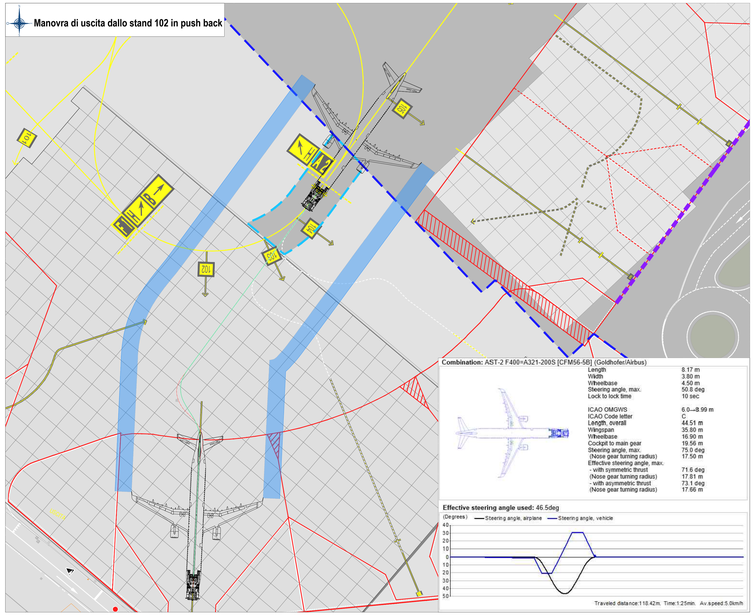
Manovra di uscita dallo stand 102 in push back



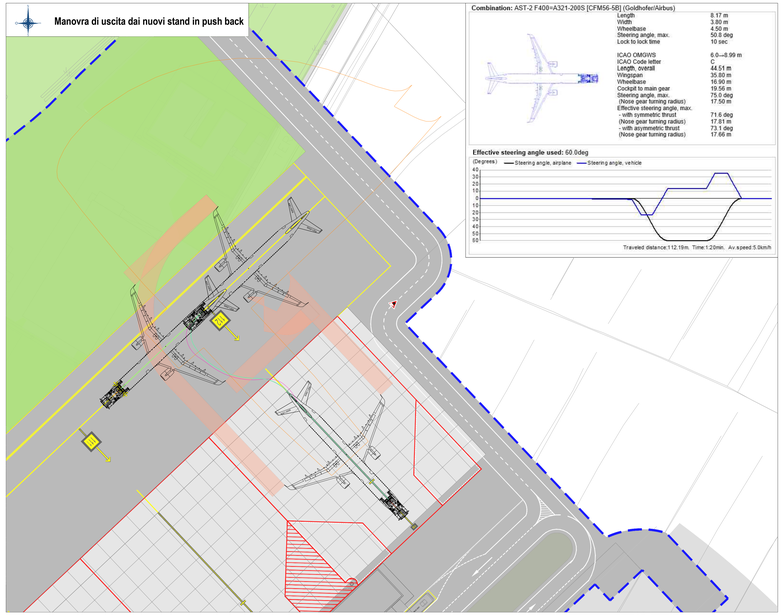
Combination: AST-2 F400+A321-200S [CFM56-5B] (Goldhofer/Airbus)

Length	8.17 m
Width	3.80 m
Wheelbase	4.50 m
Steering angle, max.	50.8 deg
Lock to lock time	10 sec
ICAO OMGWS	6.0---8.99 m
ICAO Code letter	C
Length, overall	44.51 m
Wingspan	35.80 m
Wheelbase	16.90 m
Cockpit to main gear	19.56 m
Steering angle, max.	75.0 deg
(Nose gear turning radius)	17.50 m
Effective steering angle, max.	
- with symmetric thrust	71.6 deg
(Nose gear turning radius)	17.81 m
- with asymmetric thrust	73.1 deg
(Nose gear turning radius)	17.66 m

Effective steering angle used: 46.5deg

Traveled distance:118.42m. Time:1:25min. Av.speed:5.0km/h

Manovra di uscita dai nuovi stand in push back



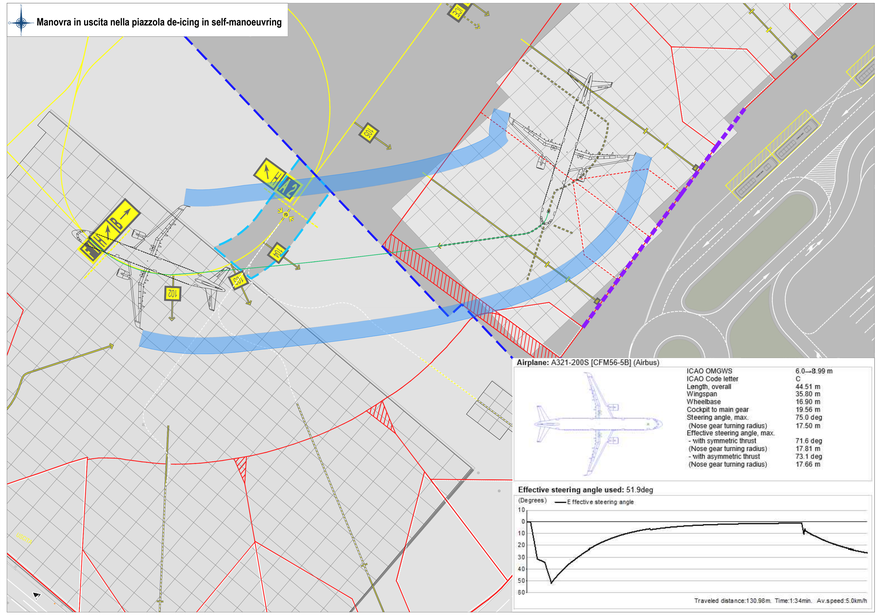
Combination: AST-2 F400+A321-200S [CFM56-5B] (Goldhofer/Airbus)

Length	8.17 m
Width	3.80 m
Wheelbase	4.50 m
Steering angle, max.	50.8 deg
Lock to lock time	10 sec
ICAO OMGWS	6.0---8.99 m
ICAO Code letter	C
Length, overall	44.51 m
Wingspan	35.80 m
Wheelbase	16.90 m
Cockpit to main gear	19.56 m
Steering angle, max.	75.0 deg
(Nose gear turning radius)	17.50 m
Effective steering angle, max.	
- with symmetric thrust	71.6 deg
(Nose gear turning radius)	17.81 m
- with asymmetric thrust	73.1 deg
(Nose gear turning radius)	17.66 m

Effective steering angle used: 60.0deg

Traveled distance:112.19m. Time:1:20min. Av.speed:5.0km/h

Manovra in uscita nella piazzola de-icing in self-manoeuvring



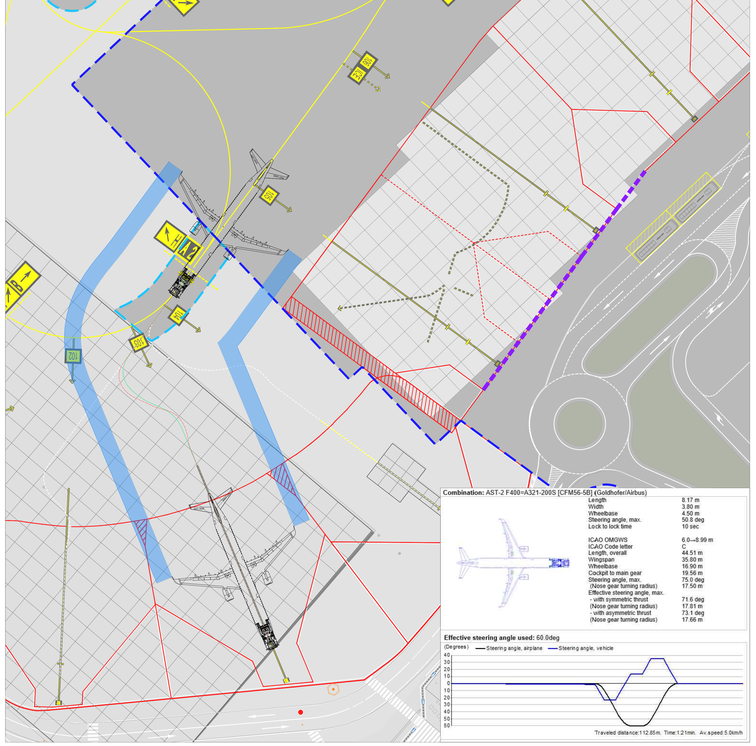
Airplane: A321-200S [CFM56-5B] (Airbus)

ICAO OMGWS	6.0---8.99 m
ICAO Code letter	C
Length, overall	44.51 m
Wingspan	35.80 m
Wheelbase	16.90 m
Cockpit to main gear	19.56 m
Steering angle, max.	75.0 deg
(Nose gear turning radius)	17.50 m
Effective steering angle, max.	
- with symmetric thrust	71.6 deg
(Nose gear turning radius)	17.81 m
- with asymmetric thrust	73.1 deg
(Nose gear turning radius)	17.66 m

Effective steering angle used: 51.9deg

Traveled distance:130.98m. Time:1:34min. Av.speed:5.0km/h

Manovra di uscita dallo stand 103 in push back



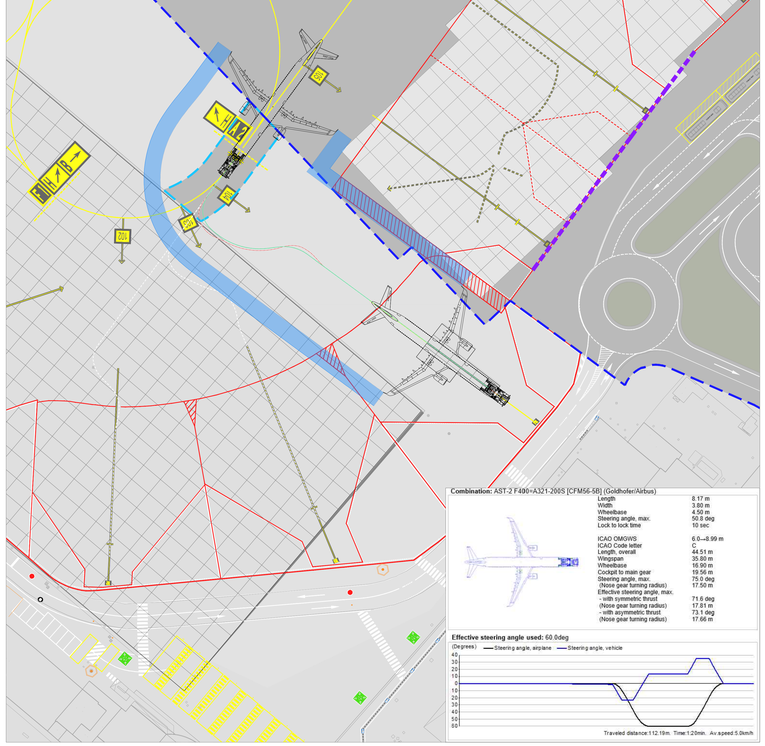
Combination: AST-2 F400+A321-200S [CFM56-5B] (Goldhofer/Airbus)

Length	8.17 m
Width	3.80 m
Wheelbase	4.50 m
Steering angle, max.	50.8 deg
Lock to lock time	10 sec
ICAO OMGWS	6.0---8.99 m
ICAO Code letter	C
Length, overall	44.51 m
Wingspan	35.80 m
Wheelbase	16.90 m
Cockpit to main gear	19.56 m
Steering angle, max.	75.0 deg
(Nose gear turning radius)	17.50 m
Effective steering angle, max.	
- with symmetric thrust	71.6 deg
(Nose gear turning radius)	17.81 m
- with asymmetric thrust	73.1 deg
(Nose gear turning radius)	17.66 m

Effective steering angle used: 60.0deg

Traveled distance:112.85m. Time:1:21min. Av.speed:5.0km/h

Manovra di uscita dallo stand 104 in push back



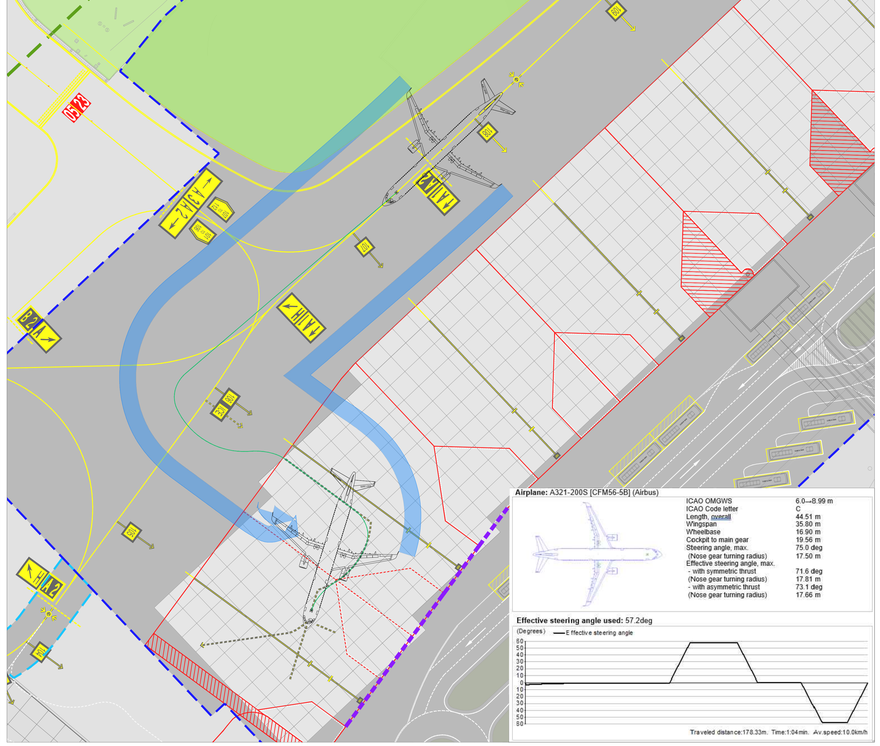
Combination: AST-2 F400+A321-200S [CFM56-5B] (Goldhofer/Airbus)

Length	8.17 m
Width	3.80 m
Wheelbase	4.50 m
Steering angle, max.	50.8 deg
Lock to lock time	10 sec
ICAO OMGWS	6.0---8.99 m
ICAO Code letter	C
Length, overall	44.51 m
Wingspan	35.80 m
Wheelbase	16.90 m
Cockpit to main gear	19.56 m
Steering angle, max.	75.0 deg
(Nose gear turning radius)	17.50 m
Effective steering angle, max.	
- with symmetric thrust	71.6 deg
(Nose gear turning radius)	17.81 m
- with asymmetric thrust	73.1 deg
(Nose gear turning radius)	17.66 m

Effective steering angle used: 60.0deg

Traveled distance:112.19m. Time:1:20min. Av.speed:5.0km/h

Manovra in ingresso nella piazzola de-icing in self-manoeuvring



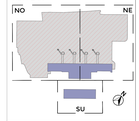
Airplane: A321-200S [CFM56-5B] (Airbus)

ICAO OMGWS	6.0---8.99 m
ICAO Code letter	C
Length, overall	44.51 m
Wingspan	35.80 m
Wheelbase	16.90 m
Cockpit to main gear	19.56 m
Steering angle, max.	75.0 deg
(Nose gear turning radius)	17.50 m
Effective steering angle, max.	
- with symmetric thrust	71.6 deg
(Nose gear turning radius)	17.81 m
- with asymmetric thrust	73.1 deg
(Nose gear turning radius)	17.66 m

Effective steering angle used: 57.2deg

Traveled distance:178.33m. Time:1:04min. Av.speed:10.0km/h

KEYPLAN



LEGENDA

- Clerances wingtips aircraft taxiway ICAO cod. C 8,00 m
- Clerances wingtips apron taxiway ICAO cod. C 4,50 m
- Clerances main gear ICAO cod. C 3,00 m
- Envelopes vehicle body
- Envelopes tires
- Jet blast 58km/h impact surface
- Front axle center
- Paths nose gear center
- Paths engines inner
- Blast fence
- Area di intervento
- Pilot 's eye

NOTE

REVISIONI

REV	DATA	DESCRIZIONE
00		
01		
02		
03		
04		
05		
06		

Data Emissione	10/2022	Revisione	00
Fase	PF	Scala	1:500
Elaborato	F.E-AA-AE-SO-00-09		

REDATTO: Ing. A. Mandelli, Ing. A. Mazzoni, Ing. A. Tagliaferri
VERIFICATO: Ing. A. Mandelli
APPROVATO: Ing. Lorenzo Tassinari

Nome file: F.E-AA-AE-SO-00-09_Email Manovre Stazionamento

Ente di Progetto: AEROPORTO INTERNAZIONALE DI FIRENZE "AMERIGO VESPUCCI"
Opera: MASTERPLAN AEROPORTUALE 2035: INTERVENTI DI ADEGUAMENTO E OTTIMIZZAZIONE DELLE AREE TERMINALI
Titolo Documento: SIMULAZIONE MANOVRE INGRESSO E USCITA AREE DI STAZIONAMENTO
Fase di Progetto: PROGETTO DI FATTIBILITA' TECNICO ECONOMICA

DELLE INFRASTRUTTURE E DELLA MOBILITA' SOSTENIBILI

ENAC: ENTE NAZIONALE per L'AVIAZIONE CIVILE

COMMITTENTE PRINCIPALE: Toscana Aeroporti

SUPPORTI SPECIALISTICI: ACI ENGINEERING S.R.L. RAFAEL VIÑOLY ARCHITECTS PC.

IL RISPARMIO VERDE E LA RIPRODUZIONE SU CARTA LUCIDA, O TESSUTI SONO AUTORIZZABILI SOLO DALLA COMMITTENTE