



## Aeronav Inc.

SNMC/27<sup>th</sup> – Accra (Ghana)

November 2019



Aeronav is both an **integrator** and **manufacturer** of CNS/ATM solutions for the global aviation industry.



# Origins of Aeronav

Aeronav's history extends almost 50 years into the past with an unwavering focus on the global aviation industry that endures to today and guides the way for our future.



**UTS** is established in Montreal specializing in Mobile ATC Solutions including Mobile Tower, NDB, CVOR, etc.



**LNS Systems** is established in Montreal specializing in pre-fabricated ATC towers both Mobile and Fixed.



**Navigation Aeronav International (NAI)** is established in Montreal providing technical services such as engineering, systems integration, installation, training, and more for aeronautical projects around the world.



**NAI** acquires the Navaid's technology of **Marconi-Philips** and begins manufacturing ILS, DME & DVOR in the factory in Montreal.



**NAI** acquires 100% of the shares of **UTS** and continues to operate the company as an independent entity in Montreal specializing in Mobile ATC Solutions.



**NAI** acquires the assets of **LNS** and establishes LNS International to continue the manufacturing of pre-fabricated Fixed ATC Towers.



Early  
1970s

1987

1991

2001

2003

# Aeronav Today

Privately-owned Canadian Corporation

- Shareholders are top-management

Headquarters in Montreal

- 3000 m<sup>2</sup> manufacturing facility
- Home of ICAO, IATA, & ACI
- Near to PET Airport (YUL)



ISO 9001:2015 Certified

International presence

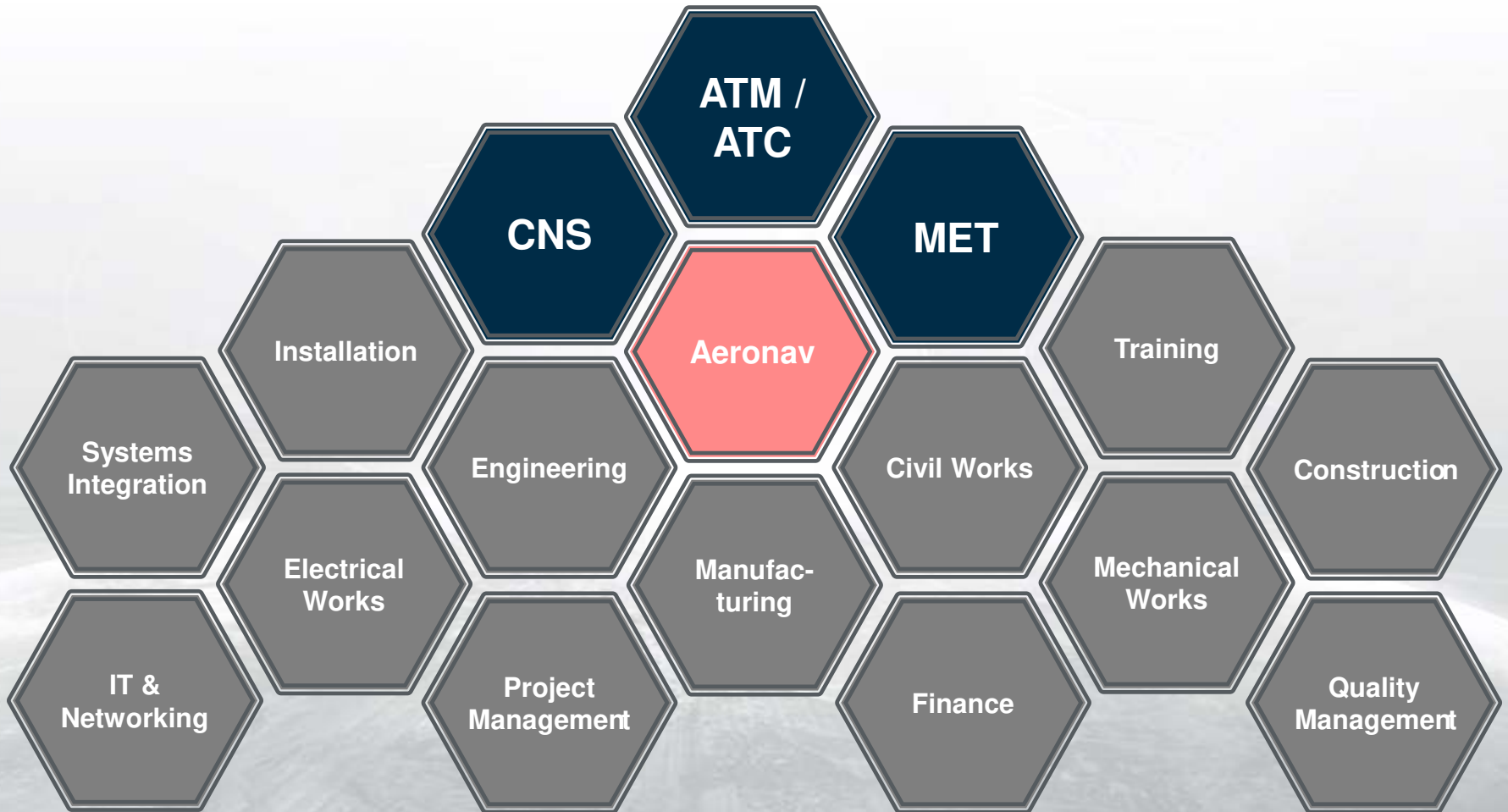
- Paris, France
- Dakar, Senegal
- Kinshasa, DR Congo
- Global network of suppliers and partners



**Aeronav Inc.** is formed by the merger of NAI, UTS & LNS into a single entity, thereby consolidating the capabilities of all three companies. **Aeronav** immediately becomes a world leader in the provision of turnkey ATC solutions & services.



# Core Competencies



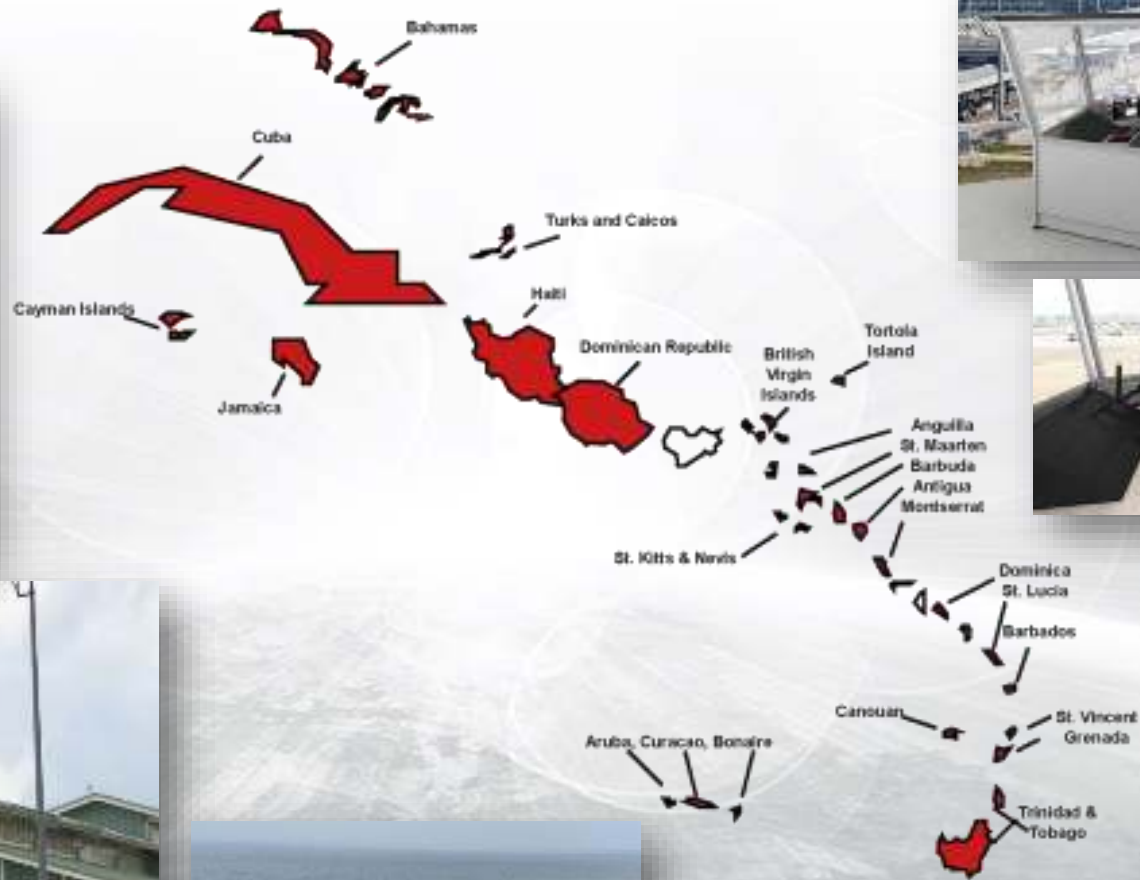
Aeronav's **aviation expertise** is supported by a **foundation** of core competencies.





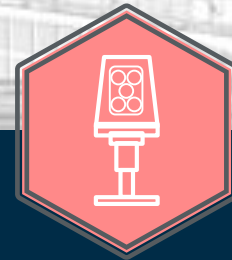
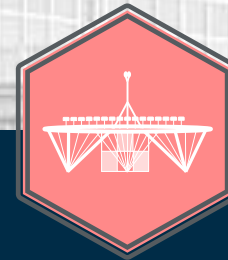
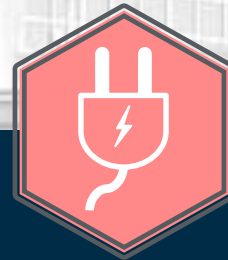






# Middle-East





## Integrated ATC Solutions

- VHF/UHF/HF
- VCCS/PABX
- Recording Systems
- ATM/AMHS/AFTN/ATIS
- Master Clock
- PSR/MSSR/ADS-B/MLAT
- Met Systems
- VSAT Networks
- Microwave
- RCMS
- Consoles

## Mobile ATC Solutions

- Mobile ATC Tower
- Transportable ATC Tower
- Mobile CVOR
- Transportable ILS
- Portable AGL
- De-icing Facility

## Pre-fabricated VCRs

- ATC Tower
- Apron Control
- Ground Control
- Tower Modernization

## Power Supply

- Power Generation
- Transformer Stations
- UPS
- Solar Power Farms

## Nav aids

- ILS CAT I,II,III
- DVOR/CVOR
- Counterpoise
- DME
- Mobile CVOR/DME
- NDB
- DF
- TACAN
- Shelters

## Airfield Lighting

- AGL Design
- AGL Installation
- Control Systems
- Portable AGL

# Integrated ATC Solutions



Aeronav delivers **turnkey** solutions of fully **integrated** ATC equipment of the highest quality and durability.

- VHF/UHF/HF
- VCCS/PABX
- Recording Systems
- ATM
- AMHS/AFTN
- ATIS
- Master Clock
- PSR/MSSR
- ADS-B/MLAT
- Met Systems
- VSAT Networks
- Microwave
- RCMS
- Consoles
- Shelters
- and more...



## ANT-26 MTT HL



1-2 Positions  
Trailer Mounted  
High-Lift

## ANT-57 MTT HL



2-4 Positions  
Trailer Mounted  
High-Lift

## ANT-57 VTT HL



2-4 Positions  
Vehicle Mounted  
High-Lift

## TCT-140



2-4 Positions  
Mounted on Containers or  
Existing Structure

Cabin is 100% Aluminum Construction

Entirely self-contained and autonomous system including ATC/MET and power equipment

65 deployed mobile towers in 20 countries

Containers can be outfitted as  
equipment rooms, boardrooms,  
sleeping quarters, etc.

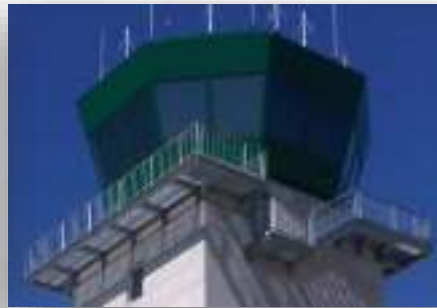


## TT-260



Up to 3 positions  
6 Sided, 18,5 Sqm

## CT-380



Up to 4 positions  
8 Sided, 22 Sqm

## CT-480



Up to 7 positions  
8 Sided, 42,5 Sqm

## CT-680



Up to 8 positions  
8 Sided, 53,5 Sqm

Pre-fabricated Aluminum Construction  
Hurricane 3 Rated

Pre-fabricated Steel Construction with Aluminum Curtain Wall  
Hurricane 5 Rated



Pre-fabricated  
VCRs

# Power Supply

## Power Generation & Distribution



## Transformer Stations



## Solar Farms



Aeronav provides **turnkey power solutions** including electrical and mechanical design, factory integration and testing, definition and supervision of civil works, on-site installation & commissioning, training and after sales support.



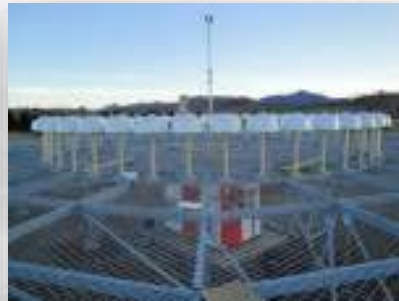
Aeronav has extensive experience in the turnkey provision of all types of Navigational Aids from all manufacturers



Aeronav no longer manufactures the Philips/Marconi brands of Nav aids, but still provides on-site support, factory repairs, maintenance and retrofit kits.



ILS/DME



DVOR/DME



CVOR/DME



Mobile  
CVOR/DME



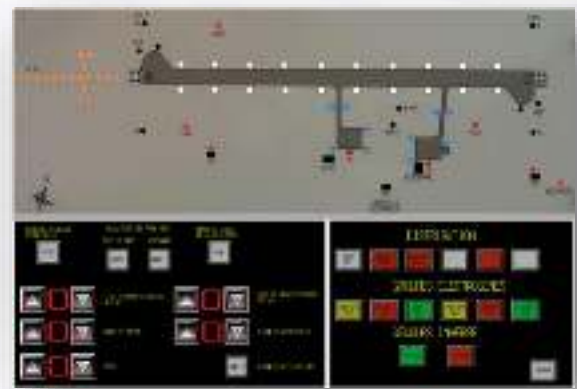


# Airfield Lighting

## AGL Design



## AGL Control & Monitoring



## Installation

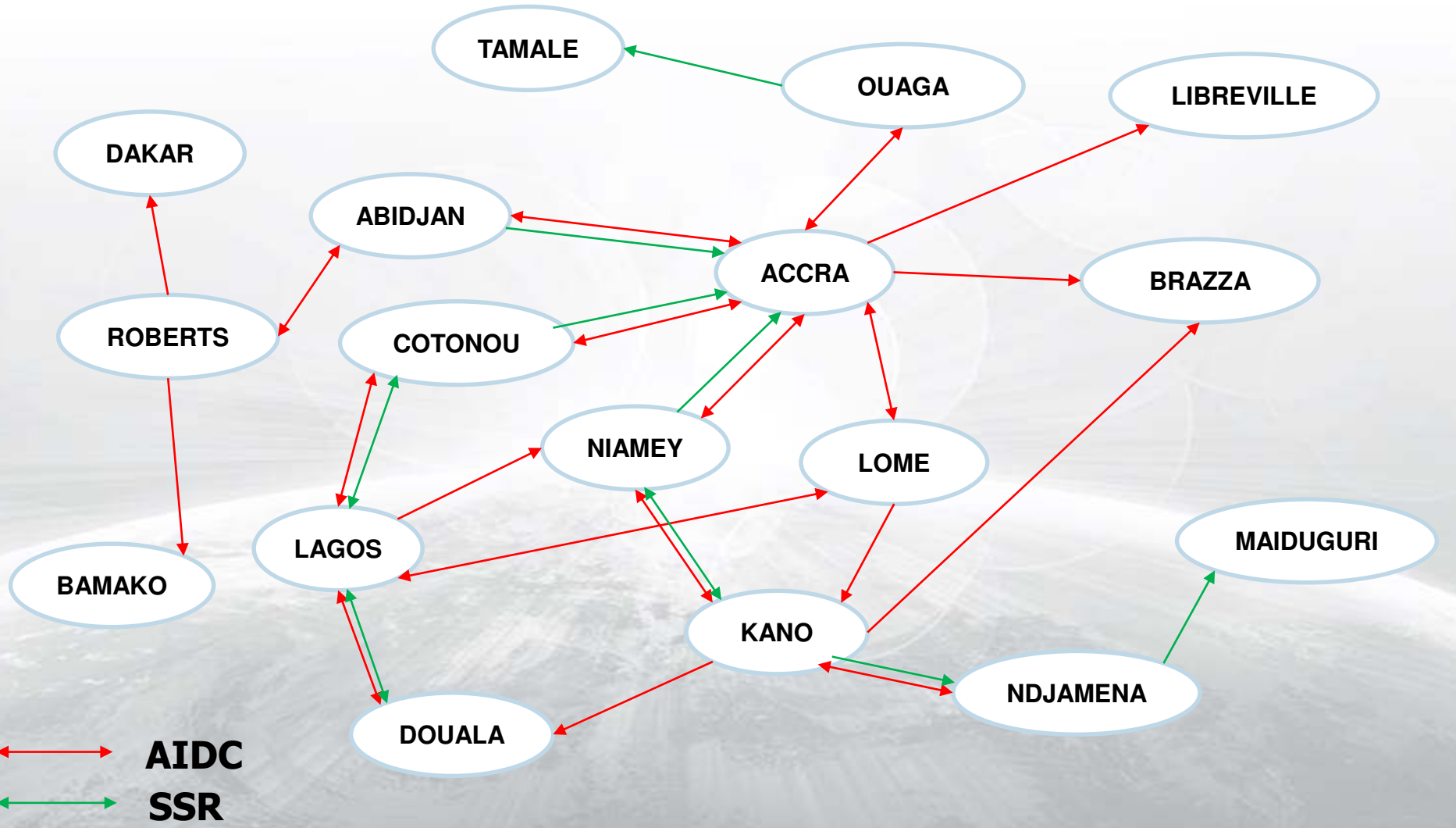


Aeronav provides turnkey AGL solutions for **ICAO Category I, II & III** Airports





- Recent implementations include in the AFI zone:
  - DR Congo VSAT network
  - SADC/NAFISAT – AFISNET Interoperability and Upgrade of CAFSAT stations
- As part of the AFISNET network
  - Upgrades or migrations of VSAT sites (Bobo, Nouadhibou, Lomé, Parakou, etc)
  - ADS-B subnetwork Phase 1
- Sharing of Surveillance Data (AIDC/SSR) for the interconnexion of :
  - 2 sites in Ghana (Accra, Tamale)
  - 3 sites in Nigeria (Kano, Lagos, Maiduguri)
  - 1 site in Roberts FIR (Roberts)
  - 11 ASECNA sites
  - *Training to be performed in Niamey (EAMAC)- Q1/2020*
  - *Assistance and support from Aeronav during implementation phase*



# DR CONGO VSAT RVA Network

- ❑ 18 Stations since 2006
- ❑ 2 Additional stations will be completed in 2020 (Kikwit and Kananga)
- ❑ POLARSAT II+ Technology: TDMA and HubLess
- ❑ Future On going projects : Migration towards IP technology :
  - First step : duplication of Kinshasa-Lubumbashi-Kisangani Triangle.
  - Second step : provision of new stations (densification) and migration of existing ones



## Services

- Air To Ground VHF Radio Communication using (Park Air Systems Equipements)
- Ground to Ground ATS/DS between Airports and CCR : using different VCS Solutions (Denro, Harris, MEP)
- AFTN/AMHS : integration of IDS (Ubitech) equipment then replacement by Thales equipment
- ADS B : Integration of Thales Sensors (2015-2019)
- Interconnexion of Three Thales Topsky systems located on ACCs (Kinshasa-Lubumbashi-Kisangani)





Aeronav participates to **Maintain** and **Improve** the Safety of Air Navigation



926 Selkirk Avenue  
Pointe-Claire (Montreal), Quebec  
Canada H9R 4T7

T: +1 514 695 0820  
F: +1 514 695 1397

[dsalanson@aeronavgroup.com](mailto:dsalanson@aeronavgroup.com)  
[www.aeronavgroup.com](http://www.aeronavgroup.com)

