June 16, 2013

<u>Peter Wehner</u> on the administration that gives answers that are the "least untruthful."

Talk about collapsing standards. When Barack Obama ran for office, his promise wasn't that he'd simply improve our politics; he would transform them. He would appoint men and women of unblemished integrity who would serve the public interest. Mr. Obama would hold people accountable. He boasted in 2010 that he had put in place the toughest ethics rules in history. His administration would be the most transparent in history. And all of this would restore faith and trust in government.

That was then. Let me tell you about now.

James Clapper, the director of national intelligence, clearly mislead Congress when in March of this year Clapper was <u>asked</u> by Senator Ron Wyden, "Does the NSA collect any type of data at all on millions or hundreds of millions of Americans?"

"No, sir," Clapper responded.

"It does not?" Wyden asked again.

"Not wittingly. There are cases where they could inadvertently, perhaps, collect, but not wittingly."

That statement was false, since we know that the NSA has collected phone records of millions of Americans.

And so what is Mr. Clapper's excuse? Try this one on for size. The New York Times <u>reports</u> that in an interview on Sunday with NBC News, Mr. Clapper acknowledged that his answer had been problematic, calling it "the least untruthful" answer he could give.

That phrase–what Clapper said is "the least untruthful" answer he could give–should live on in scandal lore. ...

## Daniel Henninger on the same theme.

Here is <u>Barack Obama</u> commenting last Friday on the National Security Agency's antiterrorist surveillance programs: "We've got congressional oversight and judicial oversight. And if people can't trust not only the executive branch but also don't trust Congress and don't trust federal judges to make sure that we're abiding by the Constitution, due process and rule of law, then we're going to have some problems here."

## Uh-huh.

Herewith a partial list of political groups that said they were subjected to over-the-top audits by the Internal Revenue Service:

Greenwich Tea Party Patriots, Greater Phoenix Tea PartyPatriots, Laurens County Tea Party, Northeast Tarrant Tea Party, Myrtle Beach Tea Party, Albuquerque Tea Party, San Antonio Tea Party, Richmond Tea Party, Manassas Tea Party, Honolulu Tea Party, Waco Tea Party, Chattanooga Tea Party and American Patriots Against Government Excess.

What that target list shows is there was never one "tea party." It was collections of citizens spontaneously gathering all over the country under one easy-to-remember name. Their purpose was to do politics. For that, their government hit them hard.

In January the pollsters at the Pew Research Center reported that for the first time a majority of Americans—53%—now agree that "the federal government threatens your own personal rights and freedoms."

This is far beyond concerns about the size of government. A majority of people now see the government of Madison, Jefferson and Franklin as a direct, personal threat.

So yes, we have "some problems" here. ...

## Mark Steyn with a Corner post.

When the IRS is accused of "targeting," don't assume they're speaking metaphorically. From *Politico*:

As chairman of the House Homeland Security oversight subcommittee, [Jeff] Duncan (R-S.C.) toured a federal law enforcement facility in late May and noticed agents training with the semiautomatic weapons at a firing range. They identified themselves as IRS, he said.

"When I left there, it's been bugging me for weeks now, why IRS agents are training with a semiautomatic rifle AR-15, which has stand-off capability," Duncan told POLITICO. "Are Americans that much of a target that you need that kind of capability..?

"I think Americans raise eyebrows when you tell them that IRS agents are training with a type of weapon that has stand-off capability. It's not like they're carrying a sidearm and they knock on someone's door and say, 'You're evading your taxes,'" Duncan said.

A bureaucracy is bad. A politicized bureaucracy is worse. A paramilitary politicized bureaucracy is nuts. And, in fact, evil. There is no reason in a civilized society why the Deputy Assistant Commissioner of Paperwork should have his own SEAL Team Six. ...

George Will says Lois Lerner is the "scowling face of the state."

As soon as the Constitution permitted him to run for Congress, Al Salvi did. In 1986, just 26 and fresh from the University of Illinois law school, he sank \$1,000 of his own money, which was most of his money, into his campaign to unseat an incumbent Democratic congressman. Salvi studied for the bar exam during meals at campaign dinners.

He lost his campaign. Today, however, he should be invited to Congress to testify about what happened 10 years later, when he was a prosperous lawyer and won the Republican Senate nomination to run against a Democratic congressman named Dick Durbin.

In the fall of 1996, at the campaign's climax, Democrats filed with the Federal Election Commission charges against Salvi's campaign alleging campaign finance violations. These charges dominated the campaign's closing days. Salvi spoke by telephone with the head of the FEC's Enforcement Division, who he remembers saying: "Promise me you will never run for office again, and we'll drop this case." <u>He was speaking to Lois Lerner.</u>

After losing to Durbin, Salvi spent four years and \$100,000 fighting the FEC, on whose behalf FBI agents visited his elderly mother demanding to know, concerning her \$2,000 contribution to her son's campaign, where she got "that kind of money." When the second of two federal courts held that the charges against Salvi were spurious, <u>the lawyer arguing for the FEC was Lois</u> <u>Lerner</u>.

More recently, she has been head of the IRS Exempt Organizations Division, which has used its powers of delay, harassment and extortion to suppress political participation. For example, it has told an Iowa right-to-life group that it would get tax-exempt status if it would promise not to picket Planned Parenthood clinics.

<u>Glenn Reynolds</u> of Instapundit wrote a WSJ column about IRS abuse in May 2009. Barack Obama owes his presidency in no small part to the power of rhetoric. It's too bad he doesn't appreciate the damage that loose talk can do to America's tax system, even as exploding federal deficits make revenues more important than ever.

At his Arizona State University commencement speech last Wednesday, Mr. Obama noted that ASU had refused to grant him an honorary degree, citing his lack of experience, and the controversy this had caused. He then demonstrated ASU's point by remarking, "I really thought this was much ado about nothing, but I do think we all learned an important lesson. I learned never again to pick another team over the Sun Devils in my NCAA brackets. . . . President [Michael] Crowe and the Board of Regents will soon learn all about being audited by the IRS."

Just a joke about the power of the presidency. Made by Jay Leno it might have been funny. But as told by Mr. Obama, the actual president of the United States, it's hard to see the humor. Surely he's aware that other presidents, most notably Richard Nixon, have abused the power of the Internal Revenue Service to harass their political opponents. But that abuse generated a powerful backlash and with good reason. Should the IRS come to be seen as just a bunch of enforcers for whoever is in political power, the result would be an enormous loss of legitimacy for the tax system. ... <u>The Economist</u> reports on a carbon fiber cable invented in Finland for elevator shafts. It will allow more sky to be scraped because at 100 or so floors, the weight of the steel cable began to be a height limiting factor. Economics will still be in play though as there are limits to the amount of each floor's space that can be dedicated to elevator shafts. One solution was the sky lobbies used in the World Trade Center which saw three cars in one shaft.

WHEN Elisha Otis stood on a platform at the 1854 World Fair in New York and ordered an axeman to cut the rope used to hoist him aloft, he changed cityscapes for ever. To the amazement of the crowd his new safety lift dropped only a few inches before being held by an automatic braking system. This gave people the confidence to use what Americans insist on calling elevators. That confidence allowed buildings to rise higher and higher.

They could soon go higher still, as a result of another breakthrough in lift technology. This week Kone, a Finnish liftmaker, announced that after a decade of development at its laboratory in Lohja, which sits above a 333-metre-deep mineshaft which the firm uses as a test bed, it has devised a system that should be able to raise an elevator a kilometre (3,300 feet) or more. This is twice as far as the things can go at present. Since the effectiveness of lifts is one of the main constraints on the height of buildings, Kone's technology—which replaces the steel cables from which lift cars are currently suspended with ones made of carbon fibres—could result in buildings truly worthy of the name "skyscraper". ...

# Contentions Obama's Ethically Challenged Administration by Peter Wehner

Talk about collapsing standards. When Barack Obama ran for office, his promise wasn't that he'd simply improve our politics; he would transform them. He would appoint men and women of unblemished integrity who would serve the public interest. Mr. Obama would hold people accountable. He boasted in 2010 that he had put in place the toughest ethics rules in history. His administration would be the most transparent in history. And all of this would restore faith and trust in government.

That was then. Let me tell you about now.

James Clapper, the director of national intelligence, clearly mislead Congress when in March of this year Clapper was <u>asked</u> by Senator Ron Wyden, "Does the NSA collect any type of data at all on millions or hundreds of millions of Americans?"

"No, sir," Clapper responded.

"It does not?" Wyden asked again.

"Not wittingly. There are cases where they could inadvertently, perhaps, collect, but not wittingly."

That statement was false, since we know that the NSA has collected phone records of millions of Americans.

And so what is Mr. Clapper's excuse? Try this one on for size. The *New York Times* reports that in an interview on Sunday with NBC News, Mr. Clapper acknowledged that his answer had been problematic, calling it "the least untruthful" answer he could give.

That phrase–what Clapper said is "the least untruthful" answer he could give–should live on in scandal lore.

As you might expect, the Obama administration is expressing support for Clapper as criticism of him mounts. "The president has full faith in director Clapper and his leadership of the intelligence community," National Security Council spokeswoman Caitlin Hayden told <u>the *Guardian*</u>.

Of course he does. Why wouldn't Obama have faith in James Clapper, since his attorney general is Eric Holder (who has misled Congress on multiple occasions)?

Rather than cleanse the political Augean Stables, the president and his administration–with every unfolding scandal, with every misleading statement, with every effort to stonewall and intimidate political opponents–are adding to the filth.

# WSJ <u>The Sum of All Fears</u> *The IRS audits and NSA surveillance flow into the same national anxieties.* by Daniel Henninger

Here is <u>Barack Obama</u> commenting last Friday on the National Security Agency's antiterrorist surveillance programs: "We've got congressional oversight and judicial oversight. And if people can't trust not only the executive branch but also don't trust Congress and don't trust federal judges to make sure that we're abiding by the Constitution, due process and rule of law, then we're going to have some problems here."

Uh-huh.

Herewith a partial list of political groups that said they were subjected to over-the-top audits by the Internal Revenue Service:

Greenwich Tea Party Patriots, Greater Phoenix Tea PartyPatriots, Laurens County Tea Party, Northeast Tarrant Tea Party, Myrtle Beach Tea Party, Albuquerque Tea Party, San Antonio Tea Party, Richmond Tea Party, Manassas Tea Party, Honolulu Tea Party, Waco Tea Party, Chattanooga Tea Party and American Patriots Against Government Excess. What that target list shows is there was never one "tea party." It was collections of citizens spontaneously gathering all over the country under one easy-to-remember name. Their purpose was to do politics. For that, their government hit them hard.

In January the pollsters at the Pew Research Center reported that for the first time a majority of Americans—53%—now agree that "the federal government threatens your own personal rights and freedoms."

This is far beyond concerns about the size of government. A majority of people now see the government of Madison, Jefferson and Franklin as a direct, personal threat.

So yes, we have "some problems" here.

People ask whether the IRS scandal will damage the president. Who knows? It depends on who talks to avoid prison. The IRS audits matter because they are a destructive event that happened at a particularly unsettled moment in the country's political and social life.

Cynics say presidents have always sicced the IRS on opponents. Perhaps. But those were simpler times. The IRS audit scandal and the NSA's metadata surveillance may be apples and oranges, but for many the distinctions aren't so obvious. We live today inside a constant torrent of big government and big data. No one should be surprised if a political backlash, however inarticulate, forms against both for inconsistent reasons.

Consider what people are asked to absorb in the news flow now—some of it political, some not. Beyond the IRS audits and NSA surveillance we have a Department of Justice penetrating press activity protected by the First Amendment, stories about Iran's hackers accessing the control-room software of U.S. energy firms, China hacking into everything, reports last month of cyberthieves siphoning millions of dollars from ATMs, rivers of email spam that fill inboxes alongside constant warnings to protect yourself against phishing and malware by storing industrial-strength passwords on encrypted flash drives, stories in this newspaper about socialmedia apps that exist mainly to collect your personal data for sale to advertisers.

Books have been written about governments using Web technology to censor and control their populations. What's good and evil, helpful and menacing, comes at us with equal force from the same technologies. "Dual-use" was formerly a phrase used mostly in the military. We're all living in a dual-use world now.

Electronic sophisticates say it's all good. Sun Microsystems' former CEO Scott McNealy famously said: "You have zero privacy. Get over it." That's what he thinks. This is a sum-of-all-fears environment tailor-made for eventually producing a public backlash. It's already in the water, with Sen. Rand Paul offering a Fourth Amendment Restoration Act, which he says would stop the NSA's data-mining program. That would be the one protecting us all from homicidal Islamist bombers.

Scott McNealy was almost right. Unavoidably, the citizens of the U.S. or any free society will have to reach an accommodation—a modus vivendi—with complex systems created by experts with abstruse knowledge. But if so, those citizens need to be free to talk about the terms of their accommodations. In short, they need to be free to do politics.

Effective antiterrorism programs such as metadata surveillance or for that matter efforts to produce progress through genetic manipulation may seem self-evidently good to their proponents. But these technologies are inevitably controversial and will only survive if they gain public support. Today that means exposing them to politics.

The goal of the IRS audits was to suppress politics, to shut up those "conservative" tea-party groups to increase the odds that Mr. Obama's side would win. One doubts that Mr. Obama's supporters were distressed about it. But this week they're stressed about "an alarming age of surveillance."

Whatever inchoate anxieties predated this presidency are now worse: a politics rife with suspicion and retribution, and most of the people believing the government, for starters, threatens their freedom.

One may hope Mr. Obama has sufficient political skill to protect the antiterrorism structures he inherited. It will be the job of the next president to prevent the public's sense of personal political threat from heading toward 60% and beyond.

# The Corner When Your W-2 Meets an AR-15 by Mark Steyn

When the IRS is accused of "targeting," don't assume they're speaking metaphorically. From *Politico*:

As chairman of the House Homeland Security oversight subcommittee, [Jeff] Duncan (R-S.C.) toured a federal law enforcement facility in late May and noticed agents training with the semi-automatic weapons at a firing range. They identified themselves as IRS, he said.

"When I left there, it's been bugging me for weeks now, why IRS agents are training with a semiautomatic rifle AR-15, which has stand-off capability," Duncan told POLITICO. "Are Americans that much of a target that you need that kind of capability..?

"I think Americans raise eyebrows when you tell them that IRS agents are training with a type of weapon that has stand-off capability. It's not like they're carrying a sidearm and they knock on someone's door and say, 'You're evading your taxes," Duncan said.

A bureaucracy is bad. A politicized bureaucracy is worse. A paramilitary politicized bureaucracy is nuts. And, in fact, evil. There is no reason in a civilized society why the Deputy Assistant Commissioner of Paperwork should have his own SEAL Team Six. As I wrote in the magazine last year:

By the way, I use the word "agents" rather than "officials" because, in the developed world, the paramilitarized bureaucracy is uniquely American. This is the only G7 government whose education minister has his own SWAT team — for policing student-loan compliance. The other day, the Gibson guitar company settled with the feds over an arcane infraction of a law on rare-

wood importation — after their factories were twice raided by "agents" bearing automatic weapons. Like the man said, don't bring a knife to a guitar fight. Do musical-instrument manufacturers have a particular reputation for violence?

The Gibson raid looks <u>a little different in light of recent revelations</u>. Oh, well. Could have been worse. Its chief executive — a Republican donor — might have been shot for "resisting arrest," right?

Abolish the IRS. And no personal Delta Force for its successor.

# Washington Post Scowling face of the state by George F. Will

As soon as the Constitution permitted him to run for Congress, Al Salvi did. In 1986, just 26 and fresh from the University of Illinois law school, he sank \$1,000 of his own money, which was most of his money, into his campaign to unseat an incumbent Democratic congressman. Salvi studied for the bar exam during meals at campaign dinners.

He lost his campaign. Today, however, he should be invited to Congress to testify about what happened 10 years later, when he was a prosperous lawyer and won the Republican Senate nomination to run against a Democratic congressman named Dick Durbin.

In the fall of 1996, at the campaign's climax, Democrats filed with the Federal Election Commission charges against Salvi's campaign alleging campaign finance violations. These charges dominated the campaign's closing days. Salvi spoke by telephone with the head of the FEC's Enforcement Division, who he remembers saying: "Promise me you will never run for office again, and we'll drop this case." <u>He was speaking to Lois Lerner.</u>

After losing to Durbin, Salvi spent four years and \$100,000 fighting the FEC, on whose behalf FBI agents visited his elderly mother demanding to know, concerning her \$2,000 contribution to her son's campaign, where she got "that kind of money." When the second of two federal courts held that the charges against Salvi were spurious, <u>the lawyer arguing for the FEC was Lois</u> Lerner.

More recently, she has been head of the IRS Exempt Organizations Division, which has used its powers of delay, harassment and extortion to suppress political participation. For example, it has told an Iowa right-to-life group that it would get tax-exempt status if it would promise not to picket Planned Parenthood clinics.

Last week, in a televised House Ways and Means Committee hearing, Rep. Peter Roskam (R-III.), Salvi's former law partner, told the riveting story of the partisan enforcement of campaign laws to suppress political competition by distracting Salvi and entangling him in bureaucratic snares. The next day, the number of inches of newsprint in The Post and the New York Times devoted to Roskam's revelation was the number of minutes that had been devoted to it on the three broadcast networks' evening news programs the night before: Zero.

House Republicans should use their committee chairmanships to let Lerner exercise her right to confront Salvi and her many other accusers. If she were invited back to Congress to respond concerning Salvi, would she again refuse to testify by invoking her Fifth Amendment protection against self-incrimination? There is one way to find out.

Durbin, the second-ranking Senate Democrat, defeated Salvi by 15 points. He probably would have won without the assistance of Lerner and the campaign "reforms" that have produced the FEC's mare's-nest of regulations and speech police that lend themselves to abuses like those Salvi experienced. In 2010, Durbin, who will seek a fourth term next year, wrote a letter urging Lerner's IRS division to pay special attention to a political advocacy group supporting conservatives.

Lerner, it is prudent to assume, is one among thousands like her who infest the regulatory state. She is not just a bureaucratic bully and a slithering partisan. Now she also is a national security problem because she is contributing to a comprehensive distrust of government.

The case for the <u>National Security Agency's gathering of metadata is</u>: America is threatened not by a nation but by a network, dispersed and largely invisible until made visible by connecting dots. The network cannot help but leave, as we all do daily, a digital trail of cellphone, credit card and Internet uses. The dots are in such data; algorithms connect them. The technological gathering of 300 billion bits of data is less menacing than the gathering of 300 by bureaucrats. Mass gatherings by the executive branch twice receive judicial scrutiny, once concerning phone and Internet usages, another concerning the content of messages.

The case against the NSA is: Lois Lerner and others of her ilk.

Government requires trust. Government by progressives, however, demands such inordinate amounts of trust that the demand itself should provoke distrust. Progressivism can be distilled into two words: "Trust us." The antecedent of the pronoun is: The wise, disinterested experts through whom the vast powers of the regulatory state's executive branch will deliver progress for our own good, as the executive branch understands this, whether we understand it or not. Lois Lerner is the scowling face of this state, which has earned Americans' distrust.

#### WSJ <u>Tax Audits Are No Laughing Matter</u> A president shouldn't even joke about abusin

A president shouldn't even joke about abusing IRS power.

by Glenn Harlan Reynolds

Barack Obama owes his presidency in no small part to the power of rhetoric. It's too bad he doesn't appreciate the damage that loose talk can do to America's tax system, even as exploding federal deficits make revenues more important than ever.

At his Arizona State University commencement speech last Wednesday, Mr. Obama noted that ASU had refused to grant him an honorary degree, citing his lack of experience, and the controversy this had caused. He then demonstrated ASU's point by remarking, "I really thought this was much ado about nothing, but I do think we all learned an important lesson. I learned never again to pick another team over the Sun Devils in my NCAA brackets. . . . President [Michael] Crowe and the Board of Regents will soon learn all about being audited by the IRS."

Just a joke about the power of the presidency. Made by Jay Leno it might have been funny. But as told by Mr. Obama, the actual president of the United States, it's hard to see the humor. Surely he's aware that other presidents, most notably Richard Nixon, have abused the power of the Internal Revenue Service to harass their political opponents. But that abuse generated a powerful backlash and with good reason. Should the IRS come to be seen as just a bunch of enforcers for whoever is in political power, the result would be an enormous loss of legitimacy for the tax system.

Our income-tax system is based on voluntary compliance and honest reporting by citizens. It couldn't possibly function if most people decided to cheat. Sure, the system is backed up by the dreaded IRS audit. But the threat is, while not exactly hollow, limited: The IRS can't audit more than a tiny fraction of taxpayers. If Americans started acting like Italians, who famously see tax evasion as a national pastime, the system would collapse.

One reason why Americans don't act like Italians is that they see the income-tax system as basically fair in execution. A tax audit or a tax-fraud prosecution is still seen, usually, as evidence that someone has done something wrong. If it comes instead to be seen as "just politics" then the moral component of the system will be gone. For the system to work, people have to believe that it is fundamentally fair.

This is why the IRS is so strict with its own employees. Paul Caron, a professor at the University of Cincinnati who writes the TaxProf blog, noted in response to Mr. Obama's remarks that the law calls for the termination of IRS employees who make audit threats for illegitimate reasons. He suggested that Mr. Obama's "joke" might be grounds for firing if he were an IRS employee.

He's not, of course, but as the president his words carry much more weight and he should be much more careful. That's particularly true given that people still haven't forgotten about the Obama administration's other tax issues -- the appointment of Tim Geithner as Treasury secretary despite an inexcusable failure to pay \$34,000 in Social Security and Medicare taxes while working for the International Monetary Fund, and the scandals involving Tom Daschle and others whose appointments failed. (When the Geithner issue came up, news reports indicated that IRS employees were very upset. They can be fired over a simple late filing or a failure to report a mere \$500 in income, making Mr. Geithner's "pass" on much more serious questions quite demoralizing.)

The notion that people who are audited are probably just "enemies of the regime," coupled with the idea that big shots get a pass -- that, as Leona Helmsley is reputed to have said, "taxes are for the little people" -- is a recipe for widespread tax evasion. That's how things work in Italy, and in many other countries around the world. But do we want things to work that way here?

Mr. Obama has been accused of not appreciating the importance of financial capital to the proper functioning of the economy. But ill-chosen remarks like his ASU audit threat suggest that he also doesn't appreciate the role of moral capital. That, too, is essential to the proper functioning of a modern economy. As he looks for ways to pay for the spending campaign he's already embarked upon, he'd be well-advised to avoid comments that undercut the very tax system he'll be depending on.

Mr. Reynolds, professor of law at the University of Tennessee, covers politics for PJTV.com.

# The Economist <u>Lifts and skyscrapers</u> A new lightweight lift cable will let buildings soar ever upward



WHEN Elisha Otis stood on a platform at the 1854 World Fair in New York and ordered an axeman to cut the rope used to hoist him aloft, he changed cityscapes for ever. To the amazement of the crowd his new safety lift dropped only a few inches before being held by an automatic braking system. This gave people the confidence to use what Americans insist on calling elevators. (Perhaps in England the inventor is not allowed to pick the name of the device.) That confidence allowed buildings to rise higher and higher.

They could soon go higher still, as a result of another breakthrough in lift technology. This week Kone, a Finnish liftmaker, announced that after a decade of development at its laboratory in Lohja, which sits above a 333-metre-deep mineshaft which the firm uses as a test bed, it has devised a system that should be able to raise an elevator a kilometre (3,300 feet) or more. This is twice as far as the things can go at present. Since the effectiveness of lifts is one of the main constraints on the height of buildings, Kone's technology—which replaces the steel cables from which lift cars are currently suspended with ones made of carbon fibres—could result in buildings truly worthy of the name "skyscraper".

The problem with steel cables (or "ropes" as they are known in the trade) is that they are heavy. Any given bit of rope has to pull up not only the car and the flexible travelling cables that take electricity and communications to it, but also all the rope beneath it. The job is made easier by counterweights. But even so in a lift 500 metres tall (the maximum effective height at the moment) steel ropes account for up to three-quarters of the moving mass of the machine. Shifting this mass takes energy, so taller lifts are more expensive to run. And adding to the mass, by making the ropes longer, would soon come uncomfortably close to the point where the steel would snap under the load. Kone says it is able to reduce the weight of lift ropes by around 90% with its carbon-fibre replacement, dubbed UltraRope.

## Roped together

Carbon fibres are both stronger and lighter than steel. In particular, they have great tensile strength, meaning they are hard to break when their ends are pulled. That strength comes from the chemical bonds between carbon atoms: the same sort that give strength to diamonds. Kone embeds tubes made of carbon fibres in epoxy, and covers the result in a tough coating to resist wear and tear.

According to Johannes de Jong, Kone's head of technology for large projects, the steel ropes in a 400-metre-high lift weigh about 18,650kg. An UltraRope for such a lift would weigh 1,170kg. Altogether, the lift using the UltraRope would weigh 45% less than the one with the steel rope.

Besides reducing power consumption, lighter ropes make braking a car easier should something go wrong. Carbon-fibre ropes should also, according to Mr de Jong, cut maintenance bills, because they will last twice as long as steel ones. Moreover, carbon fibre resonates at a different frequency to other building materials, which means it sways less as skyscrapers move in high winds—which is what tall buildings are designed to do. At the moment a high wind can cause a building's lifts to be shut down. Carbon-fibre ropes would mean that happened less often.

All of which is worthy and important. But what really excites architects and developers is the fact that carbon-fibre ropes will let buildings rise higher—a lot higher.

Lighter, stronger ropes mean the main limiting factor in constructing higher skyscrapers would become the cost, says Antony Wood, an architect at the Illinois Institute of Technology, in Chicago. Dr Wood is also executive director of the Council on Tall Buildings and Urban Habitat, which, among other things, lists the official heights of skyscrapers. At present the tallest is the Burj Khalifa in Dubai, which was completed in 2010 and, at 828 metres, shot past the previous record-holder, the 508-metre Taipei 101 tower. The Mecca Royal Clock Tower in Saudi Arabia, completed in 2012, is now, at 601 metres, the second-tallest. The Freedom Tower in lower Manhattan, built near the site of the World Trade Centre's twin towers (417 metres and 415 metres) that were destroyed by al-Qaeda in 2001, had its spire added in May to reach 541 metres. But work has now started on the Kingdom Tower in Jeddah, Saudi Arabia. Its exact proposed height is still a secret, but it will be at least a kilometre.

With a big enough budget it would, says Dr Wood, now be possible to build a mile-high (1,600metre) skyscraper. Even with carbon-fibre ropes few of such a building's lifts would go all the way from the entrance lobby to the observation deck. Most would debouch into intermediate sky lobbies, where passengers could change lifts (not least because a mile-high lift which seemed to stop on every other floor would not be popular; it would be unutterably tedious and might force the poor souls on board to make eye contact).

Such an arrangement is already familiar. Many skyscrapers are more like three-stage rockets, with different buildings stacked one on top of another—offices, a hotel and apartments. Sky lobbies mark the frontiers between these uses. But carbon-fibre ropes will allow each of these stages to be taller, too.

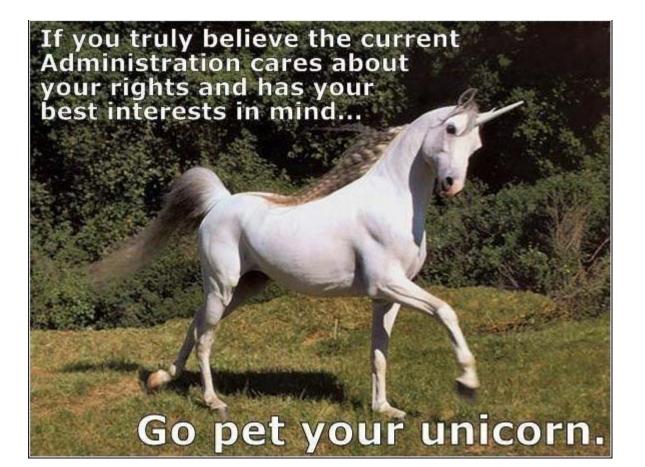
The sky's the limit

Nor need carbon-fibre lift-cables be confined to buildings. They could eventually make an idea from science fiction a reality too. Space lifts, dreamed up in the late 1950s, are a way of getting into orbit without using a rocket. Building one would mean lowering a cable from a satellite in a geosynchronous orbit above the Earth's equator while deploying a counterbalancing cable out into space. The cable from Earth to the satellite would not be a classic lift rope because it would not, itself, move. But it would perform a similar function of support as robotic cars crawled up and down it, ferrying people and equipment to and from the satellite—whence they could depart into the cosmos.

There are, of course, many obstacles to building such a lift. But the answer to one—finding a material that is light and strong enough for the cable—might just have emerged from that mineshaft in Finland.



ED DRISCOLL.COM





THE FACELESS BUREAUCRAT.

www.investors.com/cartoons



"WE'RE NOT LISTENING TO YOUR PHONE CALLS. TRUST ME."