#### Welcome! Take your seats and chill to the story of “little me and my little crew.” When I was a kid I remember watching Pirates of the carideans, the image of adventure, thrill, and violence possessed me with passion, but soon it bored me just seeing the image. I wanted to become the image of power. I plunged into the world of the hyper-real in which information is produced for the sake of It’s own satisfaction, the world becomes our adventure playground, where children play with one another producing worlds and adventures without a referential to the things that surround them, we imagine things; the playground as our ship, and the tanbark as the sea, the captain becomes the judge, and the crew becomes you and me. We no longer hold in possession the bored eye, but the eye suspended to gloriously impossible spectacle we have created through nothing, the playground is still a playground, but in this hyper-real the playground becomes more than a simple structure kids play tag on, but an entirely new world and dimension to which our history is made. We capture and kill pirates in our first ever duel and sink a navy ships that passed by in the middle of our night, we are in constant fear that we might die, a world completely saturated in the spectacle of catastrophes, it becomes dusk and our adventure for now is put on hold until we get bored again the next day… The next day we kill a couple of pirates, and sink a couple of army ships again, but then this feels repetitive and stupid, the bored eyes have gone bored, there in the face of human destiny towards destruction there nothing is left to destroy but the crew, I get annoyed by the nothingness and make a story up that \_Sanjith\_\_ stole my lunch money and that a lesson will teach him justice, I punch \_Sanjith\_\_\_ in the eye and the whole crew begins to fight one another, and punches are thrown here and there but rapidly it becomes violent and a member is thrown off our ship, we hear a snap on his neck, we here some gasps here and there, a laugh once or twice, and some are shocked to find him dead, but wasn’t the point of the fight in the first place? To have someone or something to be killed? To be engulfed in the thrill of violence? Charity has become our cannibalism, the eating of our own species have begun in the name of justice. We don’t think too much about it and go the way we always have and our bloodshed occurs the next to the next to the next, until not one man is left standing at the top of our ship, that once and still is just a playground.

#### Link: The 1ACs attempt to solve for catastrophic endings of our human species is the repetition of modernity’s constant drive towards destruction, in which the problem spars from the thirst for violence the fact that the world is too boring, it’s too peaceful. The hyper-real remedies the 1AC with an adventure playground to which its story is made possible by submission into this fantasy by the fact that it can be solved and created again, just in the context of debate people have been reading extinction for decades and decades, we solve it and make another one, and parallel the usfg sending troops to the middle east reflects charity cannabilism, by feeding alquieda and then deciding to fight them later, thus the 1AC thus embodies a history of artificiality, where scenario planning produces necessary conditions for catastrophes, in which decades of compounded relations within hyper-reality has made escape impossible because we can never identify what precisely spurred \_\_\_\_ because it has already been over-codified with meaning, all that matters to the code is that the catastrophe exists. And thus our very affirmation of the catastrophe, the recognition of its existence, gives it life gives is potential for actual destruction, the hyper-real makes possible destruction within the real.

## 1

#### Counterplan text: The United States federal government should substantially increase its active space debris removal cooperation with the Russian Federation.

#### Bilateral cooperation with Russia over debris is key to prevent orbital cascades that destroy all satellites, stop extinction.

Al Anzaldua & Dave Dunlop 17. Retired US State Department diplomat and 30-year veteran of space advocacy. Member of the National Space Society; developed the Rockets for Schools Program in Wisconsin with the Wisconsin Space Business Roundtable and subsequently in Michigan. “Why the US and Russia should work together to clean up orbital debris.” The Space Review. <http://www.thespacereview.com/article/3156/1>.

Relations between the United States and Russia have been rough the last few years. Controversies range from US sanctions in response to Russia’s annexation of Crimea, and Russian threats in response to suspend exports of RD-180 engines to the US, to accusations that Russia intervened in the US presidential election. Given this darkening picture, is there any way that the new U.S. Administration could possibly reverse the negative geopolitical trend lines? Those worried about geopolitical conflict between the powers should note that US-Russian space relations are still limping along [slowly continuing], while other areas of potential cooperation are either frozen or greatly impeded by suspicion and acrimony. For example, despite the 2014 controversy surrounding US imports of Russian RD-180s rocket motors, Congress has eased earlier restrictions on their use. Other areas of space cooperation between the powers through the years have been more mutually agreeable. Bilateral cooperation dates back to 1972, when the US and the Soviet Union initiated the Apollo-Soyuz Test Project, which culminated in the July 1975 docking of Soyuz 19 with an Apollo spacecraft. After the breakup of the Soviet Union in 1991, a new era of bilateral space collaboration started with the February 1995 flight of a space shuttle, whose crew included Russian cosmonaut Vladimir Titov, to the Mir space station. This was followed by Russian collaboration with the development and operations of the International Space Station (ISS), which continues to this day. In the overall context of geopolitical tension between the US and Russia, it is striking and relevant that Russian president Vladimir Putin, in April 2016, said in a videoconference with the ISS crew, “We attach great importance that despite whatever difficulties we face on Earth, people in space work shoulder-to-shoulder, hand-in-hand, to help each other and fulfill tasks that are essential, not just for our countries, but for all of humanity” (US News 2016). Given the unequivocal fact that space collaboration has been one relatively bright spot between the two otherwise adversarial powers, is there a way that the Trump Administration can leverage such space cooperation to lower geopolitical tensions, while simultaneously removing a grave threat to our modern way of life and future space plans? The answer is stark, if we would only look up. Introducing an “opportune” crisis Orbital debris is any human-made and uncontrollable litter left in Earth orbit. It includes inactive satellites, rocket stages, and fragments created by collisions, explosions, and even normal operations. There are over 22,000 Earth-orbiting debris objects larger than a softball (10 centimeters) and around a million shrapnel fragments between 0.5 and 10 centimeters (ESA 2013). With relative impact velocities reaching higher than 55,000 kilometers per hour in low Earth orbit (LEO—between 160 and 2,000 kilometers in altitude—even debris as small as a pea can take out spacecraft (Liou 2014). The deliberate destruction in 2007 of the Chinese Fengyun satellite with an antisatellite weapon and the catastrophic 2009 collision between a defunct Russian Cosmos satellite and an operating Iridium satellite have together more than doubled the number of cataloged debris fragments (National Academy 2011). NASA, analyzing data from six space agencies, estimates that if nothing is done about the growing quantity of debris and increasing number of satellites in Earth orbit, there will be another catastrophic collision every five to nine years and the pace will accelerate (Liou 2014). At least some who have been studying orbital debris for many years believe that we may have already reached a “tipping point” whereby orbital debris in congested LEO altitude bands is colliding in a runaway debris-generating cascade, often called the Kessler syndrome. Although this assertion is controversial, and a debris cascade would take years to unfold, at some point a Kessler cascade would nevertheless make spacecraft operation in affected altitude bands virtually impossible (McKnight 2012). Orbital debris is an ever-growing hazard to the International Space Station (NASA 2015) and the approximately 1,300 operating satellites, which represent only six percent of the 22,000 tracked objects in orbit (Baiocchi 2015). Although about 70 countries operate satellite, the US, China, and Russia have the three largest fleets (Aerospace 2015) and thus have the most at risk. The ISS must maneuver one or more times a year to avoid collisions with debris (NASA 2015). Satellites in certain higher LEO orbits (see figure 1 below) face a much higher threat of collision. Even the satellites in geosynchronous orbit, at an altitude of more than 35,000 kilometers where relative collisional velocities are usually much lower, are nevertheless threatened by multi-ton debris bodies tumbling uncontrollably (Anselmo 2000). The current risk to satellites, which provide commercial services worth over $200 billion annually for television, radio, telephone, search and rescue, weather and climate reporting, navigation, and national defense, varies with debris object number, mass, and potential impact velocity within an altitude and inclination band. Although it is difficult to determine what percentage of satellite failures are due to orbital debris strikes, as opposed to other causes such as meteoroid impacts, the increasing amount of orbital debris is undoubtedly a factor in annual economic losses in the satellite industry. In this regard, claims paid out by insurance companies for on-orbit spacecraft failures in 2013 reached $800 million (OECD 2014). Large structures planned for Earth orbits, such as commercial space stations, tourism hotels, space solar power satellites, and staging and fueling platforms, will be especially vulnerable to orbital debris that will certainly grow from future collisions, even if we put no new spacecraft into Earth orbit. Yet, companies are planning constellations of hundreds or even thousands of satellites in LEO. The authors have dealt with the daunting technical challenges to cleaning up orbital debris in previous articles and papers. They have likewise dealt with the first two non-technical challenges, i.e. adverse economic factors and legal barriers (NSS 2016). The focus here will be on the third non-technical challenge, geopolitical impediments, because therein lies our nation’s greatest opportunity for diminishing the current threat to our modern way of life and international order. In considering international cooperation, it is high time that we move beyond tepid multilateral guidelines for orbital debris mitigation, and move on to orbital debris cleanup, or remediation (Liou 2010), either by active debris removal (ADR) or the rehabilitation of defunct spacecraft through on-orbit servicing systems. Servicing can entail refueling or repairing non-functioning spacecraft, or reusing parts of such spacecraft by attaching functioning modules to them. Remediation also includes the eventual possibility of recycling and re-tooling defunct spacecraft materials, such as metals and plastics, for on-orbit assembly and fabrication (NSS 2016). Orbital bands with the largest number of objects pose the greatest current risk or threat to satellites. However, the orbital bands with the highest overall mass represent the greatest future threat, because more mass eventually generates more destructive collisional debris. Based on these criteria, and accounting only for trackable objects 10 centimeters or larger in LEO, orbits around 780 kilometers are currently the most hazardous, and orbits around 640 kilometers, 780 kilometers, 840–860 kilometers, and 920–1,000 kilometers pose the greatest future threat (McKnight 2012). How Russia fits in The ISS can serve as a testbed for emerging orbital debris cleanup technologies, while offering a multi-year avenue to engage the international community and overcome geopolitical rivalries, especially with Russia. However, the ISS is currently scheduled to operate only through 2024, with Russia considering then detaching some of its ISS modules for its own station. This future loss of cooperative engagement with Russia will be particularly unfortunate given that Russia and the United States have been the major producers of multi-ton orbiting objects, a major source of future debris in LEO. Launching governments, through their classification of technology as “secret” and their dual-use technology transfer rules, have shown themselves to be very sensitive about the characteristics and capabilities of their satellites, especially military ones. Therefore, to induce international cooperation to remove, repurpose, recycle, or rehabilitate large debris objects, it is best to start with much less sensitive, but still dangerous, upper stages (which mostly aluminum alloy tanks), which make up about half of the LEO debris mass. Although passivation—expelling remaining fuel and discharging batteries—now keeps such stages from exploding, they remain dangerous because of their uncontrolled and tumbling state. Even so, capturing aluminum tanks should be a lot less complicated than grabbing or manipulating satellites with solar arrays, antennas, or even nuclear reactors. About 693 tons of the spent stages in LEO, representing 41 percent of multi-ton debris in LEO, consist of Russian rocket bodies (see Figure 2). Removing only Russian rocket bodies from LEO could reduce future shrapnel creation by nearly 62 percent. This exceeds the 48 percent reduction that would occur if all non-Russian mass were removed from LEO (Pearson 2014). Nevertheless, the authors urge that the US transparently begin developing technologies, through public-private Space Act Agreements, to remove or relocate into salvage orbits defunct US rocket bodies and dead satellites from LEO, which account for just over half of the non-Russian mass in LEO. As the US government, in coordination with US companies, takes steps to clean up its own debris, the US should approach Russia for further bilateral collaboration in space. A good start would be for talks between Russia and the US on the range of space operations and safety considerations, i.e. space situational awareness (SSA), respective catalogs of space objects, national research and regulations for debris mitigation, conjunction analysis, and more. Ideally, these talks would lead to a US-Russia bilateral orbital debris remediation agreement, which could deal with about 86 percent of the mass in LEO

## 2

#### Space Commercialization is key to Space Deterrence – Commercial Flexibility is key to deterrence by denial.

Klein 19, John J. Understanding space strategy: the art of war in space. Routledge, 2019. (a Senior Fellow and Strategist at Falcon Research, Inc. and Adjunct Professor at George Washington University’s Space Policy Institute)//Elmer

Recent U.S. space policy initiatives underscore the far-reaching benefits of commercial space activities. The White House revived the National Space Council to foster closer coordination, cooperation, and exchange of technology and information among the civil, national security, and commercial space sectors.1 National Space Policy Directive 2 seeks to promote economic growth by streamlining U.S. regulations on the commercial use of space.2 While the defense community generally appreciates the value of services and capabilities derived from the commercial space sector—including space launch, Earth observation, and satellite communications—it often overlooks one area of strategic importance: deterrence. To address the current shortcoming in understanding, this paper first describes the concept of deterrence, along with how space mission assurance and resilience fit into the framework. After explaining how commercial space capabilities may influence the decision calculus of potential adversaries, this study presents actionable recommendations for the U.S. Department of Defense (DoD) to address current problem areas. Ultimately, DoD—including the soon-to-be reestablished U.S. Space Command and possibly a new U.S. Space Force—should incorporate the benefits and capabilities of the commercial space sector into flexible deterrent options and applicable campaign and contingency plans. Deterrence, Mission Assurance, and Resilience Thomas Schelling, the dean of modern deterrence theory, held that deterrence refers to persuading a potential enemy that it is in its interest to avoid certain courses of activity.3 One component of deterrence theory lies in an understanding that the threat of credible and potentially overwhelming force or other retaliatory action against any would-be adversary is sufficient to deter most potential aggressors from conducting hostile actions. This idea is also referred to as deterrence by punishment.4 The second salient component of deterrence theory is denial. According to Glenn Snyder’s definition, deterrence by denial is “the capability to deny the other party any gains from the move which is to be deterred.”5 The 2018 U.S. National Defense Strategy (NDS) highlights deterrence, and specifically deterrence by denial, as a vital component of national security. The NDS notes that the primary objectives of the United States include deterring adversaries from pursuing aggression and preventing hostile actions against vital U.S. interests.6 The strategy also observes that deterring conflict necessitates preparing for war during peacetime.7 For the space domain, the peacetime preparedness needed for deterrence by denial occurs in the context of space mission assurance and resilience. Mission assurance entails “a process to protect or ensure the continued function and resilience of capabilities and assets—including personnel, equipment, facilities, networks, information and information systems, infrastructure, and supply chains—critical to the performance of DoD mission essential functions in any operating environment or condition.”8 Similar to mission assurance but with a different focus, resilience is an architecture’s ability to support mission success with higher probability; shorter periods of reduced capability; and across a wider range of scenarios, conditions, and threats, despite hostile action or adverse conditions.9 Resilience may leverage cross-domain solutions, along with commercial and international capabilities.10 Space mission assurance and resilience can prevent a potential adversary from achieving its objectives or realizing any benefit from its aggressive action. These facets of U.S. preparedness help convey the futility of conducting a hostile act. Consequently, they enhance deterrence by denial. Commercial Space Enables Deterrence The commercial space sector directly promotes mission assurance and resilience efforts. This is in part due to the distributed and diversified nature of commercial space launch and satellites services. Distribution refers to the use of a number of nodes, working together, to perform the same mission or functions as a single node; diversification describes contributing to the same mission in multiple ways, using different platforms, orbits, or systems and capabilities.11 The 2017 U.S. National Security Strategy, in noting the benefits derived from the commercial space industry, states that DoD partners with the commercial sector’s capabilities to improve the U.S. space architecture’s resilience.12 Although U.S. policy and joint doctrine frequently acknowledge the role of the commercial space sector in space mission assurance and resilience, there is little recognition that day-to-day contributions from the commercial industry assists in deterring would-be adversaries. The commercial space sector contributes to deterrence by denial through multi-domain solutions that are distributed and diversified. These can deter potential adversaries from pursuing offensive actions against space-related systems. Commercial launch providers enhance deterrence by providing options for getting payloads into orbit. These include diverse space launch capabilities such as small and responsive launch vehicles, along with larger, reusable launch vehicles; launch rideshares for secondary payloads; and government payloads on commercial satellites. Various on-orbit systems also promote deterrence. For example, if an aggressor damages a commercial remote sensing satellite during hostilities, similar commercial satellites in a different orbital regime, or those of the same constellation, may provide the needed imagery. If satellite communications are jammed or degraded, commercial service providers can reroute satellite communications through their own networks, or potentially through the networks of another company using a different portion of the frequency spectrum. Regarding deterrence by punishment efforts, the commercial space sector can play a role, albeit an indirect one, through improved space situational awareness (SSA) and space forensics (including digital forensics and multispectral imagery). The commercial industry may support the attribution process following a hostile or illegal act in space through its increasingly proliferating network of SSA ground telescopes and other terrestrial tracking systems. The DoD may also leverage the commercial space sector’s cyber expertise to support digital forensic efforts to help determine the source of an attack. By supporting a credible and transparent attribution process, commercial partners may cause a would-be adversary to act differently if it perceives that its aggressive, illegal, or otherwise nefarious actions will be disclosed. Doing so can help bolster the perceived ability to conduct a legitimate response following a hostile attack, which may improve deterrence by punishment efforts. Commercial space capabilities may also facilitate the application of force to punish a potential aggressor. In addition to traditional military space systems, commercial satellite imagery and communication capabilities may be used in cueing and targeting for punitive strikes against an aggressor. Although the commercial space sector is not expected to be involved directly in the use of retaliatory force following a hostile act, commercial partners may help in providing the information used to identify those responsible and to facilitate any consequent targeting efforts.

#### Space Deterrence Breakdowns and destroys American supremacy over space.

Parker 17 Clifton Parker 1-24-2017 “Deterrence in space key to U.S. security” <https://cisac.fsi.stanford.edu/news/deterrence-space-key-us-security> (Policy Analyst at the Stanford Center for International Security and Cooperation)//Elmer

#### Space is more important than ever for the security of the United States, but it’s almost like the Wild West in terms of behavior, a top general said today. Air Force Gen. [John Hyten](http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/108115/general-john-e-hyten.aspx), commander of the U.S. Strategic Command, spoke Jan. 24 at Stanford’s [Center](http://cisac.fsi.stanford.edu/) for International Security and Cooperation. His [talk](http://cisac.fsi.stanford.edu/events/us-strategic-command-perspectives-deterrence-and-assurance) was titled, “U.S. Strategic Command Perspectives on Deterrence and Assurance.” Hyten said, “Space is fundamental to every single military operation that occurs on the planet today.” He added that “there is no such thing as a war in space,” because it would affect all realms of human existence, due to the satellite systems. Hyten advocates “strategic deterrence” and “norms of behavior” across space as well as land, water and cyberspace. Otherwise, rivals like China and Russia will only threaten U.S. interests in space and wreak havoc for humanity below, he said. Most of contemporary life depends on systems connected to space. Hyten also addressed other topics, including recent proposals by some to upgrade the country’s missile defense systems. “You just don’t snap your fingers and build a state-of-the-art anything overnight,” Hyten said, adding that he has not yet spoken to Trump administration officials about the issue. “We need a powerful military,” but a severe budget crunch makes “reasonable solutions” more likely than expensive and unrealistic ones. On the upgrade front, Hyten said he favors a long-range strike missile system to replace existing cruise missiles; a better air-to-air missile for the Air Force; and an improved missile defense ground base interceptor. ‘Critically dependent’ From satellites to global-positioning systems GPS, space has transformed human life – and the military – in the 21st century, Hyten said. In terms of defining "space," the U.S. designates people who travel above an altitude of 50 miles as astronauts. As the commander of the U.S. Strategic Command, Hyten oversees the control of U.S. strategic forces, providing options for the president and secretary of defense. In particular, this command is charged with space operations (such as military satellites), information operations (such as information warfare), missile defense, global command and control, intelligence, surveillance, and reconnaissance, global strike and strategic deterrence (the U.S. nuclear arsenal), and combating weapons of mass destruction. Hyten explained that every drone, fighter jet, bomber, ship and soldier is critically dependent on space to conduct their own operations. All cell phones use space, and the GPS command systems overall are managed at Strategic Command, he said. “No soldier has to worry about what’s over the next hill,” he said, describing GPS capabilities, which have fundamentally transformed humanity’s way of life. Space needs to be available for exploration, he said. “I watch what goes on in space, and I worry about us destroying that environment for future generations.” He said that too many drifting objects and debris exist – about 22,000 right now. A: recent Chinese satellite interception created a couple thousand more debris objects that now circle about the Earth at various altitudes and pose the risk of striking satellites. “We track every object in space” now, Hyten said, urging “international norms of behavior in space.” He added, “We have to deter bad behavior on space. We have to deter war in space. It’s bad for everybody. We could trash that forever.” But now rivals like China and Russia are building weapons to deploy in the lower levels of space. “How do we prevent this? It’s bigger than a space problem,” he said. Deterring conflict in the cyber, nuclear and space realms is the strategic deterrence goal of the 21st century, Hyten said. “The best way to prevent war is to be prepared for war,” he said. Hyten believes the U.S. needs a fundamentally different debate about deterrence. And it all starts with nuclear weapons. “In my deepest heart, I wish I didn’t have to worry about nuclear weapons,” he said. Hyten described his job as “pretty sobering, it’s not easy.” But he also noted the mass violence of the world prior to 1945 when the first atomic bomb was used. Roughly 80 million people died from 1939 to 1945 during World War II. Consider that in the 10-plus years of the Vietnam War, 58,000 Americans were killed. That’s equivalent to two days of deaths in WWII, he said. In a world without nuclear weapons, a rise in conventional warfare would produce great numbers of mass casualties, Hyten said. About war, he said, “Once you see it up close, no human will ever want to experience it.” Though America has “crazy enemies” right now, in many ways the world is more safe than during WWII, Hyten said. The irony is that nuclear weapons deterrence has kept us from the type of mass killings known in events like WWII. But the U.S. must know how to use its nuclear deterrence effectively. Looking ahead, Hyten said the U.S. needs to think about space as a potential war environment. An attack in space might not mean a response in space, but on the Earth. Hyten describes space as the domain that people look up at it and still dream about. “I love to look at the stars,” but said he wants to make sure he’s not looking up at junk orbiting in the atmosphere.

#### US space dominance prevents global war

**Zubrin 15** [(Robert Zubrin, president of Pioneer Energy, a senior fellow with the Center for Security Policy) “US Space Supremacy is Now Critical,” Space News, 1/22/15, <https://spacenews.com/op-ed-u-s-space-supremacy-now-critical/>] TDI

The United States needs a new national security policy. For the first time in more than 60 years, we face the real possibility of a large-scale conventional war, and we are woefully unprepared. Eastern and Central Europe is now so weakly defended as to virtually invite invasion. The United States is not about to go to nuclear war to defend any foreign country. So deterrence is dead, and, with the German army cut from 12 divisions to three, the British gone from the continent, and American forces down to a 30,000-troop tankless remnant, the only serious and committed ground force that stands between Russia and the Rhine is the Polish army. It’s not enough. Meanwhile, in Asia, the powerful growth of the Chinese economy promises that nation eventual overwhelming numerical force superiority in the region. How can we restore the balance, creating a sufficiently powerful conventional force to deter aggression? It won’t be by matching potential adversaries tank for tank, division for division, replacement for replacement. Rather, the United States must seek to totally outgun them by obtaining a radical technological advantage. This can be done by achieving space supremacy. To grasp the importance of space power, some historical perspective is required. Wars are fought for control of territory. Yet for thousands of years, victory on land has frequently been determined by dominance at sea. In the 20th century, victory on both land and sea almost invariably went to the power that controlled the air. In the 21st century, victory on land, sea or in the air will go to the power that controls space. The critical military importance of space has been obscured by the fact that in the period since the United States has had space assets, all of our wars have been fought against minor powers that we could have defeated without them. Desert Storm has been called the first space war, because the allied forces made extensive use of GPS navigation satellites. However, if they had no such technology at their disposal, the end result would have been just the same. This has given some the impression that space forces are just a frill to real military power — a useful and convenient frill perhaps, but a frill nevertheless. But consider how history might have changed had the Axis of World War II possessed reconnaissance satellites — merely one of many of today’s space-based assets — without the Allies having a matching capability. In that case, the Battle of the Atlantic would have gone to the U-boats, as they would have had infallible intelligence on the location of every convoy. Cut off from oil and other supplies, Britain would have fallen. On the Eastern front, every Soviet tank concentration would have been spotted in advance and wiped out by German air power, as would any surviving British ships or tanks in the Mediterranean and North Africa. In the Pacific, the battle of Midway would have gone very much the other way, as the Japanese would not have wasted their first deadly airstrike on the unsinkable island, but sunk the American carriers instead. With these gone, the remaining cruisers and destroyers in Adm. Frank Jack Fletcher’s fleet would have lacked air cover, and every one of them would have been hunted down and sunk by unopposed and omniscient Japanese air power. With the same certain fate awaiting any American ships that dared venture forth from the West Coast, Hawaii, Australia and New Zealand would then have fallen, and eventually China and India as well. With a monopoly of just one element of space power, the Axis would have won the war. But modern space power involves far more than just reconnaissance satellites. The use of space-based GPS can endow munitions with 100 times greater accuracy, while space-based communications provide an unmatched capability of command and control of forces. Knock out the enemy’s reconnaissance satellites and he is effectively blind. Knock out his comsats and he is deaf. Knock out his navsats and he loses his aim. In any serious future conventional conflict, even between opponents as mismatched as Japan was against the United States — or Poland (with 1,000 tanks) is currently against Russia (with 12,000) — it is space power that will prove decisive. Not only Europe, but the defense of the entire free world hangs upon this matter. For the past 70 years, U.S. Navy carrier task forces have controlled the world’s oceans, first making and then keeping the Pax Americana, which has done so much to secure and advance the human condition over the postwar period. But should there ever be another major conflict, an adversary possessing the ability to locate and target those carriers from space would be able to wipe them out with the push of a button. For this reason, it is imperative that the United States possess space capabilities that are so robust as to not only assure our own ability to operate in and through space, but also be able to comprehensively deny it to others. Space superiority means having better space assets than an opponent. Space supremacy means being able to assert a complete monopoly of such capabilities. The latter is what we must have. If the United States can gain space supremacy, then the capability of any American ally can be multiplied by orders of magnitude, and with the support of the similarly multiplied striking power of our own land- and sea-based air and missile forces be made so formidable as to render any conventional attack unthinkable. On the other hand, should we fail to do so, we will remain so vulnerable as to increasingly invite aggression by ever-more-emboldened revanchist powers. This battle for space supremacy is one we can win. Neither Russia nor China, nor any other potential adversary, can match us in this area if we put our minds to it. We can and must develop ever-more-advanced satellite systems, anti-satellite systems and truly robust space launch and logistics capabilities. Then the next time an aggressor commits an act of war against the United States or a country we are pledged to defend, instead of impotently threatening to limit his tourist visas, we can respond by taking out his satellites, effectively informing him in advance the certainty of defeat should he persist. If we desire peace on Earth, we need to prepare for war in space.

## 3

The images of catastrophe and destruction they present are like a drug, used by the first world nations to feed off the suffering of the rest of the world. Their efforts to solve these problems are coproductive with the disasters themselves, and this constant search for new spectacle will lead to the destruction of the human species as the ultimate adventure playground.

**Baudrillard in 94** [Jean, “The Illusion of the End” p. 66-71]

We have long denounced the capitalistic, economic exploitation of the poverty of the 'other half of the world' [['autre monde]. We must today denounce the moral and sentimental **exploitation** of that poverty - charity cannibalism being **worse** than oppressive violence. The extraction and humanitarian reprocessing of a destitution which has become the equivalent of oil deposits and gold mines. The extortion of the spectacle of poverty and, at the same time, of our charitable condescension: a worldwide appreciated surplus of fine sentiments and bad conscience. We should, in fact, see this not as the extraction of raw materials, but as a waste-reprocessing enterprise. Their destitution and our bad conscience are, in effect, all part of the waste-products of history- the main thing is to recycle them to produce a new energy source. We have here an escalation in the psychological balance of terror. World capitalist oppression is now merely the vehicle and alibi for this other, much more ferocious, form of moral predation. One might almost say, contrary to the Marxist analysis, that material exploitation is only there to extract that spiritual raw material that is the misery of peoples, which serves as psychological nourishment for the rich countries and media nourishment for our daily lives. The 'Fourth World' (we are no longer dealing with a 'developing' Third World) is once again beleaguered, this time as a catastrophe-bearing stratum. The West is whitewashed in the reprocessing of the rest of the world as waste and residue. And the white world repents and seeks absolution - it, too, the waste-product of its own history. The South is a natural producer of raw materials, the latest of which is catastrophe. The North, for its part, specializes in the reprocessing of raw materials and hence also in the reprocessing of catastrophe. Bloodsucking protection, humanitarian interference, Medecins sans frontieres, international solidarity, etc. The last phase of colonialism: the New Sentimental Order is merely the latest form of the New World Order. Other people's destitution becomes our adventure **playground**. Thus, the humanitarian offensive aimed at the Kurds - a show of repentance on the part of the Western powers after allowing Saddam Hussein to crush them - is in reality merely the second phase of the war, a phase in which charitable intervention finishes off the work of extermination. We are the consumers of the ever delightful spectacle of poverty and catastrophe, and of the moving spectacle of our own efforts to alleviate it (which, in fact, merely function to secure the conditions of **reproduction** of the catastrophe market); there, at least, in the order of moral profits, the Marxist analysis is wholly applicable: we see to it that extreme poverty is reproduced as a symbolic deposit, as a fuel essential to the moral and sentimental equilibrium of the West. In our defence, it might be said that this extreme poverty was largely of our own making and it is therefore normal that we should profit by it. There can be no finer proof that the distress of the rest of the world is at the root of Western power and that the spectacle of that distress is its crowning glory than the inauguration, on the roof of the Arche de la Defense, with a sumptuous buffet laid on by the Fondation des Droits de l'homme, of an exhibition of the finest photos of world poverty. Should we be surprised that spaces are set aside in the Arche d' Alliance. for universal suffering hallowed by caviar and champagne? Just as the economic crisis of the West will not be complete so long as it can still exploit the resources of the rest of the world, so the symbolic crisis will be complete only when it is no longer able to feed on the other half's human and natural catastrophes (Eastern Europe, the Gulf, the Kurds, Bangladesh, etc.). We need this drug, which serves us as an aphrodisiac and hallucinogen. And the poor countries are the best suppliers - as, indeed, they are of other drugs. We provide them, through our media, with the means to exploit this paradoxical resource, just as we give them the means to exhaust their natural resources with our technologies. Our whole culture lives off this catastrophic cannibalism, relayed in cynical mode by the news media, and carried forward in moral mode by our humanitarian aid, which is a way of encouraging it and ensuring its continuity, just as economic aid is a strategy for perpetuating under-development. Up to now, the financial sacrifice has been compensated a hundredfold by the moral gain. But when the catastrophe market itself reaches crisis point, in accordance with the implacable logic of the market, when distress becomes scarce or the marginal returns on it fall from overexploitation, when we run out of disasters from elsewhere or when they can no longer be traded like coffee or other commodities, the West will be forced to produce its own catastrophe for **itself**, in order to meet its need for spectacle and that **voracious appetite** for symbols which characterizes it even more than its voracious appetite for food. It will reach the point where it devours itself. When we have finished sucking out the destiny of others, we shall have to invent one for ourselves. The Great Crash, the symbolic crash, will come in the end from us Westerners, but only when we are no longer able to feed on the hallucinogenic misery which comes to us from the other half of the world. Yet they do not seem keen to give up their monopoly. The Middle East, Bangladesh, black Africa and Latin America are really going flat out in the distress and catastrophe stakes, and thus in providing symbolic nourishment for the rich world. They might be said to be overdoing it: heaping earthquakes, floods, famines and ecological disasters one upon another, and finding the means to massacre each other most of the time. The 'disaster show' goes on without any let-up and our sacrificial debt to them far exceeds their economic debt. The misery with which they generously overwhelm us is something we shall never be able to repay. The sacrifices we offer in return are laughable (a tornado or two, a few tiny holocausts on the roads, the odd financial sacrifice) and, moreover, by some infernal logic, these work out as much greater gains for us, whereas our kindnesses have merely added to the natural catastrophes another one immeasurably worse: the demographic catastrophe, a veritable epidemic which we deplore each day in pictures. In short, there is such distortion between North and South, to the symbolic advantage of the South (a hundred thousand Iraqi dead against casualties numbered in tens on our side: in every case we are the losers), that one day everything will break down. One day, the West will break down if we are not soon washed clean of this shame, if an international congress of the poor countries does not very quickly decide to share out this symbolic privilege of misery and catastrophe. It is of course normal, since we refuse to allow the spread of nuclear weapons, that they should refuse to allow the spread of the catastrophe weapon. But it is not right that they should exert that monopoly indefinitely. In any case, the under-developed are only so by comparison with the Western system and its presumed success. In the light of its assumed failure, they are not under-developed at all. They are only so in terms of a dominant evolutionism which has always been the worst of colonial ideologies. The argument here is that there is a line of objective progress and everyone is supposed to pass through its various stages (we find the same eyewash with regard to the evolution of species and in that evolutionism which unilaterally sanctions the superiority of the human race). In the light of current upheavals, which put an end to any idea of history as a linear process, there are no longer either developed or under-developed peoples. Thus, to encourage hope of evolution - albeit by revolution - among the poor and to doom them, in keeping with the objective illusion of progress, to technological salvation is a criminal absurdity. In actual fact, it is their good fortune to be able to escape from evolution just at the point when we no longer know where it is leading. In any case, a majority of these peoples, including those of Eastern Europe, do not seem keen to enter this evolutionist modernity, and their weight in the balance is certainly no small factor in the West's repudiation of its own history, of its own utopias and its own modernity. It might be said that the routes of violence, historical or otherwise, are being turned around and that the viruses now pass from South to North, there being every chance that, five hundred years after America was conquered, 1992 and the end of the century will mark the comeback of the defeated and the sudden reversal of that modernity. The sense of pride is no longer on the side of wealth but of poverty, of those who - fortunately for them - have nothing to repent, and may indeed glory in being privileged in terms of catastrophes. Admittedly, this is a privilege they could hardly renounce, even if they wished to, but natural disasters merely reinforce the sense of guilt felt towards them by the wealthy – by those whom God visibly scorns since he no longer even strikes them down. One day it will be the Whites themselves who will give up their whiteness. It is a good bet that repentance will reach its highest pitch with the five-hundredth anniversary of the conquest of the Americas. We are going to have to lift the curse of the defeated - but symbolically victorious - peoples, which is insinuating itself five hundred years later, by way of repentance, into the heart of the white race. No solution has been found to the dramatic situation of the under-developed, and none will be found since their drama has now been overtaken by that of the overdeveloped, of the rich nations. The psychodrama of congestion, saturation, super abundance, neurosis and the breaking of blood vessels which haunts us - the drama of the excess of means over ends – calls more urgently for attention than that of penury, lack and poverty. That is where the most imminent danger of catastrophe resides, in the societies which have run out of emptiness. Artificial catastrophes, like the beneficial aspects of civilization, progress much more quickly than natural ones. The underdeveloped are still at the primary stage of the natural, unforeseeable catastrophe. We are already at the second stage, that of the manufactured catastrophe - imminent and foreseeable - and we shall soon be at that of the pre-programmed catastrophe, the catastrophe of the third kind, deliberate and experimental. And, paradoxically, it is our pursuit of the means for averting natural catastrophe - the unpredictable form of destiny - which will take us there. Because it is unable to escape it, humanity will pretend to be the author of its destiny. Because it cannot accept being confronted with an end which is uncertain or governed by fate, it will prefer to stage its own death as a **species**.

Death and disaster are employed by the media to shock and titillate the viewer, which turns the event itself into a form of mass entertainment that loses any reference to the real world but must constantly be given credibility by new images of destruction.

**Baudrillard in 94** [Jean, “The Illusion of the End” p. 55-58]

In the case of the Romanian revolution, it was the faking of the dead in Timisoara which aroused a kind of moral indignation and raised the problem of the scandal of 'disinformation' or, rather, of information itself as scandal.

It was not the dead that were the scandal, but the corpses being pressed into appearing before the television cameras, as in the past dead souls were pressed into appearance in the register of deaths. It was their being taken hostage, as it were, and our being held hostage too, as mystified TV viewers. Being blackmailed by violence and death, especially in a noble and revolutionary cause, was felt to be worse than the violence itself, was felt to be a parody of history. All the media live off the presumption of catastrophe and of the succulent **imminence** of **death**. A photo in Liberation, for example, shows us a convoy of refugees 'which, some time after this shot was taken, was to be attacked by the Iraqi army'. Anticipation of effects, morbid simulation, emotional blackmail. It was the same on CNN with the arrival of the Scuds. Nothing is news if it does not pass through that horizon of the virtual, that hysteria of the virtual - not in the psychological sense, but in the sense of a compulsion for what is presented, in all bad faith, as real to be consumed as **unreal**. In the past, to show something up as a fake, we said: 'It's just play-acting', 'It's all romance!', 'It's put on for the cameras!'. This time, with Romania and the Gulf War, we were able to say, 'It's just TV!' Photographic or cinema images still pass through the negative stage (and that of projection), whereas the TV image, the video image, digital and synthetic, are images without a negative, and hence without negativity and without reference. They are virtual and the virtual is what puts an end to all negativity, and thus to all reference to the real or to events. At a stroke, the contagion of images, engendering themselves without reference to a real or an imaginary, itself becomes virtually without limits, and this limitless engendering produces **information** as **catastrophe**. Is an image which refers only to itself still an image? However this may be, that image raises the problem of its indifference to the world, and thus of our indifference to it - which is a political problem. When television becomes the strategic space of the event, it sets itself up as a deadly self-reference, it becomes a bachelor machine. The real object is wiped out by news – not merely alienated, but abolished. All that remains of it are **traces** on a **monitoring screen.** Many Romanian eyewitness accounts speak of being dispossessed of the event in this way, deprived of the lived experience they have of it by being submerged in the media network, by being placed under house arrest in front of their television screens. Spectators then become exoterics of the screen, living their revolution as an exoticism of images, themselves exogenous, touristic spectators of a **virtual history**.

**Members of our culture are in constant search of new global, hyperreal images as a way to escape the body and satisfy the bored eye.**

**Kroker in 2002** [Arthur, March 20, editor of Ctheory.net “We Look for Images”]

A story of body invasion? Not really. Contemporary society is no longer the culture of the disembodied eye. Today, we play out the drama of our private existence along and within the iris of the image-machine that we once dismissed as somehow external to human ambitions. Our fate, our most singular fate, is to experience the fatal destiny of the image as both goal and precondition of human culture. As goal, the power of the image inheres in the fact that contemporary culture is driven forward by the *will to image* as its most pervasive form of nihilism. As precondition, we *are* possessed individuals because we are fully possessed by the enigmatic dreams of impossible images. That we are possessed by the power of the image with such finality has the curious repercussion of driving the image-machine mad. The matrix of image-creation as its evolves from analog to digital and now to the biogenetic struggles to keep pace with the capricious tastes and fast-bored appetites of human flesh as an image-machine. It is the age of the **bored eye:** the eye which flits from situation to situation, from scene to scene, from image to image, from ad to ad, with a restlessness and high-pitched consumptive appetite that can **never really** ever be **fully** satisfied. The bored eye is a natural nihilist. It knows only the pleasure of the boredom of creation as well as the boredom of abandonment. It never remains still. It is in perpetual motion. It demands novelty. It loves junk images. It turns recombinant when fed straight narratives. It has ocular appetites that demand satisfaction. But it can never be fully sated because the bored eye is the empty eye. That is its secret passion, and the source of its endless seduction. The bored eye is the real power of the image. It takes full possession of the housing of the body. It is the nerve center of flesh made image. It is the connective tissue between the planetary ocular strategies of the image-matrix and the solitude of the human body. The bored eye is bored with its (bodily) self. That is why it is always dissatisfied. It needs to blast out of the solitude of its birth-place in the human cranium in order to ride the electronic currents of the global eye. No longer satisfied with simply observing the power of the image, the bored eye now demands to be the power of the image(i.e. it wants something that effects.affects it like extinction). Which is why, of course, the archival history of twentieth-century photography can now be safely interned. At dusk, the eye of the image takes flight in the restless form of the bored eye forever revolving and twisting and circulating in an image-matrix of which it is both the petulant consumer and unsatisfied author. Ironically, the bored eye has itself now become both **precondition** and **goal** for the despotic image. Which is why images can now be so powerful precisely because they are caught in a fatal miasma of powerlessness before the ocular deficit disorder of the bored eye. The despotic image may demand attention as its precondition for existence, but the bored eye is seductive because of its refusal to provide any sign of lasting interest. A love affair turned sour. With this predictable result-the increasing ressentiment of the digital image: "Analog is having a burial and digital is dancing on its grave."

## 4

#### CP: Space-faring nations should

#### Establish a unified system of space traffic management modeled after the International Telecommunication Union

#### Collaborate on techniques to track and display the location of objects in real time and AI to automate debris-avoidance maneuvers

#### The United States Federal Government should:

#### Shift responsibility for the Space-Track catalogue to the civilian Department of Commerce, allocating necessary funds

Nature 8/11 [(Nature Editorial Board, peer-reviewed, comprises experimental scientists and data-standards experts from across different fields of science) “The world must cooperate to avoid a catastrophic space collision,” Nature, 8/11/2021] JL

But there are no traffic cops in space, nor international borders with clearly delineated areas of responsibility. To avoid further damage, it’s crucial that satellite operators have an accurate and up-to-date list of where objects are in space. At present, the main global catalogue of space objects is published at Space-Track.org by the US Space Command, a branch of the military. The catalogue is the most widely used public listing available, but it lacks some satellites that countries — including the United States, China and Russia — have not acknowledged publicly. In part because of this lack of transparency, other nations also track space objects, and some private companies maintain commercially available catalogues.

Rather than this patchwork of incomplete sources, what the world needs is a unified system of space traffic management. Through this, spacefaring nations and companies could agree to share more of their tracking data and cooperate to make space safer. This might require the creation of a new global regime, such as an international convention, through which rules and technical standards could be organized. One analogy is the International Telecommunication Union, the United Nations agency that coordinates global telecommunications issues such as who can transmit in which parts of the radio spectrum.

It won’t be easy to create such a system for space traffic. For it to succeed, questions of safety (such as avoiding smashing up a satellite) will need to be disentangled from questions of security (such as whether that satellite is spying on another nation) so that countries can be assured that participating in such an effort would not compromise national security. Countries could, for instance, share information about the location of a satellite without sharing details of its capabilities or purpose for being in space.

One near-term move that would help would be for the United States to complete a planned shift of responsibility for the Space-Track.org catalogue from the military to the civilian Department of Commerce. Because this catalogue has historically been the most widely used around the world, shifting it to a civilian agency could start to defuse geopolitical tensions and so improve global efforts to manage space debris. It might one day feed into a global space-traffic agreement between nations; even the nascent space superpower China would have a big incentive to participate, despite rivalries with the United States. The transition was called for in a 2018 US presidential directive that recognizes that companies are taking over from national governments as the dominant players in space, but it has yet to occur, in part because Congress has not allocated the necessary funds.

On 25 August, the UN Committee on the Peaceful Uses of Outer Space will meet to discuss a range of topics related to international cooperation in space. The UN is the right forum through which spacefaring nations can work together to establish norms for responsible space behaviour, and that should include how the world can track objects to make space safer. It should continue recent work it has been doing emphasizing space as a secure and sustainable environment, which at least brings countries such as the United States and China into the same conversation.

Basic research has a role, too: innovations such as techniques to track and display the locations of orbiting objects in real time, and artificial intelligence to help automate debris-avoidance manoeuvres, could bolster any global effort to monitor and regulate space.

If governments and companies around the world do not take urgent action to work together to make space safer, they will one day face a catastrophic collision that knocks out one or more satellites key to their safety, economic well-being or both. Space is a global commons and a global resource. A global organization responsible for — and capable of — managing the flow of space traffic is long overdue.

No confusion since sataillite systems by companies are able to keep track of who did what that’s the klein 19 and park 17. Turn: Aff makes it worse, because it’s not like these sataillites are gonna go away anyways, and people have been talking about mega constellation for debacdes which means absent check for accident aff trigger extinction.