



Global Solutions in Design, Planning & Information Systems



AVIATION



# Design, Engineering & Project Management

GENIVAR provides a full spectrum of aviation engineering solutions, including engineering design, construction inspection/administration and project management. GENIVAR's design experience follows a project through all design construction planning, estimating and tendering stages. GENIVAR's vast construction supervision experience assists in bringing projects to a successful conclusion. With knowledge and experience, GENIVAR's team of planners and engineers coordinate complex projects at airports while minimizing operational impacts. GENIVAR's Engineering and Project Management expertise covers a wide range of aviation infrastructure projects including, amongst others:

## AIRFIELD CIVIL DESIGN & ENGINEERING

- Airside system expansion and rehabilitation (runways, taxiways, aprons and roadways)
- Civil infrastructure assessments and audits
- Specialized facilities (de-icing, engine runup pads, RESA's)
- Heliports (surface level and roof top)

## AIRFIELD ELECTRICAL DESIGN

- Airfield and approach lighting systems (ODALS, SSALR, PAPI, REILS)
- Airfield guidance signage and markings
- Field Electrical Centres

## TERMINAL AND AIRPORT FACILITY DESIGN AND ENGINEERING

- Air terminal buildings, hangars, maintenance facilities and other support buildings
- Functional programming
- Architectural design
- Building systems engineering

## PROJECT MANAGEMENT

- Project tendering, review and recommendation
- Resident engineering and construction supervision
- Regulatory and air navigation coordination
- Plans of construction operations (PCO)



# Planning, Regulatory & Information Systems

GENIVAR has established itself as an innovator and specializes in a wide range of aviation planning and regulatory services. The combined experience of GENIVAR's Professional Team exceeds 70 years and is reflected in the depth of knowledge and scope of services that are offered. Some of GENIVAR's expertise includes:

## GEOMETRIC PLANNING

- Airside systems (runways, taxiways, aprons)
- Airfield configuration and capacity
- Aircraft and vehicle simulation

## AIRSIDE AND LANDSIDE PLANNING

- Airport master, development, and commercial plans
- Apron management plans
- Traffic and passenger forecasting
- Business plans and feasibility studies

## OPERATIONAL STUDIES

- Operations manuals (airport, wildlife, emergency)
- Meteorological analysis (windrose and usability)
- Instrument approach procedure assessment

## REGULATORY

- Safety management systems (SMS) consulting and training
- Airport vicinity protection areas (AVPA)
- Airport zoning regulations and federal / provincial zoning

## COMMUNITY INTERFACE

- Noise exposure forecasting
- Aeronautical zoning
- Environmental mitigation
- Community consultation

## HELIPORT

- Surface-level and roof-top heliports
- Heliport planning, design, engineering and certification
- Flight path and obstruction zoning analysis

## PRODUCTS AND INFORMATION SYSTEMS

### Airport Landing Fee & Revenue Management (ALFA)

- Aeronautical fees (landing, terminal, aircraft parking)
- Non-Aeronautical fees (leases, licenses, concessions)

### Airport Land Use Analysis & Management (AVGIS)

- Aeronautical constraints (Obstacle Limitation Surfaces, Electronic Zoning, Bird Hazard, Sight Lines)
- Non-aeronautical constraints (Noise Exposure Forecast Zone, Municipal Land Use Zoning)

# THE CLIENT IS AT THE CENTRE OF OUR ACTIONS AND ORGANIZATION

At GENIVAR, we believe that our success is based on our clients' success. As a result, we focus on building and maintaining long term business relationships that enable us to support our clients in their growth.



## EXPERTISE

When clients choose us for a project, they are able to access the experience of the entire firm. Our work environment is flexible, and that means communication and discussion between employees is easy. As a result, our clients can count on superior services in every field because the entire team is behind every job.

## CONSTRUCTIVE APPROACH

GENIVAR offers even more. Besides their technical expertise, innovative spirit and access to state-of-the-art tools, our team members adopt a constructive approach, and that makes all the difference. Our employees are observant. They listen closely to our clients, proactively anticipate their needs and, meet their requirements.

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GENIVAR is a Canadian leader in engineering, project management and environmental services delivering global solutions based on an integrated approach. GENIVAR professionals work closely with their clients through every stage of their projects.

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

