

ETHICS – THE HEART OF THE ENGINEERING PROFESSION

JIM JOHNSON JR., PE

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ETHICS – THE HEART OF THE ENGINEERING PROFESSION

DISCLAIMER

- ❖ THIS COURSE MAY NOT SATISFY THE CPC REQUIREMENTS FOR THE PROFESSIONAL ENGINEER LICENSE RENEWAL IN OTHER STATES – LICENSEE'S ARE ADVISED TO VERIFY THE CPC REQUIREMENTS ENACTED BY THEIR RESPECTIVE STATE BOARD FOR PROFESSIONAL ENGINEERS

ETHICS – THE HEART OF THE ENGINEERING PROFESSION

- ❖ ETHICS – THE HEART OF THE ENGINEERING PROFESSION
- ❖ ETHICS IN YOUR PROFESSIONAL CAREER
- ❖ THE CODE OF ETHICS OVERLAY
- ❖ CASE STUDIES
- ❖ SIMPLE TOOLS TO USE

ETHICS – THE HEART OF THE ENGINEERING PROFESSION

MORAL PRINCIPLES THAT GOVERN A
PERSON'S OR GROUP'S BEHAVIOR

HONESTY

CODE OF ETHICS

ETHICS – THE HEART OF THE ENGINEERING PROFESSION

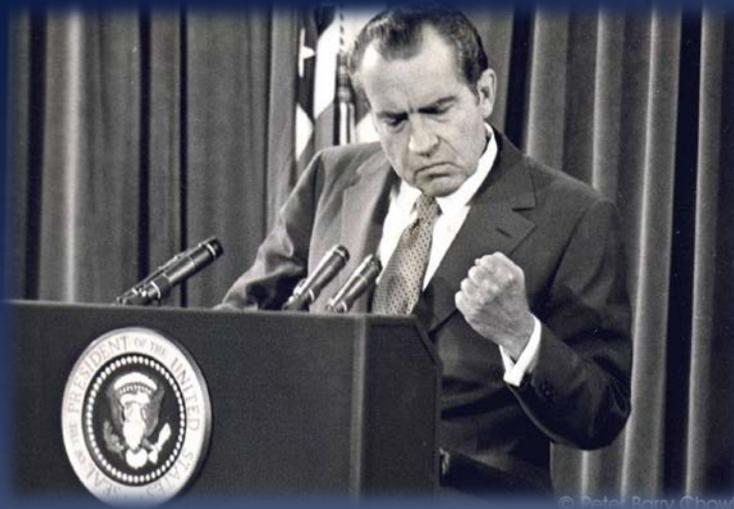
TECHNOLOGY WILL CHANGE



ETHICS – THE HEART OF THE ENGINEERING PROFESSION

DO PEOPLE CHANGE ?

Richard Nixon – 37th President

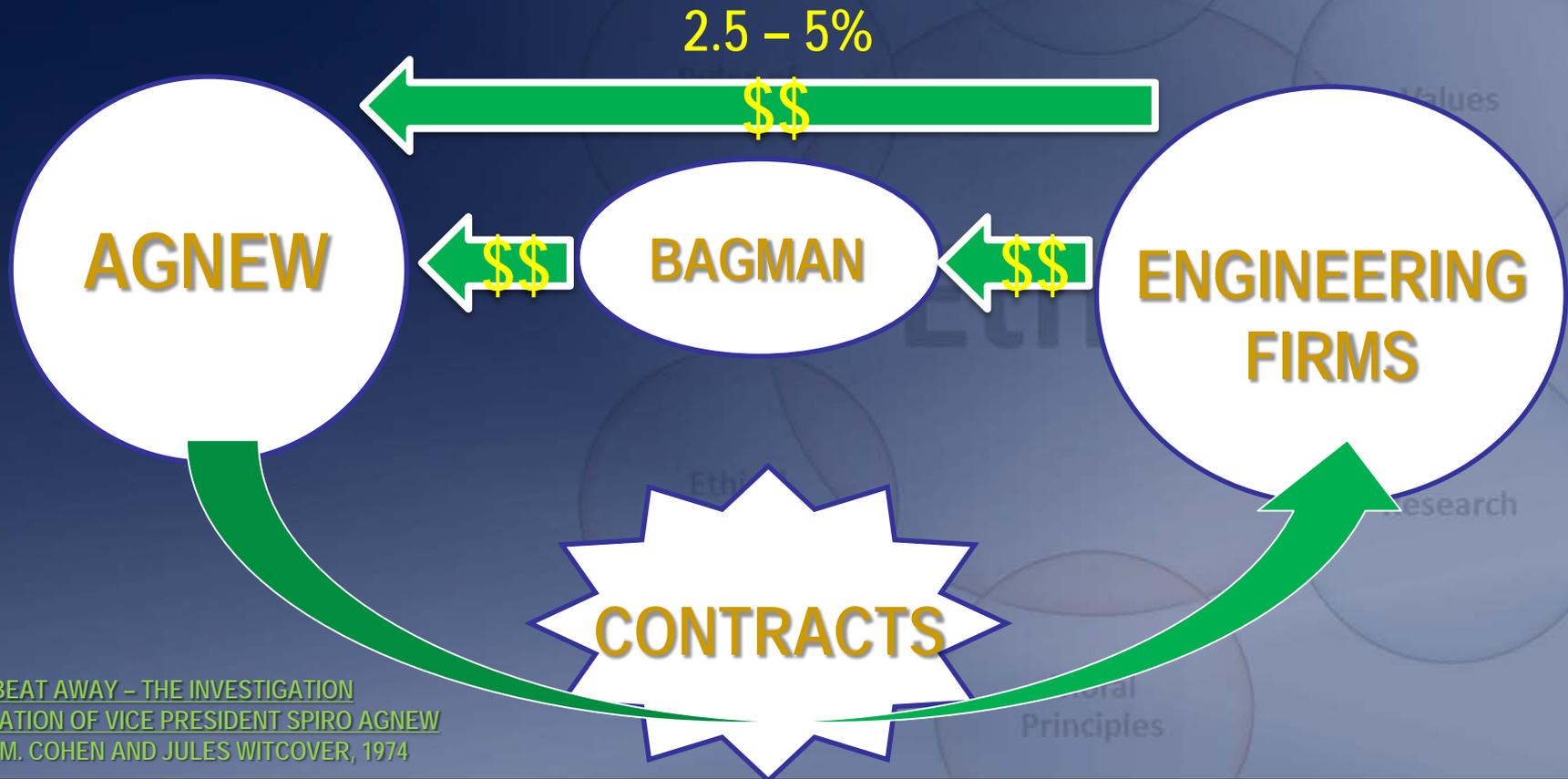


Spiro Agnew – Vice President

1960's – 1970's

ETHICS – THE HEART OF THE ENGINEERING PROFESSION

ENGINEERING CONTRACT KICKBACK SCHEME



A HEARTBEAT AWAY – THE INVESTIGATION
& RESIGNATION OF VICE PRESIDENT SPIRO AGNEW
RICHARD M. COHEN AND JULES WITCOVER, 1974

ETHICS – THE HEART OF THE ENGINEERING PROFESSION

SJTA EXIT ACY



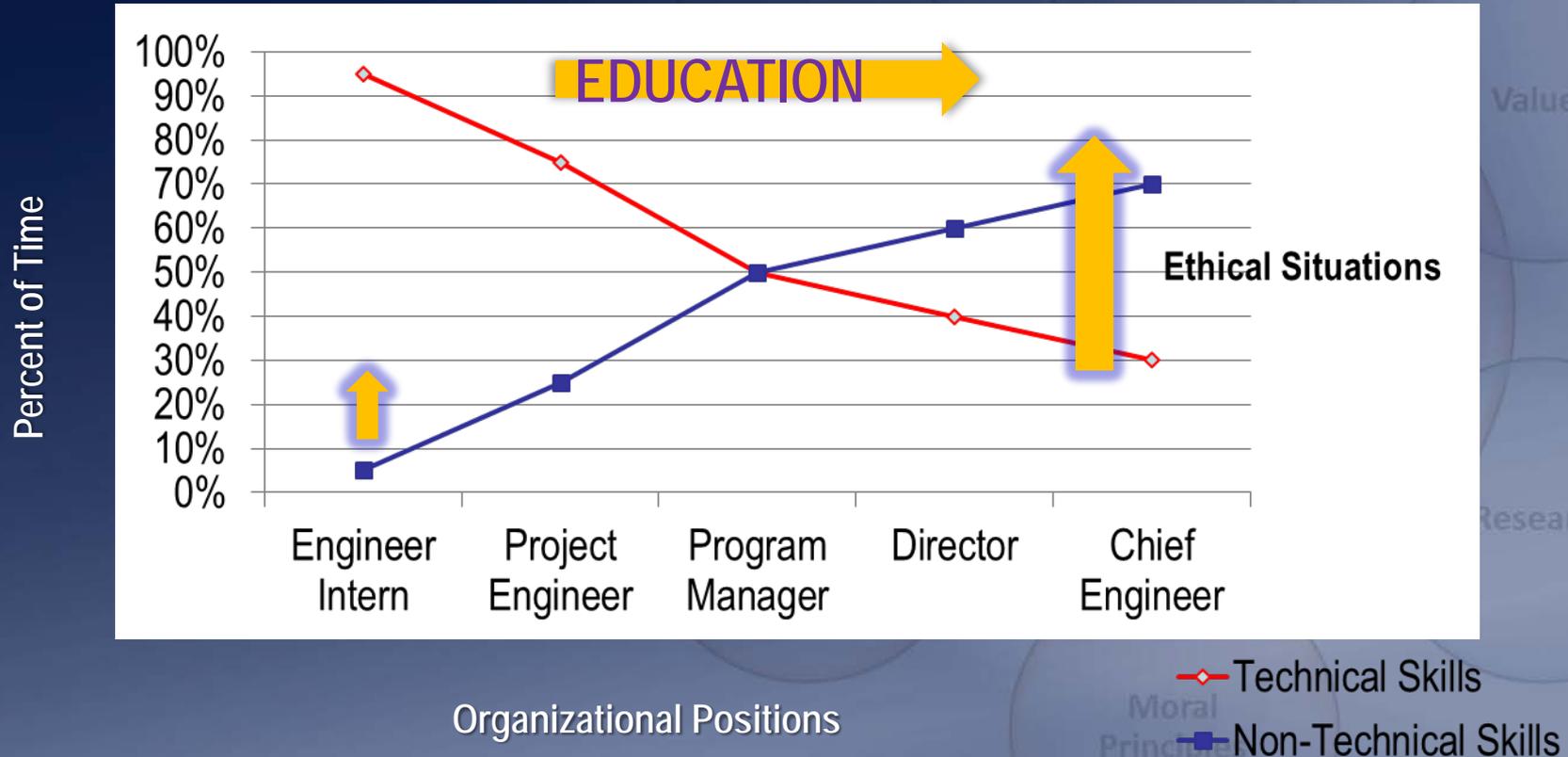
LOBBY FIRM

CHAIRMAN'S FLIGHT

2015

ETHICS – THE HEART OF THE ENGINEERING PROFESSION

ETHICS IN YOUR PROFESSIONAL CAREER



ETHICS – THE HEART OF THE ENGINEERING PROFESSION

THE CODE OF ETHICS OVERLAY

- ❖ PROFESSIONAL SOCIETIES & ORGANIZATIONS - ASCE (1914), NSPE, ITE, ASHE & AASHTO
- ❖ STATE BOARDS FOR PROFESSIONAL ENGINEERS - DE ASSOCIATION OF PROFESSIONAL ENGINEERS (www.dape.org) & MD BOARD FOR PROFESSIONAL ENGINEERS (www.dllr.state.md.us/license/pe)
- ❖ PUBLIC SECTOR – FEDERAL / STATE / LOCAL GOVERNMENT
- ❖ PRIVATE SECTOR

ETHICS – THE HEART OF THE ENGINEERING PROFESSION

ASCE CODE OF ETHICS – 7 FUNDAMENTAL CANONS

1. ENGINEERS SHALL HOLD PARAMOUNT THE SAFETY, HEALTH AND WELFARE OF THE PUBLIC AND SHALL STRIVE TO COMPLY WITH THE PRINCIPLES OF SUSTAINABLE DEVELOPMENT IN THE PERFORMANCE OF THEIR PROFESSIONAL DUTIES
2. ENGINEERS SHALL PERFORM SERVICES ONLY IN AREAS OF THEIR COMPETENCE

ETHICS – THE HEART OF THE ENGINEERING PROFESSION

ENGINEER REVIEWS AND SEALS PLANS PREPARED BY ANOTHER FIRM (CANON 2)



AN ENGINEER RECEIVES A REQUEST FROM A CLIENT TO REVIEW A SET OF PLANS PREPARED BY ANOTHER ENGINEERING FIRM AND, IF APPROVED, TO SIGN AND SEAL THE PLANS

THE ENGINEER REVIEWS THE PLANS, CHECKS ALL CALCULATIONS, AND DETERMINES THAT THEY ARE ACCURATE – HE THEN SIGNS THE PLANS AND AFFIXES HIS SEAL TO THEM

ASCE Case Study

ETHICS – THE HEART OF THE ENGINEERING PROFESSION

ENGINEER REVIEWS AND SEALS PLANS PREPARED BY ANOTHER FIRM (CANON 2)



ASCE Case Study

ASCE FOUND THE ENGINEER DID NOT VIOLATE CANON 2 BECAUSE THE ENGINEER CHECKED ALL CALCULATIONS AND DID NOT CLAIM THAT THE ORIGINAL DRAWINGS WERE HIS

ENGINEER FOUND TO BE IN VIOLATION OF THE RULES PROMULGATED BY HIS STATE LICENSING BOARD – ENGINEER HAD NOT PREPARED THE PLANS HIMSELF NOR SUPERVISED THEIR PREPARATION

ETHICS – THE HEART OF THE ENGINEERING PROFESSION

ASCE CODE OF ETHICS – 7 FUNDAMENTAL CANONS

3. ENGINEERS SHALL ISSUE PUBLIC STATEMENTS ONLY IN AN OBJECTIVE AND TRUTHFUL MANNER
4. ENGINEERS SHALL ACT IN PROFESSIONAL MATTERS FOR EACH EMPLOYER OR CLIENT AS FAITHFUL AGENTS OR TRUSTEES, AND SHALL AVOID CONFLICTS OF INTEREST
5. ENGINEERS SHALL BUILD THEIR PROFESSIONAL REPUTATION ON THE MERIT OF THEIR SERVICES AND SHALL NOT COMPETE UNFAIRLY WITH OTHERS

ETHICS – THE HEART OF THE ENGINEERING PROFESSION

ASCE CODE OF ETHICS – 7 FUNDAMENTAL CANONS

6. ENGINEERS SHALL ACT IN SUCH A MANNER AS TO UPHOLD AND ENHANCE THE HONOR, INTEGRITY, AND DIGNITY OF THE ENGINEERING PROFESSION AND SHALL ACT WITH ZERO-TOLERANCE FOR BRIBERY, FRAUD, AND CORRUPTION

ETHICS – THE HEART OF THE ENGINEERING PROFESSION

STUDENT TAKES ASCE FUNDS FOR PERSONAL USE (CANON 6)



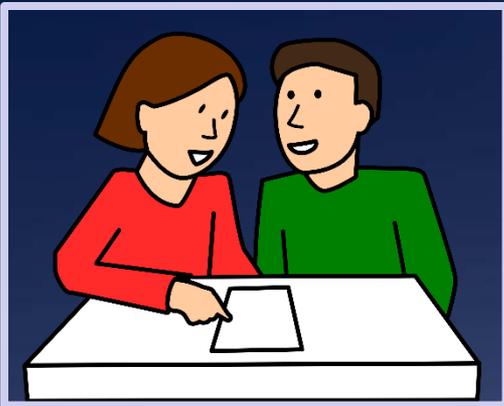
UNIVERSITY SENIOR AND STUDENT MEMBER OF ASCE ELECTED PRESIDENT, HAS CHECK WRITING AUTHORITY AND DEBIT CARD FOR STUDENT CHAPTERS BANK ACCOUNT

WHEN PREPARING THE ANNUAL REPORT FOR THE SECTION, IT IS FOUND A NUMBER OF CHARGES ON THE BANK ACCOUNT STATEMENT HAS NO RECEIPTS OR DOCUMENTATION - OVER A 4-WEEK PERIOD AMOUNTS TO \$2,000

ASCE Case Study

ETHICS – THE HEART OF THE ENGINEERING PROFESSION

STUDENT TAKES ASCE FUNDS FOR PERSONAL USE (CANON 6)



CHAPTER VP BRINGS THE BANK STATEMENTS TO PRESIDENT ATTENTION – PRESIDENT ACKNOWLEDGES EXPENSES WERE UNRELATED TO DUTIES BUT MADE THE CHARGES AT A TIME OF FINANCIAL HARDSHIP AND INTENDED TO REIMBURSE

STUDENT RESIGNS FROM HIS POSITION AS PRESIDENT AND SIGNS AN AGREEMENT TO MAKE RESTITUTION

ASCE Case Study

ETHICS – THE HEART OF THE ENGINEERING PROFESSION

ASCE CODE OF ETHICS – 7 FUNDAMENTAL CANONS

7. ENGINEERS SHALL CONTINUE THEIR PROFESSIONAL DEVELOPMENT THROUGHOUT THEIR CAREERS, AND SHALL PROVIDE OPPORTUNITIES FOR THE PROFESSIONAL DEVELOPMENT OF THOSE ENGINEERS UNDER THEIR SUPERVISION

ASCE Case Studies are available on www.asce.org/Leadership-and-Management/Ethics/A-Question-of-Ethics/

ETHICS – THE HEART OF THE ENGINEERING PROFESSION

THE CODE OF ETHICS OVERLAY

- ❖ PROFESSIONAL SOCIETIES & ORGANIZATIONS - ASCE (1914), NSPE, ASHE & AASHTO
- ❖ STATE BOARDS FOR PROFESSIONAL ENGINEERS - DE ASSOCIATION OF PROFESSIONAL ENGINEERS (www.dape.org), & MD BOARD FOR PROFESSIONAL ENGINEERS (www.dllr.state.md.us/license/pe)

ETHICS – THE HEART OF THE ENGINEERING PROFESSION

TITLE 24. CHAPTER 28. § 2816. DAPE CODE OF ETHICS

- ❖ THE ENGINEER SHALL HOLD PARAMOUNT SAFEGUARDING LIFE, HEALTH AND PROPERTY AND PROMOTING THE PUBLIC WELFARE IN THE PERFORMANCE OF HIS PROFESSIONAL DUTIES (Similar to ASCE Canon #1)
- ❖ THE ENGINEER SHALL PERFORM SERVICES ONLY IN AREAS OF HIS COMPETENCE (Similar to ASCE Canon #2)
- ❖ THE ENGINEER SHALL ISSUE PROFESSIONAL STATEMENTS ONLY IN AN OBJECTIVE AND TRUTHFUL MANNER (Similar to ASCE Canon #3)

ETHICS – THE HEART OF THE ENGINEERING PROFESSION

TITLE 24. CHAPTER 28. § 2816. DAPE CODE OF ETHICS

- ❖ THE ENGINEER SHALL ACT IN PROFESSIONAL MATTERS FOR EACH EMPLOYER OR CLIENT AS FAITHFUL AGENT OR TRUSTEE, AVOIDING CONFLICTS OF INTEREST (Similar to ASCE Canon #4)
- ❖ THE ENGINEER SHALL AVOID IMPROPER SOLICITATION OF PROFESSIONAL EMPLOYMENT (Similar to ASCE Canon's #5 & #6)
- ❖ THE ENGINEER SHALL SUPPORT AND FAITHFULLY COMPLY WITH THE LAWS OF ANY JURISDICTION WITHIN WHICH HE PRACTICES

ETHICS – THE HEART OF THE ENGINEERING PROFESSION

DAPE ADMINISTRATIVE PENALTY TABLE

	Provision	Violation	Minimum	Maximum
(1)	2823 (a) 1 2825 (h)	Attempting to procure a license, permit, or C/A, by fraud, deceit, false or forged evidence.	Reprimand and probation	Revocation or denial and \$5,000 fine
(2)	2823 (a) 2	Incompetence	Reprimand, and \$250 fine, and probation	Revocation and \$5,000 fine
(3)	2823 (a) 2	Misconduct	Warning letter	Revocation and \$5,000 fine
(4)	2823 (a) 2	Gross Negligence	Reprimand, and \$250 fine, and probation	Revocation and \$5,000 fine
(5)	2823 (a) 3	Code of Ethics Violation	\$200 fine and completion of ethics course	Revocation and \$5,000 fine and completion of ethics course
(6)	2823 (a) 3 2823 (a) 7	Improper use of seal or certificate of licensure (Canon 1B)	Warning letter	Reprimand and \$2,000 fine and 2-year probation

ETHICS – THE HEART OF THE ENGINEERING PROFESSION

MD BOARD OF PROFESSIONAL ENGINEERS

COMAR, Title 9, Subtitle 23, Chapter 3 - CODE OF ETHICS

- ❖ RESPONSIBILITY TO THE PUBLIC. THE ENGINEER - SHALL MAKE EVERY REASONABLE EFFORT TO PROTECT THE SAFETY, HEALTH, PROPERTY AND WELFARE OF THE PUBLIC (Similar to ASCE Canon #1)
- ❖ PUBLIC STATEMENTS, REPORTS AND TESTIMONY (Similar to ASCE Canon #3)
- ❖ COMPETENCY FOR ASSIGNMENTS UNDERTAKEN OR APPROVED (Similar to ASCE Canon #2)

ETHICS – THE HEART OF THE ENGINEERING PROFESSION

MD BOARD OF PROFESSIONAL ENGINEERS

COMAR, Title 9, Subtitle 23, Chapter 3 - CODE OF ETHICS

- ❖ CONFLICTS OF INTEREST (Similar to ASCE Canon #4)
- ❖ FULL DISCLOSURE (Similar to ASCE Canon #5)
- ❖ COMPLIANCE WITH LAWS
- ❖ PROFESSIONAL CONDUCT (Similar to ASCE Canon #6)
- ❖ NAMES OF ENTITIES
- ❖ SEALING REQUIREMENTS
- ❖ TITLEBLOCK RULES
- ❖ FAILURE TO RESPOND

ETHICS – THE HEART OF THE ENGINEERING PROFESSION

THE CODE OF ETHICS OVERLAY

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- ❖ *PUBLIC SECTOR – FEDERAL / STATE / LOCAL GOVERNMENT*

ETHICS – THE HEART OF THE ENGINEERING PROFESSION

PUBLIC SECTOR – FEDERAL / STATE / LOCAL GOVERNMENT

“57% OF FEDERAL, 57% OF STATE AND 63% OF LOCAL
GOVERNMENT RESPONDENTS WITNESSED VIOLATIONS OF
ETHICAL STANDARDS, POLICIES, OR LAWS IN THEIR
WORKPLACES”

SOURCE: 2007 ETHICS RESEARCH CENTER SURVEY – NATIONAL GOVERNMENT ETHICS
SURVEY: AN INSIDE VIEW OF PUBLIC SECTOR ETHIC

ETHICS – THE HEART OF THE ENGINEERING PROFESSION

PUBLIC SECTOR – FEDERAL / STATE / LOCAL GOVERNMENT

❖ FEDERAL EMPLOYEES

- STANDARDS OF ETHICAL CONDUCT FOR EMPLOYEES OF THE EXECUTIVE BRANCH (EO 12731, OCT. 17, 1990) AND SUPPLEMENTAL STANDARDS OF ETHICAL CONDUCT (5 CFR PART 6001)
- CONFLICT OF INTEREST LAWS (SECTIONS 201 – 219 OF TITLE 18 UNITED STATES CODE)
- PROCUREMENT INTEGRITY LAW (SECTIONS 201 – 219 OF TITLE 18 UNITED STATES CODE)
- HATCH ACT REFORM AMENDMENTS OF 1993

ETHICS – THE HEART OF THE ENGINEERING PROFESSION

PUBLIC SECTOR – FEDERAL / STATE / LOCAL GOVERNMENT

❖ FEDERAL EMPLOYEES

■ OTHER LAWS RELATING TO EMPLOYEE CONDUCT

GIFTS TO GOVERNMENT EMPLOYEES

GIFTS TO SUPERIORS

GIFTS FROM FOREIGN GOVERNMENTS

ACCEPTANCE OF TRAVEL FROM NON-FEDERAL SOURCES

ACCEPTANCE OF AWARDS AND OTHER PAYMENTS

NEPOTISM

ETHICS – THE HEART OF THE ENGINEERING PROFESSION

PUBLIC SECTOR – FEDERAL / STATE / LOCAL GOVERNMENT

❖ STATE EMPLOYEES (DELAWARE)

- TITLE 29, CHAPTER 58 DE CODE
CODE OF CONDUCT
FINANCIAL DISCLOSURE
COMPENSATION POLICY
LOBBYISTS' REGISTRATION
- DEPARTMENT POLICY IMPLEMENTS (DELDOT)
P-17 BAN ON GIFTS BY LOBBYISTS OR VENDORS

Ethics

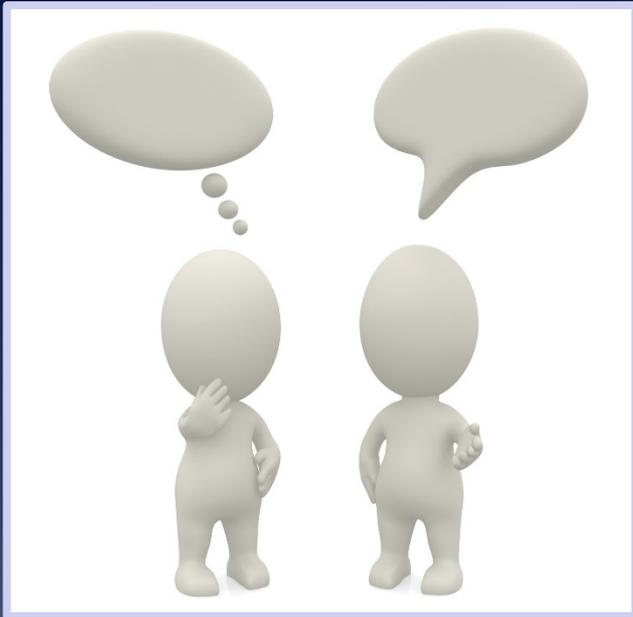
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THE CODE OF ETHICS OVERLAY

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ETHICS – THE HEART OF THE ENGINEERING PROFESSION

CASE STUDIES - I HAVE THE QUESTIONS!

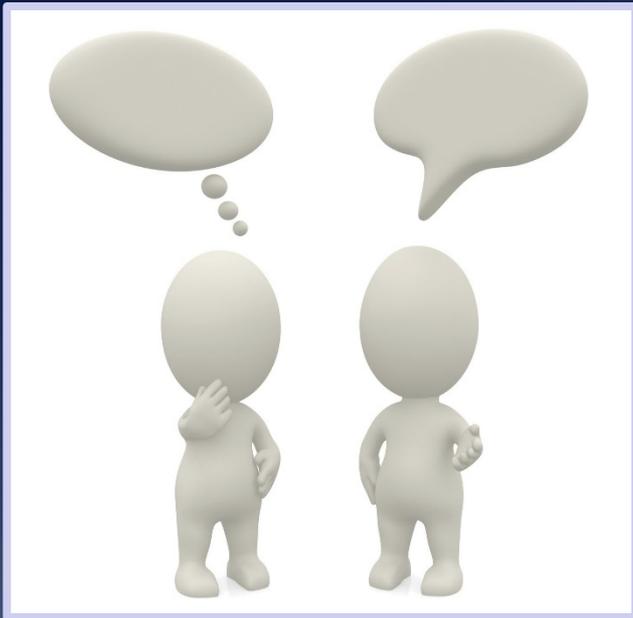


ENGINEER A IS A PROGRAM MANAGER FOR A LOCAL CONSULTANT AND IS VERY GOOD FRIENDS WITH **ENGINEER B** WHO IS A PROGRAM MANAGER FOR A STATE AGENCY.

ENGINEER B IS ABLE TO RETIRE WITHIN THE YEAR AND IS THINKING ABOUT FUTURE OPPORTUNITIES.

ETHICS – THE HEART OF THE ENGINEERING PROFESSION

CASE STUDIES - I HAVE THE QUESTIONS!

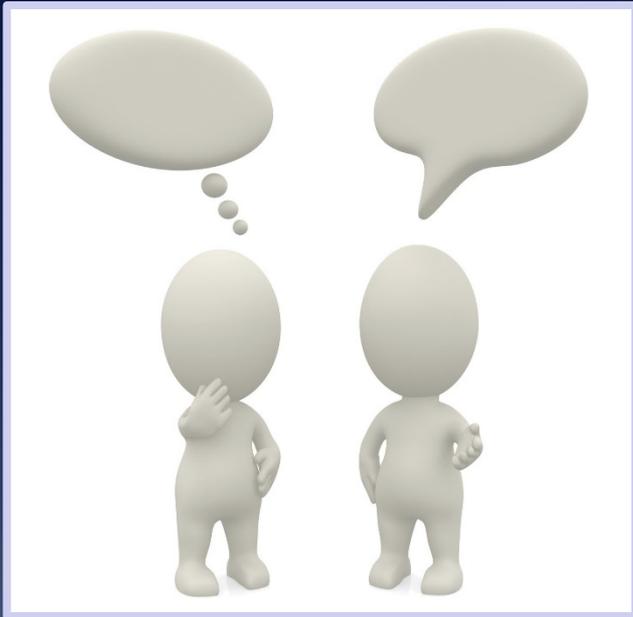


THE STATE AGENCY HAS ADVERTISED AN RFP AND ENGINEER B IS ON THE SELECTION PANEL. ENGINEER A'S FIRM IS SHORTLISTED AND PROCEEDS TO THE ORAL INTERVIEW PROCESS.

BECAUSE OF THEIR CLOSE RELATIONSHIP AND UPCOMING RETIREMENT, ENGINEER B OFFERS ENGINEER A THE QUESTIONS WHICH WILL BE ASKED DURING THE ORAL INTERVIEWS FOR THIS RFP.

ETHICS – THE HEART OF THE ENGINEERING PROFESSION

CASE STUDIES - I HAVE THE QUESTIONS!



ARE THERE ANY CODE OF ETHICS VIOLATIONS?
WHAT COULD HAPPEN IN THIS CASE?
WHAT SHOULD HAPPEN IN THIS CASE?

ETHICS – THE HEART OF THE ENGINEERING PROFESSION

CASE STUDIES - CAN YOU WORK ON MY HOUSE?



THE DIRECTOR OF THE DEPARTMENT OF PUBLIC WORKS, A LICENSED ENGINEER IS RESPONSIBLE FOR THE ENGINEERING AND MAINTENANCE DEPARTMENTS. HE IS ALSO IS RESPONSIBLE FOR COLLECTIVE BARGAINING NEGOTIATIONS WHICH BEGIN IN THE NEXT 6 MONTHS. HE IS WELL LIKED BY HIS EMPLOYEES AND THEY WOULD DO ANYTHING FOR HIM.

THE DIRECTOR HAS A HISTORIC HOME IN NEED OF RENOVATIONS TO INCLUDE FLOORING, CONCRETE WORK, PAINTING AND A NEW HVAC SYSTEM.

ETHICS – THE HEART OF THE ENGINEERING PROFESSION

Rules and
Regulations

CASE STUDIES - CAN YOU WORK ON MY HOUSE?



THE DIRECTOR ASKS FOR SOME HELP FROM HIS EMPLOYEES AND THEY ARE GLAD TO HELP HIM OUT AND PICK UP SOME EXTRA CASH. THE GOING RATE FOR THE WORK (LABOR AND MATERIALS) IS \$50,000.

BUT, USING DPW VENDORS, **THE DIRECTOR** GETS THE SUPPLIES BELOW COST AND HIS EMPLOYEES WORK FOR MUCH LESS. THE RENOVATIONS COST \$20,000.

Moral
Principles

ETHICS – THE HEART OF THE ENGINEERING PROFESSION

CASE STUDIES - CAN YOU WORK ON MY HOUSE?



ARE THERE ANY CODE OF ETHICS VIOLATIONS?

WHAT COULD HAPPEN IN THIS CASE?

WHAT SHOULD HAPPEN IN THIS CASE?

ETHICS – THE HEART OF THE ENGINEERING PROFESSION

CASE STUDIES - CAN I MOONLIGHT?



A LICENSED ENGINEER AND LAND SURVEYOR
AT A STATE AGENCY HAS A SMALL SURVEY
BUSINESS ON THE SIDE AND PROVIDES A
SERVICE TO THE LOCAL COMMUNITY.

ON ONE SMALL PROJECT, *HE* IS IN A BIND AS
HIS PERSONAL SURVEY EQUIPMENT IS IN FOR
REPAIRS. TO COMPLETE THE JOB FOR HIS
BEST CLIENT, *HE* USES STATE-OWNED
EQUIPMENT OVER THE WEEKEND.

ETHICS – THE HEART OF THE ENGINEERING PROFESSION

CASE STUDIES - CAN I MOONLIGHT?



HE ALSO USES HIS STATE-FURNISHED CELL PHONE FOR COMPANY BUSINESS AND SOMETIMES USES THE COPY MACHINE AFTER WORK HOURS TO REPRODUCE WORK PRODUCTS FOR HIS CLIENTS.

FURTHER, WHILE OUT AND ABOUT ON STATE WORK, HE USES A STATE-OWNED VEHICLE, ROUTINELY STOPS TO LOOK AT PROJECTS SO THAT HE CAN PREPARE PROPOSALS FOR HIS SIDE BUSINESS.

ETHICS – THE HEART OF THE ENGINEERING PROFESSION

CASE STUDIES - CAN I MOONLIGHT?



ARE THERE ANY CODE OF ETHICS VIOLATIONS?

WHAT COULD HAPPEN IN THIS CASE?

WHAT SHOULD HAPPEN IN THIS CASE?

ETHICS – THE HEART OF THE ENGINEERING PROFESSION

CASE STUDIES - STRUCTURAL ENGINEER SEALS PLANS FOR HVAC WORK



A STRUCTURAL ENGINEER LEASES A COMMERCIAL BUILDING THAT HE WAS RENOVATING FOR A GOURMET CATERING BUSINESS OWNED AND OPERATED BY HIS WIFE.

THE STRUCTURAL ENGINEER PREPARES PLANS FOR A COMMERCIAL KITCHEN HOOD, EXHAUST AND DUCT SYSTEM – FIRST SUBMISSION NOT SIGNED AND SEALED – THREE SUBSEQUENT SUBMISSIONS WERE ALL SIGNED AND SEALED BY STRUCTURAL ENGINEER.

ASCE Case Study

ETHICS – THE HEART OF THE ENGINEERING PROFESSION

CASE STUDIES - STRUCTURAL ENGINEER SEALS PLANS FOR HVAC WORK



ARE THERE ANY CODE OF ETHICS VIOLATIONS?
WHAT COULD HAPPEN IN THIS CASE?
WHAT SHOULD HAPPEN IN THIS CASE?

ASCE Case Study

ETHICS – THE HEART OF THE ENGINEERING PROFESSION

CASE STUDIES - STRUCTURAL ENGINEER SEALS PLANS FOR HVAC WORK



THE ENGINEER FOUND TO BE IN VIOLATION OF THE RULES PROMULGATED BY HIS STATE LICENSING BOARD – LICENSE SUSPENDED FOR 1 YEAR, FINED \$1,000 AND ATTEND A COURSE ON PROFESSIONALISM.

THE ENGINEER RESIGNED FROM ASCE AFTER A CPC HEARING – RECOMMEND 5 YEAR SUSPENSION.

ASCE Case Study

ETHICS – THE HEART OF THE ENGINEERING PROFESSION

SIMPLE TOOLS TO USE

- ❖ KNOW YOURSELF – BE AWARE
- ❖ READ – USE RESOURCES
- ❖ ASSEMBLE A PROFESSIONAL NETWORK
- ❖ HOW WOULD YOU FEEL IF YOU READ OR HEARD ABOUT YOUR SITUATION IN THE NEWS?

ETHICS – THE HEART OF THE ENGINEERING PROFESSION

QUESTIONS & ANSWERS

Ethics

Rules and
Regulations

Rules of
Conduct

Values

Ethical
Practices

Research

Moral
Principles