

AIRPORT PLANNING AND DESIGN

3 NEW STANDS FOR C17 AIRCRAFTS AT PÁPA AIRBASE



Client: NATO Airlift Management Agency

Concrete pavement:

22 000 m² load bearing concrete pavement 33 cm thick, 5.00 m x 6.00 m slabs 20 cm thick Ckt-T2 cement stabilized sandy-gravel for base course

Asphalt pavement: 3 500 m² asphalt paved shoulder 11 cm thick asphalt, 20 cm thick Ckt-T2 cement stabilized sandy-gravel for base course

New or renewed markings: 900 m²

Apron and taxiway markings Floodlighting Airfield ground lighting and modernization of equipment for transformer stations Rainwater drainage system for the treatment of deicing fluid contamination Low current design

Time of design: 2009-2010

During the project the following sectoral design works were completed:

- geodesy, geotechnical engineering

- airport design (pavement, markings)

- hydraulic engineering (pavement structure dewatering, water treatment)

- high voltage power supply (airfield ground lighting)

- low power

- organization

The design task was to create 3 C-17 aircraft stands (apron C-17) next to the taxiways A and D. The concrete pavement had to be designed with the appropriate thickness and with uniform fall conditions like the existing apron.

The new apron was built to complement the old Apron K and Apron L at Pápa Airport at the junction of TWY D parallel taxiway, and TWY A taxiway.

According to ICAO and NATO APPROVED CRITERIA AND STANDARDS FOR AIRFIELDS, the following data were taken into account to determine the size of the 3 C-17 aircraft stands (apron):

Designing aircraft (C-17):		
wingspan:	51,77 m	
length:	53,04 m	
Width of taxiway:		23,00 m
Width of taxiway safety area:		50,50 m

Accordingly, the length of the area required for the 3 C-17 aircraft is 210 m. Overall width: 179 m.

The aircrafts drive into the stand with a power-in / power-out motion and leave the stands on the D and A taxiways.

Services:

Design for approval Construction design As-built design