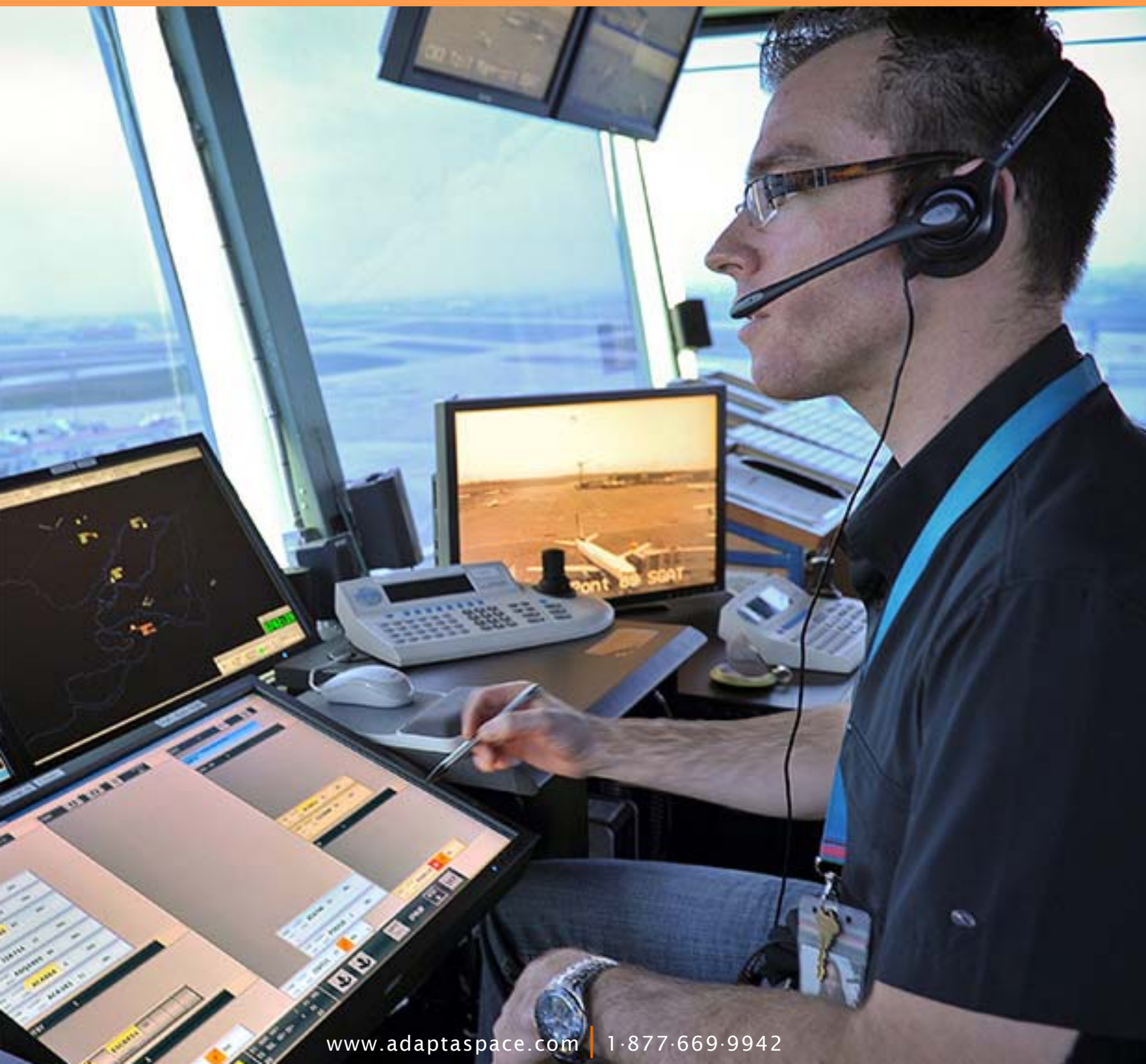
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Console Solutions for AIR TRAFFIC CONTROL TOWERS & GROUND CONTROL CENTERS





Adaptaspace designs & manufactures a full range of console and technical furniture systems, custom configurable to respond to the evolving needs of today's Air Traffic Tower Control and Ground Control Operations Center environments.





Our **Human-Centered** design approach applies best practises and knowledge of Ergonomics and Human Factors to ensure our console solutions contribute toward the creation of an optimized work environment, promoting operator attentiveness, wellness, and job satisfaction to maximize operational efficiency and performance.





Product Offerings

- Custom ATC Console Workstations
- Slat Wall Console Systems
- Rear Beam and Slat Wall Equipment Mounting Hardware
- Display Arms & Speaker Mounts
- Flight Strip Holders
- LED Accent Lighting
- Custom Cabinetry for ATC Tower Cabs; Personal Storage; Printer Cabinets; Binder & Reference Material

Adaptaspace's ATC console solutions are based on our PROCESS Console System custom configured for each unique tower or ground operations center.

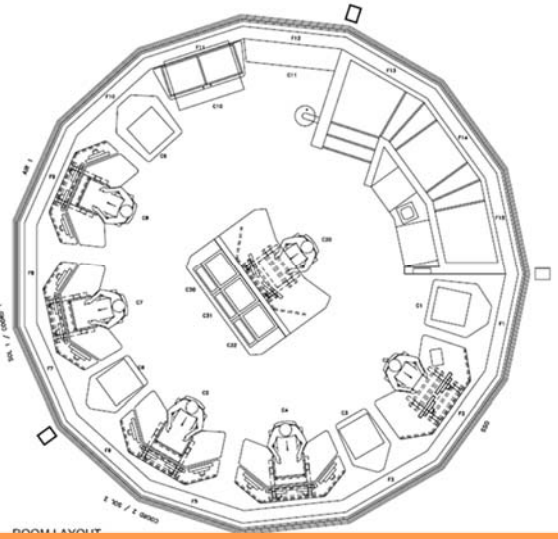
Every project is designed to meet the specific equipment requirements and layout constraints of each facility, yet all consoles incorporate the following common elements:

- human factors requirements, for increased comfort and reduced physical stress;
- equipment and accessory mounting flexibility, to satisfy the needs of each user;
- extensive cable management, for easy installation and access;
- product durability, for 24/7 operation backed by an industry leading lifetime warranty;
- tower layout flexibility, to cater for any space constraint;
- modularity, to allow future equipment and layout re-configurations;
- high aesthetics, to reflect corporate identity and image.

The **PROCESS ATC** Console has been tested to exceed ANSI/BIFMA Standard X5.5-2008 and is compliant with ergonomic standards established by ADA; ANSI; ISO; OSHA; & BIFMA

Quality • Innovation • Value









Adaptaspace has a proven history responding to the unique design and planning demands of air traffic control towers cabs and ground operation work-environments by providing collaborative design support for layout design, work flow analysis, console development, and user and equipment requirements.

Standard project support services include:

- Planning Support— concepts, budgeting
- Requirements Analysis — criteria & constraints, key success factors
- Detailed Drawings and Specifications
- Conceptual Design Development — renderings, mock-up consoles
- Delivery & Installation Planning

NAV CANADA

ADM Aéroports de Montréal

WINNIPEG AIRPORTS AUTHORITY

EIA EDMONTON INTERNATIONAL AIRPORT

U.S. AIR FORCE

Canada

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PROJECT REFERENCE SUMMARIES

Established in 2003, Adaptaspace has designed, manufactured and installed 24/7 Mission Critical Control Room projects for hundreds of customer applications representing a broad spectrum of industries including:

- Air Traffic Control Tower and Ground Operations (Civilian & Defense);
- Pipeline and Refinery Control Centers for the Oil & Gas industry;
- Mine Operation and Processing Facilities;
- Utilities; Water & Waste Water, Gas & Electric
  - Processing, Treatment, Generation, Distribution, Dispatching & Transmission
- Emergency Response 911 Centers for Public Safety organizations;
- Public Transit & Traffic Management Centers;
- Plus, Telecom, Data Processing, Building Controls, Security & Surveillance, etc.

Following, is a selection of relevant project summaries offered to demonstrate Adaptaspace's ability to support the requirements of 24/7 Mission Critical applications for Air Traffic Control and Flight Operations Centers.

1.0 NAV CANADA

Adaptaspace has worked with NAV Canada on 13 control room applications for Air Traffic Control Towers and Ground Operations across Canada including Quebec City, Sept-Iles, St-Hubert, Chicoutimi, St. John's, Gander, Moncton, Buttonville (Toronto), and London. Each tower cabin project is unique and requires a custom solution to meet the needs and constraints of the room. The consoles typically include multiple equipment and display turrets and the control rooms house custom millwork and technical furniture to support the operators.



NAV Canada Gander Oceanic ATC Technology



NAV Canada Buttonville Air Traffic Control Tower



NAV Canada—St John's Flight Service Station

2.0 Aéroport International Montréal Trudeau (Montreal International Airport)

Adaptaspace was selected by Aéroports de Montréal to design and manufacture a unique console solution for the SGAT tower at the Montreal International Airport. Working closely with the Aéroports de Montréal end users, project architect, and the telecom and electrical engineers over multiple 3D design meetings, Adaptaspace was able to provide a solution that met the challenging equipment and spatial requirements of the tower cab.

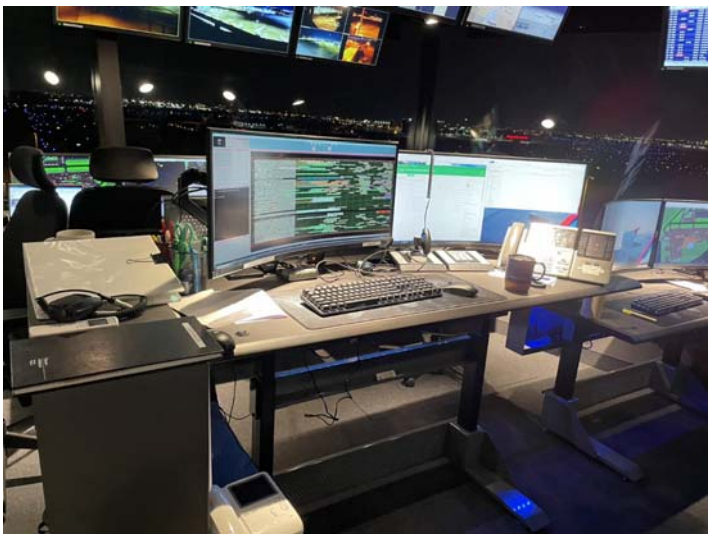
A total of 6 sit-stand consoles and 1 fixed height console were provided, along with custom millwork storage. The consoles incorporated a custom designed, tilting large screen display flush mounted into the work surface, LED accent lighting, a stepped down equipment rail to support additional monitors and speaker enclosures while maintaining appropriate sight lines, and custom long reach, sliding and swiveling keyboard platforms.

Installation was coordinated to fit into a critical window during the construction phase and was completed on-time in May 2023.









3.0 14 WING—GREENWOOD AFB: ATC TOWER CAB & IFR CONSOLES

Working under the direction of the Air Force base building contractor, Pomerleau Construction, Adaptaspace collaborated with Defense Construction Canada (DCC), Department of National Defense (DND), and representatives from CFB Greenwood, NS. to design a console solution for the VFR Cab and IFR Control room, concurrent with the construction of the new ATC Tower and Cab structure. The consoles were delivered and installed in February 2019.

The ATC Cab provides for three (3) Controller Positions, plus a Supervisor Console and custom-built cabinets for general storage, support functions and a break area.

The project team also developed a unique console solution for the Instrument Fight Rules (IFR) Consoles including Six (6) individual positions featuring a Slat-Wall Equipment Mounting System, Integrated Cable Management, Articulated Support Arms for System Displays, Support Arm Mounted IPOS and Radio Control Panels, Plug-n-Play (PIP) Jacks for Communication Head/Hand-Sets and internal support shelves and racks for equipment.



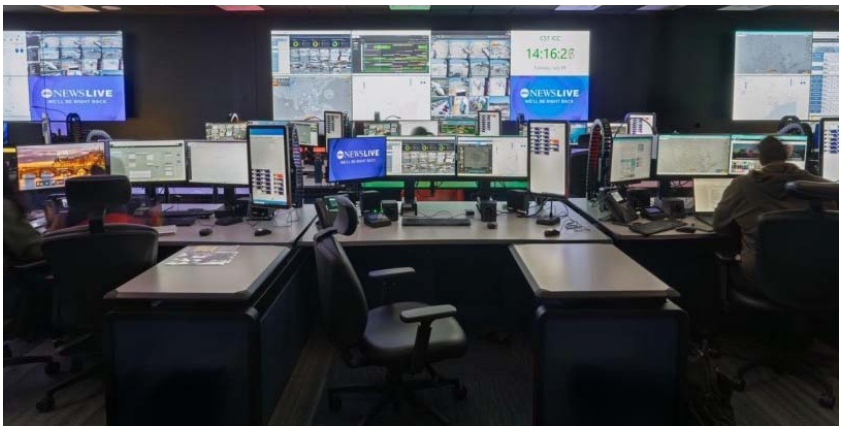




4.0 IAH Integrated Coordination Center

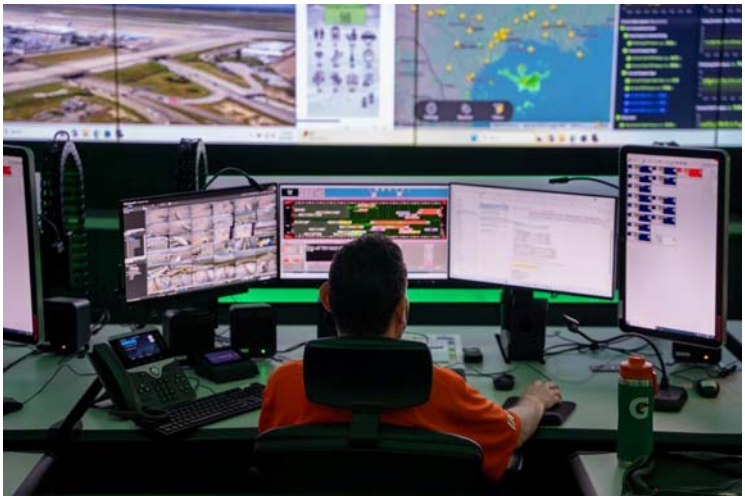
The Houston Airport Integrated Coordination Center was originally designed by the project architect prior to Adaptaspace's involvement. The project presented specific ergonomic requirements within a defined footprint. Adaptaspace's PROCESS modular parametric design easily adapted to the existing layout, meeting all ergonomic standards and resulting in an award-winning solution.

Each of the 24 consoles feature sit-stand worksurfaces, a Monitor Ergo Rail that provides both height and telescopic monitor adjustment, a personal environment control system, integrated cable management, personal storage and ambient lighting for operator comfort and performance. Installation was successfully completed in January 2025.









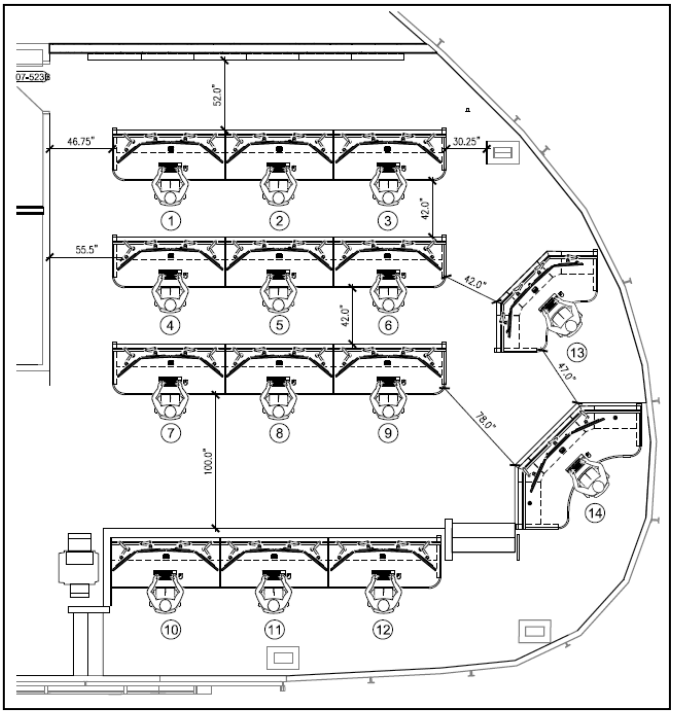


5.0 Edmonton International Airport - Airport Operations Control Center

Adaptaspace worked closely with the Edmonton Regional Airport Authority and BR2 Architecture to design the console solution for the new Airport Operations Control Center at the Edmonton International Airport in 2022. A total of 14 consoles were provided including 4 rows of linear consoles for the operators plus 2 L-shaped consoles for the supervisor and manager positions.

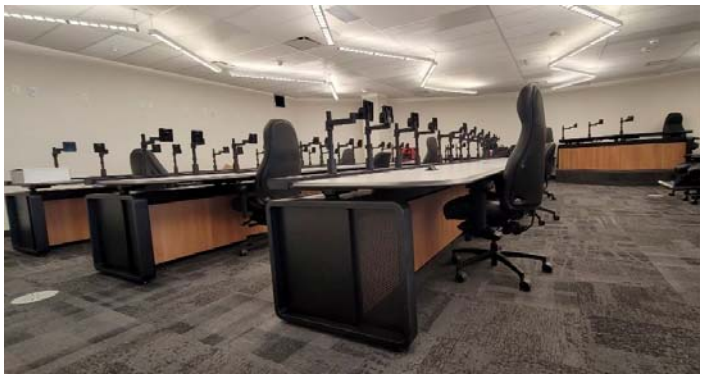
The consoles were based on custom adaptations of our PROCESS console system, configured to meet the specific room constraints. Each console features a height-adjustable work surface with the Adaptaspace Flex-Rail rear mounting beam supporting four articulating monitor support arms and task lighting. The console rows incorporated continuous power and data cable trays across all three positions allowing for a single power and data floor penetration at one end of the console row.

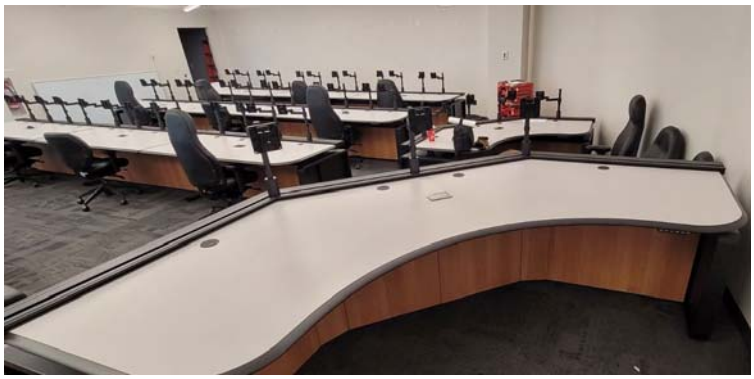
The consoles were delivered and installed in September 2022.











6.0 HOLLOMAN AIR FORCE BASE, NEW MEXICO

Adaptaspace supplied Holloman AFB with 7 custom GENESIS consoles for the MOC Facility Control Room to support 24/7 operations in a no-fail environment. The consoles were tailored to integrate operational systems and related power and communications support requirements needed for the MOC system to execute combined wing Command and Control (C2), combat mission operations, and mission intelligence and exploitation activities.

The large, single plane work surface included a custom designed monitor array that allowed for all monitors to be electrically height adjustable separate from the work surface and provide focal adjustment as a single system.

The project was completed in May 2015.





