



AACE
REGION 2

2019 AACE Northeast Symposium

Intellectual Honesty in Claims Analysis

Ethical standards and case studies in the analysis of delay and disruption claims

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RCEP Standards

AACE has met the standards and requirements of the Registered Continuing Education Program. Credit earned on completion of this program will be reported to RCEP. A certificate of completion will be issued to each participant. As such it does not include content that may be deemed or construed to be an approval or endorsement by RCEP.



Purpose

The purpose of this presentation is to review perceived problems associated with expert analysis on construction cases, and the conflicts that arise in evaluation and preparation of claims.

At the end of this presentation you will be able to:

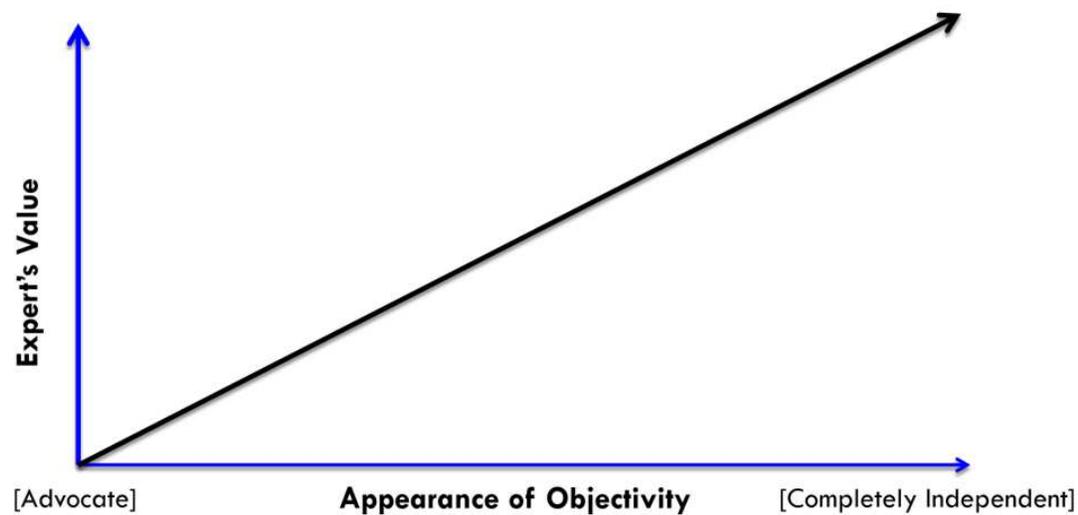
1. Understand the AACEI Code of Ethics, and be aware of other ethical requirements that you may be subject to
2. Identify some common ethical dilemmas, and how to deal with them
3. Describe some of the past ethical problems in cases
4. Explain the difference in ethics between lawyers and engineers (and schedulers, estimators, planners)

Why am I interested?

- Recent conference experience
 - Delay/Disruption experts “hired guns”
 - International experts much more impartial
 - Specific “horror story” from an industry giant
 - My own recent experience
 - My past experience with fraud and false claims projects

Why does it matter to you?

- CREDIBILITY – most important trait for an expert



What can WE do?

- Code of Ethics - (See something Say something)
- Recognize the difference in ethics between Engineers/Experts and Attorneys
- Understand that clients want an aggressive position – but the line is OURS – always make sure the client knows the blemishes
- Head off ethical dilemmas

NSPE Code of Ethics

Engineers shall be **objective and truthful** in professional reports, statements, or testimony. They shall **include all relevant and pertinent information** in such reports, statements, or testimony, which should bear the date indicating when it was current

Engineers **shall not**, without the consent of all interested parties, **participate in or represent an adversary interest** in connection with a specific project or proceeding in which the engineer has gained particular specialized knowledge on behalf of a former client or employer

Engineers shall not attempt to injure, maliciously or falsely, directly or indirectly, the professional reputation, prospects, practice, or employment of other engineers

AACE International CANONS OF ETHICS

Approved by the AACE International Board of Directors: June 26, 2015
Issued to the Association Members and the Public: February 1, 2016
[Edition: 2015.1]

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Administration

Preamble

Part I

AACE International Members shall uphold and advance the honor, dignity, and practices of Cost Engineering and Cost Management.

In keeping with the high standards of ethical conduct members shall:

- Be honest and impartial;
- Serve employer, clients, and the public with dedication;
- Strive to increase the competence and prestige of their practice;
- Apply knowledge and skill to advance human welfare; and,
- Ensure adherence to health, safety, and welfare standards.

Part II

Section I Relations with the Public

Members shall hold paramount the health, safety, and welfare of the public, including that of future generations. [Paragraph: I.1]

Members shall endeavor to extend public knowledge and appreciation of Cost Engineering and Cost Management and its achievements. [I.2]

Members shall oppose any untrue, unsupported, or exaggerated statements regarding Cost Engineering and Cost Management. [I.3]

Members shall be dignified and modest, ever upholding the honor and dignity of their profession. [I.4]

Members shall express an opinion on cost engineering or cost management subject only when it is founded on adequate knowledge and honest conviction. [I.5]

Members, concerning Cost Engineering and/or Cost Management matters, shall issue no statements, criticisms, or arguments that are inspired or paid for by an interested party or parties, unless they preface their comments by identifying themselves, by disclosing the identities of the party or parties on whose behalf they are speaking, and by revealing the existence of any pecuniary interest they may have in matters under

AACE Canon of Ethics

- Be honest and impartial;
- Serve employer, clients, and the public with dedication;
- Strive to increase the competence and prestige of their practice;
- Apply knowledge and skill to advance human welfare; and,
- Ensure adherence to health, safety, and welfare standards.
- Members shall express an opinion on cost engineering or cost management subject only when it is founded on adequate knowledge and honest conviction.
- Members shall be objective and truthful in professional reports, statements, and testimony. They shall include all relevant and pertinent information in such reports, statements, and testimony. [I.11]

Legal Ethics

- Advocate
- Clear duty to the Client
- Some have argued that it is unethical for an attorney to NOT push an expert as far as possible towards the line between objective expert and advocate [See [Prepping an Expert Witness: How Far Is Too Far?](#), Findlaw for Legal Professionals, 2011-10-05]

Expert Duties

- Client is the Judge, Arbitrator, etc.
- Duty is clear, but not simple – help the Judge
- The ABA makes clear that unlike attorneys, expert witnesses do not owe loyalty to their clients, and must refrain from advocating for the client
- How do we reconcile that with our natural bias?

Case Study: Daewoo – Palau Compact Road



Republic of Palau



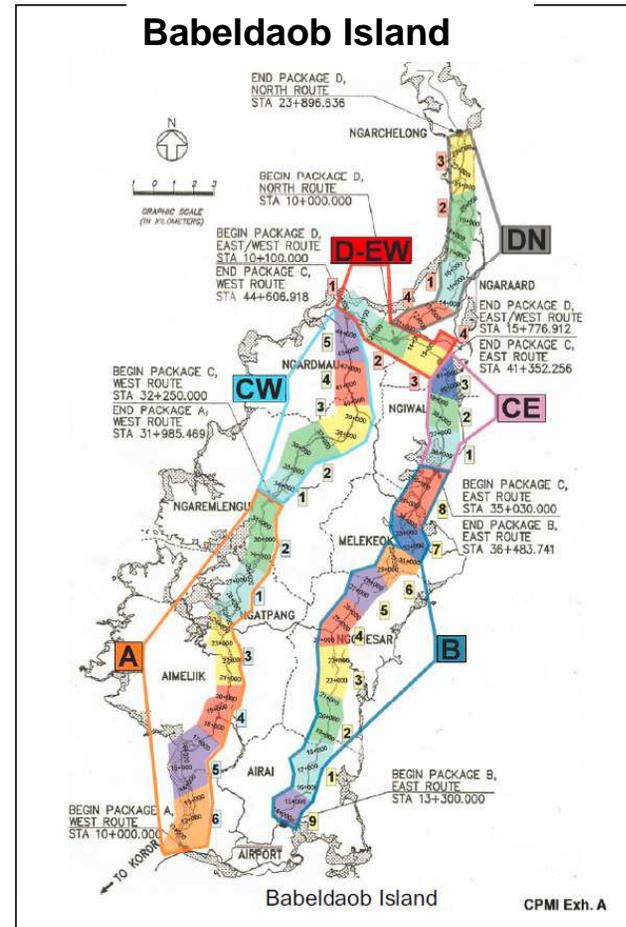
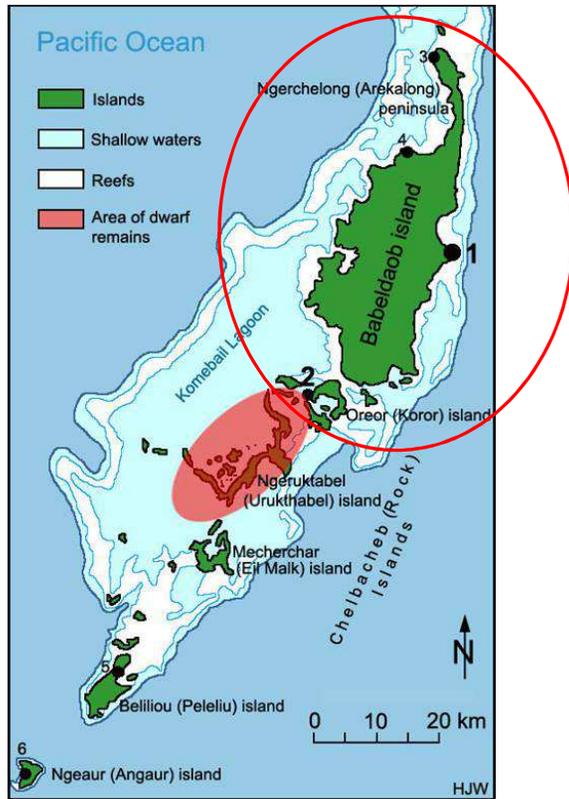
Republic of Palau



Republic of Palau



The Project



Palau Compact Road



Palau Compact Road

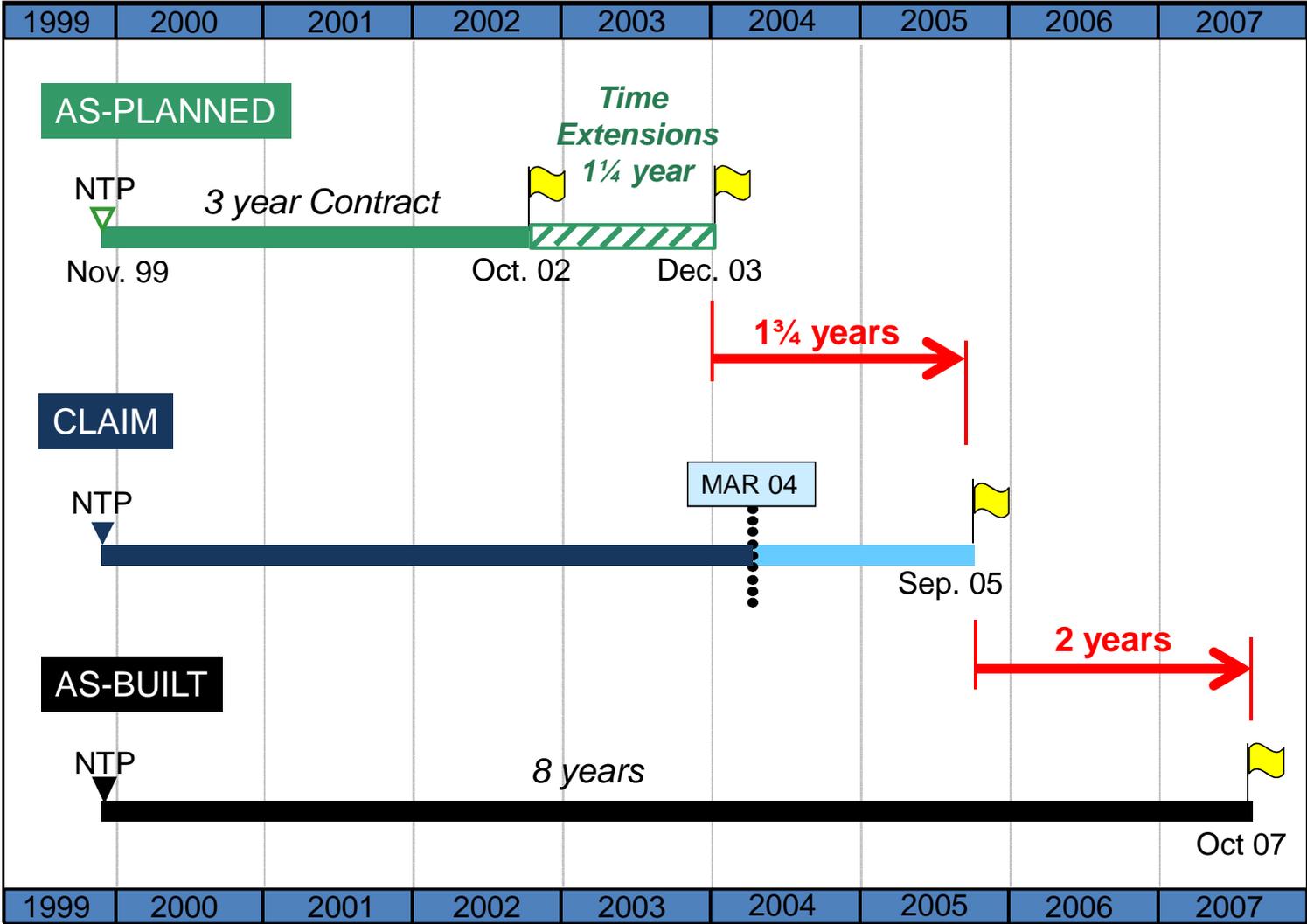
Moved over 3 million
CM of earth



Palau Compact Road



Schedule Overview



The Claim

- Daewoo's base contract was \$89 million
- Daewoo filed a \$64 million claim
- Claim issues
 - Unanticipated weather delays
 - Compaction could not be achieved in contract time period due to adverse weather and soil content
 - Loss of productivity in earthwork
 - Compensable delay based on defective weather spec

A true “kitchen sink” claim

Item No.	Description	QTY	Unit	Unit Price	Co.	Amount	Arrival Date
116	Table Set	1	unit	236.50		236.50	10/22/99
117	Living Set	1	unit	1,326.50		1,326.50	10/22/99
118	Bamboo Mat	1	unit	59.95		59.95	10/22/99
119	Freezer	1	unit	659.00		659.00	10/24/99
120	Freezer, washer	1	unit	3,400.00		3,400.00	12/14/00
121	Kitchen Sink	3	set	22.89		68.67	Nov 1999
122	Bed Cloths	10	Ea	10.00	1.90	119.60	Jun 2001
123	Pillow & Cover	10	Set	2.92	1.90	49.00	Jun 2001
124	Bed Sheet	19	Ea	10.00	1.90	227.61	Jun 2001
125	Carpet	2	Ea	200.00	1.90	403.80	Jun 2001
126	Handheld Radios	5	Ea	594.15		2,970.75	4/19/00
KITCHEN TOOLS							
1	Dish Cloth	12	pcs	11.04		132.48	Sept 2000
2	Cups	2500	pcs	0.39		975.00	Sept 2000
3	Misc. Welfare Goods, Flaying Insect Killer	15	pcs	2.64		39.60	Sept 2000
4	Misc. Welfare Goods, Melamine Bowl	100	pcs	2.91		291.00	Sept 2000
5	Cups, Melamine Cups	100	pcs	1.19		119.00	Sept 2000
6	Misc. Welfare Goods, Pan (L)	2	pcs	10.59		21.18	Sept 2000
7	Misc. Welfare Goods, Rice Scoop	1	pcs	2.64		2.64	Sept 2000
8	Misc. Welfare Goods, Rolling Pin	1	pcs	15.89		15.89	Sept 2000
9	Misc. Welfare Goods, Basin (L)	4	pcs	19.80		79.44	Sept 2000
10	Misc. Welfare Goods, Water Dipper	5	pcs	5.96		29.80	Sept 2000
11	Misc. Welfare Goods, Turner	5	pcs	2.64		13.20	Sept 2000
12	Misc. Welfare Goods, Wooden Sieve	5	pcs	6.62		33.10	Sept 2000
13	Misc. Welfare Goods, Bucket for water	5	pcs	10.40		52.00	Sept 2000
14	Misc. Welfare Goods, Thermos Bottle	2	pcs	86.09		172.18	Sept 2000
15	Misc. Welfare Goods, Rice Kettle	3	pcs	89.40		268.20	Sept 2000
16	Misc. Welfare Goods, Case of Spoon	5	pcs	5.29		26.45	Sept 2000
17	Chopsticks, Stainless Steel	12	pcs	0.52		6.24	Sept 2000
18	Spoon	120	pcs	1.19		142.80	Sept 2000
19	Fork	120	pcs	1.19		142.80	Sept 2000
20	Dish, D=150	100	pcs	3.27		327.00	Sept 2000

Contractor	Exhibit	Description	Make/Model	Date of Arrival	Capacity	Year Manufacture	Chasis No.	Notes	Duplicate Costs	
									From	To
ADC	AD0001	Dump Truck 10 Wheeler	Isuzu 10PC6	1/29/2000	9.00 Cu. M.	1995	CXZ19J-3001228	Claimed in 2000 and 2001	\$9,165.69	\$11,564.56
OCDC	OC00	DUMP TRUCK 10 WHEELER	ISUZU 10PC1	1/29/2000	9.00 CU.M.	1995	CXZ19J-3001228	Claimed in 2000		
ADC	AD0001	Dump Truck 10 Wheeler	Isuzu 10PC5	1/29/2000	9.00 Cu. M.	1995	CXZ19J-3002015	Claimed in 2000 and 2001	\$9,165.69	\$11,564.56
OCDC	OC00	DUMP TRUCK 10 WHEELER	ISUZU 10PC1	1/29/2000	9.00 CU.M.	1995	CXZ19J-3002015	Claimed in 2000		
ADC	AD0001	Dump Truck 10 Wheeler	Isuzu 10PC9	1/29/2000	9.00 Cu. M.	1995	CXZ19J-3002296	Claimed in 2000 and 2001	\$9,165.69	\$11,564.56
OCDC	OC00	DUMP TRUCK 10 WHEELER	ISUZU 10PC1	1/29/2000	9.00 CU.M.	1995	CXZ19J-3002296	Claimed in 2000		
ADC	AD0001	Dump Truck 10 Wheeler	Isuzu 10PC7	1/29/2000	9.00 Cu. M.	1995	CXZ19J-3003829	Claimed in 2000 and 2001	\$9,165.69	\$11,564.56
OCDC	OC00	DUMP TRUCK 10 WHEELER	ISUZU 10PC1	1/29/2000	9.00 CU.M.	1995	CXZ19J-3003829	Claimed in 2000		
ADC	AD0001	Dump Truck 10 Wheeler	Isuzu 10PC9	1/29/2000	9.00 Cu. M.	1995	CXZ19J-3005341	Claimed in 2000 and 2001	\$9,165.69	\$11,564.56
OCDC	OC00	DUMP TRUCK 10 WHEELER	ISUZU 10PC1	1/29/2000	9.00 CU.M.	1995	CXZ19J-3005341	Claimed in 2000		
ADC	AD0001	Dump Truck 10 Wheeler	Isuzu 10PC8	1/29/2000	9.00 Cu. M.	1995	CXZ19J-3006234	Claimed in 2000 and 2001	\$9,165.69	\$11,564.56
OCDC	OC00	DUMP TRUCK 10 WHEELER	ISUZU 10PC1	1/29/2000	9.00 CU.M.	1995	CXZ19J-3006234	Claimed in 2000		
ADC	AD0001	Dump Truck 10 Wheeler	Isuzu 10PC2	1/29/2000	9.00 Cu. M.	1995	SRZ451-1908157	Claimed in 2000 and 2001	\$9,165.69	\$11,564.56
OCDC	OC00	DUMP TRUCK 10 WHEELER	ISUZU 10PC1	1/29/2000	9.00 CU.M.	1995	SRZ451-1908157	Claimed in 2000		
ADC	AD0001	Dump Truck 10 Wheeler	Isuzu 10PC1	1/29/2000	9.00 Cu. M.	1995	SSZ41-191042	Claimed in 2000 and 2001	\$9,165.69	\$11,564.56
OCDC	OC00	DUMP TRUCK 10 WHEELER	ISUZU 10PC1	1/29/2000	9.00 CU.M.	1995	SSZ41-191042	Claimed in 2000		
ADC	AD0001	Dump Truck 10 Wheeler	Isuzu 10PC3	1/29/2000	9.00 Cu. M.	1995	SSZ451-1958824	Claimed in 2000 and 2001	\$9,165.69	\$11,564.56
OCDC	OC00	DUMP TRUCK 10 WHEELER	ISUZU 10PC1	1/29/2000	9.00 CU.M.	1995	SSZ451-1958824	Claimed in 2000		
ADC	AD0001	Dump Truck 10 Wheeler	Isuzu 10PC4	1/29/2000	9.00 Cu. M.	1995	SSZ451-19542215	Claimed in 2000 and 2001	\$9,165.69	\$11,564.56
OCDC	OC00	DUMP TRUCK 10 WHEELER	ISUZU 10PC1	1/29/2000	9.00 CU.M.	1995	SSZ451-19542215	Claimed in 2000		
Daewoo	3DA000102	DUMP TRUCK	SVLV F10 6X4	2000.05.03	25 T	1992	YV2H2B3D7Pa378687	Claimed in 2000 and 2001	\$16,505.20	\$26,513.68
OCDC	OC00	DUMP TRUCK 10 WHEELER	VOLVO FX10,6X4	5/5/2000	25 TONS	92	YV2H2B3D7Pa378687	Claimed in 2000		
OCDC	OC01	DUMP TRUCK 10 WHEELER	VOLVO FX10,6X4	5/5/2000	25 TONS	92	YV2H2B3D7Pa378687	Claimed in 2001		
Daewoo	3DA000102	DUMP TRUCK	SVLV F10 6X4	2000.05.03	25 T	1992	YV2H2B3D9Pa378688	Claimed in 2000 and 2001	\$16,505.20	\$26,513.68
OCDC	OC00	DUMP TRUCK 10 WHEELER	VOLVO FX10,6X4	5/5/2000	25 TONS	92	YV2H2B3D9Pa378688	Claimed in 2000		
OCDC	OC01	DUMP TRUCK 10 WHEELER	VOLVO FX10,6X4	5/5/2000	25 TONS	92	YV2H2B3D9Pa378688	Claimed in 2001		
Daewoo	3DA000102	DUMP TRUCK	SVLV F10 6X4	2000.05.03	25 T	1992	YV2H2B3D9Pa378691	Claimed in 2000 and 2001	\$16,505.20	\$26,513.68
OCDC	OC00	DUMP TRUCK 10 WHEELER	VOLVO FX10,6X4	5/5/2000	25 TONS	92	YV2H2B3D9Pa378691	Claimed in 2000		
OCDC	OC01	DUMP TRUCK 10 WHEELER	VOLVO FX10,6X4	5/5/2000	25 TONS	92	YV2H2B3D9Pa378691	Claimed in 2001		

STATUS OF HEAVY EQUIPMENT

Date : May 6th, 2004

NO	EQUIPMENT NAME	MFC	MODEL	SPEC'	CONTROL NO	MFC YEAR	OPER' EQUIP'	OPER' S/BY	REPAIR	OPER' FINISH	SCRAP DATE	DISPOSITION
EARTH MOVING EQUIPMENT												
1	BULL DOZER	JKMT	D155A-2	33.7 T	BD-237	1991	X					JUNGJU
2	BULL DOZER	JKMT	D155A-2	33.7 T	BD-242	1999	X					NGATPANG
3	BULL DOZER	JKMT	D155A-2	33.7 T	BD-243	1999	X					JUNGJU
4	BULL DOZER	JKMT	D155A-2	33.7 T	BD-244	1999	X					JUNGJU
5	BULL DOZER	UCAT	D6H-LGP-II	20.5 T	BD-232	1992			X			MELEKEOK
6	BULL DOZER	UCAT	D6H-LGP-II	20.5 T	BD-233	1992	X					NGATPANG
7	BULL DOZER	UCAT	D6R-LGP	20.5 T	BD-250	2001	X					NGATPANG
8	BULL DOZER	UCAT	D6R-LGP	20.5 T	BD-251	2001	X					NGATPANG
9	BULL DOZER	UCAT	D4C-LGP-III	7.8 T	BD-248	2001	X					NGATPANG
10	BULL DOZER	UCAT	D4C-LGP-III	7.8 T	BD-249	2001	X					JUNGJU
11	BULL DOZER	UCAT	D4G-LGP	8.2 T	BD-252	2001	X					NGATPANG
12	BULL DOZER	UCAT	D4G-LGP	8.2 T	BD-253	2001			X			NGATPANG
13	BULL DOZER	UCAT	D4G-LGP	8.2 T	BD-254	2001			X			JUNGJU
14	BULL DOZER	UCAT	D4G-LGP	8.2 T	BD-255	2001	X					JUNGJU
15	BULL DOZER	UCAT	D4G-LGP-III	8.2 T	BD-256	2002	X					NGATPANG
16	BULL DOZER	UCAT	D4G-LGP-III	8.2 T	BD-257	2002	X					JUNGJU
17	BULL DOZER	UCAT	D4G-LGP-III	8.2 T	BD-258	2002	X					JUNGJU
18	MOTOR GRADER	JKMT	GD705A-4	4.32 M	MG-171	1992	X					JUNGJU
31	WHEEL LOADER	JKMT	WA420-1	3.7 M3	WL-504	1992					2002.04	NGATPANG
32	WHEEL LOADER	JKMT	WA420-1	3.7 M3	WL-506	1992	X					JUNGJU
65	EXCAVATOR	KDHI	SOLAR320-III	1.25 M3	EX-365	1992					1999.12	JUNGJU
66	EXCAVATOR	KDHI	SOLAR320-III	1.25 M3	EX-377	1992	X					MELEKEOK
99	VIB' ROLLER	GHAM	2410SD	10.6 T	VR-189	1992					2003.11	JUNGJU
100	VIB' ROLLER	GHAM	2410SD	10.6 T	VR-190	1992	X					JUNGJU
101	VIB' ROLLER	GHAM	2410SD	10.6 T	VR-191	1992					2002.05	NGATPANG
102	VIB' ROLLER	GHAM	2410SD	10.6 T	VR-192	1992	X					JUNGJU
174	DUMP TRUCK	SVLV	F10 6X4	25 T	DT-1866	1992					2001.06	PTC QUARRY
175	DUMP TRUCK	SVLV	F10 6X4	25 T	DT-1869	1992				X		JUNGJU
176	DUMP TRUCK	SVLV	F10 6X4	25 T	DT-1870	1992					2002.04	NGATPANG

Daewoo Analysis

- \$64 million claim – largely on projected losses (delay/disruption) – certified
- Experts hired later, reduced the claim to \$40 million
 - Changed method of calculating claims
 - Distanced themselves from prior calculations
 - But still included high equipment rates and scrapped equipment

Daewoo's Explanations

- Duplicated and scrapped equipment were “insignificant errors” in their claim
- The Army had agreed to allow them to use COE equipment rates

Daewoo – Expert Dispute

- Method for Delay (Line of Balance vs TIA/Windows)
- Method for Lost Productivity (Weekly Measured Mile vs. Monthly and payment based Measured Mile)
- Damages – daily rates, productivity measures, scrapped equipment and equipment costs

Daewoo Decision

- False Claim during the trial
 - Judge found witnesses unreliable
 - Bait and switch of proposed project team
 - Certified Claim as a “negotiating ploy”
 - Equipment cost “windfall”
 - Claiming scrapped equipment
- Awarded Government \$50M in Damages
- Scathing decision – impacting attorneys, experts, witnesses

Daewoo v. United States

“We noted that all Daewoo’s “errors” in the claim increased the amount of the claim; no errors had the effect of reducing the claim. This would be a remarkable coincidence in a random review of claim elements, or any means of “sampling” by auditors. The possibility that the inflationary effects of [its expert] and Daewoo’s errors resulted from innocent mistakes is remote.”

--The Honorable Robert Hodges

Daewoo v. United States

“Defendant showed that Daewoo had equipment acquisition and maintenance costs in its records, but no one chose to compare the records with the Manual to see if the acquisition costs were less than those set out in the manual. If they did, they discovered that the manual rates were higher and ignored the records. In other words, plaintiff purposely avoided looking at its own acquisition costs in favor of the higher manual numbers. This intentional inflation of the claim is fraud.”

--The Honorable Robert Hodges

Daewoo v. United States

Daewoo complained that the Government and its experts picked out small issues that did not make much difference in the bottom line. These minor differences added up, however, and they showed that plaintiff was willing to commit fraud. Plaintiff was willing to inflate its claim wherever and whenever it could, even in amounts that were relatively small. ...[the expert] “rounded the percentage-to-completion factor from 44.453% upward to 45%. That rounding error alone results in a claim overstatement of approximately \$131,000.”

--The Honorable Robert Hodges

Daewoo Lessons

- Hire experts before claim certification
- Experts credibility was lost in several places:
 - If report is shown to be wrong, fix it (whether or not the client will pay)
 - If a position can be construed as biased, be able to explain why it isn't
 - Don't allow your analysis to appear one-sided – point out contrary evidence
 - Know and establish the line where aggressive turns to biased

Morse-Diesel

- \$50 million claim was voided to obtain a \$200,000 payment a month or two early
- Courthouse project in St. Louis
- Contractor can get paid for entire bond cost (as Mobilization) if it produces a receipt saying bond is paid-for
- Contractor asks bonding company to give it a paid receipt, and it would process the payment later

Stadium Example

- SuperConference anecdote
- Lost Productivity/Measured Mile on Football Stadium
- Obtained Labor hours from Electrical Subcontractor
- Labor hours were clearly not complete
- Conclusion of no lost productivity
 - Called out at hearing – conclusion based on incomplete data, but not pointed out by the expert in report or testimony
 - For that attorney, that Expert will always be tainted

YDJV v State Department

- \$26 million delay claim concerning US Consulate in Mumbai
- \$12 million counter-claim for LDs and tech issues
- “...despite the obvious time and effort that he devoted to his analysis, we find [plaintiff’s expert] opinions less helpful, in part because it appears to discount or minimize the considerable evidence in the record, generated by YDJV itself during contract performance, that repeatedly indicates YDJV’s frustrations with and difficulties handling and motivating its subcontractors in India.”

YDJV v. State Department

- “The willingness of YDJV’s expert to ignore the interplay of a necessary requirement for FWCC [permit] issuance with other activities, and to plot it simply as a “dot” on a graphic rather than as a necessary contract activity tied into the CPM analysis, caused us to approach the other parts of his analysis more critically.”
- Result: \$6.7 million in LDs owed by contractor

International Arbitration

- Expert in International Arbitration said he completely changed how he writes reports when he began International
- Required to take training and take an oath
- Would taking an oath and some training change how YOU do your job?

What can WE do?

- Code of Ethics - (See something Say something)
- Recognize the difference in ethics between Engineers/Experts and Attorneys – Expert duty is to Judge/Arbitrator
- Understand that clients want an aggressive position – but the expert controls the line
- Head off ethical dilemmas –
 - Make client aware of risks
 - Point out holes in data or in analysis, and contrary evidence
 - Identify the small dilemmas – travel claims, gifts, timekeeping

Additional Case Studies

- <https://ethics.tamu.edu/case-studies/>
- <https://www.scu.edu/ethics/focus-areas/more/engineering-ethics/engineering-ethics-cases/>
- <http://sites.bsyse.wsu.edu/pitts/be120/Handouts/cases.htm>
- <https://peer.asee.org/case-studies-in-engineering-ethics.pdf>

QUESTIONS?



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