

Dr Jack Caravelli is one of America's leading experts on non-proliferation and nuclear terrorism. He is a Senior Visiting Fellow at the UK Defence Academy and Visiting Professor at Cranfield University. He was Deputy Assistant Secretary at the US Department of Energy (2000-2003), and he served on the White House National Security Council (1996-2000), where he was President Clinton's principal advisor on non-proliferation policies and programs involving Russia and the Middle East. He began his governmental career in 1982 at the Central Intelligence Agency. This talk, transcribed, was delivered to the Global Strategy Forum, on the 29th November 2007.

Thank you all for taking the time to come and to discuss this very difficult, complex and troubling topic, which is what I want to do after my remarks. This morning several of us attended a forum like this on Pakistan. Now we are going to focus on mostly Iran – I shudder to think what I will be doing tonight! The trend is a little bit worrisome, but I am happy to be here and I will endeavour, particularly since I am out of government as we speak, to be as full and candid as I can.

To begin on Iran, let me be as clear as I can, at least on one point. I am personally fully convinced that Iran seeks to acquire nuclear weapons capability – there is no doubt about that in my mind and I will tell you why. I understand the Iranian claim that their activities are related to the peaceful pursuit of nuclear energy which is, as they point out on an hourly basis, their right under the NPT, but there is also a larger set of realities that is so long in train and so compelling on a circumstantial basis that we simply cannot ignore it.

Here are a couple of the parts of that puzzle. The first is that there is no doubt, based on sensitive material, that Iran began its pursuit of nuclear materials back in the 1980s. The programme dates at least that far back, with the focus on weapons acquisition. And again, as a sophisticated audience appreciates, there is often a large gap between ambition and success. With that said, the programme's early days began as far back as the 1980s.

We also know well and convincingly from many sources that Iran was engaged by the 1990s in clandestine acquisition from not only the notorious and infamous supply network that was headed by A Q Khan, one of the great 'humanitarians' of the 20th century, but was also engaged with the North Koreans and the Russians on both missile and nuclear technology clandestinely for years and years and years. Not exactly the type of behaviour you would expect from a country devoted to just civilian nuclear power. As our senior political officials certainly know, nations vote in a way with their resources. Iran has committed considerable resources to facilities that are hidden, to facilities such as that at Arak, which is a heavy water research reactor facility under construction, probably to be completed in 2009. Without getting into the physics of heavy water and the like, what the heavy water focus tells the experts is simple: we know technically that a heavy water research reactor is really intended for one thing – that is to be ultimately a producer of plutonium.

Iran, I think with considerable forethought, is pursuing two paths to nuclear weapons. Arak represents a plutonium path and one of the most troubling aspects of all recently emerged in the report given by the IAEA about two Fridays ago, about Iran's updating the declarations to the IAEA about its activities and I want to explain that in a second. The other path to nuclear weapons is, as you know, highly enriched uranium and for a number of years Iran had been operating a uranium enrichment facility plant called Natanz. Natanz had clearly encountered a variety of technical problems – again, without getting into the physics and engineering of all this – to enrich uranium, you put it through a series of centrifuges linked by what are called cascades and process through all the uranium and if you do this over time, you produce enriched uranium to a level that is useful for power reactors - 5% enriched uranium-235, but it is a logical and fairly easy step to go to a 90% enrichment level which is called weapons grade.

Now at Natanz, the Iranians had had, as I said, a series of problems for a number of years. The centrifuges tend to be very delicate and fragile and rather finicky pieces of equipment to operate and to understand; and the Iranians were clearly having problems. What we saw two weeks ago in the IAEA report (which caught my eye but I think escaped of the media attention) was the uranium declaration – I can only assume that it is true – that the amount of raw uranium, the throughput, as we call it, at Natanz, had spiked within the last few months by about a factor of three. If you extrapolate this and again, I am not going into physics 101 here, but if you extrapolate this and ask people who know this much better than I, again on the strictly technical basis, the judgement of US physicists is simply that under conditions that we understand today, Iran will probably succeed in enriching a sufficient quantity of highly enriched material, fissile material, to make at least a couple of weapons by about early 2009. Again this is not a political judgement, this is based on our best current technical understanding of where Iran is today. But even beyond the problematic activities directly related to the nuclear programme -Arak on the plutonium side, Natanz on the uranium side - what has always troubled me, having started my career as a military analyst at the CIA, is simply that running in parallel and in fact ahead of this nuclear time line, has been a very aggressive missile programme.

By the late 1990s Iran had conducted test flights of what we know to be the Shehab III missile. It is a knock-off, if you will, of the North Korean Nodon. It has a range of about 1300 km and if you get a military analyst to draw the range arc, you will easily see that that capability allows them to hit targets virtually throughout the entire Middle East. Again we know that every nation that has developed a long-range missile programme, which Iran clearly has and they certainly have plans to go to even longer range missiles, every nation that has done that, leaving aside ideology, also understands and has pursued a nuclear weapons capability. Missiles and nuclear weapons, as we know through fifty years of Cold War - they go together.

And that is also very troubling, Iranian behaviour, to add to this case against Iran, has been at best spotty in its openness towards IAEA inspections. If you read between the lines and even some of the explicit things said in the IAEA report, this is the case. Dr ElBaradei has tried to give the Iranians every benefit of the doubt, but I think the phrase he used in the most recent report was simply that the IAEA's understanding of Iran is growing less and less and less.

So I think that it is a terribly troubling set of events and circumstances in which we find

ourselves today. It is not for a minute that I believe that Iran has any particular plans to acquire a capability one day and use it the next. But when you couple the technical advancements and the problematic progress made by Iran over years and years now, again going back to the 80s and certainly the 90s, what you really see is a long history of being committed to this type of outcome. And as you try to sit in policy role, whether it is in Washington, in London or in the Middle East, you cannot ignore the political realities of what we find today. The honest reality is that, at least in US policy, we have viewed some nuclear nations as less troubling as others. We may not be happy about India, but we are prepared to do things with India, co-operatively today even as we speak. You cannot ignore the fact that Iran and the Iranian people, this young, vibrant country with enormous promise and potential, today at least is saddled with a theocratic government and a President who seems to enjoy making pronouncements about his desire to wipe a particular nation off the face of the earth. Given the fact of Israel's history, one cannot very easily ignore that simple declaratory statement. So for this various and sundry long list of reasons, technical and political, I think Washington - and I fully agree with the Administration - is convinced that this is where Iran wants to head.

What to do about it? The first thing is to remember that we have been at this game for a long time. When I served in the Clinton White House as a career officer and had the non-proliferation responsibilities, we began a series of negotiations, of which I was part, at a very high level with the Russian Government in the late 1990s, trying to end the Russian external assistance to Iran's nuclear and missile programmes. This issue of Iran, whether under a Republican or Democrat administration, is one where I think there is a great commonality of view and concern. We failed is the only way to describe it. We put enormous effort into it. The Russians, even under Boris Yeltsin, were at the time more inclined to listen and work with Washington, yet absolutely refused to take any of the necessary measures we suggested they take to break off this external assistance, which we knew to be critical in a number of the areas, both missile and nuclear, that Iran was pursuing. We were trying as far back as the second half of the Clinton Administration. The clock moves forward, the Bush Administration comes in with its own deep concerns about this. I think we have made probably a policy mistake of not having diplomatic relations with Iran. Jim Baker, obviously a staunch Republican, has said that. It is the same mistake the Clinton Administration made. I can understand some of the reasoning from the past and perhaps that made sense in 1979 and 1980, when they were taking US hostages. But leaving aside whatever judgements one imposes on the Iranian intentions and behaviour, it certainly serves no good interest that I can see that Washington does not have a direct channel to Iran. And one would hope that either at the of this Administration or perhaps the next Administration, that that would change.

One of the ironies of my visit to Vienna was simply that the IAEA very clearly and explicitly said to me: 'We will in Vienna engage the Iranians as much we can etc.,etc.,, but there is no substitute for Iranian and American exchanges on this and other related issues of course, directly at a high and appropriate level'. I do not know that that will happen. Having said that, beyond the things we try to do bilaterally, I think we also have to be honest about other approaches that have not succeeded either. What I have in mind here are economic sanctions. The UN Security Council in December, with UNSCR 1737 and then this spring with 1747, twice imposed a set of sanctions against entities and individuals in Iran alleged to be involved in the nuclear and missile programme. If the point of sanctions – and again, sanctions are something

the American government bilaterally loves - is to modify or change behaviour, the simple answer is that those sanctions to date imposed by the international community, have failed.

The programmes still march forward and this is why we find ourselves in this dilemma. Is there a recourse - this is the \$64,000 question - is there a recourse available to the international community, short of war? It is candidly, very difficult for me to find one. I try to talk about different options in my book, 'Nuclear Insecurity', but there are no particular magic answers. If there is any solution, short of the use of force or the acquiescence in this outcome which I think we do not want, it is simply that the international community and in particular the nations, including Russia, China, Germany, who are Iran's biggest trading partners, have to look very closely at what they are prepared to do and at least to date, China and Russia have not been very well prepared to make either the economic sacrifices or invest the political capital to undertake those kind of actions.

Now in fairness to Russia and China, as permanent members of the Security Council, they did vote in support of 1737 and 1747, but again, if anyone looked at the details of those resolutions and the length of time it took to negotiate them, I think the only objective conclusion is that those resolutions certainly are lacking in great effect or effectiveness. So it is a very, very difficult problem for us to face – I know that there is a perception in which there is a considerable amount of truth, that the United States does these things at the beck and call of the government of Israel and having worked with the Israeli government, I will tell you that both Democrats and Republicans are extremely supportive of Israel and the government of Israel and that should not change and I think it will not change. Having said that, I think that again, on both sides of the political aisle in Washington, there is recognition that our interests certainly include Israel but they do not stop in Israel in the Middle East. There is a rich and diverse set of modern Arab states that are very important to us and the implications for Iranian success certainly spill over into those countries very much, as much as it does in Tel Aviv as well. So we do this frankly for our broad set of interests and not just for those with whom we have been closely aligned, and remain closely aligned with, beginning with Israel. In an interview yesterday, I was asked about the prospects of American military options and I will comment on that for a minute.

First of all, no one wants to see war. It is a terrible thing almost always, but even worse may be Iranian acquisition of these capabilities. But leaving aside the politics for a second, it is my view, discussed a bit in my book, that the US technically and militarily has the wherewithal to successfully attack a large target set in Iran. I am not pretending that this is easy, I am not pretending that success is guaranteed, but I think this is what the United States does extremely well: they bring a large number of high tech weapons mostly through the air, against known Iranian facilities. Militarily can we carry out such an attack? My argument would be yes, we probably could. Again, I am not underselling the technical difficulties or the operational challenges of doing it. An attack against Iran is nothing like what the Israelis did in 1981 against one facility in Iraq, the Osirak reactor. It would be so much more difficult and much more militarily challenging, but it is something that if the Administration made the decision to do, there is very little doubt in my mind that they could do this successfully. Now having said that, like most things in life, it is the 'what if?' questions that jump to mind immediately. Number one, it is not clear how successful the attack could be in terms of destroying the facilities of

deepest concern.

The Iranians have obviously prepared for this, they have in many cases buried facilities, tried to hide them and the like, so that is one factor. The second factor is simply the practicality that even if you are wildly successful and are able to impose a great deal of destruction on these targets, it does not obviously preclude Iran going back and re-building and reconstituting, perhaps in a more clandestine way. I do not know that any Administration is prepared, on an annual basis, to undertake military attacks against Iran. This is really stretching the probabilities. We obviously also get into a related but entirely different set of issues - the political consequences of such an outcome. Those are almost so caught up in complexity and inter-related concerns that they are almost impossible to put in a capsule form. Obviously the impact on global energy markets could be extreme.

Some people have estimated - and it can only be that - that prices would soar and that oil prices of course would soar much higher than they are today. The vulnerability of the United States to external sources of energy is well understood, so that could be extremely damaging to us, at least economically in the short-term. What it would do to nations like Israel or the modern states in the Gulf? You can almost try to spin a wheel and come up with an answer, because your estimates and guesses are probably as good as mine. One of the most difficult things of policy formation, having served for four years inside that shell - and I know others have experiences similar to that - is that you try to form judgements and make decisions on a certain set of factors that you think you understand with some certainty but, as we talked about earlier today in the Pakistan case, for everything that you think you know, there are ten implications or ripples in the pond that you cannot fully understand or quantify or begin to really use as inputs to your policy decisions - and that is in the best case. I have no idea what the odds of a military attack in this Administration would be. My guess is that it is not imminent. I think there are reasons to believe that both the Secretary of Defense and the Secretary of State for the time being, and I am trying to parse my words carefully, at this point do not support a military operation. We have certain other things that are pressing us, both politically and militarily.

But the clock ticks down on the Administration. I think that at the very least it is clear that there is a ferocious debate within the Administration over this question. There is no secret that parts of the Administration, probably including the office of the Vice President, take a much dimmer view of the chances for any favourable outcome short of the use of force and have been fairly vocal about doing that and as some of you know, some of my former colleagues who are now out of the Administration, having served at senior levels have been very vocal about making that case as well - and are also trying to sell books. So there is no good, clean answer that we are all satisfied with to that question. My best guess - and that is all it can be - is simply that the Administration will certainly watch developments over the next few months, certainly assess where it is going with this fledgling new peace process that may be emerging from Annapolis, obviously trying to find some path forward in Iraq: all these things will become tied together in some way in the Administration's eyes. But more than anything, they will try to watch the pace and scope of activities on the ground. As I said, as we talk, as we debate, as we think about sanctions, a point made by John Bolton that I agree with, is that the clock keeps ticking and the programme keeps advancing.

When you sit and you try to find a point of light that would be countervailing to this story I am telling you, on the Iranian side, that says it is not this bad or this accounts for that or this explains that, it is very difficult to do. And I will tell you that there are those in both Administrations, past and present, that have tried to do that, but the Iranians have not made, certainly in Washington's eyes, any case for themselves. Nor have others whom we have listened to and heard from. Let me stop there and I regret that it is on such a difficult and negative note, but these are the facts as we understand them and I would certainly like to take any questions that you have.