

PAX AMERICANA  
AND THE WEAPONIZATION OF SPACE

A film by Denis Delestrac

DIALOGUE LIST  
(full transcript, english)

[NTT = Note To Translator]

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TC IN	SPEAKER	DIALOGUE
		<b>PAX AMERICANA</b>
00:00:00:00 00:00:44:10	JFK (V.O.)	For space science, like nuclear science and all technology, has no conscience of its own. Whether it will become a force for good or ill depends on Man. And only if the United States occupies a position of preeminence can we help decide whether this new ocean will be a sea of peace or a new terrifying theatre of war.
00:01:22:16	MALE NEWS REPORTER	China has carried out its first anti-satellite weapon test on an old weather satellites about five hundred miles up.
00:01:29:16	MALE NEWS REPORTER (V.O.)	According to US government officials, after three misses, China succeeded in shooting down one of its own aging weather satellites.
00:01:36:18	FEMALE NEWS REPORTER	The test may be part of China's efforts to establish a military presence in space. Does this mean the spy satellites the United States depends on could be shot down?
00:01:47:07	MALE NEWS REPORTER	They left behind a trail of garbage circling in orbit now after they blew up the satellite
00:01:52:00	MALE NEWS REPORTER	They leave us vulnerable it can cripple us...
00:01:55:07		Is that what they are up to ?
00:02:05:00	Jiang ZheMing	同志们，同志们，辛苦了 (no need to translate)
00:02:14:04	MALE FROM THE PENTAGON	There are nations out there who are hostile to us, and they are in space...
00:02:20:02	MALE VOICE	The threat to our space security is real.
00:02:23:16	IRAN PRESIDENT	(speaking in Farsi)
00:02:26:12	SENATOR JON KYL	Security in space is a vital national interest. The loss of access to space would threaten the very stability of our nation.
00:02:35:19	MALE NEWS REPORTER	If aimed at commercial satellites, such an attack could bring US businesses and industry to a halt.

TC IN	SPEAKER	DIALOGUE
00:02:41:26	(V.O.) MALE NEWS REPORTER (V.O.)	Today China warned that a shooting a war in space will affect everyone on earth.
00:02:47:00	MALE REPORTER VOICE	As space will get more crowded we are going to need control and defense measures.
00:02:50:23	MALE UN VOICE	A treaty banning space weapons has failed; a space war is now in the cards (NTT "in the cards" = expression means "possible").
00:02:56:03	ROBERT J. STEVEN	Space is the backbone of our national security. There is no substitute and there is no alternative to military dominance in space. This conviction should drive our course for the next fifty years.
00:03:21:16	[I: THE THREAT]	
00:03:47:25	NARRATOR	In the mid 20 <sup>th</sup> century, humanity spun its first satellite into orbit.  Staking this new frontier provided a new arena for war.  Still, space is unscarred by battle. A sanctuary.  But humanity's compulsion to dominate may ravage the expanse embracing our world. And the world itself.  Whom can we trust to regulate our heavens?
00:04:27:10	EVANGELIST	Caesar Augustus came to power twenty-seven years before Christ was born. People in the Roman Empire lived better under Caesar Augustus than they had in any empire on earth during any previous time. Roads improved, pirates no longer threatened ships on the high seas. Life was so good during this time that the period acquired a name. It was and is still referred to as the Pax Romana, which means the Roman Peace. Another period of peace has acquired a name. It is called the Pax Americana, or the American Peace.
00:05:22:27	EVANGELIST	It refers to the period in which American influence throughout the world has caused a relative peace to come about. Nowadays it seems the Pax Americana is threatened. Most of us only feel peace when we're not at war, but peace means the presence of a risen and a live Lord in your life. You may walk out every morning into a war zone... the Lord won't take you out of the valley of the shadow of death, but He will lead you right through it. And so it says in Isaiah 54, "Though the mountains be shaken and the hills removed, yet my unfailing love for you will not be shaken nor my covenant of peace be removed."

TC IN	SPEAKER	DIALOGUE
00:06:22:28	COLTON TUTTLE	My name is Cadet First-Class Colton Tuttle. I'm a cadet at the Air Force Academy. I'll graduate in forty-four days, and I'm just hoping to do my part to make sure that everyone here can enjoy their freedoms.
00:06:38:07	[Marching]	
00:06:45:01	THERESA HITCHENS	Pax Americana is a political view, which simply says that because America is currently the sole super power, that it has not only the ability but the responsibility into the far future to maintain world peace.
00:07:06:22	COLTON TUTTLE	I think our country has always played a key role in maintaining world peace and now that responsibility also extends into space. So when countries like the Chinese start attacking space assets it could lead to a serious crisis. Hopefully, we can talk to them before they start making a big mess.
00:07:41:01	TIM WEINER	The United States, and particularly its intelligent services, worry about an attack on the United States that is not nuclear weapons, that is not chemicals, that is not biological, but is technological.
00:08:00:08	NARRATOR	Global communications are embedded in our daily lives. Miles above our heads, beyond our awareness, satellites manage our hyper-connected society.
00:08:14:24	THERESA HITCHENS	If you look at space, lots of times you think about the Hubble telescope, or Mars probes, but most people don't realize that they use space every day.
00:08:34:02	THERESA HITCHENS	When you open your cell phone to make a call.  When you take money out of the bank with your ATM card.  Satellites bring you your TV shows and live news from around the world.  You use them each time you align a positioning system for air, for sea, for land traffic control, and even in your own car.  There would be no weather forecasting or disaster monitoring without satellites.  Our entire life depends on satellites. They're essential, but we won't be conscious of that until we lose them.

TC IN	SPEAKER	DIALOGUE
00:09:17:24	NARRATOR	<p>Today, at least 1000 active satellites circle the earth.</p> <p>45 nations own these satellites. And most of the world uses their signals.</p> <p>But the United States dominates as the owner and user of space systems, both civilian <i>and</i> military.</p>
00:09:45:01	GEN. / PENTAGON	<p>Bombs on target, real time battle management, that's what we are about. And that's what we are able to deliver through space, air, land and sea and the capability of all of those to come together. We started that in desert storm. We've done that in each conflict since and we get better and better and better.</p>
00:10:15:23	NARRATOR	<p>Since the first Gulf War, the use of space has become vital to <i>all</i> US military operations.</p> <p>In the second Gulf War, during the "Shock and Awe" air attack on Baghdad, the United States used satellites to guide 71% of all the weapons it fired. Space is the backbone of American military power. Or is it its Achilles heel?</p>
00:10:45:25	BILL GERTZ	<p>A surprise attack in space, this is the ultimate nightmare. By knocking out 50 US military satellites, the Chinese could literally cripple the US military. They could prevent the military from being able to communicate with its forces, they could blind the US intelligence community, which uses electro-optic satellites to determine military force movements around the world, and they could also cripple the guidance systems that are used on precision-guided munitions that are satellite-guided.</p>
00:11:21:23	BILL GERTZ	<p>In many sense, it could be an electronic Pearl Harbor.</p>
00:11:30:13	BILL GERTZ	<p>Without space, the US would be unable to conduct any type of military operation in an effective way.</p>
00:11:41:01	FRANK GAFFNEY	<p>There's a tremendous premium on the United States being able to prevent other people from attacking our assets in space, and to ensure that we can continue to exercise full use of them, and if necessary, also to be able to deny others use of similar assets for their own purposes.</p>

TC IN	SPEAKER	DIALOGUE
00:12:03:20	USAF VIDEO (V.O.)	The world has changed. As more and more countries develop a presence in outer space, the possibility of a space battle is no longer science fiction. Our new world requires new solutions. Meet US Air Force space command. This elite force is America's eye in the sky, keeping watch over our interests high above the ground.
00:12:32:10	MAXWELL AIR FORCE BASE TABLE TALK	...denial implies the use of force... ...weapons from space to the ground...
00:12:39:00	MAXWELL AIR FORCE BASE TABLE TALK	... China recognizes that the military dominance of the United States is utterly reliant upon space...
00:12:45:12	EVERETT DOLMAN	The United States is going to become the world's policeman. Does that title resonate with you? Do you have any reactions to that? Do you think it's accurate? If it were accurate, how would it play out...?
00:12:59:08	MAXWELL AIR FORCE BASE TABLE TALK	If you look at one of the first roles of the United States navy when it was established was combating piracy. And if you look at potential commerce in space, law enforcement, and things like that are going to be an important mission...
00:13:13:13	MAXWELL AIR FORCE BASE TABLE TALK	As more and more countries start using space for security purposes, and military purposes, sooner or later they're going to collide, and sooner or later space will become another arena for warfare, for good or bad. And the same kind of ethics that we apply to military force in the other environments will apply to space...
00:13:29:23	MAXWELL AIR FORCE BASE TABLE TALK	You can't obviously stretch any analogy to the breaking point, but the space-sea analogy, I think, is one of the more useful...  (NTT: "You can't obviously stretch any analogy to the breaking point" meaning: "all comparison has limits but")
00:13:43:17	EVERETT DOLMAN	As the Dutch controlled the seas in the 1700s, as the British tended to police and control the seas from the 1800s and 1900s, and as the United States has done in the twentieth century and will do in the twenty-first century, and that is to ensure that commerce is unfettered, pirates and others should they be out there are taken out...
00:14:03:23	EVERETT DOLMAN	...We can do the same thing for space. We can do so in a way that is good for everyone, and is good for ourselves. It is policing the heavens for the good of all.

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00:14:13:03	NAVY OFFICER	May I have the spelling of your vessel's name Captain?
00:14:17:00	SENATOR JON KYL	Few object when the United States Navy deploys hundreds of heavily armed warships in every one of the world's oceans. No one accuses us of contributing to the weaponization of the sea because they know that the presence of our weapons ensures free transit for all who pursue their peaceful interests. US systems based in space could similarly patrol the commons for the good of all.
00:14:39:03	EVERETT DOLMAN	The US Air Force has been charged with the mission of ensuring space access and denying space access in times of conflict...
00:14:51:18	EVERETT DOLMAN	Can the United States Air Force do this mission without weapons...?
00:15:12:13	NARRATOR	What constitutes a space weapon?  How much do we know about the ability of the United States to police the heavens, and <i>deny</i> access to others?
00:15:26:00	THERESA HITCHENS	Starfire has been used primarily in the past to do research on satellite tracking. Also, they've done a lot of work in astronomy with range finding of stars; you use the laser to be able to help tell you where the star is and how far away it is.
00:15:41:03	THERESA HITCHENS	In the budget documents from the Air Force, there's also been mention of the use of Starfire for anti-satellite weapons activities.
00:15:53:01	THERESA HITCHENS	The Air Force told Congress that it had no intentions of using Starfire for anything related to anti-satellite weapons.
00:16:00:19	THERESA HITCHENS	However, they are doing a test to make the laser beam very skinny and make it stay very stable as it goes up, and they're going to target that on a satellite.
00:16:10:19	THERESA HITCHENS	If you're tracking a satellite, you don't need a very skinny laser beam. In fact, you want kind of a wide one cause you want to make sure you catch it in the view, right.
00:16:28:06	THERESA HITCHENS	So, many of us here are concerned that this kind of a test is actually an anti-satellite weapons test in disguise.

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00:16:47:23	TIM WEINER	In April of 2005, the Air Force launched an experimental satellite. Its name was the XSS-11. Theoretically, this experimental micro-satellite has the ability to disrupt other nations' satellites. Has it done so? No. Could it do so? <i>En principe</i> , okay. But in reality... we don't know.
00:17:24:01	THERESA HITCHENS	One of the things that I think people need to know is that most technology that's used in space can be used either for weapons purposes or it can be used for totally benign good purposes. Lasers for tracking—good idea—more precise tracking. Small micro-satellites that can go around a big satellite and take pictures—good idea—cause it helps you figure out what went wrong with your satellite, and that's hard to do right now. Good idea. That same little micro-satellite that's going around the big satellite could be sent up to go around another person's satellite and run into it and kill it.
00:18:01:12	THERESA HITCHENS	The technology doesn't know whether it's a weapon or whether it's a, you know, a benign use. The question is going to come down to the intent of the people who are building these systems.
00:18:17:18	NARRATOR	How can we discern peaceful or hostile intentions for <i>any</i> system projected into space?  How can we know that the weaponization of space hasn't <i>already</i> begun?
00:18:37:16	[II: THE CON]	
00:19:00:00	COLONEL MARTY FRANCE	I'm the permanent professor in head of the department of Astronautics here at Air Force Academy. And we've been continually teaching the fundamentals of astronautics to our cadets. And every cadet that has graduated from the Air Force academy, almost forty thousand now, have taken at least one course in our department.
00:19:17:09	US AIR FORCE ACADEMY INSTRUCTOR	This area right here, what's that called? Bow shock, right. And superimposed on this, of course, we have a HEO, highly elliptic orbit...
00:19:28:12	COLTON TUTTLE	In military strategy, it shows that if you want to control the battle field, you need to be the first in seizing the high ground, the most advanced frontier. Whether it be land, sea, air, and now space, the person that controls that has the advantage. So, making sure that we can deny our enemies space is a huge advantage.



TC IN	SPEAKER	DIALOGUE
00:19:53:21	DR. HOWARD MCCURDY	Military forces have always relied upon high ground technologies to gain advantages. In our own civil war in the United States, troops in the army, especially in the Union army, used hot air balloons to get above the trees and see where the enemy was. And, of course, the first airplanes to be used in World War One were essentially reconnaissance craft. They were designed to fly up and look and see where the enemy was placed.
00:20:27:22	DOLMAN	Space then has been called the ultimate high ground, and the advantage to the state that can seize and maintain the high ground is the same as holding the high ground throughout history, whether that was a hill, a mountain, or in the latter half of the twentieth century—the aerospace.
00:20:44:08	WORLD WAR TWO NEWS REEL (V.O.)	September 6, 1944, armed with over a ton of high explosives, Germany's first tactical rocket now called the V2, the vengeance weapon, is fired at London.
00:21:00:00	NARRATOR	Hitler's army pioneered the <i>new</i> High Ground with the V2 rocket.  Vengeance-Weapon-2 was the first man-made object projected through space, en route to targets in Europe.
00:21:30:02	ALAIN DUPAS	[ In French.] "This rocket was developed during the Third Reich and was employed by the Nazi army. Towards the end of WWII, the program was controlled by the SS. Workers for the program were drawn from concentration camps including Dora, one of the most horrible concentration camps."
00:22:05:13	NARRATOR	A young SS officer, Wernher von Braun, was chief engineer for the design and manufacture of the V2.  This first ballistic missile sparked interest in a rich patron beyond Germany.
00:22:25:15	ALAIN DUPAS	[In French.] "At the time, the V2 really was a groundbreaking technology and it was sought after by both the East and the West. Von Braun, along with a hundred of his best engineers was brought to the US in a secret operation code-named 'Paperclip.' "

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00:22:51:12	NARRATOR	<p>The Pentagon commissioned Von Braun, and his team of German rocketeers, to design an improved version of the V2.</p> <p>Von Braun spearheaded production of the Redstone – the first American ballistic missile. It propelled him to the highest sphere of military and scientific influence.</p>
00:23:09:24	KARL GROSSMAN	<p>Wernher Von Braun ultimately became associate director of NASA, and his former Nazi scientists functioned as collaborators with the US military, and looking towards space as a new arena of war.</p>
00:23:31:19	MACDONALD/ WERNHER CLIP	<p>[Military Presenter] Gentlemen, will you please take your seats, so we can begin today's conference. I take a great deal of pleasure in presenting to you today as our guest speaker, Dr. Wernher Von Braun.</p>
00:23:42:11	MACDONALD/ WERNHER CLIP	<p>[Wernher Von Braun] Gentlemen, the conquest of outer space is the greatest technological challenge of the age in which we live. On the right side of this picture, you see a large wheel-shaped space station. This, of course, offers tremendous possibilities for reconnaissance, and both in the civilian sense as in the military sense.</p>
00:24:07:20	KARL GROSSMAN	<p>These Nazi scientists, these Nazi space scientists that came to this country under project "Paperclip", developed schemes to essentially control the earth from space with space-based weapons.</p>
00:24:23:24	MACDONALD/ WERNHER CLIP	<p>[Wernher Von Braun] It seems even feasible to use such a platform in space as a base of the bombing of objects on the ground. And it is my opinion that such bombing could be carried out with unprecedented accuracy from such a station.</p>
00:24:43:08	ALAIN DUPAS	<p>[In French.] "Initially, the German scientists were received with a degree of distrust but soon each was awarded American citizenship. They played a key role in heralding the US into the space age with Von Braun's development of the Saturn rocket program."</p>

TC IN	SPEAKER	DIALOGUE
00:25:09:20	1950s NEWS REEL (V.O.)	Then, October 4, 1957, Russia shocks the free world. The USSR hurls into orbit the world's first earth satellite, Sputnik One. The Soviets are now the unquestionable leaders in the race for space.
00:25:26:08	1950s NEWS REEL (V.O.)	[US Military Rep] We've been assigned the mission of launching a scientific earth satellite. Our promise to Secretary of the Army that we would be ready in 90 days or less. Let's go, Werner.
00:25:37:21	[Countdown]	
00:25:43:23	NARRATOR	Wernher von Braun met the US military's 90-day deadline.  His modified V2 launched the first American satellite into orbit.  The space race was on.
00:25:57:01	1950s NEWS REEL (V.O.)	News flash of a long-awaited event. America has her satellite in orbit.
00:26:08:20	NARRATOR	How would nations legislate this new realm?
00:26:13:13	CRAIG EISENDRATH	Well I joined the American diplomatic service in 1958, and I was assigned to the United Nations' political office, and I was 22 years old. I was the youngest Foreign Service officer in the State Department, and they said, "Why don't you handle the multi-lateral aspects of our space program? We just put our first satellites into space." And they said, "You're in charge." And I said, "You've got to be kidding, I'm only 22." And they said, "That's, that's your job."
00:26:43:11	LBJ	Today, outer space is free. It is unscarred by conflict. No nation holds a concession there. It must remain this way.

TC IN	SPEAKER	DIALOGUE
00:26:59:12	CRAIG EISENDRATH	Nothing was settled when we started. For instance, who owns outer space? Who owns the moon? Who owns Mars? Was it the situation like Columbus discovering the New World, you know he says, "I lay claim to America..."
00:27:15:09	COLUMBUS ANIMATION	"...in the name of the king and queen of Spain."
00:27:21:19	CRAIG EISENDRATH	Could we do that? Could the Russians do that? So, that was a big question, and the other question is, are we going to use outer space for peaceful purposes or for military and aggressive purposes?
00:27:33:21	MACDONALD CLIP	We must develop new concepts, which enable us, let's say something like 10 years from now, to land rockets on the moon to decide whether we want to have a base on the moon for scientific or military purposes.
00:27:46:27	CRAIG EISENDRATH	We thought to ourselves, can't there be one part, one sector that is free of weapons? But when it got to the peaceful uses question, I ran into the Department of Defense, and they said, "No, we don't want to give up the idea of putting weapons into outer space. We'll go along with not having <i>weapons of mass destruction</i> in outer space, but we're not going to sign on a treaty where we can't put up weapons."
00:28:24:23	CRAIG EISENDRATH	I lost. The State Department lost. The Department of Defense won. And we ended up with a treaty, the 1967 treaty, which said you can't orbit <i>weapons of mass destruction</i> , but it did not prohibit other weapons.
00:28:46:05	NARRATOR	Compelled by the influence of the Defense Department, world leaders endorsed the militarization of space.
00:29:03:02	NARRATOR	Nuclear weapons may now have been banned from space. But on Earth they were proliferating.
00:29:14:23	DWIGHT D. EISENHOWER	With both sections of this divided world in possession of unbelievably destructive weapons, mankind approaches a state where mutual annihilation becomes a possibility.
00:29:29:02	DWIGHT D. EISENHOWER	Earth satellites, in themselves, have no direct present effect upon the nation's security. However, there is real military significance to these launchings.

TC IN	SPEAKER	DIALOGUE
00:29:44:18	NARRATOR	Dreading nuclear attack, the US and USSR longed to know the position and power of its enemy's stockpiles.
00:29:52:01	NARRATOR	Each dispatched satellites to spy, day and night, over the other's arsenal. The military contest to occupy the "ultimate high ground" had begun.
00:30:01:13	NARRATOR	The United States plotted the next step to <i>weaponize</i> space. Covertly. In the early eighties.
00:30:18:12	BRUCE GAGNON	June 12, 1982, there was a huge demonstration in New York City that day. Almost a million people were protesting against nuclear weapons, at that time the height of the Cold War between the United States and the former Soviet Union. I watched it on television and after it was over they cut away to a right-wing conference, and the speaker that day was a man by the name of Lieutenant-General Daniel Graham. And at that time, he was Ronald Reagan's head of SDI, Strategic Defense Initiative. Someone said, "General Graham, aren't you worried about that demonstration in New York today? They say there's almost a million people there protesting against nuclear weapons." He said, "No, I think it's fantastic. They're out there protesting against inter-continental ballistic missiles, and we're moving into space. They don't have a clue. Let them keep doing what they're doing."
00:31:31:01	RONALD REAGAN	What if we could intercept and destroy strategic ballistic missiles before they reached our own soil or that of our allies? It will take years, probably decades, of effort on many fronts. There will be failures and setbacks just as there will be successes and breakthroughs. But isn't it worth every investment necessary to free the world from the threat of nuclear war? My fellow Americans, tonight we're launching an effort, which holds the promise of changing the course of human history. I ask for your prayers and your support. Thank you, good night...
00:32:08:03	JOSEPH CIRINCIONE	When I joined the staff of the Committee on Armed Services in the US House of Representatives back in 1985, my first assignment was to investigate and oversee the Strategic Defense Initiative. This was President Ronald Reagan's "Star Wars" program.
00:32:26:21	MACDONALD/HIGH FRONTIER CLIP	This new national strategy represents a break from the dangerous policy of mutual assured destruction.
00:32:33:12	NARRATOR	In Ronald Reagan's version of Star Wars, the new Space Shuttle would deploy <i>the Force</i> .

TC IN	SPEAKER	DIALOGUE
00:32:40:01	MACDONALD/ HIGH FRONTIER CLIP	When our radars systems verify a Soviet launch, US interceptors are fired as level one defense goes into action.
00:32:47:08	NARRATOR	Batteries of orbiting weapons would be poised to defeat a nuclear attack. Before it reached US airspace.
00:32:58:05	JOSEPH CIRINCIONE	At the time, the prevailing view was that this was going to work, that the technology was almost in hand, and that this was going to change everything. I remember the briefing I got from my staff director who said, not just anti-missile systems, but all major weapon systems were going to move to space, that space was the new <i>high ground</i> , even then we talked about it in that way, where all major military operations were going to be by the end of that century.
00:33:24:01	NBC NEWS	It was a debate of stellar proportions, the nation's number one stargazer versus the Pentagon's chief of <i>Star Wars</i> .
00:33:31:12	NBC NEWS	[Carl Sagan] It cannot protect the population of the United States. It can be by the Soviets, overwhelmed, out-foxed, under flown...
00:33:40:23	NBC NEWS	[Gen. James Abrahamson] I for one am not willing and able to just accept the idea that it can't work...
00:33:48:01	NARRATOR	Most <i>Star Wars</i> plans proved too fanciful, and went no further than animations devised for publicity.  But... the US military stayed committed to <i>Star Wars</i> .  As the US became the sole superpower, the Pentagon maintained its plan to use space weapons against enemy attacks.  <i>Star Wars</i> resurfaced in the early 21 <sup>st</sup> century, under a new name... Missile Defense.
00:34:25:00	BUSH	We need a new framework that allows us to build missile defenses to counter the different threats of today's world...
00:34:30:12	BUSH	I hope we'll also move forward on ballistic missile defense cooperation...
00:34:34:12	BUSH	We must develop and we must deploy effective missile defenses...

TC IN	SPEAKER	DIALOGUE
00:34:42:15	STEVEN STAPLES	Back in 2000, when President Bush took office, he and his cadre of people that surrounded him, you think of Paul Wolfowitz, you think of Donald Rumsfeld, you think of Dick Cheney, all of them really only had two priorities: one was to get rid of Saddam Hussein; the second was to build a Missile Defense system.
00:35:05:21	PRESIDENT BUSH	Good morning. I've just concluded a meeting of my national security council. We reviewed what I've discussed with my friend President Vladimir Putin over the course of many meetings for many months, and that is the need for America to move beyond the 1972 <i>Anti-Ballistic Missile Treaty</i> .
00:35:30:00	BRUCE GAGNON	When George W. Bush became president, immediately he gave a 6-month notice to Russia that we're pulling out, the United States is pulling out of the ABM Treaty, the <i>Anti-Ballistic Missile Treaty</i> . It limited the United States' ability to test and deploy anti-satellite weapons, so-called <i>Missile Defense</i> systems, and other space technology.
00:35:51:02	NBC NEWS	At the Pentagon today, a warning that space will become the next big battleground... To meet the challenge, Defense Secretary Donald Rumsfeld is making space a top Pentagon priority, putting a four-star general at the head of a new <i>Air Force Space Command</i> to take charge of all military space activity, including any new anti-missile defense.
00:36:12:12	NBC NEWS	[Donald Rumsfeld] We pay careful attention to protecting, promoting our interests in space...
00:36:17:22	NBC NEWS	Pentagon officials say it's the first step toward eventually putting weapons into space.
00:36:22:23	CONGRESS HEARING	[Chair] Mr. Secretary, the budget proposes spending 8.3 billion dollars on the full range of ballistic missile defense programs. This is an increase over last year of nearly 60 percent or 3 billion dollars.
00:36:35:18	CONGRESS HEARING	[Donald Rumsfeld] It is a lot of the taxpayers' money. On the other hand, the President intends to have <i>ballistic missile defense</i> to protect the population centers of the United States, as well as of our friends and allies and deployed forces.
00:37:03:26	MISSILE DEFENSE AGENCY	I have a valid missile event... I agree, that's a valid event... you have two for track, zero, zero, zero,

TC IN	SPEAKER	DIALOGUE
	VIDEO	one...
00:37:09:09	NARRATOR	Today's Air Force fights Missile-Defense wargames, in which so-called rogue nations attack American cities.
00:37:17:14	MISSILE DEFENSE AGENCY VIDEO	Possible impact in San Francisco, sir...
00:37:18:12	NARRATOR	But, in reality, who would launch such attacks against the US?
00:37:24:02	JOSEPH CIRINCIONE	The interesting thing is that the threat is actually shrinking, not increasing. The ballistic missile threat is declining. There are far fewer ballistic missiles in the world now than there were 15 years ago. There are fewer countries with ballistic missile programs. There are fewer hostile countries to the United States with ballistic missile programs. When you look at it, it really comes down to a handful of states whose programs we worry about, North Korea and Iran basically, and they only have medium-range missiles. That is, they can't reach the United States.
00:38:03:11	NARRATOR	From Ronald Reagan onwards, every president has secured funding for <i>missile defense</i> , under various guises, using various funds, for a total of at least 200 billion dollars.  Is the US taxpayer getting what it pays for?
00:38:25:02	JOSEPH CIRINCIONE	It's a con. It's a con. Missile defense is the greatest fraud in the Department of Defense, and believe me it's had a lot of competitors. I'm very serious: <i>Missile defense</i> is the longest running fraud in the history of the US Department of Defense.
00:38:50:24	NARRATOR	If a ballistic strike is implausible... why repel it at such cost, from space?  What if missile defense disguised ambitions broader than destroying only missiles?
00:39:07:02	BAKER SPRING The Heritage fund	There's going to be an inherent anti-satellite capability with any ballistic defense system, regardless whether it's located in space or else where. And I think that's effectively unavoidable. Targeting a ballistic missiles in some sense is more difficult that targeting a satellite. And therefore targeting a satellite is almost always a capability that's associated with



TC IN	SPEAKER	DIALOGUE
		missile defense system.
00:39:33:01	NARRATOR	In February 2008, the United States destroyed a disabled satellite of its own... with “missile defense” interceptors.  The US demonstrated that these interceptors, also called “kill vehicles”, can obliterate any satellite in low-earth orbit.
00:39:52:11	BRUCE GAGNON (V.O.)	Missile defense is a <i>Trojan horse</i> . It has nothing to do with defense whatsoever. It’s all about projecting power. It’s about offense.
00:40:02:25	BRUCE GAGNON	I’ve been to the bases in Colorado Spring and I’ve personally seen over the door where it says “Master of Space”. And I’ve read the documents, “Vision For 2020” and a whole array of other military Space Command documents, that have said for years that the US will control space, that we will dominate space, that we will deny other countries access to space. We, five percent of the world’s population, in the United States are going to deny other countries access to space. I mean: absolutely provocative.
00:40:35:25	Gen FRA (?)	I would tell you that we are so dominant in space that I pity a country that would come up against us. The synergy with air land and sea forces and our ability to control the battle space and seize the high ground... is devastating.
00:40:55:02	CONTROL ROOM	we’re going to build 38... take one, over ...17:27.... (NTT: no translation required)
00:41:04:28	THERESA HITCHENS	America now has the chance to establish an American empire, a <i>Pax Americana</i> that will last for many, many decades. And one of the ways to do this is to establish strong American control of space.
00:41:30:08	NARRATOR	By advancing space weaponry, the United States nurtures its economy, and its sphere of control. It guards interests at home and to the outermost frontiers... in the tradition of empires.
00:41:45:20	NOAM CHOMSKY	If you look at history, countries including the United States, had at first developed armies to <i>defend</i> themselves. So, the United States needed an army to defend itself against the indigenous population who we were exterminating as we expanded across the national territory, and to defend ourselves against Mexico, and we stole half of Mexico and so on and so forth.  And then countries also developed navies like the British had to develop a navy to defend themselves against people in India and Africa and so

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		on. And as they describe it, they're pretty frank about it. They say they had to develop navies "to protect commercial interests and investment", and the same with us: now there's a new frontier—space—and we have to move on to control space in order "to protect commercial interests and investments".
00:42:53:23	COLORADO SPRINGS PROMO	Welcome to the future... The place you go when you say, here's to bigger profits, better business, brighter prospects, and a bottom line that just won't quit. Think big. Big tax advantages, big business opportunities, big profits, and the hottest Fortune 500 industries in the world are taking advantage of them... which means whether you're looking to relocate, expand, or conquer the universe with your own special vision of the capitalist's dream. They can help make it happen.
00:43:41:24	GENERAL KEVIN CHILTON	[Intro.] Will you please welcome commander of Air Force Space, General Kevin Chilton.
00:43:39:19	GENERAL KEVIN CHILTON	It's nice to be here in Colorado Springs for this great gathering. And I think it's fitting that we're here in Colorado because it was 25 years ago when the first commander of Air Force Space Command stood up the flag here, General James Hartinger. He said that Colorado Springs would become the nation's military space capital. And indeed it has.
00:44:10:18	LORING WIRBEL	In Colorado Springs you will find a different kind of base of both direct military and military contractors approaching one third of the entire population. And when you think about it, that is a big number.
00:44:28:28	BRUCE GAGNON	The industrialists are now saying we're not going to make cars anymore. We're not going to make clothes in America anymore. We're not going to make this and that in America anymore. We're going to make weapons.
00:44:42:20	RICHARD BENT	This is our space tracking surveillance system, and this is a more advanced version of a missile detection satellite to detect, track, and discriminate missiles in flight. So, this finds them, somebody else shoots them down.
00:45:00:12	ROBOT	Here at Lockheed Martin, we have all kinds of cool stuff...
00:45:03:24	ROBERT J. STEVEN	We're working on some of the world's most important and spectacular technologies, and we're the best in the world at what we do.
00:45:11:11	NARRATOR	While most US industries struggles to endure a recession, the weaponization of space still feeds thriving corporations with contracts.

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00:45:34:18	LORING WIRBEL	<p>Now here on our right we see one of the new guys in town: S.I. International. Companies that are growing very quickly, such as L3 Communications, Sparta, these are names that are not familiar names to people, and yet they are the new strong players in military contractors.</p> <p>You have the Aerospace Corporation on your right. You have Mitre Corporation on your left.</p> <p>As we cross over here, you will see a Lockheed Martin plant. Now here to our right is Northrop Grumman. Northrop Grumman has always been a big contractor, but a couple of years ago it bought out TRW Corporation, and so now it is one of the biggest military contractors in the world. This is the kind of new growth we are seeing in Colorado Springs.</p>
00:46:46:23	BRUCE GAGNON	<p>Out of every tax dollar in the United States today, 50 cents out of every single tax dollar goes to the Pentagon for past wars, for current wars, for future wars.</p> <p>We are being made into a warrior culture if you will.</p>
00:47:15:06	US AIR FORCE PROMO (V.O.)	Nearly three-quarters of a million remarkable individuals serving their country, and they all believe they have the best job in the world.
00:47:27:18	KEVIN CHILTON	<p>[Voice of General Kevin Chilton]</p> <p>How cool is it to be able to go home at night and tell your kids that you fly satellites at geo-synchronous orbit? That is great stuff. How cool is it to know that you operate the most powerful radars in the planet and survey all the heavens, that you operate telescopes that are critical to national defense? How cool is it to tell people that you are responsible for maintaining nuclear missiles on alert for the defense of this country?</p> <p>This is a COOL business that we are in...</p>
00:47:59:01	US AIR FORCE PROMO	[Promo con't.] Join us. America's Air Force. No one comes close.
00:48:08:12	LT. FRANCE	This is our larger laboratory... off to this side, we have freshman or first year cadets working on components of our Falcon SAT-5 satellite that we're in the process of designing, and will be testing those next week at Kirtland Air Force Base in New Mexico.

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00:48:26:11	COLTON TUTTLE (V.O)	Since I was a kid I've been fascinated with aviation and space exploration. So after high school I started looking at colleges and the Air Force looked really cool because I could learn about space technology and satellite design. So the Air Force Academy was just a natural choice.
00:48:53:08	[Students working.]	
00:49:00:00	RONDA COLE	We're at the Air Force Starbase La Luz Academy at Kirtland Air Force Base, and we've got students working on an engineering software to design a space station. As if they were trying to present their model to somebody to buy or to be excited about.
00:49:16:18	BRUCE GAGNON	There are all kinds of stories across the country now where young people in their schools are being indoctrinated at very young ages in this warrior culture and in new space technology.
00:49:29:19	NARRATOR	Each year over fifty thousand children are educated in space technology, at military bases in most states across the US.  The Pentagon takes a long term view, seeking to enlist generations of youth, in richly-subsidized, aerospace careers.
00:49:47:15	RONDA COLE	It's extremely important for us to have students learning about science, technology, engineering, and mathematics. As our workforce continues to age, we need to make sure that we have young people in the pipeline that are interested in filling those career slots that our current scientists and engineers are in.
00:50:13:24	GENERAL KEVIN CHILTON	I would argue there is no better time than today for us all to commit to a future of excellence and leadership fuelled by the next generation of our airmen. Ladies and gentlemen, we're ready today, with our great industry partners and with you at our side, we'll be ready for tomorrow. God bless you and thank you very much.
00:50:45:01	BRUCE GAGNON	The Pentagon has said that moving the arms race into space will be the largest industrial project in the history of the planet Earth. They can't take any chances. They have to have an enemy. They have to make the people afraid. Someone's going to attack us with nuclear weapons. We've got to have missile defense in order to protect us from attack. Iraq, one of the rogue states, Iran, North Korea, and now they throw China into that equation.
00:51:20:22	NARRATOR	Wait a minute! What about the <i>Chinese threat</i> ? Didn't China, like the US, show that it can destroy orbiting satellites? Isn't China trying to gain military superiority in space?

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00:51:38:01	MONTAGE (V.O.)	<p>...the threat to our space security is real...</p> <p>...a clear and present danger...</p> <p>...kind of an electronic Pearl Harbor that could only be aimed at the United States...</p>
00:51:46:24	GREGORY KULACKI	<p>There are individuals who are hyping the <i>Chinese threat</i>, saying that it's imminent, that it's aggressive, that they plan to launch a preemptive massive attack on US space systems in the Pacific, which they call a <i>space Pearl Harbor</i>. And they often look for these stories, these sensational stories, in newspapers or tabloids, and these publications tend not to be very reliable.</p> <p>For example, this parasite satellite story where a Hong Kong tabloid published a bit of information it got off of a Chinese website, and then this made it into US Pentagon reports to Congress. And nobody ever bothered to figure out if this original Chinese website source was credible or not. And as it turns out, the person who was posting this, it was on his personal web page, his sort of own personal blog, and he was really just sort of making it up. And if you look at all of the other things on his site, which include things like pictures of you know scantily-clad women and sensational photographs of secret weapon systems, he's clearly not a credible source of information.</p> <p>They didn't bother to trace the information to its source, which took us about 6 hours to do.</p>
00:53:07:23	LORING WIRBEL	<p>For the last 3 years, the Pentagon has been trying to make China the new boogeyman. And China, unwittingly, played into the United States' hands with its anti-satellite test.</p>
00:53:27:29	GREGORY KULACKI	<p>At the time, I was at a conference in Colorado Springs, and the military officers in the room actually left to watch the test in real time. So, they were observing the actual Chinese anti-satellite test.</p>
00:53:45:28	JOSEPH CIRINCIONE	<p>We know about every space launch. We know about every rocket launch. We have reconnaissance and surveillance satellites that can detect all these. We detected the Chinese test, for example. In fact, we detected the two previous Chinese tests that failed. So, we know about this. It's extremely difficult to hide space tests. They're one of the most observable weapons tests you can possibly imagine.</p>
00:54:18:08	NARRATOR	<p>What was the point in China's display of destruction?</p>
00:54:24:10	LITAI XUE	<p>The reason is simple. They want to give you a signal, a warning. So, the warning must be known by the other side.</p>

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00:54:34:22	TIM WEINER	In effect, the Chinese were saying [gesture]. Okay, you want to be dominant in space, you deal with us.
00:54:44:25	NARRATOR	China intended to alert the world to US plans for military dominance of space.  And China <i>warned</i> : it <i>will</i> confront that ambition. It is able and willing to destroy US weapons in space.
00:55:00:01	LIU JIEYI	We wouldn't really want to see in the future an earth surrounded by an outer layer of weapons, which will make mankind even more vulnerable than the situation today.
00:55:17:23	NARRATOR	China offered a preview of the deadly contest that would start... if the US positions weapons in space.  How close is that risk?
00:55:28:21	BILL GERTZ	The US military is developing what the Air Force in particular has called, "Prompt Global Strike." That is basically, currently we have nuclear missiles that could strike anywhere on earth within 30 minutes.  What the military is talking about is a similar conventional capability that could be used to knock out, say a Chinese anti-satellite weapons launcher in a matter of minutes.
00:56:00:21	BILL GERTZ	A number of concepts are being studied with this notion of Prompt Global Strike. One is an orbiting space plane that would have the capability to be able to maneuver and to fire weapons at a much faster pace than is currently the case. Another is a space satellite that would actually have missiles on it that could be fired from space and reach a target in literally 5 to 10 minutes as opposed to the current 30 minutes.
00:56:38:18	CRAIG EISENDRATH	We're talking about a satellite system called, "Rods From God," which can put heavy tungsten metal rods from satellites onto the earth to penetrate bunkers. All that's being developed. We've spent billions of dollars on research on these weapons. And a number of these weapons are getting ready for testing.

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00:57:05:01	NARRATOR	<p>Were they deployed in orbit, “Global-Strike” systems could hit 100 targets on Earth at once ... at nearly seven thousand miles an hour.</p> <p>They wouldn’t be Weapons of Mass Destruction, as defined in UN resolutions. But the destructive impact of a “Rod from God” would match that of a nuclear warhead.</p>
00:57:22:13	SENATOR JON KYL	<p>Satellites can identify a target through overhead imagery, process communications about the target between military decision makers, and then guide a bomb precisely enough to destroy the target with one shot. Would it really be that big a step if a projectile itself were also launched from space? There’s no practical difference, and I venture to say that the person on the receiving end wouldn’t see the distinction either.</p>
00:58:05:05	NOAM CHOMSKY	<p>In the high tech field, there’s a notion called, “Normal Accident.” It means the kind of accident that is going to take place, unpredictably, in any complicated system, like anyone who owns a computer knows about normal accidents. Every once in a while the thing just crashes for some unexplained reason. And when you get to much more complex systems, of course that’s going to happen.</p>
00:58:28:12	MARTIN SHEEN	<p>With all our technology, we know bloody well that we cannot be assured absolutely 100 percent that our bombs, so-called think bombs, smart bombs, are hitting the targets. We know from Afghanistan and Iraq alone in the last few years that that’s a fallacy.</p>
00:58:46:22	IRAQI CIVILIAN	<p>You are hitting civilian people. You are not hitting the Iraqi bases. What you are doing is wrong.</p>
00:58:53:23	MARTIN SHEEN	<p>How much worse would the probability of hitting the wrong target, or hitting ourselves from outer space would be? We have no way of calculating that. It’s not possible.</p>
00:59:08:28	MARTIN SHEEN	<p>At least one weapon could go awry and land in Iowa, or New York City, or God knows where, you know. That’s a reality. And if we don’t accept that, well we’re just whistling in the dark. And we’re going to be victims of our own technology.</p>
00:59:46:26	NOAM CHOMSKY	<p>The rest of the world understands that the US is planning to militarize space, of course. So, there have been efforts to renew and extend the outer space treaty.</p> <p>It says <i>weapons of mass destruction</i> can’t be in space. It doesn’t say other things. And there have been attempts to renew it, just to affirm it and to strengthen it, and the US blocks it every year.</p>

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01:00:25:01	JOSEPH CIRINCIONE	It is a hundred and sixty to one, a hundred and seventy to one. The United States is the only nation actually voting against this. We're isolated on this issue.
01:00:48:12	LORING WIRBEL	It would be nice to think that space weaponization is prevented not because there's a huge outcry against it, although that would be an interesting prospect too; but because no one, including our own nation has the money to spend on this any more. But in an era, when the United States still maintains a five hundred billion dollar military budget every year, I don't think we can count on that happening.
01:01:18:21	MIKE MOORE	It's really insane; we are willing to spend hundreds of billion dollars over the years to develop space control means that a treaty would take care of, would make unnecessary. If we had the will to negotiate such a treaty, if we took the lead we can get one. It wouldn't be easy, it would be a very difficult thing to do, but it could be done.
01:01:44:10	NARRATOR	How <i>can</i> a treaty ban all anti-satellite weaponry if ground-based laser, a conventional missile, and most orbiting systems could be used to demolish satellites.  Could a treaty <i>guarantee</i> that "Kill Vehicles" would only target missiles, not satellites, or earth-bound objects?  Opponents of a new treaty argue such promises are untenable.... And too late.
01:02:18:29	FRANK GAFFNEY	Weaponization of space has happened a long time ago. This idea that it's a pristine environment that if only we stop where we are right now, all will be well is simply nonsense. It is even more foolish to think that somehow we can stuff this genie into a bottle.
01:02:39:19	LORING WIRBEL	We do indeed need a United Nation's treaty. This is not enough, this is only step one. Step two says "Ok, space has been militarized; there are military networks in space. Many of them like GPS are useful. But we should work on international treaties to make those military space networks used for multilateral purposes." Do I think that's going to happen? I'm very doubtful, but I have to keep hoping and believing that there is a prospect for that.
01:03:22:23	BARACK OBAMA	I will cut tens of billions dollars in wasteful spending. I will cut investments in unproven missile defense systems. I will not weaponize space.



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01:03:33:11	NARRATOR	Those fearing the weaponization of space could find hope in Barack Obama's election.  As soon as he took office, the White House announced it would be: "seeking a worldwide ban on weapons that interfere with military and commercial satellites."  .
01:04:05:21	NARRATOR	But it proved tough to change decades of entrenched military policy to weaponize space. Obama's 2010 defense budget requested close to a billion dollars that was applicable to space warfare systems. It included a new programme called "Offensive Counterspace". The Pentagon defined this as: "Offensive measures to disrupt, deny, degrade, or destroy, any adversary's space capabilities."
01:04:37:28	TIM WEINER	History suggests that nations do not voluntarily disarm. They disarm because they're defeated, or they make small adjustments in the way they buy, and build, and deploy their weapons. But, no superpower says, "You know it would better if we were weaker." I don't recall that ever happening.
01:05:08:10	III THE PATH	
01:05:11:10		One... two... three... four... five... six... seven... eight... nine... ten... eleven...
01:05:34:21	COLTON TUTTLE	It's hard to obtain space superiority without attacking. So, I'm afraid that if we want space superiority, we're going to have to attack enemies' assets, which I don't know if you know much about orbital mechanics, but if you create debris up in space that would just get in the way for you as well and it would start a chain reaction. And pretty soon you would just have a cloud of debris surrounding earth.
01:06:01:01	NARRATOR	About 600,000 fragments rush to space, at ten times the velocity of a rifle bullet.
01:06:10:11	RICHARD	All of these objects are traveling at 14,000 miles an hour. So, even an

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	DALBELLO	object the size of a pea traveling at that speed has more force than a canon ball.
01:06:24:12	THERESA HITCHENS	Right now, the problem with space junk is so high that NASA is worried that if there is never another launch of anything into space, because every launch creates a little bit of debris, in 50 years time certain orbits will be so polluted that nobody can operate there. Because the stuff that's already up there will start breaking up and creating more and more clutter.
01:06:52:10	NARRATOR	A satellite's destruction unleashes a stormcloud of debris, that fouls the space around our planet and threatens anything in orbit.
01:07:01:10	RICHARD DALBELLO	The point really is: is creation of debris in this manner a good idea or a bad idea? And clearly, it is a very bad idea because there's no way to go up and clean that up.
01:07:17:17	BRUCE GAGNON	So, the more times you go into space and you begin to practice destroying satellites, you create so much space junk that you literally create the very likely possibility that at some point in time you will not be able to get a rocket off the planet Earth; because it'll be like a minefield around the planet, and you won't be able to escape the minefield with that rocket because it would be destroyed by all the space junk there. So, we've got to begin to look at space as an environment.
01:08:00:02	CRAIG EISENDRATH	We have several hundred billion dollars of investment in the peaceful uses of outer space. I'm talking about weather satellites, positioning satellites, scientific satellites The entire world communication network as all satellite-oriented. All this incredible investment from the United States and from the European Union, and Canada and other countries like this, all this is completely in jeopardy if we start putting weapons in outer space.
01:08:39:19	NARRATOR	How would our world change if we lost the use of satellites?
01:08:45:09	NARRATOR	Day one: 6.15 am.  Communication satellites, hovering over the Americas, fall mute.  Over a swathe of the globe, GPS coverage collapses.

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		<p>Atomic clocks, on GPS satellites, can't transmit universal standard time; the synchronization of massive infrastructures <i>snaps</i>.</p> <p>350 million cell phones are disabled.</p> <p>Hundreds of millions of Internet connections vanish.</p> <p>Around the world, card payments and bank accounts freeze.</p> <p>Billions of dollars are sucked from industries and businesses, triggering a financial crash.</p> <p>News services are crippled.</p> <p>City streets, reliant on GPS for traffic management, are in chaos.</p> <p>Electrical grids lose synchronization.</p> <p>Wide zones of continents are blinded by blackouts.</p> <p>Coastguards are deaf to ships' distress calls.</p> <p>Dozens of aircraft are missing. Air traffic controllers are fighting panic. Worldwide, flights are grounded, or called back.</p> <p>By midnight, there's been a cascade of traffic, train, boat, and aircraft accidents.</p> <p>...</p> <p>So far, the world has avoided such a catastrophe.</p> <p>But a space war would kill satellites and blast tons of wreckage into orbit. The system we rely on would shatter, and be impossible to restore.</p>
01:10:45:29	RADIO PRESENTER	<p>...the time is 6:25 and this a special as part of the conference on world affairs. We're discussing the militarization of space.</p> <p>[Dolman] There is a point in time and maybe rapidly closing where the United States could dominate space to such a point where there would be no arms race.</p> <p>[Hitchens] Frankly, I don't think it's doable. I think the march of technology will mean that even if we get a lead on other nations in attempting to do that, that sooner or later we will again be challenged.</p>

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01:11:11:11	KARL GROSSMAN	It's kind of like what happened after World War 2, we had the atomic bomb and nobody else had the atomic bomb. We thought we had a big exclusive and with our atomic weaponry we would be able to dominate the earth. It didn't last very long, the Soviets had an atomic bomb, the Chinese had an atomic bomb. Likewise in space, to think that we could move up there with weaponry and be alone, to be the king on the throne of space... it's a tragic miscalculation.
01:11:47:10	ISABELLE SOURBES-VERGER	[In French.] "Everybody thinks that weaponizing space is a dangerous idea that will prompt other countries to also develop space weapons."
01:11:58:01	THERESA HITCHENS	India has been discussing whether or not it needs to build its own anti-satellite weapons. You can be sure if India does it, Pakistan will be thinking about it in a heartbeat as well. Israel has also been discussing this issue... So, what you see now is the potential for a domino effect.
01:12:22:12	NARRATOR	Few nations will willingly submit to US supremacy in space.  Some will try to <i>topple</i> the US; others, scramble for a foothold. Enemies will vie in leaping ahead. Stable and unstable nations will be dragged into the race.  The European Union opposes the weaponization of space. But for how long?
01:12:49:21	ISABELLE SOURBES-VERGER	[In French.] If the US continues to develop not only military satellites but also space-based weapons, we will have to think about it and find ways to defend ourselves from the American threat and the arms race that it would trigger."
01:13:08:12	NARRATOR	Russia would plunge into the contest. It has <i>committed</i> to destroying any weapon the US positions in orbit.
01:13:18:18	ROALD SAGDEEV	If Americans deploy space-based anti-ballistic missile defenses, then you imagine interceptors based on space stations, military stations would over-fly territory of Russia or territory of China. That would be considered as quite unacceptable for Russians.
01:13:48:22	NOAM CHOMSKY	The potential victims are not going to say "Here is my throat, please cut it." They know they are a potential target and if US were to develop space weapons, they'd be completely defenseless unless they destroy it

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		somehow or develop a deterrent. And deterrents are known: for example nuclear weapons are deterrence. Terrorism is deterrence. That's why aggressive militarism lead to an extension of proliferation and terror.
01:14:28:28	VLADIMIR PUTIN	[In Russian.] "Star Wars is no longer a fantasy... it is a reality. Of course, such a policy is a catalyst of an arms race, the domination of the factor of force is nourishing the proliferation of weapons of mass destruction. In Russia's opinion, the militarization of outer space could have unpredictable consequences for the international community, and provoke nothing less than the beginning of a new nuclear era."
01:15:08:18	NARRATOR	<p>During the Cold War, humankind feared, that, in a series of blinding flashes, the world would become an untended graveyard.</p> <p>Thousands of nuclear weapons are still maintained, around the world, on hair-trigger alert.</p> <p>The weaponization of space could detonate this arsenal.</p>
01:15:48:03	HELEN CALDICOTT	<p>So, any anxiety induced by putting weapons in space or launching weapons from space down to earth, could induce by accident, by human fallibility, by design, by terrorist takeover, the launching of up to 9000 hydrogen bombs, producing a short ice age and the death of most creatures on the planet.</p> <p>We're on the edge of the nuclear precipice.</p>
01:16:22:16	NOAM CHOMSKY	If we move to weaponization of space, we can bid farewell to the planet. The chances of survival are very slight.
01:16:55:00	BRUCE GAGNON	When you, all your life, have been told that America is an exceptional nation that we are different from the rest, when you're told that all your life, you begin to believe it.
01:17:13:13	BRUCE GAGNON	I was in the Air Force, I was a young Republican for Nixon. And I grew up on military bases, so everything I really was taught and was trained in was militarism and a conservative way of being, a conservative way of seeing the world. But now I've personally learned that what America is doing is not about defense, it's about offense. It's about an aggressive military doctrine; that talks about control and domination.

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01:17:52:01	BRUCE GAGNON	I really went through an entire transformation. Everything that I knew was different. But one thing wasn't different. One thing always remained. I realized I had a good heart, even as a conservative, as a young follower of the military. I had a good heart. I had a good intention. And I realized that many people in the military are that way, that they have a good heart, they mean well, they're doing what they think is the right thing to do, they want to protect the country.
01:18:19:25	GRADUATION ADDRESS by SECRETARY OF DEFENSE ROBERT GATES	There are moments that will truly test the leader within you, to test whether you will take the hard path or the easy path, the wrong path or the right path.
01:18:31:28	BRUCE GAGNON	Most people want to have a good heart and that when you challenge them to think, it doesn't mean that they change overnight, I didn't change overnight. It took me some time behind those gates on that military base for me to make my change. But, it's all about initiating that change.
01:18:47:07	GRADUATION ADDRESS by SECRETARY OF DEFENSE ROBERT GATES	The willingness always to take the right path, even if it's the hard path, is called character. In every aspect of your life, whether personal or professional, you must always maintain the courage of your convictions, your personal integrity.
01:19:09:23	MARTIN SHEEN	We're living in a very, very dangerous time. And there's hardly any alarm in this area, across the board, I mean people are so inundated with so many things... just making a living, just getting through the day, just trying to remain sane in all this insanity that's going on... that it's hard to get their attention in saying, "wait a minute I know you think it's bad, I got news for you, it's a lot worse". People don't want to hear that, you know. So we have to find a way to alert people to the reality of what's going on. And that's not an easy task.
01:19:49:19	BRUCE GAGNON	Let's prevent something terrible from happening before it does, for once. Usually, we're trying to bring back weapons systems after they've been deployed, nuclear missiles we're trying to bring them back. Here's an

TC IN	SPEAKER	DIALOGUE
		opportunity, one of the first times in history actually, when we have a chance to be proactive. We have a chance to stop a new arms race before it actually happens. That's why this moment is so crucial.
01:20:16:12	THERESA HITCHENS	The debate over space weaponization is the most critical debate for the next century. And we're on the verge of making decisions in many nations around the world about which path to choose.
01:20:33:10	GRADUATION ADDRESS by SECRETARY OF DEFENSE ROBERT GATES	Congratulations, and may God watch over all of you and the United States.
01:20:45:01	GRADUATION ADDRESS by PRIEST	[Prayer.] Lord we pray today that you allow us to worship you and to spearhead these troops. As we go out into the world.
01:20:55:25	NARRATOR	Can the high ground that nations seek be the <i>moral</i> high ground?  Or are we doomed to pursue only the high ground of <i>military</i> advantage?  Many nations are showing themselves unwilling to find global peace under the command of one.  Can the US show leadership rather than strive for supremacy?  Rather than insisting on a Pax Americana, can the US steer a union of nations towards a Pax Universalis – a Peace for all the World?
01:21:31:01	GRADUATION ADDRESS by PRIEST	[Prayer.] In Christ may we pray. Amen. [Cheering.]

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TC IN	SPEAKER	DIALOGUE
01:21:51:03	J.F. Kennedy	What kind of a peace do we seek? Not a Pax Americana enforced on the world by American weapons of war, I'm talking about genuine peace. The kind of peace that makes life on Earth worth living. Not merely peace for Americans, but peace for all men and women. Not merely peace for our times, but peace at all times.
	END CREDITS	
01:23:55:00		(End of tape)