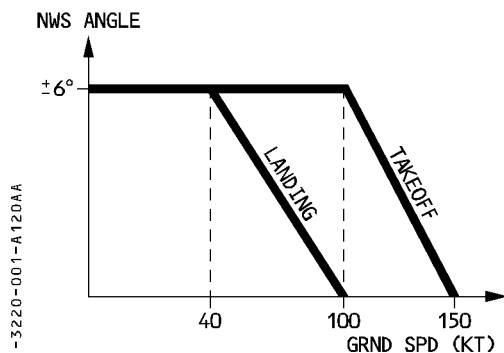


	LANDING GEAR NOSE WHEEL STEERING		1.32.20	P 1
			SEQ 120	REV 17

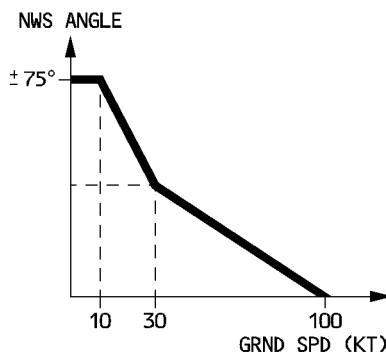
DESCRIPTION

Nosewheel steering is provided by two actuators, powered by the green hydraulic system and electrically-signaled by the Brake and Steering Control Unit (BSCU). The yellow hydraulic system is used as a backup, to power nosewheel steering when the green hydraulic system is unavailable. The BSCU has two independent systems. Only one is active at a time, while the other is on standby. To control the steering, the BSCU receives inputs from the steering handwheels, the rudder pedals, the rudder trim, and the Auto Pilot.

The BSCU transforms the pilot's order into a nosewheel steering angle, by controlling the servovalve to provide the requested flow for the hydraulic actuators. The following limitations apply :



ORDERS FROM RUDDER PEDALS



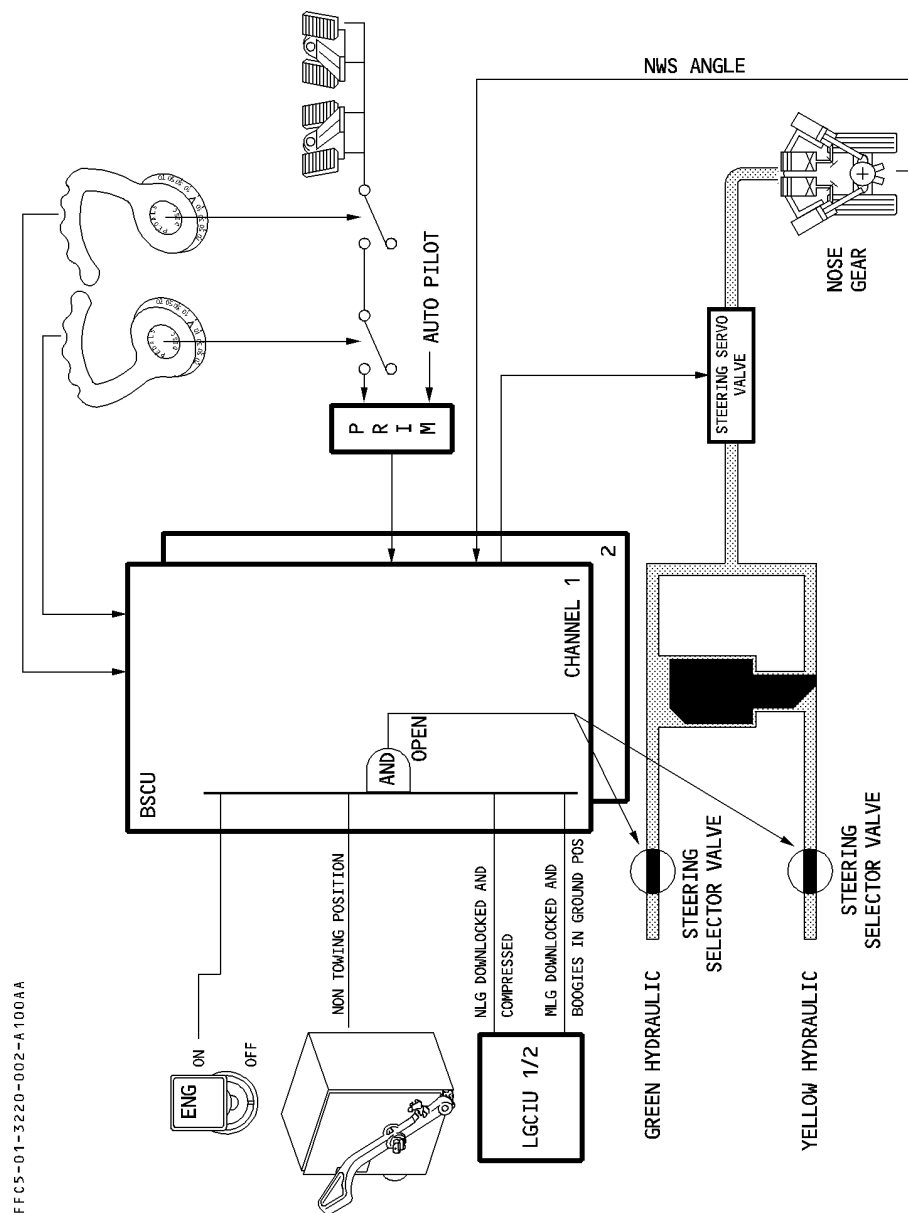
ORDERS FROM HANDWHEELS

The steering handwheels control the nosewheel steering angle up to 75° in either direction. A lever on the towing electrical box (on the nose L/G) enables the steering system to be deactivated for towing purposes.

Pilots can disconnect the rudder pedal order to the BSCU via a pushbutton located on each steering handwheel.

An internal cam mechanism returns the nosewheel to the centered position after takeoff.

FFCS-01-3220-001-A120AA



FFCS-01-3220-002-A100AA

CONTROLS AND INDICATORS

RUDDER PEDALS

Nosewheel steering control authority depends on aircraft speed. Rudder pedals provide nosewheel steering control :

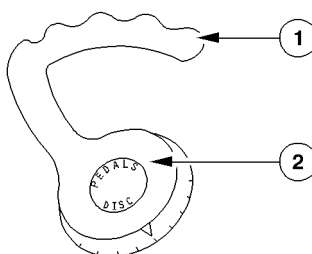
- Below 100 knots at landing
- Up to 150 knots at takeoff.

Outside the nosewheel steering control authority range, the steering demand remains at 0°.

Note : The nosewheel steering angle depends on aircraft speed.

SIDE CONSOLES

FFCS-01-3220-003-A110AA



① STEERING HANDWHEELS

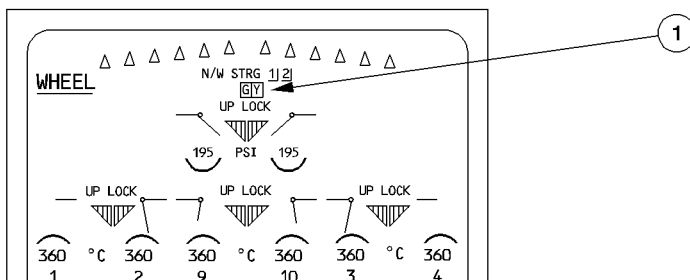
The steering handwheels control the nosewheel steering angle up to 75° in either direction.

② RUDDER PEDAL DISC pushbutton

When maintained pressed, nosewheel steering is disconnected from the rudder pedals.

ECAM WHEEL PAGE

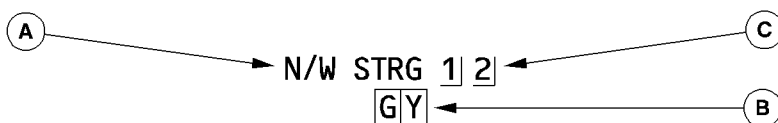
FFCS-01-3220-004-A 110AA



① N/W STRG indication

In normal operation, nothing appears.

FFCS-01-3220-004-B 110AA



Ⓐ N/W STRG label

It appears in green when nosewheel steering is still available, but when either a BSCU system is lost or failed, or one hydraulic supply (G or Y) is lost.

It appears in amber, when nosewheel steering is lost due to the loss of the normal and alternate nosewheel steering, or both BSCU systems fail, or green and yellow hydraulic pressures are low.

Ⓑ N/W STRG hydraulic supply indication

G (Y) appears in green when the nosewheel steering is supplied by the green (yellow) hydraulic system. G (Y) becomes amber, in case of a green (yellow) system low pressure.

Ⓒ BSCU channels indication

When N/W STRG is displayed, the status of BSCU systems 1 and 2 is displayed.

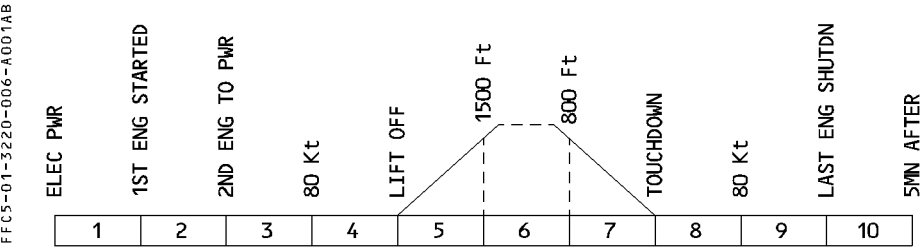
The number appears in green, when the corresponding BSCU system is available. It becomes amber when the corresponding BSCU system is failed.

LANDING GEAR
NOSE WHEEL STEERING

1.32.20	P 5
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LEFT INTENTIONALLY BLANK

WARNINGS AND CAUTIONS



EWD : FAILURE TITLE conditions	AURAL WARNING	MASTER LIGHT	SD PAGE CALLED	LOCAL WARNING	FLT PHASE INHIB
N.W.STRG FAULT detected by BSCU	SINGLE CHIME	MASTER CAUT	WHEEL	NIL	3, 4, 5, 8

MEMO DISPLAY

If the nose wheel steering switch is in the towing position, the NW STRG DISC message is displayed in green. It becomes amber if two engines are running.