The Association of Accountants and Financial Professionals in Business

MANAGEMENT ACCOUNTING CASE BOOK

CASES FROM THE IMA EDUCATIONAL CASE JOURNAL

Edited by Raef A. Lawson

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Accountants and
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Management Accounting Case Book

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Raef A. Lawson

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IMA, the association of accountants and financial professionals in business, is one of the largest and most respected associations focused exclusively on advancing the management accounting profession. Globally, IMA supports the profession through research, the CMA(R) (Certified Management Accountant) program, continuing education, networking, and advocacy of the highest ethical business practices. IMA has a global network of more than 80,000 members in 140 countries and 300 professional and student chapters. Headquartered in Montvale, N.J., USA, IMA provides localized services through its four global regions: The Americas, Asia/Pacific, Europe, and Middle East/Africa. For more information about IMA, please visit www.imanet.org.

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IMA's globally recognized CMA (Certified Management Accountant) is the leading certification for management accountants and financial professionals in business. Earning the CMA requires a mastery of advanced-level knowledge in four critical areas: financial planning, analysis, control, and decision support. For more information about the CMA certification program, please visit www.imanet.org/certification.

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Preface

As the field of management accounting evolves, management accountants are required to have a mastery over an ever-widening body of knowledge, including such areas as risk management, strategic cost management, process management, and more. They must also be able to apply that knowledge in an integrated manner to situations often involving uncertainty.

A useful way to develop such competency is through the use of case studies. Besides making mastery of important concepts more interesting, case studies can enhance one's grasp of management theory by facilitating broad discussion designed to challenge one's thinking and helping to foster critical thinking skills.

Management Accounting Case Book: Cases from the IMA Educational Case Journal (MACB) offers may cases that have been through a rigorous review process to ensure high quality of both case and teaching notes and have been used at dozens of schools. Some cases are intended for a certain academic level (e.g., principles, undergraduate, graduate, MBA), but most are usable for multiple audiences and can be adapted to the objectives of the instructor. MACB can be used to supplement a textbook or as a standalone text for using the case method.

The cases in this book were chosen from cases published in the IMA Educational Case Journal (IECJ ®). The IECJ is a high-quality online journal with the mission to publish teaching cases for management accounting and related fields. The IECJ aims to provide an educational resource rich in detail to reflect current business problems. Through publication of these case studies, IMA (Institute of Management Accountants) is pursuing its goal of enhancing the teaching of management accounting worldwide to help develop the global management accounting profession.

The *Management Accounting Case Book* is organized into five sections, each dealing with a specific area of management accounting:

- Business Leadership and Ethics (including the role of the management accountant, ethical situations, IMA Guidelines, whistleblowing, organizational culture, and employee engagement)
- Operations, Process Management, and Innovation (including flexible budgeting, standard costs, variance analysis, nonfinancial performance indicators, quality control, lean, and innovation governance)
- Planning and Decision Making (including cost estimation, CVP analysis, budgeting, decision making, capital investments, target costing, and TOC)
- Risk Management and Internal Controls (including sustainability, performance evaluation and indicators, responsibility centers, balanced scorecard, transfer pricing, compensation, and incentives)
- Strategic Cost Management (including product and service costing, cost allocation, and strategy implementation)

I want to thank the Associate Editors of the IECJ, the members of the IECJ Advisory & Review Board, and the authors of the cases included in this volume for their many years of support of our journal. Their efforts have been instrumental to the development of this great resource.

I wish you success and hope you enjoy these cases!

Raef Lawson, Ph.D., CMA, CPA, CFA
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Institute of Management Accountants

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I. Business Leadership and Ethics

Trust May Breed Trouble: Fraud Opportunities and Ethics at Saintly Church

Cecily Raiborn, Janet B. Butler, Nathan H. Cannon, and Randall F. Young, Texas State University

SAINTLY CHURCH IS EXPERIENCING DECLINING REVENUES AND increasing expenses, and several fraud risk factors are present. Do these fraud risk factors indicate fraudulent activity by one or more of the key persons in the case, or could there be reasonable and legitimate explanations? The purpose of this case is to allow students to explore the IMA Statement of Ethical Professional Practice within the context of a nonprofit institution by examining the role of Sandy Withers, CMA, as she attempts to help the church address these issues. By completing the case, students will identify potential underlying causes (both fraudulent and legitimate) of the declining revenues and increasing expenses, highlight weaknesses in internal controls, and discuss Withers's responsibilities and approaches to communication under the IMA Statement of Ethical Professional Practice.

This case is an ideal assignment for an undergraduate or graduate accounting course that discusses internal controls, the fraud triangle, and potential organizational fraud. It is also a good assignment to integrate toward the end of a fraud prevention class that employs a case-based teaching methodology since most fraud cases have a primary objective of identifying the fraud or the fraud risk factors.

Keywords: ethical standards, church fraud, not-for-profit fraud, fraud triangle, internal controls.

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Trust May Breed Trouble: Fraud Opportunities and Ethics at Saintly Church

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INTRODUCTION

Light twinkled through the stained glass windows as Pastor Peter Lang walked through Saintly Church. He had just met with Sandy Withers, a CMA® (Certified Management Accountant) and two-year member of the church's governing board. Lang and Withers had been discussing the fact that the church was perennially short of funds—although what church wasn't these days?—and the possibility of instituting some new internal controls for oversight.

As a board member, Withers was part of the group responsible for managing Saintly Church's overall business and nonbusiness affairs. Such responsibility included implementing policies regarding church administrative policies and procedures. Although the church had grown significantly over the past 20 years, board members had made few of the administrative policy changes suggested by advisers and the church's denomination headquarters.[1] The church was primarily operating under a system of trust. The following passage illustrates the majority viewpoint of the board: "Trust is the emotional glue that binds a team together and produces confidence…. High-achieving churches have a high level of trust among the staff. It means the lead pastor trusts the staff, the staff trusts the pastor, and the staff trusts one another."[2]

While Withers agrees with the basic sentiment, she also believes that too much trust could create problems. She explained to Pastor Lang that trust is simply not a valid internal control. She referenced a recently-read article stating that the environments of not-for-profit organizations (including churches) often make them more vulnerable to fraud and abuse than for-profit businesses because of the reasons listed in Figure 1. Pastor Lang can see the point Withers was trying to make, but he could also see that putting in internal controls would likely mean additional work for him and other church workers. He asked Withers to please discuss with him any recommendations she is considering before taking those recommendations to the board.

Figure 1: Susceptibility for Fraud and Abuse in Not-for-Profit Organizations

Not-for-profit organizations often:

- Place excessive control in their founder, executive director, or substantial contributor;
- Allocate limited resources to accounting, internal controls, and financial oversight;
- Have many volunteers working in the organization who are privy to confidential information;
- Have boards of directors comprising only volunteers, with little or no financial oversight expertise;
- Have nonreciprocal transactions, such as charitable contributions, that are easier to steal than other sources of revenue where there is consideration exchanged; and
- Are highly susceptible to the effects of negative publicity and, therefore, are reluctant to report, or even discuss, fraud when it occurs.

Source: B. Collins, "Not-for-Profits Not Immune to Fraud," *EisnerAmper Accountants & Advisors*, May 16, 2014, http://www.eisneramper.com/non-profits-fraud-0410.aspx.

THE CHURCH

Saintly Church was formed about 20 years ago in a small suburb of a metropolitan area. As the city grew, so did the suburb and the church. A large proportion, but definitely not all, of the members would be classified as having middle-to-high income. To meet the needs of its membership and others in the community, the church operates Little Saints Daycare five days a week. Church operating funds are raised from the Little Saints Daycare tuition, collection plate donations, online donations through Secure Spirits (the church denomination's giving website), and a monthly bingo game. The church also has two large community rooms that may be rented out for nonchurch events. The community rooms are constantly under renovation to make them more attractive for rental activities.

In addition to a small petty cash fund in the church secretary's desk drawer, a larger cash "benevolent fund" is available to pay for food for the occasional homeless person or to provide less-affluent church members with financial assistance for small emergencies. If there is insufficient cash in the benevolent fund to help someone in need, the pastor can ask the governing board for additional money.

THE PEOPLE

Pastor Lang has been with the church for three years, having moved halfway across the country just prior to taking the position. He showed up at the right time. The previous pastor retired and moved to Florida a year previously, and the church had just finished its discernment and transition process, which generated recommendations for interview candidates and sought to preserve continuity between the leaving and incoming pastors. After wowing the governing board in his interview, Lang (with an undergraduate degree in accounting and graduate degree in theology) passed his background check and was hired. In addition to his salary and a credit card to be used for church business, Lang is provided with a housing and car allowance. He was slightly disappointed by the salary offered, but stated that he could manage on that amount since he is single and his accounting major made him good at budgeting. His background has also made him a favorite with some of the elderly parishioners because he is able to help them with their finances.

Sabrina Louis, the church secretary, had been hired eight years ago by the previous pastor. That pastor, being concerned about privacy issues related to congregants' contributions, made Louis solely responsible for counting collection plate offerings rather than the more typical approach of having rotating teams of congregation members perform that task. Over the years, Louis has been given more and more responsibilities. Today she is in charge of much of the bookkeeping, including recording contributions and pledges, preparing financial statements, and making purchases authorized by Lang or, in the case of purchases more than $2,000, by the board. Because of her multiple job duties and her dedication to the church, Louis tends to work long hours and takes few vacation days. She says that vacations aren't really important to her since she is not married and few family members live close by.

GENERAL FINANCIAL PROCESSES

The church has a checking and savings account at a local bank. Two tellers and one manager from the bank are church members. Bank statements are sent to the church address and are reconciled monthly by Lang. In addition to Lang, one member of the governing board has authority to sign checks for the church; only one signature is required on a check. Lang typically makes bank deposits on Monday. Cash and checks from the Sunday collection plate are stored in a small safe that Lang, Louis, and one member of the governing board have the combination for. Cash offerings

have decreased significantly over the past few years since many church members prefer to contribute by check or online on a monthly basis.

Daycare tuition can be paid on a daily, weekly, or monthly basis depending on how regularly a child attends. Daily and weekly tuitions are generally paid by check, but some people do pay in cash. Monthly tuition is billed by Louis and remitted to her by check. The number of people working at Little Saints Daycare varies based on the number of children. Lang interviews and hires daycare workers. There are three "regular" workers, and substitutes are available to fill in when needed. One of the regular workers provides Lang with information about the daily number of children attending (and those who paid in cash) as well as who worked and for how long. Lang reviews the attendance records and forwards the attendance records and any tuition payments to Louis. Louis records the tuition payments received then sends the checks or cash to Lang to deposit into the bank. Daycare employees' timesheets are also reviewed, and the information is given to Louis. She writes the payroll checks, and Lang signs them. One of the other regular workers is in charge of purchasing snack and meal items for the daycare center and turns the receipts over to Lang, who approves them and submits them to Louis to provide payment.

Although Louis is in charge of checking the calendar for availability of community rooms, Lang meets with individuals wanting to rent the room. There is no set fee for room rental. The amount Lang charges depends on whether the person who wants to rent is a church member or nonmember, what the purpose of the rental is, how long the rental will be, and what (if any) church furniture or fixtures will be used. Lang collects a deposit and tells Louis the remaining amount to bill.

The monthly bingo game is scheduled on a Saturday night and is a cash-only event. Both Lang and Louis sell the bingo cards, and Lang pays out the winnings from the proceeds. Volunteers call the games and help with the event. Lang uses bingo proceeds to pay for the volunteers' drinks and snacks as a thank you for donating their time. The net cash is then deposited into the bank on Monday along with the Sunday offerings. Bingo proceeds have been declining substantially although most church members still attend and socialize.

THE CIRCUMSTANCES

Three days after her discussion with Pastor Lang, Withers gathered with the rest of the church's governing board for the monthly meeting. A major focal point of the meeting was the financial statements provided by Louis.[3] (Tables 1 and 2 present portions of the 2014 budget and excerpts from the three-year Statement of Activities prepared for the Board.) While they may not have been considered dismal, the financials did not provide good news compared to the budget. Offerings were lower than expected, as were tuition, rental, and bingo revenue. Expenditures for benevolences, daycare worker wages, daycare snacks and meals, and community room improvements were higher than budgeted. The situation has been getting worse over the last 18 months, and the board members were concerned. One board member who had recently become the victim of employee fraud at his business remarked that things had financially gone downhill since Lang had become pastor. The board member then mused aloud that Lang could easily be stealing from the church. After all, had the other board members seen Lang's new car?

Table 1: 2014 Budget Excerpt

Unrestricted Revenues:		
Contributions/Offerings		$200,000
Daycare Tuition		155,000
Bingo Revenue		18,000
Building Use		5,500
Total Unrestricted Revenues		$378,500
Expenses:		
Pastor Compensation		$ 80,000
Church Employees Compensation		75,500
Daycare:		
Employee Wages	130,000	
Snacks and Meals	13,000	
Utilities and Miscellaneous	8,200	151,200
Maintenance & Utilities (incl. Community Room)		30,000
Benevolences		18,500
Church Council		4,000
Youth Ministry		5,100
Worship and Music		4,300
Outreach and Advertising		1,000
Total Expenses		$369,600
Excess of Revenues over Expenses		$ 8,900

Table 2: Statement of Activities Excerpts for Three Years **Table 2: Statement of Activities Excerpts for Three Years**

STATEMENT OF ACTIVITIES
FOR YEAR ENDED DECEMBER 31

		2014		2013		2012
Contributions/Offerings		$195,000		$198,000		$202,000
Auxiliary Service Revenue:						
Daycare Tuition		150,000		154,000		158,000
Bingo Revenue		15,000		18,000		19,500
Building Use		5,000		5,300		5,800
Total Unrestricted Revenue		$365,000		$375,300		$385,300
Pastor Compensation		$80,000		$78,000		$77,000
Church Employees Compensation		75,000		74,500		74,000
Daycare:						
Employee Wages	$135,000		$130,000		$129,000	
Snacks and Meals	15,000		14,500		14,000	
Utilities and Miscellaneous	8,000	158,000	8,100	152,600	8,000	137,000
Maintenance & Utilities (incl. Community Room Improvements)		32,000		29,000		27,500
Benevolences		19,000		18,700		18,200
Church Council		4,000		3,900		3,900
Youth Ministry		5,000		5,100		5,000
Worship and Music		4,000		4,000		3,900
Outreach and Advertising		1,000		950		900
Total Expenses		$378,000		$366,750		$347,400
Excess of Revenues over Expenses		($13,000)		$8,550		$37,900

The board members turned to Withers. Surely her knowledge of accounting and budgeting could help them understand what might be happening. Withers thought carefully about everything that was going on. On one hand, logical explanations could be given for all of the unfavorable variances between the budget and actual amounts. On the other hand, internal controls were weak, and the potential for fraud is high.

Given the *IMA Statement of Ethical Professional Practice*, Withers knows that she has a responsibility to be honest, fair, and objective in addressing the church's financial issues with the rest of the board members. A CMA has a competence responsibility to "provide decision support information and recommendations that are accurate, clear, concise, and timely." Additionally, a CMA has a credibility responsibility to "communicate information fairly and objectively" and to "disclose all relevant information that could reasonably be expected to influence [a] user's understanding of…analyses or recommendations." Finally, even though the church had no stated internal control policies, Withers knew that she had a responsibility to disclose the control problems that could lead to inappropriate behaviors.

CASE QUESTIONS

1. Who are the stakeholders of Saintly Church?
2. A system of internal controls should be designed to protect assets and ensure compliance with organizational policies and procedures. Do you believe that the church has a reasonable system of internal controls? Explain why or why not.
3. Prepare a flowchart of the sources and uses of the church funds. Indicate within the flowchart where documentation is being prepared and by whom. Use this flowchart to identify points of weakness in the current system of internal controls for question 4.

4. Fraud, waste, and/or abuse may occur when an organization has no, or ineffective, internal controls.
   a. In what ways might Pastor Lang commit fraud in the church? If the pastor is stealing from the church, what rationalizations might he use for his actions?
   b. In what ways might Sabrina Louis commit fraud in the church?
   c. What types of waste and abuse could be occurring in the church by persons other than Pastor Lang or Sabrina Louis?
   d. What recommendations should Withers supply to the board about the church's internal controls?

5. Assuming that no theft is occurring at the church, discuss the human resource issues that the lack of internal controls places on church employees.

6. Organizational governance reflects the manner in which management (in this case, the church's board and pastor) is directed, administered, and controlled toward the achievement of mission and vision. It appears that the appropriate level of governance is not being provided by the board at Saintly Church. What legal and ethical issues might arise related to the various stakeholders given the lack of good organizational governance?

7. What rational and legitimate explanations could be given for each of the line item budget variances?

8. Review the standards of competence, confidentiality, integrity, and credibility within the *IMA Statement of Ethical Professional Practice*.
   a. How should Withers proceed relative to (1) the situation and (2) her communications with the board and others?
   b. Given the responsibility of confidentiality, how should Withers broach the subject (if at all) of the potential for Louis committing fraud?

ENDNOTES

[1]See, for example, http://www.kybaptist.org/wp-content/uploads/2012/06/27-Handling-Money-in-Church-Internal-Controls.pdf , http://download.elca.org/ELCA%20Resource%20Repository/Internal_Control_Best_Practices.pdf , http://www.churchmanagementsolutions.com/kb/KnowledgebaseArticle50270.aspx.

[2]Warren, R., "How to Build Trust Within Your Staff," *Pastors.com* (September 3, 2012); http://pastors.com/how-to-build-trust-within-your-staff/.

[3]Churches are not-for-profit organizations. Not-for-profit entities typically use fund accounting rules and principles and prepare financial statements in accordance with FASB Statement of Financial Accounting Standards (SFAS) Nos. 116 and 117. At the time this case was written, SFAS 117 was under review. See http://www.fasb.org/cs/ContentServer?c=FASBContent_C&pagename=FASB%2FFASBContent_C%2FProjectUpdatePage&cid=1176159286112 for an update of the current status of this standard and the review process.

Diamond Foods, Inc.

Jomo Sankara and Deborah L. Lindberg, Illinois State University

THIS CASE EXAMINES A REAL-LIFE OCCURRENCE OF ALLEGED financial statement fraud by Diamond Foods, Inc. Specifically, the company purportedly understated walnut costs in order to falsify earnings to meet estimates by stock analysts. The facts of this case are drawn from Securities & Exchange Commission (SEC) accounting and auditing enforcement releases and administrative proceedings releases. Learning objectives specific to this case include increased awareness of real-life ethical dilemmas, understanding the reasons for earnings management, understanding the costs of earnings management, and greater awareness of appropriate auditing responses to potential earnings management fraud.

The case is within the grasp of introductory undergraduate students and is also appropriate for graduate students. The case can be used in either an auditing course or a managerial course. You can pick relevant questions from the case to assign to students as deemed appropriate based on the class.

Keywords: Diamond Foods, Inc., managed earnings, analyst expectations, ethics, auditors, budgetary control.

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Diamond Foods, Inc.

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INTRODUCTION

This case examines an interesting real-life occurrence of alleged financial statement fraud by Diamond Foods, Inc. Specifically, the company purportedly understated walnut costs in two fiscal years in order to falsify earnings to meet estimates by stock analysts. The facts of this case are drawn from Securities & Exchange Commission (SEC) accounting and auditing enforcement releases and administrative proceedings releases.

OVERVIEW

The SEC filed separate actions in January 2014 against Diamond Foods, Inc., its former Chief Executive Officer Michael Mendes, and its former Chief Financial Officer Steven Neil for their roles in a scheme to understate walnut costs in order to falsify earnings to meet estimates by stock analysts.[1] The SEC contends that Diamond materially falsified its financial statements in fiscal years 2010 and 2011.[2] Diamond has since restated its financial results for those periods. The company's reported earnings decreased by $10.5 million for its 2010 fiscal year and by $23.6 million for its 2011 fiscal year.[3] Additional specific information is provided in the following sections of the case.

DIAMOND FOODS: MORE THAN NUTS

Diamond Foods, Inc., based in San Francisco, Calif., has a significant line of business that involves buying walnuts from growers and then selling the walnuts to retailers. The company diversified into potato chip and microwave popcorn product lines, introducing these lines after Diamond became a publicly traded company in 2005. Diamond first entered the microwave popcorn business when it acquired the Pop Secret popcorn brand from General Mills in 2008. Two years later, Diamond Foods expanded into potato chips by acquiring the Kettle Foods potato chip company. The potato chips are sold under the Kettle Brand label in the United States and Kettle Chips brand in the United Kingdom.[4] As of August 31, 2011, Diamond had issued 22,011,196 shares of common stock.

Although Diamond Foods diversified into other product lines, walnuts remained its primary product. In 2010, a significant increase in the cost of walnuts threatened Diamond's financial results, and, as described in the following paragraphs, two of Diamond's top officers allegedly manipulated financial information.

THE ACCOUNTING SCHEMES

In fiscal year 2010, there were significant increases in the average prices demanded by walnut growers.[5] Accordingly, Diamond needed to pay significantly more to its growers in 2010, compared to prior years. Yet an increase in the cost of walnuts would decrease net income at a time when Neil,

Diamond's then-CFO, was facing pressure to meet or exceed the earnings estimates of Wall Street analysts.[6] Neil gave "extra" payments to Diamond's walnut growers but allegedly improperly excluded portions of these payments from the cost of walnuts by instructing his finance team to consider the payments as advances on crops that had not yet been delivered. Mendes, Diamond's then-CEO, was not only involved in the decision to make special payments to growers but also was aware of the way these payments were recorded in the financial statements.[7] By allegedly falsifying the financial statements for fiscal years 2010 and 2011, Diamond was able to hit quarterly earnings per share (EPS) targets and exceed analysts' estimates.[8] The SEC also alleges that both Neil and Mendes personally benefited from the alleged fraud by receiving cash bonuses and other compensation based on reported EPS in both fiscal years 2010 and 2011.[9]

FISCAL YEAR 2010: "CONTINUITY" PAYMENTS

Diamond began manipulating the financial statements by understating its walnut cost in the second quarter of fiscal year 2010. In accordance with Diamond's accounting policy, the cost of the 2009 walnut crop is reported in the 2010 financial statements. Diamond had previously recorded an estimated average walnut cost of $0.82 per pound in the first quarter of fiscal year 2010 based on the 2009 crop. But in order to beat the analysts' consensus second quarter EPS forecast, Neil reduced the walnut cost estimate to $0.72 per pound.[10] The resultant increase in stock price from beating analysts' forecasts supported Diamond's expansion into potato chips and the imminent acquisition of the Kettle Foods potato chip company.

Diamond subsequently paid a final minimum price to the walnut growers of $0.71 per pound, which was significantly lower than market price for the 2009 crop. Therefore, Neil created a scheme to "close the gap" between the final minimum price and the market price, which was to pay the walnut growers extraordinary payments of approximately $0.10 per pound, termed as a "continuity" payment. Only the final minimum price of $0.71 per pound was included in the 2010 financial statements. To avoid including the continuity payment in the 2010 financial statements, Neil instructed his finance team that the payment was an advance for the 2010 walnut crop. But the growers were paid the continuity payment and final 2009 crop payment in one check, the continuity payment went to growers not under contract to deliver the 2010 crop, and continuity payments were made to growers who ultimately did not deliver a 2010 crop. Mendes reviewed and approved correspondence sent to the growers related to this matter. Excluding the continuity payments from the 2010 financial statements resulted in Diamond beating its EPS forecasts and reporting a 52% growth in earnings.[11]

FISCAL YEAR 2011: "MOMENTUM" PAYMENTS

Neil also allegedly manipulated walnut costs in the 2011 fiscal year, resulting in the continuation of the trend of beating analysts' earnings estimates. A competitive price for the 2010 walnut crop was approximately $1 per pound. Diamond paid the walnut growers an average first installment payment of $0.57 per pound and agreed to pay a final payment of $0.08 per pound. Diamond subsequently recorded the final 2010 crop walnut cost as $0.74 per pound. The cost of the 2010 walnut crop is recorded in 2011 fiscal year's financial statements.

Neil knew that Diamond's "final" price for the 2010 crop of walnuts, not including the "momentum" payment, was about $0.40 per pound below prices being paid by Diamond's competitors. This gap was considered unusual and unprecedented.[12] To close the gap in payments to the walnut growers, Neil issued an extraordinary and unusual payment to growers of $0.30 per pound, termed the "momentum" payment. This payment was treated by the finance team as an advance for the 2011 crop and therefore was excluded from 2011 fiscal year's reported earnings. The payment, however, was paid to all growers who delivered the 2010 walnut crop to Diamond, including those not under contract to deliver a 2011 crop and those who ultimately did not deliver a 2011 crop.

The fiscal year 2010 "continuity" payments and the fiscal year 2011 "momentum" payments could be termed "earnings management" activities. As noted in this case, the SEC took exception to the earnings management methods used by Diamond. But not all methods used to increase net income are unethical.

EARNINGS MANAGEMENT METHODS

Earnings management is the purposeful intervention in the external financial reporting process with the intent of obtaining some private gain.[13] Several methods may be used to manage earnings. Accruals management (AM) is the manipulation of accounting accruals (or prepayments) in order to manage earnings. AM is relatively common and relatively easy to justify since it is based on accounting estimates and assumptions. Real transaction management (RTM) involves the timing and structuring of actual business activities in order to achieve a desired financial reporting result.[14] Non-GAAP earnings management is another type

of earnings management where GAAP (Generally Accepted Accounting Principles) is violated in order to manipulate the reported earnings number. Although both AM and RTM do not generally violate GAAP, there may be instances when AM does violate GAAP.[15]

In his article "Overvaluation and the Choice of Alternative Earnings Management Mechanisms," Brad Badertscher argues that there is a pecking order to managing earnings. He argues that firms are likely to first use AM because it does not affect business operations and therefore is the least costly form of earnings management. But use of AM is limited because of the reversing nature of accruals. RTM generally follows AM but is more costly than AM because it impacts the company's long-term performance. In addition, companies will eventually run out of RTM opportunities and either stop managing earnings or transition to the most costly form of earnings management.[16] Companies use non-GAAP earnings management because it is difficult to detect and enables large-scale changes to reported earnings. Yet Badertscher argues that non-GAAP earnings management is the most costly form of managing earnings because of legal fees and capital market costs once the GAAP violation has been revealed. Therefore, non-GAAP earnings management is generally the last method used to manage earnings.

Auditors have the responsibility to conduct their audit to provide reasonable assurance that there are no material misstatements in the financial statements. This responsibility includes ascertaining that any "earnings management" techniques do not violate GAAP.

THE AUDITORS

Neil approved the walnut cost and determined the accounting for walnut payments. He supervised Diamond's finance and accounting team ("finance team") and the team that managed relationships with growers ("grower relations team"). As the CFO, Neil directly interacted with Diamond's external auditors. Neil prepared an internal memorandum each quarter that justifyed the quarterly estimated cost of walnuts and a memorandum to the external auditors that justifyed the final walnut costs. The SEC notes that the auditors relied on the memos when issuing their opinions about Diamond's financial statements.[17]

FISCAL YEAR 2010

During the audit of the 2010 financial statements, the auditors asked Neil for information to justify his decision to account for the "continuity" payment as an advance on the next year's crop of walnuts. The SEC contends that Neil made material misrepresentations to the auditors and withheld material information from them. Specifically, he falsely stated that walnut growers had asked for an advance payment for next year's crop and omitted the fact that he and other Diamond representatives had assured growers a competitive price for the current year.[18] Further, the auditors relied on a "management representation letter" that Neil signed, which stated that the "continuity" payment was for the 2010 crop and did not represent a payment for 2009 walnut costs. Mendes was cognizant of representations made to the external auditors and signed the related management representation letter related to the 2010 financial statements audit.[19]

FISCAL YEAR 2011

Neil continued to manipulate walnut costs during fiscal year 2011. In e-mails, Neil referred to the walnut costs as a "lever" to manage earnings in Diamond's quarterly financial statements. As a result of the cost manipulations, Diamond reported EPS that met or exceeded analysts' expectations for every quarter in 2011. It should be noted that Diamond's stock price was central to a proposed acquisition of a major potato chip business unit in spring 2011.[20] The company's stock price reached approximately $92.50 per share in September 2011.

EPILOGUE

DIAMOND FOODS

As a result of media speculation of accounting irregularities and an internal investigation, Diamond Foods issued restatements on November 14, 2012. Around the time of the announcement, the price of Diamond's stock declined to approximately $15.40 per share.

Diamond Foods, Inc., without admitting or denying the allegations, agreed to pay $5 million to settle the charges filed against it by the SEC.[21] Diamond also consented to the entry of a permanent injunction against future violations of the relevant securities laws.[22]

MICHAEL MENDES

Michael Mendes, Diamond's former CEO, agreed to settle charges against him by paying a civil money payment of $125,000 to the SEC and agreeing to "cease and desist" from committing or causing any future violations of Sections 17(a)(2) and (a)(3) of the Securities Act as well as other Sections and Rules of the Exchange Act.[23] In addition, Mendes returned or forfeited more than $4 million in bonuses and other benefits he received as a result of Diamond's allegedly fraudulent financial reporting.[24]

STEVEN NEIL

The SEC's litigation against Steven Neil, Diamond's former CFO, continues and, at the time of this writing, is still pending.[25] The SEC is seeking several things from Neil, including:

- Permanently enjoining Neil from directly or indirectly violating certain rules of federal securities laws;
- Prohibiting Neil from serving as an officer or director of any entity having securities registered with the SEC pursuant to the Exchange Act;
- Surrendering any wrongfully obtained benefits (Neil received $1.18 million in bonuses, including $687,043 tied to meeting EPS goals);
- Reimbursing Diamond for all compensation received or obtained during the relevant statutory time period established by Section 304 of the Sarbanes-Oxley Act (SOX); and
- Paying civil penalties.[26]

GENERAL QUESTIONS:

1. In this case, Diamond Foods was accused of "managing earnings" in an unethical manner. Provide two specific examples of how a company could *ethically* improve net income.

2a. Why do you think accounting personnel (the "finance team") seemed to "go along" with the schemes to understate the cost of walnuts in both fiscal year 2010 and fiscal year 2011? Provide as many possible reasons you can think of.

2b. Instead of agreeing to record the extra payments to growers as "advances" and, in effect, helping the company falsify the financial statements, what other alternative actions were available to the finance team? Consider professional standards, such as the *IMA® (Institute of Management Accountants) Statement of Ethical Professional Practice* or the AICPA (American Institute of Certified Public Accountants) Code of Professional Conduct, when answering this question.

3. At the time of this writing, charges against Steven Neil, the former CFO of Diamond Foods, were still pending. Conduct research to determine the status of these charges. In your opinion, why do you think Michael Mendes, the former CEO of Diamond Foods, chose to settle charges with the SEC, whereas Neil is disputing the charges?

AUDITING QUESTIONS:

4. Describe the "fraud triangle." Discuss the components of the fraud triangle in the context of this case.

5a. The auditors were misled by both Michael Mendes and Steven Neil. Neil even signed a "management representation letter." Describe what a "management representation letter" is. Do you believe that it, and other representations by management, constituted sufficient appropriate audit evidence in this case? Defend your answer. (Hint: Review the requirements of Statement on Auditing Standards (SAS) No. 99, paying particular attention to the concept of fraud risk factors ("red flags") in an auditing context.)

5b. Describe what the terms "analytical procedures" and "professional skepticism" mean in an auditing context. Do you think the auditors *should have* discovered the alleged fraud perpetrated in the financial statements in fiscal year 2010 and fiscal year 2011? Defend your answer.

5c. Conduct research as to (1) who the auditors were during the timeframe of this case and (2) the current status of any litigation against the auditors. Discuss any allegations against the auditors, including your opinion as to the merits of the allegations.

6. If the auditors *had* discovered the alleged fraud, what is the appropriate action, or series of actions, for an audit firm of a publicly traded company (such as Diamond) that becomes aware of illegal acts by the client's management?

COST/MANAGERIAL ACCOUNTING QUESTIONS:

7. How could management accounting tools, such as variance analysis, benchmarking, and Cost-Volume-Profit analysis, have been used to highlight Diamond's profitability challenges?

8. How could the budgeting process have been used to help Diamond achieve its targets *without* resorting to the alleged financial statement irregularities?

9. Reconcile the 2010 walnut cost payments with the final walnut cost of $0.74 per pound recorded in the 2011 financial statements.

10. Why was the 2010 "momentum" payment larger than the 2009 "continuity" payment? If the earnings management was not exposed, do you believe the earnings management could have continued? If the earnings management did continue, how would it likely have been done?
11. Describe the different reasons for managing earnings.
12. What are the disincentives for managing earnings?
13. Which IMA ethical guideline(s) was violated by Diamond's CFO?

ENDNOTES

[1]The material presented in this case was drawn from several SEC accounting and auditing enforcement releases, litigation releases, and administrative proceedings. Since some of the information from these sources is overlapping, endnotes include the primary sources where the information is located.

[2]U.S. Securities & Exchange Commission (SEC), Litigation Release No. 22902, January 9, 2014, www.sec.gov/litigation/litreleases/2014/lr22902.htm.

[3]SEC, Administrative Proceeding File No.3-15674, In the Matter of Michael Mendes, Respondent, January 9, 2014, www.sec.gov/litigation/admin/2014/33-9508.pdf.

[4]Learn more about Diamond Foods at www.diamondfoods.com/about.

[5]Fiscal year 2010 ended July 31, 2010.

[6]SEC, Litigation Release No. 22902.

[7]SEC, Administrative Proceeding File No. 3-15674.

[8]Fiscal year 2011 ended July 31, 2011.

[9]SEC, Litigation Release No. 22902, and SEC, Administrative Proceeding File No. 3-15674.

[10]SEC, Litigation Release No. 22902.

[11]*Ibid.*

[12]SEC, Complaint relating to Case 3:14-cv-00122, *Securities and Exchange Commission v. Steven Neil*, January 9, 2014, www.sec.gov/litigation/complaints/2014/comp-pr2014-4-neil.pdf.

[13]Katherine Schipper, "Commentary on Earnings Management," *Accounting Horizons*, December 1989, pp. 91-102.

[14]Amy Zang, "Evidence on the Trade-Off between Real Activities Manipulation and Accrual-Based Earnings Management," *The Accounting Review*, March 2012, pp. 675-703.

[15]Brad A. Badertscher, "Overvaluation and the Choice of Alternative Earnings Management Mechanisms," *The Accounting Review*, September 2011, pp. 1,491-1,518.

[16]Michael Ettredge, Susan Scholz, Kevin R. Smith, and Lili Sun, "How Do Restatements Begin? Evidence of Earnings Management Preceding Restated Financial Reports," *Journal of Business Finance & Accounting*, April/May 2010, pp. 332-355.

[17]SEC, *Securities and Exchange Commission v. Steven Neil.*

[18]*Ibid.*

[19]SEC, Administrative Proceeding File No. 3-15674.

[20]SEC, *Securities and Exchange Commission v. Steven Neil.*

[21]SEC, Litigation Release No. 22902, and SEC, Complaint relating to Case 3:14-cv-00123, *Securities and Exchange Commission v. Diamond Foods, Inc.*, January 9, 2014, www.sec.gov/litigation/complaints/2014/comp-pr2014-4-diamond.pdf.

[22]SEC, Litigation Release No. 22902.

[23]SEC, Administrative Proceeding File No. 3-15674.

[24]SEC, Litigation Release No. 22902.

[25]*Ibid.*

[26]SEC, *Securities and Exchange Commission v. Steven Neil.*

Sunk Costs: What Costs Do You Sea?

Marty Stuebs and Cari Edison, Baylor University; Katy Hurt, Independent External Auditor

COMPANIES' RESPONSIBILITIES FOR SAFETY ARE IMPORTANT SOCIAL AND ENVIRONMENTAL CONCERNS. This fictional case—inspired by recent actual events—presents a capital investment intended to improve cruise ship safety. Both managerial accounting investment analyses and ethical recognition of responsibilities play necessary roles in the safety investment decisions. The case also refers to and encourages use of the *IMA® Statement of Ethical Professional Practice.*

The case blends managerial accounting and ethics, so it is suitable for a number of managerial accounting and accounting ethics courses. It was written for students in an undergraduate, advanced undergraduate, or graduate managerial or cost accounting course. It should be used after students have practiced NPV and payback period capital investment techniques. Since the case integrates capital investment analyses within a larger analysis and considers professional responsibilities (in particular, the IMA Statement of Ethical Professional Practice) in the presence of incentives, it can be used in an accounting ethics course as well. The case can also be simplified and adapted for use in lower-level managerial accounting classes.

Keywords: capital budgeting, capital investments, safety investments, ethics, responsibility, managerial and cost accounting analysis, decision making.

Sunk Costs: What Costs Do You *Sea*?

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BACKGROUND

Festival Cruise Lines (FCL), a publicly traded company on both the New York Stock Exchange (NYSE) and London Stock Exchange, is the largest cruise company in the world. FCL serves as the parent company for four primary subsidiaries—a broad spectrum of cruise line brands that cater to a variety of cruise vacationers. At the low end, the first FCL subsidiary, Festival, offers an affordable cruise experience to a wide variety of cost-conscious customers. Other FCL subsidiaries, like Goddess Cruise Lines, American Swiss Cruise Lines, and Dranuc Cruise Lines, offer progressively higher-quality cruise experiences for correspondingly higher price premiums. FCL is domiciled internationally and has two headquarters located in Doral, Fla., an industrial area of Miami, and Southampton, England.

FCL's Festival subsidiary began entertaining passengers on its Happy Boats in 1972. Today, it employs upwards of 90,000 crew members who serve more than 3.5 million cruise passengers annually on a fleet of 24 ships. Cruises generally range from three to 18 days in duration, and the one-week cruise is the most common. Ships venture to a wide variety of world-wide destinations, including New Zealand, Tahiti, New England, Alaska, the Mexican Riviera, Caribbean, Mediterranean, and many more.

Festival finds itself in an industry that has evolved over the last century. The cruise ship industry was born in 1844. Focus shifted from carrying cargo to pleasing customers, and superliners were being developed by the early 20th Century. These ships provided an abundance of fine dining and leisure activities to affluent passengers and generally were not designed to cater to the general population. In the 1960s, cruise ship companies began shifting operations to attract a broader spectrum of middle-income clientele. While premium ships were still available, the days of the affluent Titanic-style voyages were becoming a thing of the past. Price competition began to slowly enter the market and dramatically increased in recent years. Call it the "Walmart-ization" of the cruise ship industry. The recent downturn in the economy put real pressure on potential passengers' discretionary income and, as a result, cruise ship prices. Containing and controlling costs in this environment is critical to a cruise ship company's success.

The cruise industry is also a high-fixed-cost industry. A typical cruise ship can cost $500 million, and larger and larger ships are being built. Given the enormous fixed costs, one of the greatest challenges facing the cruise ship industry today is utilizing capacity—filling ships with passengers and generating revenue. Festival's bottom line is extremely dependent on cruise ship passengers and ship occupancy levels. Projecting a healthy reputation to attract customers and maintain occupancy levels is important.

Festival generally has an impeccable history of safety. But increased competition and economic pressures in the industry recently created an additional bottom-line focus on cost control. Many safety repairs and investments had been tabled and delayed to increase ship turnaround, time at sea, revenue utilization, and ultimately profits. In1998, Festival ran into its first instance of trouble with a passenger-filled ship. Since that time, more than five ships have encountered

disconcerting incidences—four incidences attributable to fires in engine rooms, laundry rooms, and a generator room.

INTRODUCTION

The office was quiet. The sunny spring weather in Miami, Fla., had lured many Festival Cruise Line (FCL) personnel to take an enjoyable Friday afternoon off. But Linda Wright, a senior accountant at FCL, and some of her accounting staff were still busy at work. It was late Friday afternoon; Linda took a brief pause to reflect on her career at FCL.

Linda Wright's name suited her perfectly. She did not like being wrong—carried herself with integrity and seldom made bad decisions. She had been attracted to Festival's culture and mission—to the happiness, joy, laughter, and entertainment FCL generated and brought to passengers on its Happy Boats. Miami also provided Linda and her family a picturesque destination to call home. FCL had been a great career choice for Linda. When she joined Festival, she was the sole female in the accounting department. Over the years, she had become a skilled accountant and excelled within the company.

Linda and her staff were busy putting together capital budgeting analyses for investment proposals and projects that had been submitted to the corporate office. Among the submitted proposals, Linda and a few of her colleagues—Matt Dennison and Evan Truett—were analyzing a capital investment proposal to improve the safety of the cruise ship fleet for FCL's Festival subsidiary. This capital investment analysis posed a real challenge to delicately balance bottom-line income considerations of controlling costs with adequate safety investment considerations for protecting cruise ship personnel and passengers and minimizing safety risks.

Linda recognized a few challenges with the safety investment proposal, and two were prominent. First, the developing analysis was based on many—often slippery—estimates. Although accounting can be perceived as black-and-white and relatively straightforward, Linda found herself in murky waters, collecting data and performing analyses that were largely based on educated estimates. What was the cost of an accident? What value should be placed on human injury? The team's estimates could influence analysis of the safety investment's viability and eventually influence FCL passenger and crew safety.

Second, Linda wondered how receptive executive management would be to a significant capital outlay designed to generate safety improvements but potentially offer little bottom-line benefit. Would the proposal be passed over for projects promising larger potential boosts to profits? Bottom-line considerations were becoming a primary focus in executive decisions because of increasing price competition in the cruise industry and the increasingly tight economy.

Linda pondered her concerns: "How can I handle the uncertain estimates included in my analysis? What are my responsibilities to passenger and crew safety? How do I balance these responsibilities with controlling costs and profitability?" Linda Wright could not get this one wrong.

THE TURBULENCE

"What are you having for lunch today?" David asked with a jovial smile.

"Dave! Do you even have to ask? A spinach salad with smoked salmon and veggies," Linda replied.

"A creature of habit! You're a typical accountant," David nodded. "You need to live a little; try something different—even delicious. They're serving filet mignon today and look at these desserts!" David exclaimed as he took a bite of tiramisu.

Linda was having lunch in Festival's corporate cafeteria with David Santana, the head of Corporate Risk Management at Festival. David was a colleague and friend who Linda had known and respected for years—even if their dietary preferences were strikingly different. David was a bright, hard-working Peruvian immigrant who had worked his way up through the Festival ranks over the years. The capital investments in safety improvements were his brain child, and now he was audaciously championing the latest proposal.

In fact, the capital proposal for safety improvements had been a main topic of conversation during several lunches Linda and David shared over the last couple of months. David's concern for these safety improvements went beyond the professional; it was also personal. A few years earlier, an engine fire on the Festival ship Victory had created serious safety concerns. Mario Venasquez, one of David's Peruvian childhood friends, was a Festival employee on the ship. In fact, David was able to get Mario the job on the Victory so that he could help his family in Peru. Mario valiantly took action to fight the fire, and his responsive and courageous actions contained it, resulting in limited damage and minimal interruptions. The engine fire incident went virtually unnoticed to passengers. But Mario sacrificed his life to contain the engine fire—a tragic blow for David. This incident became the "canary in the coal mine" for David—a signal that Festival needed to change course and take corrective action to improve ship safety.

So conversation quickly returned to the safety investment topic as Linda and David started lunch. "Did you get our actuarial estimates on the probabilities and magnitudes of cruise ship safety accidents?" David queried.

"Yes, we did. Thank you. Matt and Evan added them into our capital investment analyses. In fact, we also finished extensive conversations with Festival's legal counsel," Linda replied.

"Oh? Great! Let me know if you have any questions or need any more data. What did legal have to say?" asked David.

"Well, according to the lawyers, Festival is currently meeting all international maritime safety standards. The safety improvements would go well beyond current international legal standards and requirements but would protect Festival in the future if laws change and safety requirements become more rigorous," Linda said.

"Well, that isn't all that surprising. The cruise ship industry has consistently lobbied lawmakers for years to keep safety regulation to a minimum," David revealed, "but Festival needs to be different." David's face reflected the passion resulting from the loss of his friend and his recent experiences.

"You're right. This is important for Festival," Linda affirmed.

"Our crew members, valued passengers, and shareholders need to be protected and reassured that we care about the safety of our people. I'm concerned that the Board of Directors is favoring cost control and financial considerations a little too much. Their minds are wrapped up in the current year's bottom line. I have championed safety investments for several years now and have been repeatedly turned down due to limited financial resources. Corporate needs to extend its vision beyond a myopic focus on the bottom line. This is about more than just profits; it's about people," David concluded.

Linda nodded empathetically. David was right. Festival executives selected capital investments primarily on the basis of a project's contribution to economic return and bottom-line impact. The lunch conversation continued and slowly meandered into casual chit-chat. Linda appreciated David as a Festival employee.

THE NUMBERS

"I just got an e-mail from John. Corporate is now breathing down our necks for the capital investment analysis information. We really need to wrap this up soon," Linda relayed as she rallied Matt and Evan during a brief powwow in her office. John Cary was Festival's current hard-charging CEO. Projects including the safety investment proposal had made it through the initial screening phase. Now executives wanted analysis information to rank proposals for possible selection and funding during the preference phase of analysis.

Linda's team had begun putting together the capital investment analyses for the safety investment proposal. Linda decided to develop three estimates: one for what she viewed as the minimum investment required by adding emergency generators to each ship; one for installing the emergency generators and high-pressure water mist systems (an intermediate-level proposal); and one to fully fund all the recommended changes, including upgrading the engine rooms. Using these three alternatives, Evan and Matt began calculating the total number of annual cruise line passengers Festival can carry.

If Festival chooses not to invest in the expenditures, each ship has an available passenger capacity of 3,500. But under Festival's current operations, the ships are only at 90% capacity. Additionally, Festival's fleet of 24 ships cruise an average of 48 weeks out of the year. In order to make the minimal changes, the cruise schedule must remain the same to minimize the effect on capacity. The emergency generators will be installed during each of the ships' four weeks of dock time (52 weeks in a year – 48 weeks), so total passenger capacity will remain unchanged for this alternative.

If the midrange alternative is selected, substantial effects will be seen. Average available passenger capacity will remain unchanged at 3,500, but the utilization rate will be 90% for year one, 91% for year two, and 92% for years beyond year two. In order to install the generators and sprinkler systems, the ships will need to be docked for the repairs. Therefore, only 36 cruises can be operated in year one, 40 in year two, and 49 in years beyond year two.

If all repairs and upgrades are performed, the utilization rate will be 90% for year one, 93% for year two, and 96% for years beyond year two. On average, 30 one-week-long cruises will operate in years one and two, and 50 one-week-long cruises will operate each year after year two. Evan and Matt's findings and calculations are shown in Table 1.

Without any expenditures, Festival's cruise ships can carry approximately 3.629 million passengers per year on its fleet of 24 ships. Each passenger will generate $1,700 of revenue (sales price plus onboard spending). The variable costs are approximately $300 per passenger, and the fixed costs are around $3.6 billion per year. Linda's team also collected the information on the actuarial estimates, probabilities, and costs of possible expected accidents from David Santana. This information can be used to calculate an estimated expected value of the cost of accidents. The operating costs, total passenger capacity, and potential accident costs depend on which parts of Linda's recommendations are funded. In all three cases, Linda decided to leave the $1,700 selling price and onboard spending and $300 variable cost estimates in place. None of

Table 1: Festival Cruise Lines, Inc.: Annual Passenger Factors

	Current Operations	Minimum Funding	Midrange Funding			Complete Funding		
	(All Years)	(All Years)	Year 1	Year 2	After Year 2	Year 1	Year 2	After Year 2
1. Capacity Utilization Factor:								
Average available passenger capacity/cruise	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500
Capacity utilization rate (average actual capacity/available capacity)	90.00%	90.00%	90.00%	91.00%	92.00%	90.00%	93.00%	96.00%
Capacity utilization factor (Number of passengers/1 week cruise)	3,150	3,150	3,150	3,185	3,220	3,150	3,255	3,360
2. Turnover Factor (Number of 1 week cruises/year)	48	48	36	40	49	30	30	50
3. Fleet Factor (Number of Cruise Ships/year)	24	24	24	24	24	24	24	24
Total Annual Festival Cruise Line Passengers	**3,628,800**	**3,628,800**	**2,721,600**	**3,057,600**	**3,786,720**	**2,268,000**	**2,343,600**	**4,032,000**

the changes were likely to impact those two figures. Total passenger capacity, investment costs, and fixed operating costs, however, are another story.

Making the minimum required changes would cost $100 million. Such minimal changes will have little impact on continuing capacity or efficiency, and during and after the repair process, total passenger capacity would remain unchanged. The investment would, however, somewhat reduce the probability of an accident. Linda and her team collected data on the likelihood and costs of accidents based on historical data in the industry. This information is included in Table 2.

Adding the emergency generators and installing high-pressure water mist systems on all ships will cost approximately $250 million. Linda expects these changes to improve efficiency enough to increase post-project annual passenger capacity to 2.722 million in year one, 3.058 million in year two, and 3.787 million in years following year two. Once the upgrades are made, the net annual fixed costs will decrease slightly to approximately $3.384 billion. The investments will also reduce the probability and projected costs of expected accidents.

If the Board of Directors will allow upgrades to the engine room as well, Linda estimates the upfront cost will be $300 million. Post-implementation annual passenger capacity will be approximately 2.268 million in year one, 2.344 million in year two, and 4.032 million in all years following year two. In addition, annual fixed costs will drop to around $3.240 billion, and the projected probabilities and costs of expected accidents will decrease as well.

Matt and Evan estimate that all of the capital investments will have a useful life of 15 years with no salvage value. Additionally, they conservatively assume that all capital investment outlays occur and begin to depreciate at the same time (i.e., time 0) even though complete installation of some considered alternatives will occur after the start of capital investment outlays (i.e., time 0).

Linda, with the help of Matt and Evan, input the information into a spreadsheet (see Table 2) in order to calculate the net present value (NPV) and payback period of the different funding options. For tax purposes, it is Festival's policy to depreciate capital investments using the straight-line method, and Festival's marginal tax rate (combined federal, state, and local) is about 40%. The hurdle (discount) rate is 10% after tax for all capital expenditures.

Festival's policy states that the company will only consider investing in capital projects with a positive NPV within five years to satisfy certain profitability thresholds. Also, it will only invest in capital projects with an unadjusted payback period of five years or less. Linda and her team used these standards to evaluate the different alternatives.

LINDA'S SITUATION

The analysis was coming together, but Linda began to replay executives' potential responses over and over in her head. Because of Festival's large size in the market, the public's eye is always on its stock price. CEO John Cary was well aware of this and never let anyone forget the importance of the bottom line. Even though Festival seeks to please its passengers, John and the rest of the top executives put pleasing shareholders as their first priority.

These thoughts left Linda somewhat anxious. Her analysis affected a significant number of people. What were her responsibilities to the executives and the Board of Directors, shareholders, Festival employees, Festival cruise ship personnel and passengers, and David? How could she balance and meet all of these responsibilities?

Table 2: Festival Cruise Lines, Inc.: Cruise Ship Safety Repairs and Upgrades Data
(All numbers shown in thousands except Variable Costs per Ticket and Sales Price per Ticket + Onboard Spending)

Initial Investment								
	Complete funding		$ 300,000					
	Midrange funding		$ 250,000					
	Minimum funding		$ 100,000					
Depreciable life of investment			15					
Operations Information:								
Original Operations					**With Capital Expenditures**			
Costs:					**Costs:**			
Sales price per ticket + onboard spending			$ 1,700		Sales price per ticket + onboard spending			$ 1,700
Variable costs per ticket			$ 300		Variable costs per ticket			$ 300
Fixed costs			$3,600,000		Fixed costs			
						Complete funding		$3,240,000
						Midrange funding		$3,384,000
						Minimum funding		$3,600,000
Total Passengers (from table 1, rounded in the thousands)			3,629		**Total Passengers** (from table 1, rounded in the thousands)			
					Year 1, Midrange funding			2,722
					Year 1, Complete funding			2,268
					Year 2, Midrange funding			3,058
					Year 2, Complete funding			2,344
					Thereafter			
						Complete funding		4,032
						Midrange funding		3,787
						Minimum funding		3,629
Expected Accident Costs		**Probability**	**Cost**		**Expected Accident Cost**		**Probability**	**Cost**
						Complete funding		
	Significant Accident/Event	3%	$ 160,000			Significant Accident/Event	1%	$ 100,000
	Moderate Accident/Event	4%	$ 120,000			Moderate Accident/Event	1%	$ 80,000
	Minor Accident/Event	5%	$ 80,000			Minor Accident/Event	1%	$ 60,000
	No Accident	88%	0			No Accident	97%	0
						Midrange funding		
						Significant Accident/Event	1%	$ 120,000
						Moderate Accident/Event	2%	$ 100,000
						Minor Accident/Event	1%	$ 70,000
						No Accident	96%	0
						Minimum funding		
						Significant Accident/Event	1%	$ 160,000
						Moderate Accident/Event	2%	$ 120,000
						Minor Accident/Event	1%	$ 80,000
						No Accident	96%	0
Other Information								
Income Tax Rate:			40%		Hurdle (Discount) Rate:			10%

FESTIVAL CRUISE LINES CASE QUESTIONS

Would you do the right thing if you were Linda Wright? Answer the following case questions by preparing an analysis to guide Festival Cruise Line's decisions. Help Festival decide whether it should fully fund all of the recommended upgrades.

1. What are Linda's responsibilities in this situation? NOTE: You can apply the general standards in the *IMA Statement of Ethical Professional Practice* (available in Appendix A to help you identify specific responsibilities for Linda in this situation).
2. Complete the net present value (NPV) analysis and payback-period analysis required for Linda's report and prepare a discussion of your findings. Remember to use Festival's required five-year time horizon for your analyses. (The NPV and payback period analyses can be organized neatly in an appendix to your case analysis. A reader of your conclusions should be able to follow your work and computations. You can use an Excel spreadsheet. The results of your appendix analyses can be referenced in the body of your case to support your decision.) Based solely on the economics, what course of action should Linda recommend?
3. As Linda, what is your final decision and why? Assess the impacts of your final decision:
   a. What benefits/harms result and to whom?
   b. What rights are being exercised (denied) and by (to) whom?
   c. Do these impacts modify or change your decision? How?

APPENDIX A: IMA® STATEMENT OF ETHICAL PROFESSIONAL PRACTICE

STATEMENT OF ETHICAL PROFESSIONAL PRACTICE

Members of IMA shall behave ethically. A commitment to ethical professional practice includes: overarching principles that express our values, and standards that guide our conduct.

PRINCIPLES

IMA's overarching ethical principles include: Honesty, Fairness, Objectivity, and Responsibility. Members shall act in accordance with these principles and shall encourage others within their organizations to adhere to them.

STANDARDS

A member's failure to comply with the following standards may result in disciplinary action.

I. COMPETENCE

Each member has a responsibility to:

1. Maintain an appropriate level of professional expertise by continually developing knowledge and skills.
2. Perform professional duties in accordance with relevant laws, regulations, and technical standards.
3. Provide decision support information and recommendations that are accurate, clear, concise, and timely.
4. Recognize and communicate professional limitations or other constraints that would preclude responsible judgment or successful performance of an activity.

II. CONFIDENTIALITY

Each member has a responsibility to:

1. Keep information confidential except when disclosure is authorized or legally required.
2. Inform all relevant parties regarding appropriate use of confidential information. Monitor subordinates' activities to ensure compliance.
3. Refrain from using confidential information for unethical or illegal advantage.

III. INTEGRITY

Each member has a responsibility to:

1. Mitigate actual conflicts of interest, regularly communicate with business associates to avoid apparent conflicts of interest. Advise all parties of any potential conflicts.
2. Refrain from engaging in any conduct that would prejudice carrying out duties ethically.
3. Abstain from engaging in or supporting any activity that might discredit the profession.

IV. CREDIBILITY

Each member has a responsibility to:

1. Communicate information fairly and objectively.
2. Disclose all relevant information that could reasonably be expected to influence an intended user's understanding of the reports, analyses, or recommendations.
3. Disclose delays or deficiencies in information, timeliness, processing, or internal controls in conformance with organization policy and/or applicable law.

RESOLUTION OF ETHICAL CONFLICT

In applying the Standards of Ethical Professional Practice, you may encounter problems identifying unethical behavior or resolving an ethical conflict. When faced with ethical issues, you should follow your organization's established policies on the resolution of such conflict. If these policies do not resolve the ethical conflict, you should consider the following courses of action:

1. Discuss the issue with your immediate supervisor except when it appears that the supervisor is involved. In that case, present the issue to the next level. If you cannot achieve a satisfactory resolution, submit the issue to the next management level. If your immediate superior is the chief executive officer or equivalent, the acceptable reviewing authority may be a group such as the audit committee, executive committee, board of directors, board of trustees, or owners. Contact with levels above the immediate superior should be initiated only with your superior's knowledge, assuming he or she is not involved. Communication of such problems to authorities or individuals not employed or engaged by the organization is not considered appropriate, unless you believe there is a clear violation of the law.
2. Clarify relevant ethical issues by initiating a confidential discussion with an IMA Ethics Counselor or other impartial advisor to obtain a better understanding of possible courses of action.
3. Consult your own attorney as to legal obligations and rights concerning the ethical conflict.

The A-12 Stealth Bomber: Escalating Commitment to a Failing Project

David S. Christensen and Robin Boneck, Southern Utah University

THE A-12 WAS THE NAVY'S TOP AVIATION PRIORITY. The carrier-based stealth bomber was designed to replace the aging and crippled A-6 Intruder. In 1991 the program was cancelled due to cost overruns, schedule delays, technical problems, and a culture that suppressed bad news about the A-12 from Congress. To increase moral awareness, students are required to reflect, write about, and discuss the facts and moral implications of an ethical dilemma experienced by a cost analyst whose cost estimate about the A-12 was suppressed by supervisors in her chain of command.

Students use the IMA® Statement of Ethical Professional Practice as a framework to explore applicable values, standards, and actions. The case is designed for a graduate cost accounting course for both MBA and accounting students.

Keywords: moral awareness, ethics, values, escalation of commitment.

The Association of Accountants and Financial Professionals in Business

The A-12 Stealth Bomber: Escalating Commitment to a Failing Project

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INTRODUCTION

On January 7, 1991, Defense Secretary Richard Cheney announced that the Navy's A-12 stealth bomber project was terminated, citing severe schedule, cost, and performance problems as the reasons. It was the largest weapons system contract cancellation in the history of the Pentagon. In cancelling the program, a result of an investigative report conducted by Navy Principal Deputy General Counsel Chester Beach, Cheney claimed that no one could tell him how much the program was going to cost. In reality, there were many estimates of the final cost; some were more accurate than others. In an effort to save the program, the information forwarded to top military and civilian leadership was unreasonably optimistic.

For more information, read Brian Montgomery's article "How the A-12 Went Down," in the April 1991 edition of Air Force Magazine.

BACKGROUND

The A-12 was needed to replace the aging A-6E aircraft. The A-6A aircraft was first introduced in 1963 as the Navy's only day/night, all weather, medium-attack aircraft. A later version of the A-6, the A-6E, was also used to refuel other carrier-based aircraft. In the early 1980s the mission of the A-6E was greatly reduced due to wing cracks discovered in many of the aircraft. Defense Secretary Richard Cheney had recently grounded the A-6E due to cracks in its wings. Replacing the A-6E with the A-12 was the Navy's top aviation priority.[1]

According to the Government Accountability Office (GAO), on January 13, 1988, "the Navy awarded General Dynamics and McDonnell Douglas Aerospace corporations a $4.8 billion fixed-price incentive contract for the full-scale development of the A-12. The Navy expected that the A-12 will be significantly more capable and survivable against increasingly sophisticated air defense systems being deployed by the Soviets and third-world countries."[2]

Navy Captain Larry Elberfeld was designated as the program manager (PM). He was responsible for managing the A-12 program, including reporting on the program's cost, schedule, and technical progress in *Defense Acquisition Executive Summary* (DAES) reports. Elberfeld was required to complete a quarterly DAES report and provide it to the Navy Secretary of Defense, the Under Secretary of Defense for Acquisition, and the Assistant Secretary of Defense. In addition to periodically summarizing the cost, schedule, and technical status of a major defense acquisition program, its purpose was to provide early-warning information about actual and potential problems and corrective action plans. Chester Beach, Navy Principal Deputy General Counsel, conducted an investigation into the A-12 program and provided a description of Elberfeld's qualifications:

> "The PM (Elberfeld) is an Aviation Engineering Duty Officer, with three advanced degrees and a career path which would be a model in any of the new Service Acquisition Corps. He has been on-station for more than four years and was assigned

with the understanding that he would remain through first flight. In short, the PM (Elberfeld) in this case is the archetype of the well-trained, highly motivated professional, fully empowered to fulfill his responsibility and be accountable for cost, schedule, and performance of his program that we are seeking to develop under the acquisition corps plans and matrix management approach reflected in the Defense Management Report."[3]

Elberfeld had a civilian employee—Debbie D'Angelo—who had graduated with a Bachelor's degree in business from the University of Arizona. In August1988 she was cleared into the A-12 program and assigned as its lead cost analyst. She received the monthly *Cost Performance Reports* (CPRs) from the contractors. The CPRs were prepared by the contractors and showed actual cost incurred, the schedule status of the project, and estimates of final cost. The Navy needed this information to assess the cost and schedule status of the project. D'Angelo's job was to analyze the CPRs and provide findings, conclusions, and recommendations to Elberfeld and others higher in the chain of command. She had quarterly meetings with Elberfeld, where she provided A-12 program cost estimates developed from her examination of the monthly CPRs.

Initially the contractors estimated the total cost to complete the program would be $3.981 billion. This amount was well below the Navy's ceiling price of $4.8 billion, the maximum amount that may be paid by the Navy to the contractors. Using this information in November 1988, the A-12 Program Office released DAES report No. 1, consistent with the contractors' estimates. By the next month, however, the estimated final cost began to rise. D'Angelo regularly informed Elberfeld of the ever-increasing cost estimates. Per office policy, her official reports were to contain the required lowest estimate she could provide, but she also provided a range of other estimates she thought were more accurate.

Department of Defense experience in more than 400 programs since 1977 indicated that a range of estimated final costs can be computed using cost and schedule performance indices derived from the monthly CPR. The minimum value in this range was computed using a cumulative cost performance index. Larger and more accurate estimates of final cost are usually derived from indices of shorter periods, especially when performance on a program is deteriorating.

A Beach investigation review of D'Angelo's cost reports to Elberfeld showed that they

> "contained a single point estimate based upon the cumulative cost performance index (CPI), rather than the Cost Analyst's best professional judgment. This comported with the standard practice of her office, but facilitated reliance by the Program Manager upon the single written cumulative CPI-based estimate as her best estimate. Her supervisor stated that the practice of providing the cumulative CPI-based estimate as the written estimate, rather than the Cost Analyst's best estimate, was intended to afford the Program Manager maximum flexibility in representing his program."[4]

In early 1989, D'Angelo provided Elberfeld with a report estimating the final cost at $4.575 billion. She warned that if performance continued to decline, cost would go through the ceiling. In the worst-case scenario she estimated the final cost would be around $5 billion. Furthermore, she indicated that the first flight of the A-12 would be delayed by at least three months.

In February 1989, Elberfeld released DAES Report No. 2 with an estimated final cost at $4.12 billion, well below D'Angelo's more realistic estimates. Concerned that Elberfeld was ignoring her estimates, D'Angelo began complaining to her immediate supervisor, Robert Patterson. As far as she could tell, no action was taken on her several complaints. In spite of her warnings that cost would exceed ceiling by $200 million, Elberfeld released DAES report No. 3 in May 1989, using the much lower estimate of $4.415 billion.

In July 1989, D'Angelo again provided a report to Elberfeld that indicated cost would exceed ceiling by over $200 million, placing the total cost over $5 billion. Throughout the summer she continued reporting that costs were escalating, the weight of the aircraft was exceeding specifications by more than 3,800 pounds, and that no further weight savings were possible without altering other aircraft specifications.

In August 1989, Elberfeld produced DAES Report No. 4 by using the same low-ball numbers used in the prior report. Elberfeld chose to use the lowest estimate provided to him irrespective of higher estimates available and contrary to D'Angelo's professional judgment. According to the Beach investigation report, "his justification for this action was based upon other information which he believed would result in an improvement in the contractor team's cumulative cost performance."

Meanwhile, in August 1989, Tom Hafer, a senior budget analyst on Navy programs at the Department of Defense Comptroller's Office, visited McDonnell Douglas to review the status of the A-12 for budget planning purposes. He was in for a shock. Not only was there no production taking place, but the contractor hadn't even completed half the tooling to start production.

During his plant tour he received word that, upon returning to the Pentagon, Vice Admiral Richard Dunleavy wanted to see him. In his meeting with Dunleavy, Hafer revealed that he was going to recommend adjusting the military services budget upward to reflect cost and production schedule problems in a formal document known as a *Program Budget Decision* (PBD). This information would jeopardize the continuation of the A-12 project.

As part of the process of preparing the A-12 PBD, Hafer sent approximately six pages of questions to the A-12 Program Office. The office refused to send him written responses using the justification that this was a "special access" project. In order to obtain responses to his questions he was required to visit the office and review the written responses on location. He was not allowed to remove the written responses or take any notes. During his office visits he met with D'Angelo, who presented him with cost data but was under strict orders not to discuss the information with him.

Even with this limited access Hafer determined that the program was at least two years behind schedule and cost would exceed ceiling by at least $500 million. Being under hush orders, D'Angelo was unable to verbally acknowledge his concerns and understanding of the numbers. She did give a slight nod of her head, however, which he took as an indication of her agreement with him. Hafer's draft PBD was later withdrawn by Comptroller Sean O'Keefe due to heavy opposition from Elberfeld and others in higher authority in the Department of Defense.

According to a 1990 GAO report, in December 1989 Cheney ordered a review of four major aircraft programs in development: the B-2 bomber, F-22 fighter, C-17 cargo plane, and the A-12. This study, known as the Major Aircraft Review (MAR), was to validate the necessity for these programs in light of changing world threats, including the diminishing Soviet threat.[5]

The Office of the Secretary of Defense (OSD) Cost Analysis Improvement Group (CAIG) was charged with the duty of completing the MAR. Among other duties, the CAIG helps ensure that the costs of Department of Defense programs are presented accurately and completely. Jo Ann Vines, a cost analyst with the CAIG, was assigned to collect performance data on the A-12 program. D'Angelo was instructed to provide Vines with only the official program costs and exclude all other estimates. The official estimates showed the lowest possible final cost. D'Angelo provided Elberfeld with a range of higher estimates, however, that predicted severe cost overruns and schedule delays. At the official briefing, Vines asked D'Angelo if there were other cost estimates available other than the official CPRs. D'Angelo responded in the positive, however, she did not offer to provide Vines with them, nor did Vines request to see them.

In March 1990, the OSD authorized an independent analysis of the cost and schedule status of the A-12, which was to be conducted by OSD Cost Analyst Gary Christle. Christle's analysis indicated that the program's estimated final cost would be $1 billion over ceiling and at least one year behind schedule. By this time the contractors' cost reports to D'Angelo showed growing cost overruns, and her analysis was consistent with Christle's.

On March 28, 1990, Christle briefed the A-12 Program Office on his analysis. He requested that D'Angelo be present in the briefing, which included Elberfeld, and D'Angelo's immediate supervisor, Patterson. Yet D'Angelo was purposefully excluded from the meeting—she believed it was at the request of Elberfeld, which he later denied. Shortly thereafter, on two occasions, Christle's report was briefed to the Under Secretary of Defense for Acquisition, John A. Betti. Yet, the Under Secretary did not consider the analyst's projections to be credible and did not pass the estimates on to the Secretary of Defense. According to a 1995 *Washington Post* article, on April 26, 1990, Cheney advised the House Armed Services Committee: "We think we ought to go forward with the A-12, that it's a good system, and that the program appears to be reasonably well-handled at this point."[6]

It wasn't until June 1, 1990, that the contractors publicly acknowledged that the scheduled first-flight would be significantly delayed, the contract cost would significantly exceed the contract ceiling (and could not be absorbed by the contractors), and the aircraft would not meet certain critical performance requirements (e.g., weight) specified in the contract. Cheney was outraged by this news and later testified to Congress that he had "gone forward to the Congress in good faith and presented the best information that was available to us then and then subsequently found that the information we'd been presented was not accurate."[7]

In July 1990, Navy Secretary Lawrence Garrett ordered an inquiry to investigate how and why the adverse information about the cost, schedule, and technical status of the A-12 failed to be reported to him and others. The Beach investigation resulted and determined that the earlier estimates supported by the contractors and the Navy were unrealistic and suggested that adverse information about the A-12 project may have been suppressed from Congress. The Beach investigation lasted three months. His team collected about 9,000 documents and interviewed 60 government and contractor employees. In his report, Beach concluded that,

> "The PM (Elberfeld) erred in judgment by failing to anticipate substantial additional cost increases. His projections of completion at or within ceiling were unreasonably optimistic and not supported by the facts available to him. The PM (Elberfeld) also erred by failing to anticipate greater risk to schedule than was briefed at the Major Aircraft Review."[8]

In December of 1990, Secretary Cheney ordered the Navy to justify the A-12 program. He was unconvinced by their arguments, and on January 7, 1991, he cancelled the program. He later commented on his decision to cancel the program, saying:

> "The A-12 I did terminate. It was not an easy decision to make because it's an important requirement that we're trying to fulfill. But no one could tell me how much the program was going to cost, even just through the full-scale development phase, or when it would be available. And data that had been presented at one point a few months ago turned out to be invalid and inaccurate."[9]

In the end, Elberfeld was denied a promotion to rear admiral. His promotion had been approved by the Senate on October 27, 1990. After the Beach report, Navy Secretary Garrett had second thoughts, denied the promotion, and assigned Elberfeld to other duties. Two admirals above Elberfeld—Vice Admiral Richard Gentz and Rear Admiral John Calvert—received letters of reprimand, and Under Secretary of Defense Betti resigned. According to Congressional investigators, cost analysts Hafer and D'Angelo did not escape unscathed. Each received downgraded performance ratings. Hafer was reassigned to missile programs, and D'Angelo left the Department of Defense for public health service. Christle left OSD a few years later. He was awarded the Defense Distinguished Service Medal, in part for his analysis of the A-12's cost difficulties. Additionally, the Navy sought to recover approximately $2 billion in payments to the contractors, which the contractors disputed in federal court.

REQUIREMENTS

Write an essay (three pages, double-spaced, one-inch margins) that analyzes the ethical issue that Debbie D'Angelo faced.

Include a brief description and explanation of the (1) ethical issue, (2) stakeholders, (3) alternatives with related consequences, and (4) an appropriate course of action for D'Angelo. Make specific references to relevant principles (values), standards, and actions recommended in the *IMA® Statement of Ethical Professional Practice* and excerpts from the Department of Defense's *Joint Ethics Regulation* (see appendices for statements).

Consider the following questions and be prepared to discuss your answers in class:

1. Did Debbie D'Angelo have an ethical duty to ensure that her cost estimate was not suppressed?
   - **i.** Assuming D'Angelo was a CMA® (Certified Management Accountant), which overarching ethical principles (values) in the *IMA Statement* clarify her duty?
   - **ii.** Assuming D'Angelo was a CMA, which responsibilities in the Standards section of the *IMA Statement* clarify her duty?
   - **iii.** Which additional values listed in *Joint Ethics Regulation* are relevant to her situation?
2. How should D'Angelo have made her concerns known about the program manager's decision to suppress her cost estimate? How can the *IMA Statement*'s Resolution of Ethical Conflict section be applied to this case? Does it have any shortcomings?
3. In general, does a supervisor's escalating commitment to a failing project create a moral issue for the management accountant? Why or why not?

APPENDIX A: IMA STATEMENTS ON ETHICS

ETHICAL BEHAVIOR FOR PRACTITIONERS OF MANAGEMENT ACCOUNTING AND FINANCIAL MANAGEMENT (INTRODUCTION)

Practitioners of management accounting and financial management have an obligation to the public, their profession, the organizations they serve, and themselves to maintain the highest standards of ethical conduct. In recognition of this obligation, the Institute of Management Accountants has promulgated the following standards of ethical professional practice. Adherence to these standards, both domestically and internationally, is integral to achieving the Objectives of Management Accounting. Practitioners of management accounting and financial management shall not commit acts contrary to these standards nor shall they condone the commission of such acts by others within their organizations.

IMA STATEMENT OF ETHICAL PROFESSIONAL PRACTICE

Members of IMA shall behave ethically. A commitment to ethical professional practice includes overarching principles that express our values, and standards that guide our conduct.

Principles

IMA's overarching ethical principles include Honesty, Fairness, Objectivity, and Responsibility. Members shall act in accordance with these principles and shall encourage others within their organizations to adhere to them.

Standards

A member's failure to comply with the following standards may result in disciplinary action.

Section I. Competence

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1. Maintain an appropriate level of professional expertise by continually developing knowledge and skills.
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2. Refrain from engaging in any conduct that would prejudice carrying out duties ethically.
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