

### Mayim™ Tyndall Air Force Base



**MAYIM**  
MODULAR FLOOD BARRIER

#### Client:

Tyndall Air Force Base, a critical military installation with a rich history, is strategically located on the Florida Panhandle near Panama City. Established in 1941, the base has long played a vital role in the nation's defense, serving as a training ground for fighter pilots, an air operations center, and a testing site for advanced weapon systems. Its primary purpose is to maintain combat readiness and provide air dominance to ensure national security.

The 325th MUNS provides munitions support to meet requirements of the U.S. Air Force Weapons School, Weapons Instructor Course, Air Force Civil Engineer Center, the Naval Dive Center, Air Force Research Lab, and 21 munitions custody accounts at Tyndall and surrounding areas.

"Our squadron patch has the Latin phrase 'Para Bellum' which means 'prepare for war.' This phrase couldn't be more fitting for a [munitions] troop. Our job is to ensure we're well armed to fight off any adversaries while upholding the nation's defense and people's freedoms." added Sgt. Cassie Barnwell, 325th MUNS munitions operations section chief and future munitions accountable systems officer.



#### The Challenge:

The base's coastal location had exposed it to the risk of intrusive flooding from storm surges and hurricanes, which have historically caused significant damage to the facilities and infrastructure. As the impacts of climate change become more pronounced, the frequency and intensity of such events are expected to increase, further exacerbating the risk faced by Tyndall Air Force Base.

The Munitions Storage Area at Tyndall Air Force Base is a critical component of the facility, responsible for housing and handling various types of munitions required for its operations. This area comprises 15 explosive storage structures and 5 explosive operations locations, all of which are essential for the base's readiness and mission execution. However, due to their proximity to the coast and low-lying terrain, these sites are particularly vulnerable to water intrusion from storm surges or flooding that typically occur during hurricanes and other extreme weather events.

Storm surges, resulting from the powerful winds of hurricanes and tropical storms, can lead to a rapid rise in water levels, causing widespread flooding in coastal areas. As the climate continues to change, the frequency and intensity of these events are expected to increase, posing an even greater threat to the Munitions Storage Area and its contents. Prolonged exposure to water intrusion can compromise the structural integrity of the storage structures and operations locations, as well as damage the munitions themselves, which could have severe consequences for the base's ability to carry out its mission.

*The mission of the unit is to provide Team Tyndall with world-class munitions support today, while preparing for the future."*

**-Sgt. Cassie Barnwell, 325th MUNS Operations Chief**

## CASE STUDY: Mayim™ | Tyndall Air Force Base



### Goals:

In total, the base required almost 750 feet of protection deployed in a variety of configurations. Therefore, Garrison's goal was to provide a flood protection solution that could stand up against incoming hurricane storm surges as well as other potential flooding events. The main objective was to use a solution that could accommodate the variety of configurations and doorway sizes that the munitions storage area required while also capitalizing on quick deployment.

### Solution:

To accommodate the nearly 750 feet of required protection, Garrison decided to use the Mayim™ Modular Flood Barrier system to help combat future flood threats that occur on Tyndall Air Force Base. The Mayim™ Barrier solution allowed for the opportunity to perfectly protect the unique configurations needed in the munitions storage area. Additionally, Mayim Barriers allowed for rapid deployment by utilizing the insert and lock connection system of multiple Mayim Barrier pieces.

### Summary:

Situated in Panama City, Florida, Tyndall Air Force Base is a crucial military facility with a strategic location. It functions as a training center for fighter pilots, an air operations hub, and a testing ground for cutting-edge weapon systems. The base's primary mission is to uphold combat readiness and secure national defense.

However, Tyndall Air Force Base's coastal position leaves it susceptible to intrusive flooding caused by storm surges and hurricanes, which have historically inflicted considerable damage to its infrastructure and facilities. The Munitions Storage Area, consisting of 15 explosive storage structures and 5 explosive operations locations, is especially prone to flooding due to its close proximity to the coast and low elevation. As climate change intensifies, the frequency and severity of extreme weather events are projected to increase, further exacerbating this risk.



## CASE STUDY: Mayim™ | Tyndall Air Force Base

Garrison Flood Control sought to deliver a flood protection solution capable of withstanding hurricane storm surges and other flood events while covering nearly 750 feet of required protection in diverse configurations. The main goal was to implement a solution that could accommodate the unique flood mitigation needs of the munitions storage area and ensure swift deployment.

To address this challenge, Garrison Flood Control chose the Mayim™ modular flood barrier system to shield Tyndall Air Force Base's 325th Munitions Squadron storage area from potential flood hazards. Mayim™ Barriers offered the necessary adaptability to protect the distinct sized bay doors and configurations within the storage area. Mayim™ enabled quick deployment through an insert and lock connection system for joining multiple barrier pieces seamlessly. This solution effectively safeguarded the vital munitions storage facilities, reinforcing the base's resilience to flooding events and preserving its operational capacity.



### Takeaways:

- Due to hurricanes, storm surges and its coastal location, Tyndall Air Force Base's 325th Munitions Squadron required significant flood protection for their munitions storage area.
- Mayim™ Flood Barriers are available in modular pieces that are 20in or 30in of protection height.
- The simple insert and lock connection system allows for the combination of multiple Mayim™ Flood Barrier pieces to achieve the desired configurations of protection on the base.
- Mayim™ Barrier pieces require no additional tools and allow for a rapid deployment response to potential flood threats.
- The protected munitions area on the base consists of 15 explosive storage structures and 5 explosive operation locations.



**GARRISON**  
FLOOD CONTROL

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