Art of the Airport Tower is a photographic journey to airports in the U.S. and around the world. Smithsonian photographer Carolyn Russo explores the varied forms and functions of air traffic control towers throughout aviation history, making these ordinary structures extraordinary: more than mere aviation artifacts, they are monumental abstractions, symbols of cultural expression, and testimonies of technological change.

Fifty striking photographs, informative captions, an introduction by Smithsonian commercial aviation expert F. Robert van der Linden and an essay by the National Air Traffic Controllers Association examine the history and evolution of airport towers to contextualize Russo’s work.

The Stockholm-Arlanda Airport control tower is probably one of the first to double as a wedding location, where couples can pay for a marriage ceremony. Designed by Gert Wingårdh, the 83-meter (272-foot) tower was completed in 2001. There are two control cabs, perched like birds atop the shaft. They symbolize Hugin and Minun, two ravens from Nordic mythology, who were sent out to watch over the world. On the black and white bands, Finnish artist Silja Rantanen superimposed 2,500 words from Antoine de Saint-Exupéry’s classic 1929 aviation book Southern Mail.
EXHIBITION SPECIFICATIONS

CONTENT
50 large-format framed photographs, 50 text labels to accompany each photograph describing the airport history and/or tower description.

6 text panels/essays: title panel, introduction, air traffic controllers, airport codes, artist statement, and historical overview. Exhibit contents covered by Smithsonian insurance.

SUPPLEMENTS
Educational activity material and online resources developed by NASM Education Department, exhibition poster design, exhibition script, sample press release, images for press, *Art of the Airport Tower* book publication (Smithsonian Press, 2015).

The National Air Traffic Controllers Association (NATCA) will contribute a donation toward local public programs with a subject matter expert from within the NATCA organization. NATCA’s gift includes the speaker’s travel expenses.

PARTICIPATION FEE
Rate for Smithsonian Affiliates: To be determined for 12-week booking period; venue is responsible for outgoing shipping.

Rate for non-Smithsonian Affiliates: To be determined for 12-week booking period; venue is responsible for outgoing shipping.

Size/weight/crates to be determined.

Security moderate/high.

Tour begins December 2016.

airandspace.si.edu/exhibitions/airport-towers/
rt of the Airport Tower is a stunning exhibition that brings a heightened awareness to the architectural beauty and historical significance of these structures. The airport tower has come to symbolize and define each airport, each community, and even each country. Towers were given their own integrated style and characteristics, while still reflecting the basic needs of the air traffic controllers. Even then, there is beauty in the prosaic, if one only has the eye to see it.

This is the only airport tower in the world that takes the form of a crescent. At 109 meters (358 feet) tall, it stands between parallel runways. The crescent design stems from the area’s maritime heritage. It represents the sail of a dhow boat, a cultural icon and welcoming symbol to visitors. Abu Dhabi International Airport opened in 1968 on an island just off the Arabian Peninsula. By 1982 it was moved to the mainland. Since its relocation, some 126 million passengers have traversed its halls.
“I believe that architecture is a pragmatic art. To become art it must be built on a foundation of necessity.”

I. M. Pei, architect
### Contemporary Towers

<table>
<thead>
<tr>
<th>Airport Name</th>
<th>Country</th>
<th>IATA Code</th>
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<tbody>
<tr>
<td>Aberdeen International Airport</td>
<td>Scotland, United Kingdom</td>
<td>ABZ/EGPD</td>
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<tr>
<td>Abu Dhabi International Airport</td>
<td>United Arab Emirates</td>
<td>AUH/OMAA</td>
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<tr>
<td>Bangkok-Suvarnabhumi Airport</td>
<td>Thailand</td>
<td>BKK/VTBS</td>
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<td>Barcelona El-Prat Airport</td>
<td>Spain</td>
<td>BCN/LEBL</td>
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<td>Bilbao Airport</td>
<td>Spain</td>
<td>BIO/LEBB</td>
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<tr>
<td>Birmingham Airport</td>
<td>United Kingdom</td>
<td>BHX/EGBB</td>
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<tr>
<td>Changi Airport</td>
<td>Singapore</td>
<td>SIN/WSSS</td>
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<tr>
<td>Dubai International Airport</td>
<td>United Arab Emirates</td>
<td>DXB/OMDM</td>
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<tr>
<td>Dubai World Central–Al Maktoum International Airport</td>
<td>United Arab Emirates</td>
<td>DWC/OMDW</td>
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<td>Edinburgh Airport</td>
<td>Scotland, United Kingdom</td>
<td>EDI/EGPH</td>
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<td>California, United States</td>
<td>EDW/KEDW</td>
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<td>Texas, United States</td>
<td>AFW/KAFW</td>
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<td>Frankfurt Airport</td>
<td>Germany</td>
<td>FRA/EDDF</td>
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<td>Hangzhou Xiaoshan International Airport</td>
<td>China</td>
<td>HGH/ZSHC</td>
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<td>John F. Kennedy International Airport</td>
<td>New York, United States</td>
<td>JFK/KJFK</td>
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<td>Kuala Lumpur International Airport</td>
<td>Malaysia</td>
<td>KUL/WMKK</td>
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<td>Kuala Lumpur International Airport</td>
<td>Malaysia – Tower West</td>
<td>KUL/WMKK</td>
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<td>United Kingdom</td>
<td>LHR/EGLL</td>
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<td>Los Angeles International Airport</td>
<td>California, United States</td>
<td>LAX/KLAX</td>
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<td>New Jersey, United States</td>
<td>EWR/KEWR</td>
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<td>Phoenix Sky Harbor International Airport</td>
<td>Arizona, United States</td>
<td>PHX/KPHX</td>
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<td>Virginia, United States</td>
<td>DCA/KDCA</td>
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<td>Orlando International Airport</td>
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<td>MCO/KMCO</td>
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<td>Oulu Airport</td>
<td>Finland</td>
<td>OUL/EFOU</td>
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<tr>
<td>Paris-Orly Airport</td>
<td>France</td>
<td>ORY/LFPO</td>
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</tbody>
</table>
Stockholm-Arlanda Airport  
**Sweden**  
ARN/ESSA

Sundsvall Airport  
**Sweden**  
SDL/ESNN

Sydney (Kingsford Smith) Airport  
**Australia**  
SYD/YSSY

TAG Farnborough Airport  
**United Kingdom**  
FAB/EGLF

Vienna International Airport  
**Austria**  
VIE/LOWW

**Historical Towers**

- Abu Dhabi International Airport  
  **United Arab Emirates**

- Barcelona El-Prat Airport  
  **Spain**  
  1995

- Cincinnati Municipal Airport–Lunken Field  
  **Ohio, United States**

- Croydon Airport  
  **United Kingdom**

- East Fortune Field  
  **Scotland, United Kingdom**

- Floyd Bennett Field  
  **New York, United States**

- Ford Island, Pearl Harbor  
  **Hawaii, United States**

- Kingman Airport  
  **Arizona, United States**

- LaGuardia Airport  
  **New York, United States**

- Lemnos (Limnos) Hephaestus Airport  
  **Greece**

- Old Port Columbus Airport  
  **Ohio, United States**

- Paris–Le Bourget Airport  
  **France**

- Torslanda Airport  
  **Sweden**

- Turnhouse–Edinburgh Airport  
  **Scotland, United Kingdom**

- Washington Dulles International Airport  
  **Virginia, United States**

- Wichita Municipal Airport–Kansas Aviation Museum  
  **Kansas, United States**

- Wittman Regional Airport  
  **Wisconsin, United States**

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**Biography**

CAROLYN RUSSO has been a photographer and museum specialist at the National Air and Space Museum since 1988. Her previous publications include *In Plane View: Abstractions of Flight* (powerHouse Books, 2007), *Artifacts of Flight* (Harry N. Abrams, 2003), and *Women and Flight: Portraits of Contemporary Women Pilots* (Bulfinch Press, 1997). Her photographs have been widely exhibited in both solo and group exhibitions in the United States, Finland, and China.
When Austrian designers Zechner & Zechner conceptualized the control tower at Vienna Airport, they envisioned a unique structure that would become a “lighthouse to its surrounding area.” The dynamic design symbolizes elements associated with air travel, energy, and speed. The tower opened in 2005 and aligns perfectly with the street corner on which it sits, as a typical urban building would, while the cab, 109 meters (358 feet) above, faces the runways.
TOUR SCHEDULE

July 23, 2018 – October 12, 2018

October 29, 2018 – January 18, 2019

February 4, 2019 – April 26, 2019

May 6, 2019 – July 26, 2019

August 5, 2019 – October 25, 2019

November 4, 2019 – January 24, 2020

Check updates to tour schedule at airandspace.si.edu/exhibitions/airport-towers/
LaGuardia’s Art Deco Marine Air Terminal is one of the oldest terminals in the United States. Designed by William Delano under the New Deal Work Projects Administration, it opened in 1940. The 1964 tower was designed by Wallace K. Harrison, famous for his 1939 World’s Fair sculptures, Rockefeller Center, Lincoln Center, and the United Nations headquarters. The New York Times referred to the whimsically designed tower as "a design for a giant ice cream cone." In 2010 a new tower superseded the old one. The upper section of the original 46 meter (150 foot) tower was removed because it obstructed the new tower’s view.

Early air traffic controllers directed aircraft on the ground with a flag system. A black and white checkered flag signaled a plane to "go" and a red flag to "hold." The flags were eventually replaced by “light guns,” which flashed different colored lights to planes. United Kingdom’s Croydon Airport, outside of London, was one of the first airports to use an aircraft’s radio transmission as a way to fix its position. As safety requirements improved, new towers with higher vantage points were incorporated into terminal buildings or built as separate structures.
Barcelona’s airport history began in 1916 as an airfield at El Remolar, which was moved in 1918 to El-Prat. The airport was initially used by the Aeroclub of Catalonia and was the base for the Spanish Navy’s fleet of airships. Barcelona El-Prat began commercial air service in 1927 and is now the second largest airport in Spain after Madrid. The airport has undergone several transformations over the years. Two of the airport’s three towers, one built in 1965 and another in 1995 (designed by Ricardo Bofill Levi) are no longer in service.

[Link to Air and Space exhibition: airandspace.si.edu/exhibitions/airport-towers/]

Many of the first towers no longer exist. Others continue to survive, and the most fortunate have been renovated. Even though some towers are listed on historic registry records, they still require maintenance and funds to preserve them. These towers provide a glimpse into earlier aviation eras and collectively they give perspective to the changing technology, design, and architecture of the airport tower.
There are not many airports that double as a botanical garden. Opens on December 29, 1981, the Changi airport has five different gardens through which passengers can stroll while they are waiting. The Civil Aviation Authority of Singapore air traffic controllers manage more than 900 aircraft and vehicular movements a day. The tower and the airport were one of the largest single development projects in Singapore’s history and welcomed about 53.7 million passengers in 2013.

The Smithsonian Institution's collection of aviation-related artifacts began with a gift of kites from the Chinese government in 1876. During the subsequent years, the collection grew in direct proportion to the increasing number of advances in aviation, aeronautical engineering, and space flight. Today, the National Air and Space Museum in Washington, D.C., has become one of the most popular museums in the world, hosting more than 200 million visitors since it opened in 1976. The Museum's Steven F. Udvar-Hazy Center in Chantilly, Virginia, which opened in December 2003, displays many more artifacts.
Contact/Scheduling

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Art of the Airport Tower is generously supported by:

National Air Traffic Controllers Association (NATCA)
Air Traffic Control Association (ATCA)
   Harris Corporation
   Rockwell Collins
   Saab
   Thales

In-kind support from:
   Epson America, Inc.
   Manfrotto
   Smithsonian Affiliations

Companion book published by Smithsonian Books

Designed by Ana Schwar