Searidge Technologies is a leading provider of Remote Tower and Airport Surface Optimization solutions.

We were the first company to have an operational video system in an air traffic control operation, and now with technology at over 30 sites in 16 countries, our video is viewed by the most Air Traffic Control Officers (ATCOs) and airport operations personnel worldwide.

We know your concept of operation requires a customizable solution that can support your remote tower needs.
Our Global Customers

North America
- NAV CANADA
- Greater Toronto Airports Authority
- Toronto Pearson International Airport
- Montreal Pierre Elliott-Trudeau Airport
- London International Airport
- Ottawa International Airport
- Winnipeg James Armstrong Richardson International Airport
- Edmonton International Airport
- Halifax Stanfield International Airport
- Oakland International Airport
- Aspen/Pitkin County Airport
- Fort Lauderdale-Hollywood International Airport
- Seattle-Tacoma International Airport
- Nakusp Airport

Europe
- Ente Nazionale Assistenza al Volo (ENAV)
- HungaroControl
- Direction des Services de la Navigation Aérienne (DSNA)
- Malta Air Traffic Services (MATS)
- Milan Malpensa Airport
- Budapest Airport
- Charles de Gaulle Airport
- Malta International Airport
- Saint-Pierre Airport
- Miquelon Airport
- ALBCONTROL
- Tirana International Airport

Middle East & Asia
- Dubai Airports
- Azeraeronavigatsiya (AZANS)
- Dubai International Airport
- Hamad International Airport
- Baku Airport Heydar Aliyev International Airport
- Soekarno–Hatta International Airport
- Bahrain Civil Aviation Authority
- Sultan Hasanuddin International Airport
Low Volume, Single Runway Remote Tower

You are looking to:

Replace your brick and mortar tower with video technology to enable the provision of remote Air Traffic Control (ATC) services, to one or more airports, from a geographically independent location.

THE SEARIDGE SOLUTION

- Provides required out-the-window (OTW) view presentation, binocular control replacement, and detection and recognition on approach.
- Provides ATCOs with enhanced visibility of airport surface.
- Ensures that initial and life cycle costs support the business case.
- Meets both unique site and user specific requirements.
- Provides minimal impact to existing procedures and ATCO licensing.
- Integrates with existing CNS/ATM systems.
- Prioritizes and addresses human factors in order to ensure user adoption.
- Provides innovative bandwidth management options.
ENAV/Searidge Partnership for Milano Malpensa Airport

The ENAV-led Remote Airport Concept of Operation (RACOON) is a large-scale demonstration project under the Single European Sky ATM Research Joint Undertaking (SESAR JU).

For the purpose of the project, a remote tower has been set up at Milano Malpensa (MXP) airport. MXP will act as a Remote Tower Center (RTC), providing remote airport services combined with air navigation (RNAV) procedures for the night-time operations to Milano Linate (LIN), as well as a virtual airport (distant runway at MXP).
High Volume, Multi-Runway Remote/Contingency Tower

You are looking to:

1) Develop a contingency plan for unforeseen tower closures, or
2) Replace local brick and mortar tower with remote tower technology

THE SEARIDGE SOLUTION

• Adapts remote tower technology to meet the specific needs of a larger airport environment including geographical size, traffic volume and complexity, integration with ATCO working position, and multiple ATCO roles and positions.

• Supports various concepts of operation (i.e. multiple ATCO roles and positions, role consolidation during off-peak, etc.).

• Integrates with existing CNS/ATM/Airport systems.

• Provides an enhanced OTW view presentation and binocular control replacement (vs. traditional tower).

• Ensures initial and life cycle costs support the business case.

• Meets both unique site and user-specific, operational and functional requirements.

• Minimally impacts existing procedures and ATCO licensing.

• Prioritizes and addresses human factors in order to ensure user adoption.
HungaroControl/Searidge Partnership for Budapest Airport

By 2017, HungaroControl aims to operate a remote contingency tower in Budapest and a full-time remote tower by 2018. Although Budapest airport will not be the world’s first remotely controlled airport, it will be the first of its size and complexity, with nearly 100,000 movements per year.

The Searidge Remote Tower solution has been implemented in a medium size airport environment, providing controllers with a live, panoramic stitched view of both runways and the apron area at Budapest airport. The air traffic control information is presented on a customized video wall and incorporates a fully tailored human machine interface. In addition, the integration of Searidge’s advanced video processing system and Indra Navia’s Advanced Surface Movement Guidance and Control System (A-SMGCS) provides seamless radar coverage, customized data overlays and automated functionality such as target auto-follow.
Remote Apron Control Tower

You are looking to:

1) Replace your existing apron tower(s) with a windowless apron visual control room, or

2) Consolidate operations of multiple apron towers into a single main apron tower (during off-peak operations or more permanently), or

3) Alleviate having to construct a new apron tower for a newly constructed apron areas

THE SEARIDGE SOLUTION

• Provides complete and fully customized coverage of apron and terminal areas.

• Provides an enhanced OTW view presentation and binocular control.

• Meets both unique site and user specific requirements.

• Minimally impacts existing procedures and controller licensing.

• Prioritizes and addresses human factors in order to ensure user adoption.

• Includes Visual Control Room and controller working position console design.

• Integrates with existing CNS/ATM, Airport (i.e. AODB, ground lighting) and Airline (i.e. gate planning, scheduling) systems.
Air IT/Searidge Partnership for Fort Lauderdale–Hollywood International Airport

The Virtual Ramp Control System (VRCS) will enable the consolidation of two mobile apron towers into a single windowless control room; the Airport Operations Control Center (AOCC).

The system uses visible, thermal, and pan-tilt-zoom cameras to provide ramp controllers with enhanced situational awareness around the terminal and gate areas. The views are stitched together and presented on two video walls. Workstations provided by Searidge are enhanced by a 3D map display and external surveillance data from ASDE-X and AirIT's Airport Operational Database (AODB). The data is collected and redistributed by Searidge as customized, dynamic informational overlays on the map.
Remote Aerodrome Flight Information Service

You are looking to:

1) Replace your brick and mortar tower building with video technology to enable the provision of remote Aerodrome Flight Information Services (AFIS), further consolidating service delivery for multiple sites into a single location, or

2) Provide AFIS services at locations which can not justify building brick and mortar towers

THE SEARIDGE SOLUTION

• Offers a scaled-down remote tower solution to provide AFIS and meet local business case.

• Provides visual surveillance to provide ground control to vehicles and ensure the status of the runway; to provide the most reliable advisory information to pilots.

• Meets both unique site and user specific operational and functional requirements.

• Addresses human factors in order to ensure user adoption.
Searidge/DSNA Partnerships for Saint-Pierre and Miquelon Airport

To improve the efficiency of managing Miquelon airport (MQC), Direction des Services de la Navigation Aérienne (DSNA), the French Air Navigation Service Provider, selected the Searidge Remote Tower platform. Flight information services for MQC will be remotely provided by the Air Traffic Controller at Saint-Pierre airport (FSP). In the second phase of the project, MQC’s AFIS will be upgraded to a control service. The system is expected to be in operation and certified early 2017.
Multi-Remote Tower Concept of Operation

Currently the multiple remote towers concept is not completely proven or defined. Searidge understands that this concept of operation will differ in terms of requirements and implementation for each airport and organization. The technological solution will therefore need to be flexible to address the unique factors of each customer.

CHALLENGES

Apart from safely and effectively providing visual surveillance of multiple airports to a single ATCO, the following are some of the biggest challenges that will need to be addressed through technology:

• Managing workload of controllers to ensure minimal stress levels.
• Developing a new ATCO workflow, and the role of remote tower technology and integration with ATM systems.
• Addressing of nominal events, and dynamics of workload balancing between multiple working positions.
• Implementing video safety nets and situational awareness tools that will increase the efficiency of performing ATCO tasks.

TECHNOLOGY

The most integral component for a successful multi-remote tower concept is the HMI. Searidge offers the most powerful and versatile video HMI in the industry. This coupled with our expertise in video/ATM integration and suite of proven, intelligent video-based applications positions the Searidge Remote Tower platform as the optimal choice for the development & testing, customization, and implementation of multi-remote tower service provision.
Digital Aerodrome Control Tower

The next revolution in air traffic control

The Digital Aerodrome Control Tower concept offers an open interoperability framework allowing for full integration of all ATM systems. The consolidation of this complex data creates a seamless environment where all flight data across multiple systems can be accessed by a single user interface.

BENEFITS

Apart from safely and effectively providing a fully integrated and digitized ATC environment, the technology offers:

- Increased situational awareness (visual augmentation with integration capabilities for safety nets).
- Cost-savings through improving efficiency.
- Runway anomaly alerting capability and Runway Incursion Monitoring Collision Avoidance System functionality.

TECHNOLOGY

Core to the Digital Tower is full integration of ATC systems. Interaction with a flight label on the OTW view, is reflected on the electronic flight strips, and on the A-SMGCS surface surveillance display. Every system is integrated and the digital display view is treated in system terms as just another component.
Our Unique Value

• We will provide you with a system based on proven remote tower technology, operational today on 3 continents, with the largest number of global users.

• Site and user specific system adaptation: hardware, software and integration.

• First-class video HMI: powerful and flexible.

• Support from tender to certification. Leveraging in-house expertise and strategic industry partnerships ensures rapid system deployment and implementation.

• Support multiple types of Remote Tower Concepts of Operations: small low volume, large high volume, apron, AFIS, and customized visual control room design.

• Open architecture and industry standard interfaces.

• Flexibility for system to expand with airport needs.

• Video tracking and analytics providing enhanced situational awareness and safety nets.
Your Remote Tower Partner

19 Camelot Drive
Ottawa, Ontario K2G 5W6

PHONE 613 686 3988
TOLL FREE 1 866 799 1555
EMAIL info@searidgetech.com

remotetower.com
searidgetech.com