grain directly to the destination location.

Two weight supervision systems are available at interior locations; one operated by FGIS pursuant to the act and the other by the Association of American Railroads (AAR). FGIS refers to the weighing services provided under its system as "official" and to those provided under the AAR system as "unofficial." (AAR refers to its system as "supervised" or "classified grain weights.")

Thus far, official weighing services under FGIS' system have been limited primarily to (1) export shipments where the grain is loaded into the final conveyance or container at an interior location (primarily railcars destined for Mexico) and (2) domestic shipments which historically have been weighed by the State agencies which were delegated authority to provide official weighing on export grain shipments. (See pp. 85 and 86 regarding the latter type.)

The AAR weight supervision system is used primarily to facilitate freight assessment and to help reduce grain loss claims against member railroads. Some grain companies have their grain weighing supervised by a third party because it enhances their ability to buy and sell grain on the basis of weights determined at their elevators as well as to settle claims against railroads for losses in transit. Most of the grain weight supervision in the interior is currently provided under the AAR system or, in the case of truck and barge shipments, it is provided by the same agencies providing weight supervision on rail shipments under AAR's system.

FGIS' FUNCTIONS AND OPERATIONS

FGIS' mission is to promote, facilitate, and regulate the merchandising of U.S. grain in an orderly, objective, and timely manner by establishing official standards for grain and uniformly applying those standards by providing for official inspection and weighing of grain. The FGIS Administrator has stated that every reasonable step must be taken to uniformly apply FGIS' standards to inspection and weighing services provided at every official inspection point in the Nation, from the smallest interior market to the largest export port. According to the Administrator, FGIS must provide official grain inspection and weighing services that are unbiased, accurate, and reliable, no matter who is doing the original sampling, inspection, or weighing.

FGIS' primary responsibilities in the interior are to designate inspection and weighing agencies, license agency personnel, and supervise the designated agencies' inspection and weighing activities. FGIS also performs appeal inspections and is authorized to provide original inspection services, on an interim basis, when an official agency

is not available. It also provides certain other grading and inspection services on rice and grain products covered by the Agricultural Marketing Act of 1946, as amended (7 U.S.C. 1621 et seq.), including grain products purchased by Government agencies to determine compliance with contract specifications.

As of November 1979, FGIS had designated 85 agencies (52 private, 11 trade-related, and 22 State) to provide official inspection services at interior locations. During the first 10 months of fiscal year 1979, official inspection agencies issued about 2.8 million inspection certificates, some of which pertained to grain shipments exported from interior locations.

Also, FGIS had designated seven agencies (all State agencies) to provide grain weight supervision, under the act, on domestic shipments at interior locations. As of the end of January 1980, five of the agencies were providing weight supervision services on domestic grain shipments at 10 interior locations. As of the same date, FGIS was providing official weighing (100-percent supervision) on grain shipments being exported from 39 interior locations and on domestic shipments at 6 interior locations.

FGIS carries out its mission through its headquarters in Washington, D.C.; 5 regional offices; and 42 field offices. Twenty-three of the field offices function primarily at export locations while the remaining 19 are primarily responsible for interior locations. Each interior field office is responsible for supervising one or more official agencies within a geographical area commonly referred to as a circuit.

FGIS had 1,768 full-time employees and 181 part-time employees at the end of fiscal year 1979. During fiscal year 1979, FGIS field offices' workloads totaled 1,356 staff-years of which 305 were devoted to interior inspection and weighing functions compared with 244 of the 1,230 total staff-years worked the prior fiscal year.

CHAPTER 2

SHOULD EXISTING STRUCTURES OF GRAIN INSPECTION AND WEIGHING SYSTEMS IN THE INTERIOR OF THE UNITED STATES BE RETAINED?

In enacting the Grain Standards Act of 1976, the Congress decided not to impose a Federal system of grain inspection and weighing in the interior of the United States as was done at export port locations. Instead, the act (1) strengthened certain aspects of the interior grain inspection system, (2) authorized FGIS to establish an interior weight supervision system, (3) directed FGIS, OIG, and GAO to study the systems to provide information for the Congress' use in evaluating the interior grain inspection and weighing systems, and (4) required us to submit a report setting forth our findings and recommendations for changes in the act.

On the basis of our study and evaluation of the interior grain inspection and weighing systems, including an evaluation of the FGIS and OIG study reports, we believe that the overall structures of the existing systems should be retained. However, some improvements, as discussed in subsequent chapters, are needed to strengthen the grain inspection and weighing services available under the act and FGIS' controls over such services.

Our conclusion that the overall structures of the existing systems should be retained is based on the following factors. In recent months FGIS has taken or initiated a number of actions to improve the grain inspection system and its controls over the system. It has also established a grain weight supervision system which has been implemented at a limited number of interior locations. We believe that the act provides FGIS sufficient authority to make or require the further improvements that are needed in these systems. Therefore, the Congress does not need to increase FGIS' authority over the systems.

Moreover, most of the country elevator, terminal elevator, and domestic processor officials we interviewed were generally satisfied with the existing interior grain inspection and weighing systems and were opposed to further structural changes or increased Federal involvement in the systems. FGIS and OIG have reported similar responses from those they interviewed during their reviews of the systems.

Also, many of the grain company officials told us that the interior grain marketing system is self-policing to a

large extent. Anyone dissatisfied with grain grades or weights assigned in a marketing area can always refuse to base future purchases or sales on grades or weights assigned in that market, or they can buy grain from or sell grain to someone else the next time. Therefore, each company involved in buying and selling grain has to uphold its own reputation.

These factors are discussed in more detail in the following sections.

WHY EXISTING INSPECTION SYSTEM STRUCTURE SHOULD BE RETAINED

The Grain Standards Act of 1976 made a number of substantive changes to improve the grain inspection system in the interior of the United States. FGIS has taken or initiated a number of actions in recent months to improve the system and its controls over the system. While further improvements are needed, as discussed in subsequent chapters, the act provides FGIS sufficient authority to make or require the needed improvements. Moreover, representatives of the grain trade told us, as well as FGIS and OIG, that they were generally satisfied with the existing system and were opposed to structural changes or increased Federal involvement in the system.

1976 act strengthened Federal controls and gave FGIS sufficient authority to further improve the inspection system

The 1976 act strengthened Federal controls over the interior inspection system by

--providing strong prohibitions against conflicts of interest between inspection agencies and the grain trade;

--strengthening the process of designating inspection agencies by requiring them, as a condition for designation, to meet certain criteria set forth in the act;

--authorizing FGIS to provide original inspection services at interior locations, on an interim basis, until the services can be provided by an official inspection agency;

--authorizing the Administrator to refuse to provide inspection services under certain circumstances; and

--in addition to or in lieu of such refusal or of criminal penalties provided for in the act, authorizing the Administrator to assess against any person a civil penalty up to $75,000 for violations of the act or other Federal law relating to the handling, weighing, or inspection of grain.

We believe that these provisions also give FGIS sufficient authority to make, or require inspection agencies to make, the improvements in the inspection system which our review indicated are needed. FGIS' success in bringing about these improvements, however, will depend to a large extent on the inspection agencies' cooperation and acceptance of responsibility for providing appropriate quality controls over their inspection operations.

Recent actions by FGIS to improve its controls over the inspection system

In recent months FGIS has made considerable progress toward improving the inspection system and its controls over the system. The actions taken, which are discussed in more detail in subsequent chapters, include

--legally separating trade inspection agencies from control by trade organizations,

--strengthening the process for designating inspection agencies,

--improving certain procedures for testing and licensing inspection personnel,

--improving the FGIS grain inspection monitoring system and increasing use of the system's products to identify and deal with inspection problems,

--emphasizing to FGIS personnel and to inspection agencies that improper rounding of grading results and grade shaving (see p. 36) will not be tolerated and that prompt corrective action will be taken when such practices are identified, and

--implementing a management review team concept for evaluating inspection and weighing services and field office operations.

Also, FGIS has initiated or plans to take a number of other actions to improve its internal instructions and controls over the inspection system.

Grain company officials' views on existing inspection system

Most of the terminal elevator and domestic processor officials we interviewed said that they were satisfied with the existing interior grain inspection system and that they were opposed to any further structural changes or increased Federal involvement in the system. Official grain inspection on domestic shipments is provided only on request in contrast to the mandatory inspection requirement for export grain.

Many grain company officials also said that interior grain inspection is a marketing function and that the marketing system is self-policing, to a large extent, because anyone dissatisfied with grades assigned in a marketing area can always refuse to base future purchases or sales on grades assigned in that market, or they can buy grain from or sell grain to someone else the next time. Thus, each company involved in buying and selling grain has its own reputation to uphold.

Most of the country elevator operators we interviewed also said they were satisfied with the present inspection system.

In its report on interior grain inspection and weighing procedures and management practices, FGIS stated that over 90 percent of all respondents it surveyed were satisfied with official inspection in the 28 markets covered by the survey. FGIS concluded that an overwhelming majority of respondents were satisfied with the services provided in the 28 markets and that there appeared to be considerable support for retaining the existing inspection system.

Also, CIG reported that most of the individuals it had interviewed in its study of grain inspection and weighing at interior locations were generally satisfied with the existing grain inspection system and showed little enthusiasm for increased Federal involvement.

WHY EXISTING WEIGHING SYSTEM STRUCTURE SHOULD BE RETAINED

Most of the elevator and domestic processor officials we interviewed, as well as respondents FGIS and OIG interviewed, were also satisfied with the existing interior grain weighing system and were opposed to changes or increased Federal involvement in the system. Our comparisons of origin and destination weights on 5,677 grain shipments made by country and terminal elevators generally confirmed that their satisfaction

was justified. 1/ In the majority of these cases, the origin and destination weights were identical or within accepted tolerances. In those cases where the weight differences exceeded accepted tolerances, available records did not indicate the reasons for the differences.

Under the existing interior weighing system, grain buyers and sellers (primarily terminal elevators and domestic processors) can arrange to have the weighing of grain shipped into or out of their facilities supervised by a third party--a weight supervision agency. Such supervision is provided under one of two systems--a well-established system set up over 20 years ago by AAR along its members' rail lines or a system recently set up by FGIS pursuant to the Grain Standards Act.

The AAR system is used primarily to help the railroads assess freight charges and reduce claims for grain losses in transit. Grain weight supervision also enhances grain companies' ability to buy and sell grain based on weights at their elevators and to settle claims for grain losses in transit. The AAR system is intended for rail shipments only, although we noted a number of locations where weight supervision agencies also provided supervision on barge and truck grain shipments. Although the AAR system has some limitations and service is not always available on all modes of transportation, it appears to serve the interests of railroads and the grain industry reasonably well.

Thus far, weight supervision under FGIS' system, which is available on all modes of transportation, has been provided on domestic shipments at a limited number of interior locations. We see no need to expand FGIS' weight supervision system to other interior locations unless the grain trade requests it.

1/In making these comparisons, we excluded those shipments where available records indicated that such factors as leaks in railcars, grain spills, and grain left in the conveyance at destination were involved. Although such factors can cause wide differences between origin and destination weights, they are unrelated to weighing accuracy.

Grain buyers and sellers generally are satisfied with accuracy of weights

Country elevator, terminal elevator, and domestic grain processor officials we interviewed generally were satisfied with the accuracy of weights assigned to their grain shipments. Most of them were opposed to changes in the present weighing system or any further Federal Government involvement in grain weighing. Also, FGIS has reported that export elevator operators, terminal elevator managers, domestic processor managers, and country elevator managers generally expressed satisfaction with weighing services in the 28 major interior market areas covered by its survey. In addition, OIG reported that most warehouse operators (country elevator managers) it interviewed were satisfied with destination weights and were opposed to paying for Federal weight supervision at interior locations.

To determine if their satisfaction with the weights assigned to their shipments was justified, we compared origin and destination weights on 5,677 grain shipments made by country and terminal elevators. The shipments included (1) country elevator shipments by truck and rail to terminal elevators, domestic processors, and export elevators and (2) terminal elevator shipments by rail and barge to export elevators, domestic processors, and other terminal elevators. No third-party weight supervision was provided at origin on the shipments by country elevators. On the other shipments, weight supervision was generally provided under the AAR system at interior locations and by FGIS and the delegated States at export locations.

To help ensure that our comparisons would not be distorted by factors unrelated to weighing accuracy, we excluded the following types of shipments.

--Shipments for which the records contained a notation of some irregularity at the time of loading or unloading, such as grain spilled after it was weighed at origin or before it was weighed at destination, grain left in the conveyance at destination, and leaks or open doors on railcars when they arrived at destination. Weight differences related to such irregularities have nothing to do with weighing accuracy.

--Shipments made in open-top railcars because of the high potential for loss of grain in transit when such cars are used.

--Shipments for which country elevators had estimated origin weights or used questionable methods to obtain them.

Country elevators generally were satisfied with weights assigned to their shipments

Of the 82 country elevator managers we interviewed in four States--Illinois, Iowa, Kansas, and North Dakota--60, or 73 percent, said they were satisfied with the accuracy of weights assigned to their grain shipments at destination. The country elevators generally sold their grain to terminal elevators, domestic processors, and export elevators on the basis of destination weights.

Our comparisons of origin and destination weights on 2,733 grain shipments made during the 1- to 17-month period prior to our visits to the country elevators are summarized in the following table.

Location of country elevators	Total shipments reviewed	Number of shipments with destination weight: Less than origin	More than origin	Equal to origin	Total pounds at origin	Gain (loss) at destination as compared with origin weight: Pounds	Percent
Illinois	517	224	254	39	31,126,822	15,607	0.05
Iowa	710	377	278	55	46,458,682	205,873	0.44
Kansas	797	324	453	20	138,711,390	162,714	0.12
North Dakota	709	334	349	26	86,775,106	67,101	0.08
Total	2,733	1,259	1,334	140	303,072,000	451,295	0.15

As the table shows, the destination weight was (1) less than the origin weight on 1,259 shipments, (2) more than the origin weight on 1,334 shipments, and (3) the same as the origin weight on 140 shipments. The table also shows that, overall, the destination weights of the shipments were about 451,000 pounds, or 0.15 percent, more than the origin weights. Therefore, the country elevators were paid for 451,000 more pounds of grain than their records showed they had shipped in these cases.

Although the total destination weight of the shipments we reviewed exceeded the origin weight, the destination weights on 46 percent of the country elevators' shipments were less than the origin weights. Appendix I shows the weight gain or loss at destination for each country elevator where we analyzed transactions.

Twenty-two, or 27 percent, of the country elevator managers we interviewed said they had experienced some problems with destination weights assigned to their grain. Several of them, however, referred only to isolated problems.

Two managers who complained about weight problems acknowledged that their scales were not accurate or that they did not actually weigh their grain shipments at origin. Others believed their scales were accurate.

We noted circumstances at many of the elevators we visited that could have contributed to some of the managers' complaints.

--Of the 82 elevators visited, 25 did not have a platform scale long enough to weigh large tractor-trailer trucks. They estimated origin weights of such truck shipments by weighing the front and back of the truck separately (split weighing) and taking the sum of the two weights.

--Of the 62 country elevators that shipped grain by rail, 15 did not weigh the grain before shipping it because either (1) they did not have a scale for weighing such shipments or (2) the scale they had would have taken too much time to use and would have delayed loading operations.

As stated previously, we excluded these types of shipments from our comparisons.

Most of the elevator managers we interviewed, including those that said they had experienced some problems with destination weights, were satisfied with the existing weighing system and did not want any changes to it.

Many of the elevator managers told us that they had numerous outlets for selling their grain and that they could therefore avoid selling to a buyer that did not have accurate weights. Several terminal elevator and processing plant officials also mentioned the high level of competition for country elevators' grain. They said that they had to have accurate weights or they would not be able to continue buying grain from country elevators.

Also, OIG and FGIS reported that most of the country elevator managers responding to their surveys were satisfied with existing weighing services. In addition, both reported that most of the country elevator managers were not in favor of any additional Federal involvement with weight supervision in the interior of the United States.

Terminal elevators and domestic processors generally were satisfied with grain weights

Terminal elevator and domestic processor officials we interviewed generally were satisfied with the AAR weight supervision system and the accuracy of weights assigned to the grain purchased and sold. They were opposed to any Federal involvement in supervising grain weighing at interior locations. Only one of them was receiving weight supervision under FGIS' system.

The 24 terminal elevator managers we interviewed in Illinois, Indiana, Iowa, Kansas, Missouri, Nebraska, Oklahoma, and Wisconsin generally shipped their grain to export elevators, domestic processors, or other terminal elevators. They told us that they generally settled rail-shipped grain sales based on their own (origin) weights. Barge-shipped grain sales, however, were generally settled based on destination weights. We found some variations in these general practices, depending on such factors as the types and available supplies of the grains shipped.

We were able to obtain origin and destination weights from only 6 terminal elevators, including 4 of the 24 elevators referred to above, primarily because it was unusual for terminal elevators to receive destination weight information when they sold their grain on origin weights. Our comparisons of origin and destination weights on 469 grain shipments made by the six terminal elevators during the 1- to 17-month period prior to our visits are summarized in the following table.

Origin of shipments	Firm number	Type of shipment (note a)	Total shipments reviewed	Number of shipments with destination weight: Less than origin	More than origin	Equal to origin	Total pounds at origin	Gain (loss) at destination as compared with origin weight: Pounds	Percent
Kansas	1	rail	59	31	28	0	11,817,390	(2,540)	(0.02)
Missouri	b/ 2	rail	139	85	54	0	31,467,430	(21,435)	(0.07)
Minnesota	3	barge	111	54	49	8	368,353,900	(113,648)	(0.03)
	4	barge	106	84	22	0	324,130,673	(514,456)	(0.16)
Oklahoma	5	barge	14	14	0	0	39,650,392	(51,312)	(0.13)
	c/ 6	barge	40	30	10	0	105,236,914	(404,542)	(0.38)
Total			469	298	163	8	880,656,699	(1,107,933)	(0.13)

a/The barge shipments out of Minnesota went to gulf coast export elevators as well as to domestic processors. All other shipments went to export port locations at the gulf.

b/The firm that provided this data was located in Missouri but some of the shipments originated in other States.

c/This firm did not have its weights supervised and settled sales transactions based on destination weights.

As the table shows, the destination weight was (1) less than the origin weight on 298 shipments, (2) more than the origin weight on 163 shipments, and (3) the same as the origin weight on 8 shipments. The table also shows that, overall, the destination weights of the shipments were 0.13 percent less than the origin weights. A shrinkage rate of 0.25 percent is widely accepted by the grain trade as reasonable.

On the basis of the average weight loss--or shrinkage--of 0.13 percent, the shrinkage on a 200,000-pound hopper car of corn would be 260 pounds, or 4.6 bushels. Using a price of $2.80 per bushel for corn, the value of the shrinkage would be about $13. The average weight shrinkage on a 3-million-pound barge shipment of corn would be 3,900 pounds (69.6 bushels) with a value of $195.

Of the 24 terminal elevator managers, 12 said that they settled some of their grain sales based on destination weights. Of the 12, 6 said they had experienced some problems with destination weights. One said that, on a barge shipment in June 1978, some of the grain was left in the barge. Another said that he had experienced excessive weight shortages at destination on three railcar shipments. A third, who complained about destination weight shortages on railcars, attributed the shortages to poor condition of railcars which resulted in loss of grain in transit. A fourth manager said the shortages were due to failure to remove all grain from barges at destination.

The other two managers said that, overall, the destination weight shrinkage rate on barges was higher than they believed to be acceptable. Both of them, however, used inbound truck weights to estimate outbound barge weights, because neither of them had a scale for weighing grain as it was being loaded on barges. One of the managers told us that he considered the grain weight estimates arrived at during the loading of barges at his facility to be inaccurate. He said he was concerned about being shortweighed at destination but his lack of accurate origin weights prevented him from complaining. He said, however, that he intended to install scales for weighing grain loaded on barges.

Because of limited weight information available from the terminal elevators and the domestic processors, we obtained origin and destination weights on 2,475 rail shipments from one of AAR's affiliate weighing bureaus. The data covered shipments made during the 19 months ended April 1979 between interior locations (between terminal elevators and from terminal elevators to domestic processors) and from interior terminal elevators to export elevators. Grain weighing at the interior facilities was supervised under

AAR's system. At the export facilities, it was supervised by FGIS and/or the delegated States.

The data we obtained was based on the weighing bureau's onsite monitoring of the weight supervision provided on selected shipments either at origin or destination and its comparison of these weights with the respective weights assigned at the shipping or receiving facility. According to bureau officials, the bureau concentrates its monitoring efforts at locations where it has indications of the greatest weighing problems.

The following table shows the results of our analysis of the origin and destination weights furnished by the bureau.

Type of shipment	Total shipments reviewed	Number of shipments with destination weight: Less than origin	More than origin	Equal to origin	Total pounds at origin	Gain (loss) at destination as compared with origin weight: Pounds	Percent
From interior to export locations	a/ 1,213	886	314	13	213,726,920	(419,671)	(0.20)
Between interior locations	b/ 1,262	991	262	9	213,173,905	(519,180)	(0.24)
Total	2,475	1,877	576	22	426,900,825	(938,851)	(0.22)

a/The average size of these shipments was 176,197 pounds each.

b/The average size of these shipments was 168,918 pounds each. Includes 815 shipments from terminal elevators to domestic processors and 447 shipments between interior terminal elevators.

As the table shows, the destination weight was less than the origin weight on about three-fourths of the shipments. The average shrinkage on shipments to export locations was 0.20 percent of the origin weight, or slightly less than the average shrinkage of 0.24 percent on shipments between interior locations. Both shrinkage rates are within the 0.25-percent rate widely accepted by the grain trade as reasonable. Also, railroads generally will not pay claims on grain losses in transit unless they exceed 0.25 percent of the weight shipped.

The average differences between origin and destination weights on shipments to individual elevators were as follows.

--Net losses of 0.01 percent to 1.6 percent 1/ on shipments to export locations.

--Net losses of 0.001 percent to 0.58 percent on shipments from terminal elevators to domestic processors.

--A net gain of 0.15 percent to a net loss of 0.43 percent on shipments between interior terminal elevators.

Terminal elevator and domestic processor officials we interviewed were generally satisfied with the existing grain weight supervision system at interior locations and did not want any changes or additional Federal involvement in weight supervision. FGIS reported similar responses to its interior market survey.

Exporters generally were satisfied with interior weighing

FGIS' survey of the operators and managers of 40 export elevators which had exported a total of about 2.2 billion bushels of grain in 1978 suggested that a majority of the exporters were satisfied with the existing interior weighing system. Of the 40 interviewed, 15 reported that they had not experienced any problems with weighing at interior locations; 16 did not respond; and 9 reported problems involving loss of grain in transit, inaccurate weights at origin, and slow service at origin. In only three of the nine cases, however, did the respondents report that their problems had not been resolved satisfactorily.

FGIS reported that the export elevator operators identified only two market areas (Des Moines and Fort Dodge, Iowa) where they clearly were not satisfied with the weighing servces provided. Our analysis of the supporting data, however, indicated that FGIS may have overstated the case since only one respondent in each case expressed dissatisfaction. 2/

1/The 1.6-percent loss at one export elevator pertained to five railcar shipments, one of which was short at destination by 5.73 percent. The net loss at destination did not exceed 0.50 percent on any of the remaining 1,208 shipments to export elevators.

2/See pp. 20 and 23 of FGIS' report, "Grain Inspection and Weighing Procedures and Management Practices at Interior Locations in the United States (Phase II)," dated Sept. 1979.

Market pressures help ensure weighing accuracy

Although some interior elevators appear to have less accurate weights than others, the overall shrinkage rates seem reasonable. An AAR official said that the Interstate Commerce Commission (ICC) requires railroads to pay claims on grain losses in transit that exceed 0.25 percent of the weight shipped when they are responsible for the losses.

The grain industry and the railroads have inherent controls to correct weighing problems that are causing large shrinkages. For example, if a firm that buys grain on origin weights has shrinkages in excess of 0.25 percent, it can file a claim against the carrier railroad. If the railroad is responsible for all or part of the loss, it must pay the firm for that amount. If the railroad is not responsible for the loss, the buyer must absorb the loss or negotiate an adjustment with the seller. The buyer, however, normally has the option of not buying from that particular seller again or of not buying on the basis of the seller's weights if he suspects the seller has inaccurate weights. Also, a seller normally has the option of selling his grain elsewhere or of not selling on the basis of a buyer's weights if he suspects that the buyer's weights on which he is being paid are inaccurate.

Many grain trade representatives told us that to stay competitive they had to have an accurate weighing operation. They also said that if a buyer or seller provides inaccurate weights, knowledge of that spreads quickly throughout the trade. Other trade representatives said that they might continue to sell to a buyer who they knew had inaccurate weights but they would demand a higher price per bushel. Market pressures, therefore, appear to provide a check and balance on weighing accuracy.

CHAPTER 3

FGIS NEEDS TO ENSURE THAT INSPECTION AGENCIES MAINTAIN PROPER QUALITY CONTROLS OVER THEIR INSPECTION ACTIVITIES

As a condition to being designated under the 1976 act to provide official inspection services, the inspection agencies accepted responsibility for providing certain basic quality controls over their inspection activities. FGIS, however, had either not enforced or not established clear and definitive standards which such quality controls should meet, and the agencies generally had not instituted the necessary controls on their own. As a result, the agencies had often used equipment that had not been properly checktested or had not been approved by FGIS for official inspection use. Also, their staffs were often too small, poorly trained, and inadequately supervised. Because of these weaknesses, grading accuracy has suffered.

According to their designation agreements with FGIS, the agencies are to

--use only FGIS-approved inspection equipment and periodically verify (checktest) its accuracy,

--maintain an adequate staff of physically and technically qualified employees,

--provide employees with the training necessary to be licensed and to upgrade or maintain their skills, and

--supervise their employees and take corrective action when they violate the Grain Standards Act or FGIS regulations.

While FGIS has established equipment checktesting standards which specify the testing frequency and procedures to be followed in testing inspection and sampling equipment, it had not ensured that inspection agencies performed the required tests within prescribed time periods. Also, FGIS had not established clear and definitive standards for the other areas listed above, such as a staffing level that would be considered sufficient or a training or supervision program that would be adequate, which would enable it to measure the adequacy of an inspection agency's performance.

Despite the designation agreements, the agencies generally considered such essentials as proper supervision of their employees and checktesting of their equipment to be FGIS' responsibility. Until FGIS establishes and requires the agencies to adhere to quality control standards, it will have difficulty measuring the adequacy of the agencies' performance.

INADEQUATE EQUIPMENT

Many agencies were drawing samples and performing official inspections with equipment that was either not properly checktested in accordance with FGIS standards or not approved for official use, as required by the act. Many grading factors, such as moisture, foreign material, and test weight, are determined mechanically. Using equipment that has not been checktested could cause inaccurate results. Grading accuracy is important to the grain trade because the grading results for some factors are used in applying price discounts, which can be substantial, when the grain quality determined by inspectors differs from that specified in the purchase or sales contract.

Some agencies used untested, unapproved, or badly worn equipment. Field office records show that FGIS supervisors had found licensed samplers using equipment designed to divide samples into equal portions that was badly worn, canvases used for sample collection that were too short to hold the entire sample or had holes in them, and unapproved probes and mechanical sampling devices. 1/ In such situations there is little assurance that the grain sample delivered for grading accurately represents the lot of grain from which it is drawn.

Also, in many cases agencies had not checked the accuracy of their sampling and inspection equipment at prescribed intervals, as required by FGIS. Except for mechanical samplers, such checks involve a comparison of test results on control samples provided by the FGIS field office. At the

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1/A probe is a long, metal pipe-like device used to obtain samples manually from a railcar, truck, or barge. (See pictures on pp. 26 and 27.) It consists of two tubes, one inside the other, with several compartments that can be opened and closed to allow grain samples to be withdrawn from various levels. Mechanical sampling devices, called diverters, use a mechanical arm that sweeps automatically at timed intervals through a free-falling stream of grain to obtain samples.

31 inspection agencies within the six field office circuits we visited, testing of about 24 percent of the following equipment was delinquent at the time of our review.

Type of equipment	Number reviewed	Not tested at prescribed times	
		Number	Percent
Mechanical (diverter type) samplers	401	70	17.5
Dockage testers	119	21	17.6
Moisture meters	153	81	52.9
Test-weight scales	155	25	16.1
Total	828	197	23.8

Because the mechanically determined grading results on some factors can directly affect the grain's market value, periodic verification of the equipment's accuracy is essential. For example, the accuracy of moisture meters is especially important, because a person selling high-moisture corn receives a lower price because of the moisture and the cost to the buyer of drying the corn.

Many inspection agency officials said that they did not notify the FGIS field office when equipment testing became delinquent. Some felt that such testing was the field office's responsibility. Two agencies' officials said they did not know when the equipment was supposed to be tested, although FGIS has issued instructions on the prescribed time intervals.

Some FGIS field office supervisors felt the agencies had not properly accepted their responsibility to assure that their sampling and inspection equipment was accurate and in good working condition. One supervisor said that, in cases where the agencies had not made checktests properly or at appropriate times (such as before a harvest), field office personnel often had to test the agencies' equipment to ensure that it was accurate. Another supervisor had issued letters of corrective action to two agencies suspected of falsifying equipment test results. In one case, where the agency allegedly had filled out test forms and condition reports without making the tests, the supervisor withdrew FGIS' authorization to use the equipment until proper checktests could be made.

While FGIS appears to have properly defined equipment checktesting standards, it needs to reemphasize to inspection agencies their responsibility for properly checktesting equipment and ensure that they make the required tests within prescribed time periods.

INADEQUATE STAFFING

An adequate staffing level for most interior inspection agencies is hard to define because their workloads vary widely. However, some inspection agencies seemed to have too few inspectors. Staffing shortages can affect not only the timing but also the quality of inspections. Requests for inspections tend to be heavy during the harvest and navigation seasons but light during the winter months. For example, monthly inspections in the Minneapolis circuit averaged 20,000 from December 1977 to February 1978 but increased to 46,000 from August to October 1978. Thus, what might be considered an adequate staffing level one month may be inadequate the next.

Nevertheless, some inspection agencies' staffing levels were clearly insufficient. In one circuit, the FGIS field office supervisor said that one inspector had regularly provided grades on 100-car trains within a single day. Based on his experience, the supervisor felt the inspector could not correctly grade that many samples that quickly. Another agency's inspectors averaged about 94 inspections a day each and sometimes as many as 150 each during September 1978.

At such rates proper inspection procedures may not be followed. According to FGIS records, many inspectors have been found taking shortcuts, such as

--manually dividing samples into the various portions needed for analysis instead of using the prescribed divider;

--failing to evaluate all factors, such as total damaged kernels and coarse foreign material, covered by the grain standards in assigning grades; and

--analyzing by "eyeballing" the entire sample instead of grading the prescribed sample portions.

FGIS needs to establish clear and definitive staffing standards for inspection functions and ensure that inspection agencies maintain adequate staff to properly carry out their work.

INADEQUATE TRAINING

Not only were some of the agencies understaffed, but in some cases their staffs were making mistakes because they were not trained adequately. In general, training was provided on the job until employees were licensed. Only 2 of the 16 agencies we contacted provided training after licensing.

Of the 16 agencies, only 1--a State agency--had a formal training program and a designated training officer. This agency also maintained records of its employees' training. The on-the-job training provided by the other agencies prior to licensing emphasized the technical skills required by the job. While trainees were provided copies of the Grain Standards Act, regulations, implementing instructions, and other material, they were expected to study them on their own.

Generally, trainees worked with more experienced agency personnel until licensed. In some cases, sampler training was provided by a firm engaged in selling and leasing mechanical sampling equipment rather than by the inspection agencies. The effectiveness of such training is questionable, as indicated by the sampling problems discussed on pages 25 to 32. Inspector trainees were often licensed samplers who were learning to grade grain as time permitted. The State agency mentioned above was providing formal inspector training in a classroom. Another agency was supplementing on-the-job training with weekend practice sessions. While agency officials said that they evaluated the trainees' proficiency before recommending them for licensing, only one agency required that the supervisor or instructor verify in writing the training provided and the proficiency achieved.

After Federal licensing, agency training was almost nonexistent. Of the two agencies that provided training after licensing, one provided training to all its employees while the other provided some training to inspectors only. Postlicensing training is important to maintain licensees' skills and keep them abreast of changes in such areas as grain quality and variety and official inspection procedures.

Four of the five FGIS field office supervisors with whom we discussed this subject agreed that the agencies were not adequately training their employees. They based their opinions on the results of licensing examinations and their supervision of agency activities. For example, at one agency, field office personnel noted samplers improperly sampling railcars. When confronted, one of the samplers told the FGIS representative that he was following procedures he was given by the agency when he was hired. FGIS records contained numerous examples of problems caused by inadequate sampler training, such as improper submission and handling of grain samples and failure to protect samples from substitution or manipulation.

The field office records also contained documentation of mistakes by inspection personnel which indicated a lack of proper training. For example, some inspectors had failed

to follow proper procedures in determining test weight and moisture content. One inspector had issued an unauthorized official certificate on a railcar of "elevator dust."

FGIS needs to establish clear and definitive standards for inspection agency training programs and assist the agencies in setting up programs that will help ensure that all licensees are properly trained.

INADEQUATE SUPERVISION

Most of the inspection agencies we visited were not adequately supervising their employees. Of the 16 agencies,

--only 1 had a formal supervision program or plan,

--only 6 had designated supervisors, and

--none maintained records of supervision performed.

We noted numerous instances of improper sampling and inspection that might have been avoided had the agencies properly supervised their employees.

Samplers

Agencies have grossly neglected supervision of their samplers. Such supervision is important because sampling is hard, low-paying work and without a proper sample it is impossible to obtain accurate inspection results. Yet, samplers often work alone and without supervision.

The nature of some types of sampling tend to discourage diligence. Getting a sample by probing grain lots, for instance, often requires brute strength, and working conditions are sometimes hot or cold, wet, dirty, or dangerous. Working hours are often long and abnormal, sometimes starting at daybreak. (See pictures of samplers obtaining samples by probe on the following pages.)

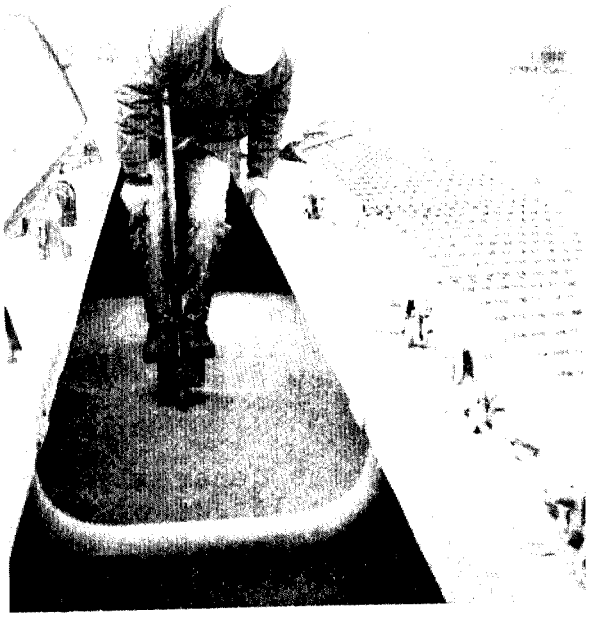
Ensuring that a sampler does the job properly is critical to accurate inspection results. Sampling cannot be duplicated because grain lots are not homogeneous. Elevator blending and loading practices often result in uneven distribution of broken kernels, foreign material, or other defective kernels in a load of grain. Small pockets or layers of foreign material can form. Also, kernel size and configuration vary. As a result, minor deviations in obtaining or handling the sample can affect inspection results. A slight difference in placing the probe, for example, may cause one sampler to strike a pocket of foreign material while another may

SOURCE: USDA

SAMPLER PROBING A BOXCAR

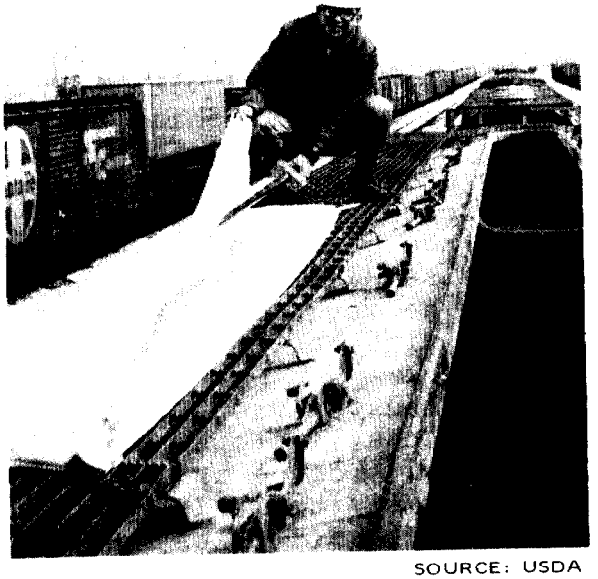
SOURCE: USDA

SAMPLER EMPTYING GRAIN SAMPLE FROM PROBE



SOURCE: USDA

SAMPLER PROBING A HOPPER CAR



SOURCE: USDA

SAMPLER EMPTYING GRAIN SAMPLE FROM PROBE

narrowly miss it. Even a variation in the setting of a mechanical sampler can change inspection results. It is important, therefore, for sampling to be done properly and for proper controls to be maintained over the samples until grading is completed.

Although sampling is critical and the temptation to cut corners is strong, it is a low-paying job. Except at some State agencies, most samplers' pay did not exceed $5 an hour and some were paid as low as $3.25 an hour. Many worked as samplers only part time or during certain seasons of the year. Thus, sampler turnover was high. One agency reportedly had hired 34 samplers in a year to retain 11. Agency officials said they usually hired four samplers when they needed two because they knew one would quit and another would have to be fired.

The inspection agencies generally did not supervise their samplers. Six of the 16 agencies we visited had roving supervisors who performed some unannounced supervision of samplers. However, some of them stated that providing this supervision was very difficult and they did so infrequently.

Generally, when supervision was provided, it involved sampling done at locations near agency offices. Much of this nearby sampling was performed in groups with a licensed inspector or foreman in the area. Some agency officials contended that supervision was being provided by the foremen of the railyard sampling crews. However, because of the nature of their duties, these foremen were usually unable to supervise. For example, they often worked several railcars ahead of the samplers, recording and breaking seals and opening hatches. When finished with that phase of their job, they would work the cars behind the samplers, closing hatches, applying and recording new seals, and picking up official samples. Only one of the agencies had someone following the samplers and reviewing their work. This person would check the grain in the railcar for indentations to determine if the sampler had used the proper probing pattern. Sometimes he would draw another sample from the cars for comparison with the one drawn by the sampler.

Because of the lack of proper training and supervision, it is not surprising that improper grain sampling is a serious and widespread problem in the interior of the United States. Despite very limited FGIS supervision of agency activities (see ch. 5), FGIS files are replete with reports of improper sampling. For example, field office files showed that:

--FGIS supervisors had found an agency's samplers probing only one instead of the required three compartments in hopper cars, after repeated warnings that this practice was improper.

--FGIS supervisors had found barges being loaded and "officially sampled," although the agency's sampler had abandoned his station. The sampler told the supervisors he was aware that he should remain at his station during loading, but that he sometimes left.

--During an unannounced visit, FGIS personnel found that official samples were actually being drawn by elevator employees because the licensed sampler was not physically capable of sampling.

FGIS' management review teams (see p. 67) have also reported numerous cases of improper sampling and other sampling-related problems, such as the following.

--Unlicensed personnel were performing official sampling.

--Samplers had not been properly trained and were not following proper sampling procedures.

--Unapproved equipment was used to obtain official samples.

--Samplers were skipping some required procedures, such as checking samples for odor, insects, condition, and uniformity.

--Samplers had failed to make required checks of diverter samplers before using them to sample grain.

--Samplers had failed to maintain proper controls over samples, such as leaving them unattended.

The review teams had found some of these problems at nearly every agency they reviewed.

The inspection agencies were providing virtually no supervision over certain samplers--called contract samplers--who needed it the most. These samplers are not inspection agency employees but work under contract. They often work alone at great distances from the agencies' offices. Nevertheless, the inspection agencies accept the samples drawn by these samplers as the basis for inspections that result in white (official sample-lot) inspection certificates.

These contract samplers are licensed by FGIS, but no distinction is made on their licenses to differentiate them from inspection agency employees. These persons generally operate mechanical diverter-type samplers and are often recruited and trained by the company that sold or leased the mechanical sampling equipment to the elevator. They often serve elevators capable of shipping unit trains of grain that would not otherwise be able to obtain official inspection services at origin because of the long distances from an inspection agency and the high costs associated with having an agency's employees obtain the samples.

The use of contract samplers is common and appears to be growing. We were able to identify about 100 licensed contract samplers in five of the six circuits reviewed. They were not being used in one circuit, where the only designated agency providing service was a State agency which would not use them because of the loss of sample control. Interviews with FGIS field office supervisors, inspection agency officials, and grain trade representatives confirmed that the inspection activity is becoming more decentralized and is moving away from traditional terminal areas. This situation may result in escalated use of contract samplers. Following are some of the problems inherent in using contract samplers.

--Contract samplers may not be completely independent or unbiased because they are generally recruited from the small, rural communities where the elevators requesting the services are located.

--They serve only one or a few elevators and cannot be easily rotated among elevators within an agency's jurisdiction because of the distances involved.

--It is often very difficult for the agency to know exactly when they are working, because the elevators sometimes contact the samplers directly to arrange for services.

--They often lack the technical training necessary to understand the significance of their job or the operation of the sampling equipment.

--It is difficult for the inspection agencies to supervise them; such supervision was virtually nonexistent.

The following examples reported by FGIS review teams in October 1978 and May 1979 illustrate some of the weaknesses related to using contract samplers. Our review disclosed many similar problems. Such weaknesses, which jeopardize sample accuracy and security, raise serious questions about

the accuracy and reliability of inspection certificates issued.

--A contract sampler, licensed only to perform mechanical sampling, obtained two official samples by probe. The sampler did not know he was not authorized to sample by probe. When FGIS notified the inspection agency of this impropriety, the agency issued submitted sample, or pink (see p. 74), certificates on the samples rather than white (official sample-lot inspection) certificates.

--Several contract samplers employed by two agencies were not aware of the diverter sampler's physical and operating aspects. Some had never been up in the elevator to make required checks of the samplers for condition and cleanliness--two factors that directly affect the representativeness of the samples being drawn. At one of the elevators, FGIS discovered that a bird had built its nest inside the diverter sampler.

--A contract sampler, whose competence had never been tested by FGIS, admitted he never checked railcars for cleanliness before loading, as required by FGIS procedures. He stated that the elevator prepared the mechanical diverter sampler for sampling. Also, he was not aware of certain required procedures, such as checking the samples for odor and condition. Further, in some cases, he did not maintain proper control over samples. When an official sample was lost en route to the inspection agency, he would obtain the portion of the sample he had furnished to the elevator and send it to the agency for grading.

--In sampling grain shipments, a contract sampler had set the timing of the diverter sampler to take a cut of the grain stream every 110 seconds, instead of every 30 seconds, as required by FGIS instructions. By setting the sampler at 110 seconds, he was able to obtain just enough grain to fill the sample bag and avoid having to mechanically divide the sample to reduce it in size. Also, he did not check samples for odor and condition, as required.

--A contract sampler routinely abandoned her station during sampling. She would go to the elevator when elevator management called, prepare the mechanical sampler for sampling, and go home to wait for a call when sampling was finished.

In a meeting with FGIS officials in January 1979, we questioned whether the use of contract samplers by inspection agencies was authorized by the act. They agreed to look into the legality of such use. On July 23, 1979, USDA's Office of General Counsel informed FGIS that, in its opinion, contract samplers are not eligible for licensing under section 8(a) of the act and any grain sample submitted by such a sampler would not be entitled to an "official sample lot inspection" (white) certificate but, at most, only a "submitted sample" (pink) certificate.

In explaining its opinion, the General Counsel said:

> "Clearly, the references to 'personnel' in Section 7(f) of the act contemplate employees of an agency who are subject to the agency's supervision and control, rather than an 'independent contractor.'"

In addition, the General Counsel said:

> "* * * the legislative history surrounding the 1976 amendments reflects the Congressional concern for assuring integrity of the inspection system over the laxness of the past by, among other things, imposing stricter criteria for qualification of an agency and closer supervision by the agency of its personnel, and closer supervision of the agency's operations by FGIS."

We concur in the legal opinion by USDA's Office of General Counsel. However, as of January 15, 1980, FGIS had not taken action to prevent inspection agencies from issuing official sample lot inspection certificates on grain samples submitted by contract samplers.

Inspectors

The 16 agencies we reviewed generally provided little or no supervision or review of their inspectors' work in spite of the subjectivity of grain grading and the importance of assigning accurate grades. Inspectors can be supervised more easily than samplers because the inspectors often work in central laboratories and samples are kept on file for future verification of grading results.

Most agencies did not routinely review their inspectors' work. Two agencies stated that they reviewed or regraded some samples as time permitted, while two others stated they reviewed very few. Another agency's staffing plan provided for a laboratory supervisor whose duties included sample review. However, that position was vacant at the time of our review.

Generally, inspectors must request supervision before the agencies will provide it. Many agency officials said that they provide technical advice to their inspectors as needed. One said that his agency's inspectors often work as a group and when a problem is encountered, each will provide an opinion and the majority rules.

In grading grain, inspectors rely heavily on their senses of smell and sight. Yet none of the agencies required their inspectors to take periodic medical examinations to assure that they were physically fit to perform inspections, and only one agency required (and paid for) inspectors' corrective lens prescriptions to be checked periodically.

Most field office supervisors we interviewed concurred that the agencies were not adequately supervising their inspectors, and FGIS records document the need for better supervision. Despite the very limited FGIS supervision, the files contained evidence of many incidences of misgrading, use of improper inspection techniques, and other deficiencies. For example:

--In September 1978 FGIS received a complaint about seven railcars of wheat shipped to Houston. The company complained of wide variances between dockage 1/ at origin and destination. Upon investigation, FGIS discovered that the FGIS employees in Houston had found buckwheat in samples from the railcars. When inspectors find buckwheat in a sample, they are required to follow a special procedure which usually causes the dockage measurement to be much higher. FGIS stated that the inspector at origin probably did not follow the special procedure and thus failed to record a high enough percentage of dockage on the certificate.

--In September 1977 FGIS supervisors found agency personnel using an outdated moisture conversion chart. In August 1978, at the same location, FGIS supervisors again found agency personnel using outdated charts, although the current charts were on hand. These charts are used to translate a moisture meter reading to the moisture content of the grain. Using the wrong chart results in recording an incorrect moisture content.

1/Lower quality grain and foreign material that is generally deducted from the shipment weight in determining the final sales price.

--In June 1978 a field office supervisor wrote a letter to an inspector regarding the grading of five sour and musty samples whose odor the inspector had not noticed. The inspector was under a doctor's care for an allergy and had been taking medication which impaired his sense of smell. "Some days," he admitted, "I could hardly smell anything at all."

Generally, inspection agency officials recognized the need for more and better supervision, especially over samplers. However, they expected FGIS to provide it. For example, many said that FGIS should increase its supervision, especially over samplers; some wanted FGIS to review more of their inspectors' samples; and others wanted FGIS to station a supervisor in their inspection laboratories to review their inspectors' work. Some agency officials said they did not supervise or regrade their inspectors' samples because they believed that was FGIS' job. One added that having inspectors review each other's work would promote ill will.

Most inspection agencies have not fully accepted their responsibility for supervising their employees as they agreed to do in accepting designation. FGIS needs to establish clear and definitive standards for inspection agencies to use in supervising their employees and ensure that the agencies comply with the standards.

INSPECTORS COULD PROVIDE MORE ACCURATE GRADING RESULTS

The grading accuracy levels of inspection agencies and individual inspectors at interior locations vary widely. Our analyses, as well as analyses by FGIS, indicate that inspection certificates may often be issued that do not reflect the true quality of the grain they represent. Sometimes the grading results appear to be biased in favor of the party requesting the inspection service.

We analyzed all the supervision and appeal inspection results available in FGIS' grain inspection monitoring system (see p. 61) for fiscal year 1978 on damage in wheat, corn, and soybeans; foreign material in soybeans; and broken corn and foreign material in corn. This data, which included about 50,000 factor comparisons, contained inspection results arrived at by licensed inspectors and those arrived at by FGIS employees when both graded different portions of the same sample or different samples from the same lot of grain.

To measure uniformity among the various inspection agencies, we determined the relative percentage of times the respective agencies' original grading results differed, to a significant degree, from FGIS' supervision or appeal inspection results. We considered the differences to be significant when they exceeded FGIS' established "absolute limits"--that is, those points at which FGIS is statistically 99.7 percent confident that the difference was caused by an inspector's grading error.

Our analysis of the 50,000 factor comparisons showed that overall about 4 percent of the original grading results exceeded the absolute limits. Statistically, this figure should not have exceeded 0.3 percent. At inspection points which had at least 50 individual factor results in the system, the percentages by which the grading results exceeded the absolute limits ranged from 0 to 26 percent. Many of the inspection agencies serve more than one inspection point.

Our analysis of data on individual inspectors employed by the agencies within the six field office circuits included in our review showed that grading accuracy varied widely among inspectors and among the field office circuits. For example, within the Fort Worth circuit, 20 inspectors had at least 50 factor analyses in the system; 10 of them exceeded the absolute limits from 6 to 10 percent of the time. In the Minneapolis circuit, 56 inspectors had at least 50 factor analyses in the system; 49 of them had exceeded the absolute limits less than 5 percent of the time. The following table shows the frequency that grading results of the licensed inspectors within the six field office circuits exceeded the absolute limits.

Field office	Number of inspectors (note a) whose results exceeded the absolute limits by 0%	0.1 to 2.9%	3 to 5.9%	6 to 9.9%	10% or more	Range (percent)
Cedar Rapids	1	6	14	5	-	0 to 9.4
Fort Worth	0	3	7	9	1	1.2 to 10.4
Indianapolis	0	5	1	4	4	1.3 to 14.0
Kansas City	0	3	14	5	1	1.6 to 11.7
Minneapolis	2	22	30	2	-	0 to 7.1
Omaha	0	5	23	7	-	1.6 to 9.9

a/Inspectors with fewer than 50 factor analyses on record in fiscal year 1978 were excluded to prevent distortion of statistics.

For years FGIS and its predecessor, the Grain Division of USDA's Agricultural Marketing Service, had suspected licensed inspectors of an illicit practice commonly called "grade shaving." This practice involves adjusting inspection results for grading factors falling on or near grade or known discount lines generally in favor of the elevator requesting and paying for the inspection service. For example, on shipments going out of an elevator and being sold based on the inspection results at the shipping elevator, an inspector supposedly would lower factor results that fell just above the grade and/or discount line. By making such an adjustment, an inspector would avoid having the elevator manager request an appeal inspection because the elevator would benefit financially from such adjustment.

Grade shaving appeared to be an entrenched problem in the interior. We found evidence of it in every circuit we visited. In addition, FGIS' domestic review teams have reported on suspected grade shaving, and in one report they concluded that it was a common problem.

We analyzed a representative selection of about 2,500 inspection certificates issued in fiscal year 1978 on outbound barge shipments by inspection agencies in five of the six field office circuits covered by our review to see how frequently the reported results fell at or slightly above grade and known discount lines. The two factors we checked were foreign material in soybeans and broken corn and foreign material in corn. The discount lines we used were based on

our discussions with grain trade representatives. As shown by the graphs on pages 38 and 39, the results were startling.

As the graphs show, in only three cases did the factor determinations on soybeans fall one-tenth of 1 percent above known grade or discount lines, and in only six cases did the results on corn fall at 2.1 percent--one-tenth of 1 percent above the line for U.S. number 1. It should be noted that yellow corn is normally marketed domestically based on U.S. number 2 quality; therefore, any broken corn and foreign material grading results of 3.0 percent or below usually have no bearing on the contract or the settlement price. Also, soybeans are normally marketed based on a maximum of 1 percent foreign material with any excess deducted from the total weight of the shipment. We were unable to determine the exact contract terms in any of the cases shown in the graphs.

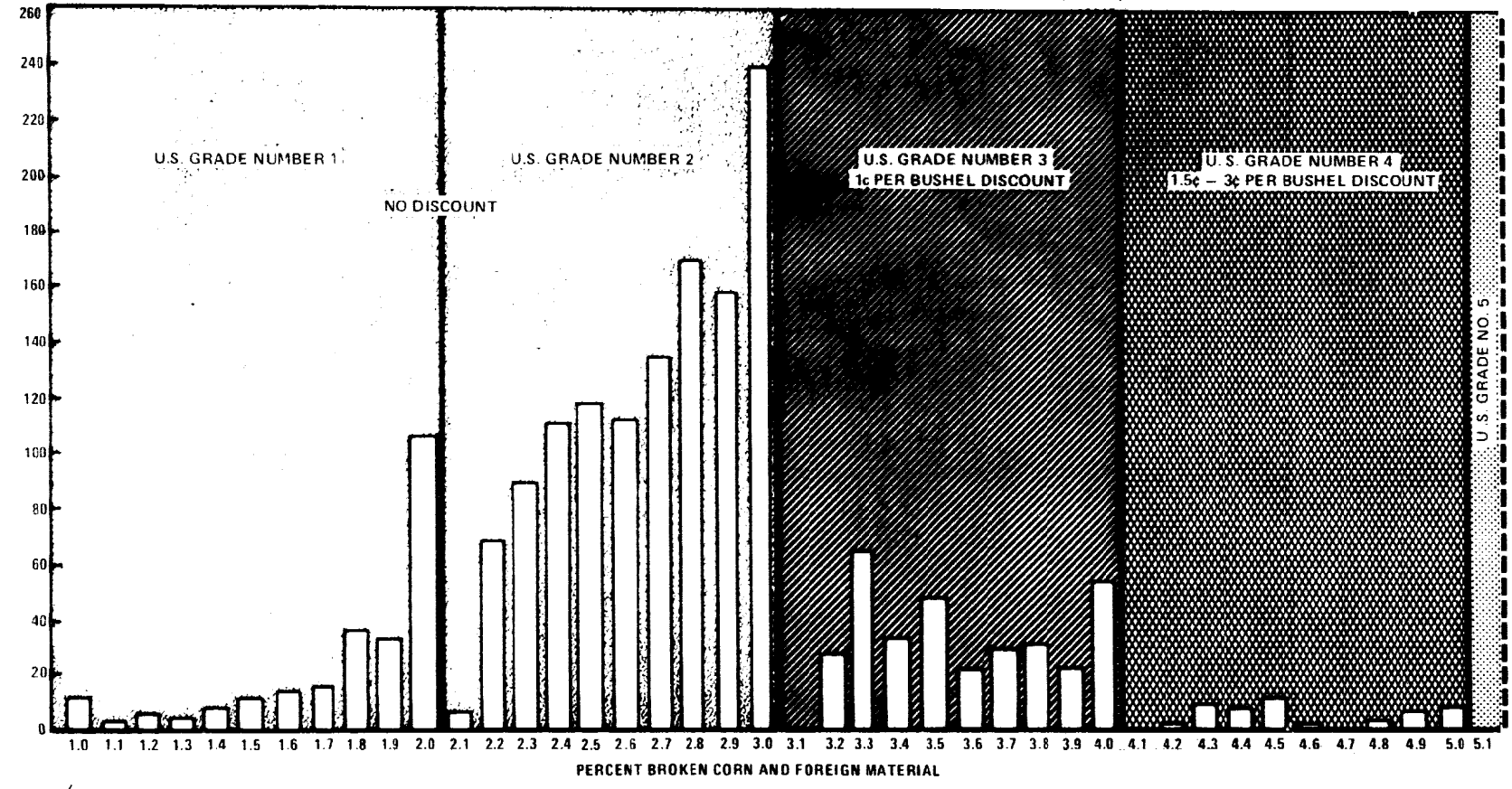
Our similar analyses of certificates issued on truck and rail shipments coming into elevators showed a more normal grading pattern in that inspectors were issuing certificates with some factor grading results shown as one-tenth of 1 percent above grade or discount lines. However, some managers of small country elevators told us they preferred not to have their shipments to terminal elevators officially inspected because they were often graded just beyond the discount lines, resulting in a lower price for their grain.

Several analyses that FGIS has made of grading data gathered through supervision and appeal work for use by its circuit review teams have shown a similar grading trend around the grade and discount lines. After we discussed the results of our analyses of outbound barge shipments with an FGIS official, FGIS initiated a study in August 1979 to determine the extent of grade shaving and/or the improper rounding of grading results in the interior.

In December 1979 FGIS issued a notice stating that (1) it had concluded that improper rounding of grading results and grade shaving had occurred in some cases, which threatens the integrity and reliability of the national inspection system, (2) special corrective actions were to be initiated immediately and be completed by March 1, 1980, to eliminate these practices, and (3) all instances of improper rounding and grade shaving occurring after March 1, 1980, would be subject to appropriate administrative or criminal action.

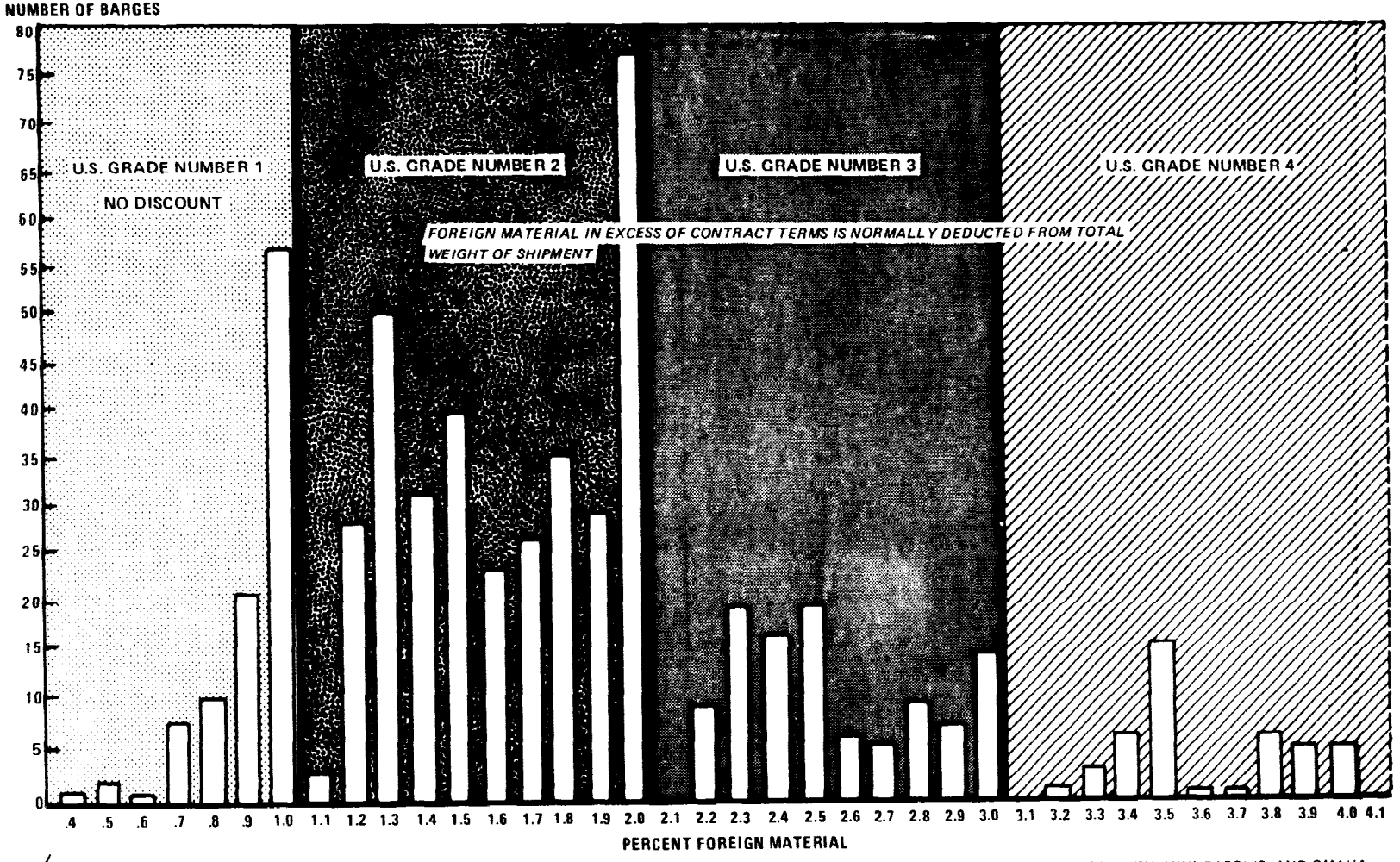
The notice provides that the delegated States, designated inspection agencies, and FGIS field office supervisors are to

GRADING RESULTS AND TYPICAL DISCOUNTS ON BROKEN CORN AND FOREIGN MATERIAL FOR 1,842 OUTBOUND BARGE SHIPMENTS OF YELLOW CORN IN FISCAL YEAR 1978 (note a)



a/ THE GRADING RESULTS WERE DETERMINED BY INSPECTION AGENCIES WITHIN FIVE FGIS FIELD OFFICE CIRCUITS — CEDAR RAPIDS, INDIANAPOLIS, KANSAS CITY, MINNEAPOLIS, AND OMAHA. THE GRAPH DOES NOT INCLUDE 15 OF THE 1,842 RESULTS: 1 THAT WAS LESS THAN 1 PERCENT AND 14 THAT EXCEEDED 5.1 PERCENT.

GRADING RESULTS ON FOREIGN MATERIAL FOR 606 OUTBOUND BARGE SHIPMENTS OF SOYBEANS IN FISCAL YEAR 1978 (note a)



[a] THE GRADING RESULTS WERE DETERMINED BY INSPECTION AGENCIES WITHIN FOUR FGIS FIELD OFFICE CIRCUITS -- INDIANAPOLIS, KANSAS CITY, MINNEAPOLIS, AND OMAHA. THE GRAPH DOES NOT INCLUDE 18 OF THE 606 RESULTS THAT EXCEEDED 4.1 PERCENT.

--brief their employees on the illegality of improper rounding and grade shaving;

--ensure that their employees understand and can demonstrate the proper rounding procedures described in FGIS' Grain Inspection Manual;

--inform their employees that all instances of improper rounding and grade shaving will be viewed as willful noncompliance with FGIS instructions and that FGIS will initiate prompt action to consider or recommend administrative or criminal action when such practices are identified;

--include, as part of all training programs for new employees, special emphasis on the consequences of improper rounding and grade shaving;

--instruct all inspection personnel to immediately report known or suspected instances of improper rounding and grade shaving to the FGIS field office supervisor; and

--require that their employees verify their understanding of the proper rounding procedures and the illegality of improper rounding and grade shaving by signing a form attached to the notice.

FGIS' field office supervisors are responsible for retaining the signed forms on file, updating them as new inspection personnel are hired, and aggressively fulfilling their supervision responsibilities to deter instances of improper rounding and grade shaving.

FGIS' Compliance Division is responsible for assuring compliance with the notice's requirements and for developing and coordinating plans and actions to deter improper rounding and grade shaving. The notice also requires that analyses be done by the various management review teams (see p. 67) to detect improper rounding and grade shaving.

We believe that issuance of this notice is a good first step by FGIS toward eliminating improper rounding and grade shaving practices. Proper followup by FGIS to identify instances of improper rounding and grade shaving, combined with appropriate corrective actions, should result in a major improvement to the national grain inspection system.

CONCLUSIONS

FGIS should establish clear and definitive standards for all elements of quality control that inspection agencies should maintain over their inspection operations and ensure that inspection agencies comply with such standards. Maintaining adequate quality controls over their day-to-day operations is the inspection agencies' responsibility. Proper quality controls in such areas as equipment, staffing, staff training and supervision, and grading accuracy are essential to the accuracy, uniformity, and integrity of the inspection system. It is impossible for FGIS to provide such day-to-day quality control through its supervision and monitoring activities.

Prompt action is needed to resolve the legal impropriety concerning the inspection agencies' use of contract samplers and other problems related to their use. Improper grain sampling, especially by contract samplers, is a serious and widespread problem in the interior. Obtaining a representative grain sample and making sure that it is properly safeguarded until it is graded are essential to ensure that the grade assigned accurately reflects the quality of the sampled lot.

Inaccurate grading, particularly grade shaving, has been identified as a fairly widespread problem. However, in December 1979 FGIS took action to emphasize to its personnel and inspection agencies that improper rounding of grading results and grade shaving will not be tolerated and that prompt corrective action will be taken when such practices are identified. This action, if coupled with proper FGIS followup, should help improve grading accuracy.

RECOMMENDATIONS TO THE SECRETARY OF AGRICULTURE

We recommend that, to improve the accuracy, uniformity, and integrity of the existing grain inspection system, the Secretary direct the FGIS Administrator to:

--Establish clear and definitive standards for the quality controls inspection agencies should maintain over their inspection operations and ensure that the agencies comply with them.

--Take prompt action to resolve the legal and other problems related to inspection agencies' use of contract samplers and the issuance of official sample lot inspection certificates based on samples drawn by such samplers.

--Periodically review FGIS' followup procedures for detecting and detering improper rounding and grade shaving to ensure that they are working properly.

AGENCY COMMENTS AND OUR EVALUATION

FGIS agreed with our recommendations and outlined the actions it has taken or plans to take. (See app. II.) It said that:

--In January 1980 it issued the first chapter of its field office supervisors handbook. The chapter sets out procedures for supervising performance of official agencies in such areas as organization and staffing, training, supervision of employees, licensing, equipment, reports, and records. In addition, FGIS plans to develop (1) by the fall of 1981, quality control standards governing inspection and weighing operations carried out by official agencies and (2) by March 1982, official agency staffing standards. FGIS will then conduct reviews before renewing agency designations to ensure that such standards are met.

--USDA's Office of General Counsel is currently considering alternatives to inspection agencies' use of contract samplers. FGIS plans to use a questionnaire to collect and analyze information on the current use of contract samplers and use the information to evaluate the impact of alternative actions.

--Procedural review teams are to be used to determine compliance with the provisions of FGIS' notice on special actions to eliminate improper rounding of grading results and grade shaving. Appropriate action is to be taken against any individuals or official agencies that are found to be engaged in improper rounding or grade shaving. Also, FGIS plans to consider requiring mathematical computations to be shown on inspection work records.

When fully developed and properly implemented, the actions taken or planned by FGIS should result in substantial improvements in the grain inspection system.

CHAPTER 4

FGIS NEEDS TO FURTHER IMPROVE ITS PROCESSES FOR DESIGNATING INSPECTION AGENCIES AND LICENSING INSPECTION PERSONNEL

Designation of inspection agencies and licensing of inspection personnel are potentially two of FGIS' strongest controls over their performance. In making initial designations, FGIS seems to have done a good job of eliminating or reducing the negative effects of the conflicts of interest that had existed between some inspection agencies and the grain trade. In making future designations, however, FGIS needs to carefully consider each agency's past performance as well as its demonstrated ability to provide quality inspection services.

While FGIS has made certain improvements in its procedures for licensing inspection personnel, it still needs to (1) develop an objective and measurable standard for grading accuracy which inspectors must meet before being licensed to grade grain and (2) ensure uniformity in the content and scoring of inspectors' technical competency examinations.

DESIGNATION--AN IMPORTANT PROCESS THAT SHOULD ENSURE QUALIFIED INSPECTION AGENCIES

FGIS' authority to designate inspection agencies is potentially its strongest control over their performance, because agencies that are not designated cannot perform official grain inspections. It is essential to the integrity of grain inspection that FGIS designate only those agencies that prove they can control the quality of their service and that their management and employees have no conflicts of interest. In designating inspection agencies under the 1976 act, FGIS seems to have taken a firm stance in insisting on legal arrangements to protect inspection agencies' operations from grain trade influence. However, it did not adequately consider past problems with some of the agencies and the effectiveness of their quality controls over inspection operations.

Section 7(f)(1) of the act authorizes the FGIS Administrator to designate any State or local governmental agency, or any person, to provide official grain inspections if the agency or person meets certain criteria and prohibitions against conflicts of interest set forth in the act. The act provides for the designations to terminate at such time as specified by the Administrator but not later than every

3 years. Also, designations may be amended or renewed in accordance with criteria and procedures prescribed in the act.

FGIS needs to improve designation reviews

During its initial designation reviews, FGIS generally did not consider information that was available from its field offices on past inspection problems. The field office files contained substantial documentation and field office supervisors often had specific knowledge about prior inspection-related problems with some of the agencies that were designated.

In one case a field office supervisor provided the officials responsible for designation reviews a list of specific questions he believed were significant about the past history of a particular inspection agency. The questions concerned possible conflicts of interest, alleged bribes offered to licensees, and other possible improper or illegal practices. The field office supervisor was told that the designation reviewers could not use the information he provided because the agency might accuse FGIS of unequal treatment.

Because of this approach, many designated agencies had problems such as those discussed on pages 21 to 34, that should have been resolved in the designation process. For example, in October 1978, only 6 weeks after one agency was designated, an FGIS circuit review team (see p. 67) reported that many weaknesses seemed to have been overlooked by the designation officials. The team reported that the agency provided no supervision or training to its employees and that FGIS regulations and instructions were not available to the employees. The team's report concluded that the agency was not capable of handling its responsibilities as a designated inspection agency.

In January 1979 we discussed with FGIS officials the way designations had been and were being made. We suggested that redesignation should not be automatic and that, in deciding whether to redesignate an agency, FGIS should carefully consider the agency's compliance with the act, regulations, and other requirements, as well as the quality and adequacy of its inspection services since its designation. Also, we suggested that FGIS review one-third of the inspection agencies for redesignation each year, rather than reviewing all official agencies in a single year.

The FGIS officials generally agreed with our observations. They said that during the initial designation effort, FGIS' major concern was the discovery and elimination

of conflicts of interest and that it had not intended to make an indepth review of the inspection agencies. They added, however, that FGIS had tried to assure itself that the agencies had sufficient staff and equipment to provide adequate service. The officials also emphasized that each agency had signed a designation agreement which listed its responsibilities. No such formal agreement had been made with inspection agencies in the past. According to the officials, this document established criteria against which FGIS could measure the adequacy of each agency's performance.

However, a major difficulty faced by FGIS' designation officials was the absence of specific criteria against which to compare the agencies' qualifications for designation. The criteria in the act and in the designation documents are too general. As recommended in chapter 3, FGIS needs to further define these criteria in measurable terms, such as a staffing level that would be considered sufficient or a training or supervision program that is adequate, to enable it to measure the adequacy of the agencies' performance.

With regard to distributing the designation workload over a 3-year period, FGIS announced that effective July 16, 1979, the designations of official inspection agencies were being modified so that one-third of them will terminate each year.

Action to eliminate or reduce conflicts of interest

In designating inspection agencies since enactment of the 1976 act, FGIS seems to have taken a firm stance in insisting on legal arrangements to avoid or lessen the effect of conflicts of interest which had existed between some agencies and the grain trade and which were a major problem cited in our February 1976 report. Whether these arrangements will prove sound, however, must await the test of time.

In amending the act in 1976, the Congress specifically prohibited official inspection agencies from engaging in grain-related businesses and from having financial affiliations with any business involved in the commercial handling of grain. However, section 11(b)(5) of the act allows the FGIS Administrator to grant an exception if he determines that the conflict of interest would not jeopardize the integrity or the effective and objective operations of the inspection agency's functions. Within 30 days of making such an exception, the Administrator is to report to the House Committee on Agriculture and the Senate Committee on Agriculture, Nutrition, and Forestry on the factual bases for granting such exceptions.

On March 21, 1979, the Administrator reported to the committees that 11 such exceptions had been made in designating inspection agencies affiliated with boards of trade, grain exchanges, and chambers of commerce.

We reviewed in detail the bases for the Administrator's determinations in six of these cases and parts of the files for the remaining five. While it appeared that in most cases FGIS was successful in legally separating the inspection operations from control by the grain trade, we believe that some of the arrangements could have been more effective in resolving potential conflict-of-interest problems and in meeting congressional and FGIS standards. Overall, however, FGIS seems to be making an adequate effort to maintain the integrity and the effective and objective operation of the grain inspection system.

In explaining the Administrator's "waiver" authority under section 11(b)(5), the Conference Report (H. Rept. 94-1722, pp. 44-45 (1976)) said that it was expected that, where this authority was used,

> "* * * the Administrator would require the organization to establish an autonomous committee to manage the grain inspection or weighing operation which is free of any conflict of interest."

It was thus expected that there would be some separation between ownership and control of the inspection business to the extent that owners who had conflicts of interest would be divorced from management of the inspection operation.

In the 11 cases in question, the conflicts of interest were that members (stockholders), directors, and/or officers of the agency applying for official designation had interests in grain-related businesses. In keeping with the Conference Report statement, FGIS attempted to separate individuals with conflicts of interest from having control over grain inspection, before waiving any conflicts, and applied the following test:

> "Have plenary powers over all official inspection activities been irrevocably given over to an independent, neutral third party in such a way as to insulate all employees involved in inspection activity--including management officials--from direct or indirect control by grain industry representatives."

In some of the 11 cases, the Administrator resolved the conflicts by prohibiting members with conflicts from having any control over grain inspection activities. In other

cases in which some conflicts remained, the conflicts were generally considered minimal and were waived. FGIS treated all 11 cases, however, as waiver cases and reported them to the committees.

The conflicts were resolved in several different ways. In six cases--Fort Worth Grain Inspection Service, Inc.; Lincoln Inspection Service, Inc.; Los Angeles Grain Inspection Service, Inc.; Louisville Grain Inspection Services, Inc.; Omaha Grain Inspection Service, Inc.; and Sioux City Inspection and Weighing Agency, Inc.--each agency established a subsidiary corporation to receive the designation under the act. All outstanding shares of stock in each new corporation, along with certain property, were placed in an irrevocable trust with a conflict-free trustee--a bank, trust company, or individual--who thereby gained control of the new corporation that would become the official inspection agency. Also, each new corporation prohibited its directors, officers, and employees from having conflicts of interest prohibited by the act. This subsidiary/trust arrangement legally prevents individuals with conflicts from exercising any control over the inspection agency's operations, thus meeting for the most part FGIS' standard and the Conference Report statement quoted previously.

In two other cases--Memphis Grain and Hay Association Inc., and Peoria Grain Inspection Service, Inc.--voting rights of individuals with conflicts were restricted. The corporations were under the direction and control of conflict-free officials, thus accomplishing a legal separation of ownership and control by the affected individuals and meeting FGIS' standard and the Conference Report statement.

In another case--Burlington Chamber of Commerce Grain Fund, Inc.--membership was restricted to conflict-free individuals, and officers, directors, and employees were required to be conflict-free. Legally, this fully resolved the conflict-of-interest problems, and the agency was designated. In July 1979, however, the agency requested that FGIS terminate its designation but agreed to continue providing inspection service until FGIS could designate a replacement agency. As of February 15, 1980, FGIS had not designated a replacement agency.

In the remaining two cases--Denver Grain Association, Inc., and Little Rock Grain Exchange--members with conflicts of interest were required to transfer their stock to conflict-free trustees who thereby gained their voting rights. Directors and officers were prohibited from having grain industry ties. Individuals with conflicts thus surrendered legal influence and control over the operation of their

respective inspection agencies. In concept, this is consistent with FGIS' standard and the Conference Report statement. However, as discussed below, several problems with the trust arrangement in the Denver case make it more susceptible to abuse than the organizational arrangements involved in the other 10 cases.

The Denver agency, which was already functioning as an inspection agency when the 1976 act was passed, had members, directors, and officers with industry ties. To overcome FGIS' objections, all members with industry ties transferred their stock in the agency to a conflict-free trustee--an individual--who thereby gained their voting rights. The board of directors, which includes individuals with industry ties, continues to direct and control the agency's business affairs and management, subject to some control by the trustee and certain other limitations and safeguards.

The trustee is empowered to veto actions of the board of directors "insofar as they relate to conflicts of interest" and to expel directors in certain circumstances. He is to ensure that the business operates impartially and that no members, directors, or employees have actual or apparent conflicts or exert undue influence over the agency that would damage the agency's reputation for fair and impartial inspection and weighing of grain or that would result in possible loss of its official designation. Also, the trustee is to supervise and approve hiring and firing by the Chief Inspector who otherwise has complete control over the inspection operation. The Chief Inspector cannot be fired without the trustee's consent and is prohibited from having conflicts "in the performance of his official functions." Further safeguards include prohibitions against members, directors, officers, or employees acting in any matter in which they have financial or other prejudicial interests or from exerting undue influence over the Chief Inspector in the performance of his job.

Notwithstanding the advice of USDA's Office of General Counsel, which argued that the arrangement described above did not provide sufficient safeguards and that the trustee should be given complete independent control over the agency's inspection operations, the Administrator granted the designation. While the Administrator acted within his authority under section 11(b)(5), he did not take precautions to the same extent taken in other cases, but left room for potential abuse. In this case FGIS did not fully comply with its standards and the Conference Report statement.

We believe the Denver trust arrangement is more susceptible to abuse than the other "waiver" cases because

--grain industry people still own and have some control over the agency;

--the trustee's powers are not broad enough to ensure his complete independence and control;

--the trust is not truly irrevocable;

--the trustee's authority to review and disapprove decisions of the Chief Inspector is not clear--it can be read as being limited to the area of fees and charges; and

--the trustee's power and independence is somewhat restricted in that his decisions may be disputed and required to go to arbitration.

Overall, FGIS seems to have taken a firm stance in the 11 "waiver" cases in insisting on legal arrangements to protect the inspection agencies' operations from grain trade influence. Even in the Denver case where we see some room for abuse, we do not think the system's integrity and effectiveness are unduly jeopardized. However, FGIS will need to closely monitor these inspection agencies to ensure that their inspection operations are not controlled or influenced by the grain trade.

In its interior market study report, CIG recommended that FGIS "exercise care in monitoring official agencies operating under 'trust' agreements to insure the parent organization does not influence the inspection activities." In response, FGIS said that it was actively monitoring the inspection activities of these agencies. We believe that FGIS should include the results of such monitoring in its annual report to the House Committee on Agriculture and the Senate Committee on Agriculture, Nutrition, and Forestry.

FGIS' LICENSING PROGRAM HAS IMPROVED, BUT ADDITIONAL CHANGES ARE NEEDED

Recently, FGIS issued interim licensing procedures which, if followed properly, should make the licensing of all inspection personnel more uniform. Also, it began providing its field offices with data on inspectors' past performance for use in determining whether they should be reexamined for competency before being relicensed. However, it still needs to (1) develop an objective and measurable standard for grading accuracy which inspectors must meet before being licensed to grade grain (see p. 64) and (2) provide guidance to field offices to ensure uniformity in the content and scoring of inspectors' technical competency examinations.

The act specifies that no persons shall perform official inspection functions unless they hold a valid license or authorization from the FGIS Administrator. Also, the Administrator is authorized to issue a license only after he is satisfied that the applicant is competent and is employed by an official inspection agency. All licenses terminate triennially and the Administrator may require reexaminations as he deems warranted to determine the competence of any applicant.

Inspectors' licenses allow them to perform all inspection-related functions, including sampling. Grain samplers may be licensed to perform various types of sampling and stowage examinations. Technicians generally are licensed to perform certain mechanical and laboratory testing functions. Inspectors are the only licensed personnel permitted to issue official grain inspection certificates which show official grades.

Improved procedures for testing and licensing samplers and technicians

Before June 1979, when FGIS issued revised instructions for testing and licensing grain samplers and technicians, licensing procedures varied among field offices and none of them administered formal tests. Some issued licenses to samplers and technicians based on recommendations by the inspection agencies' chief inspectors, without verifying the applicants' knowledge and skills. One issued licenses on the basis of the chief inspector's recommendations and telephone discussions with the applicants. Only at two field offices did FGIS employees actually observe the samplers' performance prior to licensing.

The June 1979 instructions require FGIS field office staff members to personally administer examinations to all applicants for sampler and technician licenses. The instructions specify the procedures for compiling, administering, and scoring the written portions of the tests and provide an inventory of objective questions from which to compile the tests, along with the correct answers. The procedures require that applicants for new licenses be given a practical test to measure their technical competency and allow for a waiver of this portion of the test for license renewals if FGIS deems that test unnecessary.

If properly followed, these instructions should help ensure that testing and licensing of samplers and technicians are uniform and that persons to be licensed for these jobs are qualified to do them.

Inspector licensing examinations should be uniform

Even though FGIS had a formal procedure for licensing inspectors and uniform tests for color vision and for knowledge of laws, regulations, grain standards, and inspection procedures, the content and scoring of the "practical" portion of the examination, which measures technical competence to grade grain, had never been standardized. Headquarters instructions specify the number of grain samples to be graded, but the composition of those samples in terms of the degree of difficulty involved in grading them (such as the types of defects or damage to be covered) is left to each field office's discretion. Thus, the degree of difficulty of the sample composition used in the tests can vary widely among the field offices.

Also, field office supervisors have not been provided instructions as to what constitutes a grading error or what weight should be given an error in scoring the test. Thus, even if samples of comparable composition are used, an applicant could be considered competent by one field office but incompetent by another, simply because different scoring systems are used.

To help ensure uniformity in the inspector licensing examinations, FGIS should specify the composition of samples that the field offices are to use for testing and standardize the scoring system.

Inspector license renewal is becoming less automatic

Until recently, FGIS gave little consideration to the need to reexamine some inspectors for technical competency when their licenses were scheduled for renewal. Such reexaminations are important. They provide periodic assurance that inspectors are maintaining a minimum level of competence as well as updating their skills. This is especially important because revisions are made in the grain standards and grain varieties change over time, as do the official inspection procedures and techniques. Periodic reexaminations provide FGIS a way to ensure that inspectors are keeping abreast of changes in their profession.

Also, some inspectors, licensed years ago, no longer grade grain regularly and as a result may have difficulty maintaining their skills. These licensed "occasional graders" include persons serving in other capacities in the inspection agency, such as general manager, business officer,

and grain sampler. Reexamination of these inspectors is important, because weaknesses in their inspection skills would take a considerable length of time to show up as a result of FGIS' normal supervision.

Yet, waivers of the technical competency reexamination had become routine. Of 246 licensed inspectors whose files we reviewed, only 3 were recommended by field office supervisors for reexamination since their initial licenses were issued, and only 1 was reexamined. Some of the inspectors had held licenses for as long as 20 years and had never been given a technical competency examination.

In June 1979 FGIS' Licensing Branch began providing the field offices with analyses of grading information contained in the grain inspection monitoring system. (See p. 61.) These analyses show the degree to which individual inspectors' grading results differed significantly from results obtained by FGIS employees when they regraded another portion of the same sample or another sample from the same lot of grain. The field offices have been instructed to use this data in deciding whether a licensee should be reexamined for technical competency.

We did not attempt to determine whether more inspectors were being reexamined as a result of such data because this practice was initiated after we completed our fieldwork. However, we believe that such performance data should provide a better basis for deciding whether to require a particular licensed inspector to be retested for competency.

CONCLUSIONS

Designation of inspection agencies is potentially FGIS' strongest control over their performance. In making future designations, FGIS should carefully consider each agency's history of compliance with the act, FGIS regulations, and other requirements, as well as its demonstrated ability to comply with such quality control standards as FGIS establishes and to provide quality inspection services.

FGIS seems to have done a good job of eliminating or reducing the negative effects of the conflicts of interest that previously existed between some inspection agencies and the grain trade. However, it will take more time and experience to determine whether these arrangements will prove effective in every case. Meanwhile, FGIS should include the results of its monitoring of these agencies' activities in its annual report to the House Committee on Agriculture and the Senate Committee on Agriculture, Nutrition, and Forestry, particularly if problems develop.

Licensing of inspection personnel provides FGIS with another strong control over inspection agency and licensee performance. Recently, FGIS issued interim procedures to make the licensing of all inspection personnel more uniform. Also, it began providing its field offices with data on inspectors' past performance for use in determining whether they should be reexamined for technical competency before being relicensed. However, it still needs to (1) develop a standard for grading accuracy which inspectors must meet before being licensed to grade grain (see recommendation on p. 69) and (2) provide guidance to field offices to ensure uniformity in the content and scoring of inspectors' technical competency examinations.

RECOMMENDATIONS TO THE SECRETARY OF AGRICULTURE

We recommend that, to help ensure that official inspections are performed by the most qualified agencies and personnel, the Secretary direct the FGIS Administrator to take the following actions.

--In making future designations, carefully consider each agency's past history of compliance with the act, FGIS regulations, and other requirements, as well as its demonstrated ability to comply with FGIS quality control standards and to provide quality inspection services.

--Include in FGIS' annual report to the House Committee on Agriculture and the Senate Committee on Agriculture, Nutrition, and Forestry the results of FGIS' monitoring of the activities of those inspection agencies which were granted conflict-of-interest waivers pursuant to section 11(b)(5) of the act.

--Develop and furnish guidance to FGIS field offices to ensure uniformity in the content and scoring of inspectors' technical competency examinations.

AGENCY COMMENTS AND OUR EVALUATION

FGIS agreed with our recommendations and outlined its planned actions. (See app. II.) It said that:

--Before renewing an official agency's designation, FGIS will examine all available information on the agency to assess its past history. The examination will include, but not be limited to, such information as past designation checklists, correspondence files, procedural review team reports, grain inspection

monitoring system charts, field office files, and violation case files. Once quality control standards are developed (see ch. 3), FGIS will assess and document agencies' compliance with such standards during designation reviews.

--It will include in future annual reports to the Congress a synopsis of its monitoring results of agencies granted conflict-of-interest waivers, along with any problems that have developed.

--Procedures for ensuring uniformity in preparing and scoring inspectors' technical competency examinations will be included in the licensing handbook to be issued in March 1980. The handbook will also set forth requirements for preparing the practical examinations for inspectors. Procedures developed for scoring proficiency examinations of FGIS graders will also be used for scoring practical examinations of applicants for inspector licenses.

FGIS' planned actions, when fully developed and properly implemented, should improve its processes for designating inspection agencies and licensing inspection personnel.

CHAPTER 5

FGIS NEEDS TO FURTHER IMPROVE ITS MANAGEMENT CONTROL OVER INSPECTION SYSTEM

FGIS' supervision or monitoring of inspection agencies' operations had not been sufficient to identify, and serve as an adequate basis for correcting, inspection problems and for providing a reliable control over grain sampling and grading accuracy. More specifically:

--Supervision planning had not been adequate to ensure minimum coverage of the various types of inspections performed.

--The field offices did not have enough experienced staff to maintain a minimum level of supervision coverage.

--The long distances between FGIS field offices and locations where sampling and inspection functions were performed had often hampered or precluded supervision visits.

--Higher priority had been given to appeal inspections and other projects than to supervision.

--Supervision grading results and appeal inspection results had not been used effectively in identifying potential and actual inspection problems, investigating the causes of the problems, and taking action to correct them.

Section 5(b) of the act requires that all official inspection, whether done by FGIS employees or other persons licensed under the act, be supervised by the FGIS Administrator in accordance with such regulations as he may provide. FGIS has used two methods to supervise inspection operations--sample review and over-the-shoulder supervision. Sample review involves FGIS grading of the file portion of the sample graded by the licensed inspector or grading a new sample drawn by FGIS personnel. Over-the-shoulder supervision involves direct observation of licensees' work.

Recently, FGIS has taken or initiated a number of actions to improve its controls over the inspection system and to make better use of available data in identifying, investigating, and correcting inspection problems. However, further improvements, including a systematic approach to monitoring and evaluating inspection agency performance, are needed.

IMPROVEMENTS NEEDED IN SUPERVISION PLANNING AND COVERAGE

Because supervision activities were not being adequately planned, FGIS had little assurance that it was supervising or monitoring the work of all licensed inspectors systematically. Monthly reports on inspections performed by inspection agencies were not used to plan supervision. Also, a systematic procedure had not been followed in selecting inspection agency file samples for review (regrading) or for providing over-the-shoulder supervision that would ensure minimum coverage of the various types of inspections done by licensed inspectors.

FGIS procedures for selecting file samples for review simply provided for selecting a specific number of samples based on the number of licensed inspectors employed by an agency. For example, the procedures required that 208 samples a year be selected for review when an inspection agency had up to five inspectors. No provision was made for ensuring that the samples selected were representative of the (1) types of grain inspected, (2) mode of transportation, (3) type of movement (inbound or outbound), or (4) type of inspection certificate issued. Also, in some cases the field offices permitted the inspection agencies to select the samples to be reviewed.

As a result the inspection results FGIS monitored were not always representative of the volume and types of inspections done by individual inspectors. Our review of a representative selection of supervisions performed in 1978 showed that the field offices had often concentrated on a few licensed inspectors with little coverage of inspections performed by others. When compared with the number and types of original inspections that were done, field office supervision was unevenly distributed, or gaps existed in coverage, in relation to the four items listed above.

Overall, the level of FGIS' supervision or regrading of inspection agency file samples did not seem adequate to identify grading problems and serve as a basis for correcting them. In fiscal year 1978, supervision of such samples by the field offices covered by our review averaged about 1 percent of total original inspections and ranged from 0.4 percent to 1.9 percent. Some field office supervisors believed that file sample review should cover a minimum of 5 percent of total inspections to be effective in identifying grading problems.

Over-the-shoulder supervision was also limited. At none of the field offices we reviewed were the staffs able to make more than about 23 percent of the supervision visits planned

for fiscal year 1978. For example, one field office planned 13 2-week trips, during which each of the four inspection agencies in the circuit would be visited. The staff made only three trips, and during two the workload was light, thereby limiting observations of sampling and grading activities. Although FGIS instructions require the field office supervisors to prepare and submit for approval their plans for supervision visits, the instructions do not require them to report on the number of visits actually made.

For practical reasons, over-the-shoulder supervision generally was concentrated on inspection and sampling points near the field offices. Most field office supervisors said that they could not send their staffs on supervision trips of more than 1 day because they might be needed for appeal inspections, detail to another field office, or other work. They added that 1-day supervision trips generally are ineffective because most of the time is spent traveling, particularly when inspection and sampling points are located very far from the field office.

The field office supervisors told us that they were concerned about the lack of adequate supervision coverage of inspection and sampling activities. They said, however, that without proper staffing they could do little to increase supervision. Of particular concern was the difficulty involved in supervising or observing grain sampling. The supervisors said that supervision of grain sampling, particularly that done by contract samplers, is very difficult without prior knowledge as to when and where sampling will be performed. In this regard, field office records cited numerous instances in which field office staffs had traveled long distances to observe grain sampling and inspection only to find no sampling, and in some cases no inspection activity, taking place. Also, the field office personnel we accompanied on supervision trips were sometimes unable to find any inspection or sampling activities to observe.

We discussed these problems with FGIS officials who agreed that they need to do more to assure that each licensed inspector's work is reviewed regularly. They also agreed that the grain samples selected for supervision should be representative of the volume and types of original inspections.

On January 1, 1980, FGIS issued the first chapter of a field office supervisors handbook setting forth procedures for conducting supervision visits and supervising all aspects of official inspection agencies' performance. According to FGIS, chapter 2 of the four-part handbook on supervision will be completed and issued in December 1980.

INSUFFICIENT EXPERIENCED STAFF AND LOW PRIORITY ASSIGNED TO SUPERVISION

FGIS had not been able to assign adequate, experienced staff to supervision activities primarily because of the difficulties experienced in hiring, training, and retaining enough qualified staff to carry out inspection and weighing programs at export locations. Generally, low priority was assigned to supervision because the available field staffs were devoting most of their time to other work.

At the time of our fieldwork, the six field offices we reviewed had 58 graders compared with the field office supervisors' estimated staffing needs of 155. These 58 graders were responsible in 1978 for supervising 31 inspection agencies employing 1,337 licensees, who performed 1.6 million official inspections. Aside from this responsibility, the 58 graders performed 19,000 appeal inspections, trained dozens of new employees for export assignments, and performed special projects for headquarters. Also, some of them were detailed to export locations for varying periods during the year.

In addition, the 58 graders, with the aid of 70 commodity samplers, performed other functions which although authorized are unrelated to the Grain Standards Act. These included original inspections of rice and processed grain commodities under the Agricultural Marketing Act, including grain products purchased by Government agencies to determine compliance with contract specifications. In 1978 this work consisted of about 10,000 inspections involving about 15 billion pounds of commodities and foodstuffs.

FGIS employees at the six field offices were not only overloaded with work but many lacked experience. In fact, some were new employees sent to the interior field offices for basic training, after which many of them were to be reassigned to export field offices. Of the 24 experienced, nonsupervisory graders assigned to the six field offices in January 1976, 8 had retired or been transferred by the time of our fieldwork. Of the remaining 16, 11 were located in two field offices that were heavily involved in training new employees.

Under these circumstances it is understandable that supervision of grain inspection activities generally was done only as time permitted and that sampling and grading accuracy problems (see pp. 25 and 34) have continued.

FGIS officials agreed that the field offices were spending too little time supervising or reviewing inspection agencies' work and that higher priority must be given to

supervision. They told us that they were considering budgeting specific amounts of staff-years at each field office for supervision.

LONG DISTANCES OFTEN HAMPER OR PRECLUDE EFFECTIVE SUPERVISION

Much of the inspection activity in the interior takes place far from FGIS field offices. Some sampling and inspection locations are as far as 400 to 600 miles from the field office responsible for supervision. As mentioned earlier, field office personnel have often traveled long distances to perform over-the-shoulder supervision of sampling and inspection activities but have not been able to find anyone performing these functions.

Most field offices are located in cities which have traditionally served as consolidation points for many small shipments of grain. Recently, however, an increasing number of large shipments, such as unit trains consisting of 65 to 125 railcars, have been originating closer to production areas away from large cities. As a result the field offices have difficulty in effectively supervising the inspection activities FGIS is supposed to supervise. The following table shows the one-way distances from the field offices covered by our review to the farthest inspection and sampling points under their jurisdiction.

Field office	Miles to farthest	
	Inspection point	Sampling point
Cedar Rapids	117	160
Fort Worth	463	615
Indianapolis	220	295
Kansas City	161	184
Minneapolis	89	174
Omaha	186	416

In some cases the number of inspections done by certain agencies within a field office circuit is higher than those done by the agency in the city where the field office is located. For example, of the total inspections in the Indianapolis field office's circuit in fiscal year 1978, 30 percent were done by the Columbus, Ohio, agency and 18 percent by the Cincinnati, Ohio, agency compared with 5 percent by the Indianapolis agency. This indicates that the field office may be in the wrong place or that suboffices or personnel responsible for supervising inspection activities should be located in or closer to the cities where the larger volumes of inspections are done.

FGIS officials acknowledged that distance is one of the biggest problems the field offices face in supervising or monitoring the interior inspection system. As of November 9, 1979, FGIS had established two additional interior field offices and was considering realignment of the areas covered by several field offices to shorten the distances to where the larger volumes of inspections are done.

NEED FOR SYSTEMATIC APPROACH TO MONITORING AND EVALUATING INSPECTION AGENCY PERFORMANCE

FGIS needs to take a systematic approach to monitoring and evaluating performance by inspection agencies and individual inspectors. It needs to establish

- --a standard for grading accuracy which inspectors must meet before being licensed to grade grain and which can be used to measure the acceptability of individual inspectors' and inspection agencies' day-to-day performance;

- --adequate criteria or guidance for identifying potential or actual grading problems;

- --adequate procedures and guidance for following up or investigating inspection-related problems to determine their causes;

- --clear lines of authority and responsibility for dealing with inspection-related problems;

- --criteria for taking action against inspection agencies and/or licensees to correct problems identified; and

- --a system of penalties or sanctions to be imposed against inspection agencies, licensed inspectors, samplers, and technicians for substandard performance or for violations of the act, regulations, procedures, and other requirements.

Recently, FGIS has initiated some actions to improve its computerized grain inspection monitoring system and the use of system reports in identifying, investigating, and correcting inspection problems, but further improvements are needed. Also, in September 1979 FGIS was developing instructions setting forth criteria for dealing with licensees when sampling and inspection problems are identified. The instructions would clarify the authority and responsibility of field offices and FGIS headquarters for dealing with such problems and require consultation with USDA's Office of General Counsel on the specific sanction or penalty to be assessed against a licensee for a serious infraction.

Need to further improve monitoring system and use of its products

FGIS' grain inspection monitoring system has a high potential as an excellent management tool for monitoring and evaluating inspection agency and licensee performance. However, further improvements are needed in the system and in the use of system reports in identifying potential and actual grading problems that should be investigated to determine the cause and the corrective action needed.

The system was established to help ensure that inspectors maintain competency in grain grading and that grain quality determinations are uniform among inspectors and inspection sites. It was designed to monitor, detect, and serve as a basis for investigating and correcting actual or potential grading problems before they become serious.

The monitoring system employs a two-tier approach: FGIS field office personnel monitor the grading accuracy of individual licensed inspectors and FGIS' Board of Appeals and Review monitors the grading accuracy of field office personnel.

The monitoring involves the regrading of grain samples after original inspections. Regrading can result from an appeal inspection or supervision of an original inspection. Either a new sample is drawn from the same lot of grain or a file sample is regraded to determine the accuracy of original grading results.

The original and regrading results are placed in an automated data system which compares the two results on each grading factor, such as moisture, test weight, damaged kernels, and foreign material, and matches the differences against set criteria or tolerances 1/ to determine if significant grading problems exist. The automated system produces periodic charts which present the comparisons by factor for each inspection point. The charts also identify grading differences that violate established tolerances or other rules, indicating potential grading problems that should be

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1/Two statistical limits are used: the absolute limit and the tolerance limit. On the average, only 3 results in 1,000 should exceed the absolute limit due to sample variation alone; therefore, it is likely that any additional results exceeding the absolute limit would involve grading errors, whereas 1 result in 10 may exceed the tolerance limit due to sample variation alone.

investigated to determine the cause and, if warranted, the corrective action needed. The system is capable of making other analyses, including producing charts on grading results of individual inspectors and stratifying those results by grain shipments going into or out of elevators.

During the early part of our review, we noted that the monitoring system's products were rarely being used to identify potential grading problems that should be investigated to determine the cause and the corrective action needed. Field office supervisors said that the output charts were (1) received too late, (2) prone to keypunch error, and (3) difficult and time consuming to interpret and relate to individual inspectors. Some also said that no guidance had been provided on how to evaluate the output charts and deal with violations of the system's tolerances.

Moreover, data submission requirements were not being enforced and controls had not been established to ensure collection of enough information to properly evaluate individual inspectors, primarily because (1) low priority was given to inspection monitoring by field offices (see p. 58) and (2) the method of selecting samples did not ensure representative coverage of individual inspectors' work (see p. 56). In addition, FGIS appeared to be giving low priority to correcting system design and technical problems. We felt, however, that the potential of the system was just too great to ignore.

To evaluate and demonstrate the system's potential use, we used the system tolerances to compare original and supervision grading results for a representative selection of fiscal year 1978 supervisions by five of the six field offices we reviewed. (Supervisions by the sixth field office represented only 0.4 percent of the total original inspections in its circuit, which we considered insufficient for a meaningful analysis.) We limited our analysis to two factors: damaged kernel total and foreign material (or broken corn and foreign material) for corn, sorghum, soybeans, and wheat. Grading of one of the factors, damaged kernel total, requires a judgmental analysis while grading of the other, foreign material, primarily involves a mechanical analysis. Both factors may involve substantial discounts when the grading results differ from contract specifications.

Our analysis indicated wide variances in grading accuracy among inspection agencies and individual inspectors and, in many cases, a fairly high percentage of original grading results violated FGIS tolerances. For example, our analysis of 53 damaged kernel total supervisions for corn showed that

for one inspection agency the original grading results violated FGIS tolerances in 16 of 53 cases, or 30 percent, including violations of the absolute limit in 3 cases. Also, one inspector's grading results for broken corn and foreign material violated FGIS tolerances in 67 percent of the cases selected, including violations of the absolute limit in 47 percent of the cases.

In October 1978 we asked FGIS for special printouts of data on inspection agencies covered by one field office circuit and used the data to illustrate that it could be used to identify potential grading problems. Subsequently, FGIS began devoting more attention to improving the monitoring system and began producing additional reports for use by field offices and management review teams evaluating field office and inspection agency operations.

In January 1979 we discussed with FGIS officials the preliminary results of our evaluation of FGIS' monitoring of inspection activities. We told them that the monitoring system had not been used effectively as a management tool in part because supervision coverage was too low, FGIS had not ensured that inspection agencies followed prescribed procedures for randomly selecting samples for regrading by FGIS, and the samples regraded were not representative of the original inspections. In some cases there was little or no FGIS review of some licensed inspectors' work for extended periods of time.

We pointed out that field office personnel needed better guidance and training on (1) interpreting and using information produced by the system, (2) recognizing potential or actual grading problems, (3) proper procedures for following up to determine the causes of the problems, and (4) criteria to be followed in taking action to resolve problems identified.

We suggested that the monitoring system be restructured to require random selection of file samples for review on a basis that would be representative of the volume and makeup of each inspector's work. We also pointed out that

--the system, if developed to its full potential, could serve as an excellent source of historical data that could be used to identify grading accuracy problems that require followup to determine the cause and the proper corrective action needed;

--clear lines of authority and responsibility should be established for dealing with inspection-related problems; and

--to ensure consistency in actions taken, appropriate criteria should be established for taking action against inspection agencies and licensed inspectors, samplers, and technicians for violations of the act, regulations, procedures, and requirements, and for substandard performance.

FGIS officials agreed that they needed to do more to ensure that each inspector's work is reviewed regularly and that the samples selected and reviewed should be representative of the inspections performed. They said that they had begun to use some data from the monitoring system to identify inspection problems at several locations and that they hoped to develop the system to its fullest potential as a management tool.

Since the January 1979 meeting, FGIS has made many improvements to the monitoring system and it is now providing more useful and timely information. Controls have been established to reduce keypunch errors and, at the time of our review, FGIS was in the process of changing the chart production frequency with the goal of producing data in the charts within 2 to 4 weeks after the monitoring inspection. Previously, input data did not appear in the charts until 5 to 9 weeks after the end of the period covered. Also, each month charts are being prepared on inspectors whose licenses are scheduled for renewal. Field offices can use these charts in evaluating inspector performance and in determining whether a licensee should be reexamined for technical competency.

Also, in July 1979 FGIS initiated, at three FGIS field offices, a field test of new random selection procedures designed to obtain for regrading a representative sample of all inspections performed. The procedures applicable to inspections done at interior locations provide for 10 percent coverage of all barge and unit train inspections and 3 percent coverage of all others. The procedures also provide for monthly supervision visits by FGIS field office personnel to each inspection site. The test period was to run for 3 months before a decision would be made whether to implement changes nationwide. Subsequently, the test was expanded to 10 additional field offices and the test period was extended several months.

Need for standard to measure inspector performance

FGIS does not have a standard for grading accuracy that inspectors must meet before they are licensed to grade grain and which can be used to measure their day-to-day performance.

Such a standard seems essential to a systematic process of monitoring and evaluating inspector performance and would help FGIS in evaluating overall inspection agency performance from the standpoint of the adequacy of its training and supervision programs.

Until FGIS establishes a standard for grading accuracy, it will not have an adequate basis for uniformly (1) determining that licensed inspectors have the minimum skills required to accurately grade grain (see p. 49), (2) measuring and evaluating inspectors' performance, and (3) identifying potential and actual grading problems that should be investigated to determine the causes. Such a standard is also essential for developing and applying criteria for taking consistent corrective actions against inspection agencies and/or individual inspectors whose performance is unacceptable.

Criteria needed for taking action on inspection-related irregularities

Although FGIS supervisors and management review teams have found many sampling, grading, and other inspection-related irregularities, corrective actions taken by field offices varied, primarily because of a lack of specific criteria for determining what actions should be taken against licensees and/or inspection agencies and because FGIS had not established clear lines of authority and responsibility for reporting and/or correcting inspection problems. Some field offices used a standard corrective action report to record and report inspection irregularities to licensees, and one had issued warning letters to inspection agencies and licensees. We found no evidence, however, that one of the offices had used either reports or warning letters. Some field office supervisors we interviewed were uncertain as to their authority and responsibility for dealing with inspection problems.

Each field office generally exercised its own judgment in deciding what constituted substandard or unacceptable performance in a given situation. However, most field office supervisors we interviewed considered a difference of two grades or more between original inspection results and supervision or appeal inspection results to be cause for taking action against a licensee. Other supervisors followed other judgmental criteria which were not always consistent among field offices. The only instruction for taking corrective actions that we were able to locate was dated December 1, 1959, and, according to an FGIS official, is out of date and not used.

Under the act and FGIS regulations, official inspection personnel are subject to administrative or criminal action whenever it is determined that they have improperly performed any official function or have otherwise violated the act or FGIS regulations or instructions. For serious violations, which may be subject to criminal prosecution, the act authorizes the Administrator to refuse to renew or to suspend or revoke a license after the licensee has been afforded an opportunity for a hearing. If deemed in the best interest of the inspection system, the Administrator may, without a hearing, suspend a license temporarily pending final determination.

Also, the act authorizes the Administrator to revoke the designation of an official agency, after the agency is afforded an opportunity for a hearing, if it has (1) failed to meet required designation criteria, (2) not complied with any provision of the act, regulations, or instructions, or (3) been convicted of any violation of other Federal law involving the handling or official inspection of grain. If deemed in the best interest of the inspection system, the Administrator may, without a hearing, suspend an agency's designation temporarily pending final determination.

According to FGIS, the following actions were taken against licensees and inspection agencies in fiscal years 1978 and 1979.

Action	Number of cases in fiscal year 1978	1979
Warning letter issued to licensee	5	4
Warning letter to licensee pending	-	5
License suspended for a definite period	-	6
License canceled	2	2
License revoked	-	1
Inspection agency designation suspended for a definite period	-	1
Warning letter to inspection agency pending	-	1
Total	7	20

Overall statistics on corrective action reports issued were not readily available.

As of September 1979 FGIS was developing instructions to set forth criteria for dealing with licensees when sampling and inspection irregularities are identified. The draft instructions would (1) provide criteria for field office supervisors to follow in issuing corrective action reports to licensees, (2) require that the report be routed to the licensee through the inspection agency's chief inspector, and (3) require that a copy of each report be forwarded to FGIS' Compliance Division.

On receiving a report, the Compliance Division would review it and other available records to determine if the infraction is severe enough by itself or along with other prior infractions to warrant (1) issuing a caution or warning letter to the licensee, (2) suspending or revoking the licensee's license, or (3) recommending criminal prosecution. All such actions would be required to be coordinated with USDA's Office of General Counsel and other FGIS divisions and offices. Also, only the Compliance Division or regional directors and field office supervisors with the Compliance Division's approval would be authorized to issue caution or warning letters, after consultation with the Office of General Counsel.

The instructions being prepared appear to be the type of guidance needed to provide criteria and clear lines of authority and responsibility for taking action against licensees to correct inspection irregularities. However, similar criteria need to be developed for taking action against inspection agencies because the draft instructions cover licensees only.

MANAGEMENT REVIEW TEAM CONCEPT

In early 1978 FGIS implemented a management review team concept for evaluating inspection agency compliance with FGIS' inspection and weighing instructions and regulations. The teams also review and evaluate FGIS field office operations. The teams visiting domestic locations are referred to as domestic or circuit review teams. The teams usually consist of representatives from various FGIS headquarters divisions and field offices who make unannounced visits to selected inspection sites. Generally, different team members are assigned each time a visit is made. They observe inspection operations, interview inspection agency officials and personnel, and examine records to identify technical and administrative problems.

The first domestic review team visit was made in June 1978. As of October 1979 the teams had made 25 visits, including 2 which covered inspection operations of all inspection agencies within a field office circuit. The review teams have disclosed problems in virtually all aspects of inspection operations, including grain sampling and controls maintained over samples, grain grading, equipment testing, use of unauthorized equipment, licensing, training, supervision, and safety.

Regarding the review teams, OIG recommended in its report on the interior inspection and weighing systems that FGIS (1) continue the review team concept, (2) provide permanent members for these teams where possible, and (3) require that team reports be issued and responded to promptly. OIG also pointed out that where possible the review teams should allow for more time to be spent onsite at interior locations.

In responding to OIG's recommendations, FGIS said that it was not yet feasible to assign permanent members to the review teams and that the timeliness of issuing team reports had improved and prompt replies were being received.

We believe that the review team concept has served as an excellent management tool for uncovering inspection problems that otherwise would not have been brought to top FGIS officials' attention. We agree with OIG that this centralized management review concept should be continued.

CONCLUSIONS

FGIS' supervision or monitoring of inspection activities needs to be improved. Generally, it has not provided a reliable control over grain sampling and grading accuracy. Samples selected for regrading have not always been representative of individual inspectors' work; the field offices generally have not had enough experienced staff to maintain a minimum level of supervision coverage; and higher priority has been given to appeal inspections and other projects than to supervision. Moreover, FGIS generally had not effectively used supervision grading results and appeal inspection results in identifying potential and actual inspection problems, investigating the causes of the problems, and taking action to correct them.

In addition, FGIS needs to review the locations of its field offices because the long distances between some of the field offices and the high volume sampling and inspection locations have often hampered or precluded effective FGIS supervision.

Although FGIS has made some improvements to its computerized grain inspection monitoring system, it needs to continue to develop and improve the system and the use of system reports to effectively monitor and evaluate inspection agency and inspector performance.

Also, in recent months FGIS has taken or initiated a number of actions to improve its controls over the inspection system and to make better use of available data in identifying, investigating, and correcting inspection problems. However, further improvements, including a systematic approach to monitoring and evaluating inspection agency performance, are needed.

RECOMMENDATIONS TO THE SECRETARY OF AGRICULTURE

We recommend that, to help ensure a systematic approach to monitoring and evaluating performance by inspection agencies and individual inspectors, the Secretary direct the FGIS Administrator to:

--Budget specific staff-years for supervision and monitoring of inspection activities and ensure that adequate priority is given to this important function to maintain a minimum level of coverage of each agency's and licensed inspector's work. (The level of coverage could be increased when potential or actual problems are identified or it could be decreased after sufficient experience is gained to demonstrate that an agency's quality controls are adequate and that its grading is accurate.)

--Review the locations of interior field offices, and, where practicable, relocate or establish suboffices of those that are long distances from where the large volumes of inspections take place.

--Develop an objective and measurable standard for grading accuracy that inspectors must meet before they are licensed to grade grain and which can be used to measure their day-to-day performance as being acceptable or unacceptable.

--Implement a sample selection methodology that ensures that the samples selected for regrading are representative of the total inspections performed by each licensed inspector.

--Continue to develop the grain inspection monitoring system so that it can be used as an effective management tool for monitoring and evaluating inspection agency and inspector performance.

--Develop criteria and provide guidance for use by field offices in identifying potential or actual grading problems and ensure that they make effective use of monitoring system data and other available data in identifying, investigating, and correcting inspection problems.

--Develop procedures and guidance for following up or investigating inspection-related problems to determine their causes. (Provision could be made for field offices to report a problem to an agency's chief inspector and require the inspector to investigate the problem and report back on what was found and what action was taken to correct the problem. If the problem persists, the field office could investigate, determine the cause, and initiate corrective action.)

--Establish clear lines of authority and responsibility for dealing with inspection problems.

--Develop specific criteria for taking action against inspection agencies and licensees to correct problems identified.

--Develop a system of penalties or sanctions to be imposed against inspection agencies and licensees for violations of the act, regulations, procedures, and other requirements, or for substandard performance.

AGENCY COMMENTS AND OUR EVALUATION

FGIS agreed with our recommendations and outlined the actions it has taken and plans to take. (See app. II.) For example, FGIS said that it:

--Has budgeted staff-years for supervision and monitoring of official services. A monitoring system is to be completed in fiscal year 1980 which will ensure that the supervision provisions of the recently issued chapter of the field office supervisors handbook (see p. 57) are carried out.

--Has already analyzed some interior field office locations, established one new field office, moved two offices, and opened several suboffices. An analysis of other field office locations is to be completed by

the end of calendar year 1980. Also, FGIS is considering the use of mobile inspection laboratories and seasonal suboffices. This project is planned for completion in fiscal year 1982, depending on the availability of funds.

--Is currently field testing a new grain sample selection procedure, which will ensure review of a random selection of original inspections performed by all licensed inspectors. A review of the results for the first 3 months of the test is scheduled to be completed by June 1, 1980, after which, according to an FGIS official, a decision will be made on implementing the new procedure nationwide.

--Has made numerous improvements to the grain inspection monitoring system during the past 18 months. Further improvements and new applications of system information are scheduled for completion by January 1981.

--Has developed specific criteria for taking action against licensees and a system of penalties or sanctions, which will be included in a licensing handbook to be issued in March 1980. Action against official agencies will continue on a case-by-case basis until FGIS develops specific criteria and penalties or sanctions for official agencies, which will begin by fiscal year 1981.

When fully developed and properly implemented, the above actions along with other actions taken or planned by FGIS should substantially improve FGIS' controls over the inspection system.

CHAPTER 6

REVISIONS NEEDED TO BETTER SHOW LIMITATIONS OF QUALIFIED OFFICIAL CERTIFICATES

Because users of certain qualified official inspection certificates are confused about their meaning, FGIS needs to improve the way qualifying statements are shown on these certificates. Currently, FGIS permits inspection agencies to issue two types of qualified certificates in addition to the unqualified "official sample-lot inspection" certificate (commonly referred to as the "white" certificate). Both of these qualified certificates (commonly called "pink" and "yellow" certificates) are issued based on samples drawn by persons who are not employees of official inspection agencies.

Some users of the pink and yellow certificates do not fully understand the differences between the way samples are drawn for grading and issuing such certificates and the sampling methods used for white certificates. FGIS has taken action to improve the understanding of the pink certificates, but information needs to be placed on the yellow certificates to better inform users of the limitations as to their reliability.

WAREHOUSEMAN'S SAMPLE-LOT INSPECTION CERTIFICATE

The "warehouseman's sample-lot inspection" certificate--the yellow certificate--is issued by an official inspection agency based on its grading of a grain sample obtained by a sampler licensed by FGIS but employed by the elevator (warehouseman) requesting the inspection service.

The yellow certificate program, initiated in 1971, requires a formal contract between FGIS and a participating elevator. In these contracts the elevators agree, among other things, to (1) maintain the accuracy of the mechanical diverter-type sampling equipment, (2) employ only competent samplers who are licensed by FGIS, and (3) assume responsibility for and provide adequate supervision to ensure that their licensed samplers perform their duties properly. The program's purpose is to make official inspection service more available, especially to outlying points. The service is restricted to use for domestic grain shipments and requires that the samples be drawn by a mechanical diverter-type sampler.

The yellow certificate program has inherent conflicts of interest. The samplers, although licensed by FGIS, depend on the elevators for continued employment, and although the contract with FGIS prohibits it, many have a direct financial interest in the grain being officially sampled. We identified 94 licensed samplers in the six field office circuits we reviewed who were actually elevator owners, operators, managers, or superintendents.

The following examples illustrate program abuses we noted during our review.

--We noted two cases in which yellow certificates were issued on grain the samplers had permitted to be loaded into railcars that were contaminated with fertilizer. In one case the fertilizer was discovered at an export location during the loading of a ship which reportedly had to be unloaded--a very costly process. (FGIS instructions require a railcar or other conveyance to be examined, before the loading of grain, for conditions which could contaminate the grain or otherwise lower the quality of the grain to be loaded.)

--Warehouseman's samples that were not representative of the lot of grain they were supposed to represent have been submitted to inspection agencies for grading. In one case we noted that warehouseman's samples on nine railcars submitted for inspection were graded number 1 or 2 yellow corn at origin. At destination the corn was graded number 4 or 5. FGIS appeal and supervision regrading results sustained the official grades issued both at origin and at destination. FGIS concluded that either the cars were "plugged" with inferior corn or the samples graded at origin had been switched or tampered with. The buyer informed FGIS that it was the second such incident within 10 days on grain shipments received from the same elevator. The inspection agency notified the elevator that it would not issue yellow certificates on future warehouseman's samples from that elevator until the problem was resolved. The licensed sampler submitting the samples was the elevator superintendent.

The yellow certificate does not contain adequate information on its face to properly inform its users of the source of the sample used to determine the grade of the grain represented by the certificate. It provides space for the name of the warehouseman's sampler, but it does not explain that the warehouseman's sampler could have a direct financial interest in the grain he sampled.

Some elevator managers we interviewed did not fully understand the difference between the various types of official inspection certificates. Also, some field office supervisors and chief inspectors of official inspection agencies did not like the yellow certificate program. They stated that the program was established under the assumption that the grain trade would police it but that abuses had occurred and, for the most part, the program was dying.

FGIS officials with whom we discussed this program in January 1979 generally agreed with our observations. They said that:

--The yellow certificate program has been retained because the 1976 act provides for such a program.

--Although the program has its shortcomings, it is designed to provide a special service to the trade.

--The program is intended to be self-policing with no provision for FGIS monitoring of sampling, but the trade has not properly policed sampling operations and many abuses have occurred.

--As a result of the abuses, use of the certificate is declining, but unfortunately it is being replaced by white certificates issued on the basis of samples obtained by contract samplers. (See p. 29 to 32 for discussion of contract samplers.)

Because the yellow certificate service may be needed in some parts of the country, eliminating the program may not be appropriate at this time. However, action is needed to ensure that these certificates adequately inform their users of the potential conflicts inherent in the relationship between the grain firms requesting the service and the samplers. Printing the word "QUALIFIED" in bold print across the face of the certificate along with a footnote explaining why it is so qualified might better inform users of the limitations on the yellow certificates' reliability.

SUBMITTED SAMPLE INSPECTION CERTIFICATE

FGIS has permitted inspection agencies to place railcar, truck, or other identification numbers on inspection certificates issued on submitted samples (commonly referred to as "pink" certificates), although a licensed inspector issuing such a certificate has no assurance as to what lot of grain the sample represents or the manner in which it was drawn. While the pink certificates being used at the time we made our review contained a statement in fine print that the in-

spection results related only to the sample submitted and not to the grain from which it may have been taken, such a statement did not seem adequate to clearly indicate to potential certificate users the lack of official sampling.

Use of the pink certificate generally is limited to local transactions, such as truck deliveries, where both buyer and seller are represented at the time of transfer. Farmers, country elevators, and domestic processors use this service. Also, in some markets pink certificates are used to provide advance grade information for trading purposes, even though settlement may be based on official grades determined at destination. Some small country elevator operators we interviewed were settling grain sales on the basis of pink certificates but indicated they did not know that more than one type of certificate is used or that the pink certificate is not based on an official sample.

In the discussions with FGIS officials in January 1979, we suggested that the best solution to the problem might be to place an appropriate qualifying statement on the pink certificate rather than prohibiting the placing of conveyance numbers on the certificate.

Subsequently, FGIS revised its regulations to require the following statement in bold print on the face of the pink certificate:

> "The sample identification and inspection results shown on this certificate are assigned only to the quantity of grain in the sample indicated and not to any identified carrier, container, or lot from which the sample of grain may have been taken * * *."

The regulations also require printing of the words "not officially sampled" in ghost or shadow type diagonally across the face of the certificate.

CONCLUSIONS

The changes made to the pink certificate should help avoid future misunderstandings about the certificate's reliability due to the inspector's lack of assurance about what lot of grain the sample represents or the manner in which it was drawn. However, similar changes need to be made to the yellow certificate. Although use of the yellow certificate is declining, an appropriate qualifying statement needs to be placed on the certificate to better inform users of the limitations on its reliability.

RECOMMENDATION TO THE SECRETARY OF AGRICULTURE

We recommend that the Secretary direct the FGIS Administrator to revise the warehouseman's sample-lot inspection certificate to include the word "QUALIFIED" across the face of the certificate, along with a footnote explaining the reason, to better inform users of the limitations on the certificate's reliability.

AGENCY COMMENTS AND OUR EVALUATION

FGIS agreed with our recommendation and said that it would amend the regulations under the act by October 1, 1980, to include the word "QUALIFIED" across the warehouseman's sample-lot inspection certificate along with an explanatory footnote. (See app. II.) When implemented, this should better inform users of the limitations on the certificate's reliability.

CHAPTER 7

GRAIN WEIGHING IN THE INTERIOR OF THE UNITED STATES--TWO SUPERVISION SYSTEMS

The two grain weight supervision systems available in the interior of the United States--one operated under the general direction of AAR and the other under the direction of FGIS, pursuant to the Grain Standards Act--are separate and distinct. To date, nearly all weight supervision on domestic shipments in the interior has been provided under the AAR system, or, in the case of truck and barge shipments, it has been provided by the same agencies providing weight supervision on rail shipments under AAR's system. AAR's system is carried out mainly through railroad-affiliated inspection and weighing bureaus and State or grain trade-related weight supervision agencies and official inspection agencies. The FGIS system, which is being carried out by FGIS and designated State agencies, only recently became available to the grain trade and has been implemented at only a few locations.

While each program has certain strengths and weaknesses, most of the grain trade officials we interviewed, as well as respondents FGIS and OIG interviewed, were opposed to changes or increased Federal involvement in weight supervision. Subsequent sections of this chapter describe the two systems and their strengths and weaknesses and discuss certain changes that FGIS needs to make to improve its program requirements, including the need for regulations specifying the conditions or criteria that must be met before the FGIS Administrator would implement mandatory official weighing or supervision of weighing. Currently, the Grain Standards Act provides FGIS (1) broader weighing than inspection authority at interior locations and (2) greater weighing authority at some interior locations than at others. For example:

--At interior locations where official inspection is provided, FGIS is authorized to implement mandatory weighing services on its own initiative; at other interior locations the services can be provided only upon request.

--Neither the act nor its legislative history provide any guidance as to the conditions or criteria that must be met before FGIS can implement mandatory weighing services at interior locations where official inspection is provided. Moreover, the FGIS Administrator had not established regulations specifying the conditions or criteria that must be met.

--While FGIS is authorized to implement weighing services at certain interior locations, official inspection services can be provided at interior locations only upon request.

--FGIS' personnel can provide weighing services at interior locations for an indefinite period, while they can provide original grain inspection at such locations only on an interim basis until an official agency can provide the service.

AAR GRAIN WEIGHT SUPERVISION SYSTEM

AAR's grain weight supervision system (referred to by AAR as "grain market classification") was organized in the 1950's to help reduce rising grain loss claims against its member railroads. As stated previously, ICC requires railroads to pay loss-in-transit claims that exceed 0.25 percent of the grain shipped when they are responsible for the losses. ICC requires railroads to investigate each claim on an individual basis and to consider, among other factors, whether the weighing was supervised and the quality of that supervision. Established freight tariffs allow railroads to accept supervised weights as a basis for grain shipment freight assessment, thereby eliminating the need to route all railcars over railroad-owned track scales. Because of the ICC requirements, railroads have a vested interest in grain weight accuracy and supervision.

AAR's role

AAR has established standards for classifying grain markets and elevators according to their facilities; methods of handling and weighing grain; and the type, if any, of weight supervision performed. Originally, AAR had five levels of market classifications. Today only two remain--Class I and Class II. The principal distinction between them is the amount of weight supervision provided. In Class I markets weighing of 100 percent of the cars or their contents is supervised; in Class II markets a minimum of 25 percent of the cars or contents weighed each shift of each day is supervised. There appears to be a recent trend away from Class I supervision because of the high costs.

AAR employs only one full-time person to oversee its grain market classification program. It relies on the weighing and inspection bureaus of the Eastern, Western, 1/

1/The Western Railroad Association has two bureaus.

and Southern Railroad Associations to monitor grain weighing activities. These associations primarily establish and publish tariffs. AAR furnishes the bureaus with a manual which provides (1) guidance for their monitoring activities and (2) procedures which grain firms with weight supervision are to follow in weighing and handling grain.

Bureaus' role

The bureaus' overall objectives in monitoring grain weighing and weight supervision are to (1) facilitate the accurate assessment of railroad freight charges and (2) reduce the loss-in-transit claims against railroads. They furnish both grain firms and weight supervision agencies copies of the grain weighing and handling procedures contained in the AAR manual. The grain firms are to follow such procedures in weighing and handling grain. The weight supervision agencies are to use the procedures as a guide in supervising grain firms' grain weighing and handling.

Also, the bureaus' representatives use the procedures as a checklist for monitoring grain firm and weight supervision agency performance. During visits to elevators, these representatives check scales, review scale test reports, tour elevators and railyards to check for spills and other evidence of improperly handled grain, and spot check the weight supervision agency's activities and reports.

Neither AAR nor the bureaus license or otherwise approve the employees of the various weight supervision agencies. However, representatives of two bureaus told us that they observe weight supervision employees' performance and spot check their work. Some of the bureaus' representatives told us that they work with agency employees until they are convinced the employees are competent and will protect the railroads' interests. Other representatives said that AAR generally requires weight supervision agencies to bond their weight supervisors. One bureau representative told us that the bureau receives a list of agency employees performing supervision at the time the market classification is granted, but the list generally is not updated as employees are hired or leave the agency.

The bureaus have access to information on all shipments made on members' rail lines. Supervising agencies report annually the grain firms whose weights they are supervising. Thus, the bureaus can keep track of supervised weighing and concentrate their monitoring where activity is heaviest. They told us they visit all firms at least twice a year but some as often as once a week.

In addition, the bureaus have two methods of identifying problems in the system. First, because they have access to weighing records, they can compare origin and destination weights on railcars. They use these comparisons to spot check for problems. (We used information developed from this activity to make the weight comparisons shown on p. 17.) Second, because they investigate claims made against the railroads for losses in transit, they can watch the frequency of such claims. They told us that they view an increase in claims in a given market as a signal to step up their monitoring.

According to representatives of two bureaus, monitoring of grain weight supervision is a relatively minor function in relation to the bureaus' total responsibilities. There is no contractual agreement or exchange of funds between AAR and the bureaus for the monitoring program but, according to representatives of the bureaus, they cooperate because they serve essentially the same member railroads.

Weight supervision agencies' role

The weight supervision agencies supervise the weighing of grain loaded into or unloaded from conveyances at grain firms' facilities. AAR requires that the agencies observe the weighing of grain as well as the movement of the grain between the scale and railcar. On inbound movements the supervisors are to (1) walk along the railroad tracks and make note of leaking cars, broken seals, and other factors that could explain weight differences, (2) make sure that all grain is removed from each car and weighed or that any irregularities are properly documented, (3) balance the scale and check its condition, and (4) check the condition of other grain handling equipment for leaks and other irregularities. For outbound movements supervisors are to concentrate on the scale condition, ensure that all grain is loaded into the railcar after it leaves the scale, and accurately report any exceptions that would affect weighing accuracy.

Market classification process

AAR relies on the bureaus' representatives to make sure that those grain firms and weight supervision agencies that apply for classification understand AAR procedures and are staffed adequately to follow them and that the grain handling facilities meet AAR's physical requirements. The bureaus' representatives recommend whether or not the firm and agency should be given a market classification. AAR considers this recommendation in granting a market classification.

To be classified, a grain firm's facility must be located on an AAR member's rail line and be approved by that railroad. The physical requirements the facility must meet relate to such things as scale capacity and accuracy and the soundness of grain handling equipment.

Also, a grain firm must apply for supervision together with the agency that plans to provide the supervision. The two constitute a "market." Some agencies provide weight supervision services for only one firm or facility. Others provide services at several facilities, including one that supervised weighing at 41 facilities. A given geographical area can contain numerous markets. For example, in one city a grain exchange supervised weighing at two firms while a chamber of commerce supervised weighing at another.

AAR does not prohibit any organization, regardless of its ownership, from providing weight supervision. Of the 107 agencies that were providing weight supervision under the AAR program in February 1979, 5 were State organizations, 18 were official inspection agencies, and 84 were grain trade-related organizations.

AAR allows grain trade-related organizations, such as grain exchanges, boards of trade, and chambers of commerce, to serve as weight supervision agencies. However, the act restricts the ownership or control of weight supervision agencies designated pursuant to the act to preclude conflicts of interest between the agencies and the grain trade. One bureau official told us he did not agree that such ownership forms have the potential for conflicts of interest. He said that stimulation of local trade provides an adequate incentive to those organizations to ensure accurate weights. Another bureau official said that he did not believe that there was any basis for claiming that a grain trade-related weight supervision agency has a conflict of interest as long as the agency follows AAR procedures.

Services available under AAR's program

Although AAR and the bureaus are concerned only with grain moved by rail, many of the AAR-approved weight supervision agencies also supervise transportation modes other than rail. Of the 25 AAR-approved agencies for which we obtained information on the type of weight supervision provided, 13 were located on navigable rivers. Of these 13, 11 provided supervision on barge shipments. Also, 8 of the 25 agencies offered truck weight supervision services.

Supervision may be less important for truck weights because the truck driver, who is generally present when the grain is weighed, is interested in the accuracy of the weight, a major factor in determining his transportation fee. Therefore, he generally can be expected to make some observations of grain weighing on his own. Some firms that sold grain on the basis of destination weights told us that they relied on their truck drivers to protect their interests regarding weight accuracy at destination. Although some terminal elevators picked up grain at country elevators, country elevators generally owned or hired trucks to deliver their grain.

Unlike freight rates on rail and truck shipments, barge freight rates are not directly tied to the weight of the grain moved. Barge companies usually receive a guaranteed fee that covers all cargo weights up to the maximum weight permitted by the navigable limit of the river involved. If the cargo weight at destination exceeds the weight covered by the guaranteed fee, a barge company will charge freight on the additional weight. Therefore, barge companies are less concerned with weight accuracy than railroads and truckers, as long as the barges are not overloaded and the cargo weight does not exceed that covered by the guaranteed fee.

Under either Class I or II supervision procedures, a firm can elect whether or not to have supervision on any particular rail shipment and some request weight supervision infrequently. For example, we noted two facilities classified by AAR that had received no weight supervision in over a year.

AAR's Class II supervision procedures require that all railcars on which supervised weight certificates are issued have an equal chance of being supervised. For example, if a firm requests supervision on 100 cars it is loading during a shift, it cannot specify which 25 cars are to be supervised. An AAR official told us that it is very difficult to detect whether this requirement is being adhered to.

For partial (Class II) weighing services, a supervisor must supervise at least 25 percent of the cars weighed during each shift of every day. Visiting an elevator daily puts the AAR-approved agency in a good position to detect irregularities, such as grain spills, unbalanced scales, or grain left in railcars, which can affect origin and destination weights. The agency is therefore able to reinforce good weighing practices.

Although we noted that some agencies provided more than 25-percent supervision in Class II markets, most provided only the minimum amount. There is no financial

incentive for agencies to perform more than the minimum because they are paid a fee for each unit for which a certificate is issued. Therefore, their revenue is fixed and any increase in supervision costs would reduce their profits.

AAR allows grain firms and weight supervision agencies to use either of two types of weight certificates. One type is issued by the supervision agency and one is stocked and issued by the grain firm. The latter type is a combined weight certificate and scale ticket on which the scale mechanically prints the weight. The possibility exists that a firm could issue combination certificates without supervision actually being provided. However, AAR warns its member railroads of the potential for such improper use. Also, bureau personnel could be expected to discover such a practice when examining a grain firm's records. One bureau representative said that he preferred the combination weight certificate and scale ticket because there was no chance for typographical errors.

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The AAR grain weight supervision system has two primary purposes--to help protect the interests of railroads by facilitating assessment of freight charges and to reduce claims for grain losses in transit. Grain weight supervision also enhances the grain companies' ability to buy and sell grain on the basis of weights at their elevators as well as to settle claims against railroads for grain losses in transit. Although the system has some limitations and service is not always available on all modes of transportation, it appears to serve the interests of railroads and the grain industry reasonably well.

FGIS INTERIOR GRAIN WEIGHT SUPERVISION SYSTEM

The act authorizes two types of grain weighing services to be provided at interior locations under the FGIS system--official weighing and supervision of weighing. These services may be provided by either FGIS or FGIS-licensed personnel of designated weighing agencies. Official weighing, referred to by FGIS as Class X, is the actual performance or complete supervision of weighing activities. Supervision of weighing, referred to by FGIS as Class Y, may be either partial (minimum of 25 percent) or complete weight supervision.

Before receiving weighing services under FGIS' system, grain firms must meet certain requirements specified in the act, such as (1) having and maintaining suitable grain

handling equipment and accurate scales, (2) allowing only competent employees to operate scales and related equipment, and (3) requiring employees to follow FGIS weighing procedures. FGIS weighing services are available to all grain firms and modes of transportation and for sacked or containerized grain.

FGIS has designated seven State agencies to perform weight supervision services under the act at interior locations. As of the end of January 1980, FGIS and five of the designated States were providing weight supervision on domestic shipments at a limited number of interior locations.

Act provides FGIS broad discretionary weighing authority at interior locations

The act provides FGIS (1) broader weighing than inspection authority at interior locations and (2) greater weighing authority at some interior locations than at others.

Section 7A(b) of the act provides the FGIS Administrator broad discretionary authority to cause official weighing or supervision of weighing to be performed at grain elevators and handling or storage facilities in the interior at which official inspection is provided. In contrast, section 7(b) of the act authorizes the Administrator to cause official inspections of grain at interior locations to be performed only upon request.

Although the Administrator has broad discretionary authority to implement, on his own initiative, mandatory weighing services at interior locations where official inspection is provided, neither the act nor its legislative history provide the Administrator any guidance regarding the conditions or criteria that must be met before implementing such services. Moreover, while the Administrator has the authority to establish regulations specifying the conditions or criteria that must be met, such regulations had not been promulgated.

At grain elevators, warehouses, or other storage or handling facilities where official inspection is not provided, section 7A(e) authorizes the Administrator to cause official weighing or supervision of weighing to be performed only upon request of the operator.

Also, subsection 7A(c)(2) authorizes the Administrator to designate the agency or person providing official inspection at an interior location to also perform official weighing or supervision of weighing at such location if the agency or person qualifies for designation and meets the criteria in

section 7. If such agency or person is not available to perform the weighing services or the Administrator determines that the agency or person is not qualified to perform them, the Administrator is authorized to have FGIS personnel perform the weighing services or he can designate any State or local governmental agency, or any person, to perform the weighing services.

In contrast to the authority for FGIS personnel to perform official weighing services at interior locations for an indefinite period, section 7(h) authorizes FGIS to perform original grain inspections only on an interim basis, under certain circumstances, until the service can be provided on a regular basis by an official inspection agency.

Although top FGIS officials told us that they have no immediate plans to implement mandatory official weighing or supervision of weighing at interior locations, this authority could be exercised at some future date. Therefore, we believe that the FGIS Administrator should promulgate regulations to specify the conditions or criteria that must be met before the authority to implement weighing services at interior locations would be exercised.

Designation of agencies and licensing of personnel

To be designated under the act to provide official weighing or supervision of weighing, an agency or person must meet the same criteria that agencies must meet to be designated to perform official inspection. Also, the act requires agencies designated to provide official weighing or weight supervision to meet the same prohibitions against conflicts of interest that designated inspection agencies are required to meet.

Effective November 20, 1978, FGIS prohibited agencies that were performing weighing services under the act from also performing AAR weighing services. According to FGIS, its main reasons for this prohibition were (1) the difficulty of separating official (FGIS) and unofficial (AAR) services, (2) the potential for conflict-of-interest situations arising when an agency provides both official and unofficial services, and (3) possible misunderstandings resulting from agencies issuing both FGIS and AAR weight certificates. Because of the prohibition, State agencies with delegated authority to perform official export inspection and weighing services at export elevators at export port locations were forced to either discontinue providing AAR weight supervision at interior locations and seek designation to provide weighing services under the act or provide no interior weighing services at all.

Seven of the eight States currently delegated to perform export inspections and weighing applied for and were designated to perform weighing services under the act at interior locations. The designated States are Alabama, California, Minnesota, Mississippi, Virginia, Washington, and Wisconsin. As of the end of January 1980, two of the States were providing Class X weighing services (complete supervision of weighing activities) on domestic shipments at five locations; three were providing Class Y (partial weight supervision) at five locations; and the other designated States were providing no weight supervision. (Officials of two State agencies told us that three grain firms in their States discontinued weight supervision at their facilities after the States were designated by FGIS to provide weight supervision under the act.) Also, FGIS was providing Class X weighing services on domestic shipments at six interior locations.

As of the end of January 1980, no other agencies had been designated to provide weighing services under the act.

FGIS has a formal program for examining and licensing weighing agency employees. Before granting licenses, FGIS examiners verify applicants' knowledge of weighing procedures, the Grain Standards Act, and FGIS regulations and observe them performing weighing duties.

FGIS needs to redefine its requirements for partial weight supervision

FGIS needs to redefine its requirements for partial (Class Y) weight supervision to improve the effectiveness of such supervision. Although both FGIS and AAR require weight supervisors to observe at least 25 percent of the weighing activity at a facility when partial weight supervision is provided, their definitions of what constitutes 25 percent are different.

To fulfill AAR's partial weight supervision (Class II) requirement, supervising agency personnel must observe at least 25 percent of the cars weighed each shift of every day. Under FGIS' Class Y procedures, however, weight supervisors are to physically supervise the actual weighing of a minimum of 25 percent of the lots weighed by elevator personnel. FGIS officials, in explaining this requirement, said that any variation of supervision which would amount to a minimum of 25 percent would be adequate to fulfill the Class Y requirement.

The FGIS officials said that, for example, at an elevator that loads 20 unit trains of 100 cars each in a month, the FGIS-designated weight supervision agency is required to

supervise the weighing of a minimum of 5 unit trains to meet the Class Y supervision requirement of 25 percent. Using this definition of partial weight supervision, days or even weeks could pass with none of the weighing activity being observed by the supervising agency; yet weight certificates, indicating that weight supervision had been provided, would continue to be issued. According to the Director of FGIS' Weighing Division, designated weight supervision agencies issue Class Y weight certificates on unsupervised unit trains or other unsupervised lots of grain on the basis of scale tapes or scale tickets furnished to the agencies by the weighing elevators.

Because a weight supervision agency under the AAR program is required to be at a facility to observe at least 25 percent of the cars weighed each shift of every day it is going on, such agencies are in a better position to detect irregularities which can cause differences between origin and destination weights and to reinforce good grain weighing and handling practices. An FGIS official said that Class Y weight supervision offers nothing more than the AAR system. We believe FGIS' Class Y weight supervision would be more effective if supervising agencies were required to be present to observe the weighing of at least 25 percent of the conveyances or grain lots covered by Class Y weight supervision certificates each shift of each day that such certificates are to be issued.

Inadequate supervision of designated States' weighing activities

FGIS field offices' supervision of the designated States' weighing programs has been very limited because of a lack of adequately trained personnel to provide such supervision. One field office supervisor told us that supervision of licensed weighing personnel was third priority behind appeal inspections and original commodity work. Available time was then split between supervision of inspection, sampling, and weighing activities and other commodity work. Another supervisor said that he had not supervised any interior weighing in his circuit because he had been busy supervising export weighing activity.

At the time our fieldwork was completed, FGIS was still in the process of developing its first comprehensive instruction covering field office supervision of designated States' weighing activities. As a result, the field offices did not know what they were supposed to do, how they were to do it, or how often they were to do it. However, in January 1980 FGIS issued the first chapter of a field office supervisors handbook which provides detailed procedures and instructions for supervising weight supervision agencies' activities.

CONTROLS OVER SCALES

A number of entities are involved in ensuring the accuracy of scales on which grain is weighed. For example:

--FGIS oversees the periodic testing of scales at locations where weighing services are provided under the act and, if they meet FGIS' standards, it certifies them as accurate.

--AAR requires periodic testing of scales at locations where AAR weight supervision is provided.

--Some States and local jurisdictions periodically test scales.

--The National Bureau of Standards sponsors an annual conference of State and local authorities to promote uniformity among commercial scales and other measuring devices.

--The grain firms themselves arrange to have their scales tested.

Some of these entities have adopted the National Conference on Weights and Measures' technical standards for scales. Others, including FGIS, have developed their own technical standards. FGIS' standards, which are among the most stringent, have drawn both criticism and praise from some of the other entities.

While some firms have protested having to upgrade their scales to be eligible to receive weight supervision under the act, officials of AAR's affiliated bureaus consider FGIS' technical standards and requirements for scales to be an improvement. One bureau official said that FGIS has tightened scale-testing procedures and standards and that its knowledge of scale technology is excellent. Another bureau official said that grain firms have been forced to upgrade and maintain their scales at locations where weight supervision is provided under the act.

With various modifications, most States have adopted the scale-testing standards recommended by the National Conference. However, in May 1979 USDA's OIG reported that the States had failed to test grain scales at reasonable intervals and that inconsistencies existed among the States' testing procedures.

We noted that grain firms generally did not rely wholly on the States or other weights and measures jurisdictions to test their scales. Many firms told us that they had their scales tested more frequently than the States required. They said that they needed accurate scales to be able to buy and sell grain competitively and that they could not afford to have their scales out of tolerance.

In addition to its tighter technical standards, FGIS has more stringent requirements for scale testing than AAR. At locations where grain weight supervision is provided under the act, FGIS requires that each scale be tested about every 6 months by an FGIS-approved scale inspection firm under the supervision of an FGIS scale specialist. If a scale meets FGIS standards, an FGIS approval seal is affixed to the scale. AAR does not certify scales, approve scale inspection firms, or require the presence of bureau representatives during scale testing. However, bureau representatives said that they try to observe scale testing or at least review test reports during their monitoring visits to grain firms that have AAR weight supervision.

CONCLUSIONS

As stated in chapter 2, most of the country elevator, terminal elevator, and domestic processor officials we interviewed, as well as the respondents FGIS and OIG interviewed, were satisfied with the existing interior grain weighing system and were opposed to changes or increased Federal involvement in the system. Our comparisons of origin and destination weights on 5,677 grain shipments by country and terminal elevators generally confirmed that their satisfaction with the weights assigned to their grain shipments is justified.

Although the AAR grain weight supervision system has some limitations and service by the AAR weight supervision agencies is not always available on all modes of transportation, it appears to serve the interests of railroads and the grain industry reasonably well. Therefore, we see no need to institute mandatory grain weight supervision or other major structural changes in the weighing services provided on domestic shipments at interior locations.

Although the act provides the FGIS Administrator broad discretionary authority to cause official weighing or supervision of weighing to be performed at grain elevators and handling or storage facilities in the interior where official inspection is provided, neither the act nor its legislative history provide any guidance regarding the conditions or criteria that must be met before the Administrator would be authorized to implement such services. Although top FGIS

officials told us that they have no immediate plans to implement mandatory official weighing or supervision of weighing at interior locations, this authority could be exercised at some future date. Therefore, FGIS needs to promulgate regulations to specify the conditions or criteria that must be met before mandatory weighing services would be implemented at interior locations. In promulgating such regulations, however, FGIS needs to consult with the House and Senate Agriculture Committees to ensure that the regulations meet their expectations.

While FGIS' interior weighing system has some shortcomings, it offers the grain trade several potential advantages over the AAR weight supervision system. For example:

--FGIS' system is available to all grain facilities and modes of transportation, not just those along AAR members' railroad lines.

--The ownership or control of weight supervision agencies is restricted by the act to preclude conflicts of interest between the agencies and the grain trade.

--The act authorizes FGIS to examine and license designated weighing agencies' employees and thus determine their qualifications before they are assigned weight supervision duties.

--FGIS has more stringent technical standards and check-testing requirements for scales.

However, FGIS needs to revise its program instructions for partial (Class Y) weight supervision to require that the weighing of at least 25 percent of the conveyances or grain lots covered by Class Y weight supervision certificates be observed each shift of each day that such certificates are to be issued.

RECOMMENDATIONS TO THE SECRETARY OF AGRICULTURE

We recommend that the Secretary direct the FGIS Administrator to promulgate regulations specifying the criteria or conditions that must be met before the Administrator would implement mandatory official weighing or supervision of weighing at interior locations where official inspection is provided. Because neither the law nor its legislative history provide any guidance on this matter, the Administrator, in promulgating such regulations, should consult with the House and Senate Agriculture Committees to ensure that the regulations meet their expectations.

We recommend also that the Secretary direct the FGIS Administrator to revise the program instructions for partial (Class Y) weight supervision to require that the weighing of at least 25 percent of the conveyances or grain lots covered by Class Y weight supervision certificates be observed each shift of each day that such certificates are to be issued.

AGENCY COMMENTS AND OUR EVALUATION

FGIS agreed with our first recommendation. (See app. II.) It said that section 7A(b) of the act clearly indicates that official weighing services may now be provided at inspection points other than export elevators at the discretion of the Administrator, subject to regulations promulgated by the Administrator. It also said that it would propose regulations to implement section 7A(b) of the act and that it would inform the House and Senate Agriculture Committees of its plans.

FGIS disagreed with our recommendation that program instructions for partial (Class Y) weight supervision be revised to require that the weighing of at least 25 percent of the conveyances or grain lots covered by Class Y weight supervision certificates be observed each shift of each day that such certificates are to be issued. FGIS said that it did not believe that the recommendation was practical or cost effective. In addition, FGIS commented that, among other things:

--It is not essential that each conveyance upon which certificates are issued have an equal chance of being selected for supervision.

--Weight supervision is performed while weighing is being conducted by elevator personnel and they are aware of the supervisor's presence and observations; consequently, elevator personnel are not likely to perform undesirable or dishonest practices. Therefore, the key to weight supervision is unannounced supervisory visits rather than random selection of carriers to be supervised.

--Manpower limitations, cost, and uncertainty of carriers' arrival times make it impractical and costly to visit and supervise remote weighing locations each shift of each day.

--Use of the FGIS Class Y weight supervision system is minimal, involving less than a half dozen locations.

Also, according to FGIS officials, the Class Y weight certificate does not certify weight accuracy, but only that the person signing the certificate is authorized or licensed under the Grain Standards Act to perform weight supervision and that the grain elevator weighing the grain has suitable grain handling equipment, accurate scales, and approved weighers.

Although FGIS' arguments may have some merit, we question the validity and propriety of issuing Class Y weight supervision certificates on unit trains or other lots of grain on the basis of weight tickets or scale tickets furnished by the weighing elevator, rather than requiring that the weighing of at least 25 percent of all conveyances or grain lots covered by the certificates be observed each shift of each day that such certificates are to be issued. If, as FGIS argues, the Class Y "Supervision of Grain Weight Certificate" only certifies that the person signing the certificate is authorized or licensed to perform weight supervision and that the grain elevator weighing the grain has suitable grain handling equipment, accurate scales, and approved weighers, then it should not be necessary to observe any grain weighing to make such a certification.

We never intended to imply that a random or statistical sample of carriers be selected for supervision under the Class Y system. We believe, however, that FGIS or a designated weight supervision agency would be in a better position to detect irregularities--such as scale malfunctions and grain spills which can cause differences between origin and destination weights--and to reinforce good grain weighing and handling practices, if the weighing of at least 25 percent of the conveyances or grain lots covered by Class Y weight supervision certificates was observed each shift of each day that such certificates are issued. The fact that use of the Class Y system is currently limited to five locations (see p. 86) should have no bearing on the credibility of the services provided.

CHAPTER 8

SCOPE OF REVIEW

Our review included an examination of legislation; regulations; instructions; and various reports, studies, articles, and financial and operating records pertaining to the grain standards and the interior grain inspection and weighing systems. At USDA headquarters, we interviewed FGIS and OIG officials.

We also interviewed FGIS regional office officials and visited FGIS field offices in Cedar Rapids, Iowa; Fort Worth, Texas; Indianapolis, Indiana; Kansas City, Missouri; Minneapolis, Minnesota; and Omaha, Nebraska. These field offices had jurisdiction over 31 designated inspection agencies that operated 76 inspection laboratories. In addition to interviewing FGIS officials and reviewing field office files for all the agencies, we visited 16 of the agencies and 28 of their laboratories where we observed grain handling, sampling and inspection, and in some cases weighing operations; reviewed records; and interviewed various inspection agency and grain company officials.

We also compared origin and destination weights on selected grain shipments, and we interviewed

--officials of AAR and the bureaus responsible for the AAR weight supervision program,

--officials of agencies providing AAR grain weight supervision at grain firms' facilities,

--officials of State agencies providing official weighing or supervision of weighing pursuant to the act and obtained their responses to a questionnaire,

--82 country elevator managers in four States,

--officials of 24 interior terminal elevators,

--officials of 12 grain processing firms, and

--representatives of State weights and measures organizations and scale manufacturers.

Further, we reviewed the legislative history of the Grain Standards Act, with particular emphasis on the provisions regarding (1) the FGIS Administrator's authority to cause official weighing or supervision of weighing to be performed at interior locations, (2) prohibitions against conflicts

of interest, and (3) inspection agencies' employment of grain samplers. We also reviewed FGIS' files and other documents related to its handling of designations of inspection agencies with certain conflicts of interest.

In addition, we reviewed and evaluated FGIS' and OIG's reports on their studies of the interior grain inspection and weighing systems.

APPENDIX I

RESULTS OF GAO ANALYSIS OF COUNTRY ELEVATOR SHIPMENTS IN FOUR SELECTED STATES

Country elevator number	Total shipments reviewed	Number of shipments with destination weight: Less than origin	More than origin	Equal to origin	Total pounds at destination	Gain (loss) at destination as compared with origin weight: Pounds	Percent
Illinois:							
1	50	17	23	10	2,076,680	1,640	0.08
2	58	14	32	12	2,921,905	1,793	0.06
3	5	3	2	0	241,970	470	0.19
4	28	16	12	0	1,321,597	(287)	(0.02)
5	55	35	16	4	2,475,359	(1,630)	(0.07)
6	52	42	10	0	2,413,010	(7,370)	(0.31)
7	2	0	2	0	2,769,424	4,045	0.15
8	46	16	29	1	2,066,010	(540)	(0.03)
9	56	26	26	4	2,476,680	115	0.01
10	14	4	10	0	1,736,997	1,274	0.07
11	67	18	44	5	2,376,860	3,569	0.15
12	35	26	9	0	1,821,298	(312)	(0.02)
13	44	5	37	2	6,211,212	12,380	0.20
14	5	2	2	1	217,820	460	0.21
Total	517	224	254	39	31,126,822	15,607	0.05
Iowa:							
1	3	1	1	1	588,000	6,680	1.14
2	86	41	39	6	2,485,665	3,935	0.16
3	5	0	0	5	214,840	0	.00
4	48	15	29	4	2,289,260	5,790	0.25
5	73	55	16	2	3,412,230	(9,200)	(0.27)
6	75	38	37	0	6,518,240	(11,067)	(0.17)
7	62	21	19	22	2,678,590	220	0.01
8	27	16	11	0	1,230,030	(730)	(0.06)
9	43	27	12	4	1,996,999	(564)	(0.03)
10	24	1	23	0	3,393,580	59,675	1.76
11	77	41	28	8	6,779,570	75,214	1.11
12	53	46	6	1	1,588,250	2,610	0.16
13	55	18	35	2	8.167,548	17,690	0.22
14	33	13	20	0	4,052,480	58,880	1.45
15	46	44	2	0	1,063,400	(3,260)	(0.31)
Total	710	377	278	55	46,458,682	205,873	0.44

APPENDIX I

Country elevator number	Total shipments reviewed	Number of shipments with destination weight: Less than origin	More than origin	Equal to origin	Total pounds at destination	Gain (loss) at destination as compared with origin weight: Pounds	Percent
Kansas:							
1	36	22	14	0	6,117,600	(12,545)	(0.21)
2	50	17	32	1	5,789,260	(1,143)	(0.02)
3	53	28	24	1	6,333,860	(535)	(0.01)
4	57	39	18	0	6,957,870	(22,910)	(0.33)
5	36	17	17	0	5,177,810	42,230	0.82
6	51	0	51	0	22,582,000	73,000	0.32
7	52	37	12	3	9,751,500	(26,750)	(0.27)
8	43	3	40	0	8,595,600	9,420	0.11
9	66	23	39	4	9,912,980	(10,905)	0.11
10	55	36	18	1	8,698,290	(8,410)	0.10
11	33	0	33	0	6,415,800	32,050	0.50
12	51	8	42	1	9,994,500	67,735	0.68
13	54	24	28	2	10,807,400	(1,990)	(0.02)
14	66	48	16	2	8,102,020	(20,185)	(0.25)
15	59	19	37	3	6,814,580	8,822	0.13
16	10	3	7	0	1,840,600	100	0.01
17	25	0	25	0	4,819,720	34,730	0.72
Total	797	324	453	20	138,711,390	162,714	0.12
North Dakota:							
1	61	8	47	6	6,553,690	55,145	0.84
2	16	8	8	0	2,739,440	1,106	0.04
3	51	23	26	2	3,653,860	(2,114)	(0.06)
4	40	21	19	0	7,672,800	4,020	0.05
5	50	15	33	2	8,045,040	25,985	0.32
6	24	9	15	0	3,042,300	27,075	0.89
7	65	20	44	1	4,493,420	5,915	0.13
8	52	23	23	6	3,814,610	12,390	0.32
9	21	19	2	0	1,781,400	(18,895)	(1.06)
10	57	30	26	1	7,904,280	(22,120)	(0.28)
11	52	25	25	2	5,051,180	5,025	0.10
12	22	17	5	0	3,162,600	(10,490)	(0.33)
13	51	29	19	3	8,536,000	(28,730)	(0.34)
14	30	7	23	0	5,171,176	29,429	0.57
15	48	31	17	0	6,235,910	(12,330)	(0.20)
16	51	39	10	2	6,339,400	(570)	(0.01)
17	18	10	7	1	2,578,000	(3,740)	(0.15)
Total	709	334	349	26	86,775,106	67,101	0.08

APPENDIX II

UNITED STATES DEPARTMENT OF AGRICULTURE

FEDERAL GRAIN INSPECTION SERVICE

WASHINGTON, D.C. 20250

February 14, 1980

Mr. Henry Eschwege, Director
Community and Economic Development Division
United States General Accounting Office
Washington, D.C. 20548

Dear Mr. Eschwege:

Thank you for the opportunity to review the draft of the proposed report entitled "Grain Inspection and Weighing Systems in the Interior of the United States - An Evaluation."

With the exception of the recommendation on the supervision of Class Y weighing services, we believe the recommendations in the report are constructive and will help the Federal Grain Inspection Service (FGIS) implement the Congressional policy stated in the United States Grain Standards Act (Act). The recommendation on the supervision of Class Y weighing services would, in our opinion, be impractical and would not achieve its intended purpose, and we encourage its deletion.

We are enclosing an exhibit containing further comments on the recommendations to the Secretary of Agriculture.

Program changes involving most of the recommendations in the report are included in our current and future work plans. We are a relatively young agency and have had much to accomplish. Many of the changes recommended in the report were recognized as needed at the time FGIS was created in 1976, but the mandates of the 1976 amendments of the Act and related starting-up activities dictated unwelcome delays in implementation. As shown in the enclosure, it will be several more years and will require additional funds before some of the recommendations can be implemented.

We appreciate your helpful recommendations and will continue to improve the national grain inspection and weighing program.

Sincerely,

L. E. Bartelt
Administrator

Enclosures

EXHIBIT A

COMMENTS TO RECOMMENDATIONS

MADE IN PROPOSED GAO REPORT

ENTITLED

"GRAIN INSPECTION AND WEIGHING

SYSTEMS IN THE INTERIOR OF THE

UNITED STATES - AN EVALUATION"

Prepared by the Federal Grain Inspection Service, USDA
February 1980

GAO note: Page references in this appendix refer to the draft report and do not necessarily agree with the page numbers in this final report.

APPENDIX II

1. GAO recommendation to USDA (Page 40):

   Establish clear and definitive standards for the quality controls inspection agencies should maintain over their inspection operations and ensure that the agencies comply with them.

FGIS RESPONSE

We agree with the recommendation.

On January 1, 1980, FGIS issued Chapter 1 of the FGIS Field Office Supervisors Handbook - Supervising Official Agencies. This Handbook established procedures for supervising the performance of official agencies in areas such as providing requested services; organization and staffing; training; supervision of employees; licensing, equipment, supplies, and space; fees and charges; and reports and records.

In addition, FGIS plans to: a) develop by the fall of 1981 quality control standards governing the inspection and weighing operations carried out by official agencies, and b) develop official agency staffing standards by March 1982.

FGIS will then conduct reviews prior to designation renewals to ensure that such standards are met.

2. GAO recommendation to USDA (Page 40):

Take prompt action to resolve the legal and other problems related to inspection agencies' use of contract samplers and the issuance of official sample lot inspection certificates based on samples drawn by such samplers.

FGIS RESPONSE

We agree with the recommendation.

FGIS is now discussing with the Office of General Counsel (OGC), USDA, alternatives to the use of contract samplers. Further, as part of the problem identification process, FGIS plans to use a questionnaire to collect and analyze information on the current use of contract samplers, and will use this information to evaluate the impact of alternative actions.

APPENDIX II

3. GAO recommendation to USDA (Page 40):

Periodically review FGIS' follow-up procedures for detecting and deterring improper rounding and grade shaving to ensure that they are working properly.

FGIS RESPONSE

We agree with the recommendation.

FGIS will use procedural review teams to determine compliance with the provisions of FGIS Notice 206, Special Actions to Eliminate Improper Rounding and Grade Shaving. FGIS will take appropriate action against any individuals or official agencies that are found to be engaged in improper rounding or grade shaving.

FGIS will also consider requiring that mathematical computations be shown on inspection work records.

APPENDIX II

4. GAO recommendations to USDA (Page 51):

In making or renewing future designations, carefully consider each agency's past history of compliance with the Act, FGIS regulations, and other requirements, as well as its demonstrated ability to comply with FGIS quality control standards and to provide quality inspection services.

FGIS RESPONSE

We agree with the recommendation.

Prior to renewing designations, all available information on the official agency will be examined to assess past history of the agency. Such information will include, but not be limited to, past designation checklists, correspondence files, procedural review team reports, Forms GR-132 (Type and Volume of Inspections Performed by Licensed Inspectors), the Grain Inspection Monitoring System charts, field office files, and violation case files.

Further, once quality control standards are developed (see FGIS response to recommendation number 1), the FGIS review process will assess and document agencies' compliance with such standards.

APPENDIX II

5. GAO recommendation to USDA (Page 51):

Include in FGIS' annual report to the House Committee on Agriculture and the Senate Committee on Agriculture, Nutrition, and Forestry the results of FGIS' monitoring of the activities of those inspection agencies which were granted conflict-of-interest waivers pursuant to Section 11(b)(5) of the Act.

FGIS RESPONSE

We agree with the recommendation.

FGIS will include in future Annual Reports to Congress, a synopsis of the results of our monitoring of the agencies that were granted waivers, along with problems that have developed.

APPENDIX II

6. GAO recommendation to USDA (Page 51):

Develop and furnish guidance to FGIS Field Offices to ensure uniformity in the content and scoring of inspectors' technical competency examinations.

FGIS RESPONSE

We agree with the recommendation.

Procedures for implementing the recommended uniformity in the preparing and scoring of inspectors' technical competency examinations have been developed and will be issued in March 1980 in the Licensing Handbook. The Handbook will also set forth requirements for preparing the practical examinations for inspector applicants. FGIS will also use the same practical examination scoring procedures that have been developed for proficiency examinations of Agricultural Commodity Graders (Federal employees).

7. GAO recommendation to USDA (Page 66):

Budget specific staff years for supervision and monitoring of inspection activities and ensure that adequate priority is given to this important function to maintain a minimum level of coverage of each agency's and licensed inspector's work. (The level of coverage could be increased when potential or actual problems are identified, or it could be decreased after sufficient experience is gained to demonstrate that an agency's quality controls are adequate and that its grading is accurate.)

FGIS RESPONSE

We agree with the recommendation.

FGIS presently has budgeted staff years for supervision and monitoring of official services. Effective January 1, 1980, a Field Office Supervisors Handbook was implemented, which may impact on the staff years needed. However, the supervision program is dependent upon budgetary considerations.

FGIS is developing a monitoring system which will ensure that the provisions of the Field Office Supervisors Handbook are carried out. This system will be completed in FY 80.

8. GAO recommendation to USDA (Page 66):

Review the locations of interior field offices, and, where practicable, relocate, or establish suboffices of, those that are long distances from where the large volumes of inspections take place.

FGIS RESPONSE

We agree with the recommendation.

FGIS has already analyzed some interior field office locations, established one new field office, moved two field offices, and opened several suboffices. The analyses of other interior field office locations should be completed by the end of calendar year 1980. Although official agency supervision will be more timely and effective, it could initially be more expensive because of relocation costs.

FGIS is also considering mobile inspection laboratories and establishing seasonal suboffices. This project is planned for completion in FY 82, depending on the availability of funds.

9. GAO recommendation to USDA (Page 66):

Develop an objective and measurable standard for grading accuracy that inspectors must meet before they are licensed to grade grain and which can be used to measure their day-to-day performance as being acceptable or unacceptable.

FGIS RESPONSE

We agree with the recommendation.

As noted in the discussion preceding the recommendation and as noted in the FGIS comment to recommendation No. 6, FGIS has developed uniform criteria for examining licensed inspector applicants.

Further, the Grain Inspection Monitoring System identifies potential grading problems requiring investigation. FGIS will also develop guidelines to initiate appropriate corrective action on a license based on the number of potential grading problems that require investigation.

APPENDIX II

10. GAO recommendation to USDA (Page 66):

Implement a sample selection methodology that ensures that the samples selected for regrading are representative of the total inspections performed by each licensed inspector.

FGIS RESPONSE

We agree with the recommendation.

As noted on page 61 of the GAO draft report, FGIS is currently field testing a new sample selection procedure which will ensure review of a randomly selected proportionate number of original inspections performed by all licensed inspectors. Review of the results for the first 3 months of this test should be completed by June 1, 1980.

APPENDIX II

11. GAO recommendation to USDA (Page 67):

Continue to develop the grain inspection monitoring system so that it can be used as an effective management tool for monitoring and evaluating inspection agency and inspector performance.

FGIS RESPONSE

We agree with the recommendation.

Numerous improvements to the Grain Inspection Monitoring System have been accomplished during the past 18 months. Several improvements and new applications of information in the system are being planned and are scheduled for completion by January 1981.

12. GAO recommendation to USDA (Page 67):

Develop criteria and provide guidance for use by field offices in identifying potential or actual grading problems and ensure that they make effective use of monitoring system data and other available data in identifying, investigating, and correcting inspection problems.

FGIS RESPONSE

We agree with the recommendation.

The recently published Chapter 1 of the Field Office Supervisors Handbook provides guidelines for identifying, investigating, and correcting grading problems. Further, a revision to the Monitoring Grading Accuracy Instruction is being prepared for increased guidance on interpreting the Grain Inspection Monitoring System output. FGIS also plans to train regional and field office personnel on the use of this system by FY 81.

APPENDIX II

13. GAO recommendation to USDA (Page 67):

Develop procedures and guidance for following up or investigating inspection-related problems to determine their causes. (Provision could be made for field offices to report a problem to an agency's chief inspector and require him to investigate the problem and report back on what he found and what action was taken to correct the problem. If the problem persists, the field office should investigate, determine the cause, and initiate corrective action.)

FGIS RESPONSE

We agree with the recommendation.

Chapter 1 of the Field Office Supervisors Handbook was published January 1, 1980, and provides procedures for investigating the inspection and weighing problems, determining the cause of the problems, and initiating corrective action. When necessary, full investigations or review teams will be used to determine the cause of problems and to form a basis for appropriate disciplinary action.

APPENDIX II

14. GAO recommendation to USDA (Page 67):

Establish clear lines of authority and responsibility for dealing with inspection problems.

FGIS RESPONSE

We agree with the recommendation.

Every effort will be made to establish clear lines of authority and responsibility for dealing with inspection and weighing problems. An example of this was the issuance of Chapter 1 of the Field Office Supervisors Handbook.

APPENDIX II

15. and 16. GAO recommendations to USDA (Page 67):

Develop specific criteria for taking action against inspection agencies and licensees to correct problems identified.

Develop a system of penalities or sanctions to be imposed against inspection agencies and licensees for violations of the Act, regulations, procedures, and other requirements, or for substandard performance.

FGIS RESPONSE

We agree with both recommendations.

Specific criteria for taking action against licensees and a system of penalties or sanctions has been developed and is contained in the Licensing Handbook, which will be issued in March 1980.

Action against official agencies will continue on a case-by-case basis. FGIS will develop specific criteria for taking action, and will develop a system of penalties or sanctions on official agencies. This will begin by FY 81.

APPENDIX II

17. GAO recommendation to USDA (Page 72):

We recommend that the Secretary direct the Administrator, FGIS, to revise the warehouseman's sample-lot inspection certificate to include the word "QUALIFIED" across the face of the certificate, along with a footnote explaining the reason, to better inform users of the limitations on the certificate's reliability.

FGIS RESPONSE

We agree with the recommendation.

FGIS will amend the regulations under the Act by October 1, 1980, to include the word "QUALIFIED" across the warehouseman's sample-lot inspection certificate, along with an explanatory footnote.

18. GAO recommendation to USDA (Page 87):

Revise the program instructions for partial (Class Y) weight supervision to require a designated weight supervision agency to observe a minimum of 25 percent of the grain weighing activity each shift of each day and to require that each conveyance upon which certificates are issued have an equal chance of being selected for supervision.

FGIS RESPONSE

We disagree with the recommendation.

FGIS does not believe the recommendation is practical, cost effective, or any more reliable than instructions that are currently in effect.

It is not essential that "each conveyance upon which certificates are issued have an equal chance of being selected for supervision." This would only be necessary and effective if it were possible to reweigh carriers after they have been weighed by the elevator and they no longer can influence the weight in any way. This is not possible, because once grain is emptied from the carrier it is commingled with other grain and it cannot be reweighed; or once the carrier is loaded, it is impractical to return the grain to the scale for reweighing without disrupting the entire loading and weighing procedure.

18. FGIS RESPONSE (Cont.)

Supervision of weighing is performed while the carrier is being weighed by elevator personnel. They are aware of the supervisor's presence and observation of their operation. Consequently, they are unlikely to perform undesirable or dishonest practices. The key to supervision is unannounced supervisory visits, not random selection of carriers to be supervised.

Manpower limitations, cost, and uncertainty of the time of arrival of carriers makes it impractical and costly to visit and supervise remote weighing locations each shift of each day. This practice is desired by the Association of American Railroads, but they freely admit that it is not always followed and that in many locations considerably less than 25 percent of the carlots are supervised. It is much easier to establish a uniform supervisory system when you are working with one mode of transportation as with the AAR system. It is most difficult when you must arrange supervision for a variety of transportation modes. The use of the FGIS Class Y weighing system is minimal, with fewer than one half dozen locations to be supervised.

19. GAO recommendation to USDA (Page 87):

Finalize and implement, as soon as possible, detailed procedures and instructions for supervising designated agencies' weighing activities and ensure that FGIS Field Offices give adequate priority to such supervision.

[See GAO note below.]

FGIS RESPONSE

We agree with the recommendation.

Chapter 1 of the Field Office Supervisors Handbook, which covers detailed procedures and instructions for supervising official agencies' weighing activities, was issued in January 1980.

GAO note: This proposed recommendation was deleted because FGIS had issued the procedures and instructions shortly before we submitted our draft report to it for comment.

APPENDIX II

20. GAO recommendation to USDA (Pages 86 and 87):

We recommend that the Secretary of Agriculture direct the FGIS Administrator to promulgate regulations specifying the criteria or conditions that must be met before the Administrator would implement mandatory official weighing or supervision of weighing at interior locations where official inspection is provided. Because neither the law nor its legislative history provide any guidance on this matter, the Administrator, in promulgating such regulations, should consult with the House and Senate Agriculture Committees to ensure that the regulations meet the Committee's expectations.

FGIS RESPONSE

We agree with the recommendation.

Section 7A(b) of the Act clearly indicates that official weighing services may now be provided at inspection points other than export elevators (1) at the discretion of the Administrator, and (2) subject to regulations promulgated by the Administrator. FGIS will propose regulations to implement Section 7A(b) of the Act and will inform the House and Senate Agriculture Committees of our plans.

(022320)

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