A Solution Addressing The Needs Of The 21st Century
is specialized in the design, development, and manufac-
turing of high-end night-vision cameras for mid-range
and long-range surveillance applications based on
active imaging. Thanks to its range-gating capability
and unique illuminator technology, Obzerv’s cameras
are operating in total darkness and degraded weather
conditions while offering real time video images.

World Leader

Over the years, Obzerv’s cameras have been installed and integrated with diverse surveillance systems around
the world. To achieve this success, we worked closely with our customers to ensure that the best and most
efficient integrated solution is delivered.

Mission

“Provide our world-wide customers with a decisive operational advantage through the superior performance
of our surveillance products based on active imaging technology.”

A Word from the Founders

“At Obzerv, ensuring end-user’s satisfaction
through the building of winning relationships with
our integrators and customers is of the utmost
importance to us. We strongly stand by this phi-
losophy ever since the inception of the company
and this is what has propelled us at the forefront
of the high-performance range-gated suppliers
on a worldwide level. As we look ahead, we are
confident that our cameras will continue to deliver
quality solutions and high value to our customers,
while continuing to strengthen our global presence
in the industry”.

Mr. Deni Bonnier, President (on the right) and
Mr. Demers, CTO (on the left).

An Effective and Proven Solution

MALAYSIA MARITIME TRAFFIC SURVEILLANCE
Growing piracy threats are a problem to the Strait of
Malacca, Malaysia, carrying 70,000 vessels per year,
which is the main passageway for oil tankers, on their
way to world consumers such as Japan and China. On
March 21st 2009, the Japanese government offered
three cameras to the Malaysia Maritime Enforcement
Agency (MMEA) to complete its surveillance network.
The ARGC-2400 cameras were integrated
to existing radar stations, enhancing the smooth flow
of sea traffic along the 900-kilometer channel. While
the radars detect the location of unusual activities
and threats, the ARGC-2400 cameras classify and
clearly identify these targets.

NORTHERN CANADA ARCTIC TRAFFIC SURVEILLANCE
In view of the forecasted increase of maritime traffic
within the unique and fragile Canadian Arctic envi-
ronment. Obzerv Technologies was selected by the
Canadian Department of Defense as a cost-effective
solution to survey maritime traffic. Obzerv delivered
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which combines its ARGC-2400 long-range iden-
tification camera, a high-end thermal camera and
a moving map display. This project is also known as
Canadian Arctic Night and Day Imaging Surveillance
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THE SPATIONAV PROJECT IN FRANCE
The Spationav project was initiated after a ship with
more than 900 refugees ran deliberately aground on
the Varoise coast, near St-Raphael in 2001. The fight
against illegal immigration, drug smuggling and the
intensification of terrorism threat drove the Spationav
project. The Obzerv ARGC-2400 camera has been
acquired to upgrade the Semaphores for this project
directed by the French DGA (Délégation Générale
pour l’Armement). In the Spationav program, whilst
the radars are dedicated for the detection of unusual
activities and threats, the ARGC-2400 cameras are
used, day and night, to recognize and identify those
targets.
Solutions

Providing the highest level of performance available, Obzerv’s night vision cameras are ideal for coastal and border surveillance, military operations, protection of high value assets, identification at long-range, etc. Our multi-sensor camera offers the sharpest video images at long ranges, in total darkness, and in challenging weather conditions.

Who is Obzerv for?

Nations and Governmental Agencies are using Obzerv’s products for:

COASTAL & BORDER SURVEILLANCE

- Target-evidence gathering (name of vessels, deck activities, etc.)
- Port security and maritime domain awareness
- Special zone situational awareness
- Vessel traffic monitoring
- Anti-piracy and counter terrorism actions
- Illegal fishery within territorial waters
- Smuggling activities
- Illegal immigration
- Location of buoys, markers and identification of floating objects
- Search and rescue missions (day and night operations)
- Military Forces Protection & Security
- Detection of Pointed Optics (snipers)
- Identification friend/enemy/neutral/urban warfare

INDUSTRIAL SURVEILLANCE

- Perimeter surveillance/protection of High Value Assets (oil rigs, pipeline, airports, natural gas infrastructures)

SPECIAL TASK FORCE & CUSTOMS

- Evidence gathering (contraband, drug, organized crime)
- Border surveillance
- Suspicious & unwanted crowd surveillance
- License plate identification

The Company’s origin

The company’s scientific roots are going back to the Canadian Department of National Defence and the National Institute of Optics also known as INO.

With the commercial potential of the technology as clear as its imaging results, Obzerv Technologies Inc. was founded in March 2002 as a spin-off of INO to address the development and manufacturing of commercial products.

PRODUCTS DEVELOPMENT HISTORY

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Obzerv has developed a breakthrough imaging technology by combining proprietary designs into its Active Range-Gated Cameras.

**Design, Development and Manufacturing**

Obzerv’s multidisciplinary engineering team designs, develops and manufactures our products in specialized laboratories using high-tech tools.

**DIGITAL & ANALOG ELECTRONIC**

Real-time imaging requires very fast electronic gating systems. Consequently, Obzerv has developed its own unique electronic gating system for accurate synchronisation with its high-frequency laser.

**MECHANICAL**

Obzerv relies on an opto-mechanical engineering team to provide the knowledge necessary to design all mechanical components of Obzerv’s cameras. This team designs and conceives motorized zooms, macro and micro collimators, camera enclosures as well as all mechanical components required to integrate our cameras on a motorized pan & tilt head. The result is a highly sophisticated, IP-66 rugged design.

**PRODUCTION FACILITY**

Optical, mechanical and electronic sub-assemblies are manufactured by highly qualified subcontractors with unique capabilities. Obzerv’s production team is handling the final assembly, calibration, and quality control including environmental testing using custom design or specialized high-end equipment such as projection systems with long-ranges simulation capabilities in controlled conditions environment.

**Expertise**

Obzerv has a unique focus on designing, developing, and manufacturing imaging technology. Our expertise lies in integrating powerful laser diode array illuminators with range-gated cameras, enabling high-quality imaging in challenging conditions.

**Obzerv’s Range-Gating Technology**

Obzerv’s active range-gating technology is based on a powerful pulsed laser diode array illuminator and a range-gated camera. By providing its own illumination source, it does not require any ambient light.

Obzerv’s patented laser source integrated in its cameras delivers unprecedented performance for long-range identification and classification.

By incorporating innovative range-gating technology in its cameras, Obzerv’s active imaging night vision systems can reduce blooming effects caused by intense lighting in the field of view. Additionally, it greatly increases visibility through light pollution, fog, snow, dust, and rain. At the same time, Obzerv’s products enable the operators to see objects through glass, an indispensable feature for observing building and vehicle interiors.

**UNIQUE CAMERAS**

Obzerv Technologies is delivering unique off-the-shelf active range-gated cameras. Its cameras are deployed in many countries to assist radar-based surveillance system. With its efficient range-gated technology, Obzerv cameras are best suited to see through glass and to provide identification based on markings, in good and adverse weather conditions. Moreover, Obzerv is using military-hardened laser fabrication technique to ensure the best operation in very harsh environmental conditions.

It is also worth mentioning that Obzerv’s cameras possess a laser beam divergence slaved to the camera’s FOV, that its ICCD is protected against blooming effects caused by high intensity light sources, and that its NFOV color camera provides excellent day-time effectiveness.
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