



# 360° VIRTUAL / REMOTE TOWER

Air Traffic Control in times of staff shortages and cost pressure

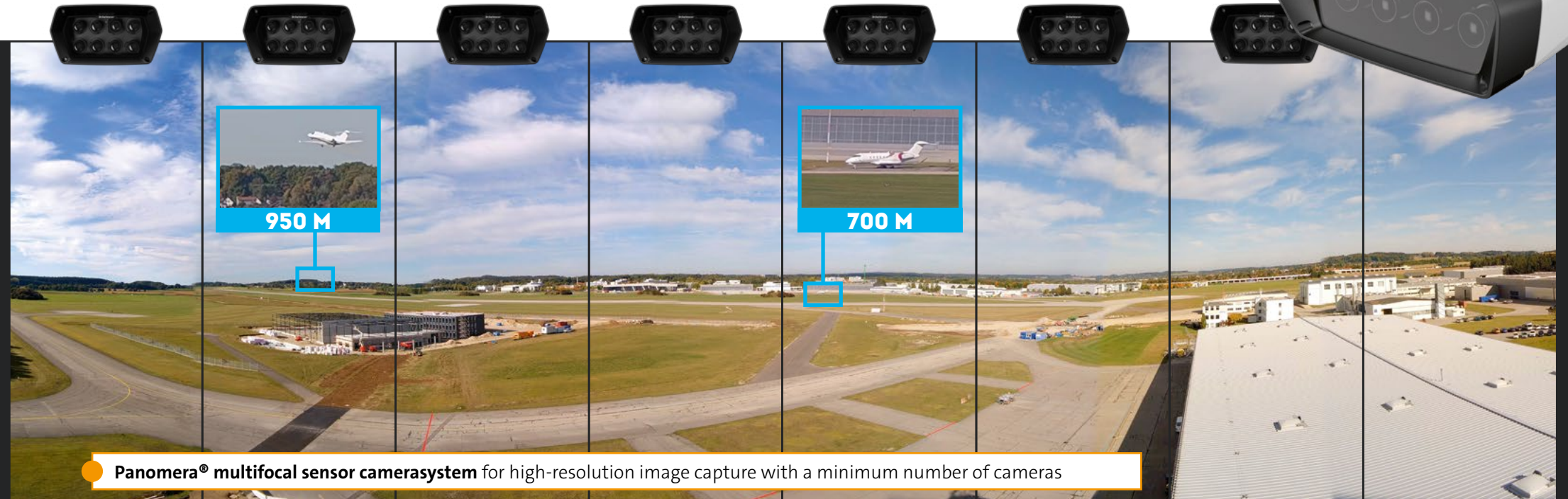


# FOR ATC AND AFIS: THE 360° VIRTUAL / REMOTE TOWER SOLUTION



## Your benefits:

- Maximum cost efficiency
- Location-independent controller workstations
- Control of multiple airports/airfields
- Highest technical reliability due to redundant infrastructure
- Maximum personnel security through “shared resources”
- Recording for forensics and employee protection



Panomera® multifocal sensor camerasystem for high-resolution image capture with a minimum number of cameras

## YOUR CHALLENGE AS AIRPORT OPERATOR

Regional airports, in particular, often struggle to recruit and retain air traffic controllers due to unattractive locations and limited career opportunities. As a result, these airports may experience a shortage of qualified personnel, which can lead to safety concerns and operational challenges.

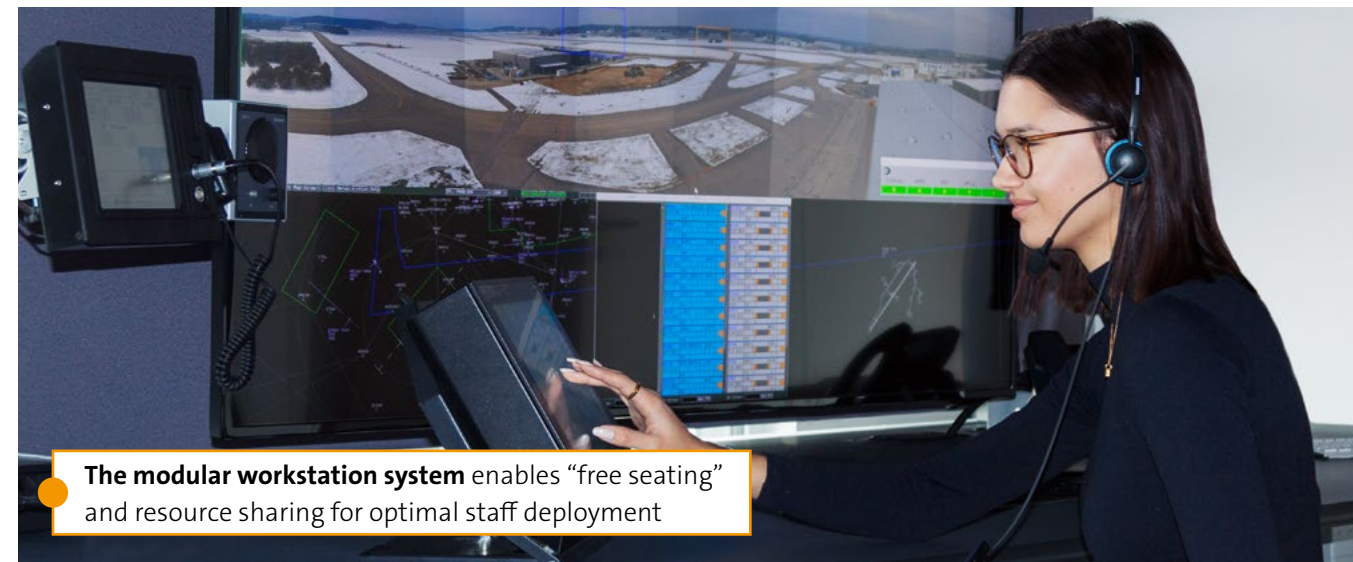
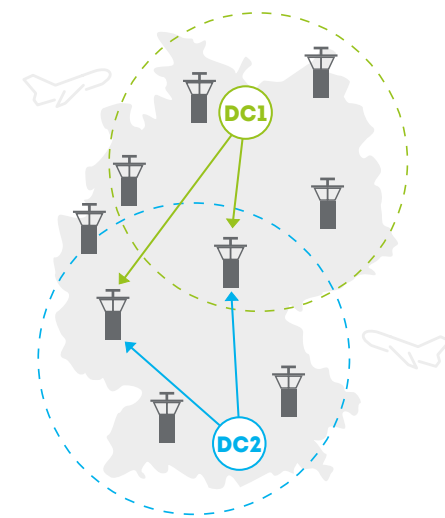
## OUR SOLUTION

Our surveillance-based remote tower solutions are “air traffic controllers as a service”: Our highly qualified air traffic controllers and AFIS specialists monitor one or more airports/airfields from a centralised and/or decentralised location – with the same familiar working environment as if they were on site. The special camera technology as well as our sophisticated workstation system make the work even more efficient and more ergonomic.

## EXTENSIVE INTEGRATION OF INTERFACES:

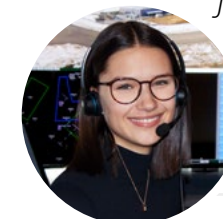
- Runway lighting
- Weather information
- Radar information
- Flight schedules
- Ground service vehicle tracking
- Communication equipment

Redundant data centers at two locations enable remote workstations and maximum reliability



The modular workstation system enables “free seating” and resource sharing for optimal staff deployment

“For me, the remote tower solution enables a familiar work environment with no adjustments needed. The 360-degree view and having all the key functions integrated on one screen even makes my job much easier.”



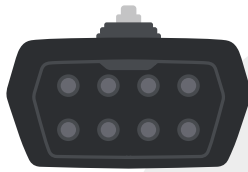
Yasmin Köllner,  
Apprentice AFISO

“The remote tower solution will secure air traffic control at our airport in the medium and long term. And thanks to the technical and personnel redundancy, we will be able to do so reliably and at a reasonable cost.”



Peter Adrian, Managing Director  
EDMO-Flugbetrieb GmbH

# REMOTE TOWER SOLUTION



## PANOMERA® MULTIFOCAL SENSOR CAMERAS

- Optical capture in high resolution
- Between four and twelve systems in use at the same time



## RECORDING SYSTEMS

- Available as stand-alone server
- Available as virtual machine solution



## TWO DATA CENTERS

- In Lübeck and Oberpfaffenhofen
- Redundant system infrastructure and network connection to all locations



## ESTC WORKSTATION

- Extensive interface integration
- Location-independent ESTC solution (Enhanced Surveillance Tower Control)



Dallmeier develops and manufactures its camera and recording systems as well as all software components in Regensburg, Germany. The result are state-of-the-art video information systems that comply with data protection regulations for a wide range of different industries. Among Dallmeier customers are airports of all categories all over the world.

[www.dallmeier.com](http://www.dallmeier.com)



TRIAC GmbH is a certified provider of air traffic control services for ATS and CNS as well as an innovative service provider for remote tower solutions. The joint venture of Austro Control GmbH and TRIWO AG with headquarters in Trier and Oberpfaffenhofen specialises in the needs of regional airports and commercial airfields.

[www.triac.aero](http://www.triac.aero)



**Karlheinz Biersack**  
Director Business Development Airport  
Dallmeier electronic GmbH & Co. KG  
Phone: +49 941 8700 230  
[karlheinz.biersack@dallmeier.com](mailto:karlheinz.biersack@dallmeier.com)



**Erwin Rischan**  
Authorized Officer  
TRIAC GmbH  
Phone: +43 664 964 8710  
[erwin.rischan@triac.aero](mailto:erwin.rischan@triac.aero)