



BIRDS EYE AERIAL DRONES

Birds Eye Aerial Drones

Helping the Smart Border Coalition . . .

to implement aerial imagery and data collection solutions seamlessly

The Need

San Diego-Tijuana Smart Border Coalition purpose – One people, one region, one economy. If the agencies and users have better info, they can make better decisions.

Smart border Crossing = more efficient crossing for all - transport, people, railway, industrial, etc.

Pain Point – lack of dependable real-time info

Vision-Based Solutions – Many options have been presented, yet none have stuck.

Technology currently being used – in-person info gathered at the border booths, building mounted cameras, CALTRANS/SANDAG working with Mexico –telephone pole mounted cameras, and GPS in trucks

What would a solution look like?

Robust, formal, analytics, consistent, reliable 24/7 'go-to' info, perhaps app accessible





How Do We Support You?

Add experienced, expert UAS services to your capabilities.

Safety • Inspection • Mapping • Planning • Security • Real-Time feed • Data Analytics • Consultation

Who Are We?

We are . . .

- San Diego-based Unmanned Aerial Systems (UAS) Imaging and Data Collection Company.
- Pilots are Part107 Licensed and Insured.
- Retired armed forces personnel who serve our clients like we served our country.
- Certifications: SDVOSB/SB/DVBE/SLBE
- Memberships: AUVSI/AMA/AOPA

We Deliver . . .

- Experience, Expertise and Equity
- Sound judgment & strict flight discipline
- Turn-key solutions to solve your problems



Vision-Based Solution

Potential Intelligent Deliverables
Via UAS - Non-Intrusive Inspection
Technology:

- ~ Predictability
- ~ Real-time feed
- ~ Information data packages to offer to other agencies
- ~ Infrared possible at night
- ~ Security
- ~ User interface app
- ~ App inputs
- ~ Other



- Our services save man-hours
- Our services save money
- Our Daylight Waiver enables us to operate 24/7
- All of the above equals a smart vision-based solution

Exceptional observation & surveillance capabilities



Powering both the drone and its sensors from the ground has a number of advantages. For one, flight time is extended from less than an hour (with most current UAS) to days. Additionally, a tether can supply more power than a battery, which means larger motors and heavier payloads.

This type of tethering technology can also provide greater bandwidth and, with that, much better video quality compared to wireless drones.

BEADS tethered drones solutions are a critical asset for security operations

Able to maintain:

- Continuous and global aerial view
- Risk-free and efficient surveillance
- Day and night use
- Longer flying times
- Aerial stability
- Tether doubles as a power supply

Peace of Mind

Border UAS cameras
help commuters plan ahead

Border Wait Time Measurement Technologies

Queue Length Measurement

Inductive Loop Detectors

Ranging Radar Detectors

Video Image Processing

Fixed Point Vehicle Re-identification

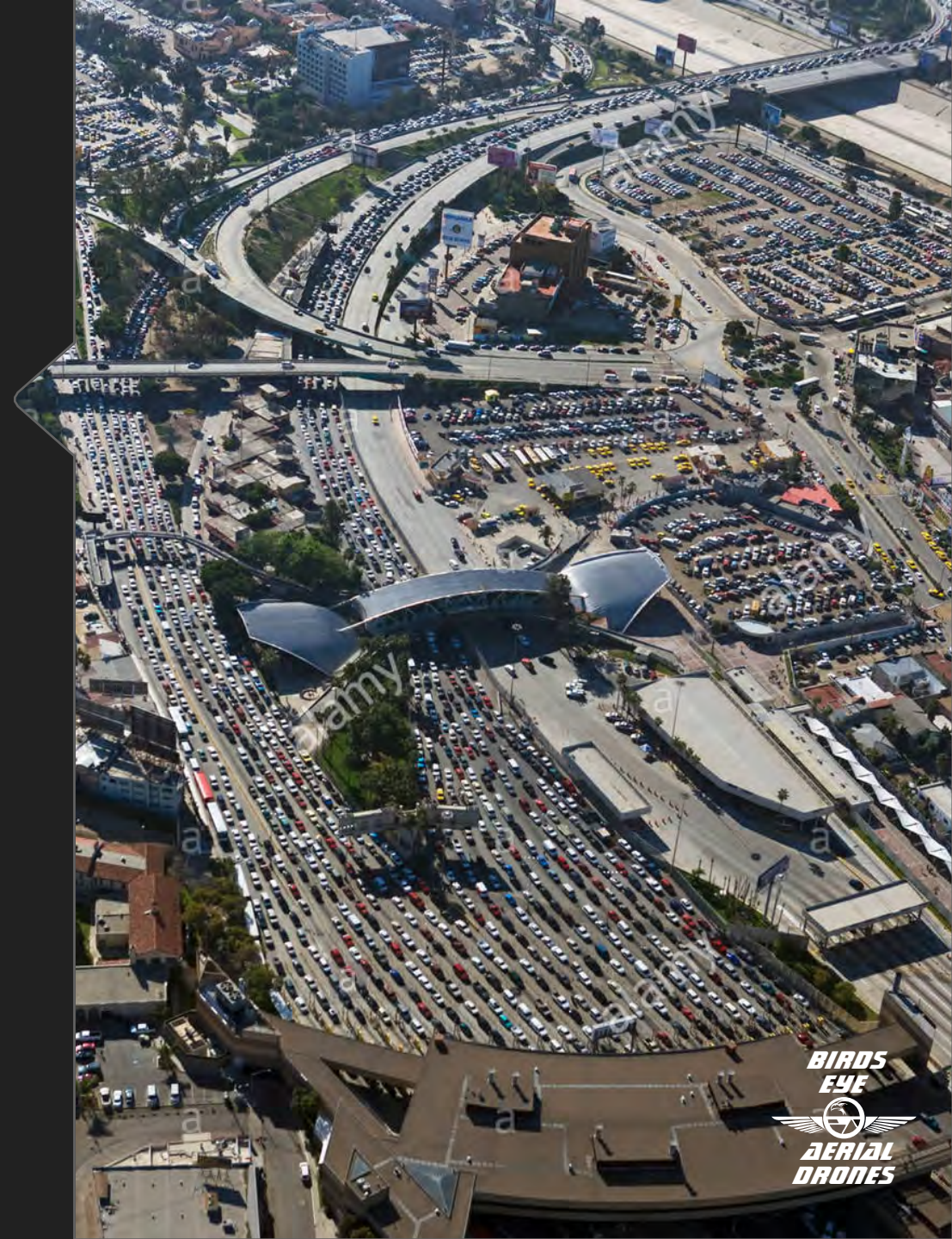
Radio Frequency Identification

License Plate recognition

Dynamic Vehicle Tracking

Cell Phone Tracking

Global Positioning Systems





- ▶ Long detection range (up to 5850 m)
- ▶ Integrated Intelligent Video Analytics
- ▶ 640 x 480 resolution version available for even sharper images
- ▶ High access security for data protection

Smart Border Solution Proposal:

Birds Eye Aerial Drones Tethered drone mounted camera which is capable of collecting high amounts of data for BLUENOSEiT to be able to quantify and make accessible to the various bi-national entities

Video Image Processing

How it works: A tethered UAS mounted video camera monitors queuing traffic. Consecutive images are analyzed to track the movement of individual vehicles in the queue.

Equipment Required: UAS, tether system, power source, Cameras, image processing software, equipment cabinet and field controllers, communications link to Traffic Management Center.

Advantages: Estimates the wait time for the next vehicle entering the queue (future-oriented), rather than recording the wait time for a vehicle that has already left the queue.

- Image can be live-feed and/or later viewed for confirmation.
- Can be a direct secure link.
- Maintenance does not require lane closures





BIRDS EYE AERIAL DRONES

Scott Painter • CEO/Chief Pilot (805) 809-1991 Scott@BirdsEyeAerialDrones.com

Sheri Painter • Co-Founder/Marketing Director (805) 890-8817 Sheri@BirdsEyeAerialDrones.com

Brian Katz • Marketing (619) 995-9773 Brian@BirdsEyeAerialDrones.com

www.BirdsEyeAerialDrones.com

info@BirdsEyeAerialDrones.com