INTRODUCTION

This evening I'm going to share with you some of what I learned as an Intelligence officer specializing in strategic nuclear weapons and nuclear war planning. I held the highest security clearances. One of my duties was involved with the preparation of a highly classified document called the Single Integrated Operational Plan (SIOP). This is the document that gives the President a range of nuclear targeting options, describes launch procedures, and lists targets for our nuclear weapons to attack.

Much of what I did (and know) is still classified, and I can't talk about that. Rather, I will give you unclassified information in lay terms (as best I can), regarding how aspects of nuclear targeting relate to the risks Vermonters run by basing the F-35 nuclear bomber in Vermont.

Some people have commented that we are using scare tactics. What Ben told you, what I'm about to tell you, and what Pierre and Chuck are going to tell you is not with any intent to scare you. It's to provide you with the facts, stark and unsettling as they are. Being ignorant or dismissive of facts and the risks we are running will not save us. The truth might.

BACKGROUND

I'm guessing that the younger people here have never thought about nuclear weapons and nuclear war; and for those of us who are a tad bit older, it has likely been decades since we had to "duck and cover" to protect ourselves from a nuclear bomb. So, I'm going to preface my remarks with a brief explanation of strategic nuclear weapons.

The U.S., and the big nuclear nations, maintain a triad of strategic nuclear weapons. These include land-based intercontinental ballistic missiles (ICBMs), sea-based submarine-launched ballistic missiles (SLBMs), and strategic bombers. Each leg of the triad has advantages and disadvantages.

Our ICBMs are based in underground silos whose silo doors are super-hardened and very difficult to destroy. Plus, since it's just a hole in the ground, it's a small target. But ICBM silos are fixed targets, and our enemies know exactly where they are.

Our SLBMs are inside submarines. Our enemies know where all of our submarine bases are located; but it's much harder to find the submarines once they are on patrol underwater. SLBMs are the most "survivable" leg of the triad and therefore are more likely to be used in a retaliatory strike.

Our strategic bombers carry cruise missiles and gravity bombs. Until the recent inclusion of the F-35, we had only two other strategic bombers: the B-52s and the B-2s. Our enemies know where all of our bomber bases are located, and bomber bases are

the easiest of the triad to destroy. However, bombers are the only leg of the triad which can be recalled in flight and prevented from deploying their weapons.

In contrast, once an ICBM or SLBM is launched, it cannot be stopped. Depending on the location of the target and the location of the attacking nuclear weapon, intercontinental flight times can be as short as 10 minutes, or as long as half an hour.

So, these are our strategic nuclear weapons. Now, I'll cover how we plan to use them...which brings us to MAD.

<u>MAD</u>

MAD stands for Mutual (or Mutually) Assured Destruction.

The MAD theory holds that if one country launches a nuclear strike, it would prompt a retaliatory nuclear strike, which could lead to a massive exchange of nuclear weapons. This would result in the annihilation of *both* the country attacked as well as the country initiating the attack. The theory further holds that if nations know they risk annihilation, they would be "deterred" from ever using nuclear weapons. They call this "strategic deterrence." However, for the MAD theory to work, four criteria must exist:

- Each side has to have a second-strike capability, meaning the country attacked *must be able to retaliate with nuclear weapons.* Since ICBM silos and bomber bases will likely be struck first, the survivable leg of the triad are the nuclear missiles onboard submarines.
- Each side has to have *perfect nuclear launch detection capabilities* which report instantly when a launch occurs, and identifies the exact location from which it was launched. There can be no "false positives" — meaning, the detection equipment cannot interpret a naturally occurring event, such as a meteor, as an incoming warhead, or a flock of geese, as a bomber.
- 3. Each side has to be *defenseless against an all-out nuclear attack* meaning that neither side can have enough anti-ballistic missiles or any other way to block or destroy the hundreds or thousands of incoming nuclear warheads.
- 4. Each side has to have *rational national leaders*.

That's MAD. Nuclear targeting strategies flow from MAD.

NUCLEAR TARGETING

The specifics about how nations chose targets for their nuclear weapons is highly classified. But, I can share three of the tenants of nuclear targeting which are applicable to the F-35...and to Vermonters.

The first tenant has to do with *WHAT is attacked FIRST*. There are two major categories: the nuclear delivery vehicles, and the bases at which the delivery vehicles are located.

Nuclear weapons arrive via delivery vehicles. Our nuclear delivery vehicles include the boosters which carry the warheads atop the ICBMs, the submarines which carry the SLBMs, and the bombers which carry the cruise missiles and bombs. To better understand this, think of guns and bullets as an analogy. Bullets need guns to reach their target. Without a gun, bullets can't kill. So, the "gun" is targeted, not the "bullets."

WHERE the delivery vehicles are based is equally important. If the runway is gone, bombers can't take off—or return to reload. Moreover, bases are large fixed targets, and are relatively easy to find and destroy.

The second tenet has to do with *WHICH* delivery vehicles and bases to attack. That's simple. *ALL of them.* All delivery vehicles and bases are targeted. Were countries in short-supply of nuclear warheads (and I assure you they are not — Ben's BBs demonstrated it powerfully); then they might have to pick-and-choose among the targets. They don't have to do this, as there are more nuclear warheads than there are targets. Ergo, everything is targeted. *Delivery vehicles and bases are struck first.*

The third tenet relates to basic nuclear targeting planning assumptions. Nuclear targeteers *always worst-case it.* They assume EVERY nuclear delivery vehicle is capable of engaging in a nuclear attack.

CAPABILITY AND MISSION

Now, let's relate all this to the F-35 and Vermont.

There's been a lot of speculation about whether "our" F-35s will have a nuclear capability and be assigned a nuclear mission. Since both of these decisions are not required to be released to the public, Vermonters will likely never know — just as Vermonters didn't know the last time the Vermont Air Guard had a nuclear mission. In the 1960s, when their F-89 fighters were upgraded with a nuclear capability, the Vermont Air Guard acquired a nuclear mission. Our Vermont Air Guard has had many mission changes over the years. Military missions change all the time.

Our politicians are trying to assure us that Vermont's F-35s won't ever carry nuclear weapons. Their assurances are meaningless. The Department of Defense **can and will change military mission assignments** to support national needs.

But, from a nuclear safety perspective, it doesn't matter what our politicians think. They cannot change the enemy's nuclear targeting. The Pentagon announced that the F-35 is now part of our nuclear triad. Department of Defense officials talk about the F-35 as a first-strike nuclear weapon. As such, it becomes a *huge threat to our enemies*; and that makes Burlington an *even more important target.*

If the enemy is conducting a first strike on us, or if they are retaliating immediately after our first strike on them, they will "worst-case it" and assume that all F-35s could participate in a nuclear attack. They cannot afford to miss any nuclear threats. It will not matter whether, in fact, Vermont's F-35s have a nuclear capability or a nuclear mission, much less where the nuclear bombs are stored. The enemy will strike the bomber base with force. *All F-35 bases, including ours, will be targeted.* In the event of a nuclear conflict, our survival will be determined by *what the enemy thinks.*

Given the uncertainties and the catastrophic consequences if we lose the MAD gamble, our politicians are insane to continue supporting basing the F-35 in Burlington. *Nothing is worth taking that kind of risk.*

CONCLUSION

Thus ends our nuclear targeting session. I hope it was understandable. Given my background in nuclear targeting and nuclear war planning, I now view basing the F-35 in Vermont from an entirely different perspective.

And I'd like to share how this affects me personally. I've lived near nuclear targets throughout my military career. I had no choice. In a weird twist of fate, one of the factors that went into my decision to retire to Vermont was my knowledge of what is targeted in the U.S. Until the F-35 became part of the U.S. nuclear triad, I felt I was finally living in one of the safest places in the country. So, the decision to base a nuclear bomber in *MY* city is a cruel irony.

If we are *not safe from nuclear weapons in Vermont*, then where are we safe? It's stomach-turning to think that Vermont...of all of the states...will house a nuclear bomber.

Should an irrational national leader decide to launch the nuclear weapons that he's talked about wanting to use, the unthinkable could happen to us.

Truly, this is madder than MAD.

Nuclear Weapons Targeting and the F-35 Colonel Rosanne Greco, USAF (Retired) 12 April 2019