



AirTrafficControl

— consoles & enclosures —



Introduction

With over 50 years experience, Emcor® has a long tradition of leadership in providing quality consoles and enclosures for the air traffic control market. From towers to TRACONS and RAPCONs, our installations span the nation and the world. No job is too big or complex - we are up to any challenge!

We thank you for your interest in learning more about our company and the capabilities we are so proud of. Enclosed you will find photographs and drawings of various installations that have been completed or are in progress.



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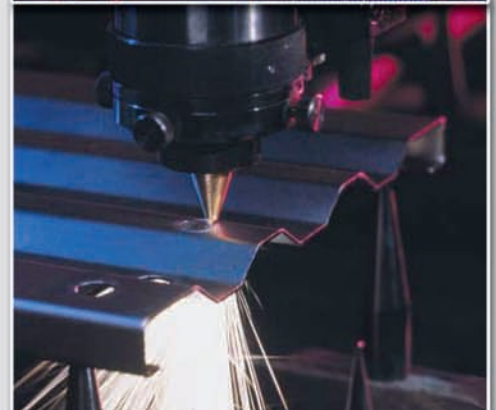
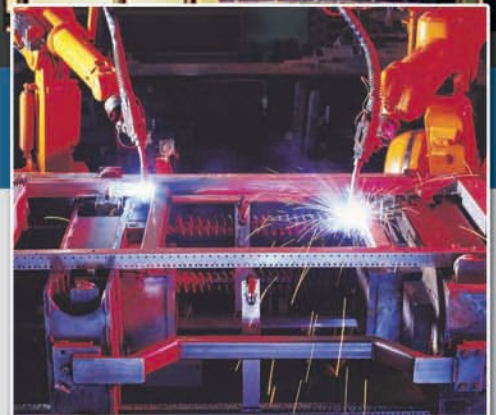
Crenlo's Emcor

line of high-tech modular enclosures & consoles are sold to customers in a variety of markets, including security, broadcast, communications, military, air traffic control, and more.

Emcor's robust product line is manufactured and produced in both of Crenlo's state of the art facilities.

Plant I encompasses an area of 191,000 square feet. It serves as corporate offices and houses our press room, tool and die department, and prototype model shop.

Plant II encompasses an area of 435,000 square feet. Welding, painting, and assembly operations are performed at this facility.



Crenlo Quality Policy

Crenlo's objective is to define our customer's quality requirements and to profitably produce products and services that meet or exceed those expectations.

Crenlo is committed to continuous improvement through education, process advancements and problem prevention.



An ISO 9001:2000 Company

From TOWERS to TRACON's and RAPCON's,
Emcor's installations span the nation and the world.

Tower Installations

- Al Asad Air Base, Iraq
- Amarillo, TX
- Anoka, MN
- Aviano AFB, Italy
- Billings, MT
- Birmingham, AL
- Boise, ID
- Cincinnati, OH
- Columbus Regional Airport, OH
- Columbus, OH
- Crystal, MN
- Dallas, TX (Alliance)
- Dayton, OH
- Decatur, IL
- Denver International Airport, CO
- Des Moines, IA
- Dover AFB
- DuPage County Airport, IL
- Eielson AFB, AK
- Ellington ANG, TX
- Fargo, ND
- Flying Cloud Airport, MN
- Front Range ATCT, CO
- Grand Canyon Nat'l Park
- Grand Forks, ND
- Hanscom Field, MA
- Hartford, CT
- Hill AFB, Utah
- Hillsboro, OR
- Houston, TX
- La Guardia, NY
- Langley AFB, VA
- Lincoln, NE
- Los Angeles International, CA
- Louisville, KY
- MacArthur Field, NY
- MacDill AFB, FL
- MCAF Kaneohe Bay, HI
- MCAS Beaufort, TX
- MCAS Camp Pendleton, CA
- MCAS Cherry Point, NC
- MCAS Futenma, Japan
- MCAS Iwakuni, Japan
- MCAS Miramar, FL
- MCAS New River, NC
- MCAS Yuma
- Memphis, TN
- Midway Airport, Chicago, IL
- Minneapolis /St. Paul, MN
- NAES Lakehurst, NJ
- NALF Cabaniss, TX
- NALF Orange Grove, TX
- NALF San Clemente, CA
- NALF Waldron, TX
- NAS Brunswick
- NAS Corpus Christi
- NAS JRB Fort Worth, TX
- NAS JRB Willow Grove, PA
- NAS Key West, FL
- NAS Kingsville, TX
- NAS Lemoore
- NAS Meridan, MS
- NAS North Island (Coronado)
- NAS Oceana Air Det Norfolk, VA
- NAS Paxtuxent River, MD
- NAS Pensacola, FL
- NAS Whidbey Island, WA
- NAS Whiting Field, FL
- NAVSTA Mayport, FL
- NAVSTA Rota, Spain
- Newark, NJ
- Newburgh, NY
- Newport News, VA
- NOLF Choctaw, FL
- Offutt AFB, NE
- O'Hare (NORTH) Chicago, IL
- Otis ANG, MA
- Palwaukee Municipal Airport, IL
- Phoenix, AZ
- Pontiac, MI
- Quonset ANG, RI
- Richmond, VA
- Robbins AFB, GA
- Salina, KS
- Savannah, GA
- Scottsdale, AZ
- Seattle, WA
- Spirit of St. Louis, MO
- Springfield ANG, OH
- St Croix, U. S. Virgin Islands
- St. Louis Downtown Airport, IL
- St. Thomas, U.S. Virgin Islands
- Stewart Field,
- Tinker AFB, Oklahoma City, OK
- Topeka, KS
- Travis AFB, CA
- Warwick (Providence) RI
- Waterloo, IA
- Wright Patterson AFB, OH

TRACON Installations

- Billings, MT
- Birmingham, AL
- Columbus, OH
- Dallas/Fort Worth, TX
- Honolulu, HI
- Houston, TX
- Memphis, TN
- Northern California
- Oklahoma City, OK
- Pensacola, FL
- Philadelphia, PA
- Phoenix, AZ
- Portland, OR (ETG LAB)
- Roanoke, VA
- San Diego, CA (ETG LAB)
- Savannah, GA
- Seattle/Tacoma, WA
- St. Louis, MO
- STARS Controller, Training Facility
- STARS Training, Atlantic City

RAPCON Installations

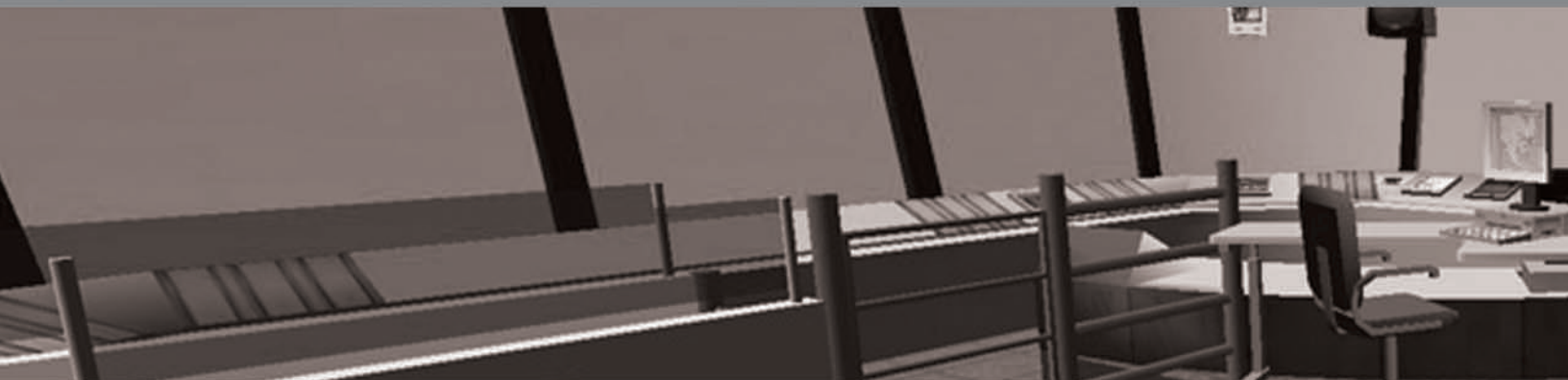
- Alpena ANG, MI
- Aviano AFB, Italy
- Beale AFB, CA
- Columbus, MS, AFB
- Eglin AFB, FL
- Ellsworth AFB, SD
- Elmendorf AFB, AK
- Fort Drum, NY
- Fort Huachuca
- Fort Polk LA
- Fort Riley
- Fort Rucker, AL
- Incirlik AFB, Turkey
- Johnstown ANG, PA
- Keesler AFB, MS
- Kunsan AFB, Korea
- Laughlin AFB, TX
- March AFB, CA
- MCAF Kaneohe Bay, HI
- MCAS Camp Pendleton, CA
- MCAS Futenma, Japan
- MCAS Iwakuni, Japan
- MCAS Quantico, VA
- MCAS Yuma
- McGuire AFB, NJ
- Moody AFB, GA
- MT. Home AFB, ID
- NALF San Clemente, CA
- NAS Brunswick
- NAS Corpus Christi
- NAS Jacksonville, FL
- NAS JRB Willow Grove, PA
- NAS Kingsville, TX
- NAS Lemoore
- NAS Oceana Norfolk, VA
- NAS Paxtuxent River, MD
- NAS Whidbey Island, WA
- NAS Whiting Field, FL
- NAVSTA Mayport, FL
- NAVSTA Rota, Spain
- Nellis AFB, NV
- Selfridge ANG, MI
- Sheppard AFB
- Travis AFB, CA
- Tyndall AFB, FL (Training Room)
- US Army
 - Coleman AAF
 - Grafenwohr AAF
 - Illiesheim AAF
- Volk Field, Camp Douglas, WI
- Whiteman AFB, MO

International Installations

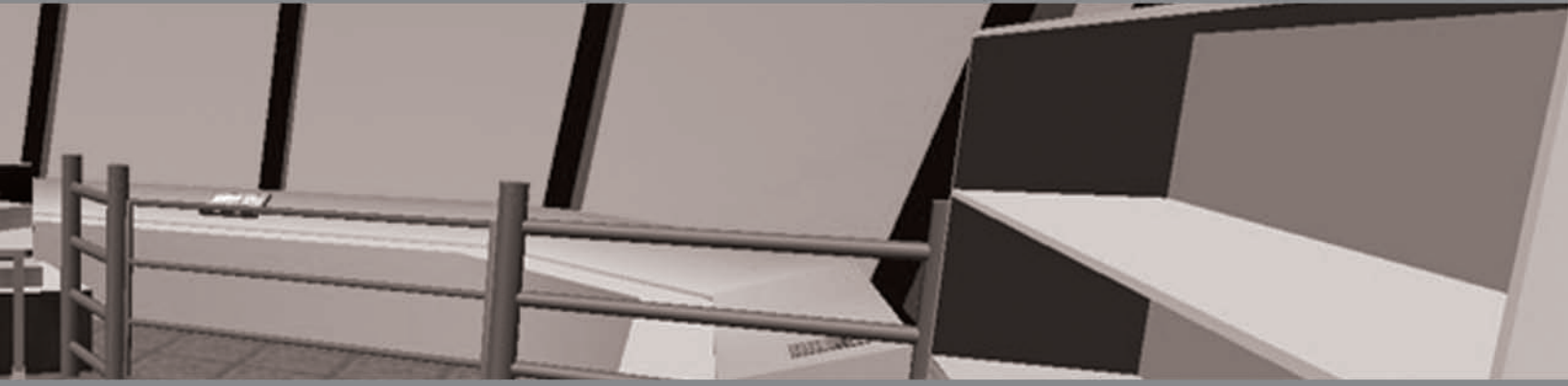
- Taiwan – Centers & Towers
- Saudi Arabia – Centers
- China – Centers & Towers (Numerous locations)
- Thailand – Air Defense Consoles
- Indonesia – Centers
- United Arab Emirates – Air Defense Consoles
- Beirut, Lebanon – Centers & Towers
- Albania - Centers & Towers
- Kazakhstan - Centers & Towers
- Uzbekistan - Towers

FAA Programs

- AAS (DSR) \ EGG \ URET \ ERAM \ ERIDS
- ETVS/DVRS/STVS
- VSCS
- WAAS
- MSAS
- ATOP
- IVSR
- AFSS (upgrade)
- ACE \ IDS



Design & Engineering - Services





Achieving e-finity

Experienced

Original design solutions using cutting edge CAD software

Established

Longstanding familiarity with customer equipment and applications

Efficient

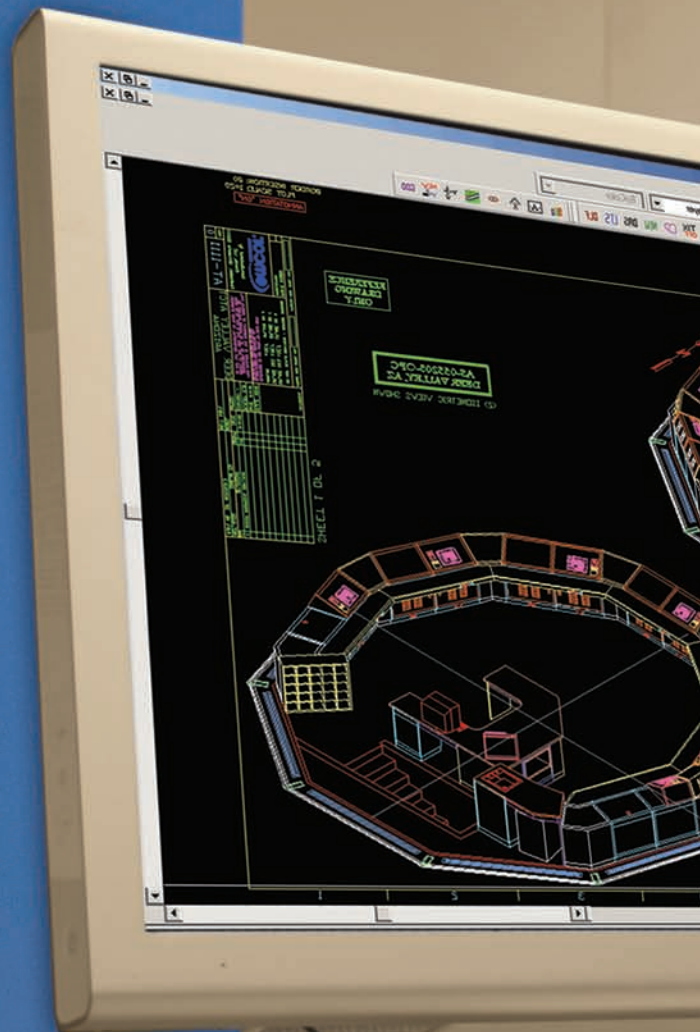
Quick turnaround of client proposals to support aggressive time lines

Ergonomic

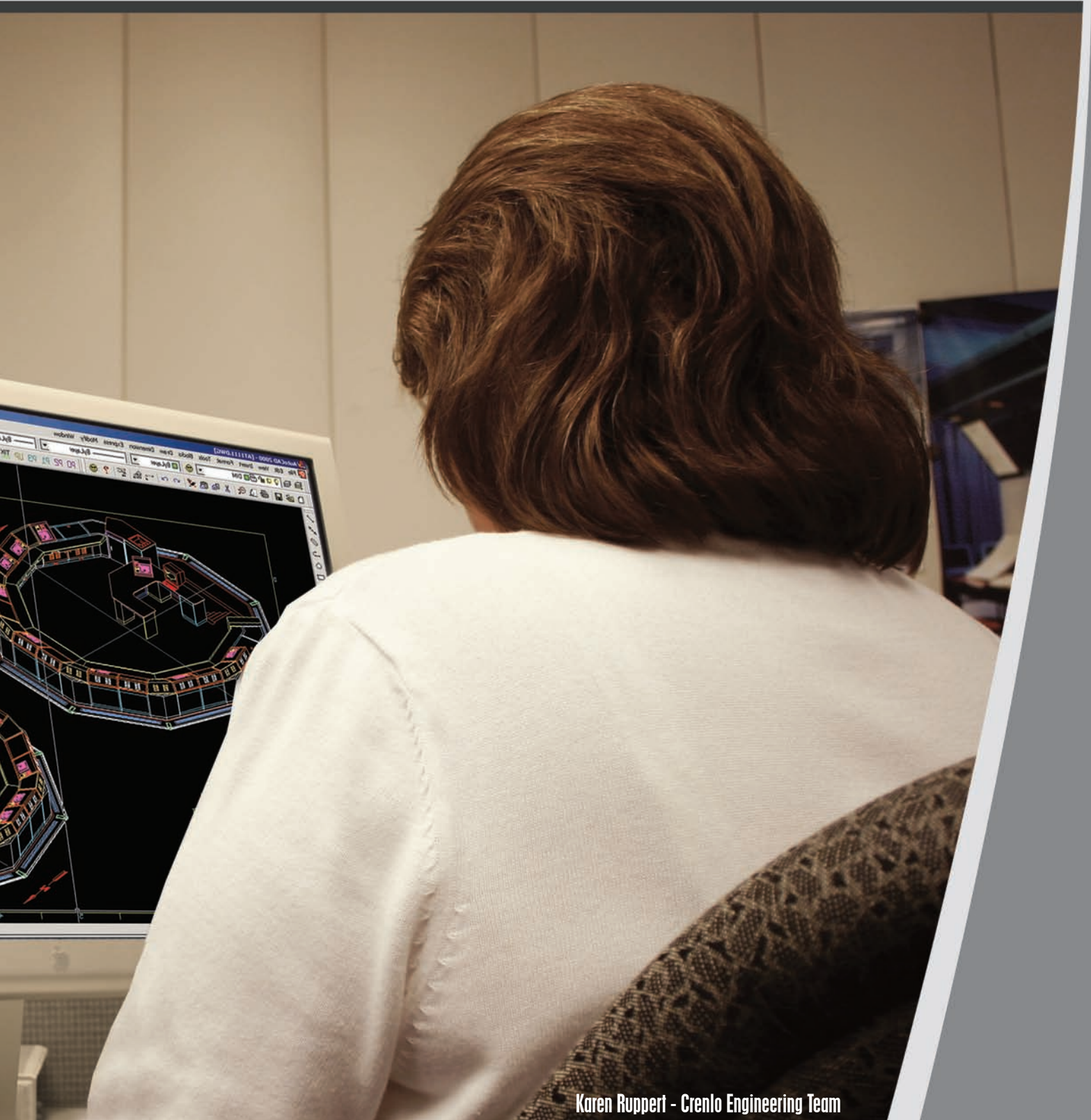
Operator comfort assured by meeting industry codes and specifications

(e-fin-i-ty)

Providing client solutions for tailored engineering applications.



Design & Engineering - Services



Karen Ruppert - Crenlo Engineering Team

Ergonomics

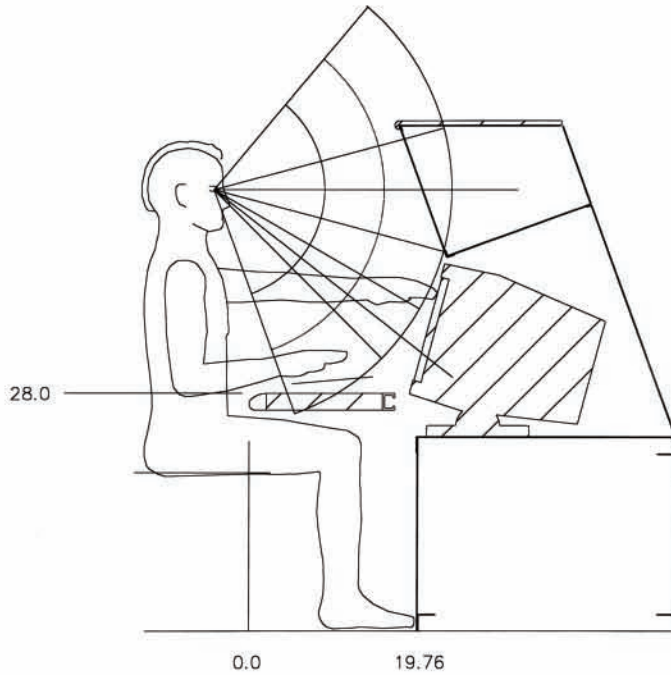
Etymology: erg- + -nomics (as in economics):
an applied science concerned with designing and arranging
things people use so that the things and people interact
most efficiently and safely - also called human engineering.

Today, ergonomics can refer to biomechanics, workplace
ergonomics, and human-computer interface, user interface
design for hardware & software, and human factors. At
Emcor it's all these concepts enclosed in the design of our
products.

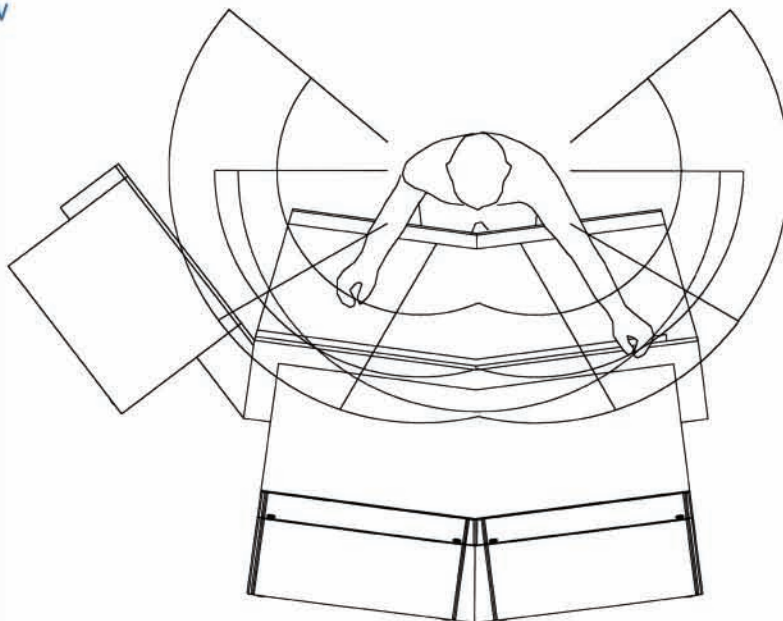
Companies once thought there was a bottom-line tradeoff
between safety and efficiency. Emcor assists companies in
embracing ergonomics because it is integral to a safe work
environment resulting in greater efficiency and productivity.

Design & Engineering - Services

Profile View



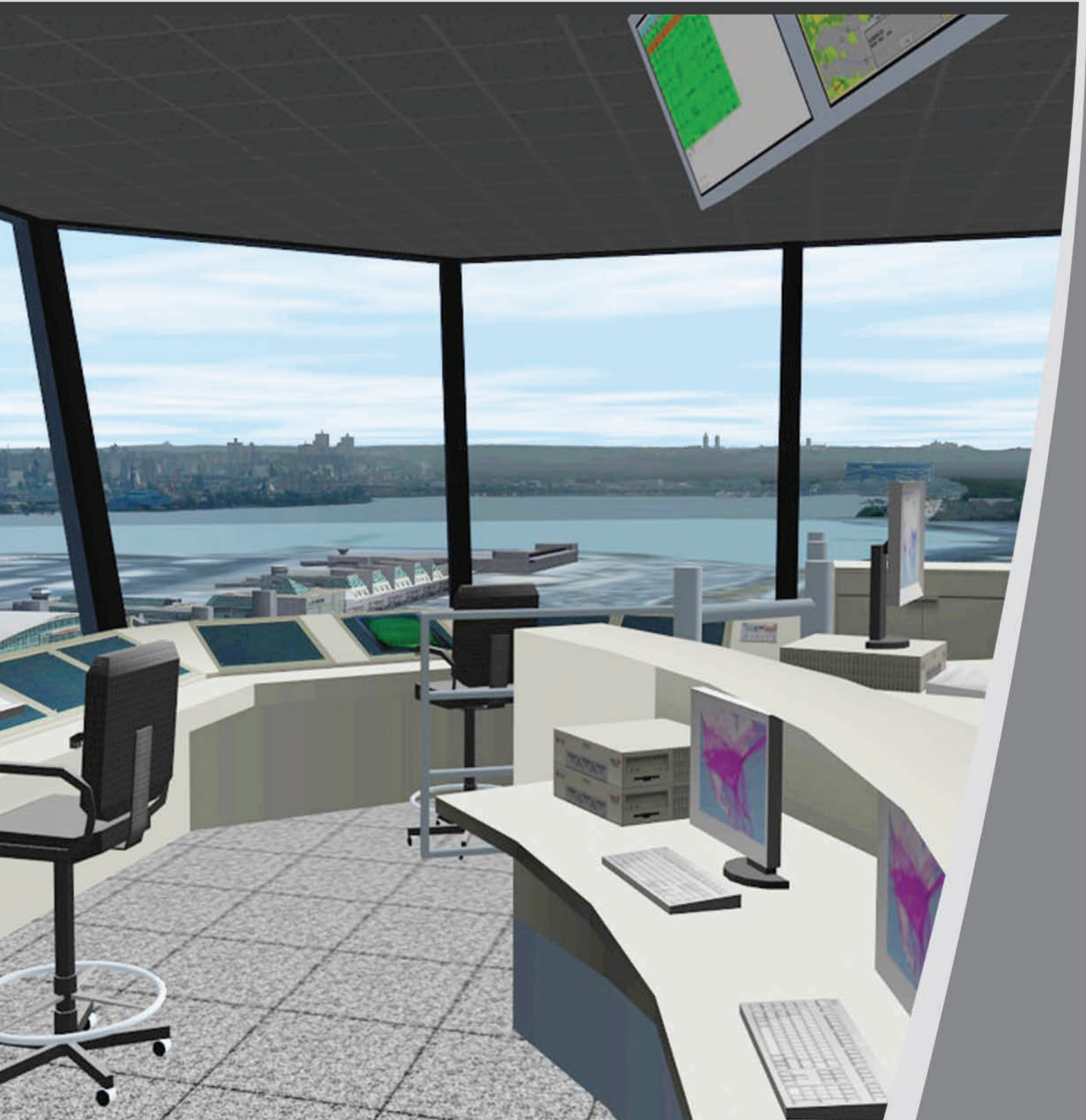
Top View



CAD Rendering



Design & Engineering - Services

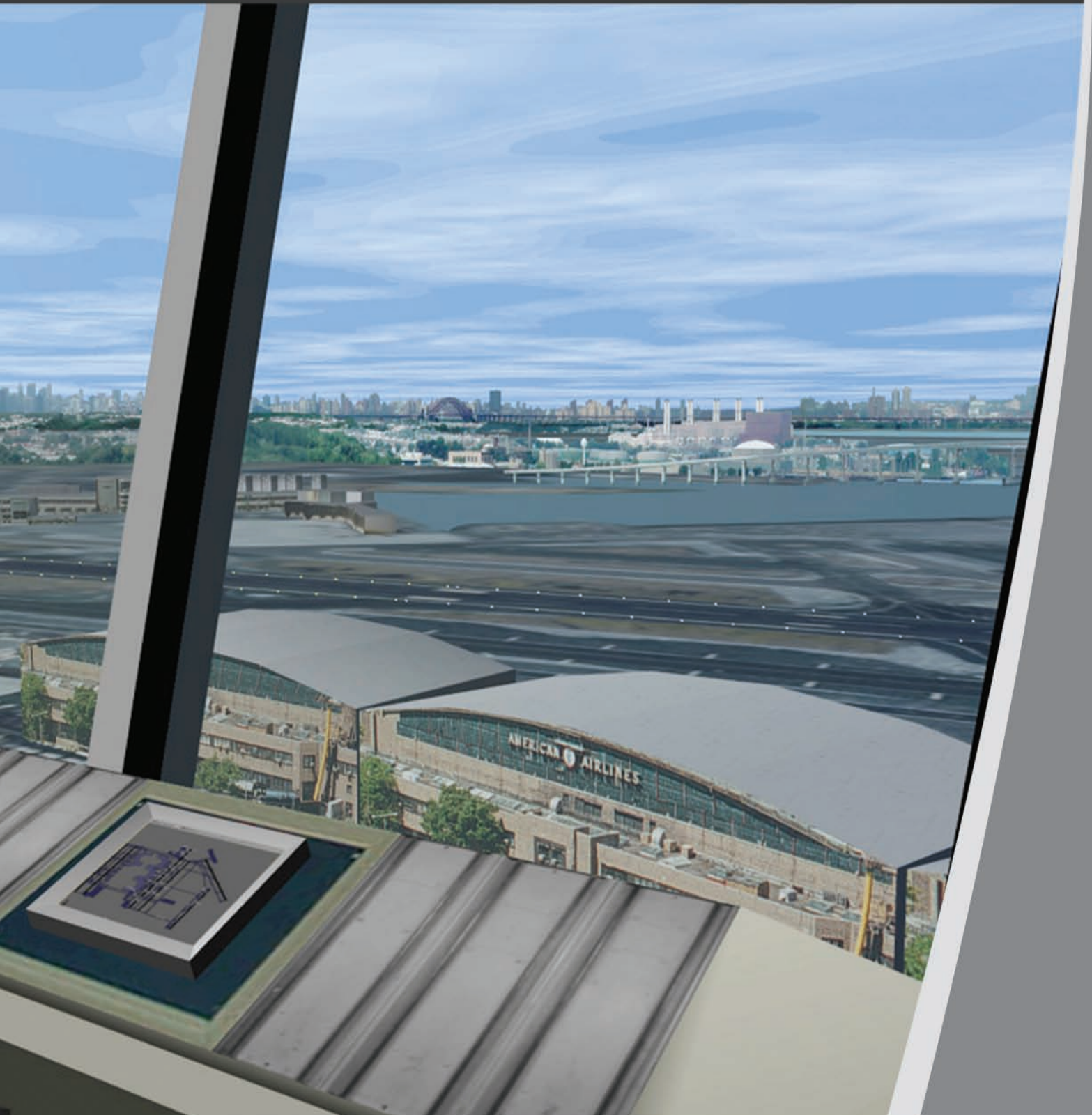


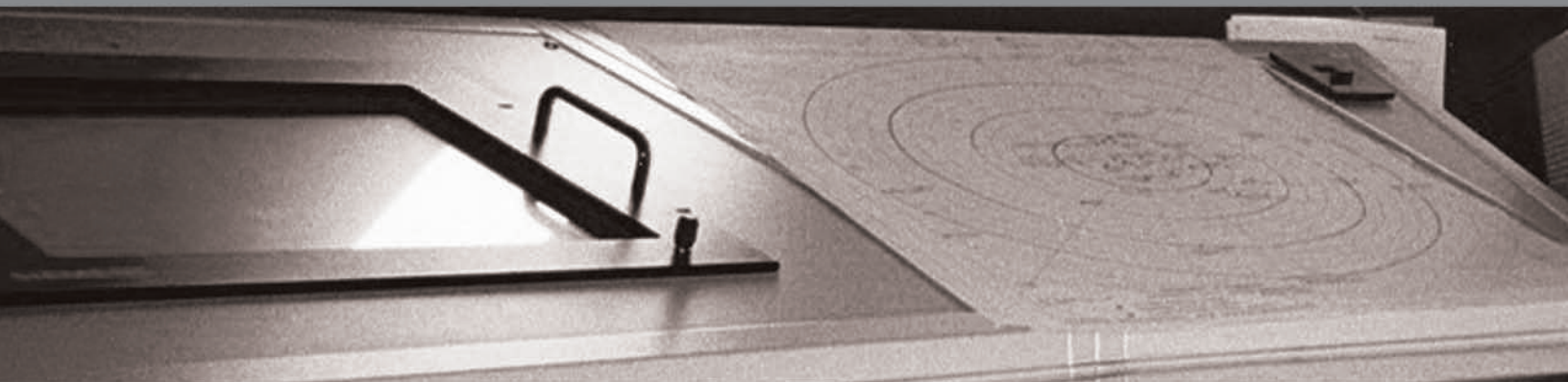


CAD Rendering



Design & Engineering - Services





Air Traffic Control - Towers



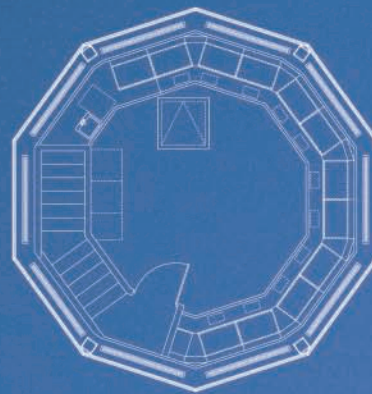
FAA Tower Console Requirements

The FAA has a new standard for air traffic control tower consoles. The drawings to the right are the new FAA specified tower console design layout plans.

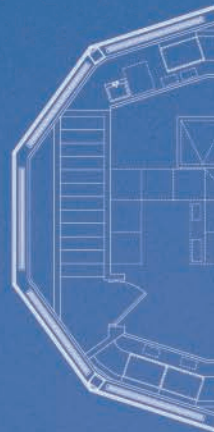
Emcor has commercial off the shelf (COTS) products that meet the FAA's requirements. We can provide complete bills of materials as well as PDF and Autocad® files that can be easily integrated into any drawing.

We have made tower console design easy. If you are interested in obtaining any of the items listed above contact the factory.

FAA Tower Requirements

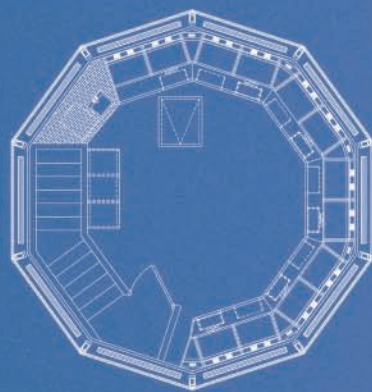


395 Square Foot Cab

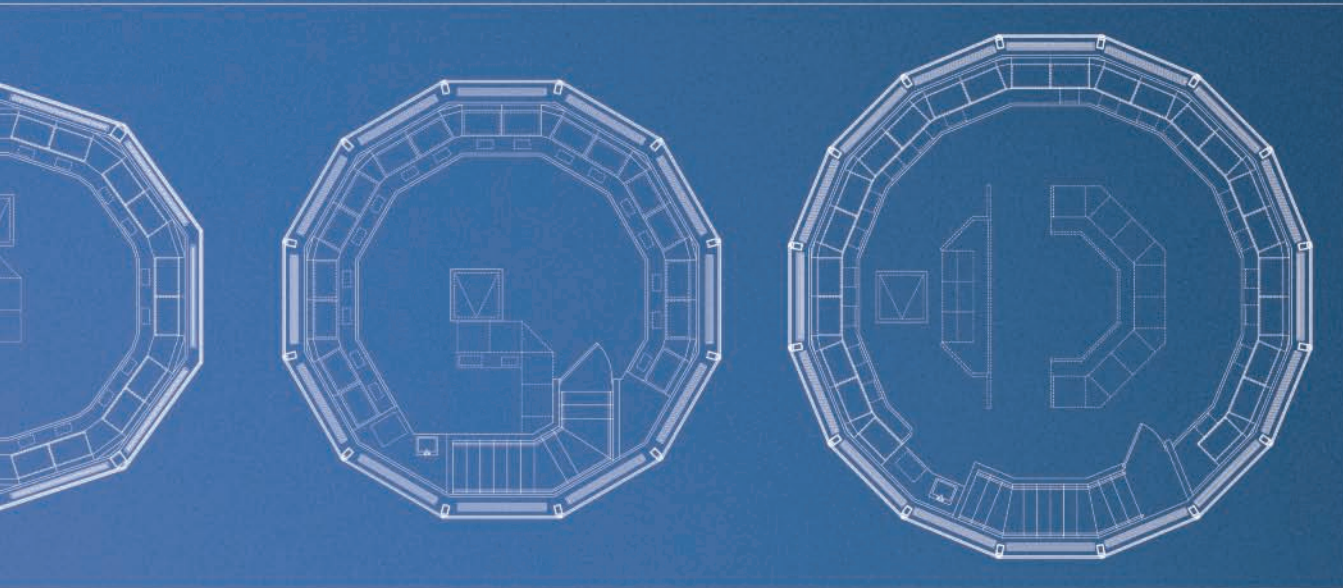


525 Square Foot Cab

Emcor's Solution



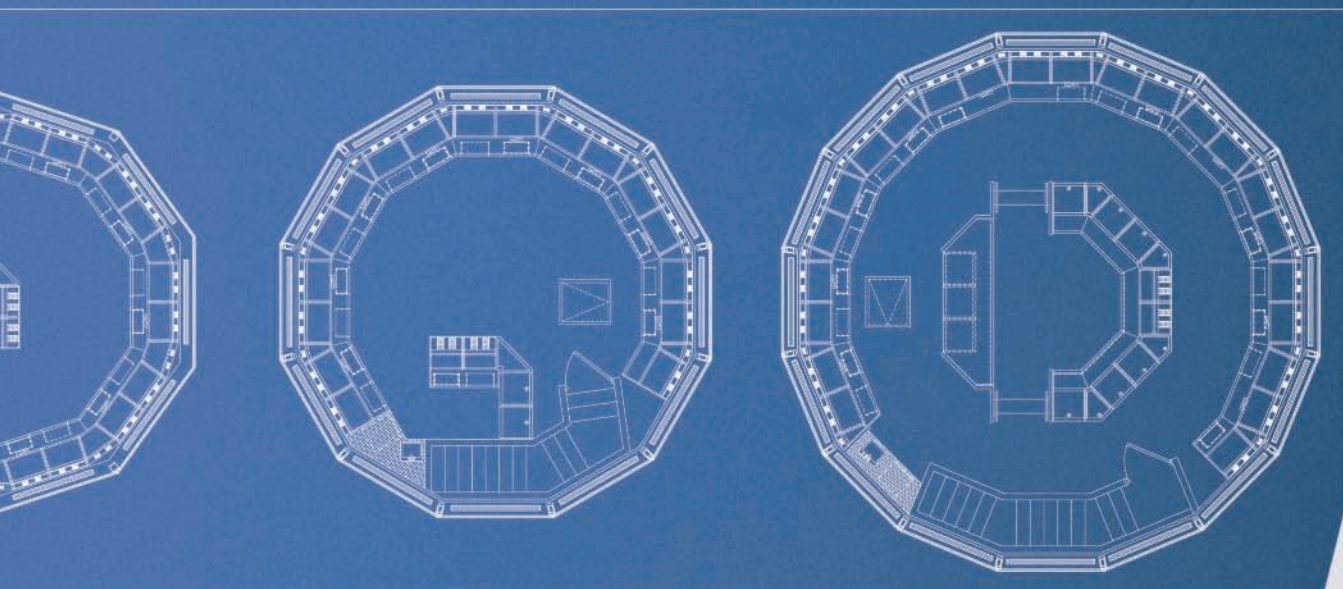
Air Traffic Control - Towers



300 Square Foot Cab

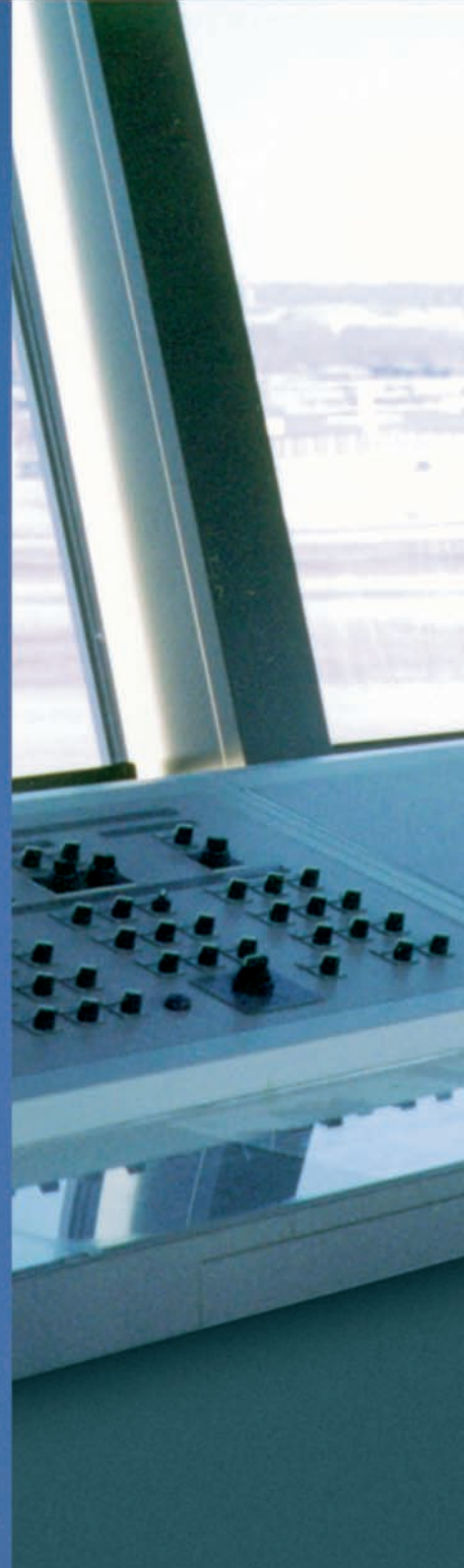
550 Square Foot Cab

850 Square Foot Cab





Minneapolis, MN



Air Traffic Control - Towers



Seattle, WA



Air Traffic Control - Towers



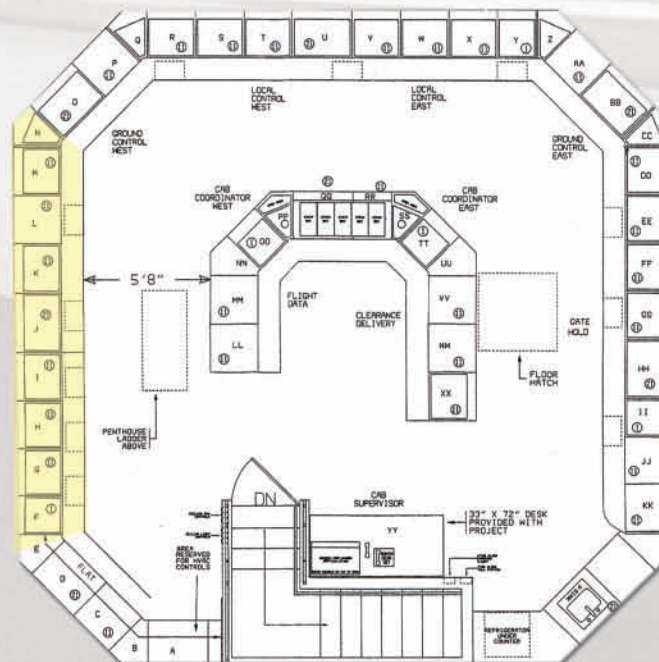
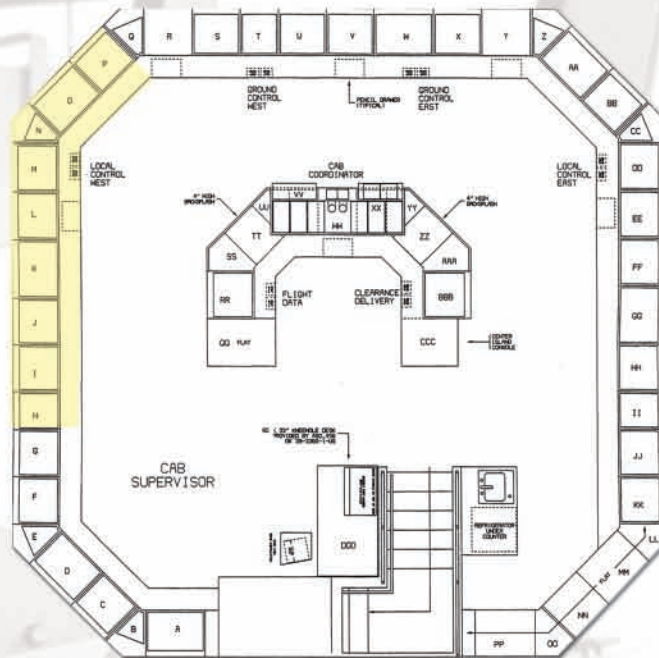
Cincinnati, OH



Louisville, KY



Air Traffic Control - Towers



Phoenix, AZ



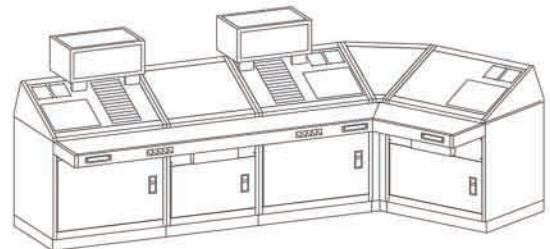
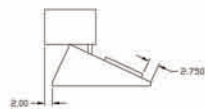
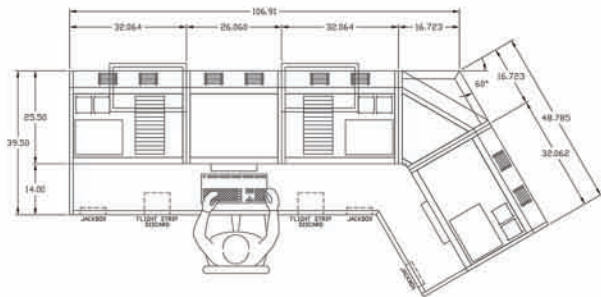
Air Traffic Control - Towers



Otis Air National Guard Base



Air Traffic Control - Towers

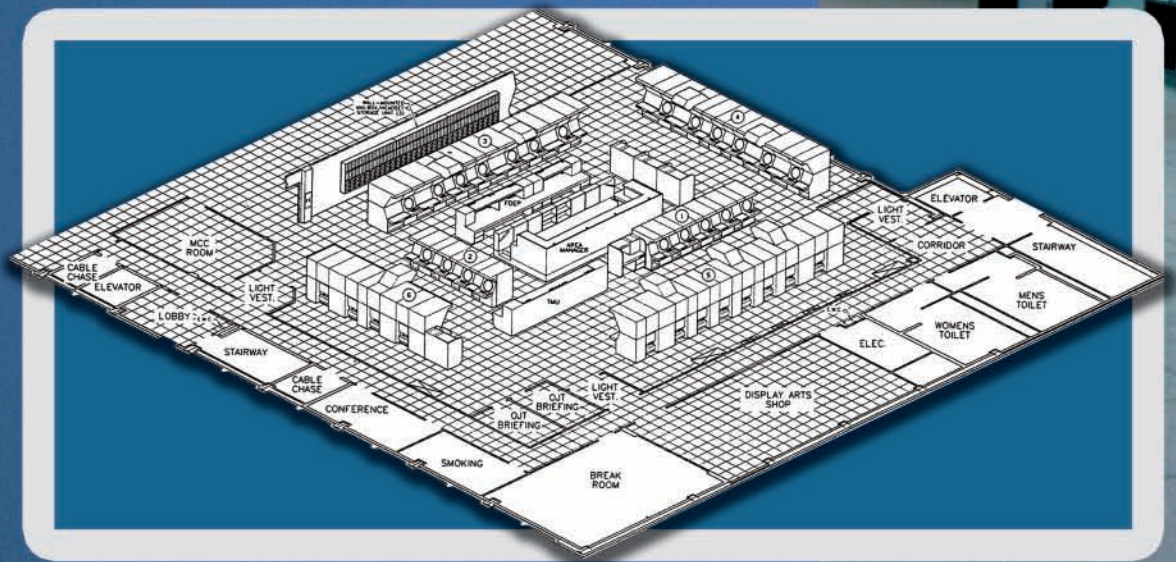




Air Traffic Control - TRACON's/RAPCON's



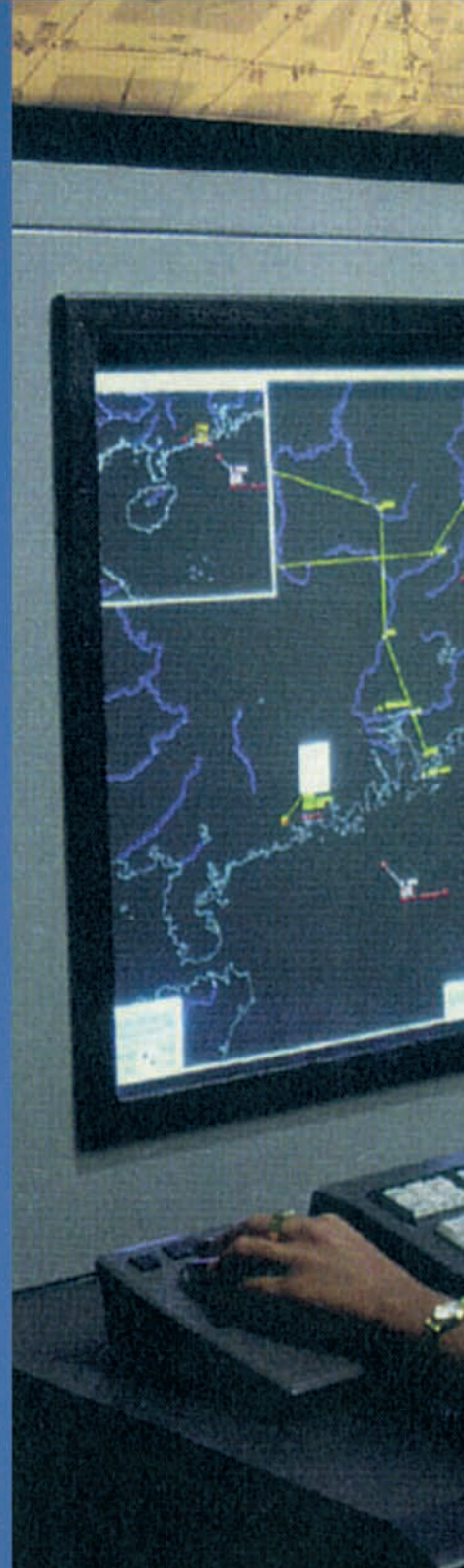
Dallas/Fort Worth, TX



Air Traffic Control - TRACON's/RAPCON's



Zhuhai & Guangzhou, China



Air Traffic Control - TRACON's/RAPCON's



Honolulu, HI



Air Traffic Control - TRACON's/RAPCON's



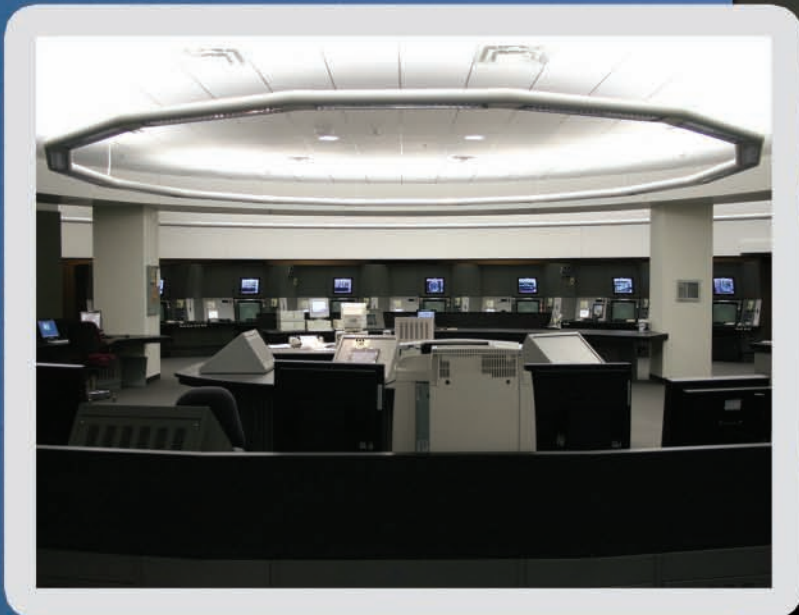
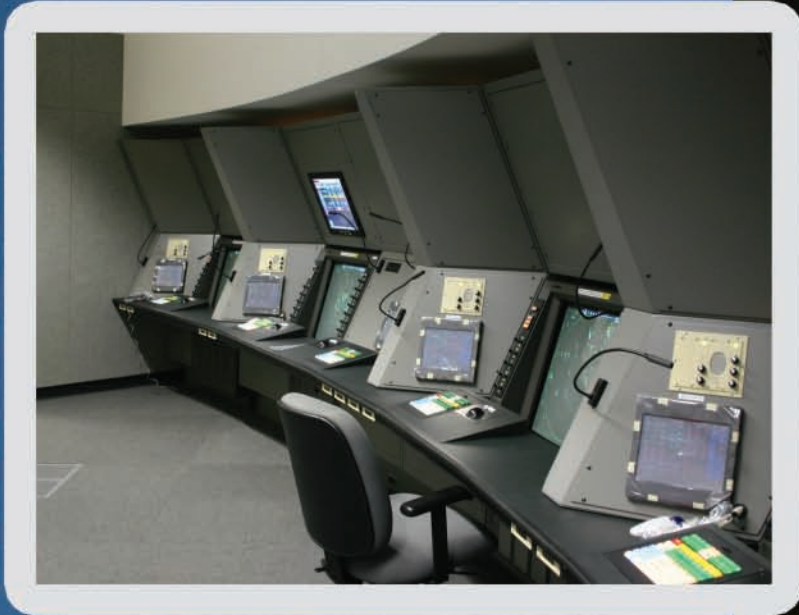
China



Air Traffic Control - TRACON's/RAPCON's



Phoenix, AZ



Air Traffic Control - TRACON's/RAPCON's



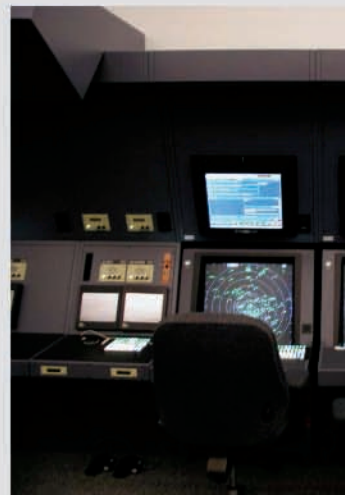
Oceana Virginia Beach



Air Traffic Control - TRACON's/RAPCON's



Northern California



Air Traffic Control - TRACON's/RAPCON's



Navy/Marine Base Yuma, AZ



Air Traffic Control - TRACON's/RAPCON's



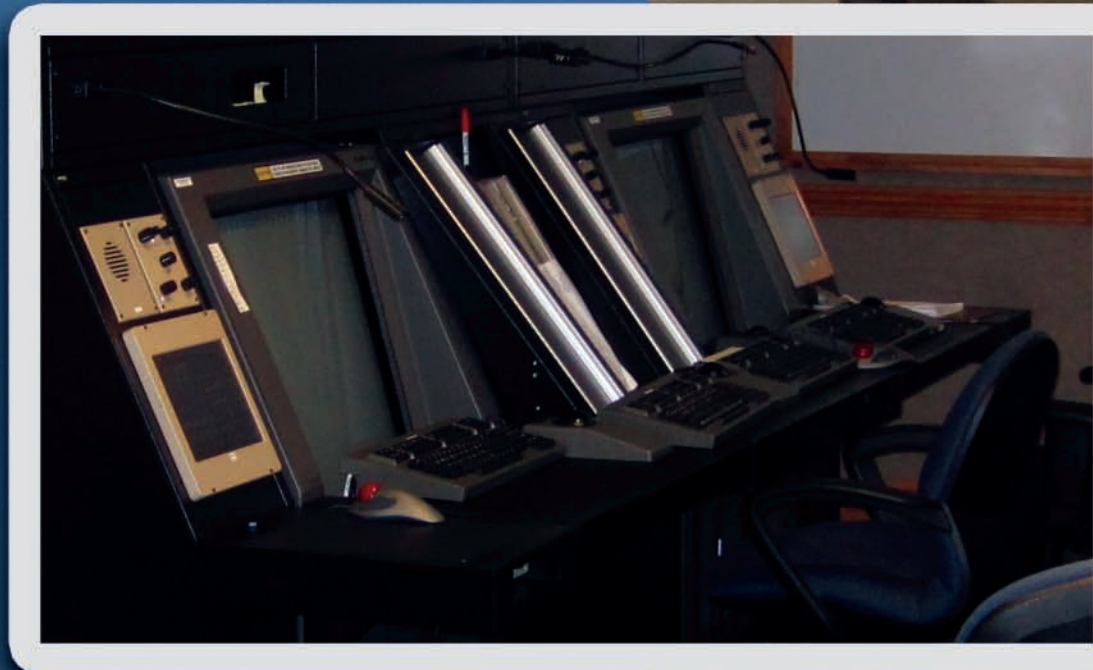
Eglin Air Force Rapcon



Air Traffic Control - TRACON's/RAPCON's



Tyndall Air Force Base



Air Traffic Control - TRACON's/RAPCON's





Thank You

Once again we thank you for the time you have taken to learn more about Emcor. We are a service oriented company with extensive in-house resources. We can fulfill all of your needs with knowledgeable design engineering assistance, value added capabilities, on-staff electrical and packaging engineers, a sales support staff of highly trained professionals, and our private fleet of 21 air ride tractor trailer trucks.

If you have any further questions please do not hesitate to contact us.







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—consoles & enclosures—

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