

## P R O L O G U E

WASHINGTON, DC  
NOVEMBER 23, 2007

THE HOTEL SUITE IS RICHLY DECORATED in cream-colored fabrics and matching carpet, the turquoise drapes drawn, blocking out the view of downtown Washington. A series of aluminum steam table pans situated on warming trays cover a small side table, the aroma of scrambled eggs, bacon, and hash browns filling the room.

Ignoring the hunger pangs growling in his stomach, Colonel Graeme “the Bull” Turnbull, U.S. Army, directs his harsh, blue-eyed gaze at the two civilians seated directly across the small conference table. Ryan Gessaman, a rugged man in his forties, wearing a dark suit and matching bow tie, is a senior assistant to Richard Perle, chairman of the Defense Policy Board. Perle, known around Washington power circles as the “Prince of Darkness,” is himself a close personal advisor to former secretary of defense Donald Rumsfeld and a major investor in a number of defense companies. Perle is also co-founder of the Project for the New American Century (PNAC), a political think tank, established in 1997, that promotes American dominance in world affairs.

Turnbull does not recognize Gessaman’s companion, an as-yet unidentified woman with thick, shoulder-length, blonde, curly hair and penetrating hazel eyes, her navy business suit partially concealing what appears to be an athletic physique.

“Colonel, are you sure we can’t interest you in some breakfast?”

“No, thank you, sir.”

“Well, if you change your mind . . .” Gessaman opens a sealed file. “I understand you’re currently stationed at Camp Anaconda. How long have you been in Iraq?”

“Since the beginning. I started in Afghanistan with the 187<sup>th</sup> Airborne Regimental Combat Team, the ‘Rakkasans.’ We were the first boots on the ground. Same for Iraq. *Ne desit virtus*—”

“—let valor not fail,” the woman translates. “When did Military Intelligence recruit you?”

“The day Psy Ops found out I spoke fluent Arabic.”

“So you were with MI two years, then Counterintelligence. Looks like you were quite busy . . . over one hundred interrogations.” The woman’s eyes narrow. “Tell me, Colonel, what’s the most interesting thing you ever learned from these ‘sessions?’”

Turnbull frowns. “You don’t want to know.”

“Try me.”

“Back in 2005, I reported that Bin Laden had escaped to the Hadhramaut of Yemen, that he was being protected by Sayyid tribesmen. The info went up the food chain, but nothing ever happened. Seems the Sayyids of the Hadhramaut are allied with members of the Saudi Royal Family . . . to go after him would have insulted our Saudi friends. Better to just pretend the number-one bad guy’s hiding in a cave in Afghanistan than confront the real enemy, huh?”

The woman nods. “I share your frustration, Colonel. Off the record, CIA ran an assessment of the blowback of a Bin Laden capture. Sometimes bad guys are better left alive than dead.”

“Is that why we’re funding Sunni insurgents with ties to Al-Qaeda?” Turnbull watches their expressions drop. “Yeah, I know about that, most of the other grunts in MI do too. Fact is, 45 percent of these foreign fighters are Saudis, and half of them are involved in suicide bombings. You don’t have to be a brain surgeon to figure out where these guys are getting their money and weapons.”

“It’s a complicated situation, Colonel,” Ryan Gessaman replies.

“Not when you’re getting shot at.”

“Shiite radicals must be contained.”

“Look, friend, let’s get something straight: I ain’t in politics and the old ‘the enemy of my enemy is my friend’ policy doesn’t fly with me, unless your definition of history is any period of time less than five years old. We supported Bin Laden to keep the Soviets in check, we supported Saddam to keep the Iranians in check . . . now we’re supporting Al-Qaeda to keep Iraq from turning into a Shi’ite nation? Ever wonder why we’re not exactly being embraced these days?”

The woman stares straight ahead, saying nothing, her silence saying everything.

“Let’s refocus on Iraq,” Gessaman says. “The president has decided to go with a troop surge. Your thoughts?”

An icy glare crosses Turnbull’s eyes. “You don’t want to know my thoughts.”

“Off the record.”

“Off the record . . .” Turnbull smirks. “The commander-in-chief started a forest fire, now he thinks he can put it out with gasoline. Baghdad’s a zoo, you have so many different factions fighting against one another that we need a score card just to know who to shoot. Troop surge? Where exactly is the president getting these troops from? The Boy Scouts? I’m working with soldiers that have been recycled so many times they’re starting to demand air miles. My enlisted men are so fried that a third of them no longer have any business carrying a weapon, let alone participating in combat operations where their presence jeopardizes the welfare of an entire platoon. And the Reserves and National Guardsmen? Nice surprise, not telling them deployment doesn’t officially begin until their boots hit sand, meaning the six months their unit spent at the MOB stations didn’t count.”

Gessaman interrupts, “Morale aside, Colonel, we’re asking for your assessment of—”

“Morale aside? Disillusion and morale don’t mix real well on the battlefield. Our guys want to complete the mission, they’re no longer sure what the mission is. Last month my soldiers killed a guy setting a roadside bomb. Turns out he was a sergeant in the Iraqi army, the guys we’re supposed to be training as our replacements! Who the hell are we fighting for? In the last ninety days, three of my PFCs committed suicide. These were brave, outstanding soldiers . . . when they arrived three tours of duty ago. Two were on antidepressants, the third had already attempted suicide ten weeks earlier. His mental health officer and I had personally signed a recommendation that the soldier not be returned to active duty. My CO’s response was that we had troop shortages, request denied.”

“Duly noted, Colonel,” said the blonde. “We appreciate the severity of the situation, which is why you are here. Now, if you could refocus your comments on the activities of the enemy.”

“I’m sorry, ma’am, I didn’t get your name.”

“No, you didn’t. The insurgents, Colonel.”

“Insurgents are a small piece of a larger puzzle. A year ago we were in the middle of a Sunni–Shi’ite civil war, now we’re seeing growing signs of a Shi’ite movement designed to unleash a nationwide bloodbath aimed at American troops. The militias’ objective is to lure us out of the green zone, then pin us down in hostile neighborhoods using Iranian-made rocket-propelled grenade launchers. As a result, we’ve now ceased all military sweeps. Meanwhile, the local Sunni population is slowly being killed off or sent packing. By invading Iraq, we essentially radicalized the entire Muslim community and turned a secular society into a Shi’ite nation.”

“In your estimation, Colonel, what group is doing most of the damage?”

Turnbull looks hard at Gessaman. *They’re playing head games, leading me somewhere . . .* “Which group is the worst? The Shi’ite Death Squads? The Mahdi Army? The Badr Organization? Take your pick. Essentially, the groups trained by the Iranians. Of course, if you happen to be a Shi’ite living in the South, it’s the Sunni extremists, backed by our Saudi and Jordanian allies. These groups come and go as they please, controlling neighborhoods, sometimes entire cities, and the Iraqi militia and police give them free reign. The civilians are too scared to venture out of their homes, and areas that used to be mixed have now segregated into either Sunni or Shi’ite simply out of necessity. Add to that the perpetual shortages of water and electricity, plus an exodus of ten thousand Iraqis a day, and you’ve got an almost intolerable situation. But you already know that, don’t you, Mr. Gessaman?”

Gessaman says nothing.

“Let’s talk about you, Colonel.” The blonde leafs through her own folder. “Both parents trace their roots to the Scottish Highlands, your family came to America just after World War II. Grandfather was a war hero—”

“Yes, ma’am. He fought Rommel in North Africa.”

“According to your bio, you come from a long line of fighting men.”

“The Turnbull clan has fought in every war since Longshanks invaded Scotland.” The colonel smiles. “We were a wild sort, the only bunch of rowdies ever to have a bounty placed on the entire clan’s head.”

“Tell me about John Turnbull.” The blonde flashes an encouraging smile.

“John Turnbull . . . now there was a crazy-ass ancestor. According to Scot lore, John was reputed to have killed more English during William

Wallace's raids than any other kinsman who wore the kilt. Used to bring a two-hundred-pound mastiff into battle. One time, John beheaded four English knights while his dog chewed on their arms. True story. Some time after that this little English dweeb by the name of Kerr beheaded the dog and John simply lost it. Forgot all his training and got his arm chopped off, then he lost his head. Literally. War is hell, huh?"

The blonde again makes it a point to reference her notes. "According to Scot history, for the next two hundred years the Turnbulls waged war on the Kerr's land."

"That we did. See, us Highlanders . . . we never forget a debt."

"Killed a lot of people in the process, I imagine."

"Nothing I'm proud of, mind you. But you do what you have to."

"Women and children too?"

The colonel's guard goes up. *She's a spook. CIA most likely. Careful, Bull, this one's a wolf in sheep's clothing . . .*

Ryan Gessaman jumps in before he can reply. "Colonel, you're right about Iraq, it's become a real quagmire. Was it a mistake to go in? We'll let history decide. But the problem that refuses to allow democracy to take root in Iraq is the same one that threatens America—Islamic radicals. And everything's coming from Iran."

"Ever hear the term 'Islamic Waqf'?" asks the blonde. "It refers to an old Islamic precept that states Muslims have the right to claim any territory their people have conquered by force. Any conquest, including the ones that date back over a thousand years."

"That's a radical interpretation," the colonel counters. "Waqf is the act of giving an estate to the leaders of Islam to manage to help the poor."

"Radicals are who we're dealing with, Colonel. America stumbled in Iraq, and radical Islam used the momentum to spread its tentacles throughout the Muslim world. Yesterday, Hezbollah assassinated Pierre Gemayel, a Christian Cabinet minister in Lebanon, one of the few leaders left who stood against Syrian influence. We're dealing with a dangerous ideology, fueled by religious hatred, that thinks nothing of slaughtering Muslim and non-Muslim civilians alike to achieve their objectives. These radicals have infiltrated at least fifty-five different countries, and they won't be satisfied until they've retaken or recaptured every speck of land, from Madrid to the Middle East and then some. Their influence is spreading quickly throughout the Arab world; the more radical the violence, the more power they wield."

Gessaman nods. “This is Nazi Germany all over again, only they’re killing for Allah, which is far more powerful cause than the Fuhrer. Radical Islam is winning the war of minds through an extensive propaganda program. Children in Palestine, Jordan, Iran, and Saudi Arabia are being taught at an early age to despise the West. Textbooks and music videos depict Jews and Christians as blood-sucking animals, the westerners as Satan worshipers. We have videotaped footage of first graders chanting for Jihad and the opportunity to blow themselves up in Allah’s name. And as bad as things may seem now, it’s going to get a whole lot worse. Within the next five years we could be looking at Armageddon-like attacks that could lead to the end of open societies as we know them.”

“Five years, Colonel,” the blonde repeats. “Within five years, Iran will be producing enriched uranium. Think about how a nuclear Iran would change the Middle East. The Saudis would demand nukes, then Egypt, Jordan, Syria . . . nuclear detente. But that’s not even the worst of it. How do we stop Iran from supplying nuclear weapons to terrorist groups? Is there any doubt these Islamic radicals would use them? Remember how helpless you felt on September Eleventh? Imagine waking up one day and learning a suitcase nuke just wiped out New York or Chicago or Philadelphia or Miami—”

“—or all of them at once!” Gessaman says. “Hijacking planes requires long-range planning and specific talents, and we still failed to stop it from happening, smuggling in a dozen fifteen-kiloton suitcase nukes would be a cakewalk. A dozen Hiroshimas, Colonel. Think Homeland Security could stop it? What about immigration? We can’t even keep a thousand Mexicans a day from sneaking over the border, and six years after 9/11 our ports still remain virtually unprotected. And you know how Washington is when it comes to terrorist threats; the politicians always wait until something bad happens before they react. You think the Dems are going to be any better? Non-binding actions change nothing.”

“Weapons of mass destruction . . . our population in imminent danger.” Colonel Turnbull exhales an exasperated breath. “With all due respect, this smells like the same neocon fear tactic Cheney and Rumsfeld used back in 2002.”

“Are you saying the Iranians pose no threat?”

“Lady, let me tell you something I’m guessing you already know. The most effective ally we had in fighting the Taliban *were* the Iranians. They had always considered bin Laden a terrorist and were already battling

Sunni Pashtun tribes in Afghanistan. The Iranians had been secretly providing us with military support and intelligence against the Taliban—up until the moment George Bush did an abrupt about-face and declared their nation part of the axis of evil, even though they had nothing to do with 9/11.”

“And what about Ahmadinejad’s threats?”

“Ahmadinejad’s nothing more than a blowhard . . . the Iranian equivalent of Ann Coulter. It was our reaction to him, coupled with the invasion of Iraq, that increased his popularity among Shi’ites. We gave him exactly what he was after—a presence. We did the same thing forty years ago with Castro, and look where that got us.”

“And when Castro acquired nuclear missiles from the Soviets, we didn’t hesitate to act,” Gessaman shoots back. “Ahmadinejad’s missiles are radicals carrying suitcase nukes. Imagine the worst-case scenario. American cities destroyed without warning, tens of millions of people vaporized, millions more dead and dying. Our economy destroyed, panic in the streets.”

“It’s an absolute nightmare,” the woman says, “and Iran is the linchpin. Rumsfeld screwed up Iraq, no argument, but the Neocons were right about one thing: threats must be addressed before they arrive, sponsors of terror, held accountable. We simply cannot afford to allow the nuclear genie out of the bottle in the Persian Gulf.”

Colonel Turnbull’s heart races. “Why am I here?”

“You’re here because you know the enemy, because you’ve seen what they can do. You’re here because you have access to resources we may need.” Ryan Gessaman closes his folder. “For a moment, Colonel, I want you to imagine you’re the new secretary of defense. Better yet, the next president. Your top advisors have just told you in no uncertain terms that, within the next five years, Iran will have enriched uranium to build and supply nuclear suitcase bombs to radical extremists. How do you prevent the terrorists from using those weapons to decimate our nation and western society?”

“A preemptive invasion, I suppose.”

“Yes,” Gessaman replies, “but with what fighting force? You said yourself, Iraq’s a disaster, our troops are burned out, the military is dangerously short on manpower, and the American people want out of the Persian Gulf. Even if you went ahead, you’d need upwards of half a million troops to invade Iran, maybe more to maintain control, which none

of us truly believes can happen. Where do you get the troops?"

"You could institute a draft," the blonde suggests, playing devil's advocate.

Gessaman shakes his head. "The American public would never go for it."

"Okay," the colonel says, "so we don't invade, we simply take out their nuclear facilities, just like the Israelis did with that Iraqi reactor back in '81."

"A good suggestion," Gessaman states, "only there's potentially dozens of facilities, most of them unknown, many underground. Plus, there's the terrorist training camps, the military bases . . . no, if we do this it's got to be all or nothing. And remember what you said earlier: by invading Iraq we essentially radicalized the entire Muslim community. The days of preemptively attacking another country are over . . . unless there's just cause."

"You mean if they hit us first?"

"Exactly." The blonde's eyes bear down on Turnbull. "The world had no problem with us invading Afghanistan after 9/11. Last May, I sat in a top-secret meeting between President Bush and his most senior national security advisors about how to rewrite the rules of the Cold War. The old rules of deterrence don't apply when it comes to suitcase nukes. At some point before his presidency ends, Bush will announce that, should a nuclear suitcase bomb ever be detonated on American or Allied soil, the United States will hold the country who supplied the material 'fully responsible' for the aftermath."

Colonel Turnbull wipes a bead of sweat from his brow. "What does 'fully responsible' mean exactly?"

"The term was purposely left vague, allowing for a nuclear or other type of retaliatory attack. Should such an attack be directly linked to the Iranians through nuclear forensics, the outcome would change the geopolitical landscape forever."

"Wait . . . you actually want them to hit us?"

"Of course not," Gessaman backpeddles. "But hypothetically, if they did . . . then the world would understand, then our response would be justified."

"Think about it," adds the blonde. "Eliminate Iran's crazy president and the radical mullahs and democracy suddenly has a fighting chance to take root. No more nuclear threat, no more Iranian insurgents into Iraq,

and we deal the radical elements of Islam a death blow. We're talking about saving western society while allowing the Arab world to climb out of the Stone Age, once and for all."

Colonel Turnbull sits back in his chair, suddenly feeling queasy. "Let me get this straight: you want to allow an American city to be nuked in order to give us an excuse to turn Iran into a parking lot?"

"No. Only the desired Iranian targets. Nuclear facilities, military bases, terrorist training sites. A preemptive strike to prevent a dozen nuclear attacks on American cities."

"But to wipe out a million Americans?" The colonel mops sweat from his brow.

"Your grandfather fought in World War II," the blonde reminds him. "Imagine what would have happened if Roosevelt had waited another six months before entering the war. All of Britain would have been lost, the Manhattan Project would have been delayed, Hitler's heavy water experiments were nearly complete . . . Germany would have won the war."

"But allowing a nuclear attack . . . on American soil?"

"News flash, Colonel: Roosevelt *knew* the Japanese were readying an attack on Pearl Harbor, and guess what—he allowed it to happen!"

"I heard that; I just never wanted to believe it."

"Believe it," Gessaman states. "U.S. intelligence had broken the enemy's codes months earlier, we'd been monitoring their communications long before December 7. World War II was Roosevelt's Iraq. He knew Congress and the American people would never agree to engage in another battle in Europe, not unless something drastic were to happen . . . an event so terrible, so heinous that it would incite an emotional public response and illicit a massive call to arms. When he learned the Japanese were coming, FDR ordered the carriers out to sea and allowed the devastation in Pearl Harbor to take place. The president sacrificed thousands of innocent American men and women so that our country would be forced to go to war, a war the White House secretly provoked in order to give us a fighting chance to defeat an evil that was threatening the entire world."

The colonel's eyes grow harsh. "And Bush? Are you saying he allowed the events of September Eleventh to happen in the same way?"

Ryan Gessaman smirks. "Honestly, Colonel, I didn't think someone of your stature would be a conspiracy theorist."

The blonde leans forward, her Cheshire cat smile intended to dismiss his question. "Colonel, this is merely think-tank conversation; the Pentagon

engages in this kind of rhetoric eight days a week. But let's face the facts: Islamic radicals want to get their hands on a nuke, and with Iran entering the game, the odds are suddenly even that the threat is very real. I think you'd agree we've been relatively lucky since 9/11, but our ports remain unprotected, and our border patrols fail almost every test we throw at them. Sure, we could sit back and pray our intelligence network will stop the next wave of attacks, only it doesn't take a team of terrorists to blow up a city; it only takes one suicide bomber with one atomic suitcase bomb. But if we control the variables, we can destroy the threat."

"What variables do you control?" Turnbull asks. "The Republicans lost both Houses, the Neocons lost Rumsfeld. Come 2008, another Clinton may be occupying the White House."

The blonde is grinning, but her hazel eyes are as cold as ice. "You're misreading the landscape, Colonel. Corruption scandals swung the pendulum away from the GOP in the midterms. That slide will be corrected in the next two years. The Democrats will talk a tough game, threatening to cut funding to the troops, but in the end they'll be so worried about the '08 elections that they'll back down and Bush will still do whatever he pleases."

She waves the conversation off. "Anyway, this is just talk. Before any action can even be considered, there must be a plan, and no one knows this area of the world better than you."

Colonel Turnbull clears his throat. "Nothing personal, ma'am, but I have a family that's barely seen me these past few years. I've done my time in hell, so if it's all the same to you, I think you'd better find another man for the job."

The blonde sits back, her face turning flush. "You think you've been in hell? You have no idea what hell is, Colonel. I have a great uncle who passed away a few years ago. When he was ten the Nazis rounded him up with his parents and sisters, his aunts and uncles and cousins, and the rest of the Jews in his village and shoved them into cattle cars. The lucky ones suffocated to death on the ride to Auschwitz. When they arrived at the death camp, the women were separated from the men and taken directly to the gas chambers. That was before the Nazis figured out they could run the ovens day and night by using the fat from burning human flesh as a fuel."

"I may seem cold-hearted to you, Colonel, and maybe I am. But when I go home at night I hug a husband who loves me and kiss my two young

children whom I adore, and if I have to sell my soul to make sure they don't get incinerated by some lunatic in a turban who's been brainwashed into believing he's going to paradise for killing infidels . . . then so be it."

She pauses, looking out the window at downtown Washington. "Last week I was watching CNN . . . Glenn Beck was interviewing Benjamin Netanyahu. The former Israeli prime minister was asked what the Jews learned from the Holocaust. You know what he said? He said, 'When someone tells you they intend to annihilate you, you should believe them.'"

She forces a smile, regaining her composure. "I know you're a family man, Colonel; that's why you're here. For a moment I want you to imagine you and your family living in the Highlands centuries ago, at a time when Longshanks was readying his invasion of Scotland. If you knew you could save your country and countrymen by sacrificing a few clans while forever removing the English threat, would you have done it?"

Colonel Turnbull grinds his teeth, the nerves in his right quadriceps causing the leg to shake. "Okay, lady, you've got your man."

“If you want to get people to fight, you have to get them to believe there is a threat, that they’re in danger. This is an integral part of Islamic propaganda.”

—ITMAR MARCUS,  
*Palestinian Media Watch*

“Bush and Cheney are ramping up the case for an attack on Iran, just as they did before invading Iraq.”

—ROBERT FOX,  
*The First Post*,  
July 1, 2007

“Whoever fights monsters should see to it that in the process he does not become a monster.”

—NIETZSCHE

“The American way of life is not negotiable.”

—VICE PRESIDENT DICK CHENEY

“Iran’s chief nuclear negotiator, viewed by the West as a moderator in Tehran, resigned before crucial talks with Europe this week over Iran’s nuclear program, signaling that Iranian officials may have closed the door to any possible negotiated settlement in its standoff with the West.”

—NAZILA FATHI AND MICHAEL SLACKMAN,  
*New York Times*,  
October 21, 2007

# WINTER 2011

“The first angel blew his trumpet, and hail and fire mixed with blood were thrown down upon the earth, and one-third of the earth was set on fire. One-third of the trees were burned, and all the grass was burned.”

—REVELATION 8:7

“Yeah, I was in the old Executive Office Building for those meetings, at one time or another all of us were. BP, Chevron, Conoco-Phillips, Shell, Exxon-Mobil, U.S. Oil and Gas . . . but only the top managers, the CEs were purposely kept away. That was the red flag, the ‘plausible deniable’ factor. All of us knew what was at stake, we’d seen the reports coming out of the Caspian Basin, all of which added a sense of urgency to Cheney’s plan. Rumsfeld showed us SAT images of the oil fields while Wolfowitz did most of the selling, some nonsense about how our workers would be safe, how they’d be embraced, all the while pushing us for timetables on how long it would take us to get the oil flowing again, as if we had a crystal ball. The Brown and Root guys had detailed maps of Iraq’s energy infrastructure, you could tell they’d been in it with the CIA lady from the beginning. It was one big circle jerk, and I just kept nodding, wondering what the hell we were doing here, I mean the Bushies had just taken office, and the scenario they outlined, no one actually believed it would happen. Five months later the planes struck the Twin Towers and everyone knew. The Senate Hearings that followed . . . what a joke. I mean, no one was even placed under oath.”

—ANONYMOUS OIL EXECUTIVE,  
on Vice President Dick Cheney’s secret  
Energy Task Force meetings

“On August 13, 2002, the CIA completed a classified, six-page intelligence analysis (dubbed “Perfect Storm”) that described the worst scenarios that could arise after a U.S.-led removal of Saddam Hussein. According to then-CIA director George Tenet, it was relegated to the back of a thick briefing book handed out to President Bush’s national security team for a meeting on September 7, 2002, where the Iraq war was Topic A.”

—WALTER PINCUS,  
*The Washington Post*,  
June 2007

## Iran Claims Capability to Build a Dozen Nuclear Missiles

Associated Press: December 11, 2011

TEHRAN—Iranian President Mahmoud Ahmadinejad announced today that his country has succeeded in enriching enough weapons-grade uranium to build a dozen atomic bombs. “For more than a decade we have been pressured by the West and the Zionist regime to curtail our efforts to remain a liberated power. Thanks to our great successes in bringing nuclear power to our people, we have taken the next step down the path of independence. Iran’s enrichment program now yields enough uranium to arm a dozen nuclear missiles—sufficient to annihilate the enemies that threaten our borders. The great nation of Islam will no longer be bullied by the West. The Zionist movement will be eliminated in one storm, the western powers that hold Iraq, in another.”

The McKuin administration responded to the Iranian announcement by stating that Ahmadinejad’s rule has succeeded only in taking his people down a “dangerous path of self-destruction.”

Ahmadinejad’s recent rise in popularity among his own people, fueled by the continued violence in Iraq, allowed him to change the Iranian constitution, extending his presidency.

STEVE ALTEN

DIRKSEN SENATE OFFICE BUILDING

ROOM SD-366

DECEMBER 12, 2011

9:06 AM EST

HEARING BEFORE THE COMMITTEE ON  
ENERGY AND NATURAL RESOURCES  
United States Senate  
110th Congress

“The hearing will please come to order.” Committee chairman David Keller grandstands a sweeping glance around the packed chamber, the senator from California reminding himself not to look directly into the C-Span cameras. “I’d like to thank everyone in attendance, particularly the senators who have chosen to join us here today for the first in a series of meetings that I hope will lead to real change in the role energy plays in our global economy, the environment, and the security of our nation. In light of the recent events in Iran, I can think of nothing as important.

“The questions we’re going to be focusing on today concern the present and future energy needs of both the United States and the world as a whole, specifically dealing with oil and natural gas. If our witnesses would share their perspectives on these specific challenges, the committee and I would be most grateful. Senator Poschner, I believe you had some opening remarks?”

“Thank you, Mr. Chairman, and a special thank you to our esteemed panelists who have made themselves available for this morning’s session.” The republican senator from Virginia pauses for the applause, nodding to the lone woman and four men seated at the witness table below the main dais. Adjusting his wire-rimmed glasses, he reads from a prepared statement.

“Ladies and gentlemen, we live in unprecedented times. The world’s population is growing by a quarter of a million people every day. Whether we’re able to feed and clothe, educate, sustain, and maintain our population will depend upon our ability to meet global energy demands. Little has changed over the last twenty years. Fossil fuels still supply 85 percent of our energy needs, with oil leading the way. Each day the United States uses approximately 22 million barrels of crude, representing nearly a fourth of the world’s 94 million barrel-per-day consumption. These staggering quantities are expected to increase at an annual rate of upwards

of 2 percent, reaching 107 million barrels of oil per day by 2020 as the economies of China, India, and other Asian countries continue their unprecedented acceleration as industrialized nations . . .”

Ashley Brown Futrell III, affectionately known to family and friends simply as “Ace,” stretches his left leg beneath the witness table. At six-four and 225 pounds, the forty-four-year-old petroleum geologist and one-time football star at the University of Georgia finds it hard to remain seated for very long in one position. His left knee crackles like gravel beneath a twice surgically repaired patellar tendon, and his joints ache from chronic arthritis. On good days he can recall every pass completion thrown during a meteoric college career, on bad days, only the pain.

Ace tilts his head hard to the right then back to the left until the vertebrae in his neck “snap” into place. Then, methodically, he pops each knuckle a finger at a time while stealing another quick glance at his watch.

*Ten after nine. Six more hours 'til I leave for Dulles Airport. Figure an hour flight, then another hour to get my luggage and catch a cab into the city. Eight hours . . . eight long hours until Kelli's back in my arms. No more long trips, Futrell, no matter what she says. This is it.* Ace palms his BlackBerry, flipping through the stored images in his photo gallery. Kelli and their two children smile back at him, tugging at his heartstrings. He has thought about his wife every day during his travels abroad, the hardest times coming at the end of each eighteen-hour day when he lay in bed alone in some foreign hotel room, staring at the ceiling fan, wondering if she was all right . . . wracked with guilt over leaving her. Twenty-three days . . . at least a dozen times he had contemplated taking the next flight home, but his wife had insisted he stick it out. Tonight he and Kelli will finally share the same bed—a suite in Central Park—before driving home to Long Island tomorrow to see their kids.

He checks his watch again.

Ace had met Kelli Doyle during their junior year at Georgia—he the walk-on third-string quarterback suddenly thrust into the limelight, she the knockout blonde with the country-girl smile and the disposition of a back-room brawler. She had been an All-American on the women's lacrosse and field hockey teams, a tough-as-nails competitor who enjoyed physically humiliating her opponents. Ace and Kelli's relationship had lasted nearly until graduation, when Ace had gone through his “gray period.” Kelli, always focused on the brass ring, had moved on without him. Six

years later the flame was rekindled when they ran into one another at a fund-raiser in Orlando. Within two months they had married.

Fourteen years of marriage, most of it good. A house, cars, two wonderful kids, two well-paying careers—the American dream . . . all threatened by that damn lump in her left breast. Surgery, chemo, followed by a two-year reprieve before it had spread. The second round of chemo had knocked the fight out of her . . . but was it enough? He had wanted to cancel his trip, but she had insisted, promising him good news when he returned.

*Three long weeks . . . never again. PetroConsultants can fire me if they want. Plenty of other jobs in the field.* He turns to face the other four members of the panel. To his immediate right is Ellen Wulf, an associate director with the Energy Information Administration, to her right, Michael Bach-Marklund, a senior fellow for the Center for Strategic and International Studies. Next to him is Rodney Lemeni, an economist representing Chevron, Texaco, and Caltex, then Christopher Santoro, a consultant from the Cambridge Energy Research Association (CERA). CERA is a sister organization to Ace's employer, PetroConsultants, both falling under the ever-expanding IHS Energy Group umbrella. *Wonder if any of them have to travel twenty-two weeks out of the year?*

Senator Poschner drones on, "Listen to these stats. China is adding the equivalent energy demand of an entire mid-sized country every two years. Last year they added another forty-four thousand megawatts—more than our largest power company, and they still experienced blackouts throughout 60 percent of their country. In addition, India has—"

Ace shifts again in his chair, waiting for the senator to chew up his allotted time. He has worked as a petroleum engineer for PetroConsultants for fifteen years and has heard it all before—the statistics, the warnings, the recommendations, the endless debates. He has never doubted the sincerity of the senators present, not now, not six years earlier when he last testified before the newly installed, Democrat-led Congress. But convincing a committee to act is far different from passing sweeping legislation, especially when the White House was doing the Texas two-step with the fossil fuel industry.

*Maybe I should just quit. Not like I haven't given it some thought. I'm sure I could find a position with any of the major oil companies . . . unless of course I burn the bridge right now, pull back the curtain, tell Congress what I really know . . . yeah, like that'll make a difference. Most of these bozos receive campaign donations from the six sisters of sludge, the ones that don't*

*won't survive next year's election. Your call, Ace. Feed your family, or go down in one last blaze of glory . . .*

"Thank you, Senator. That brings us to our first witness of the day. Ace Futrell is a senior administrator at PetroConsultants of Geneva, now part of the IHS Energy Group. Mr. Futrell's team has been collecting data as part of his organization's upcoming report on world oil reserves—"

*What about a major university? I could probably get a teaching job. Of course, we'd have to downsize. Lose the cars, forget about that Disney cruise. Maybe I could pick up a few night shifts as a fry cook at McDonald's. Could be fun. They just bumped the minimum wage to \$8.25, that should be enough to cover our cable bill. So what if we can't afford health insurance or college tuition or summer camp . . .*

"Mr. Futrell, I know you've been traveling abroad these last few weeks. The committee greatly appreciates you diverting your trip home to be with us this morning. Mr. Futrell?"

*. . . or gasoline or food—*

"Hey, Ace, you're on." Ellen Wulf nudges his shoulder, snapping him back into reality.

"Mr. Futrell, I asked if you're ready to testify."

"Testify? Yes, sorry. Oh, and it's pronounced Fu-troll. As in petrol." Ace adjusts his microphone, then reads from his notes. "Mr. Chairman, Senators, it's an honor for me to be back with you this morning. I've been asked to address the topic of global oil production, specifically how much oil is left in world reserves. Having just returned from an extensive field trip to the Middle East, I have with me preliminary results from our latest data; however, before I share that information with the committee, I feel it's important we understand a few basic rules of the game. The first is a fundamental law of energy, the Law of Diminishing Returns. When the first wildcat rig is drilled, we know very little about what an oil field will yield, but by the time the last well is up, we pretty much know everything. The pattern is consistent and clear—every oil reserve peaks and drops in what M. King Hubbert, the father of petroleum geology, discovered to be a bell-shaped curve. The first oil pumped from a well is the cream, the easiest to access. Eventually the basin will peak, thereafter production will slow, the less the flow, the more difficult and costly it is to pump. And yes, while technology continues to increase the long-term potential of each reserve, even technology has its limitations."

*You're boring them, Futrell. They're not here to resolve the oil crisis, only to spin it.*

“Peak oil is a term that refers to the top of Hubbert’s Curve, the point at which the fruit is still easily picked among the tree’s lower branches. EUR Oil refers to the Estimated Ultimately Recoverable quantity of oil remaining underground, the key word here being ‘recoverable.’ Bottom line, Senators: It takes energy to get energy and, in this case, oil to recover oil. If it takes two barrels of oil to recover three barrels, you pump. But if the field is in decline and you’re only able to recover two barrels or less for those two barrels expended, you can’t continue pumping, not with a negative energy return on energy invested. Remember that, Senators. It means we’ll run out of oil long before the last drop is ever drawn out of the ground.

“Hubbert correctly predicted crude oil production in the United States would peak between 1966 and 1972. The actual peak occurred in 1970, though it would take another full year before that fact became apparent. Since then we’ve gone from being the world’s largest oil producer to its biggest importer, a role now being challenged by China. While we still have active reserves in the Gulf of Mexico, for the most part America’s domestic supply is all but finished.

“What about the rest of the world? Hubbert predicted world peak oil would occur between the years 2000 and 2005. Have we peaked? No question about it. From 2003 to today, not a single new catchment has been discovered that exceeds 500 million barrels. Okay, so how much is left? That’s a bit more difficult to predict, given that these national companies exporting oil tend to operate in secrecy and deceit. Kuwait, for example, recently lied about its reported reserves in order to protect their OPEC production quotas, a practice all too common among producing nations. Oil companies are just as bad. Because they have to pay taxes on reserves, they tend to report new findings in old fields, a practice that maintains stock prices but does little for world energy needs. Six years ago executives at Shell had to resign after they misrepresented oil reserves to stockholders by 4 billion barrels of oil . . . an ‘accounting error’ worth an estimated \$136 billion.”

Ace reshuffles his notes. “Here’s a few hard facts that play into the equation. Our species uses a billion barrels of oil every ten days, and the United States is responsible for 25 percent of that. Instead of enacting policies that conserve energy, we continue to use more. America’s demand

for oil, as well as natural gas and coal, is expected to increase by another 40 percent over the next twenty years, and we're not the only nation using more energy. As Senator Poschner already mentioned, the energy demands coming out of Asia, specifically China and India, are enormous. Prior to 1990, China's energy needs grew only half as quickly as its gross domestic product, but over the last five years there's been a groundbreaking surge in China's economy that has caused their energy consumption to quadruple. We've contributed to that variable, our auto imports playing a key role in the mobilization of China's workforce. Of particular concern is China's recent shift from coal to oil and natural gas, a change necessitated by the effects of carbon dioxide emissions that have decimated air quality in their major cities. As a result, China's oil demand has risen from 14 million barrels per day in 2004 to its present levels of 19 million barrels, nearly equaling that of the United States. When one considers that China's population of 1.4 billion people is four times as large as ours, it staggers the imagination to think how high their demand could eventually go. And, like the United States, China receives most of its oil imports from Saudi Arabia, followed by Iran, Venezuela, and the Sudan."

Chairman Keller interrupts, "It's no secret we're in direct competition with the Chinese, Mr. Futrell. What this committee would like to know is how much oil is left, specifically in Saudi Arabia, which appears to be the only oil-producing nation that can sustain global increases in demand."

Ace nods. "Saudi Arabia is the key; there's no doubt. They possess five fields classified as super-giants, several of which have been pumping for close to sixty years. Ghawar is the mega-giant, composed of several super-giants. The field is 174 miles long and sixteen to twenty miles wide, and it's been online since 1951. To the Saudis' credit, they set the standard on maintaining their wells, with recovery rates at 75 percent—far and away the highest in the industry."

The Chairman interrupts again. "Yesterday, the committee heard a presentation by Mr. Nansen Saleri, the reservoir manager at Saudi Aramco. According to Mr. Saleri, the Saudis have tapped and untapped fields that could meet world demand beyond 2054. By the look on your face, you don't seem convinced."

"No, sir, I'm not, and I'm not alone. Despite their public gestures, the Royal Family has clamped down on foreign inspections of both oil wells and tankers. As a result, our data reflects basin quantities that are antiquated at best. As to these untapped fields . . . we've been listening to

that song and dance for years. These days, if the House of Saud told me the desert was dry, I'd probably bring a raincoat."

The remark sends smiles across the faces of a few of the Democrats in attendance.

*Nicely done. The fast food industry can use a man like you . . .*

Republican senator Bob Prichard, a staunch oil industry supporter from Texas, is not amused. "For the record, Mr. Futrell, the House of Saud has been a friend and ally to this nation for more than sixty years. Besides being our main supplier of cheap oil, they've also proven themselves to be a stabilizing influence among the other OPEC nations, as well as one of the few countries in the Middle East that supports our ongoing war against terrorism.

*They also fund the teaching of radical Islam and hatred of the West, and fifteen of their nationals hijacked our planes. Ah, but what's a few thousand dead civilians among friends . . .*

"I ask you now, sir, and for the record, are you in possession of any hard evidence that refutes the information presently being supplied by Saudi Aramco?"

"Hard evidence? No, Senator; however—"

"Thank you, Mr. Futrell."

Ace grinds his teeth, refusing to back down. "Senator, you invited me here to testify, not to debate politics. PetroConsultants accepts the fact that third-world nations routinely exaggerate oil reserves. In the last year alone Venezuela, Dubai, Iran, and Iraq have all been caught in lies. I'm not sure we're any different. After all, how many tens of billions of dollars worth of aid to New Orleans was secretly diverted to rebuild oil rigs damaged by Hurricane Katrina?"

*Oops, did that just slip out?* Ace returns the senator's glare.

Conversations break out as Senator Prichard's face turns a deeper shade of red. "Mr. Chairman, I demand you strike those comments from the public record, they have no bearing on—"

"Senator, my only point was—"

Chairman Keller interjects, "I think we've got the point, Mr. Futrell. If you'd conclude your testimony with your latest figures?"

Ace takes a deep breath, his blood pressure refusing to settle. "One final comment, if I may, Mr. Chairman, for the record. While the committee might eventually enact measures to replace some of the 40 percent of oil expended on power generation with natural gas, coal,

nuclear, or some other form of alternative energy, there presently exists no short- or long-term solution to remedy our transportation and farming needs. Let me be crystal clear here: without the oil used in fertilizers and pesticides, corn yields would drop from 130 bushels per acre to thirty, the same would apply for our other crops, including the grain needed to feed livestock. It's gasoline that powers industrial tractors, allowing a mere 2 percent of our population to feed 300 million people, and it's gasoline that brings those perishable goods to market. When the oil stops flowing, the masses will go hungry—and that, Senator, is fact. The only way you remedy that nightmare is to invest now in renewable energy resources and enact major policy changes that radically replace our nation's infrastructure, something that will take upwards of ten years, mandating long-range planning and investment. In the opinion of many experts, it's long overdue."

Chairman Keller waits for the spectators' applause to die down. "Your recommendations are duly noted. Now, the estimates?"

Ace removes a sealed manila enveloped from his briefcase. "Mr. Chairman, Senators, based on all available supply indicators, it is PetroConsultants' belief that world oil levels peaked in the summer of 2003, fueled, in part, by unexpected losses incurred at Iraqi wellheads and insurgent attacks on pipelines in the wake of the second Gulf War. Based on current and projected demand, the ongoing war in the Middle East, the continued pattern of hurricanes affecting the Gulf of Mexico with increased ferocity, and the potential for more terrorist attacks that threaten key pipelines, we anticipate the world suffering serious depletions by the year 2017."

A hush falls over the chamber, followed by dozens of side conversations.

"Six years, Mr. Futrell?"

Ace nods. "Or perhaps, Mr. Chairman, even sooner."