# USKITES

## "You're Gonna Need a Bigger Boat"

In recent years, we've seen an incredible upswing in shark attacks worldwide.

#### How Many People Are Attacked by Sharks?

• The International Shark Attack <u>File</u> (ISAF), described as "the world's only scientifically documented, comprehensive database of all known shark attacks," documented 108 alleged "human-shark interactions" in 2022.

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- The majority of these 57 were considered unprovoked bites, meaning they occurred "in the shark's natural habitat with no human provocation of the shark."
- The majority of these incidents also occurred in the U.S., with 41 bites recorded in American waters, ISAF reported.



- While only one of these attacks was fatal, this number far outpaces the second-place country, Australia, which had just nine bites in 2022.
- Egypt, South Africa, Brazil, and New Zealand – all countries with large coastal areas – rounded out the top six spots.
- While no 2023 data is available from the ISAF, <u>TrackingSharks.com</u> reported 58 attacks worldwide this year, with 31 occurring in the United States.

## **Understanding the Uptick**

### The Impact of Human Activities



The increasing number of shark attacks can largely be attributed to the growth in human population and coastal development.

As more people engage in activities like swimming, surfing, and diving in oceanic habitats, the boundaries between human and shark territories become blurred.

This has led to a surge in shark sightings and encounters in places that are experiencing rapid coastal development and tourism.

With our expanding presence on the coast, the likelihood of incidents has also risen.

#### **Climate Change**



One notable factor contributing to the increase in shark encounters is the continuous climate change.

Due to the warming ocean temperatures, certain shark species are altering their migration patterns and expanding their territories, causing them to appear in areas where they were not commonly seen before.

Additionally, the acidification of the ocean and rising sea temperatures impact the availability and distribution of prey, thereby leading sharks to move closer to the shorelines in search of food.

This displacement of sharks raises the likelihood of unexpected encounters between humans and sharks.

### **Overfishing and Disrupted Ecosystems**



Overfishing causes a decrease in the shark's main sources of food, leading them to change their diet and hunting locations.

This can result in an increased chance of shark-human encounters as they come closer to populated beaches.

Additionally, overfishing disrupts the balance of marine ecosystems, as sharks are apex predators that play a vital role in maintaining ocean health.

When overfishing causes changes in their hunting behavior and diet, it can cause a ripple effect with potential consequences of more frequent interactions between sharks and humans.

#### **Time To Take Action!**



As sharks adapt to their changing environment and encroach on beaches, it's important for us to also adapt by using new methods for monitoring and awareness.

With these factors contributing to increased shark activity, there's no doubt that sharks will continue to be present near our coastlines.

To ensure the safety of beachgoers, we need a way to identify sharks before they become a problem.

## We Have a Solution.

### **Shark Monitoring Helikites**



Detecting approaching sharks becomes effortless with our Shark Monitoring Helikites, providing ample time for a safe water evacuation.

This significantly diminishes interactions between sharks and people, ultimately resulting in fewer, if any, shark attacks.

Helikites offer an exceptional advantage in shark surveillance by effortlessly lifting cameras into the sky for extended periods.

With their unique aerostatic design, Helikites can remain airborne for weeks at a time, providing continuous, unobstructed views of the

ocean

### What are Helikites?

A Helikite is a hybrid of a helium WIND + HELIUM STABILISES HELIKITES balloon and a kite, designed to utilize both helium and wind for lift.

This unique aerostat is engineered to provide stability in high winds where other aerostats and drones fail



Similarly to a balloon, the Helikite is lighter-than-air. However, unlike a normal balloon, it doesn't get knocked down by the wind. Winds do the opposite to a Helikite - they force it powerfully upwards.

Normal kites get pushed up by the wind but come down if the wind changes/reduces in strength too much, or if it gets too strong for their adjustment.

Helikites can fly to great heights in no wind and then catch any breezes that may exist at altitude. They can then use that breeze to fly many thousands of feet high with ease.

The balloon used by Helikites is fat and rounded, which is essential to provide good helium lift (about twice that of a comparably sized blimp). It also ensures that changes in temperature affect the Helikite as little as possible. Most balloons that are shaped to fly like kites collapse when they hit cold air due to the shrinkage of the gas inside and consequent loss of pressure needed to retain their shape.

This is not a problem with Helikites, so they are far more reliable.

Nothing else in the world has as many beneficial flying characteristics.



### Largest Range of Cameras



Our universal 'Steady-Cam' Camera Attachment system is unique to Helikites.

This allows almost any type of camera to be easily attached and then held steady and level whilst providing a full 360degree field of view.

The 'Steady-Cam' system also ensures that Helikite cameras are automatically lifted out of the way when the Helikites are close to the ground, ensuring they are not damaged during landing or take-off

### **Unmatched Drone Lifting Capability**

Our Helikites extend their versatility to drone enthusiasts as well. With the innovative 'Drone Lifting Helikite,' we empower your existing drones to reach new heights.

Elevating their endurance from a mere 30 minutes to an impressive 8+ hours, this technology opens up a world of possibilities.



The recommended 4.5m<sup>3</sup> Skyhook Helikite seamlessly carries a WiFicontrolled turntable that enhances your drone's capabilities.



Utilizing the drone's gyrocamera, tilt function, battery, and radio, the 'Drone Lifting Helikite' takes your aerial photography and videography to the next level.

This hybrid system isn't classified as a drone for legal purposes, allowing you to operate it in areas typically restricted for traditional drones.

### **360 Degree Total Surveillance**



Another feature of Helikites is their ability to keep the same angle of attitude in the sky whatever the wind speed.

This is invaluable for all-around surveillance, as it allows numerous cameras to be attached all around the Helikite to provide 360-degree surveillance.

Therefore, even without the addition of camera leveling systems, there is constant and reliable viewing of everything below the Helikite.

A high-zoom camera pointing in one direction is, undoubtedly, useful, but it will miss what it is not pointing at.

Getting constant video or photographic information from all around means nothing goes unseen. This is very useful for wide-area ocean monitoring.

# Why Choose Helikites for **Shark Monitoring**

#### Precision Surveillance:

Helikites offer an unprecedented level of accuracy in shark detection. By providing realtime aerial surveillance, they enable quick and reliable identification of shark activity near your shores.

#### **Cost-Effectiveness:**

Helikites are not only affordable to purchase but also cost-effective to operate. Their low operating costs make them a financially sound choice for longterm surveillance and monitoring efforts.

#### **All-Weather Reliability:**

**Our Helikites are** designed to operate flawlessly in all weather conditions. Rain or shine, they ensure consistent monitoring, eliminating weather-related disruptions

#### Ease of Use:

Helikites are designed for simplicity, requiring minimal technical traditional aerial vehicles, such as light aircraft or drones, you don't need expensive flying hours or specialized skills.

#### Continuous **Monitoring:**

Unlike conventional methods that may have limited flight knowledge. Unlike times, Helikites can remain airborne for weeks at a time, offering uninterrupted surveillance capabilities.

#### Unrivaled **Reliability:**

Skip the complex Helikites are not licensing and permission mere toys or unstable balloons;requirements often they are serious, associated with miniature aerostats drones. Helikites trusted by Special offer a Forces worldwide. straightforward They excel in flying solution for shark

conditions that challenge even larger aerostats, making them the go-to choice for reliable, continuous monitoring.

monitoring, eliminating bureaucratic

obstacles.

Legal Simplicity:

#### Unparalleled **Versatility:** Helikites can also

lift drones, significantly extending their battery life from 25 minutes to an astounding 10 hours+. This synergy creates a powerful and costefficient combination for extended aerial coverage.

### Join Us in Our Mission to Create Safer Shores and Redefine the Future of Aerial Surveillance

At US Kites we are committed to doing our part in protecting our coastlines by offering the most affordable and reliable aerial platforms in the world and enabling widespread, uninterrupted surveillance



Leverage Shark Monitoring Helikites to unlock unparalleled aerial capabilities and keep our beaches free from shark attacks.

Contact our dedicated team of experts at (855)-3-USKITE to discover how Helikites can elevate your shark monitoring program and keep your coastline safe!





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