

THE INTRODUCTION OF CHINESE DEVELOPED REGIONAL AIRCRAFT



2021.07

China

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1 Opportunity

2 ARJ21 General information

**3 ARJ21 General characteristics
for airport planning**

1.1 Summary

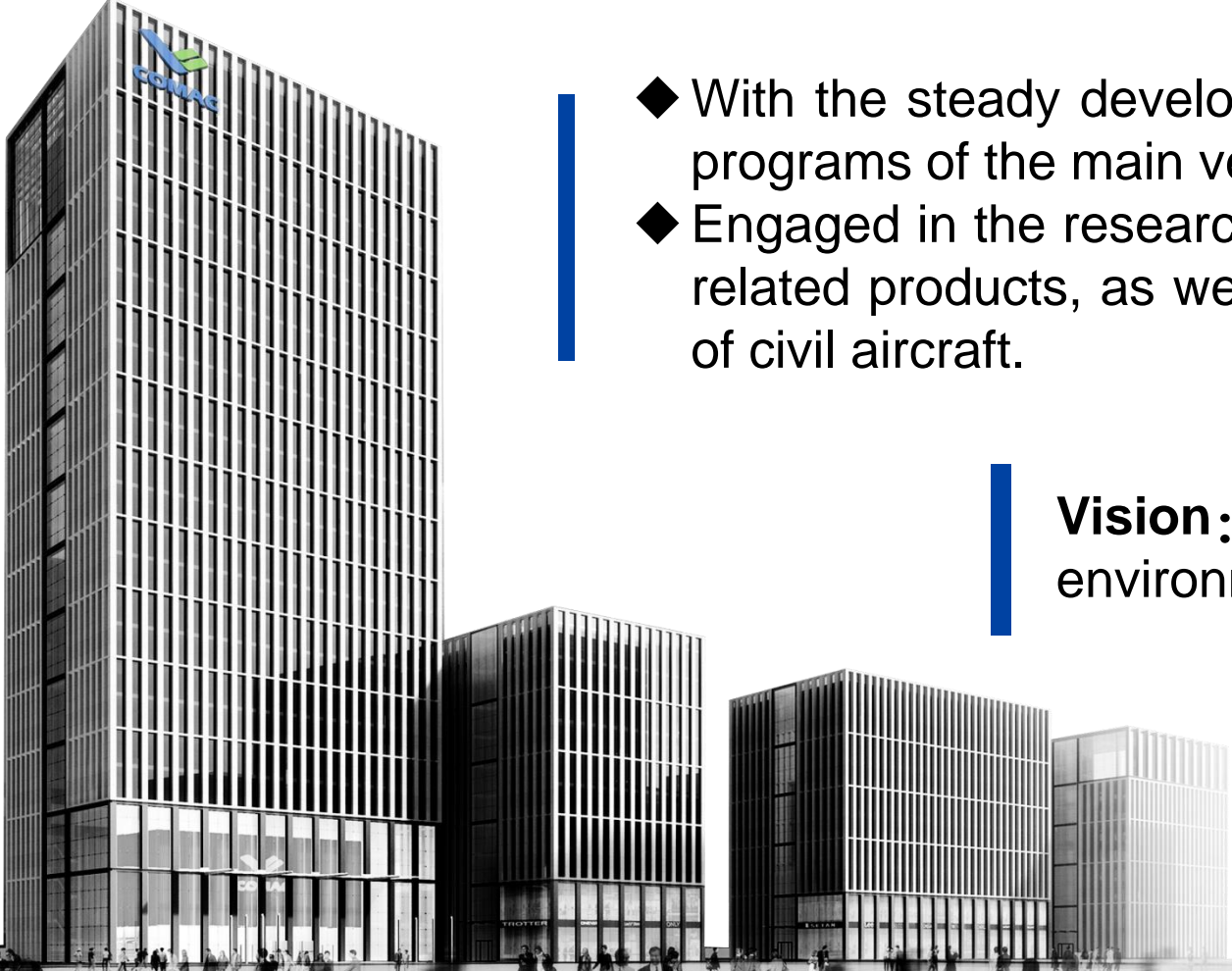
Summary of Information Paper

The short-medium range turbofan regional aircraft, ARJ21, is one of the commercial aircraft projects of the main vehicle program in implementing large civil aircraft of China. ARJ21 is now operating in China and will be going into the global market. Good airport compatibility is the prerequisites of successful operation. This Information Paper intends to introduce key information and characteristics of ARJ21 to the airports in Asia/Pacific Region for future planning and operation.



1.2 Introduction of Manufacturer

Commercial Aircraft Corporation of China, Ltd. (COMAC)

- 
- ◆ With the steady development of aviation industry, China has started the programs of the main vehicle in implementing large civil aircraft.
 - ◆ Engaged in the research, manufacture and flight tests of civil aircraft and related products, as well as marketing, servicing, leasing and operations of civil aircraft.

Vision: Deliver safer, cost-effective, comfortable and environment-friendly commercial aircraft.

Founded on May 11, 2008
Headquartered in Shanghai



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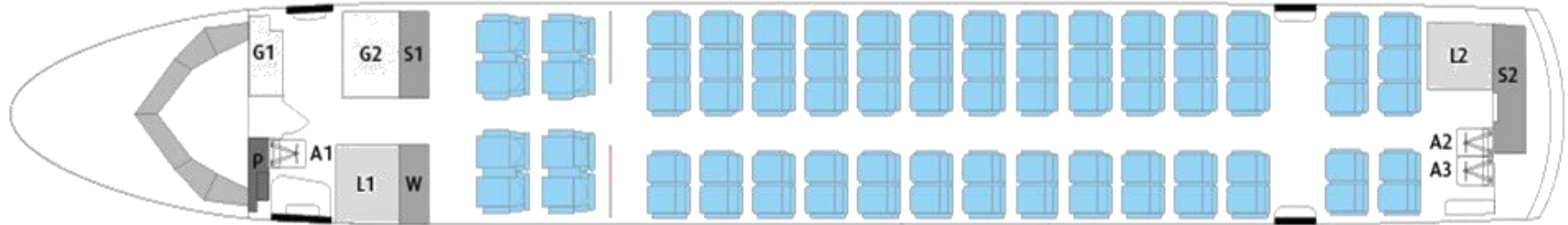
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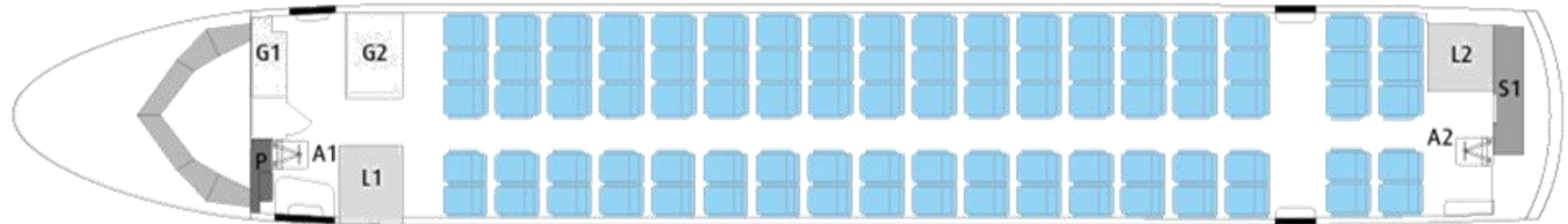
2.1 General Information

ARJ21 aircraft has a layout of 78 to 90 seats, and a range of 2,225 to 3,700 kilometers. Cabin layout of 97 Seats is under development.

78 Seat Class
(38"/31" array pitch)



90 Seat Class
(31"/30" array pitch)



2.2 ARJ21 Development

ARJ21

Type Certificate (TC)

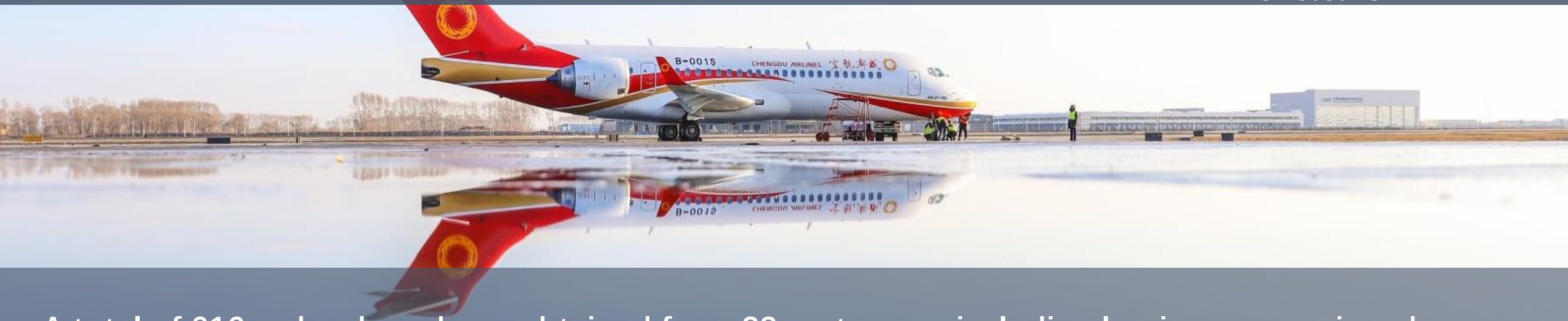
2014.12.30

Entry into Service (EIS)

2016.6.28

Delivered Air China, China Eastern,
and China Southern Airlines








2020.6.28



A total of 616 orders have been obtained from 23 customers, including leasing companies who intend to lease ARJ21 to operators in Southeast Asia. The Validation of Type Certificate (VTC) in countries of Southeast Asia is undergoing.

2.3 Operation status

Destinations

-  One Two Three Airlines
-  China Express Airlines
-  Genghis Khan Airlines
-  Chengdu Airlines
-  Jiangxi Airlines
-  China Southern Airlines
-  Air China Airlines



- Delivered **53** aircraft
- Operated safely over **78,000** hours and **49,000** cycles
- Carried more than **2.7** million passengers
- **190** routes and **91** navigable airports



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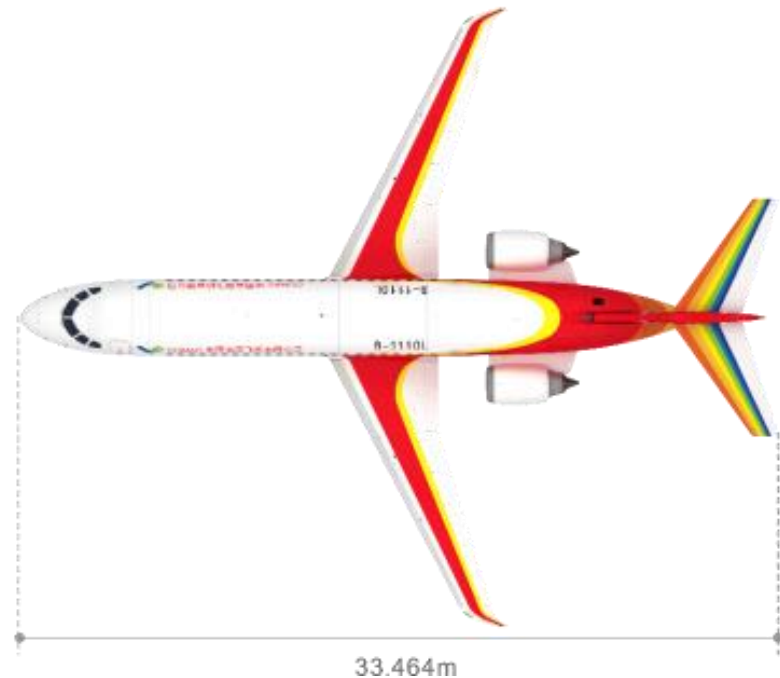
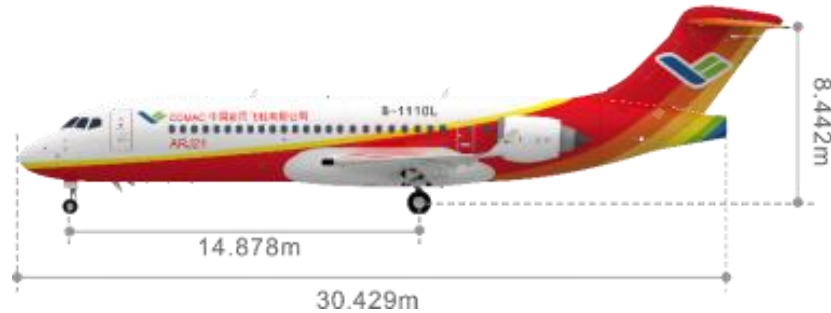
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3.1 ARJ21 General Parameters

ICAO CODE: AJ27



Maximum take-off weight	43,500 kg
Maximum landing weight	40,455 kg
Maximum payload	10,000 kg
Maximum zero fuel weight	10,625 kg
Typical cruising speed	0.78 Mach
Take-off field length (MTOW, SL, ISA)	1,900 m
Landing field length (MLW, SL, ISA)	1,650 m
Design voyage(90Pax@200lb.)	2,000 nm

3.2 Plateau Performance



Outstanding Plateau Performance

- TO&LD altitude is **14472ft/4411m**, covering **all high plateau airports** in China
- **More takeoff weight** at typical airports (MTOW at KMG)
- **More payload** on typical routes (KMG-PEK with 90pax and CTU-LXA with over 70pax)

3.2 Plateau Performance

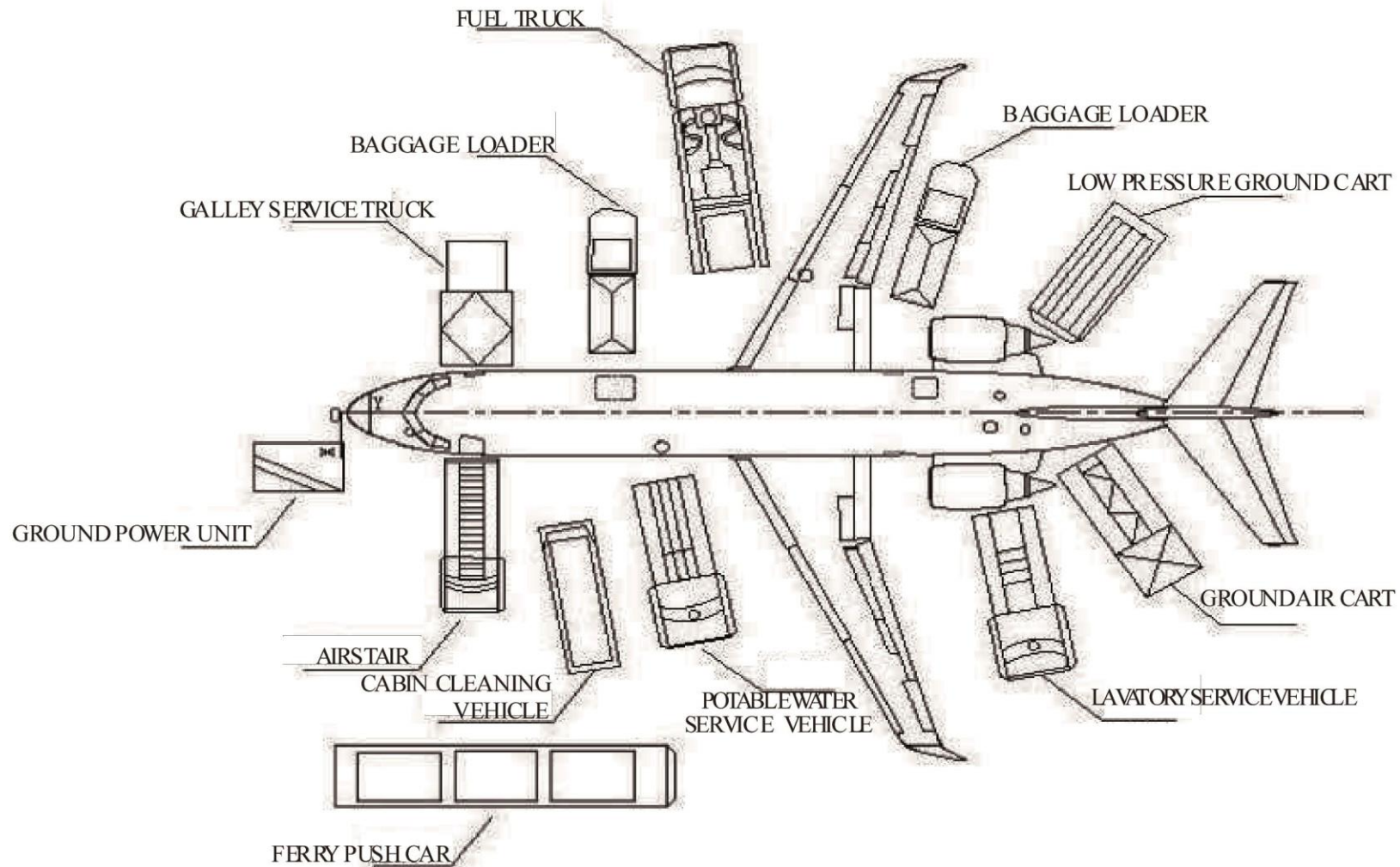
Plateau Eagle

- Aug.2020 ■ Daocheng (ZCY/ZUDC), 4411m
- Aug.2019 ■ Yunnan, Demonstrate flight, 8 airports
- Sep.2017 ■ Huatugou (HTT/ZLHX), 2905m

Continuous Optimization



3.3 Aircraft Servicing Arrangement



3.4 Passenger Boarding

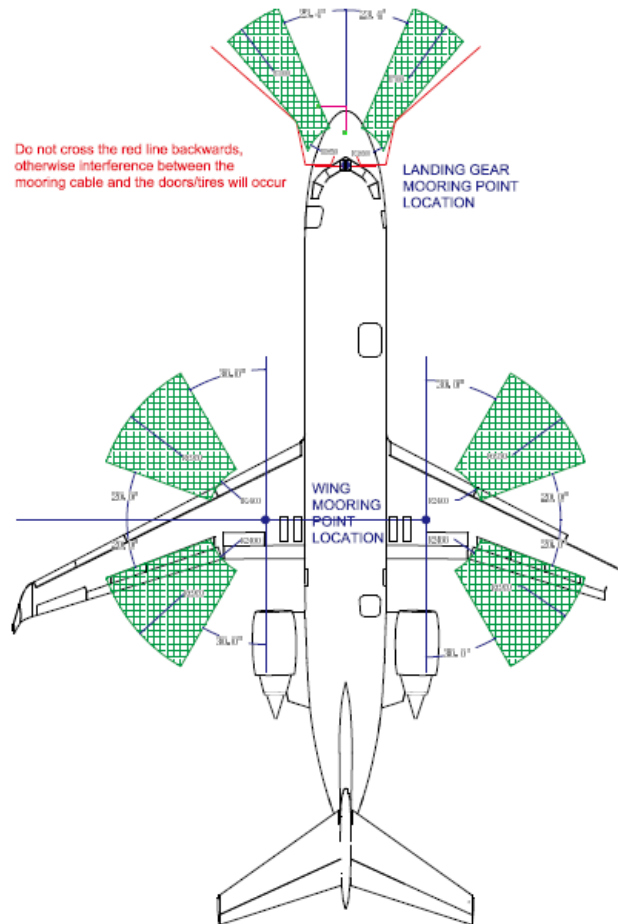
Passenger Door Height

- ◆ 2,385 (-40°C) ~ 2,461 (15°C) mm above ground in empty state.
- ◆ 2,254 (forward limit of center of gravity, -40°C) ~ 2,356 (rear limit of center of gravity, 15°C) mm above the ground in maximum taxiing weight state.



3.5 Mooring

Mooring Ground Anchor Area



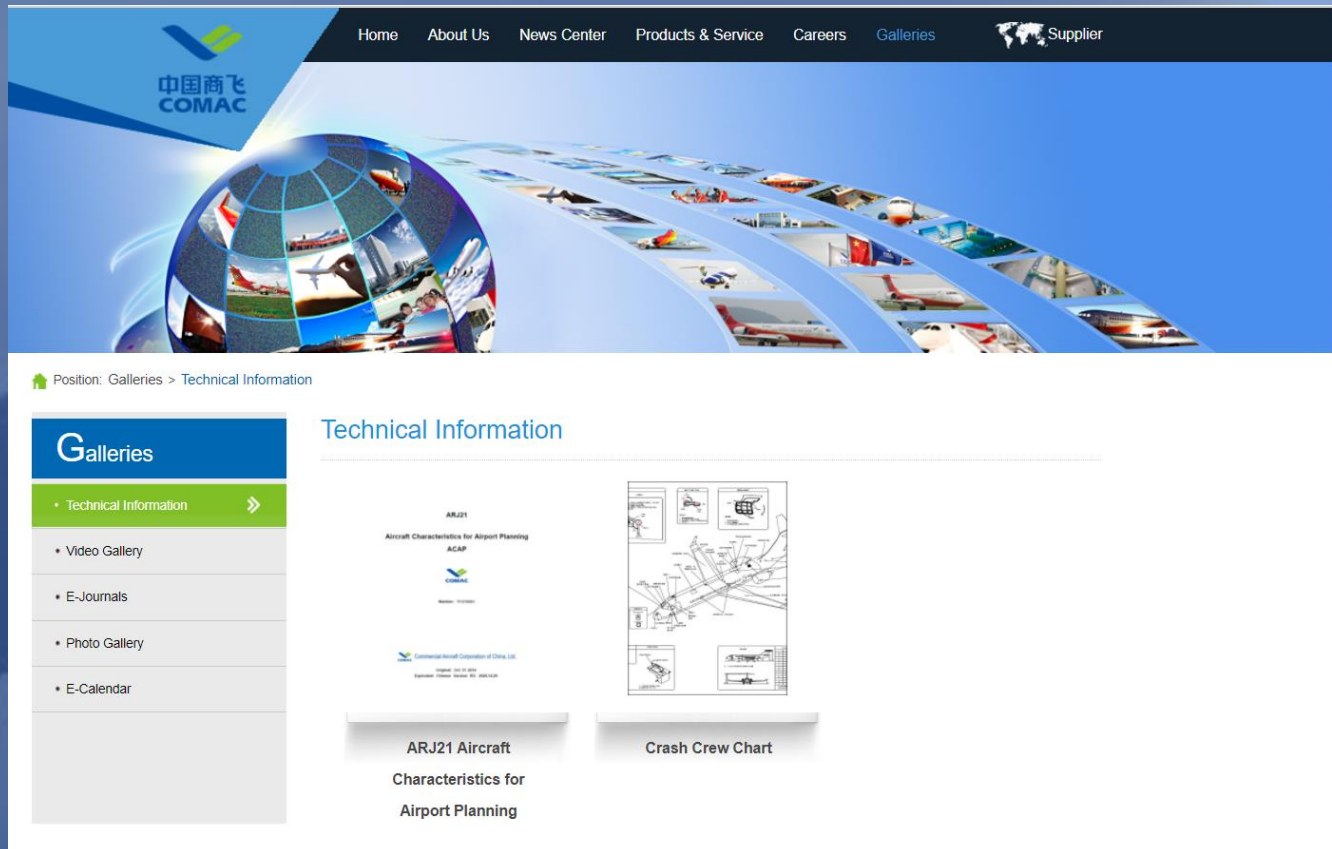
Servicing Door

Servicing door height is 2,250 mm at minimum.



3.6 Further Information

More information and characteristics can be obtained from **Aircraft Characteristics for Airport Planning (ACAP)**, which can be downloaded on COMAC website, <http://english.comac.cc/Galleries/Technical/>.



The screenshot shows the COMAC website's 'Technical Information' gallery page. The header includes the COMAC logo and navigation links: Home, About Us, News Center, Products & Service, Careers, Galleries, and Supplier. The main content area features a 'Technical Information' section with two download options: 'ARJ21 Aircraft Characteristics for Airport Planning' and 'Crash Crew Chart'. A sidebar on the left lists other gallery categories: Video Gallery, E-Journals, Photo Gallery, and E-Calendar.



- ARJ21 Aircraft Characteristics for Airport Planning
- Crash Crew Chart

Expectation

During the operation, COMAC has already solved some compatibility issues and keeps on taking actions to promote the airport compatibility of ARJ21-700.

Along with the increasing of ARJ21-700 fleet size in certain regions and the world, it is expected that airports can **take the operation requirements of ARJ21-700 into consideration** while constructing airports or reconstructing airport facilities and ground support equipment.

We sincerely hope you will pay more attention to the ARJ21-700 and provide us valuable suggestions.

We are working on the integration of aircraft and airport.

THANK YOU !

