ZBETA

Launch paper

Build a drone security muscle with expert help

Modernize your program to address new threats and opportunities from the air





Introduction

Drones and other robotics are reshaping the physical security perimeter, creating new risks from air, land, and sea while introducing new opportunities to improve security operations. But understanding these technologies doesn't mean rushing to buy new tools. It starts with determining where your organization is actually exposed, what capabilities make sense for your environment, and how they can seamlessly integrate with the security program you already have.

ZBeta's Drones & Robotics Security Consulting practice helps organizations make those decisions with confidence. Drawing on deep practitioner experience in drone detection and response, robotics, physical security integration, regulation, and technology evaluation, we help our clients assess vulnerabilities, define requirements, evaluate and test solutions, develop response programs, and explore productive uses of autonomous systems. Our goal is simple: Help you build a measured, risk-informed and data-driven approach that strengthens security, avoids unnecessary investment, and prepares your program for a rapidly evolving robotics landscape.

Security programs have a newly expanded perimeter: The skies.

Drones (officially called unmanned aerial systems, or UAS) present a threat vector in many environments that physical security teams have never previously thought to address. As we describe in a recent white paper, bad actors are increasingly using drones for nefarious activities ranging from smuggling and aviation interference to corporate espionage, vandalism, and terrorist attacks.

As with many areas of physical security, education is the first step. Gather the right facts about your environment and the specific areas where it might be vulnerable, and come up with a plan that connects these requirements to meaningful forms of protection. Doing otherwise means you risk overspending and underdelivering for your unique needs.



Introducing ZBeta Drones & Robotics Security Consulting

Your security program deserves the best level of consideration for drone vulnerability and countermeasure planning. ZBeta recognizes this and has years of experience guiding businesses in the direction that best suits their environments. Along the way, we've compounded our internal knowledge of drones and other robotics as an evolving threat, amassing data and learnings all along the way.

Our Drones & Robotics Security Consulting practice delivers a full spectrum of advisory and technical services focused on protecting your people, assets, and critical infrastructure from evolving drone threats. With a practitioner-led team, deep physical security integration experience, and a track record of supporting global enterprises, ZBeta helps organizations assess risk, evaluate technology, validate performance, and build sustainable airspace security programs.

Your partnership with ZBeta brings:

+ Decades of hands-on practical drone detection and counter-drone experience, blending traditional enterprise physical security with emerging airspace applications.
+ Deep alignment with enterprise physical security strategies and airspace regulations.
+ Access to ZBeta's dedicated test lab and industry-leading vendor network.
+ Customized, scalable engagement model based on years of client experience.

By combining these elements rather than excelling only in one or two areas, ZBeta stands out by delivering a full life cycle of consulting, from risk assessment to security operations response to technology selection.



About our program

The best drone security programs don't exist in a silo—they integrate with your existing physical security risk profile, governance model, operations, and design. This is one of the best reasons to consult with a partner like ZBeta who can deeply understand the best integration points for adding drone-aware capabilities to the security program you've already spent years building, learning from, and fine-tuning.

To that end, we strive to meet you where you are. ZBeta Drones and Robotics Security Consulting is the formalized version of services we've already been providing for years, around areas of:

+ **Risk assessment and market research.**
  We start your path from a position of strength, helping you determine what you do and don't need protection from, and basing preliminary recommendations on our research and experience elsewhere in the physical security market.

+ **Standards, requirements, and program development.**
  We draw on our extensive knowledge of regulatory standards and jurisdictional requirements to help find the best ways of augmenting your security program with new protective capabilities.

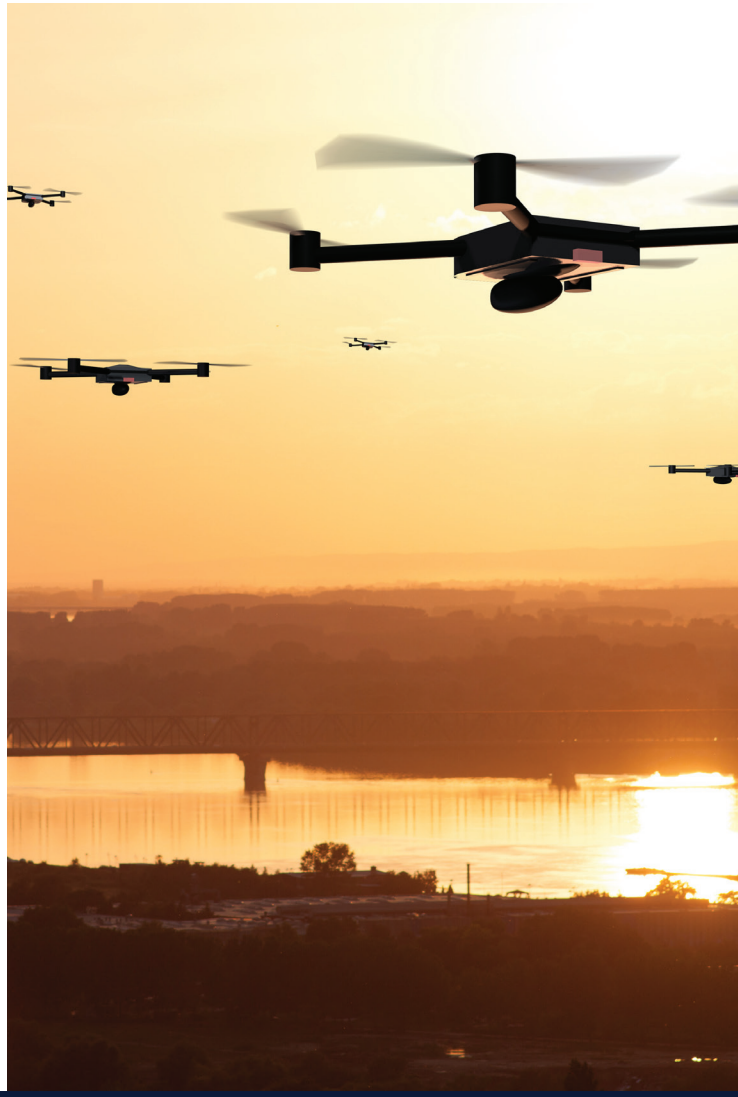
+ **Drone detection and mitigation strategies and systems.**
  There's plenty of tech available on the market for detecting drones, but it gets expensive fast and you might not need every capability. We work with you to form and execute a strategy for prioritizing your investment in drone-aware program technologies.

+ **Onsite technology proof-of-concept and pilot testing.**
  We provide field verification of drone detection and response technology by using a data-focused approach that gives you assurance of capability prior to capital investment. This enables you to pilot your proposed solutions and test them for efficacy prior to wide-scale rollout.

+ **Operations and training.**
  With a new threat vector comes the need for new operational learnings and best practices. Our experts can help your team integrate drone detection and response into your existing program with a minimum of friction or complexity.

+ **Public/private partnerships.**
  Drone security response often entails unique relationships and support from state, local, tribal and territorial (SLTT) law enforcement and other public-safety entities, in part because drone detection and response law is under frequent change and evolution. We help your team navigate and stay on top of these relationships, regulatory nuances, and agreements.

+ **UAS "red team" services**
  Our team can conduct exercises that simulate real-world-inspired UAS incursions to demonstrate security vulnerabilities to your people, networks, facilities, and assets. Highlighting these security gaps informs your company's drone security approach.



How we add value

Our mission is to be the premier partner for organizations confronting drone threats by delivering expert guidance, operational readiness, and innovative security solutions that elevate airspace protection as a core element of modern physical security programs. We offer:

+ **Practitioner-led expertise** from our talented bench of UAS security consultants.
+ **Focus on risk and understanding requirements** before proceeding with procurement.
+ **Independent technology guidance and testing** using resources from our dedicated lab.
+ **Long-term guidance** for continuously augmenting your program as drones and robotics evolve.

The key value of our services is to help clients like you:

+ Gain a definitive perspective on the risk from drones that your business and facilities face.
+ Reduce the potential cost of operational shutdowns and security breaches from drone-related incidents.
+ Avoid unnecessary capital expenditures by selecting technologies based on validated risks and operational requirements.
+ Improve your return on security investments through independent technology evaluation, testing, and integration planning.
+ Strengthen response readiness to contain incidents faster and limit financial, legal, and reputational consequences.



Drone security is about risk management, not just tech

Technology is key to defending your facilities against drones, but without an underlying analysis of your particular risk, proceeding with technology integrations is prone to guesswork and misaligned requirements. You can always buy the tech you think will get the job done, but unless you align that spend with the actual risk your business faces, you'll quickly go off-course by investing in the wrong areas while leaving areas of your business inadequately protected.

Getting it right means applying a thoughtful, measured approach, just as it does in other areas of your program strategy and operations. So, don't start with the wrong conversation—drone security isn't a problem you solve by simply shopping for the right new tools. Rather, it's a risk management discipline, subject to the same considerations as your other risk-driven investments.

We firmly believe in this principle and use it to guide our efforts to make clients successful. As such, we've made it a cornerstone of our new practice.

Beyond the air: Risks from land and sea

With drone incidents prevalent in the news, many of our clients are currently making aerial risks the focus of their attention. But increasingly, this "new perimeter" is also extending to waterways and long-range ground distances as well. Ports are more vulnerable than ever to evolutions in underwater and water-surface robotics incursions, requiring an updated awareness of maritime security technologies. Ground-based robotics are likewise becoming more powerful and ubiquitous, making their use by bad actors a risk factor some security programs are compelled to address.

Our consultants have knowledge and experience in these areas, too, and continue to track the latest threats posed by maritime and long-range terrestrial robotics. As with aerial drones, we provide risk assessment and counter-robotics strategies that will logically fit within your existing physical security operations. A range of technologies exists for addressing these risks, and just as with drones, we start with understanding your true risks and guide you toward a proportionate consideration of your options.



Broader opportunity: Robotics as a force multiplier

Drone security, it turns out, is about more than defending against threats. It's also a way of modernizing your security operations (including response capability and persistent surveillance) to be faster, more cost effective, and better integrated with your other systems.

We can advise you on ways to implement drones and other robotics to conduct routine patrols, verify alarms, assess suspicious activity, automate infrastructure inspection, sense environmental dangers, conduct post-incident follow-up, and inspect materials or support response in hazardous or inaccessible locations. Where needed, we also help find ways that drones and robotics can help you search and assess large geographic areas, provide temporary coverage during construction or other special events, and provide security escorts or overwatch for employees working in isolated locations.

For using drones and robotics as security assets, the value of our services can help you:

+ Reduce reliance on labor-intensive patrols and lower the cost of security activities.
+ Increase coverage and service levels without a commensurate increase in guard-force expense.
+ Improve incident assessment and response speed, helping reduce losses and avoid unnecessary deployments.
+ Extend the value of existing cameras, sensors, command centers, and security infrastructure through integrated autonomous operations.
+ Create a measurable business case based on total cost of ownership, staffing efficiencies, risk reduction, and operational return on investment.

Many of the services we deliver here are parallel to those we offer for protecting against drones: assessing risks, identifying opportunities, building use cases, testing technology, and deploying program elements that will augment and strengthen your day-to-day security capabilities without forcing an overhaul of operational systems you already have in place.



Make drone security part of your program's natural evolution



You've already worked hard to produce a physical security program that meets the security needs for your business and its facilities. We'll help you shape and integrate the new part of that program that addresses robotics threats from the sky and elsewhere.

Start your drone security journey with clarity and intention by working with professionals who deal in consultation and analysis, not just product features and the latest trends. On this journey, we'll encounter and resolve issues with technology evolution, regulatory changes, and the emergence of new threats—all for the purpose of shoring up your defenses in this new perimeter and keeping your physical security program the strongest it can be.

Find out your drone-based risks and opportunities

Contact us to set up an initial consultation on your company's readiness for drone and robotics security.



ZBeta is a world-class physical security design and managed services firm that provides services to some of the most dynamic, high-profile organizations and individuals in the world. We leverage a data driven, technology led, human centered approach in order to help our clients architect and engineer superior physical security solutions, implement them seamlessly, and operate them at peak efficiency. Whether designing a new corporate campus, building a futureproof technology roadmap, or augmenting a client's internal team, we operate at scale, move at the speed of today's projects, represent your program as you would, and assure delivery where others cannot.

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