

2017



## Advanced Survival Technology

Advanced Survival Technology, LLC, is the Leader in Survivability SME, Multi-Hazard Design, Engineering, Consultation, and Construction Management. Offering over 100 years of combined experience, we offer the industry-leading technology and expertise in survivability, sustainability, resiliency, continuity, and protection. We continue to seek and offer the most advanced survival technologies, forecasting technologies, and building systems available around the world, offering hazard mitigation and continuity strategies for any and all necessary applications, including above/below ground or underwater. We are proud to be the leaders in multi-hazard threat mitigation, with our primary focuses on protection, survivability, resiliency, sustainability, self-reliance, forecasting, and innovative energy resources. Our Team is composed of specially contracted and exclusively trained engineers, architects, security specialists, Ex-NAVY Seals and Special Ops, program/project managers, planetary risk experts, and scientists. We pride ourselves as one of the most experienced and versatile companies in the United States and around the world, specializing in the confidential planning, design, and covert construction management of prefabricated & customized shelter systems, hardened & fortified facilities (private, commercial, and military/government applications), CBRNE threat assessment and mitigation, underground and above ground shelter systems, self-sustaining community developments, storm shelters, safe rooms, vaults, tunnel systems, advanced forecasting technologies, advanced fire mitigation technology, miscellaneous fortified/hardened structure applications, site risk assessments and threat evaluations, EMP/HEMP hardening and consultation services (including hardened broadcasting/communication systems), underwater submersible structures and systems, underwater submarines and personal vehicles (including full operations training), existing structural blast/ballistic fortification, armored vehicles, military and civilian firearm safety and training/survival skill training, and emergency/disaster preparedness supplies.

*Julie Kramer*  
President  
2017

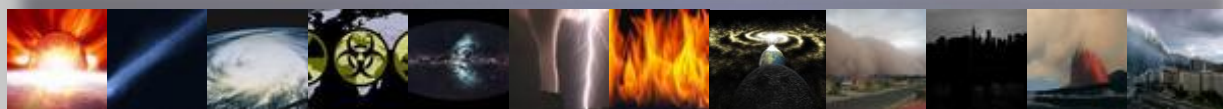


# Advanced Survival Technology, LLC

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# Advanced Forecasting Technology



We are proud to announce a collaborative and exclusive partnership between Advanced Forecasting Corporation and Advanced Survival Technology, to bring you Advanced Forecasting Technologies, the global leader in Advanced Forecasting information, mitigation, and consultation services!

Advanced Forecasting Technologies is recognized as the leader in global medium-term to long-range weather prediction and Meteorological Intelligence, as well as a predictive risk advisory firm and think-tank in Planetary Risk Management, while being able to offer advanced mitigation solutions. We pride ourselves in being a leader in delivering tailored solutions in forecasting and mitigating weather volatility and the impact of global climate change, the threat of earthquakes and other planetary disasters, and in quantitative consulting surrounding the growing dangers of terrorism.

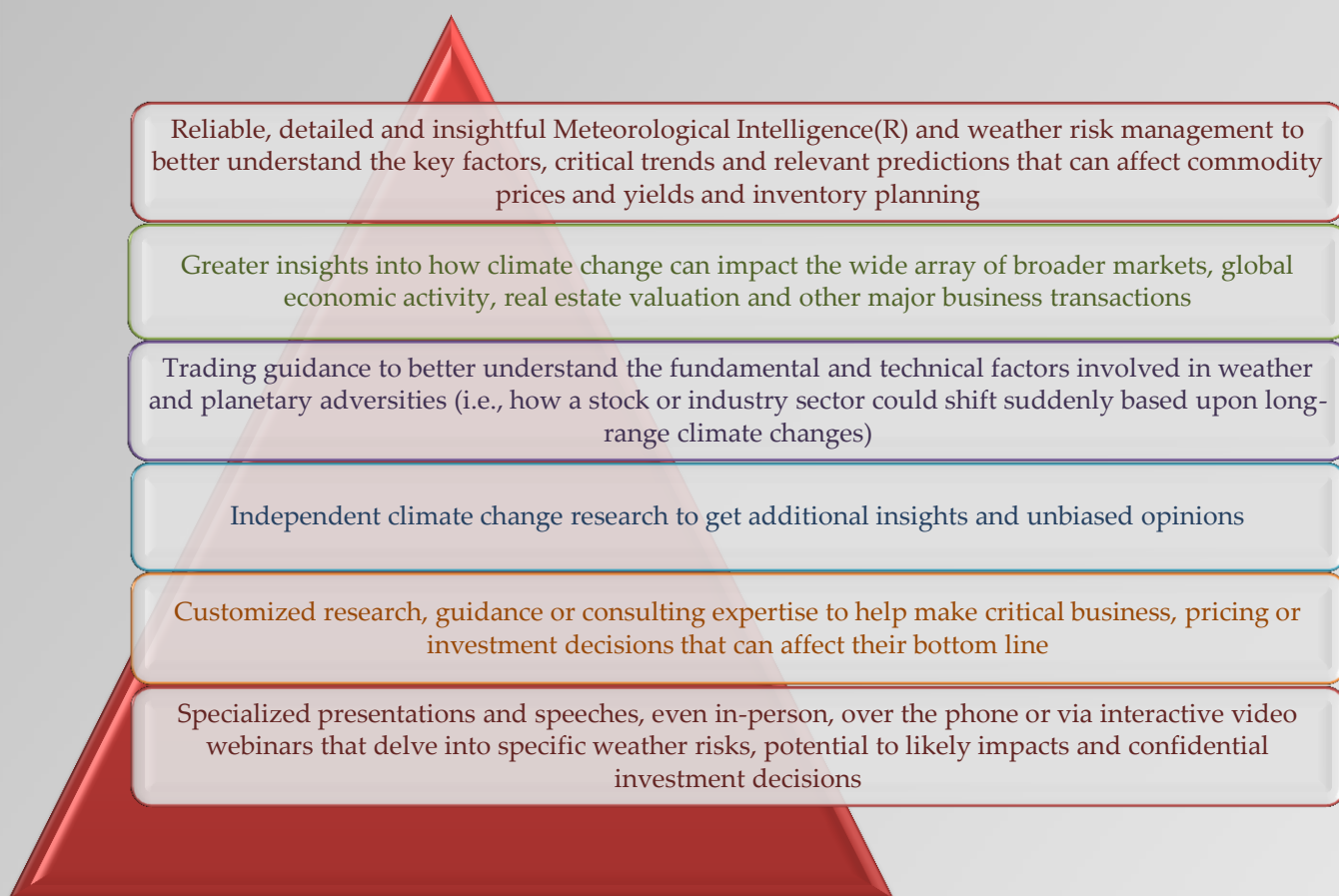
Our Team provides customized know-how, insights and assessments, educational workshops, conferences, and seminars to dozens of different industries, and to companies ranging from individual ownership to global corporations with assets in excess of \$500 billion, as well as to emergency planners, investors, civilians, and government entities/organizations that are affected by any natural-based threats, human-caused perils, and irregular economic complexities.

Experienced consultants on our Team include meteorologists on the cutting edge of business-meets-weather, advise clients on vulnerability assessment 'hotspots'. Our specialists in different fields provide high-resolution quantitative intelligence and expertise in advanced catastrophe risk analysis, both in the USA & internationally, in order to better achieve optimized security planning and business continuity.

We welcome the opportunity to carefully listen in confidence as to how planetary risks, both from Mother Nature and human-made, affect your company. Advanced Forecasting Technologies can provide the right solution for you ...allowing you to better assess and contain the risk and potential impact of future calamities that could unexpectedly affect your bottom line and livelihood.

As weather risks and planetary threats increase, the Advanced Forecasting Team is proud to have provided accurate, quantitative intelligence to a wealth of businesses since 1993. This list is comprised of transnational corporations, hedge funds, investment banks, and other trading companies, government NGOs, all the way to land developers/ farmers, disaster risk managers, "Mom-n-Pop" stores, strategic planning directors, emergency management agencies, and other individuals who seek an "edge".

The bottom line is that in business, we all need to make successful decisions. Our clients, current and prospective, come to Advanced Forecasting Technologies looking for one or more of the following:





# Breakdown of Our Clients

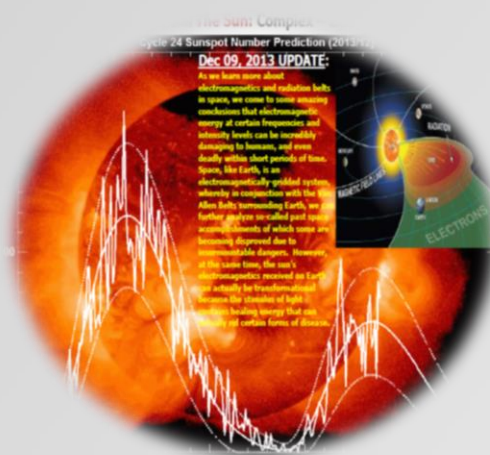
**\*\* We strictly honor client confidentiality and therefore do not name specific business names \*\***

- Climate Change & Business Continuity Industry (bringing together many folks across many disciplines)
- Agricultural operations (dairies, ranchers — small to large)
- Commodities analysts
- Commodities futures traders (CTAs)
- Conference managers
- Construction firms
- Economists
- Financial managers
- Governmental agencies
- Hedge funds
- Investment banks
- Managed futures funds
- Manufacturers
- Producers (agricultural to chemicals to energy)
- Purchasers
- Raw materials wholesalers & distributors
- Research departments
- Speculators
- Traders
- Utilities
- Wealth management companies



## Sample Services Offered By Advanced Forecasting Technologies

- Meteorological Intelligence Center (Forecast Products, Advanced Maps, eAlerts)
- Weather Threat Business Continuity
- Commodity Risk Prediction / Weather Bias Price Forecasts
- Solar and Planetary Risk Management
- Risk Connect Intel / Risk Consulting
- Conferences / Presentations
- Video Teleconferencing / Webinars
- Research
- Miscellaneous Consulting Services



## Stunning Innovative Results

Ground-breaking research often starts with a perplexing question: if the moon's gravitational force affects Earth's tides, then is it possible that the solar wind or an electromagnetic force field could affect a chief component of atmospheric motion or even activate a series of earthquakes? And so a journey, a quest for reaching new understandings, begins. Our view may be different, but we are continually seeing astounding, breathtaking results.

There has been a documented trend toward greater damages and losses caused by continually increasing atmospheric “shifts”. Financial losses due to weather adversities amass into the billions of dollars each and every month. AFC is increasingly gaining a superior understanding of the complex mechanisms in the atmosphere and their relationship with the oceans, the sun and natural energy grids. The firm’s atmospheric scientists, modelers and information technology specialists maintain an excellent track record in predicting atmospheric irregularity more accurately and within longer windows of time. Our Team’s technology includes neural network toolboxes, artificial intelligence, genetic algorithms, innovative programming, numerical simulation techniques, teleconnections and mathematical mapping to advance weather forecast skill, bringing stunning results to a myriad of markets, industries, corporations, NGOs and investors alike.

### Weather Risk Impact Dynamics

Essentially, 90% of your most common weather (adding the 20% and the 70% of the two bottom parts of the pyramid) will likely be benign or without major problems, and will only on average cause 10% impact to your financial results.



However, the top 10% of your worst adverse weather (adding the 3% and the 7%) will bring about 90% of your damage and financial losses. Obviously, the top 10% of the worst weather does not happen very much, but when it comes you will want to know about it and you will want the greatest lead time and highest accuracy possible.

That is why so many institutional clients turn to Advanced Forecasting Technologies.

### Scientific Excellence

Advanced Forecasting Technologies is dedicated to serving many risk needs, and is committed to delivering a solid return on investment in planetary intelligence. Given its extensive disaster prediction expertise, pioneering tools, and enthusiastic approach to research, our AFT Team is able to provide cutting-edge products that enable businesses to make swifter, more accurate decisions. Advanced Forecasting Technologies continues to strive for distinction in its line of products and customer care with a ‘kaizen’ approach. Its mission’s principles and corporate philosophy revolve around solution-oriented excellence, accommodating all specific requests and delivering on-time worldwide twenty-four hours a day.

In essence, with each new sunrise, Advanced Forecasting Technologies makes a positive difference in any situation of short-term critical adversity to long-range seasonal planning. The organization exists to build helpful, positive, long-term relationships characterized by integrity and professionalism. The different teams around the world value each opportunity to serve any local to global planetary risk management need and look forward to Crossing New Thresholds® with you ...certainly before the next disaster.



## Our Commitment to You

There has been a documented trend toward greater damages and losses caused by continually increasing atmospheric “shifts”. Financial losses due to weather adversities amass into the billions of dollars each and every month. Our Team is increasingly gaining a superior understanding of the complex mechanisms in the atmosphere and their relationship with the oceans, the sun and natural energy grids. Our Team's atmospheric scientists, modelers, and information technology specialists maintain an excellent track record in predicting atmospheric irregularity more accurately and within longer windows of time.

Due to our exclusive partnership, not only can we deliver on our commitment for such vital information and resources, but we can combine our synergies, technologies, and subject matter expertise to provide future mitigation solutions for continuity, resiliency, sustainability, and survivability.

Advanced Forecasting Technology's **superior** technology includes neural network toolboxes, artificial intelligence, genetic algorithms, innovative programming, numerical simulation techniques, teleconnections, and mathematical mapping, in order to advance weather forecast skills, bringing stunning results to a myriad of markets, industries, corporations, NGOs, and investors alike.

Overall, our mission and vision as well as its corporate pillars have been on a continual journey of innovation, freedom, and transformation — a path of incremental and continuous improvement - symbolizing fertility, individuality, and metamorphosis to dare higher levels in both physical and metaphysical realms. This is our commitment to you.



**AFCRiskConnect™ Intelligence**

# Security Solutions/Threat Assessments/Secured Site Analysis

The *Advanced Survival Technology Team* represents the best and brightest security assessment professionals in the world today. With over 100+ years of combined experience, we have the talent and specific engineering expertise, equipment, supplies and specialized components to immediately commence work and complete a quality project in the shortest possible time.

At *Advanced Survival Technology*, our mission is to provide a confidential and professional, "ALL HAZARDS" comprehensive approach to building security evaluations - encompassing the full spectrum of Threat Assessments, Asset Assessment and Recommended Countermeasures and Components.

## Security Assessments

- Threat Hazard Assessment
- Full Site/Structure Risk Assessment
- Vulnerability Assessment
- Countermeasures
- Asset Value Assessment
- Hardened Assessment/Recommendations



## Risk Control & Risk Management

Concepts of risk control and management are central to the Advanced Survival Technology evaluation and planning process. Risk control strives to minimize or eliminate to the extent possible each identified risk through the application of appropriate security strategies or "Hardening" measures. Risk management, in contrast, evaluates and quantifies identified risks, then prioritizes the requirements for security measures based on the assets critical vulnerabilities.

The Advanced Survival Technology Security Assessment Team identifies risks that can be controlled. The client determines which ones to accept, transfer, or avoid, taking into account that security measures or "Hardening" required to reduce or eliminate some risks might not be cost-effective or appropriate.

The risk analysis phase of an Advanced Survival Technology security assessment is based on the asset vulnerabilities or exposure identified during the vulnerability analysis. A loss event probability and impact assessment is carried out to determine the existing asset exposure or loss and its potential effects on the organization/company/structure.



### Security Risk Chart



Our Advanced Survival Technology Assessment Teams are led by ex-Navy Seals, Military Special Ops, and Military Delta Force professionals that consult for the US Department of Defense, Department of Homeland Security, as well as other government entities.

The Advanced Survival Technology Team offers the world's finest security assessment professionals, structural engineers, blast engineers, EMP engineers, and state-of-the-art Chemical, Biological, Radiological, Nuclear, and Toxic detection system engineers and system providers.

#### CBRN Threat Mitigation

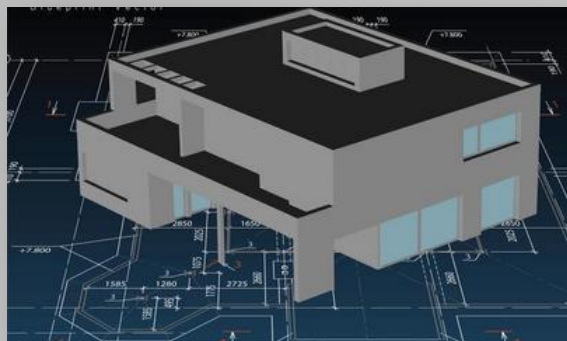
By their very nature, shelters and underground bunkers require highly specific life safety and threat mitigation features in order to perform their primary mission: protecting your family. This is not a job for the common contractor. Success requires a unique expertise in WMD's, blast effects mitigation, adversarial assaults, shelter dynamics, threat mitigation measures, advanced HVAC systems, structural steel/concrete and earth work operations.

We mitigate various threats by employing a Multi-Hazard Engineering methodology that not only recognizes individual hazards/threats sequentially but also address all hazards/threats simultaneously as a problem of optimization under constraints. The facility/shelter/building can be protected against a wide range of threats including WMD's, forced entry, armed assaults, climate change, 2014 Threat Event Scenarios, biological, radiological, explosive (CBRE) agents, air-blast, ground shock, penetration, fragmentation and damage to the structure and equipment due to explosive loading.

As Professional Architects, Engineers, Security Specialists, Project Managers, Military, Special-Ops, and Ex-Navy SEALs with over 100+ combined years in shelter construction experience, our approach methodology is to professionally and confidentially complete the designs, and covertly construct the facility while ALWAYS working in the best interest and confidentiality of our Clients.



# Underground and Above Ground Shelter Systems



At Advanced Survival Technology, we design our civilian Bomb/Blast/Ballistic Shelters primarily for nuclear weapons of medium to large size, but also secondary for chemical, biological, and radiological dispersion devices and conventional weapons, also known as Weapons of Mass Destruction or WMD's. Although the design and dimensions are principally determined for nuclear weapons it can be established that a highly functioning nuclear bomb shelter also offers excellent protection against chemical, biological, and conventional weapons along with most types of WMD's. In addition, with the ever increasing importance of having EMP (Electro-Magnetic pulse) protection of Shelters, and other "HARDENED" structures, we provide State-of-the Art EMP/HEMP mitigation both in terms of Bomb/Blast Shelter design and engineering, which incorporates EMP shielding, and the usage of specialized EMP/HEMP mitigation components.

The extent of protection for private civilian underground bomb shelters will, in general, be determined by Blast Overpressure measured in "Bars", (where 1 Bar equals 15 psi of applied Blast Overpressure) and initial radiation mitigation. Protection against the penetration of chemical, biological, and radiological weapons is achieved by constant positive internal air pressure maintained by artificially filtered ventilation and air-locks. At Advanced Survival Technology, we use only Military Grade NBC air filtering systems, blast doors, blast valves, and related shelter components. Our standard Blast buildings are rated for 8.0 psi. We can also custom-engineer our product at higher psi ratings to meet your unique building requirements.

## **Blast and Ballistic-Resistant Buildings**

Advanced Survival Technology has a Team that is uniquely equipped to custom design, engineer, and manufacture blast-resistant buildings to meet your most detailed specifications. Offering pre-fabricated steel options, pre-fabricated concrete, or cast-in-place concrete options. We offer a generous list of custom features, and we encourage you to visit with our sales team about any alternative options exclusive to your needs. The quality of our systems is unsurpassed, as is our dedication to meet the confidential and diverse needs of our clients.







### Planning a Bomb Shelter

To properly plan, design, and construct a customized underground or above ground shelter system for our individual clients we must first:

- **Identify the threat levels; blast overpressure, radiation, etc**
- **Identify the assets to be protected; people, possessions, food, water, etc**
- **Determine the length of the shelter duration**
- **Thoroughly examine the site and geotechnical conditions**
- **Be aware of all regulatory agencies having jurisdiction**

Once this information is assembled a Protection Program and Cost Model Budget is then submitted to the Client for their review and approval.

### Fallout / Storm Shelters & Safe Rooms

At Advanced Survival Technology, we offer a wide range of options for Multi-use Underground Shelters, as structure that offer the necessary protection from Nuclear, Biological and Chemical disasters or emergencies such as hurricanes and tornadoes. As a rule of thumb, a Fall-Out Shelter vs a Bomb Shelter should be considered only if the installation location is greater than 50 miles (80 km) from a Nuclear detonation point. Advanced Survival Technology Fall-Out Shelters are designed by certified structural engineers and meet or exceed F.E.M.A. (Federal Emergency Management Agency) guidelines.



All Shelters are Approved by FEMA and the U.S. Department of Homeland Security Standards

All Shelters are designed by our EXPERIENCED Multi-Hazard Structural Engineers

Custom Designs for Private/Residential, Commercial, Military, Parks/Community Centers, Schools, Financial Institutions, Law Enforcement/Fire Departments, Town/City Halls

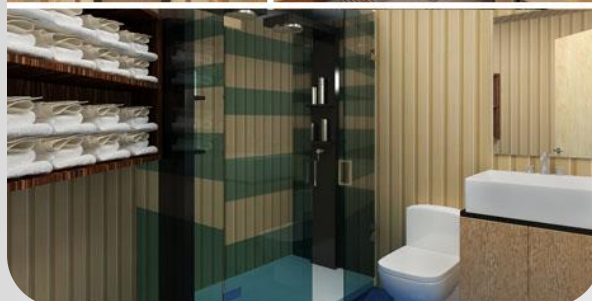
### About Our Bomb/Blast Shelters:

- Permanent & Modular Systems Available (pre-fabricated steel and concrete options)
- Residential, Commercial, Industrial, Government/Military Applications
- Financing Available for some models
- Pre-Fabricated or Custom Designed to Client Specs
- Covert Construction & Installation
- Underground & Above Ground Systems Available



### Multi-Family / Community / Dome Technology Structures

At Advanced Survival Technology, our underground multi-hazard community shelters are completely self-contained, high pressure structures, designed to protect 8 -200+ adults for 6 months to 5 years. Multiple shelters can be connected into underground communities to increase capacity and include additional amenities to meet our clients specific and confidential survival needs. We offer long-term sustainable food supply solutions for both underground and above ground survivability such as hydroponics, aquaponics, fish farming, greenhouses, and packaged food supplies with a 25-year shelf life.



# Fortified and Hardened Structures

## Private / Residential

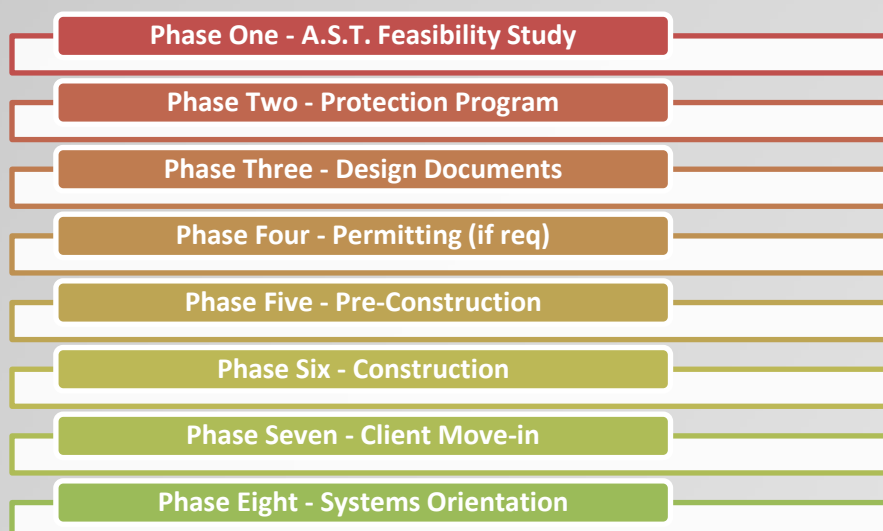
### Balanced Survivability

Because it is impossible to protect against all threats and hazards, adopting a “balanced approach” in designs that considers intended functions, threat mitigation, and budget, is imperative. This is where Advanced Survival Technology's experience and know-how separates us from the general purpose Architects and Engineers. Our experience has shown here is no one-size-fits-all and there is no formula of security features and programs that will ensure 100% safety against all violent attacks or natural disasters. Designers and owners must understand the limitations of designed facilities and proposed countermeasures. Mitigating measures or countermeasures are specified to meet particular anticipated threats and determine the best possible means for survivability, sustainability, and continuity.

At Advanced Survival Technology, we design your facility to achieve a Balanced Survivability, ensuring that no one system or component is the "Achilles heel." No matter if it is Nuclear, Biological, or Chemical war, armed assaults, or any civilization altering scenario, our experienced and highly specialized team of engineers, scientists, and fabricators can confidentiality design and covertly construct your facility, efficiently and cost effectively, anywhere in the world.

### Risk Assessment

Advanced Survival Technology's first steps in determining the feasibility of constructing a “HARDENED” home in a specific location is to completely understand our Client's priorities, goals, and budget; thoroughly examine the site and its surroundings; be fully aware of all regulatory agencies having jurisdiction; and to conduct a full Risk Assessment. This is completed using our proprietary "Confidential Client Interview Form". Once this information has been assimilated and agreed upon, the development of the A.S.T. Feasibility Study can be completed and submitted. This study is a condition precedent to establishing Program of Requirements, which then allows the Client to modify the Program or continue to the next phases. The planning, design, and construction of a hardened structure is technically specific and complex and is executed through the following phases:



While each risk situation is unique and requires a methodical threat assessment tailored to the client's needs, Advanced Survival Technology's experience mitigating across a spectrum of threats has enabled us to design both permanent and modular, configurable systems that enables survivability in even the most demanding scenarios.

At Advanced Survival Technology our fortified structures can range from a single safe room to a multi-building self-sustaining, secured, survival community. However, they are principally designed as our Client's private residence or VIP house. Simply stated, your home is now your secured castle!



In order to prepare for anarchy, economic collapse, armed assaults, terrorist attacks, severe weather phenomenon, planetary risks, and other miscellaneous disasters and emergencies, our Team will work with you to maintain the highest level of preparedness possible. Given limited resources, managing the risk posed by major events is imperative. In an atmosphere of changing and evolving threats, resilience, sustainability, and preservation are the cornerstones, and are vital in building structures that will enable the Client to prevent, defend against, respond to and recover, from a wide range of Major Threat Events. We address these challenges by employing a Multi-Hazard Engineering methodology that not only recognizes individual hazards and threats sequentially but also address all hazards and threats simultaneously as a problem of optimization under constraints.

The facilities and structures can be protected against a wide range of threats including forced entry/assaults, climate change, chemical / biological / radiological / explosive (CBRE) agents, air-blast, ground shock, penetration, fragmentation and damage to the structure and equipment due to explosive loading.



Along with the Client's particular living, functionality, and storage requirements, the designs also incorporate active offensive and defensive components, and mechanical responses to reduce the effectiveness of any given threat while providing for individual and family long term living requirements.

Fortified structures are special, and so are the people who choose them. At Advanced Survival Technology, confidentiality

of ALL PROJECTS is paramount. We serve as our Client's agent, representing their best efforts by professionally and stealthily implementing a design/build program to meet any Threat Event.

Advanced Survival Technology's team of experienced structural engineers and designers are available to review and design solutions to fortify/harden residential structures to mitigate a wide variety of attacks or disasters. The new hardening/fortification can be incorporated into new Residential designs or through upgrading an existing private home to client specific requirements.

A fortified home that is safe and secure against a variety of threats is an excellent way to protect your family and your investments. ***Learn more about our Advanced Defender Building Systems in the Fortified and Self-Sustainable Residential Homes & Community Development Section of this brochure.***

Let us assist you today, with the best "insurance" you will ever purchase...

## PROTECTION & SAFETY FOR YOUR FAMILY!



# Commercial and Industrial Applications



Advanced Survival Technology offers highly specific engineering expertise for any commercial or Industrial application. Commercial structures face differing levels of risk associated with CBRN threat, climate change and natural events, accidents or intentional (criminal or terrorist) events. The development of effective and efficient client/project-specific mitigation strategies requires the use of Risk Assessment. Risk is a combination of credible threats, vulnerability and consequence. Certain geographical areas have particular risk factors that affect facility capability need and placement such as population density,

presence of critical infrastructure, location in a high terrorist threat or high natural disaster areas and military base/complex proximity.

Advanced Survival Technology employs the latest defense and approved sensory and filtering equipment to protect commercial and government buildings.

## The CBRN Threat Mitigation and Assessments

Counter-terrorism experts within the DHS, CDC, and NIOSH are vexed by commercial and public building vulnerability. An office building has a high concentration of human life encapsulated in a small space; an ideal target for today's merciless terrorist. The experts repeatedly identify the HVAC system as the most likely distribution point for a toxic attack.



Advanced Survival Technology works with only industry leading and proven technologies to provide the most accurate Threat Assessments and Advanced Protection Systems against CBRN threats. From Metropolitan Commercial Development Projects to PetroChemical and Nuclear Power Plant Threat Mitigation needs, we have the most advanced and cost effective solution on the market. Contact your local A.S.T. office to review your commercial application requirements.



# Military and Government Applications

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Our Hardened Military Structures are designed to meet or exceed current Mil Spec and NATO Third generation standards. Third generation NATO hardened Aircraft Shelters are designed to meet NATO AASTP-1 and Mil Spec 188-125-1.

Hardened military structures are designed to withstand a wide range of threats including forced entry, CBRN (Chemical, Biological, Radiological and Nuclear) attacks, ground shock, penetration, fragmentation, and damage to the structure and equipment due to explosive loading.

Our balanced survivability approach ensures that no significant facility failure mode has been overlooked.



**The Advanced Survival Technology Team of specialized and certified design, engineering, and construction specialists can provide Department of Defense designs or building services for any type of military facility or related requirement, including (but not limited to):**

- Deep Earth Command and Control Bunkers
- NATO "Third Generation" Direct Attack Aircraft Hangers
- Earth Cover Magazines (ECM's)
- Hardened, Above-ground Blast & Ballistic Resistant Facilities
- EMP/HEMP Protected Facilities

The Advanced Survival Technology Team can provide the following services and products:

- Risk/Threat Assessments
- Architectural, Mechanical, Electrical, Structural, Blast, and Ballistic Engineering
- Shelter Dynamics & Programming
- Fortification Designs & Placement
- EMP/HEMP Mitigation Engineering
- CBRN (Chemical, Biological, Radiological & Nuclear) Air Filtration Systems
- Blast Doors, CO<sub>2</sub> Scrubbers & Oxygen Machines, and Miscellaneous Specialized Shelter Equipment
- Existing Facility Assessments & Recommendations

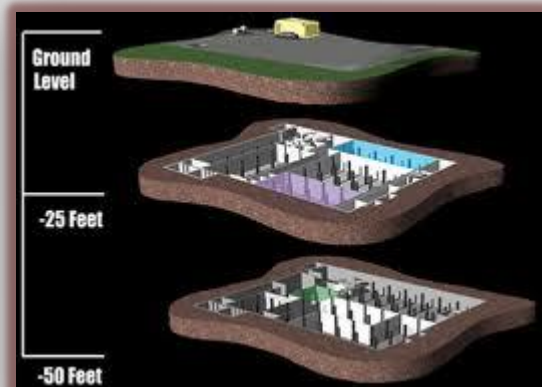
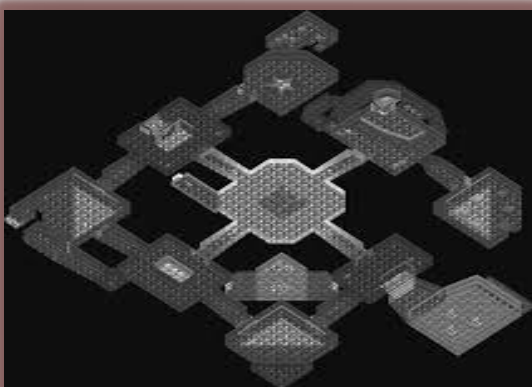


The Advanced Survival Technology Team designs structures according to UFC 3-340-01: Department of Defense Unified Facilities Criteria: Design and Analysis of Hardened Structures and UFC 3-340-02: Department of Defense Unified Facilities Criteria.



- Military grade pre-fabricated steel shelter systems. All designs meet or exceed the (USACE) United States Army Corps of Engineers design standards and are in accordance with the (IBC) International Building Code.
- Complete design and specifications for Command and Control Centers, Continuity of Government Facilities, Communication Centers, and similar Facilities.
- Full Blast Engineering and Mitigation designs.
- Full Facility HEMP shielding designs and complete specialized component protection.
- Military grade CBRE (chemical, biological, radiological and explosive) equipment including air filtration, blast doors, blast valves, etc.
- Military grade pre-fabricated steel shelter systems and reinforced concrete systems (permanent and modular systems available)

Special designs are available to mitigate for multiple types of missiles and munitions impact.



## Structural Hardening of Buildings and Structures

Innovative structural solutions are needed to harden and fortify new or existing commercial structures to accommodate client priorities. Advanced Survival Technology has the required experience to design, engineer, and manage the construction of these specialized projects, offering complete turn-key services.

The Advanced Survival Technology's Engineering Team provides the following building “hardening” services to meet your damage mitigation expectations:

- **Blast mitigation design and construction for new or existing commercial buildings**
- **Analysis of structural building elements**
- **Site and building assessments of a commercial building from a wide variety of experts**
- **Security and Site Threat Assessment, including building “hardening” recommendations**



### Building “Hardening” Process:

The Advanced Survival Technology Team provides a detailed survey to determine and record current structural integrity, barriers, detection systems, operations, logistics, security requirements, roads, landscaping, and other features.

This initial site survey information must be integrated and coupled with the appropriate structural “Hardening” design and planning to provide the necessary client specific level of protection (see chart below) for critical asset protection. **Levels of Protection for Commercial Buildings:**

| Level of Protection   | Potential Structural Damage  | Potential Injury   |
|-----------------------|--|--|
| <b>Below Standard</b> | Severely damaged. Frame collapse/massive destruction. Little left standing   | Majority of personnel suffer fatalities  |
| <b>Very Low</b>       | Heavily damaged. Onset of structural collapse: Major deformation of primary and secondary structural members, but progressive collapse unlikely. Collapse of non-structural elements         | Majority of personnel suffer serious injuries. There are likely to be a limited number (10% to 25% fatalities) |
| <b>Low</b>            | Damages - unrepairable. Major deformation of non-structural elements and secondary structural members and minor deformation of primary structural members, but progressive collapse unlikely | Majority of personnel suffer injuries. There may be a few (<10%) fatalities                                    |
| <b>Medium</b>         | Damaged-repairable. Minor deformations of non- structural elements and secondary structural members with no permanent deformation in primary structural members                              | Some minor injuries but fatalities are unlikely  |
| <b>High</b>           | Superficially damaged. No permanent deformation of primary and secondary structural members and non-structural elements  | Only superficial injuries are likely   |

## Features

### High Speed Detection and Shut Down in Seconds

- Critically providing detection-to-HVAC shutdown in seconds.

### Elimination of False Positives

- Redundant design coupled with proprietary firmware and software algorithms generate a 99.7% confidence level.

### Broad Spectrum Sensing

- Providing radiological library of up to 120 isotopes and a huge chemical spectrum offering the most reliable sensing available today.

### Automated Response

- Eliminating human intervention for HVAC shutdown. Robust Design, Field-proven Technology – Built for the harsh building environment using base technologies which have been in use every day for decades.

### Flexible, Modular "Plug and Play" Design

- Creating a backbone detection system that is simple to install into any architecture, and inexpensive to maintain and upgrade.

### 24/7/365 Remote Monitoring

- Providing first responders with useful real time data to expedite a safe building rescue.

### Multi-level Security Protection

- Multi-key access and continuous real-time monitoring insure that your system is up and operating accurately.

### Developed by Experts

- Created by building infrastructure professionals and experts in nuclear and chemical detection.

### UL 508A Compliant

- UL 508A Compliant SAFETY Act Designated Technology

# Fortified and Self-Sustainable Residential Homes & Land/Community Development

## The Advanced Defender Building System



Advanced Survival Technology is proud to announce a new partnership with Defender Technologies to bring an incredible new patented building technology system to the public and private sectors. We are proud to present the Advanced Defender Building Technology System, offering endless multi-hazard protection capabilities and applications to meet any residential, commercial, industrial, government, or military need.

This building system is focused on protective and resilient construction and self-sustaining community developments. Builders and Land Developers are encouraged to contact Advanced Survival Technology, to participate in our vision for the development of resilient and protective structures as we progress into an ambiguous future for severe weather and planetary risk threats.

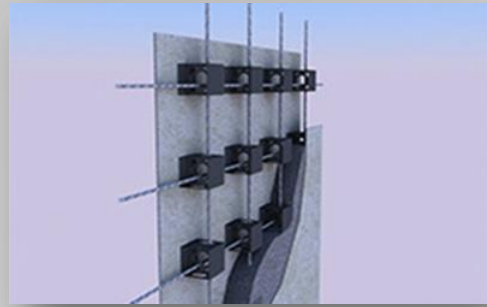
This patented building system is available anywhere in the world, and offers innovative technology that enables the development for structurally engineered applications to withstand hurricane and tornado force winds up to 200 mph, resistance to earthquakes (up to 7.0 on the Richter scale), flying projectiles, mold, fire, carpenter ants, mud slides, and flood/water damage. This building system provides the necessary hazard mitigation for survivability, sustainability, protection, and green energy savings, as well as the added benefits of shorter construction time, labor costs, and possible insurance savings (contact us for more information on whether these insurance savings are available in your area.)

Since the start of the 21st Century, this building technology has been utilized globally to construct over 60,000 units in more than 15 countries with 30,000 additional units scheduled for completion by the end of 2013. While no technology can be rendered "indestructible", our Advanced Defender Building System comes as close as any affordably priced structure can be, and is the wave of the future in the building industry!



### Advantages of the Defender Tech Building System:

- 4-inch (thicker on multi-storied or ballistic/blast resistant structures) concrete reinforced on 16-inch centers with vertical/horizontal steel reinforcement bars.
- 4000 p.s.i. concrete custom-poured to spec on-site (not pre-fabricated or shipped in)
- Tested to withstand 1800 degree Farenheight direct flame for over two hours with no loss of structural integrity - (inquire about our new patented firebreak system)
- Residential, Commercial, Industrial, Government/Military, FEMA, HUD, and Community Development Applications
- Engineered to withstand 200 mph winds
- Exponentially stronger than wood-frame
- Tested to withstand light ballistics (can be engineered and tested to provide heavier ballistic/blast protection needs) to include 9 mm, .45 cal, and M-16. (Bullets did NOT penetrate or compromise the structure, photos available demonstrating these test results at 80 feet)
- Designed to withstand earthquakes
- "Green Construction" (uses up to 75% less trees in construction)
- Extremely Energy Efficient (estimated to use 40% less energy than traditional stick-built)
- Acoustically superior
- Designed to exceed IBHS Fortified Gold Standard which typically carries on a 40%-60% discount on insurance premiums (contact us for more information in your area)
- Does not absorb water (unlike concrete block)
  - Resists Mold
  - Impervious to Termites and Ants
  - Does Not Rot



Over 60,000 homes in 15 nations have been built using this system that is incorporated into our Advanced Defender Building Systems. Known as, DefenderWall™, this system's components have been tested and proven to be the new innovative way to construct structures with protection, resiliency, and sustainability. Best of all, DefenderWall™ systems saves lives and saves on energy costs (green building). Here are a few residential projects that have been constructed utilizing this phenomenal building technology:



Advanced Defender Building Systems can be utilized for residential and commercial construction, and in addition, provides significant construction opportunities with government building applications, such as HUD Housing Developments, FEMA, Defense and State departments, just to name a few. This system can also be utilized for the construction of retaining walls, blast/ballistic resistant structures, in addition to the obvious building of safe homes in tornado alley and hurricane-prone areas.

*We can also incorporate EMP/HEMP mitigation strategies as well as our new Advanced FireBreak Systems that can be remotely activated to protect your structure and surrounding parameters (up to 150 feet). You will find designated sections in this brochure that discuss these additional threat mitigation options.*

### Building Green – Stronger, Safe, Smarter

Our innovative Advanced Defender Building Technology enables our clients to build structures engineered to withstand hurricane and tornado force winds up to 200 mph.

These structures also resist termites, water damage, earthquakes (up to 7.0 on the Richter scale), mold, fire, carpenter ants, mudslides, and fire (also offering additional FireBreak and EMP (Electro-magnetic Pulse) Protection options found in the lower portions of this brochure.)

#### Compare

- | DefenderWall™                | vs | Wood Frame Built                         |
|------------------------------|----|--|
| 1. Resists High Winds        |    | Decimated by Hurricanes & Tornadoes      |
| 2. Resists Fire              |    | Is Fuel for Fire                         |
| 3. Resists Flood Damage      |    | Powerless Against Floods & Water         |
| 4. Resists Earthquakes       |    | Offers No Protection Against Earthquakes |
| 5. Resists Termites          |    | Is Food for Pests                        |
| 6. Resists Mold & Mildew     |    | Mold & Mildew Destroy Wood               |
| 7. Resists Projectiles       |    | Walls Are Mostly Hollow, No Protection   |
| 8. Resists Mudslides         |    | Mudslides Decimate Wood Homes            |
| 9. Resists Carpenter Ants    |    | Carpenter Ants Feed on Wood              |
| 10. Environmentally Friendly |    | Destroys Trees, Consumes More Energy     |

**Which Would *You* Prefer?**



## Advanced Firebreak Technology System

Our amazing Advanced Firebreak Technology System, is brought to you directly from our partners, Colorado Firebreak, offering ideal wildfire protection for residential, commercial, and community development projects and any other structural application needs.

## Customized Wildfire Protection to Defend Your Home

Colorado Firebreak has developed a revolutionary high-tech wildfire mitigation system to guard homes from the destruction of wildfire.

These customized wild land fire defense solutions include sophisticated systems that will protect both your home and the trees and vegetation that surround it. Colorado Firebreak also provides simple do-it-yourself fire retardant spray options that offer effective, but more limited defense.



More than 600 Colorado homes were destroyed by wildfire last year. These homeowners lost valuable assets and irreplaceable mementos. Colorado Firebreak has the wildfire protection systems you need in a wildfire disaster. Colorado Firebreak designs and builds customized systems to deliver fire retardant sprays in the event of a wildfire. We engineer and install fully-automated wildfire mitigation systems that become operational when sensors detect the UV wavelengths unique to fires. Colorado Firebreak also sells the FireIce Home Defense Unit. In combination, these options create a customized

firebreak for your home, outbuildings, and the surrounding trees and property. You decide the level of protection you desire.

## Defend Your Home with Our Fire Retardant Delivery Systems

For most homes, Colorado Firebreak recommends our mid-range wildfire protection system, designed to protect your home and an area 50-feet around it. It includes wildfire detection sensors that wirelessly signal the control panel to activate Stage One.



Stage One, FireIce powder is combined with water pumped from an underground storage tank. This creates the FireIce protective gel, a revolutionary fire retardant product used by many professional firefighting organizations to stop fires fast. Multiple fire suppression lines installed on the home deliver the FireIce gel so that it covers the home. As the fire nears, the control panel activates Stage Two.

In Stage Two, fire suppression lines in the tree canopy at the perimeter of the home spray water on all trees. The microclimate that Stage Two creates lowers temperatures and raises

humidity, producing a natural firebreak around the home. Because Stage Two applies water to the area 50-100 feet around the home, it can protect valuable vehicles, outbuildings and trees.

The Colorado Firebreak system is fully self-contained, including an isolated water tank and power sources. Depending upon the system chosen, it is activated either manually or automatically and relies on either electrical or gas power generation. The system is customized to your home and property's environment, and to the area you want to protect.

### **The FireIce Home Defense Unit**

For the homeowner who wants a do-it-yourself fire retardant system, Colorado Firebreak recommends the FireIce Home Defense Unit. Using the same FireIce gel that our automated systems use, the Home Defense Unit is designed to deliver fire retardant through a powerful sprayer on wheels. It includes enough FireIce to cover a home up to 2,500 sq. ft. Additional buckets of FireIce® may be purchased as needed.



### **FireIce gel is:**

- Environmentally friendly and non-toxic. It is safe for plants, wildlife, pets, and children.
- Non-corrosive and cleans up easily. Just rinse with water to wash it off.
- Long-lasting and effective. It does not break down over time and consistently outperforms the best Class A foams.
- FireIce is designed to protect structures in heat as high as 2000 degrees Fahrenheit.

### **Request a Wildfire Mitigation Consultation Today!**

The team at Colorado Firebreak knew that wildfire mitigation solutions that focus only on the home offer inadequate protection. Their goal was to engineer and construct a system that would protect the home and create a firebreak around it.

Our team has extensive experience with high-pressure water systems, fire science, threat evaluation, and fire systems engineering, and this specialized knowledge and skill allowed us to create a unique wildfire protection system. The system's innovative design not only covers the home in a fire retardant gel spray, but hydrates the trees and vegetation around the home producing a micro-climate that lowers air temperatures, raises humidity, and acts as a natural firebreak.

There is no system that offers your home 100% guaranteed protection from wildfire. But, by combining a Colorado Firebreak system with standard wildfire protection advice like clearing flammable debris and thinning vegetation, you can mitigate the risk to your home from a wildfire threat. Learn how you can defend your home in the event of a wildfire. Colorado Firebreak delivers the fire retardant products and systems to provide a customized wildfire mitigation solution. Our team can construct a high-tech system that creates a firebreak around your home or a larger perimeter of your property.

Let us meet with you and inspect the unique challenges presented by your home and property. Our team will develop a customized plan to mitigate the risk to your family's home in a wildfire disaster.

## EMP/HEMP Mitigation Products and Services

Advanced Survival Technology is dedicated to the analysis, design, fabrication and installation of specialized shielding, components and systems to mitigate the harmful effects of Electromagnetic Pulse and Geomagnetic Storms on buildings, vehicles, and structures world-wide. Our Team of highly skilled professional engineers, project managers, and fabricators have worked on military, government, and private projects world-wide.

Due to varying worldwide conditions, the need now exists for uniform and effective hardening, hardness verification and hardness maintenance of command and control centers, critical communications, data and computer centers, and intelligence systems that require 100% operations during and after an EMP/HEMP or Geo-Magnetic Storm (GMS) event. In critical time-urgent applications where momentary upsets are mission-aborting, the hardening requirements include stringent facility shielding, point-of-entry (POE) protection and special protective measures.



Advanced Survival Technology can provide comprehensive and effective hardening, hardening verification and hardness surveillance of bomb shelters, buildings, facilities, hardened shelters, command/control centers, data processing centers and business continuity centers against the damaging effects of Electromagnetic Pulse (EMP), HEMP, GMS, or transportable High-Powered Microwave (HPM) weapons. The function of these facilities supporting critical time-urgent applications requires network interoperability and effective physical protections, electromagnetic shielding, point of entry (POE) protection, and related special protective measures. At EMP Engineering we offer cost effective solutions and full manufacturing capabilities for most any type of HEMP/EMP/GMS mitigated facility along with full hardened shelter design/build services. We are dedicated to the design and implementation of robust, hardened CBRN and EMP measures – including specialized shielding / mitigation, components and sub-systems, to prevent the harmful effects of intentional or unintentional Electromagnetic Pulses and Geomagnetic Storms.

### Our services include (but are not limited to):

- Professionally Designed and Engineered HEMP/EMP/GMS Mitigation Solutions
- Custom HEMP Shielding Fabrication, Installation, and Project Management
- HEMP Verification Testing, Hardening, Hardening Assurance, Maintenance, and Remote Surveillance
- Custom designs for Electromagnetic Compatibility (EMC), Electromagnetic Interference (EMI), Nuclear and Lightning Electromagnetic Pulse (EMP), and TEMPEST solutions
- Electromagnetic pulse (EMP) Solutions that integrate with Architectural, Structural, Electrical, and Mechanical Engineering services to create a secured and safe shelter / bunker environment
- Full Service Professional Architectural, Engineering Solutions and Products for Hardened Facilities including CBRE (chemical, biological, radiological, explosive) Filters, Structural Engineering, Blast Engineering, and Electrical/Mechanical Engineering
- Engineering Solutions to keep your designed environment effective against evolving threats now and in the future
- All designs and projects are HEMP hardened per MIL-STD-188-125-2
- Portable, custom designed HEMP Resistant Electrical Generators, Communications Centers, and Data Centers fabricated in ISO shipping containers at 10', 20', 30' and 40 foot lengths. These can be ballistic/blast hardened with CBRN Air-Filtration systems. Custom evaluations, installation, and commissioning services included.
- Custom HEMP Shielded Rooms and Faraday Enclosures designed, built to any size, and installed



Creating a protective electromagnetic-threat facility shield requires an electromagnetic barrier with additional special protective measures that incorporate electrically continuous housings that substantially



reduce the coupling of EMP electric and magnetic fields into the protected area. The electromagnetic barrier shall consist of the Facility HEMP Shield and protective devices for all POE's. Additionally, reliability, maintainability, safety and human engineering, testability, configuration management and corrosion control all need to be incorporated to the HEMP protection system design.

To accomplish this goal, a Client specific Vulnerability identification/Hardness Program overview and criticality assessment must be conducted that incorporates design, engineering, fabrication, installation and ongoing effectiveness testing activities to achieve the following:

- Provide an electromagnetic threat- protected facility or system design based upon verifiable performance specifications against identified threats that ideally suits the requirements of our clients.
- Provides a means of verifying achieved hardness levels through a cost-effective program of testing and analysis.
- Develop a maintenance/surveillance program during the procurement phase that supports the Client's operational and life cycle HEMP hardness requirements.
- Based on the anticipated threat, facility location and Client's protection program establishes the HEMP configuration baseline consisting of documentation of the physical characteristics of the HEMP protection system, subsystem and baseline performance data.

## Services

HEMP Hardening Design and Engineering

HEMP Hardened Systems Integration

HEMP Project Management

HEMP Quality Assurance

HEMP System Testing

HEMP Education, Training, and Consultation

## Sectors

Departments/Ministries of Defense

Power Grid Operators

Civil/Critical Infrastructure Operators

Oil Companies/Oil Infrastructure

Residential/Commercial/Industrial Hardening

VIP and Government Continuity

Aircraft Operators and Aviation Facilities

Electronics Manufacturers

Advanced Survival Technology understands EMP hardening, design, and integration of life-safety systems that must work during and after a HEMP/EMP attack, such as power systems, CBRN air-filtration systems, water systems, communications systems, sensor systems. Work with the experts when your life and continuity depends on performance. We have the experience to understand your needs, and the knowledge to meet them.

# Armored Vehicles and Secure Transportation Services

Advanced Survival Technology has partnered with the top Armored Vehicle Manufacturing firm that specializes in design and production of a wide variety of armored vehicles, cars, and armored trucks. Our Luxury armored cars, armored SUV's, Cash Transit Vehicles, and Tactical Armored Vehicles are used by Law Enforcement Agencies all over the world. With multiple facilities all over the world, our manufacturers aim to please every customer with its maximal efficiency, organized deployment and superior technical abilities.



## History of our Armored Car Manufacturer

Established in 1993, our Armored Car Manufacturing partner has been providing Armored Vehicles for Banks, Law Enforcement Agencies, Corporate Clients, and Private Individuals. Today they have grown into a leading international manufacturer of quality armored vehicles. Accommodating today's diverse market, we now specializes in a wide range of custom security/transportation solutions for its clients, including Armored Transport Vehicles, Executive Armored SUV's, Armored Cars, Luxury Sedans, and Special Purpose Military Vehicles. Personal and corporate security concerns have always been a top property for governments and corporations worldwide. New surges in



terrorism have raised these concerns to an unprecedented level. Many organization and private individuals are now forced to dedicate a significant portion of their resources to defeating actual and potential threats of crime and terrorism.



Through an individual approach to the needs and requirements of each of its clients, Advanced Survival Technology is able to relieve this strain by supplying armored cars that take safety and security to a higher level, while offering peace of mind.

## Technical Capabilities

Our Manufacturing partner operates from a 140,000 square foot manufacturing facility, enabling us to fulfill the large orders faster, and more efficient than most of our competition. Along with the ballistic certification from recognized ballistic laboratories, the armor materials used in the construction of the vehicles are tested at their in-house shooting range to ensure the 100% compliance with the standards of armoring.

## Technology

Our Manufacturing partners are taking advantage of the latest technological advances available to produce the best armored cars possible. The extensive use of modern light-weight armor, extensive upgrades and modifications to the vehicle's suspension and brake systems, superior interior finish of the cars – puts even more prestige into owning an armored vehicle built by our Manufacturing partners.



## Certifications

Security, safety, quality, performance – all words used to describe the guiding principle for Advanced Survival Technology armored vehicles. We believe that if we do not, or cannot impose and meet our own stringent guidelines in the manufacturing and distribution of armored vehicles – we shouldn't be in the business in the first place. We aim to over-deliver with every job by offering stellar customer service, quick turn-around and knowledgeable recommendations when it comes to selecting armored vehicles.



All of our work is done to international specifications and only the highest quality materials and glasses are used. We have been issued certifications from numerous international organizations in order to establish ourselves as a reputable and established armored vehicle manufacturer.

With the amount of resources that typically need to be allocated towards the purchase of an armored vehicle, it makes sense to opt for a manufacturer with proper certifications in order to ensure the safety of everyone within the vehicle.

## Special Purpose and Military Vehicles



As the name suggests Special Purpose Vehicles (SPV) are employed for certain special conditions where typical vehicles will not be able to do the job. They are designed in such a manner so that they can sustain volatile environments and can over hi-end rifle attacks or blasts. Their quality lies in their robust features along with the advanced technologies used to ensure that they are able to perform even under the most skeptical of all situations. Special Purpose Vehicles have been designed with the utmost precision so that the advanced ballistic protective technology used to deliver protection should remain virtually unidentified from the regular factory models. These vehicles aim to provide the highest quality of security in order to ensure the safety of the people and the valuables involved and can sustain not only direct fire from hi-end rifles but also those weapons that fire armor piercing projections. Armored Special Purpose Vehicles are ideal for military and law enforcement agencies. With a wide array of options and configurations, almost any specification is attainable.

## Service and Warranty

Our Manufacturer warrants any armor related items installed and conversion related custom workmanship, for two (2) years, or 50,000kms (32,000 miles), whichever comes first.

Warranty work covered by our Manufacturing Partner, shall be performed after assessment and written authorization by their Corporation, or its representative on the Territory. Our Manufacturing Partner will make a payment for all approved repairs deemed to be of a reasonable nature. Please inquire for further warranty information.



## Ballistic Protection

### NIJ Level 1068.01, Ballistic Test Summary

| Armor Type   | Test Ammunition      | Nominal Bullet Mass | Suggested Barrel Length | Required Bullet Velocity | Required Hits Per Armor Specimen | Permitted Penetrations |
|--------------|----------------------|---------------------|-------------------------|--------------------------|----------------------------------|------------------------|
| <b>I</b>     | 22 LRHV              | 2.6 g               | 15cm – 16.5cm           | 320 ± 12 m/s             | 5                                | 0                      |
|              | Lead                 | 40 gr               | 6" – 6.5"               | 1050 ± 40 ft/s           |                                  |                        |
|              | 38 Special           | 10.2 g              | 15cm – 16.5cm           | 259 ± 15 m/s             | 5                                | 0                      |
|              | RN Lead              | 158 gr              | 6" – 6.5"               | 850 ± 50 ft/s            |                                  |                        |
| <b>II-A</b>  | 357 Magnum           | 10.2 g              | 10cm – 12cm             | 381 ± 15 m/s             | 5                                | 0                      |
|              | JSP                  | 158 gr              | 4" – 4.75"              | 1250 ± 50 ft/s           |                                  |                        |
|              | 9mm                  | 8.0 g               | 10cm – 12cm             | 332 ± 12 m/s             | 5                                | 0                      |
|              | FMJ                  | 124 gr              | 4" – 4.75"              | 1090 ± 40 ft/s           |                                  |                        |
| <b>II</b>    | 357 Magnum           | 15.55 g             | 15cm – 16.5cm           | 425 ± 15 m/s             | 5                                | 0                      |
|              | JSP                  | 240 gr              | 6" – 6.5"               | 1395 ± 50 ft/s           |                                  |                        |
|              | 9mm                  | 8.0 g               | 10cm – 12cm             | 358 ± 12 m/s             | 5                                | 0                      |
|              | FMJ                  | 124 gr              | 4" – 4.75"              | 1175 ± 40 ft/s           |                                  |                        |
| <b>III-A</b> | 44 Magnum            | 15.55 g             | 14cm – 16cm             | 426 ± 15 m/s             | 5                                | 0                      |
|              | Lead SWC Gas Checked | 240 gr              | 5.5" – 6.25"            | 1400 ± 50 ft/s           |                                  |                        |
|              | 9mm                  | 8.0 g               | 24cm – 26cm             | 426 ± 15 m/s             | 5                                | 0                      |
|              | FMJ                  | 124 gr              | 9.5" – 10.25"           | 1400 ± 50 ft/s           |                                  |                        |
| <b>III</b>   | 7.62mm               | 9.7 g               | 56cm                    | 838 ± 15 m/s             | 5                                | 0                      |
|              | 308 Winchester FMJ   | 150 gr              | 22"                     | 2750 ± 50ft/s            |                                  |                        |
| <b>IV</b>    | 30-06                | 10.8 g              | 56cm                    | 868 ± 15 m/s             | 1                                | 0                      |
|              | AP                   | 166 gr              | 22"                     | 2850 ± 50 ft/s           |                                  |                        |

#### Abbreviations:

AP – Armored Piercing

FMJ – Full Metal Jacket

JSP – Jacketed Soft Point

LRHV – Long Rifle High Velocity

RN – Round Nose

SWC – Semi-Wadcutter

# Firearm and Survival Skill Training Civilian and Military

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Our Precision Defensive, Tactical Firearm, and Survival Skill Expert Training team can teach you what you need to need to know, from real combat and executive protection experience. Our exclusive Firearm and Survival Skill Training Team offers an exclusive training facility located in Southern Colorado, or we can come to you to provide the necessary training for protection and security. This is not your average firearms and survival skill training. We're serious about your confidence, your ability, and your safety in real life situations. ***This is the real deal.***

We offer high quality instruction from extremely experienced, former /active military and corporate security personnel who are NRA-certified instructors and Military Terrain Leaders. Our focus in key areas include: mindset, tactics, safety, weapons, and survival skill training. Unlike some training, our exclusive Team offers you structured concepts from the beginning, in a complete package. Your training is thorough and designed with care so you feel confident you've received the best weapons training possible.

Conceal  
Carry

Basic NRA

Level I

Level II

Corporate  
Security

Counter  
Assault

Law  
Enforcement

Military

Survival Skill  
Training

# About Our Firearm Training

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Our expert Team offers firearm training that covers the following (but is not limited to these training concepts.) Please contact us directly to discuss your confidential training needs, both civilian and military.

- Firearm safety
- Principles of personal defense and use of deadly force
- Combat triad proper mindset pre and post-defense shooting
- How to choose the right handgun, ammunition, and holster
- Pistol marksmanship
- How to determine if your firearm is loaded and how to unload it
- How to safely load, reload, reset, and holster your firearm
- Proper grip, stance, use of sight picture, and alignment, point shooting, and trigger control
- How to handle malfunctions
- Modern technique of the pistol
- Tactical movement including pivots, turns, forward, and backing
- How to perform tactical or emergency reloading
- Multiple target engagement. Spouses/team tactics shooting
- Combat triad mindset pre-and post-defense shooting
- Concealed drawing and drawing from various positions
- Tactical and speed loading
- Clear Malfunctions
- Strategies and tactics for gun fighting
- High speed shooting drills
- Strong and weak hand shooting and reloading
- Immediate action drills for restaurants, streets, and automobiles
- Position shooting from cover and displacement drills
- Knife fighting techniques
- Low light shooting
- Multiple targets engagement drills
- Room clearing
- Conceal Carry
- NRA Basic Pistol
- PSD and Counter Assault
- Tactical Weapons to Include:
  - ✓ Developing good mind set
  - ✓ Carry and mounting positions
  - ✓ Loading and unloading
  - ✓ Immediate action drills (malfunctions)
  - ✓ Transition drills (carbine or shotgun-to-handgun)
  - ✓ Weapon retention
  - ✓ Structure clearing
  - ✓ Two man teams (if applicable)
  - ✓ Multiple targets engagement
  - ✓ Alternate positions, movement, use of cover

**Contact Us Today for Additional Training Inquiries and Instructor Background Information**

# Firearm Training Photo Gallery





# Disaster and Emergency Preparedness Supplies



## Welcome to the National PREPARE Store

The National PREPARE Store, a division of Advanced Survival Technology, is your *premier* source for food and beverage storage (25 year shelf life with rotating shelf systems available), all possible survival and emergency preparedness supplies, hiking/outdoor/military survival and protective gear, and any other tools imaginable for self-reliant living and recreation. We are proud to offer you best variety, price, and product to meet your specific and confidential needs. **Do not wait until it is too late.** PREPARE for yourself, family members, children, friends, businesses, communities, government, and emergency management agencies.



You may need to survive on your own or help someone after an emergency or national threat/alert. This means having your own food, water, and other necessary supplies in sufficient quantity to last for at least 72 hours at the **Absolute Minimum**. Local officials and relief workers cannot reach everyone immediately. It could be hours, days, or in a potentially catastrophic event, unknown length of time that you will need to sustain and survive. Basic services such as electricity, gas, water, sewage treatment, and communication capabilities may be cut off for days, weeks, or even longer. Your supplies kit should contain items to help you manage during these times.

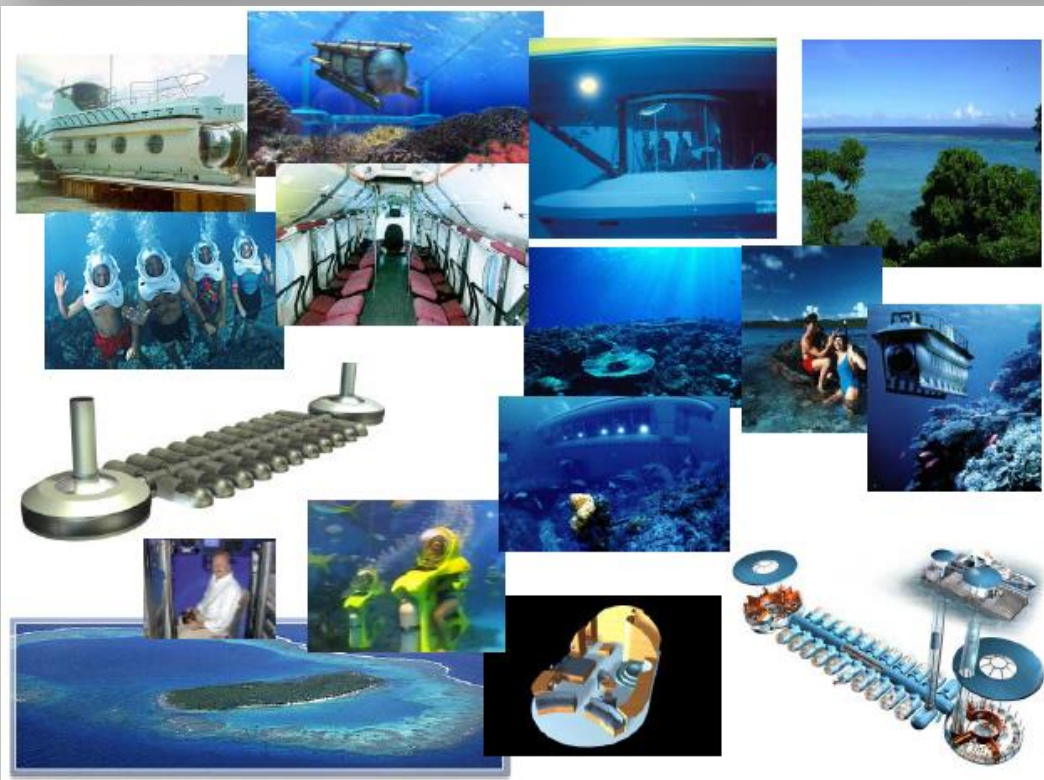
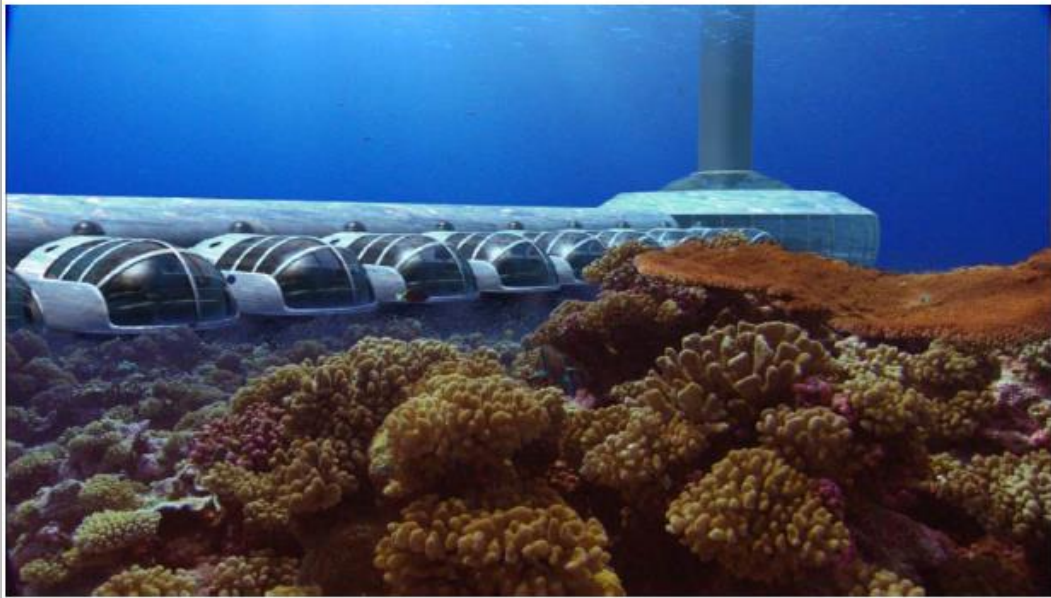


Our National PREPARE Store provides emergency supplies, emergency kits, earthquake supplies, disaster preparedness supplies, emergency supply kits, and emergency food supplies to support all planning requirements.

We offer the best and most reliable emergency preparedness supplies. Offering emergency supplies, radiation protection, emergency preparedness kits, emergency ready store supplies, disaster preparedness supplies, and any other miscellaneous indoor or outdoor survival tools, supplies, and kits. You may visit our website (currently under construction as prices and product availability continues to change) at the [nationalpreparestore.com](http://nationalpreparestore.com), or inquire directly for special pricing and product availability, as not all supplies are currently listed on our website. We're here to meet your needs to help you sustain in the event of an emergency or disaster.

# Underwater Submersibles and Private Submarines

Offering Underwater Submersible Structures, Habitats, &amp; Sea-Floor Living Spaces





# Underwater Structures

## Executive Summary

### BUSINESS SUMMARY

Our Industry Leading Partners were formed to design and build underwater vehicles, structures, habitats, and permanent sea floor structures. The original project was the engineering of the world's first undersea resort, the Undersea Resort project, now under development at a private island in Fiji. Based on the millions of dollars of engineering associated with the resort planning, our Partners are now able to offer undersea residences and commercial buildings (e.g. casinos, restaurants, office space, etc.). Our Partners can build an undersea structure and install it anywhere in the world with appropriate water depths and conditions.

Our Partners, U.S.I., formed in 1993 to build a wide range of civil submarines, including personal luxury submarines to 65m in length, tourist submarines, commercial submersibles, deep submersibles for marine science research and luxury deep submersibles for yacht-based operations. The company has operated continually for 16 years and is the only firm of its type in the world with such a broad ranging product line with a specific division formed to concentrate on the design, sales and construction of the high-end line of luxury deep submersibles for yacht-based/private use.

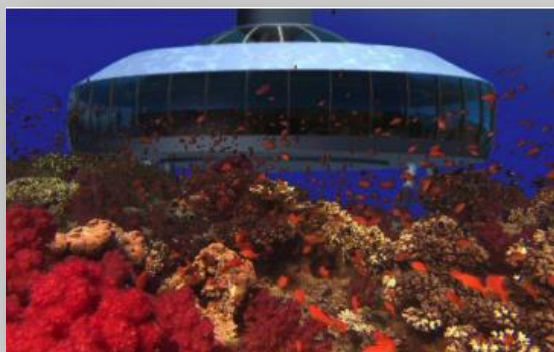
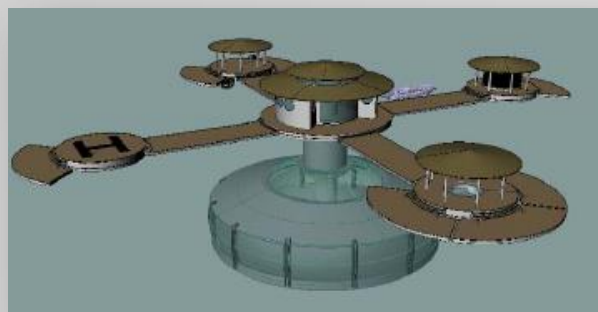
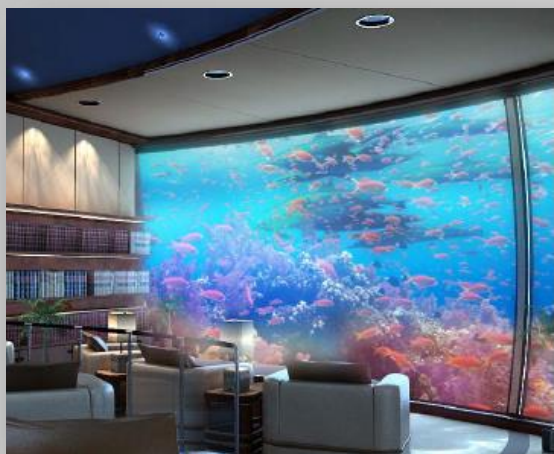
### OFFERINGS

- The World's first undersea residence and the possibility to develop undersea subdivisions. Access from shore by a pier and entrance to the facility by elevator or access by yacht, helicopter or submarine.
- Undersea commercial buildings such as restaurants, executive office spaces, observation areas and casinos. All structures are one atmosphere and require no change in pressure from the surface.
- The Fiji Undersea Resort consists of 24 undersea suites of 50m<sup>2</sup> each in addition to a 100 seat bar and restaurant (350 m<sup>2</sup>) and another 350 m<sup>2</sup> unit with an undersea library, a Presidential Suite, two spa treatment rooms and a wedding chapel/conference room combination. The Fiji Undersea Resorts may consider joint ventures at various locations but will build 4-5 additional properties for its own account after the Fiji project is complete.
- Floating undersea structures like our Partner's Ocean Activity Center designed with a 40-seat restaurant, 40-seat bar, gift shop, tourist submarine support area, snack bar, sunbathing deck, gift shop and 5- VIP hotel suites on two levels.
- Civilian submarines and submersibles of all types including tourist submarines that seat from 10 to 66- passengers and personal luxury submarines that accommodate between 2- and 72 passengers, some for trips several weeks in duration. These can also be equipped with proper NBC and related air filtration systems.



# World's First Undersea Residence

The H<sub>2</sub>ome is 340m<sup>2</sup> (3600 ft<sup>2</sup>) of unsurpassed luxury. We can build and install the luxury residence in any number of places across the globe, from shallow warm seas, to island lagoons, remote water systems, or mountain lakes. All that is required is a relatively level bottom in 10-18 meters of water. Access to the underwater home is simplest from a pier that connects the shore to the residence, with an access trunk via ramp. The interior of the H<sub>2</sub>ome is then available via elevator or by a circular stairway. Umbilicals for water, sewage, communications, and electricity are connected to the pier and run to shore. A more advanced version of the H<sub>2</sub>ome can be autonomous and can generate its own electricity and fresh water systems. Thus, the structure can be further from shore where it is accessed by boat or helicopter. It is even possible to install a dry transfer trunk for access by submarine. COME AND GO IN COMPLETE SECRECY! Are you enamored by the idea of an underwater residence, but not sure where to place it? Talk to the experts. We can find you the perfect tropical island location with easy access but pristine undersea conditions.





# The H<sub>2</sub>ome Layout

## H<sub>2</sub>OME LAYOUT

The H<sub>2</sub>OME is installed cantilevered on piling just above the sea floor. The structure has two floors that are linked to each other and the surface by an elevator and a circular staircase.

The top floor layout is comprised of two bedrooms with baths and open lounge areas. The main floor consists of a master bedroom with integrated seating and a master bath. Also included is a gourmet kitchen with adjacent wine cellar, a formal dining area, a library lounge, a bar, private office space, a living room with flat screen television, a half bathroom and several discrete seating areas where one can enjoy the different views of the undersea world.

Of course the layout can be structured to the client's requirements and the details here are only proposed for illustrative purposes. There is basically 340 m<sup>2</sup> of design freedom.

### CONSTRUCTION & INSTALLATION

Your H<sub>2</sub>OME is built in components at our Partner's manufacturing yard. They also produce the acrylic panels to your specifications by post-processing thermoforming and annealing. They then transport all components to a floating drydock for assembly and testing. The interior is ordered from a supplier specializing in 5-star hotel interiors and superyacht interiors. This Dubai-based firm fits and assembles the interior components and then packs them in containers and ships the components to us where they do the installation.

The completed structure is floated off the drydock and is then picked up by a semi-submersible heavy lift ship which transports the H<sub>2</sub>OME to the site. Previously piles have been driven into the sea floor and the H<sub>2</sub>OME is floated into place, keyed to the piles and then ballasted for a slow descent toward the sea floor where it is then bolted to the piling. The piling tops are cut off and the umbilical cables run to the access pier and connected. In this way, your undersea residence is available for your use only 48 hours after delivery.

### SEASCAPING

We can work with our clients to create a fabulous coral garden area replete with living hard and soft corals, a wide assortment of invertebrates and a myriad profusion of brilliant tropical fish. Our Partner works with Dr. Jean Jaubert, recently the Director of Oceanographic Museum in Monaco and a world leader in coral propagation.

Your H<sub>2</sub>OME comes complete with push-button fish feeders so that you and your guests can feed the fish as well as underwater lights to light up the sea floor for a limited period of time each evening.





# H2ome Gallery



# H<sub>2</sub>ome: A Charter Opportunity?

## H<sub>2</sub>OME: A CHARTER OPPORTUNITY?

You own the world's first undersea residence, 3600 square feet of uncompromising elegance situated in 40 feet of crystal clear water surrounded by a magnificent coral reef, where the ever changing view is fascinating and absolutely unique.

Your H<sub>2</sub>OME is in Belize, in a protected private lagoon connected to land by your private pier. Floating above and accessed by elevator is a cluster of floating buildings, including a warm water outdoor spa, the central entrance lounge, docking space for a yacht and an enclosed building for your Triton submarine as well as space for a wide array of water toys. And, let's not forget the floating helicopter landing pad.

The airport, where your private jet is hangared is ten minutes away.

You've clearly created a remarkable facility that is unique in the world, but you only have a few weeks a year that you and your family can use it.

Imagine the "charter" potential. You charter your yacht for 8 weeks a year to offset operating costs. The same company that manages your yacht, charters your H<sub>2</sub>OME for 25 weeks a year. In less than three years, your H<sub>2</sub>OME and all its support amenities have been paid for completely.





# Underwater Commercial Spaces

## COMMERCIAL SPACES

Our base level 340 m<sup>2</sup> structure lends itself to a wide range of possibilities.

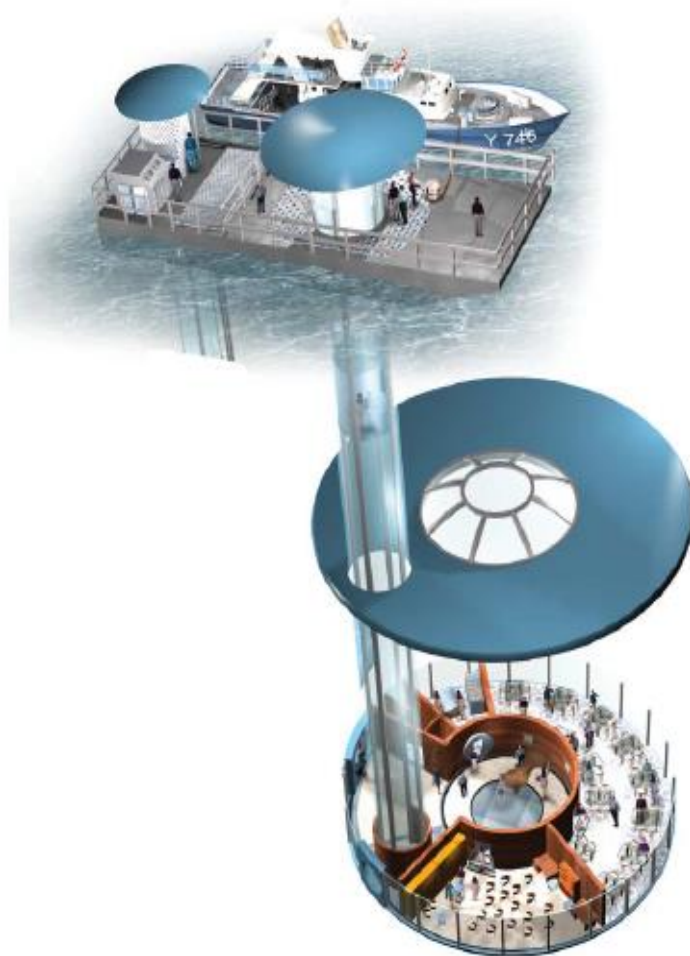
Are you a Taiwanese entrepreneur who would like to operate the world's first sea-floor casino? We can make it happen. How about a Caribbean-based residential developer interested in building the world's first five-star residential undersea subdivision? We know just the place. An underwater restaurant for the U.A.E? The world's first undersea bank? The most exclusive office address on the ocean floor off Monaco? Our Partners along with HSA have the experience and capability to add your name to the exclusive list of owners of "world's firsts."

### FEASIBILITY STUDY

The project starts with a feasibility study where we'll inspect the site, analyze the sea floor topography and structure and pick the ideal location. We adapt our design to the requirements of the site, add the amenities the owner wishes and we then develop a cost estimate including transportation and installation. Upon approval of the details we write and sign the contract and immediately begin construction.

### DELIVERY

A typical build will take between 18 months and two years but this may be fast-tracked if necessary. Please speak to us about your requirements.





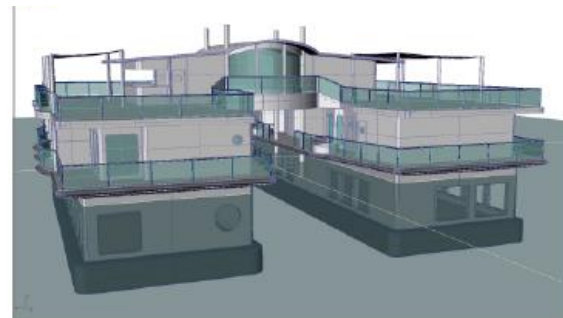
# Ocean Activity Centers

## THE OCEAN ACTIVITY CENTER

The Ocean Activity Center (OAC) is a revolutionary floating, semi-submersible structure with one of its three floors entirely submerged. The major elements of the OAC are a 40-seat underwater restaurant, a 40-seat underwater cocktail lounge and five luxury hotel suites with underwater bedrooms and above-water living rooms with private decks. The structure also contains a gift shop, open deck areas for sunbathing, a snack bar, a floating water-sports center and support facilities for a tourist submarine, including an integrated hydraulic lift.

The OAC is constructed in modules that can be easily transported and then assembled on-site. The complex can be accessed from the shore via a land-bridge, or it can be made completely autonomous with its own diesel generators, watermakers, sewage treatment plant and other equipment to form a complete, self-contained system anchored off-shore. The OAC is a versatile, highly profitable establishment that can be custom designed for any site. The expansive underwater viewing provides hours of entertainment for guests and provides the owners with extraordinary market differentiation. And the cost of the OAC is quite reasonable when compared to the price of alternative waterfront real estate and construction.

This type of floating semi-submersible structure is well suited to a wide range of commercial endeavors. The structure can be adapted to private floating residences, entertainment complexes or a cluster of hotel modules.



# Civilian Submarines

## CIVILIAN SUBMARINES

Our Partners have been active in the design, engineering and construction of non-military submarines and submersibles for 16 years. In addition the company specializes in the development of tourist submarine projects for its clients. Today, 40+ tourist submarines operate around the globe and carry more than 1.5 million passengers a year. The industry has a perfect safety record making tourist submarines the safest form of transportation in the world today.

Our Partners are able to provide a turn-key tourist submarine operation that can be immensely profitable.

Our Partner developed the concept of the personal luxury submarine in 1993. You too can own your own submarine yacht with diving depths of 1000 feet and trans-Atlantic range. The 65 meter long, \$90 million Phoenix 1000 has 470 square meters of interior living space and can take you anywhere in the world.

Today, the hottest trend is having a pocket-sized submersible to go aboard your large yacht. The Triton 1000s are available in two and three passenger versions with diving depths to either 300 meters or 1000 meters.

For a spectacular project, ask us about Private Undersea Cruises. We've done the preliminary design work on the world's first cruise ship style submarine that will carry 72 passengers on 2- and 3-day excursions to as deep as 305 meters.

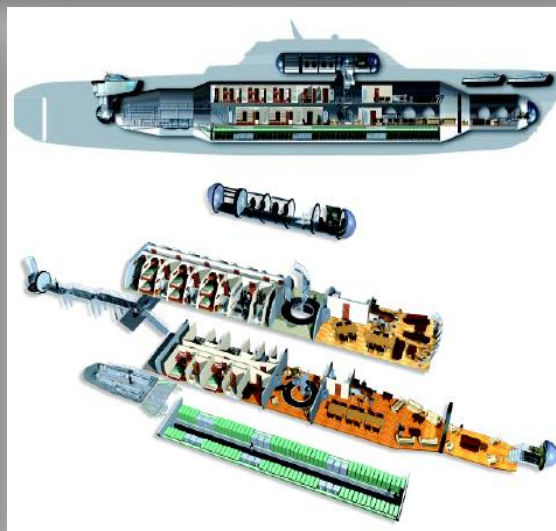
From our Partner:

"When it comes to submarines, if you can dream it, we can build it."





# Submarine Photo Gallery



# Underwater Submersibles and Underwater Subs Final Thoughts

## FINAL THOUGHTS

The dream of living under the sea was - until now - the subject of childhood imagination, scientific speculation and Hollywood movies. To turn this dream into reality, our Partner's engineering team had to truly innovate, tapping into technological expertise as well as poetic vision.

As the world is looking to new frontiers to expand the field of human experience and as space tourism is about to launch as a new industry, the undersea world remains the most seductively exotic environment open to pioneering.

Whether it is a private residence where you and your loved ones will enjoy in luxury and safety (these can be designed, engineered, and constructed to meet any structural need to including ballistic, blast, and other threats) - an experience that few can even imagine; an undersea resort or restaurant that will create growth opportunities for your business or a special project tailored to the vision you nurture for your family, community, city, or country, be assured that your undersea habitat will redefine the word exclusive and safe.

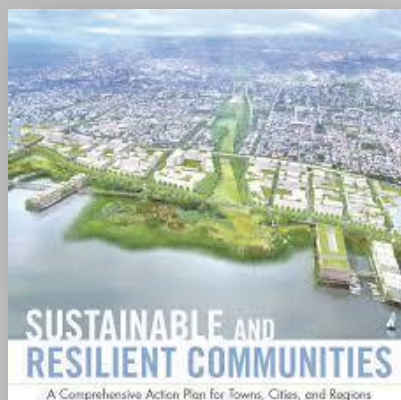
Your "fantasy come true" can also make a difference and give back to the world: Our Partner's marine biology team can complete your project with unique undersea landscaping and a coral reef restoration program, recreating biodiversity in the ecosystem thus providing a spectacular visual experience, as well as a scientific and environmental achievement. This makes you a leader in the international movement for the health of the oceans, and ultimately, the planet.

Please accept our invitation to join us on an adventure that makes the once impossible, a reality. An adventure that will change your personal life, transform the potential of your company, or reshape the image of your nation.





Contact Advanced Survival Technology today to let us know how we can best assist you in your threat mitigation needs. Advanced Survival Technology offers the most advanced, cost-effective, sustainable building systems and multi-hazard threat mitigation practices. The time for proactive planning with the most advanced threat protection technologies is now!



Please visit our website at [www.advancedsurvivaltechnology.com](http://www.advancedsurvivaltechnology.com) to learn more or contact us today at 1.484.222.9351 to discuss your confidential needs.

