

Tactical surveillance support for offshore containment and recovery (C&R) operations is essential for efficient collection and recovery operations. It helps improve encounter rates by allowing C&R vessels to target the thickest patches of oil.

Technology has progressed in recent years, and tools such as Unmanned Aerial Vehicles (UAV) and Aerostats have been utilised to provide tactical support for offshore operations, augmenting established platforms such as fixed wing or rotary "spotter" aircraft. Traditional and new methods of surveillance add great benefits in the right scenario, however they can also bring challenges from cost, regulatory restrictions, availability and logistical requirements.

The challenges faced with existing tools led OSRL to investigate and develop a kite surveillance package. Kites can be utilised where other tools may be restricted in use due to the regulatory environment/requirements, cost implications and availability of other surveillance assets. The kite surveillance package adds value in the right scenarios by providing a tool that is simple to deploy, deployable without considerable regulatory controls and involvement, and is inexpensive in comparison to other tools.

Kites are an age-old technology that has stood the test of time; a testament to their usefulness and relevance even today can be seen by the multiple patents and new kite designs that have come about over recent years.

As with all surveillance tools, they provide greatest value when they are selected and utilised for the right scenario and in the right conditions. The surveillance kite is another tool in the toolbox.

Surveillance Kite Package:

The surveillance kite package consist of three kites, each selected to be used during differing wind conditions to provide optimum lift, and to ensure safe operation. Equipped with a gyro stabiliser action camera to provide useable imagery and video, the video can be streamed using a simple mobile phone app and the video receiver and transmitter. Ultimately the surveillance kite provides a tool to provide actionable tactical intelligence to responders in the field, enabling them to target the thicker patches of oil, increasing response effectiveness and providing all round improved situational awareness.

Kap Foil 1.6
Kap Foil 3.0
Kap Foil 8.0
Picavet
Various Kite lines and Winders
GoPro HERO4
3-Axis Gimbal
5.8Ghz Receiver
5.8Ghz Transmitter

KAP 1.6

- Width: 130 cm / 51"
- Height: 120 cm / 47"
- Sail: Ripstop Nylon
- Line rec.: Polyester 90 kg / 200 lb.
- Wind range: 2-6 Bft. (11-49 km/h /

7-31 mph)

KAP 3.0

- Width:180 cm / 71"
- Height: 160 cm / 63"
- Sail: Ripstop Nylon
- Line rec.: Polyester 120 kg / 250 lb.
- Wind range: 2-6 Bft. (7-45 km/h / 4-28 mph)

KAP 8.0

- Width: 300 cm / 118"
- Height: 266 cm / 105"
- Sail: Nylon
- Line rec.: Polyester 250 kg / 550 lb.
- Wind range: 1,5-6 Bft. (5-45 km/h / 3-28 mph)

Benefits for the surveillance kite package

- · Tactical support
- Long endurance
- Constant stare
- Birds eye view
- Visual cameraRelatively inexpensive
- minimum training required compared to UAV's/ Aerostats









