CHAPTER 2 Portending Danger Earthquakes, Plagues, Wars, and Asteroids

Life threatening situations compel us to embrace Father, Son, and Holy Spirit for all He's worth. Connecting with God is a paramount priority not a superfluous choice or dispensable option. Reality beckons us to reinforce our vital relationship, with God and others, so we will have what it takes to finish strong when the time comes.

This chapter highlights our mortality with historic death tolls and credible threats. It amplifies the urgency we all face, to resolve doubts, manage fears, and address insecurities. Properly understood, these data estimates should motivate us to renounce complacency, abandon indifference, and prepare for the future with informed diligence.

Looking Back as we Focus on the Future

"The farther backward you can look, the farther forward you are likely to see." Sir Winston Churchill

Nine-Eleven

On September 11, 2001, 19 Muslim jihadists assaulted the presumed security of the United States. This attack resulted in 2,986 fatalities and countless physical and emotional injuries. The immediate economic loss surpassed 50 billion dollars. The U.S. stock market lost \$1.2 trillion in value for the week. Besides lives and money, this incident altered the emotional climate throughout the world. It changed the public mindset concerning personal security and vulnerability. Fear and courage as-

sume a new urgency in light of this intrepid agenda for world dominance under an Islamic Caliphate. The events of this day altered our reference point for national and international security.

Hurricane Katrina

On August 29, 2005, Hurricane Katrina devastated a major US city. Katrina's 10.4-meter (34-foot) storm surge breached levees and flooded about 80 percent of the metropolis and neighboring areas. Devastation escalated with hysterical momentum. As of March 7, 2006, this storm had caused 1,422 fatalities and 75 billion dollars in damages.

Tsunamis and Earthquakes

The Asian Tsunami

On December 26, 2004, an earthquake deep beneath the Indian Ocean rumbled a fault line about 15 meters (50 feet) long. The vibrational force wobbled the earth about one centimeter, shortening the length of the day by 2.68 microseconds (about one billionth of a day). The resulting 10-meter (33-foot) tsunami devastated the shoreline of numerous nations. This Asian Tsunami killed at least 229,886 people worldwide. The indirect cost in lives, damage, and disruption remains incalculable.

The deadliest earthquake on record occurred in Tangshan, China (1976) officially killing 255 thousand (others estimate 655 thousand). In 1927, an earthquake in Tsinghai, China killed 200 thousand people; another 200 thousand lost their life in Gansu, China (1920); in the 1923 Kanto quake (Tokyo, Japan) 143 thousand died; in 1948, 110 thousand died in Turkmenistan, USSR; in 1908, Messina, Sicily lost 70 to 100 thousand lives in a combined earthquake and tsunami.¹

Deadlier disasters are possible and probable. Highly concentrated population centers are increasingly vulnerable to hurricanes, earth-

¹ http://earthquake.usgs.gov/regional/world/most_destructive.php (3-18-06)

quakes, and tsunamis. Mass casualties are inevitable along with devastating structural damage.

John the apostle saw a prophetic glimpse of a gigantic earthquake that moved every mountain and island (Rev 6:12-14). He also saw an international earthquake that decimated cities around the world.

And there were noises and thunderings and lightnings; and there was a great earthquake, such a mighty and great earthquake as had not occurred since men were on the earth. Now the great city was divided into three parts, and the cities of the nations fell. ... (Revelation 16:18-19 NIV)

Bubonic Plague (killed approximately 137 million)

So far, death by natural disaster pales in comparison to plagues. In medieval Europe, one bite from a flea infected with *Yersinia Pestis* was fatal. This bacterial disease also spread from person to person through coughing, sneezing, or talking. Whether by insect or human, both modes of transmission were 90 percent lethal in less than a week. Europe experienced three major outbreaks (in the 6th, 14th, and 17th centuries). The Great Plague also known as Black Death destroyed between one-quarter to one-half of the population in Europe within four years (1347-1350). In London, 1,000 people died each week during August 1563. In September 1,600 died per week and in October 800 died per week.

Severe economic disruption and psychological shock led to increased social, spiritual, and political instability. A moral crisis followed as 40 percent of England's clergy died leaving the church understaffed and under trained. An inferior priesthood filled this void, which accelerated abusive religious practices and moral decline. While sources and statistics vary, the Bubonic Plague killed an estimated 137 million people.

An epidemic (sudden disease outbreak) becomes a pandemic when it extends over a wide geographic area and affects a large part of the population. Historians document three major pandemics from the bubonic plague.² The Plague of Justinian (A.D. 541–542) probably originated in Ethiopia. It reduced the population of the eastern Mediterranean by 25 percent. It killed 40 percent of those inhabiting Constantinople (about 10,000 per day at its peak). In A.D. 588, another plague killed 25 million people throughout the Mediterranean (including modern day France).

The Black Death pandemic (A.D. 1347-1351) started in China cutting its population in half (killing between 65 and 123 million). Spreading through Asia, Europe, and Africa it reduced the global population from about 450 million to between 350 and 375 million. Europe lost around 1/3 of its population from about 75 million to about 50 million. Africa lost 1/8th of its population from about 80 million to 70 million.

In 1855, the third pandemic also originating in China, killed more than 12 million people in India and China alone.

Spanish Flu (Killed 30 to 100 million)³

Italian physicians coined the term influenza during the Renaissance.⁴ At the time, they attributed epidemics to supernatural influences. *Influenza coeli* means influence of the heavens or stars. *Influenza del diavolo* means influence of the devil. Before widespread vaccinations, seasonal influenza normally accounted for 250,000 to 500,000 deaths worldwide. Deaths in the USA averaged 36,000 annually. Annual flu vaccines are significantly reducing these mortality rates.

The fast moving Spanish Flu only lasted 18 months, peaking within 2 to 3 weeks in each city. It affected 20% (1/5th) of the world's population from 1918 to 1920. Mortality from this pandemic was unprecedented

² http://en.wikipedia.org/wiki/Bubonic_plague (1-23-08)

³ US Department of Health and Human Services estimate 30 to 50 million; http://1918.pandemicflu.gov/the_pandemic

⁴ Howard Markel, MD, PhD, Why Pandemic Influenza Is So Frightening: A Look Back At 1918 In The Hope Of Inspiring Informed Concern For The Present And Future, Medscape Public health & prevention, 2006;4(2).

killing up to 5% of the human race. With an attack rate of 25% to 50%, it killed over 2% of those stricken.⁵ In contrast, seasonal influenza has only attacked from 5% to 20% with a mortality rate less than 0.1%.⁶

Worldwide mortality estimates for Spanish Flu varies from 30 to 100 million people. Unlike seasonal influenza, which affects the elderly and very young, this outbreak proved most deadly for individuals between 20 and 40 years of age. Twenty-five million perished during the first 25 weeks of Spanish Flu while AIDS killed about 25 million during its first 25 years.

Pneumonia was the primary killer of this Category 5 virus. Skin turned bluish purple (cyanosis) from intense air hunger. A massive inflammatory response (a cytokine storm) generated enormous quantities of bloody froth in the lungs. Victims suffocated within 24 to 48 hours of developing symptoms.

It struck about 28% of the United States population of 105 million, killing 500 to 675 thousand (including 195 thousand in October 1918). In Nome, Alaska, 60 percent of the Eskimo population died from the virus. Without an effective treatment, a similar pandemic would kill about 1.8 million Americans. According to the US Centers for Disease Control and Prevention, this estimate represents a case fatality ratio of 2.2 based on 2007 population estimates. The fraction of infected people who die in a pandemic constitutes the case fatality ratio.

⁵ Markel, *Why Pandemic Influenza Is So Frightening*, Medscape Public health & prevention, 2006;4(2).

⁶ Markel, Why Pandemic Influenza Is So Frightening, Medscape Public health & prevention, 2006;4(2).

⁷ http://www.medscape.com/resource/influenza (2006)

⁸ Spanish flu data From Wikipedia except where noted http://en.wikipedia.org/wiki/Spanish flu (6-20-06)

⁹ Marc Lallanilla, Spanish Flu of 1918: Could It Happen Again?

http://abcnews.go.com/Health/Flu/story?id=1183172&page=1&CMP=OTC-RSSFeeds0312, (6-20-06)

¹⁰ The US Centers for Disease Control and Prevention, guidelines for flu pandemic survival.

Entire villages in Alaska and southern Africa perished from Spanish Flu. In Britain, 200,000 died. In France, more than 400,000 died. In Australia, an estimated 10,000 people died. In the Fiji Islands, 14% of the population died during two weeks. Spanish Flu infected over 80 percent of the Samoan population and killed 22% in Western Samoa. Many of the survivors died from starvation because they lacked the energy to feed themselves. In India, an estimated 5% of India's population died (17 million). Almost 22% of Indian troops who caught the disease died.

In Spain, this flu allegedly killed 8 million in one month.¹¹ Unaffected by the prevailing World War 1 censorship, Spanish newspapers were among the first to report fatalities (hence, the label "Spanish Flu").

Strong evidence from a reconstruction of the Influenza A virus (subtype H1N1) suggests that birds passed it directly to humans.¹² This flu did not mutate from within the pig immune system like the Asian flu of 1957 and the Hong Kong flu of 1968.¹³ On March 11, 1918, military cook Albert Mitchell reported flu-like symptoms at the infirmary in Camp Funston, which is now part of Fort Riley, Kansas. Within 7 days, the influenza virus infecting him had spread throughout the USA.

This global disaster killed far more people than combat did during World War 1. Of the U.S. soldiers who died in Europe, half of them fell to influenza rather than to a military enemy. Flu symptoms rendered entire regiments too weak to fight. This mutated bird flu affected both sides, out-killing soldiers faster than their own weapons could. World War 1 troop deployments helped export this virus around the world.

Chaos erupted in many communities as social structures disintegrated. Influenza hit physicians and nurses especially hard, which resulted

¹¹ http://www.stanford.edu/group/virus/uda/ (6-20-06) Molly Billings, The Influenza Pandemic of 1918, Feb 2005, quoting BJM, 7-13-1918 and 10-19-1918

¹² Various 2005 publications from Nature and Science cited in Wikipedia

¹³ The Bubonic Plague, Far from the deadliest epidemic http://home.nycap.rr.com/useless/bubonic plague/index.html (3-17-06)

in a shortage of medical care. Countless orphans wandered the streets. Steam shovels dug mass graves to dispose of decomposing corpses. Panic drove the enactment of restrictive laws prohibiting public gatherings. Churches closed for over a year.

While most quarantine efforts were unsuccessful, Marajó island (at the mouth of the Amazon River in Brazil), Pacific American Samoa, the French colony of New Caledonia, and Japan prevented widespread death through effective quarantines. All therapeutic measures were ineffective except for transfusing blood (or plasma) from recovered patients into new victims (about 50% effective).

During World War 1, governments had already implemented nationwide restrictions and rations. People generally rallied with a sense of nationalism by accepting new levels of governmental control and authority. The added health crisis allowed public officials to implement widespread restrictions on personal freedom. Primed by fear and wartime propaganda, many sacrificed their liberties willingly.¹⁴

Casualties of War

The militant history of the human race depicts a sadistic legacy of violence and bloodshed. On this precedent, tyrants and terrorists exploit both the frightened and the ferocious. History records the results in graphic detail.

Compiled from various sources, combat statistics stagger the imagination. In the following tables, casualty estimates include combat deaths, civilian atrocities, death from war-related famine and disease, and famine used as a weapon during sieges. Precise totals are difficult to quantify and vary widely depending on the source. In addition, the wounded, captured, and missing in action all experienced poor outcomes since clean water, sanitation, food, shelter, and medical care were insufficient at the battle front.

¹⁴ Molly Billings, The Influenza Pandemic of 1918, June 1997 modified February 2005, http://www.stanford.edu/group/virus/uda/

The take away message from this summary is that God watched behavior that He did not want to see. Creative minds designed weapons of mass destruction. Contending with mixed emotions and conflicting motives, hostile adversaries continue to prepare for battle. Hatred and revenge transform tranquil meadows into gruesome battlefields. While our Heavenly Father seeks multitudes of informed worshipers He finds hordes of inflamed warriors. Nonetheless, we have a window of opportunity to worship on earth, as multitudes worship in heaven.

MILITARY ACTIVITY WITH HIGH CASUALTIES

WAR	Casualties (Millions)	Date	Duration (Years)
World War 2	55	1937-1945	8
Mao in China	40	1949-1976	27
Taiping Rebellion China	20-40	1850-1864	14
Stalin in USSR	20	1924-1953	29
World War 1	15	1914-1918	4
Russian Civil War	8.8	1918-1921	3
Chinese Warlord/Nationalist	4	1917-1937	20
Congo Free State	3	1900-1908	8
Korean War	2.8	1950-1953	3
US Civil War ¹⁵	0.97	1861–1865	4

Casualties in the U.S. Civil War represent 3% of the entire U.S. population including 620,000 soldiers (2/3 died by disease).

Nuclear Weapons

Near the end of World War 2, the United States detonated two nuclear bombs over Japan. The long and short-range impact of these

¹⁵ http://en.wikipedia.org/wiki/American Civil War; (accessed 12-16-06)

weapons devastated the people living in Hiroshima, population 350,000, and Nagasaki, population 240,000.

Location	Code Name	Date	Nuclear Casualties
Hiroshima	Little Boy	1945	140,000
Nagasaki	Fat Man	1945	74,000

Rogue nations and terrorist cells are aggressively pursuing nuclear weapons. Speaking to a gathering of avowed terrorist leaders in 2005, Iran's president Mahmoud Amadinejad said, "Is it possible for us to witness a world without America and Zionism?" He continued, "You had best know that this slogan and this goal are attainable, and surely can be achieved." He "urged Muslims around the world to prepare for the day when "our holy hatred expands" and "strikes like a wave." This outspoken leader vowed publicly to annihilate the United States and vowed to wipe Israel "off the map."

Obsessed with similar ambitions, thousands of radical Muslims consider the United States and Israel to be worthy of destruction. As jihad enthusiasts, they pursue the means to carry out their rage. The age of nuclear warfare presents a credible threat. Since coming to power, Amadinejad has "dramatically accelerated Iran's effort to build, buy, or steal the nuclear weapons necessary to bring about the end of days, in accordance with his Shiite Muslim eschatology."¹⁷

Many Shiites believe they can expedite the advent of their Mahdi by creating global chaos. The Mahdi represents an Islamic messiah figure known as the Twelfth Imam. Shiites prayerfully await the return of this nine-year-old descendent of Mohammed who disappeared during the 9th century. Each day, tens of thousands attend prayers at the Jamkaran

¹⁶ Address to Tehran Conference reported by Iranian Students News Agency, Oct 26, 2005, cited by the Middle East Media Research Institute, Special Dispatch Series No. 1013, October 28, 2005.

¹⁷ Rosenberg, JC, Epicenter: Why Current Rumblings in the Middle East Will Change Your Future, Tyndale House, 2006, p. 111.

Mosque in Qom, 95 miles south of Tehran. They expect the Mahdi to emerge from a well behind this mosque. Shiite Muslims await his appearance to establish Islam as the last standing religion and to secure their dominance.

Various Shiite leaders believe Allah has chosen them to lead Iran in hastening this event by launching a final holy war against Christians and Jews. Technical and material assistance from nuclear powers including Russia brings Iran ever closer to fulfilling its nuclear ambitions. Threats from radical Islam now extend far beyond saber rattling and inflammatory rhetoric. Deploying nuclear weapons through overt or covert terror networks may generate massive chaos on a global scale.

Electromagnetic Pulse (EMP)

Verbatim quote from Wikipedia (accessed 7-3-2011)

An electromagnetic pulse ... is a burst of electromagnetic radiation ... usually from certain types of high energy explosions, especially a nuclear explosion, or from a suddenly fluctuating magnetic field. The resulting rapidly changing electric fields and magnetic fields may couple with electrical/electronic systems to produce damaging current and voltage surges.

In military terminology, a nuclear bomb detonated hundreds of kilometers above the Earth's surface is known as a high-altitude electromagnetic pulse (HEMP) device.

To gain an appreciation of this verifiable threat, read "One Second After" by William R. Forstchen. This sobering novel describes potential material and social consequences in the Continental US after several hostile HEMPs render all electronic devices disabled.

Massive Solar Flares

Verbatim quote from pcmag.com/article2/0,2817,2386623,00.asp (accessed 7-3-2011)

For centuries, solar flares have been responsible for a multitude of earth-bound calamities, from blackouts to disrupted communications to strange lights in the sky. In 1859, the biggest flare on record hit, creating auroras worldwide and interrupting telegraph service for weeks. Considering today's connected world—and our reliance on satellites—a major solar storm could be disastrous.

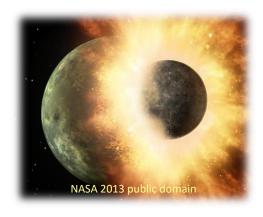
Most solar flares will only cause minor problems with satellites and power grids, but there's always a chance that a monster like the one from 1859 could hit.

"The worst-case scenario is an extreme event," says Michael Hesse, chief of NASA's Space Weather Laboratory at the Goddard Space Flight Center in Maryland. "If it were to happen and we don't take any precautions, it would probably knock out our power grid for an extended period of time and destroy a sizable fraction of our satellite infrastructure."

Shakable Things Will Be Shaken

Without a moment's notice, the spiritual, emotional, and material climate may change. Suddenly, one hurricane converted the metropolis of New Orleans from the "Big Easy" into an anarchistic disaster zone.

Earthquakes, tsunamis, pandemics, famines, and terrorist attacks have all taken their toll. The devastation from another nuclear blast like Little Boy or Fat Man will redefine the context of national security. Yet, none of these natural disasters or man-made catastrophes compare with the destruction that the Bible predicts before the Eschaton.



John saw an asteroid hit the earth with enough force to darken the sun. 18 The events that followed devastated humanity. Transgenic beings emerged, integrating cyber-mechanical assets into deadly weap-

¹⁸ Revelation 9:1-11

ons. Part human, part animal, and part machine these hybrid entities tormented survivors with painful stings.

In this catastrophic context, John saw one third of humanity perish in a horrific battle fought by "200 million" combatants (a controversial biblical figure). English Bible translators render "200 million" from the Greek word murias. 19 The ESV and the Message render the word, "twice ten thousand times ten thousand". Murias represents various numbers in other parts of the Bible including ten-thousand, an innumerable multitude, an unlimited number, or an innumerable host. The NAS uses the word 9 times translating it once as "fifty", twice as "many thousands", three times as "myriads", once as "thousand", once as "thousands", and once as "two hundred million". 20 Consequently, quantifying the exact number of warriors in this battle remains a challenge.

Credible Threats from Asteroids

On July 3, 2006, a potentially hazardous asteroid (PHA) passed exceptionally close to the Earth. In astronomical terms, 268,624 miles away constitutes a near miss. While asteroid 2004-XP14 only came as close as the Moon,



it was discovered just 570 days earlier. Nineteen months did not offer much time to prepare. Due to the relatively close proximity and nearly half-mile diameter of this asteroid, astronomers labeled 2004-XP14 "potentially hazardous". A direct hit could have demolished a moderate size European country.²¹ "If it smashed into the United States, it would

¹⁹ Revelation 9:16-19

²⁰ http://www.biblestudytools.com/lexicons/greek/nas/murias.html (9-29-12)

²¹ "Astronauts Demand Asteroid Collision Plan", Nov 08, 2005 AP; http://www.foxnews.com/story/0,2933,174785,00.html (6-29-06)

probably destroy several states, but not the entire continent said Don Yeomans, who heads the Near Earth Object Program at NASA's Jet Propulsion Laboratory."²² "It would be quite serious, but not a global catastrophe," said Brian Marsden, director of the Minor Planet Center in Cambridge, MA. Scientists predict that a mile-wide or larger asteroid would cause widespread devastation that could threaten civilization, depending on the object's composition, speed, angle of impact, and whether it hit the ocean or land.

John Saw the Wrath of God Erupt with a Trumpet Blast

- 1. Hail and fire destroyed 1/3 of the earth including vegetation (Rev 8:7).
- 2. A great mountain of burning fire plunged into the sea killing 1/3 of the sea life and destroying 1/3 of the ships (Rev 8:8-9).
- 3. A flaming "star" collided with the earth embittering 1/3 of the rivers and springs with a deadly poison (Rev 8:10-11).
- 4. Some event caused a reduction of light by 1/3 from the sun, moon, and stars (Rev 8:12).
- 5. Another "star" hit the earth with such force that smoke from the resulting pit polluted the air and darkened the sun (Rev 9:1-2).

Asteroid 2004-XP14 was unique because it was among the largest to threaten our planet. According to experts, "Besides devastation in the immediate impact zone, another concern is the extent to which debris from the collision would spread in the atmosphere, like ash from a volcanic eruption, possibly dimming or blotting out the sun."²³

NASA's Spaceguard Survey Program, along with others, employs state of the art technology to discover and track new threats. 2004-

²³ http://www.foxnews.com/story/0,2933,201905,00.html (7-4-06)

²² Medium-Sized Asteroid Passes Harmlessly by Earth, AP, http://www.foxnews.com/story/0,2933,201905,00.html (7-4-06)

XP14 represents one of nearly two-thousand Earth-crossing asteroids.²⁴ Between 2003 and 2006, more than three dozen asteroids have come closer than the moon. If big enough, asteroid collisions with the moon also affect the earth. Along with 57 comets, scientists have now confirmed the course of 807 asteroids. An estimated 1,100 asteroids (measuring at least 2/3 of a mile wide) are flying through our inner solar system. Scientists have identified 783 PHAs.²⁵ "Altogether, 3,611 near-Earth asteroids of all sizes have been discovered, with an estimated 100,000 more capable of setting off a tsunami the size of the one that shook the Indian Ocean [December 2004]".²⁶

Experts predict that on April 13, 2029 asteroid 99942 Apophis will pass between the Earth and the Moon. Scientists calculate that it will pass well within the orbit of communications satellites (within 31-thousand kilometers or 19-thousand miles). This 300-meter wide asteroid may come even closer in 2036. Statistics from 2005 data suggest a 1-in-5,500 chance of a direct hit with earth. At about 1,000 feet across, this relatively small asteroid has the capacity to demolish a city the size of New York and its surrounding area.

In 1996, an asteroid discovered only four days earlier passed within 450,600 km (280,000 miles) of Earth. Over 3.2 km wide (one third of a mile), its impact would have produced a 5,000 to 12,000 megaton explosion.

At 7:40 AM, June 30, 1908, an asteroid or comet fragment estimated at only 20 to 100 meters in diameter (65-300 ft) exploded less than 10 km (3-6 mi) above the Tunguska region of Siberia (Krasnoyarsk Krai, Russia). The force knocked down over 60 million trees igniting fires and

http://www.foxnews.com/story/0,2933,201355,00.html (6-29-06)

²⁴ Discovered on Dec 10, 2004 by Lincoln Laboratory Near Earth Asteroid Research (LINEAR)

²⁵ "Asteroid Near-Miss Set to Happen July 3" [2006]

²⁶ http://www.foxnews.com/story/0,2933,174785,00.html (6-29-06)

killing wildlife for more than 2000 sq km (1,200 sq mi). The fiery blast would have killed hundreds of thousands in a densely populated city.²⁷

On June 6, 2002, an aerial explosion detonated over the Mediterranean Sea (between Libya and Crete). Experts attribute this event to a previously undetected asteroid about 9 m (30 ft) in diameter. Generating twice the force of Hiroshima's atomic bomb, the damage from this event would have been catastrophic had it occurred in a populated area.²⁸

A Celestial Shooting Gallery



Warnings from the book of Revelation are not "Chicken Little" fairytales. They serve to motivate followers of Jesus to connect with Him beyond their own strength so they will be prepared when the time comes—when the sky indeed does fall. As the Eschaton

draws near, celestial objects can and will fall out of the sky and collide with the Earth. According to space shuttle astronaut and space station veteran Ed Lu of the B612 Foundation, we "need to start thinking about [asteroid collisions] ahead of time because afterward is way too late. The possible consequences are way worse than your run-of-the-mill natural disasters like earthquakes and tsunamis and hurricanes. As bad as they may be, this can dwarf them." According to the B612 Foundation, "Asteroid and comet impacts have both destroyed and shaped life on Earth since it formed. The Earth orbits the Sun in a vast swarm of near Earth asteroids (NEAs)." The Goal of the B612 Foundation is to significantly alter the orbit of an asteroid, in a controlled manner, by 2015. B612 is the asteroid home of the Little Prince in Antoine de Saint-

²⁷ http://www.time.com/time/reports/v21/science/asteroid.html and http://en.wikipedia.org/wiki/Tunguska_event (1-3-08)

²⁸ http://en.wikipedia.org/wiki/Eastern Mediterranean Event (1-3-08)

Exupery's child's story *The Little Prince*.²⁹ Rusty Schweickart (Apollo 9 astronaut and co-founder of the B612 Foundation) adds, "We're sitting in a shooting gallery, with hundreds of thousands of these things whizzing around in the inner solar system. So it's just a matter of time".³⁰

Astronauts eventually hope to use nuclear-powered spacecraft as asteroid tugboats. Starting early enough, they could "theoretically" apply a steady force over months in order to nudge killer asteroids away from the Earth (or at least steer them away from highly populated areas).³¹ Present technology however, leaves us vulnerable to fiery cosmic collisions foreseen by John in The Revelation. The wrath of God and the rage of Satan will generate catastrophic events, which are unprecedented.

Jesus emphasized the counterproductive nature of self-preservation in an apocalyptic context. He said, "in the day when the Son of Man is revealed... Whoever seeks to save his life will lose it, and whoever loses his life will preserve it." (Luke 17:30 and 33 NKJ)

As apocalyptic events transpire, connecting with God should dominate our agenda. As the Eschaton draws near, His power should replace generations of weakness. "Finally" the Lord will fortify us with strength to live, love, and influence "in the strength of His might." (Eph 6:10 NAS)

The Progressive Rage of Satan

Besides the gravity of God's wrath, we also contend with Satan's rage.

1. Satan makes war against those who obey God's commandments and hold to the testimony of Jesus (Rev 12:17).

²⁹ http://www.b612foundation.org/

³⁰ "Astronauts Demand Asteroid Collision Plan", Nov 08, 2005 AP

^{31 &}quot;Astronauts Demand Asteroid Collision Plan", Nov 08, 2005 AP

- 2. Daniel saw four beasts, which represent four kingdoms. "The four great beasts are four kingdoms that will rise from the earth." (Dan 7:17 NIV) "He gave me this explanation: The fourth beast is a fourth kingdom that will appear on earth. It will be different from all the other kingdoms and will devour the whole earth, trampling it down and crushing it." (Dan 7:23 NIV)
- 3. John also saw a beast [perhaps a kingdom as Daniel interprets it] from the sea waging war against the saints. With Satanic power, this hybrid kingdom exercised global authority for 42 months while attracting international worship (Rev 13:1-10).
- 4. John saw another beast from the earth speaking like Satan. It deceived the earth by performing great and miraculous signs, causing fire to come down from heaven. Under the threat of death, it forced the earth and its inhabitants to worship the beast from the sea. It also forced everyone to receive a mark on the right hand or forehead, so that no one could engage in commerce without the mark (Rev 13:11-18).

Suppressing the Truth Invites the Wrath of God

For the wrath of God is revealed from heaven against all ungodliness and unrighteousness of men, who by their unrighteousness suppress the truth. (Rom 1:18 ESV)

Severe consequences await those who exchange the truth about God for a lie and worship created deities rather than the Creator.

Therefore God gave them up in the lusts of their hearts to impurity, to the dishonoring of their bodies among themselves, because they exchanged the truth about God for a lie and worshiped and served the creature rather than the Creator, who is blessed forever! Amen. (Romans 1:24-25 ESV)

The following plagues will affect individuals who embrace Satan's deception and worship "the beast".

- 1. Loathsome and painful sores will torment those marked as beast worshipers (Rev 16:2)
- 2. Everything in a blood-red sea will die (Rev 16:3)
- 3. The rivers and springs will turn to blood (Rev 16:4)
- 4. Intense heat from the sun will scorch people who in turn will respond by cursing the name of God (Rev 16:8-9)
- 5. Darkness, pain, and sores will afflict those within the domain of the beast (Rev 16:10-11)
- 6. The Euphrates River will become dry (Rev 16:12)
- 7. A global earthquake will destroy every island, mountain, and city. An extraordinary storm will follow, producing 100-pound hailstones (Rev 16:18-21)

